

18 December 2020

Victorian Planning Authority
c/- Stephen Davis
Senior Planning Advisor
Level 25
35 Collins Street
Melbourne VIC 3000

**Submission to Craigieburn West Precinct Structure Plan
1340, 1390, 1430 & 1480 Mickleham Road and 665 Craigieburn Road, Craigieburn
(Properties 28, 29, 30, 31 and 34)**

Thank you for the opportunity to make a submission in relation to PSP 1068 – Craigieburn West Precinct Structure Plan [Draft for Public Consultation] (PSP) and accompanying planning scheme provisions.

Peet Limited (Peet) is the developer and registered proprietor of the following properties, representing 11% of the PSP area:

Street Address	Total area (hectares)	PSP Property ID
1340 Mickleham Road, Craigieburn	11.73	34
1390 Mickleham Road, Craigieburn	13.98	31
1430 Mickleham Road, Craigieburn	11.08	30
1480 Mickleham Road, Craigieburn	12.76	28
665 Craigieburn Road, Craigieburn	12.19	29
	61.74	

Peet is one of Australia's leading residential real estate developers, creating places to live for thousands of Australians every year. Established in 1895 by founder James Thomas Peet with a vision for Australians to build or buy their own home, Peet has enabled thousands of Australians to achieve their ownership dreams. Peet is Australia's largest 'pure play' residential property developer with a portfolio of more than 47,000 lots with a gross development value of approximately \$13.9 billion across 51 projects in master planned communities, medium density housing and low-rise apartments in the major growth corridors in every mainland state in Australia.

We wish to commend the Victorian Planning Authority (VPA) and Hume City Council (Council) in making efforts to fast track the PSP. With this goal in mind we hope that the matters raised in this submission can be resolved prior to the *VPA Projects Standing Advisory Committee* hearing in April 2021.

We trust that the PSP can now progress to approval without delay.

Having reviewed the *Public Consultation Documents*, we support the approval of the PSP and generally endorse the *vision, objectives* and distribution of land uses. However, we have concerns regarding specific *guidelines* and *requirements* that are outlined in this submission that we seek to be addressed.

This submission outlines each area of concern and proposes changes to each. We believe these amendments will further improve the PSP's ability to guide change, respond to evolving markets, provide flexibility in design and most importantly, encourage early investment in this precinct to aid Victoria's COVID-19 recovery.

Ultimately, this will enhance the deliverability of the PSP.

The following submission is provided to assist in ensuring that the vision for our land can be achieved and development can commence as soon as practical.

The submission has been compiled as follows:

Section	Title
1	Key Issues
2	Implementation
3	Table of Changes

In preparing this submission we have been supported by our multi-disciplinary project team who have significant experience in growth area planning.

The following documents are attached to the submission:

Addendum	Document	Prepared by
A	Master plan	Calibre Group
B	Transport Considerations memo dated 17 December 2020	Ratio Consultants

The Master plan has been informed by detailed onsite analysis and whilst generally consistent with the Place Based Plan in the PSP, there are some necessary departures.

We look forward to working closely with the VPA and Council to progress the approval of the *Craigieburn West Precinct Structure Plan*.

Please contact me on 0439 330 057 or at nick.bosco@peet.com.au if you have any queries.

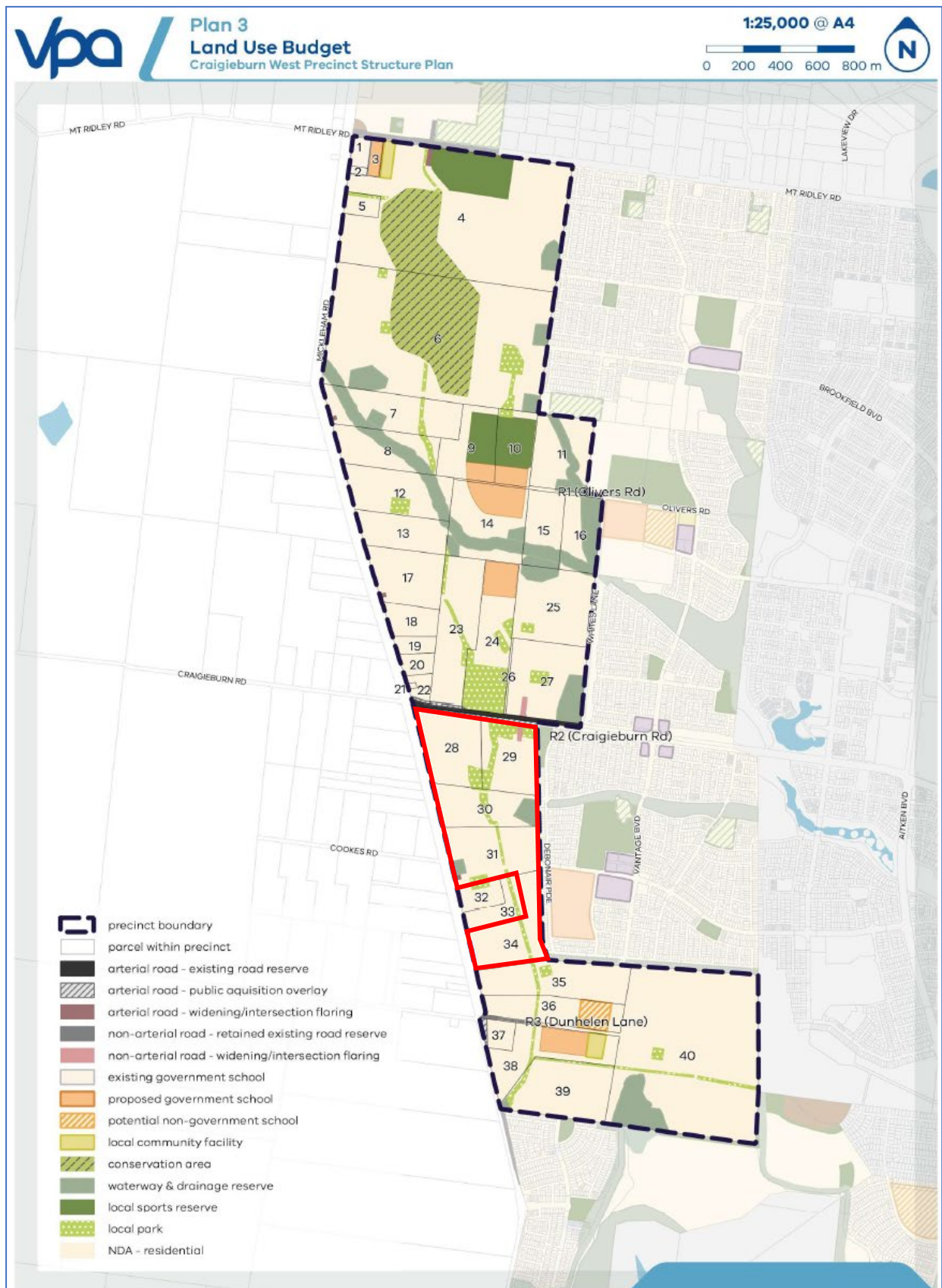
Yours sincerely

PEET LIMITED



Nick Bosco
Project Director

Peet Landholding



Section 1 – Key Issues

The key issues have been categorized under five headings and a summary of the requested changes is outlined below:

1. Tree retention strategy

- a. Change Requirement 33 from a Requirement to a Guideline to allow flexibility to remove trees where it is not appropriate or practical for them to be retained.
- b. Amend Plan 10 (Biodiversity and Vegetation Plan) to recategorize trees 953, 959, 968, 969, 982, 1048, 1232, 1265 & 1266 (TreeTec, 2019) from 'native vegetation that must be retained' to 'vegetation that should be removed.'

2. Local open space distribution

- a. Amend Plan 8 (Open space) of the PSP by altering the local open space distribution to be consistent with the attached Master plan.
- b. Amend the Property Specific Land Budget table to change the land areas of the local parks to match the areas shown on the Master plan attached to this submission, and to achieve a Public Land equalisation outcome across the Peet landholding.

3. North-South street

- a. Add specific notation to Plan 5 and associated section to state the Craigieburn/NS Road intersection requires a non-standard design response.
- b. Amend Plan 5 to shift the alignment of the north-south street further west in accordance with the attached Master plan.
- c. Amend Plan 5 to replace the *Connector Street – Boulevard* between Craigieburn Road and Gallantry Avenue with the *Local Access Street – Level 2 (bus capable)*.
- d. Amend Plan 5 to replace the *Connector Street – Boulevard* south of Gallantry Avenue with the *Local Access Street – Level 2 (linear park)*.
- e. Include a new *Local Access Street – Level 2 (linear park)* cross section (as per the Ratio Transport Considerations memo) in Section 4.5 of the PSP.
- f. Amend Plan 5 to replace the 'controlled intersection' legend description with 'roundabout' for the intersections within Properties 30, 31 and 34.

4. Road network

- a. Include cross sections for Mickleham and Craigieburn Roads (with and without a frontage road) in Appendix 4.5 of the PSP.
- b. Add specific notation to Plan 5 and associated section to state the Mickleham/Elevation Road intersection requires a non-standard design response.
- c. Amend the description of Intersection IN-05 in Table 4.1 (Precinct infrastructure table) to include the following:
'Construction of a signalized T-intersection (non-standard)'
- d. Include a Guideline in Section 3.2.3 (Street Network) that states:
'Interim site access may be gained from the arterial road network in the early stages of development'.
- e. Amend the designations of Riverglen Drive and Gallantry Avenue from *Local Access St Level 1* to *Local Access St Level 2*.
- f. Include cross section for a standard laneway.

5. Integrated Water Management

- a. Update Plan 6 (Integrated Water Management) to show revised Aitken Creek, Upper Brodies Creek and 'gap' drainage catchment boundaries.
- b. Amend Table 3 to increase the size of ACSB-08 size from 1.43 hectares to 2.1 hectares.
- c. Amend Table 3 to increase the 'gap' asset size from 0.52 hectares to include two assets, one of 0.76 hectares on Property 31 and the other 0.60 hectares on Property 32.
- d. Amend Plan 6 to show a 0.60 hectare drainage asset on Property 32 and increase the size of the drainage asset on Property 31 to 0.76 hectares.
- e. Remove the reference on Plan 6 to '*potential asset (no DSS)*' and replace with '*drainage asset (no DSS)*'.
- f. Update Requirement 13 to provide clear date reference to the Best Practice performance targets that must be met.
- g. Update Requirement 15 to include performance targets so compliance can be appropriately assessed
- h. Amend the Property Specific Land budget table to update the waterway & drainage reserve areas.

All these elements are intertwined and have been considered concurrently as part of our detailed and ongoing master planning process.

The information outlined below is intended to assist the VPA and relevant authorities in further understanding the detailed considerations and balancing of priorities that we have made in preparing our comprehensive Master plan, which we believe has embraced the key themes that have been advanced during the PSP process.

1. TREE RETENTION STRATEGY

It is understood that the Place Based Plan seeks to incorporate the retention of all trees that were identified as having 'very high' retention value and some trees that were identified as having 'high' retention value in the Arboricultural Assessment Report prepared by Treetec dated February 2019.

Requirement R33 of the PSP states:

"Vegetation shown on Plan 10 as Vegetation for Retention must be retained and incorporated into either the open space network or the public realm."

Given the prescriptive nature of Requirement R33, the details of the arboricultural assessment are crucial in guiding the tree retention requirements across the precinct and therefore may require further review as specific onsite assessments are completed.

Section 7 of the VPA's *Craigieburn West – PSP 1068 Background Report Draft for Public Consultation* (November 2020), outlines that there are 73 'very high' and 420 'high' rated trees. This is a significant number of trees that are scattered throughout the precinct making retention within the future urban area challenging. The location of specific trees designated for retention presents practical delivery issues that should be avoided.

Section 2.3 of the Background Report recognises that the Melbourne Strategic Assessment was undertaken in 2009 and states:

...four conservation strategies were developed as part of the MSA commitments, including the Biodiversity Conservation Strategy (BCS). The BCS covers the biodiversity offsets required under the EPBC Act.

The Craigieburn West PSP includes a BCS area in the north of the precinct. BCS Area 29 (Nature Conservation). This area is approximately 37.69ha in size and encapsulates the biodiversity values of Grassy Eucalypt Woodland and the Golden Sun Moth

Importantly, the BCS does not require the retention of scattered trees or groups within the PSP area and as such, any tree retention is above statutory requirements.

Notwithstanding the absence of a statutory obligation to retain scattered trees, Peet is committed to delivering an enduring community in the precinct and a core pillar to achieving this is through high quality landscaping within the public realm. The retention of mature indigenous trees contributes greatly to this objective.

The intention of this section of the submission is to impart the importance of maintaining design flexibility by being less prescriptive about individual trees.

It is understood that the linear Local Park has been formed to incorporate a high number of scattered trees and tree groups, however this has caused a problematic separation between the park and the north-south connector road alignment within the Peet Landholding. The close proximity of these two fixed linear assets limits the viable design outcomes available for the several residential pockets sandwiched between them.

The viable design outcomes for the pockets of land between these two linear assets is considerably further constrained by Requirement R33, which mandates the retention of several scattered trees within the pockets. Taken in conjunction, these two constraints serve to effectively sterilise these areas, given they will be extremely difficult if not impossible to develop. It is imperative that the PSP can respond to site specific requirements with more flexible solutions.

Additionally, there are 'very high' and 'high' retention trees that will not be able to be retained as they are either: within the Craigieburn Road PAO area (northern boundary of Property 28 and Property 29); have TPZs considerably within that PAO area; are within the alignment of Gallantry Boulevard as shown on Plan 10; or are within the embankment of an existing dam that will be altered (southern boundary of Property 31 and depicted in LP-14). Consequently, Requirement R33 conflicts with other important objectives of the PSP and in its current form, lacks the flexibility to respond to these issues.

The inclusion of retained trees within local open space is supported as they provide an important contribution to the amenity of these spaces. This support is qualified on the basis that the open space remains creditable open space.

However, the Requirement R33 (which by definition 'must' be followed) associated with retaining such a large number of trees is unreasonable.

As demonstrated by the attached Master plan there are other ways the land could be developed that still achieve significant scattered tree retention, which we request is further considered following exhibition of the PSP.

Requested Change

- Change Requirement 33 from a Requirement to a Guideline to allow flexibility to remove trees where it is not appropriate or practical for them to be retained.
- Amend Plan 10 (Biodiversity and Vegetation Plan) to recategorize trees 953, 959, 968, 969, 982, 1048, 1232, 1265 & 1266 (TreeTec, 2019) from 'native vegetation that must be retained' to 'vegetation that should be removed'.

2. LOCAL OPEN SPACE DISTRIBUTION

Plan 8 of the PSP shows that there are four local parks (LP-11, LP-12, LP-13 and part LP-14) and four linear parks (GL05, GL-06, GL-07 and GL-08) located wholly or partially within the Peet Landholding. The Property Specific Land Budget table (Section 4.2) shows a total area of 5.01ha across the Peet Landholding.

Achieving a Public Land equalisation outcome for the Peet Landholding is our preferred outcome. Currently a total area of 5.01ha is identified for the Peet Landholding, which we request is appropriately adjusted and maintained as any changes to the PSP occur.

Our attached Master plan shows a very similar local park configuration to Plan 8, except for the location of the local park between Properties 31 & 32 (LP-14).

The trees in LP-14 on Property 31 are located on or around the batter of an existing farm dam, which will be significantly disturbed during the development process. The dam cannot be retained in its current form and will require significant earthworks to facilitate urban development.

Furthermore, the two trees identified for retention in LP-14 (trees 1265 and 1266, TreeTec 2019) are *Eucalyptus Viminalis* not *Eucalyptus Camaldulensis* and should not be prioritized for retention. These trees are ranked as 'High' not 'Very High' in the TreeTec report. Given the lower quality and likely fatal disturbance of these trees during development they should not be listed for retention. Additionally, LP-14 should be relocated further west to the entry to Elevation Boulevard so that it can be integrated with the works associated with the drainage reserve and road works.

Subject to minor adjustments to local parks LP-11, LP-13 and GL-05, GL-06, GL-07 and GL-08 these areas are very similar to those shown on our attached Master plan and we request that our configuration be adopted. The open space layout on our Master plan responds to following site-specific matters:

- significant retention of 'high' and 'very high' scattered trees
- local access street to be constructed along the western edge of LP-11, GL-05 and LP-13, which is key to the drainage strategy for Property 28
- provides two frontages to the north-south connector street
- retains numerous large scattered trees as landscape features south of Gallantry Boulevard
- maintains a visual open space connection from Craigieburn Road through to the linear park south of Gallantry Boulevard

Requested Change

- Amend Plan 8 (Open space) of the PSP by altering the local open space distribution to be consistent with the attached Master plan.
- Amend the Property Specific Land Budget table to change the land areas of the local parks to match the areas shown on the Master plan attached to this submission, and to achieve a Public Land equalisation outcome across the Peet landholding.

3. NORTH-SOUTH STREET

The role and function of the north-south street (south of Craigieburn Road) is a key issue that will influence the liveability of the future community within the precinct.

At the earliest stage of the consultation process we highlighted our concerns that an expansive north-south road will attract commuter traffic heading south beyond the precinct boundaries. We further submitted that a reduced cross-section and an alternative intersection layout at Craigieburn Road should be considered to discourage non-local traffic continuing south. The southern leg of the intersection of Craigieburn Road and the north-south road should be tailored to achieve this outcome and therefore is unlikely to be as per the VPA's *Benchmark Infrastructure Cost and Guide*.

Two key elements of the north-south street are further explored below:

Cross section

Whilst it is understood that the Department of Transport are yet to confirm that the north-south connector will be a designated bus route, we appreciate that an important role of the PSP is to maintain flexibility for the future, therefore we accept that the street must be bus capable.

This outcome can be achieved using a **Local Access Street – Level 2** as per the 21-metre cross shown on Page 62 of the PSP.

However, Plan 5 of the PSP shows the road as a 28-31 metre **Connector Street Boulevard** between Craigieburn Road and Elevation Boulevard. This cross section is excessive and when combined with a standard intersection treatment at Craigieburn Road, will encourage commuter traffic to proceed south through what would otherwise be quiet residential areas.

Additionally, when combined with the 10-15 metre linear park adjacent to the Connector Street Boulevard (north of Elevation Boulevard, as per Plan 8 of the PSP), it will result in a 38-46 metre cross section. This width will contain two 1.5m footpaths, one 3m off-road bike path and one 2.5m shared path all running parallel (8.5m total). With the additions of road pavement (7m), off street parking (4.2m) and paths (8.5m), this cross-section results in 19.7m of the corridor being hard paved.

To address this excessive cross section and to give further clarity to its delivery, there should be specific cross sections showing the integration of the linear park within Section 4.5 of the PSP.

This is important given the significant amenity the linear park will provide to the precinct. The cross section should achieve an appropriate integration between the road and park function and avoid the duplication of elements, such as shared paths.

Our preferred cross section for a 'Bus Capable Access Street Level 2 (Adjacent Linear Park)' is included on Page 9 of the attached *Transport Considerations* memo prepared by Ratio Consultants.

Alignment & Controlled Intersections

Plan 5 of the PSP contemplates a 4-way intersection centrally within the Peet Landholding which is designated as a 'controlled intersection'. This is one of many such intersections within the PSP, however there is no clear direction as to how these controlled intersections are to be designed (i.e. roundabouts / traffic signals).

To provide further clarity, we suggest that Plan 5 denotes the intersections within Properties 30, 31 and 34 as 'roundabouts' in accordance with Figure 11 of the *Craigieburn West Precinct Structure Plan: Transport Impact Assessment* report by One Mile Grid (9 November 2020).

Additionally, it is necessary that the north-south road be sited further west in accordance with the attached Master plan. This will ensure that the stormwater management strategy for the land can be delivered, providing the following whole-of-community benefits:

- Reduce the land area in the 'gap' catchment, thus improving drainage outcomes for existing properties west of Mickleham Road
- Reduce the amount of fill required within this section of the precinct; and
- Reduce the (drainage) barrier effect of the road alignment.

Requested Change

- Add specific notation to Plan 5 and associated section to state the Craigieburn/North South Road intersection requires a non-standard design response
- Amend Plan 5 to shift the alignment of the north-south road further west in accordance with the attached Master plan
- Amend Plan 5 to replace the *Connector Street – Boulevard* between Craigieburn Road and Gallantry Avenue with a *Local Access Street – Level 2 (bus capable)*
- Amend Plan 5 to replace the *Connector Street – Boulevard* south of Gallantry Avenue with a *Local Access Street – Level 2 (adjacent linear park)*
- Include a new *Local Access Street – Level 2 (adjacent linear park)* cross section (as per the Ratio Transport Considerations memo) in Section 4.5 of the PSP
- Amend Plan 5 to replace the 'controlled intersection' legend description with 'roundabout' for the intersections within Properties 30, 31 and 34

4. ROAD NETWORK

Mickleham and Craigieburn Roads are the key arterial roads servicing the precinct. The Peet Landholding connects to both roads via numerous proposed intersections.

The locations of the intersections connecting the land to Mickleham Road and Craigieburn Road are generally supported, including the 'left-in/left-out' intersections at Gallantry Avenue and Riverglen Drive. However, to ensure the appropriate design of these intersections and internal subdivision design it would be useful to include an ultimate cross section for these arterial roads. This cross section could also include an option where a frontage road is adjacent the arterial road.

Key elements of the road network are further explored below:

Mickleham Road / Elevation Boulevard intersection (IN-05)

The location of the Mickleham Road / Elevation Boulevard intersection is supported as it avoids the location of the existing farm dams – which will generally be converted to drainage assets – and appropriately aligns parallel with the northern boundary of Property 32. A four-way intersection with Cookes Road (rural road to the west) is also avoided.

Elevation Boulevard is expected to carry significant traffic volumes (8,800 vehicles per day), primarily due to through traffic. The intersection with Mickleham Road is a key control point for vehicles entering and exiting this part of the precinct and will also serve those within the existing community to the east. Additionally, there are major destinations located immediately east of the precinct, including Elevation Secondary College, Aitken Hill Primary School, Aston Village retail precinct and the Aston Fields active open space.

The volume of traffic that is modelled to utilise this intersection requires additional turning lanes entering from Mickleham Road and exiting from Elevation Boulevard to head south. Therefore, we are concerned that the size of this intersection will be beyond the standard 'benchmark' sizing outlined in Appendix 6 of the VPA's *Benchmark Infrastructure Cost and Guide*, which is used for ICP purposes.

It is noted that the 'interim' construction of the intersection will be included in the ICP, however the ultimate design requirements should be understood to ensure the full funding of the 'land' component is included in the ICP.

Notwithstanding the volume of traffic utilizing IN-05, we support the Elevation Boulevard classification as a Connector Street due to the projected traffic volumes.

Interim access: left-in/left-out intersections

Staging of development is a key consideration when developing the land. To achieve the most orderly development sequencing for this part of the precinct, development of the Peet landholding will commence on Property 30 and therefore entry to the early stages of development will be from the Mickleham Road / Gallantry Avenue intersection.

Plan 5 shows this intersection as a 'left-in/left-out' only, however during the early stages of development this intersection will also need to facilitate a right turn into Gallantry Avenue for traffic travelling north on Mickleham Road. This is a common practice in greenfield development.

A Guideline that acknowledges the likelihood that developments along the arterial road network will take interim access via the left-in/left-out intersections would assist during the implementation stage.

Riverglen Drive and Gallantry Avenue

The east west roads, which will form the extensions of Gallantry Avenue and Riverglen Drive are identified on Plan 5 as Access Street Level 1. This is inconsistent with their current designation of these roads to the east as Access Street Level 2. The higher order classification of Access Street Level 2 is considered more appropriate, as it will allow a consistent cross section between the Aston community and the new Peet development.

Laneways

Rear loaded lots are a common feature of many residential subdivisions and as such the current standard of laneway should be included in the PSP for reference.

Requested Change

- Include cross sections for Mickleham and Craigieburn Roads (with and without a frontage road) in Appendix 4.5 of the PSP
- Add specific notation to Plan 5 and associated section to state the Mickleham/Elevation Road intersection requires a non-standard design response
- Amend the description of Intersection IN-05 in Table 4.1 (Precinct infrastructure table) to include the following:
 - *'Construction of a signalized T-intersection (non-standard)'*
- Include a Guideline in Section 3.2.3 (Street Network) that states:
 - *'Interim site access may be gained from the arterial road network in the early stages of development'*.
- Amend the designations of Riverglen Drive and Gallantry Avenue from *Local Access Street Level 1* to *Local Access Street Level 2*
- Include a standard laneway cross section in Appendix 4.5 of the PSP

Request for Information

Notwithstanding the requested changes outlined above, there is additional information that could assist us in understanding the mitigation measures and implementation approach necessary to deliver the key intersections within the PSP area. The following information is requested:

1. Details of the One Mile Grid intersection analysis for the PSP area
2. Details regarding the proposed mitigation measures to address the over-capacity issues of numerous intersections and road segments within the precinct that are shown to be operating over capacity
3. Details of the proposed mitigation measures to ensure capacity of the Mickleham / Elevation intersection
4. Confirmation that the Mickleham / Elevation Boulevard intersection will be fully funded, noting that it will be in excess of the VPA Benchmark intersection type

Upon receipt of this additional information, we reserve our right to make further submissions.

5. INTEGRATED WATER MANAGEMENT

Plan 6 of the PSP identifies the existing Melbourne Water Aitken Creek and Upper Brodies Creek DSS boundaries and appropriately identifies the gap between those schemes that generally runs through Properties 31-34. This is generally referred to as the 'gap catchment'. Plan 6 also shows the location of a 'potential asset (no DSS)'.

Stormy Water Solutions have been assisting us with the detailed planning for the land and have been particularly focused on establishing an efficient drainage solution for Properties 28 to 34. This includes ensuring the DSS assets are appropriately located and sized and the land outside the DSS areas (i.e. the gap catchment) can function appropriately and accommodate the necessary drainage assets.

The Stormwater Management Strategy (SWMS) developed by Stormy Water solutions proposes to physically alter the stormwater catchment boundaries across the Peet landholding by regrading sections of our land, with the explicit intent of minimising the area of the gap catchment.

The Strategy calculates the size of all stormwater assets required if the new catchment boundaries are adopted. At the request of Melbourne Water, the Strategy also calculates the sizes of all assets in a 'base case' scenario where catchment boundaries are not changed. Together, these two datasets will be used by Melbourne Water to determine the appropriate cost reimbursements for the Scheme assets.

The land allocations as shown in Table 3 in the exhibited PSP for ACSB-08 and DSS "Gap" are 1.43 hectares and 0.52 hectares respectively. These areas are insufficient to meet the drainage requirements for the Peet Landholding in either the 'base case' model or with the altered catchment boundaries proposed by the SWMS. The stormwater management assets for both the Aitken Creek Catchment and the DSS "Gap" will need to be delivered with a larger footprint.

The note at the bottom of Table 3 appropriately states that *'Negotiations with landowner are still ongoing regarding the final design and land-take for these assets'* and this statement should be retained in the final form of the PSP in relation to both assets. However, we believe that the engagement with Melbourne Water and Council regarding our SWMS is sufficiently advanced that these areas can now be updated in the PSP to provide a more accurate land budget calculation. The areas in Table 3 (Water Infrastructure) and Appendix 4.2 (Parcel Specific Land Use Budget Table) should be updated to reflect the land take required as per the altered catchment boundaries in the SWMS.

Clarifying this now will ensure the Property Specific Land Budget better reflects the known drainage asset requirements.

ACSB-08 (Aitken Creek DS asset)

Plan 6 shows the location of the proposed drainage assets and Table 3 (Water Infrastructure) specifies their size.

Drainage asset ACSB-08 within Property 30 provides an important role in the drainage system that extends east along Gallantry Avenue into the existing Flax Lily Creek. The size of the sediment basin in the PSP is stated as being 1.43 hectares however our detailed analysis shows that this asset should be increased to 1.62 hectares (with original DSS boundaries) or 2.10 hectares (with Peet's proposed DSS boundary augmentations).

Stormy Water Solutions' calculations demonstrate that the additional land take is required to account for site-specific constraints such as:

- Requiring the asset to be free-draining;
- The limited capacity of the existing downstream connection into the wetlands to the east;
- The limited capacity to utilise the existing reserve and Debonair Parade east of ACSB-08 as a 1% AEP flow conveyance mechanism given the requirements of the Melbourne Water Corporation Floodway Safety Criteria (2017)¹; and
- The existing rear lot levels along Debonair Parade which front the proposed reserve (these cannot be impacted by any proposal).

'Potential asset (no DSS)'

Plan 6 shows the location of a 'Potential asset (no DSS)' within Property 31 and Table 3 specifies its size as 0.52 hectares. This Gap catchment asset is a required stormwater asset not a 'potential' one, and the detailed analysis undertaken in the SWMS demonstrates that it is undersized at 0.52 hectares.

There are currently two farm dams within the Gap catchment, one on Property 31 and one on Property 32. Accordingly, the SWMS has determined that there should be a retarding and sediment basin on each property, sized at 0.76ha (Property 31) and 0.60ha (Property 32), assuming the DSS catchment revisions are adopted as recommended in the SWMS.

The SWMS has been designed to ensure the existing conditions of the properties downstream, west of Mickleham Road, are not impacted by the development of the Peet Landholdings or Properties 32 and 33. In fact, the SWMS and proposed changes to DSS boundaries improves conditions downstream.

The referencing to the gap catchment asset within the PSP is also inconsistent. Plan 6 labels this asset as both a 'waterway' and a 'potential asset (no DSS)', however it is included within Table 3 as a 'retarding & sediment basin'. The asset is required to be a retarding and sediment basin and Plan 6 should be amended to reflect this categorisation.

Requirement R13

Further, development of the Gap catchment will also be required to meet the requirements of Clause 56.07 of the Victorian State Planning Provisions regarding stormwater treatment as referenced in Requirement R13 of the PSP.

In order to ensure a clear understanding of Requirement R13 we suggest that a date reference of the relevant performance objectives be provided.

Currently the EPA are reviewing the performance objectives within the Best Practice Environmental Management Guidelines and any change to these, which could occur during the preparation of this PSP, should be appropriately referenced.

Integrated Water Management Plan

Finally, Requirement R15 as it relates to the preparation of an Integrated Water Management Plan must provide clear direction in relation to requirements / targets, particularly around recycled water use, so this requirement that 'must be met' can be reasonably reviewed.

¹ <https://www.melbournewater.com.au/building-and-works/developer-guides-and-resources/standards-and-specifications/floodway-safety>

Requested Change

- Update Plan 6 (Integrated Water Management) to show amended Aitken Creek, Upper Brodies Creek and 'gap' drainage catchment boundaries as per the attached Master plan
- Amend Table 3 to increase the size of ACSB-08 from 1.43 hectares to 2.1 hectares
- Amend Table 3 to increase the 'gap' asset size from 0.52 hectares to include two assets, one of 0.76 hectares on Property 31 and the other 0.60ha on Property 32
- Amend Plan 6 to show a 0.6 hectare drainage asset on Property 32 and increase the size of the drainage asset on Property 31 to 0.76 hectares
- Remove the reference on Plan 6 to '*potential asset (no DSS)*' and replace with '*drainage asset (no DSS)*'
- Update Requirement 13 to provide clear date reference to the Best Practice performance targets that must be met
- Update Requirement 15 to include performance targets so compliance can be appropriately assessed
- Amend the Property Specific Land budget table to update the waterway & drainage reserve areas

Section 2 – Implementation

The preceding key themes are the overarching concerns we have with the PSP, and the following section discusses concerns regarding the implementation of the PSP with a focus on engineering and planning scheme provision matters.

1. Urban Growth Zone Schedule (Clause 37.07)

Section 3 (Application Requirements)

Section 3 (Application Requirements) of the UGZ Schedule requires the preparation of a Sodic and Dispersive Soils Management Plan. This matter was recently discussed in length at the Beveridge North West and Shenstone Park PSP panel hearings and the provision have been somewhat refined to clarify the actions required to satisfy the application requirements.

The following wording is extracted from the Beveridge North West UGZ schedule, which we submit should also be applied in this case:

Sodic and Dispersive Soils Management Plan

An application to subdivide land or undertake earthworks must be accompanied by a sodic and dispersive soils management plan, prepared by a suitably qualified professional, that includes:

- *The retention and removal of vegetation and any revegetation.*
- *The existing site conditions, including extent of sodic and dispersive soils based on soil samples in the works area, land gradient and the extent of any existing erosion, landslip or other land degradation;*
- *The extent of any proposed earthworks;*
- *Recommendation for soil management practices with consideration of anticipated sodic/dispersive soil exposure;*
- *The staging of development; and*
- *Recommendations that inform a site management plan including:*
 - *The volume and location of any stockpiles.*
 - *Vehicle access and movement within the site area.*
 - *Any treatment to manage the soil while works are undertaken.*

Section 5 (Exemption from notice and review)

Section 5 (Exemption from notice and review) should include an exemption from notice for the subdivision, use and development of land that is generally in accordance with the PSP. Whilst notification of planning permit applications is not common in PSP areas, we believe a specific reference to an exemption will enhance the implementation provisions of the UGZ Schedule.

Requested Change:

- Amend the sodic and dispersive soils Application Requirement to be consistent with the post-panel Beveridge North West PSP provision.
- Include an 'Exemption from notice and review' provision for subdivision, use and development that is 'generally in accordance with the Craigieburn West PSP'.

2. Notice of permit applications (Clause 66)

The Amendment proposes that the Schedule to Clause 66 (Notice of permit applications under local provisions) be updated to include a referral to the airport lessee company of Melbourne Airport where an application is being made within the Melbourne Airport N-Contours.

The precinct is located within Melbourne's Urban Growth Boundary as has been designated for urban development. As such, the purpose of Melbourne Airport's involvement in future planning permit applications for subdivision is unclear and poses a potential delay in the processing of future applications.

Requested Change:

- Remove the proposed Clause 66 notice provision from the Amendment documentation

3. Infrastructure Contributions Plan

The infrastructure required to service this PSP area should fit within the Standard Levy and we do not believe there is a need for any supplementary items. As such, we seek confirmation as to when the ICP will be prepared.

Section 4.1 (Precinct infrastructure table) of the PSP outlines four infrastructure items that are also apportioned to the Linden Vale PSP area. These are IN-02 (50%), IN-03 (25%), CI-01 (50%) and SR-01 (50%). However, the Linden Vale ICP seems to only contribute toward 4ha (42%) of SR-01 and 0.4ha (33%) of CI-01.

This may have occurred because the land area of these items has increased since the Linden Vale ICP was prepared however the Precinct infrastructure table should be adjusted accordingly to ensure there is not a shortfall in funding.

Requested Change:

- Amend Section 4.1 Precinct infrastructure table to require a 58% apportionment for SR-01 and 66% apportionment for CI-01.

4. Incorporated Plan Overlay Schedule 6

Requested Change:

- The Environmental Management Plan condition in Section 3 should be updated to remove the reference to the *Shenstone Park Precinct Structure Plan*.

Section 3 – Table of Changes

Page/Plan/Reference	Requested Change	Rationale
Section 1 – Introduction		
Infrastructure contributions plan Section 1 Page 5 Section 1.2 Page 7	Insert anticipated timeframes for the preparation and implementation of the Craigieburn West ICP into the Hume Planning Scheme.	<p>Has an Infrastructure Contributions Plan (ICP) been prepared in parallel as stated?</p> <p>The PSP area is suitable for immediate development, therefore certainty for landowners is paramount and should be provided as soon as possible. Expedient implementation of the ICP will avoid unnecessary interim s173 agreements.</p>
Plan 2 Precinct Features Page 9	Amend Plan 2 (Precinct Features) to show only 'high' and 'very high' River Red Gum trees	<p>There is a strong focus in the PSP on the retention of River Red Gums, of which there are numerous across the PSP area. Requirement R14 highlights the importance of including 'existing mature River Red Gums' within the design and layout of the connector street network and open spaces.</p> <p>The 'high' and 'very high' retention value trees shown on Plan 2 include a range of species that may not integrate as well into the future urban development.</p>
Section 2 – Local Context and Site Description		
Section 2.2 Purpose Page 10	<p>Amend current drafting of dot point #3 to include the highlighted words:</p> <p><i>Facilitate the final drainage outcomes for the Council "DSS Gap" catchment and the Melbourne Water development services schemes for the Aitken Creek, Yuroke Creek and Upper Brodies Creek catchments, including the protection of the Greenvale Reservoir.</i></p>	The "DSS Gap" catchment is referred to and addressed in section 3.3 of the PSP and given the active role the PSP will take in facilitating these drainage outcomes, it should be referenced in section 2.2.
Plan 3 Land Use Budget	Amend Plan 3 to reflect land uses as per the attached Master plan	

Section 2.4 Precinct land use budget	<p>Amend the land areas associated with ‘Waterway and drainage reserve’, ‘Local network park (ICP Land)’ and ‘Arterial road – new/ widening / intersection flaring (ICP land)’ and adjust the Net Developable Area for the Peet Landholding accordingly.</p>	<p>Stormy Water Solutions, our drainage consultants, has undertaken a detailed assessment of the drainage requirements and identified changes to the size of the drainage assets as outlined in the ‘Part 1: Key Issues’ section of this submission.</p> <p>The proposed tree retention strategy may also alter the Net Developable Area as the tree retention and open space objectives are balanced.</p> <p>The Arterial Road intersection flaring at Mickleham Rd / Elevation Blvd and Craigieburn Rd / north-south connector may vary as both intersections are likely to require a non-standard intersection design.</p> <p>All these matters are likely to have some impact on the Land Budget calculations, which should be reconciled at the appropriate time.</p>
Plan 4 Place Based Plan Page 14	<p>Amend Plan 4 to incorporate the changes identified in the “Key Issues” section of this submission, including:</p> <ol style="list-style-type: none"> 1. Alter the local open space distribution to be consistent with the attached Master plan 2. Amend the shape and size of the wetlands in Properties 30 and 31 to be consistent with the attached Master plan 3. Add a 0.6ha drainage asset on Property 32 4. Shift the alignment of the north-south street further west in accordance with the attached Master plan 5. Replace the <i>Connector Street – Boulevard</i> between Craigieburn Road and Gallantry Avenue with a <i>Local Access Street – Level 2 (bus capable)</i> 6. Replace the <i>Connector Street – Boulevard</i> south of Gallantry Avenue with a <i>Local Access Street – Level 2 (linear park)</i> <p>Amend labelling errors:</p> <ol style="list-style-type: none"> 1. Amend the street classification of Gallantry Avenue and Riverglenn Drive to Access Street – Level 2 	<p>Justification for each of these changes is outlined in the Part 1: Key Issues section of this submission.</p>

Section 3 – Implementation & Delivery

<p>Requirement 1</p> <p>Section 3.1 Page 15</p>	<ol style="list-style-type: none"> 1. Remove dot point 3 regarding the rural landscape interface west of Mickleham Road. 2. In any event, Remove the word “old” from dot point 3. 	<p>Mickleham Road is proposed to be upgraded to a major arterial road, which will provide a hard-edge separation between the PSP area and the rural land to the west. Therefore, it is questionable whether the interface treatment is a substantive issue that necessitates a specific Requirement in the PSP.</p> <p><u>Point 1:</u> The Requirement is drafted as follows: <i>‘Subdivision layouts, lot diversity and housing typologies must respond to the natural and existing built features of the surrounding developed area, including (but not limited to):</i></p> <ul style="list-style-type: none"> • <i>Topographical features;</i> • <i>Aitken Creek and Yuroke Creek tributaries; and</i> • <i>Rural landscape interface west of old Mickleham Road.</i> <p>However there is no guidance on:</p> <ol style="list-style-type: none"> a. The proposed design response b. The assessment criteria to determine whether this has been addressed adequately c. Whether R4 is the only criteria this will be assessed against <p><u>Point 2:</u> The prefix “old” appears to be erroneously included.</p>
<p>Requirement 4</p> <p>Section 3.1 Page 15</p>	<ol style="list-style-type: none"> 1. Amend Requirement R4 to make it clear that the landscaped nature strip is being implemented <i>within</i> the existing arterial road reserve and is not seeking to create an additional tree reserve, nor widen the road reserve of the internal ‘loop’ road within the subdivision. 2. Include a Cross Section for Mickleham Road (ultimate) in Section 4.5 of the PSP. 	<p><u>Point 1:</u> The Requirement is drafted as follows: <i>‘Development along Mickleham Road and Mt Ridley Road must provide a sensitive rural interface through design treatments, which include a landscaped nature strip between the row of housing and road reservation.’</i></p> <p>However, it is unclear whether the term ‘road reservation’ is referring to the Mickleham Road and/or Mt Ridley Road reservations? Or does it refer to the new road reservation created within the subdivision?</p> <p><u>Point 2:</u> The Mickleham Road reserve is currently 60 metres wide and it is expected that the future upgrade of Mickleham Road will require a 41 metre cross section, which leaves substantial space, within the existing road reserve, to accommodate further landscaping. The inclusion of a cross section for the road reserve would assist.</p>

Requirement 5 and Guideline 4 Section 3.1 Page 15	<ol style="list-style-type: none"> 1. Remove Requirement 5 2. Amend Guideline 4 to state: <i>An application for subdivision of land into residential lots or development of land for residential or mixed use purposes should provide affordable housing as defined by the Planning and Environment Act 1987. The affordable housing should be located within walkable catchments and provide for a range of housing typologies to meet the demonstrated local need'</i> 	<p>The matter of Affordable Housing was discussed and tested during the Beveridge North West PSP panel hearing, which resulted in the removal of the PSP Requirement and the replacement with a PSP Guideline.</p> <p>It is requested that the final outcomes that are detailed in the Beveridge North West PSP Independent Panel Report be applied to this PSP and Amendment.</p>
Guideline 5 Section 3.1 Page 15	<p>Further clarity is required regarding the extent of higher density development around retained vegetation.</p>	<p>There does not appear to be a plan that designates certain areas as being earmarked for higher density dwellings and the final dot point in G5 makes it difficult to know what extent of the land is expected to be high density.</p> <p>Plan 10 (Biodiversity Plan) shows many trees for retention making it unclear how the higher densities would be distributed.</p>
Guideline 6 Section 3.1 Page 16	<p>Clarify dot point 1 to make it clear whether:</p> <ol style="list-style-type: none"> a) The title boundary of the lot is to be set back at least 4.0m from the waterway/open space; or b) The dwelling is to be set back 4.0m from the title boundary <p>If it is to be option (a), then the Guideline should be simplified as follows:</p> <p><i>Subdivision should provide for a street separating development from waterways, sporting reserves and local parks and the linear reserve.</i></p> <p><i>Where subdivision does not propose a local street separating development, design and layout options should demonstrate:</i></p> <ul style="list-style-type: none"> • <i>A 4.0m wide "paper road" should be provided as the primary point of access from a footpath or shared path with a minimum width of 1.5 metres along the lot frontage.</i> 	<p>The Guideline is ambiguous as to whether there should be a 4.0m separation between the open space and the lot title boundary (which presumably would be the paper road referred to in dot point 3), or whether there should be a 4.0m setback to the dwelling.</p>

Plan 5 Transport Plan Page 18	<p>Amend Plan 5 to incorporate the changes identified in the “Key Issues” section of this submission, including:</p> <ol style="list-style-type: none"> 1. Shift the alignment of the north-south street further west in accordance with the attached Master plan 2. Replace the <i>Connector Street – Boulevard</i> between Craigieburn Road and Gallantry Avenue with a <i>Local Access Street – Level 2 (bus capable)</i> 3. Replace the <i>Connector Street – Boulevard</i> south of Gallantry Avenue with a <i>Local Access Street – Level 2 (linear park)</i> 4. replace the ‘controlled intersection’ legend description with ‘roundabout’ for the intersections within Properties 30, 31 and 34. 5. Add specific notation to state the Craigieburn/NS Road intersection requires a non-standard design response. 6. Add specific notation to state the Mickleham/Elevation Road intersection requires a non-standard design response. <p>Amend labelling errors:</p> <ol style="list-style-type: none"> 7. Amend the street classification of Gallantry Avenue and Riverglenn Drive to Access Street – Level 2 	<p>Justification for each of these changes is outlined in the Part 1: Key Issues section of this submission and supported by the <i>Transport Considerations memo</i> prepared by Ratio Consultants dated 17 December 2020.</p>
Non-numbered Requirement Section 3.2.2 Page 19	<ol style="list-style-type: none"> 1. Add a Requirement number for future reference 2. Show the alignment of the linear park on Plan 5 3. Include a cross section in Appendix 4.5 that specifically includes the linear reserve in varying circumstances 	<p><u>Point 3:</u> Justification for this change is outlined in the Part 1: Key Issues section of this submission and supported by the Transport Considerations memo prepared by Ratio Consultants dated 17 December 2020.</p>
Guideline 18 Section 3.2.3 Page 20	<p>Amend the Guideline G18 to remove dot point 4.</p>	<p>Whilst increasing lot widths is an obvious way to achieve a reduced frequency of vehicular crossovers on verges, lot widths are driven primarily by the desired density outcomes, which may be higher along the linear reserve due to the amenity that is provided.</p>

Guideline 20 Section 3.2.3 Page 20	<p>Amend Guideline G20 to include the highlighted wording to confirm that the streets abutting the linear park do not need to provide a row of trees on the side adjacent to the park.</p> <p>The Guideline is drafted as follows:</p> <p><i>Unless abutting the linear park, street trees should be provided on both sides of all roads and streets (excluding laneways and streets abutting the linear reserve) at regular intervals appropriate to tree size at maturity, unless otherwise agreed by the responsible authority.</i></p> <p><i>Average interval Tree size</i></p> <p><i>8–10 metres Small (less than 10m canopy)</i></p> <p><i>10–12 metres Medium (10–15 metre canopy)</i></p> <p><i>12–15 metres Large (canopy larger than 15m)</i></p>	<p>A key function of the Linear Park is to provide an increased level of trees within the PSP area, and therefore it is not necessary to duplicate the street planting by having adjacent nature strips and linear park spaces that both accommodate tree planting.</p>
New Guideline Section 3.2.3 Page 20	<p>Include a Guideline in Section 3.2.3 (Street Network) that states:</p> <p><i>‘Interim site access may be gained from the arterial road network in the early stages of development’.</i></p>	<p>Justification for this change is outlined in the Part 1: Key Issues section of this submission and supported by the Transport Considerations memo prepared by Ratio Consultants dated 17 December 2020.</p>
Plan 6 Integrated Water Management Plan Page 21	<p>Amend Plan 6 to incorporate the changes identified in the “Part 1: Key Issues” section of this submission, including:</p> <ol style="list-style-type: none"> 1. Amend the Melbourne Water DSS and Gap drainage catchment boundaries to reflect the recommendations from Stormy Water Solutions as shown on the attached Master plan; 2. Increase the area of drainage asset ACSB08 from 1.43ha to 2.1ha; 3. The Gap catchment ‘potential asset (no DSS)’ should be shown as two assets; one on Property 31 and one on Property 32 as per the attached Master plan. 4. Replace the reference to ‘potential asset (no DSS)’ with ‘drainage asset (no DSS)’ 	<p>Justification for each of these changes is outlined in the Part 1: Key Issues section of this submission.</p>

Requirement 9 Section 3.3.1 Page 22	Amend Requirement R9 to state: “Development must give effect to relevant policies and strategies being implemented by the responsible authority, Melbourne Water and Yarra Valley Water, including the Healthy Waterways Strategy and the approved integrated water management plan for each permit/project. ”	The reference to “any approved integrated water management plan” should be project specific.
Requirement 13 Section 3.3.1 Page 22	Update Requirement 13 to provide clear date reference to the Best Practice performance targets that must be met	Justification for this change is outlined in the Part 1: Key Issues section of this submission.
Requirement 15 Section 3.3.1 Page 22	Update Requirement 15 to include performance targets so compliance can be appropriately assessed	Justification for this change is outlined in the Part 1: Key Issues section of this submission.
Guideline 23 Section 3.3.1 Page 22	We request further clarity as to the expectations that are sought to be achieved by this Guideline.	It is unclear what techniques may be used to achieve the outcomes outlined in this Guideline or whether Melbourne Water and / or council are seeking to promote alternate approaches.
Requirement 16 Section 3.3.2 Page 24	Amend Requirement R16 to include the following highlighted words: All existing above ground electricity cables (excluding substations and cables with voltage 66kv or greater) must be placed underground as part of the upgrade of existing roads or subdivision works, unless the cables share power poles with higher voltage lines ’.	There are examples where various voltage electrical cables share the same power poles (E.g. Mickleham Road) and therefore it is not practical to underground some cables but leave the remaining above-ground infrastructure in place.
Table 3 Water Infrastructure Section 3.3.2 Page 25	Amend Table 3 as follows: <ol style="list-style-type: none"> 1. Increase the size of ACSB-08 size from 1.43 hectares to 2.1 hectares 2. increase the ‘gap’ asset size from 0.52 hectares to include two assets, one of 0.76 hectares on Property 31 and the other 0.60 hectares on Property 3 3. Responsibility should be listed as Council in the 4th column for the additional DSS Gap asset. 4. Ensure note ‘^’ also applies to the DSS ‘Gap’ asset. 	<u>Points 1 and 2:</u> Justification for each of these changes is outlined in the Part 1: Key Issues section of this submission. <u>Points 3 and 4:</u> The ‘^’ note at the bottom of Table 3 should also apply to the DSS ‘Gap’ assets as the full detail of these is yet to be resolved with Council.

Plan 7 Bushfire Plan Page 26	Amend Plan 7 to remove “Mickleham Road reserve (60m low threat setback)” from the legend.	In Section 3.3.3 there is no reference to the “Mickleham Road reserve (60m low threat setback)” therefore appears redundant.
Guideline 37 Section 3.3.3 Page 27	Amend Guideline G37 so that it only relates to Bushfire Hazard Area 1 and Bushfire Hazard Area 2.	All the open spaces have been identified as bushfire hazards on Plan 7 and would therefore require a perimeter road, which conflicts with Guideline 6. However Table 4 does not require setbacks to be shown from Bushfire Hazard Area 3 & 4.
Plan 8 Open Space Plan Page 28	Amend Plan 8 to incorporate the changes identified in the “Part 1: Key Issues” section of this submission, including: <ol style="list-style-type: none"> 1. Alter the local open space distribution to be consistent with the attached Master Plan 2. Move LP-14 to the west to be located at the entry to Elevation Boulevard and contained entirely within Property 31 as per the attached Master plan 3. Adjust the alignment of the Linear Park to be adjacent to the north-south street as per the attached Master plan 4. Equalise the total public open space area across the Peet Landholding 	Justification for each of these changes is outlined in the Part 1: Key Issues section of this submission.
Requirement 24 Section 3.4.1 Page 29	Amend Requirement R24 to read as follows: <i>The first development proponent to lodge a permit application for land which contains a section of the linear park as outlined on Plan 8 must undertake a master plan for that section of the entire linear park, unless otherwise agreed by the responsible authority.</i> <i>The masterplan should be prepared in separate stages and for practical lengths (i.e. Mt Ridley Road to east-west connector, east-west connector to Craigieburn Road, Craigieburn Road to Riverglen Drive and south of Riverglen Drive) to the satisfaction of the responsible authority.</i>	<p>The alignment of the Linear Park affects numerous land parcels across the PSP area. Whilst it is understood that this Requirement provides the development proponent some design flexibility there is a risk that the design process becomes cumbersome and results in significant delays to the processing of future planning permit applications.</p> <p>It is recommended that the length of linear park that is designed be substantially less than the north and south parts of the precinct. At a minimum each length should be further broken up into 2 parts north and south of Craigieburn Road.</p> <p>Furthermore, it is likely that numerous parties will be preparing their permit applications concurrently which is likely to result in confusion and delay in relation to the linear park design and approvals process.</p>

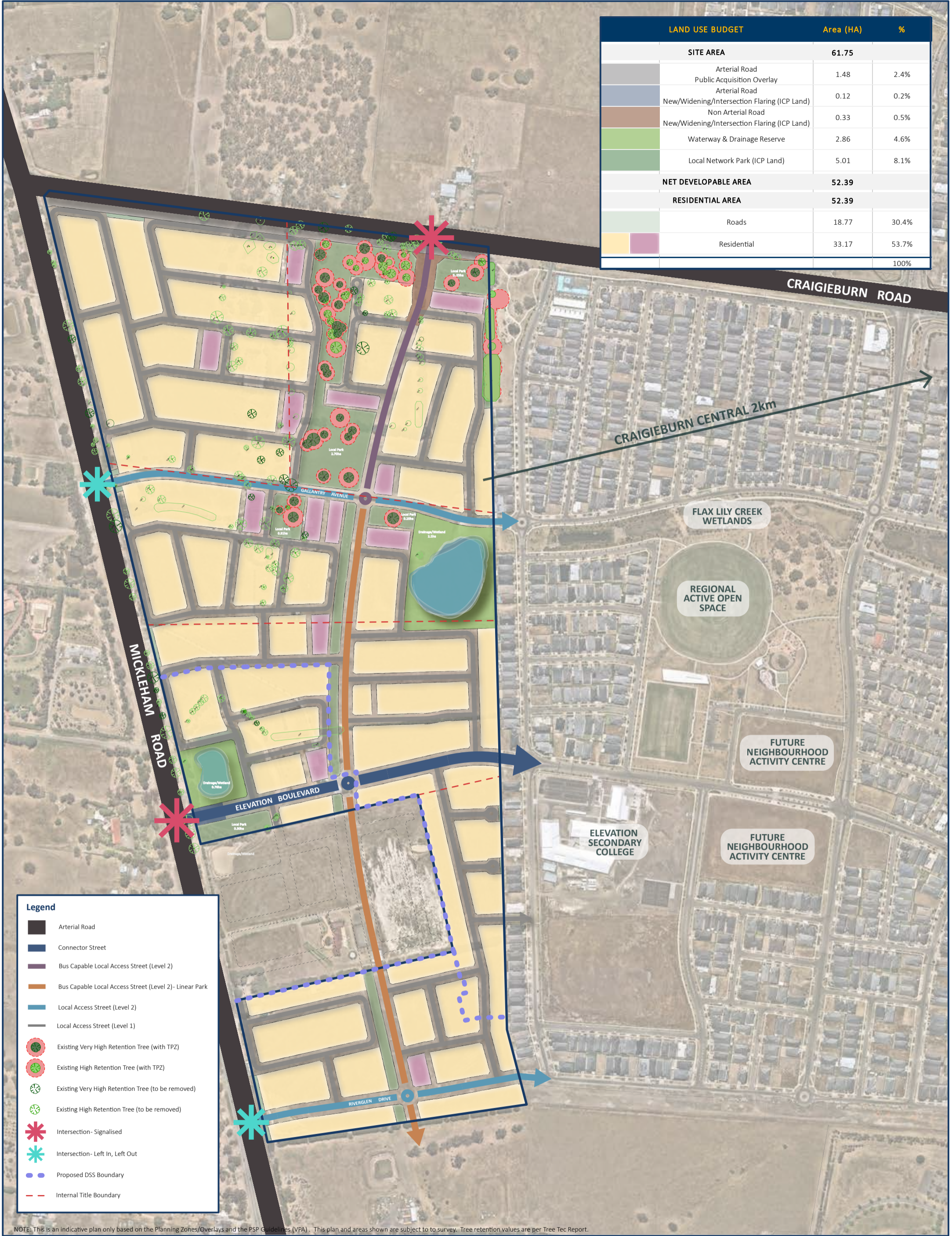
<p>Requirement 25</p> <p>Section 3.4.1</p> <p>Page 29</p>	<p>Amend the Requirement to include the highlighted words as follows:</p> <p><i>Development of the linear park as shown on Plan 8 must:</i></p> <ul style="list-style-type: none"> • Accommodate the full Tree Protection Zone of all River Red Gums shown as must be retained on Plan 10 within the linear park. • Include the Tree Protection Zone area in the credited open space. • Ensure pedestrian access is provided to all residential lot frontages via a 1.5 metre paper road. 	<p>Whilst it is understood that there is an aim to retain a large number of River Red Gums within the future development area it is unclear whether the Tree Protection Zones of all the trees identified on Plan 10 (Biodiversity & Vegetation Plan) can be accommodated within the local parks shown on Plan 8 (Open Space Plan).</p> <p>Alternatively, the local open space / linear park boundaries should be adjusted to include the Tree Protection Zones in the credited open space area.</p> <p>The requirement for a paper road should be clarified by specifying the width of a paper road that provides for footpath access (i.e. 1.5 metres).</p>
<p>Table 5</p> <p>Credited Open Space Delivery Guide</p> <p>Page 31</p>	<p>Amend LP-14 as follows:</p> <ul style="list-style-type: none"> • amend “Locational Attributes” to remove reference to retention of existing vegetation • reduce area from 0.6 hectares to 0.3 hectares as per attached Master plan 	<p>The table is drafted as follows:</p> <p><i>LP-14 “Locational Attributes”</i></p> <p><i>Located to retain existing vegetation (refer plan 10) within a passive open space.</i></p> <p>The two trees that are shown to be retained in LP-14 are located on the embankment of the large dam on 1390 Mickleham Rad and it will not be feasible to retain them. Therefore, it is recommended that the need to retain the trees in the vicinity of LP-14 is removed.</p> <p>Additionally, the area of LP-14 should be reduced from 0.6ha to 0.3ha to reflect its location between the two drainage assets as shown on the current Master plan</p>
<p>Plan 10</p> <p>Biodiversity & Vegetation Plan</p> <p>Section 3.4.1</p> <p>Page 28</p>	<p>Amend Plan 10 to incorporate the changes identified in the “Part 1: Key Issues” section of this submission, including:</p> <ol style="list-style-type: none"> 1. Rearrange local open space configuration to match the attached Peet Master plan 2. recategorize trees 953, 959, 968, 969, 982, 1048, 1232, 1265 & 1266 (TreeTec, 2019) from ‘native vegetation that must be retained’ to ‘vegetation that should be removed.’ 	<p><u>Points 1 and 2:</u></p> <p>Justification for each of these changes is outlined in the Part 1: Key Issues section of this submission.</p> <p><u>Point 3:</u></p> <p>The detail shown on Plan 10 (Biodiversity & Vegetation Plan) is very prescriptive. There are trees that are shown to be retained that are not located within the local parks or linear park, which will present major challenges for the future development of the land.</p>

	<p>3. Remove 'native vegetation that must be retained' from areas outside of the open space areas</p> <p>4. Only show River Red Gums to be retained</p>	<p>Additionally, the 'green dots' that represent the 'native vegetation that must be retained' on Plan 10 do not accurately account for the size of the trees and their associated Tree Protection Zones.</p> <p><u>Point 4:</u> There is a strong focus in the PSP on the retention of River Red Gums, of which there are numerous across the PSP area. Requirement R14 highlights the importance of including 'existing mature River Red Gums' within the design and layout of the connector street network and open spaces.</p> <p>The 'high' and 'very high' retention value trees shown on Plan 2 include a range of species that may not integrate as well into the future urban development.</p> <p>It is recommended that only River Red Gums of 'high' and 'very high' retention value be considered for retention.</p>
<p>Requirement 33</p> <p>Section 3.5</p> <p>Page 36</p>	<p>Remove as a Requirement and change to a Guideline that states:</p> <p><i>'Vegetation shown on Plan 10 as Vegetation for Retention should be retained and incorporated into either the open space network or the public realm'.</i></p>	<p>Justification for this change is outlined in the Part 1: Key Issues section of this submission.</p>
<p>Requirement 38</p> <p>Section 3.8.2</p> <p>Page 42</p>	<p>Remove dot point 14 as it is a duplication of dot point 6 of Requirement 38.</p>	
<p>Requirement 39</p> <p>Section 3.8.2</p> <p>Page 42</p>	<p>Amend the Final dot point of Requirement 39, it incorrectly references Table 4 (bushfire setbacks) instead of Table 5 (open space)</p>	

Section 4 – Appendices

	4.1 Precinct infrastructure table	
IN-05 (Pg. 44)	<p>Amend the description of Intersection IN-05 in Table 4.1 (Precinct infrastructure table) to include the following:</p> <p><i>‘Construction of a signalized T-intersection (non-standard)’</i></p>	Justification for this change is outlined in the Part 1: Key Issues section of this submission.
	4.2 Parcel specific land use budget table	
Properties 28, 29, 30, 31 and 34 (Page 49)	<p>Amend the Property Specific Land Budget table to:</p> <ol style="list-style-type: none"> 1. change the land areas of the local parks to match the areas shown on the Master plan attached to this submission, and to achieve a Public Land equalisation outcome across the Peet landholding. 2. Increase the size of waterway and drainage reserve on Property 30 from 1.43 hectares to 2.1 hectares. 3. Increase the size of waterway and drainage reserve on Property 31 from 0.52 hectares to 0.76 hectares 	Justification for each of these changes is outlined in the Part 1: Key Issues section of this submission.
Property 32	<ol style="list-style-type: none"> 1. Add a 0.60 hectare waterway and drainage reserve to Property 32. 2. Remove the 0.24 hectare allocation of ‘Local Network Park (ICP Land)’ for LP-14 (now contained wholly within Property 31 as per the attached Master plan). 	Justification for each of these changes is outlined in the Part 1: Key Issues section of this submission.

	4.5 Street cross sections	
Connector Street (28.0-31.0m) Boulevard (Pg. 59)		Cross section should make it clear the median is 3m if there is no WSUD proposed and 6m if WSUD is proposed.
New cross sections	<ol style="list-style-type: none"> 1. Include a new <i>Local Access Street – Level 2 (linear park)</i> cross section 2. Include cross sections for Mickleham and Craigieburn Roads (with and without a frontage road) 3. Include cross section for a standard laneway 	Justification for each of these changes is outlined in the Part 1: Key Issues section of this submission.
	4.8 Centres External to the Precinct	
Table 8: Town Centre hierarchy – external to Craigieburn West Precinct Section 4.8 Page. 68	Delete Table 8 from the PSP.	This Table is not referenced in the PSP and should be removed and included in the PSP Background Report.
Table 9: Employment generation in precinct Section 4.9 Page 69	Delete Table 9 from the PSP	This Table is not referenced in the PSP and should be removed and included in the PSP Background Report.



LAND USE BUDGET		Area (HA)	%
SITE AREA		61.75	
	Arterial Road	1.48	2.4%
	Public Acquisition Overlay		
	Arterial Road	0.12	0.2%
	New/Widening/Intersection Flaring (ICP Land)		
	Non Arterial Road	0.33	0.5%
	New/Widening/Intersection Flaring (ICP Land)		
	Waterway & Drainage Reserve	2.86	4.6%
	Local Network Park (ICP Land)	5.01	8.1%
NET DEVELOPABLE AREA		52.39	
RESIDENTIAL AREA		52.39	
	Roads	18.77	30.4%
	Residential	33.17	53.7%
			100%

Legend

Arterial Road

Connector Street

Bus Capable Local Access Street (Level 2)

Bus Capable Local Access Street (Level 2)- Linear Park

Local Access Street (Level 2)

Local Access Street (Level 1)

Existing Very High Retention Tree (with TPZ)

Existing High Retention Tree (with TPZ)

Existing Very High Retention Tree (to be removed)

Existing High Retention Tree (to be removed)

Intersection- Signalised

Intersection- Left In, Left Out

Proposed DSS Boundary

Internal Title Boundary

NOTE: This is an indicative plan only based on the Planning Zones/Overlays and the PSP Guidelines (VPA) . This plan and areas shown are subject to to survey. Tree retention values are per Tree Tec Report.

Addendum B – Transport Considerations memo

Dear Rhys,

17 December 2020

Rhys Dudley
Assistant Development
Manager
PEET Craigieburn Pty Ltd
Level 4,
380 St Kilda Road VIC 3004

**Craigieburn West PSP Submission
1340, 1390, 1430 and 1480 Mickleham Road and 665 Craigieburn
Road, Craigieburn – Transport Considerations**

1 Introduction

The following submission seeks further clarification and changes to the Draft Craigieburn West Precinct Structure Plan (PSP), prepared by the Victorian Planning Authority (VPA) and currently on exhibition.

Based on the information provided by Peet and the background reports available, I have reviewed the implications to the Peet landholding within the Craigieburn West PSP area and make the following comments for consideration by the VPA, during the next phase of the PSP process.

2 Scope of Review

The following review is specific to the Peet landholding including land parcels at 1340, 1390, 1430 and 1480 Mickleham Road and 665 Craigieburn Road. This submission does not include a detailed review of the PSP area north of Craigieburn Road or south of Riverglens Drive.

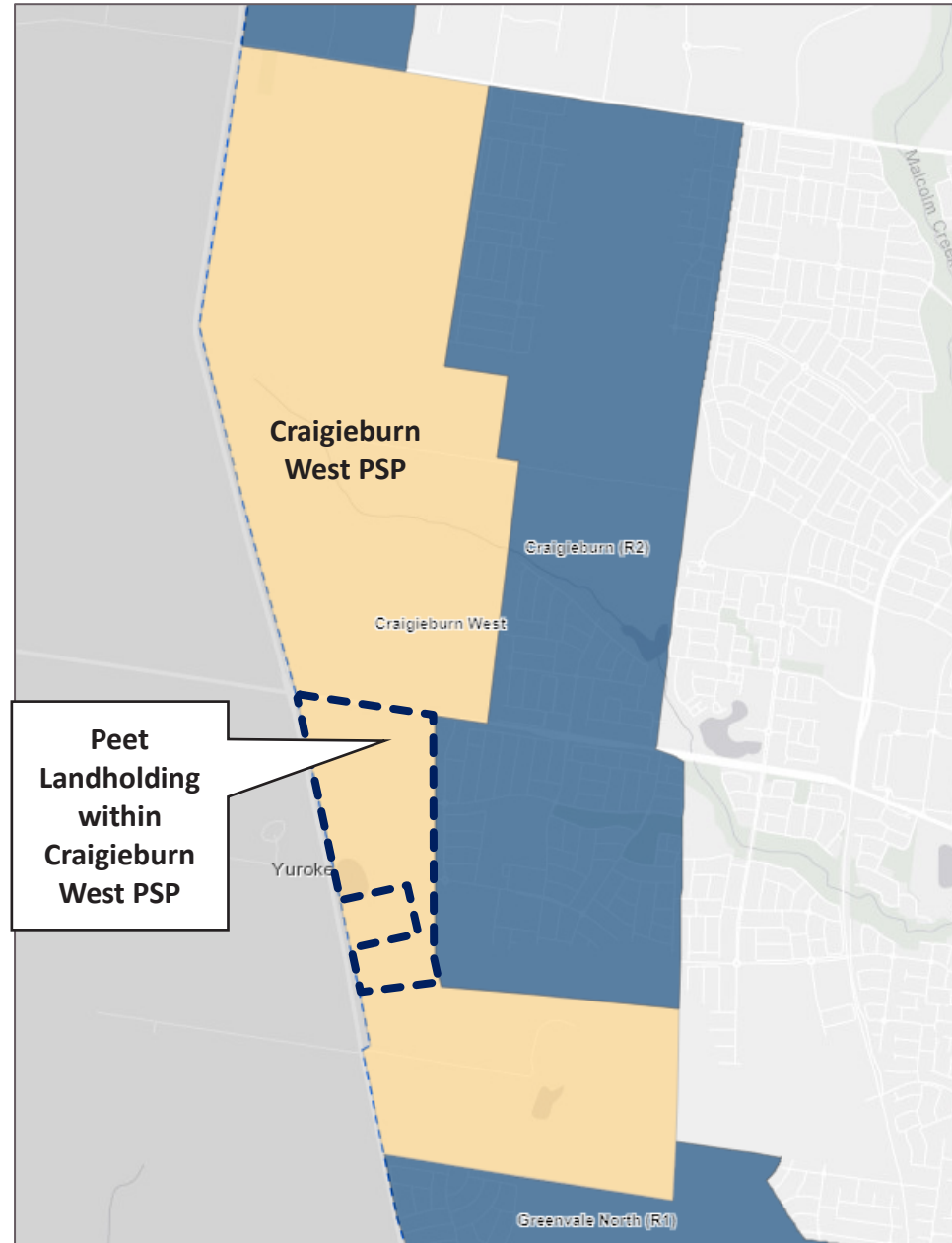
The following documents and plans have been reviewed in the course of preparing the following opinions:

- PSP 1068 – Craigieburn West Precinct Structure Plan, Draft for Public Consultation, prepared by the VPA, dated November 2020.
- Craigieburn West Precinct Structure Plan, Transport Impact Assessment, prepared by onemilegrid (OMG), dated 9 November 2020.
- Preliminary Road Network Plan of the subject site prepared by the VPA, supplied by Peet on the 11/8/2020.
- Concept Plan – Alternate prepared by Calibre on behalf of Peet dated 5/8/2020.
- Craigieburn West Precinct Structure Plan, Existing Conditions Assessment, prepared by OMG dated 18/2/2020.
- Craigieburn West – PSP 1068, Background Report, Draft for Public Consultation, prepared by VPA, dated November 2020.

3 Location

Peet Craigieburn Pty Ltd own a large portion of land in the southern half of the Craigieburn West PSP area, south of Craigieburn Road. The land owned by Peet and the Craigieburn West PSP area are shown in Figure 3-1

Figure 3-1: Craigieburn West PSP



Source: VPA website

The Peet landholding is generally bound by Craigieburn Road to the north, the largely complete Aston estate by Peet to the east, undeveloped land to the south and Mickleham Road to the west, excluding the properties at 1360 and 1370 Mickleham Road.

As shown in the preceding figure, the Craigieburn West PSP abuts the Lindum Vale (Mt Ridley West) PSP to the north, the Craigieburn R2 PSP to the east and Greenvale North R1 PSP to the south.

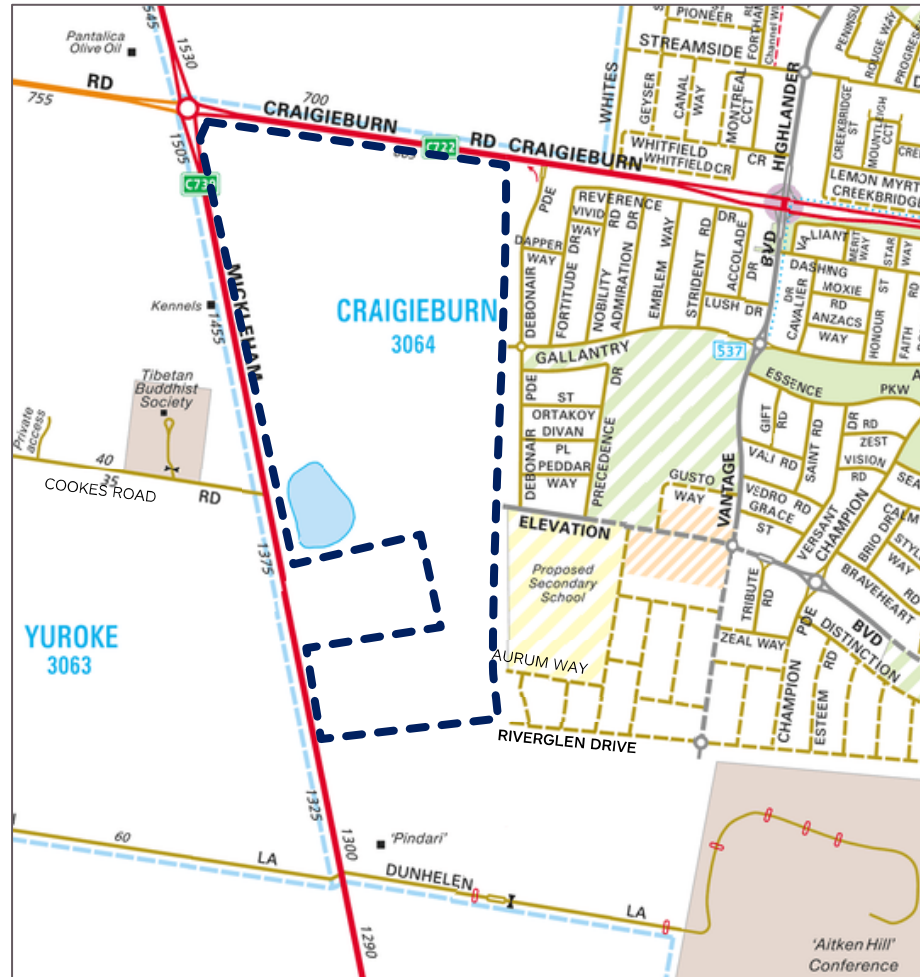
Importantly, all land to the west is outside the Urban Growth Boundary (UGB) and is generally being used as rural residential.

The abutting PSPs are all gazetted and are in various stages of development.

4 Existing Road Network

The subject site in context with the surrounding road network is shown in Figure 4-1.

Figure 4-1: Road Network Abutting Peet's Landholding



Source: Melway online

As shown in the preceding figure, the subject site has good road access with a frontage of approximately 750 metres to Craigieburn Road, a frontage of approximately 1.4km to Mickleham Road and four local road connections to the east, including Gallantry Avenue, Elevation Boulevard, Aurum Way and Riverglen Drive.

It is noted that the latest Melway image, shown in Figure 4-1, is out of date and that all proposed roads to the east within the Aston community are now constructed and the Secondary School is in operation.

There are currently no roads opposite the subject site north of Craigieburn Road and only one no through road opposite the site on the western side of Mickleham Road shown as Cooke's Road.

Craigieburn Road

Craigieburn Road is an Arterial Road aligned east west between Mickleham Road and Epping Road to the east. West of Mickleham Road, Craigieburn Road is a local road extending west to its termination shortly after Oaklands Road approximately 4.8km west of Mickleham Road.

Craigieburn Road is being upgraded by Major Road Projects Victoria (MRPV) as part of the Northern Roads Upgrade package, to provide a four-lane road,

with two through lanes in each direction. The upgrade project is scheduled to be complete by 2025.

As part of the Craigieburn Road upgrade project, the existing Mickleham Road / Craigieburn Road roundabout will be replaced with traffic signals.

Mickleham Road

Mickleham Road is an Arterial Road aligned north south between Donnybrook Road and the Tullamarine Freeway.

Adjacent to the subject site, Mickleham Road is within a Road Zone 1 (RDZ1) under VicRoads management and sits within a road reserve of approximately 60 metres with a single traffic lane in each direction.

No bicycle lanes or footpaths are currently provided along the frontage of the subject site to Mickleham Road. In the vicinity of the site, Mickleham Road has a speed limit of 80 km/h.

Gallantry Avenue

Gallantry Avenue is an **Access Street Level 2** in an east-west alignment, with an 18m cross section, comprising a single traffic lane in each direction, indented parallel parking, a footpath on the northern side of the road and a shared path on the southern side.

Elevation Boulevard

Elevation Boulevard is a **Connector Road** in an east-west alignment, with a 26m cross section comprising a single traffic lane and on-road bike lane in each direction, with indented parallel parking and footpaths on both sides of the road.

Elevation Boulevard will ultimately provide an east-west connection between Mickleham Road and Aitken Boulevard.

Aurum Way

Aurum Way is an **Access Street Level 1** in an east-west alignment, with a 16m cross section comprising a single traffic lane in each direction and a footpath on both sides of the road.

Aurum Way provides a local connection from Debonair Parade to the subject site and is not proposed to extend through the site with the exception of a short local connection.

Riverglen Drive (Southernmost Local Road)

Riverglen Drive is an **Access Street Level 2** in an east-west alignment, with a 22.3m cross section comprising a single lane of traffic in each direction, indented parallel parking on both sides of the road and a footpath on the northern side of the road.

Cookes Road

Cookes Road is a rural no through road aligned east west from Mickleham Road to its end point approximately 1km to the west. Cookes Road is located outside the Urban Growth Boundary.

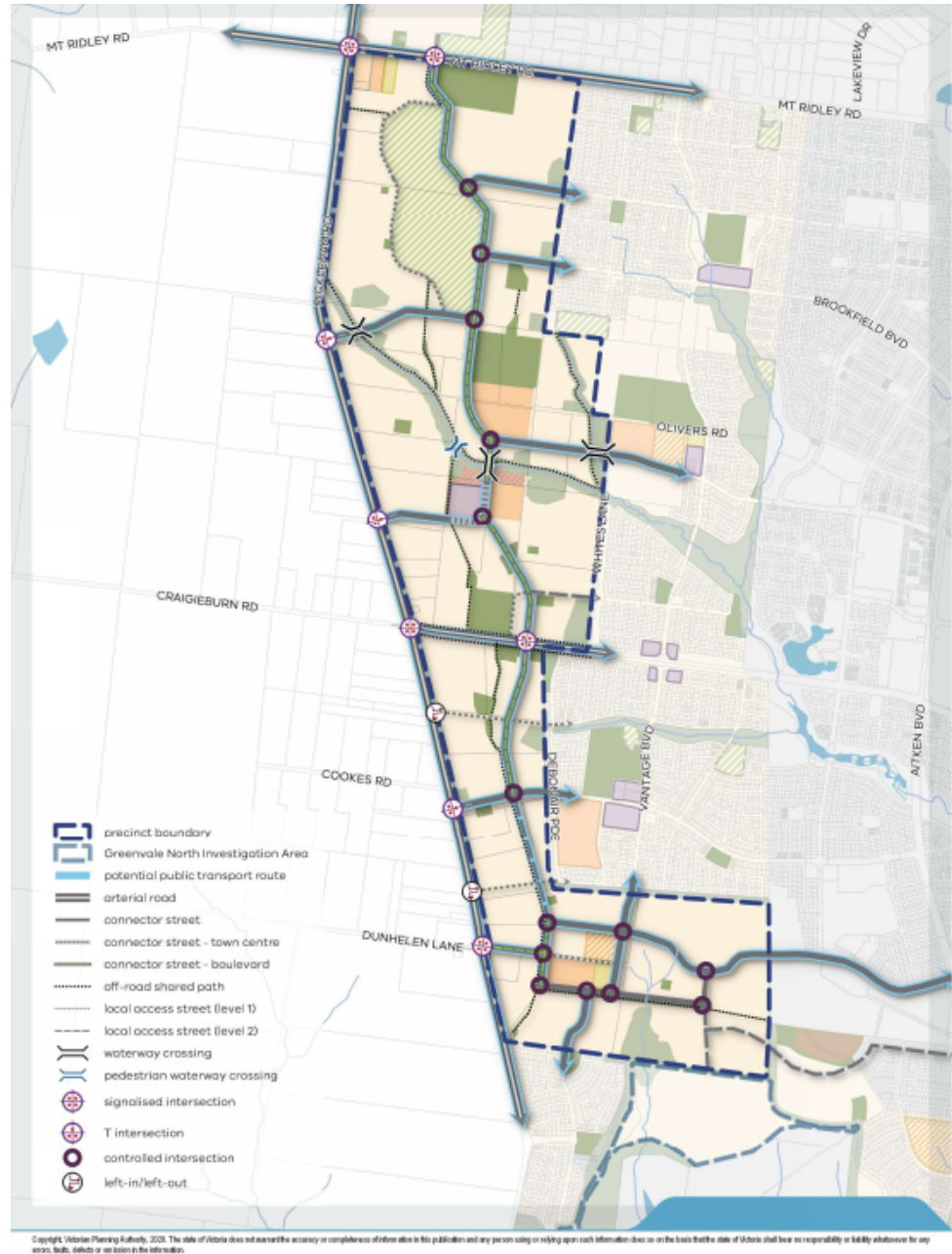
Cookes Road currently has a road reserve of approximately 20 metres providing a single vehicle width paved carriageway, with gravel shoulders allowing passing at slow speed.

Cookes Road serves in the order of 10 large rural residential properties and the Tibetan Buddhist Society.

5 Proposed Craigieburn West PSP Road Network

Plan 5 of the Draft PSP outlines the proposed 'Transport Plan', which is reproduced as Figure 5-1.

Figure 5-1: Draft PSP Transport Plan (Nov 2020)



As shown in Figure 5-1, the Craigieburn West PSP will have a number of new signalised intersections on Mickleham Road with left in / left out access points generally between each set of signals.

In parallel to Mickleham Road is a central spine Connector Road forming a north south link from the northern end of the PSP (Mt Ridley Road) through the Peet landholding to Dunhelen Lane.

The proposed road network relevant to the Peet landholding is shown in Figure 5-2.

Figure 5-2: Proposed Road Network Through the Peet Landholding



As shown in Figure 5-2, the Peet land is proposed to be entirely residential land use with passive open space. There are no traffic-generating facilities, such as Activity Centres and/or schools located within the Peet landholding.

Therefore, there are no attractors of traffic within the Peet landholding and as such traffic volumes beyond those generated by the residential development itself are associated with cut through traffic from areas external to the Peet residential area.

5.1 Gallantry Avenue and Riverglen Drive

It is noted that the east west roads, which will form the extensions of Gallantry Avenue and Riverglen Drive are identified in the PSP as Access Street Level 1 on Figure 5-2. This is inconsistent with their current designation as Access Street Level 2. The higher order classification of Access Street Level 2 is considered more appropriate, as it will allow a consistent cross section between the Aston community and the new Peet development. It is also noted that a downgrade of road classification is not typically appropriate when the traffic volumes increase towards the western end of both roads, due to the anticipated traffic from the Aston community.

5.2 North South Connector Road

The legend provided on the Transport Plan doesn't appear to accurately reflect the Boulevard Connector road type. For clarity the legend should be amended to match the line types shown on the Transport Plan.

It is our assumption that the north south road bisecting the northern portion of the Peet landholding and continuing north of Craigieburn Road, is shown as a Boulevard Connector based on information available within the PSP. The portion of road of concern is the north south section between Craigieburn Road and the extension of Elevation Boulevard, indicatively shown as a Boulevard Connector.

Issues

As identified in the OMG traffic assessment, the 2010 Cardno traffic modelling adopted by OMG, suggests that there will be a significant through volume from the northern parts of Craigieburn R2 PSP, through the Aston community along Vantage Boulevard (Connector Road), when Vantage Boulevard provides a connection to Mickleham Road in the future.

The 'rat run' is anticipated to be in the order of 9,000vpd giving an overall daily traffic volume on Vantage Boulevard of over 11,000vpd. As acknowledged by OMG this exceeds the desirable capacity of a Connector Road (7,000vpd).

We are concerned that the proposed road network within Craigieburn West PSP, provides a similar incentive for cut through traffic, similar to Vantage Boulevard. Therefore, resulting in vehicles choosing to use the local road network through the new Peet development, rather than the adjacent arterial road network.

Although we have previously sought for the intersection on Craigieburn Road to be two staggered T-intersections, rather than a cross intersection, to reduce the likelihood of rat run traffic, this has not been adopted in the draft PSP. We therefore seek, a downgrade of the north south road, south of Craigieburn Road to a bus capable Access Street Level 2.

Solution

The traffic modelling undertaken by OMG suggests an ultimate volume of 3900vpd on the portion of the north south road between Craigieburn Road and Elevation Boulevard, which is well below the upper limits of a Connector Road.

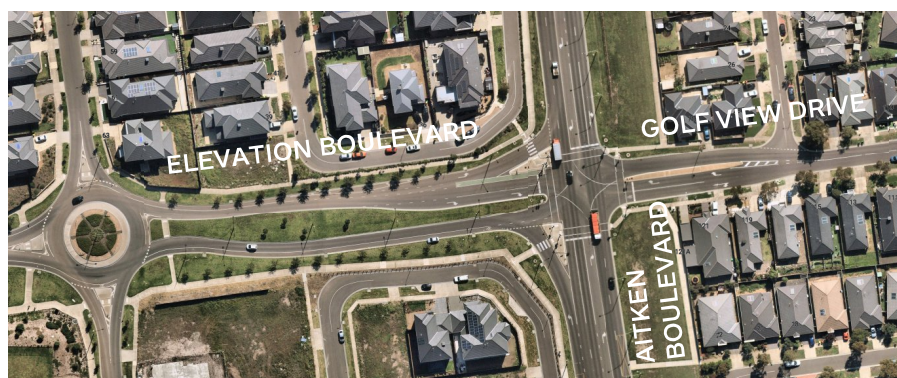
We consider it appropriate for this portion of the north south road to be designated a **bus capable Access Street Level 2**. Discussions with the VPA to date, have indicated that the main reason to provide the cross intersection is to facilitate direct north south bus connectivity. This is why we are requesting the bus capable version of the Access Street Level 2 cross section, rather than the standard Access Street Level 2.

We believe that the change to the road hierarchy to Access Street Level 2 would result in a daily volume of less than 3,000vpd, as appropriate for an Access Street Level 2.

The north south road north of Craigieburn Road is assumed to be maintained as a Connector Road to facilitate the demand for southbound movements generated by the northern half of the PSP area. However this traffic should be encouraged to utilise the arterial network once it reaches Craigieburn Road.

An example of how the intersection may be structured to discourage through traffic is provided locally at the intersection of Elevation Boulevard and Aitken Boulevard, as shown in Figure 5-3.

Figure 5-3: Example of downgrading intersection priority



Source: Nearthmap Sept 2020

The eastern leg of the intersection is Golf View Drive, which clearly diminishes in status east of Aitken Boulevard, compared to the western leg of Elevation Boulevard.

It is recommended that a similar treatment be undertaken at the Craigieburn Road / North South Road intersection. As this intersection arrangement will not fit into one of the VPA Benchmark Designs, a specific notation will need to be added to the Road Network Plan and associated section to achieve the desired outcome.

6 Proposed Cross Sections

Arterial Roads

Cross sections for the abutting arterial road network have not been provided in the Draft PSP. We believe that the Craigieburn Road and Mickleham Road cross sections should be included, as there are a number of intersections that will need to be constructed along the arterial roads.

The cross section for Mickleham Road is particularly relevant as this will ultimately be a 6 lane primary arterial requiring a 41m cross section but is currently sitting within a 60m wide road reserve.

In addition to the above, there is no cross section outlining the requirements for a frontage road adjacent to an arterial road. The current standard 12m wide frontage road typically adopted within the various PSPs, needs to be updated to accord with Council and authority servicing requirements and the relevant road design criteria.

Access Street Level 2

We note that a proposed cross section for a bus capable Access Street Level 2 has been included at a width of 21m, one metre wider than the typical 20m cross section, to allow a central road pavement width of 7.0m.

We fully support the inclusion and use of such a cross section and feel that it is appropriate as the replacement for the North South Road currently shown through the Peet landholding, due to the close proximity of the bike route through the Linear Park.

Laneway

Rear loaded lots are a common feature of many residential subdivisions and as such the current standard of laneway should be included in the PSP for reference.

Linear Park

A Linear Park is proposed from north to south throughout the PSP area. The portion of the Linear Park impacting the Peet landholding is shown in Figure 6-1.

Figure 6-1: Proposed Linear Park Alignment



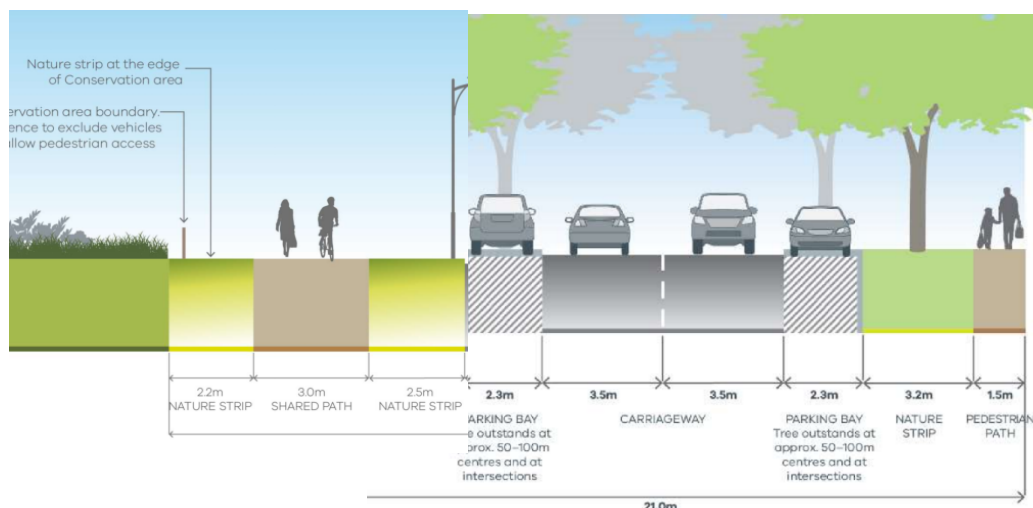
It is noted that south of Gallantry Avenue, the proposed Linear Park is aligned along the western side of the North South Road through the Peet landholding.

There is no cross section to describe how the Access Street Level 2 cross section will relate to the adjacent Linear Park containing an off road shared path.

As the Linear Park is a unique feature of this PSP, careful consideration of the cross section will be required prior to approval of the PSP. Therefore, we strongly recommend that specific cross sections are included in the PSP that demonstrate the reduction in verge widths and path infrastructure when the linear park abuts the road network.

We would anticipate that the Access Street Level 2 Cross Section abutting the Linear Park would be amended, such that the footpath and verge adjacent the Linear Park were removed and replaced with the Linear Park including shared path. An example of how the cross section would look is shown in Figure 6-2.

Figure 6-2: Proposed Bus Capable Access Street Level 2 Cross Section Adjacent Linear Park



7 Traffic Analysis Review

In regard to the traffic assessment prepared by OMG we make the following comments and requests:

Traffic Generation

A rate of 9 vehicle movements per lot per day has been adopted for the Craigieburn West PSP. Based on case study data collected by Ratio and traffic generation rates used by other consultants within recently adopted PSPs, the rate of 9vm/lot/day is considered to be too high.

It is noted that adopting a lower traffic generation rate may reduce the built in conservatism and assist in reducing the traffic volumes on the various roads expected to operate over capacity.

The adopted traffic generation rate can make a substantial difference to the anticipated road network. For example, the rate of 9 vehicle movements per lot per day results in 55,377 vehicle movement per day generated by the proposed 6,153 residential lots within the Craigieburn West PSP.

A rate of 8 vehicle movements per lot per day, based on current case study data at similar residential development, would decrease the overall daily traffic generation of the Craigieburn West PSP by over 6,000 vehicle movements per day.

Ratio have used a rate of 8 vehicle movements per lot per day throughout the growth areas, including a number of residential subdivisions within the City of Hume, which has been accepted without question.

Road Capacity Analysis

A road capacity analysis has been undertaken within the OMG report, with 4 roads expected to operate over capacity, including the following two relevant to the Peet landholding:

Table 7-1: Over Capacity Road Segments of Concern to Peet

Road	Theoretical Capacity	Interim Daily Traffic Volumes	Ultimate Daily Traffic Volume
Elevation Boulevard	3000-7000vpd	10,500vpd	8,800vpd
Vantage Boulevard, north of Fairways Blvd	3000-7000vpd	13,100vpd	11,100vpd

No recommendations or mitigating measures were identified or discussed in regard to the overcapacity roads.

It is anticipated that the particularly high volumes on Vantage Boulevard will result in diverted trips through the Peet development, which is clearly demonstrated by the overcapacity volume on Elevation Boulevard.

We request that further discussion and recommendations be provided by OMG and/or the VPA, on the implications of the road network being well over-capacity under interim conditions and also ultimate conditions.

Intersection Analysis

The OMG PSP traffic assessment does not include an intersection analysis. However, Section 13.2.1 of the Background Report states the following:

*“The intersections of **Mickleham Road / Craigieburn Road**, **Mickleham Road / Elevation Boulevard** and **Mickleham Road / Dunhelen Lane** will all operate with a Degree of Saturation of above 0.9 under interim conditions. Whilst this is not*

desirable, these intersections will improve in operation under ultimate conditions and the queues anticipated under interim conditions will not impact the operation of other intersections within the vicinity”.

We request that the PSP traffic report provide details of the above assessment, and furthermore propose appropriate mitigation to resolve the overcapacity intersections.

In particular the Mickleham Road / Craigieburn Road and Elevation Boulevard / Mickleham Road intersections are of concern to Peet.

The proposed road network and modelling assumptions indicate that the very high traffic volumes on Elevation Boulevard (8,800vpd), primarily due to through traffic, will result in a larger than ‘Benchmark’ intersection being required at the Mickleham Road / Elevation Boulevard intersection, to satisfy the Department of Transport, who are unlikely to accept the conclusion, that it will operate satisfactorily in the Ultimate Scenario.

On that basis, we request the details of the OMG analysis to review the proposed mitigation measures that will be required at the Elevation Boulevard / Mickleham Road intersection. We anticipate that this is likely to result in considerable additional expense for Peet that may not be reflected in the ICP. As such, we require acknowledgement from the VPA that the Elevation Boulevard and Mickleham Road intersection is not a ‘Benchmark’ item as defined in Appendix 6 of the VPA’s “Benchmark Infrastructure and Costs Guide” and will be treated as a “Hybrid Item”.

8 Summary

In summary we would like to see the following amendments made to the proposed Craigieburn West PSP:

Road Network Plan

- Downgrade of the north-south road between Craigieburn Road and Elevation Boulevard from a Boulevard Connector to bus capable Access Street Level 2
- Change classification of Gallantry Avenue, existing and extension, to Access Street Level 2, as per the existing construction standard, the Craigieburn R2 PSP and the anticipated use.
- Change Riverglen Drive to Access Street Level 2, as per its existing construction standard, Craigieburn R2 PSP and the anticipated use.
- Update legend on the Road Network Plan to ensure all road types shown on the PSP plan are included and readily identifiable.
- Add a “Bus Capable Local Access Street Level 2 - Linear Park” road type, and any other specific road types required to accommodate the proposed Linear Park.
- Change wording in the legend from ‘controlled intersection’ to roundabout as per the OMG traffic assessment and standard practice to reduce future ambiguity.

Craigieburn Road Intersection

- As previously discussed with VPA, there is a concern that the cross intersection on Craigieburn Road will encourage traffic to ‘cut through’ the Peet development to access Mickleham Road from north of Craigieburn Road rather than using the arterial road network, similar to the issue identified at Vantage Boulevard.
- We still recommend a staggered intersection on Craigieburn Road to reduce the through traffic. However, if it remains a cross intersection

then we seek to reduce the cross section of the North South Boulevard Connector south of Craigieburn Road to a bus capable Access Street Level 2.

- Notation within the PSP to acknowledge that the Craigieburn Road intersection will be deliberately downgraded on the southern leg and will therefore not fall into one of the standard (Benchmark) VPA intersection designs and associated ICP.

Cross Sections

In regard to the cross sections provided in the Draft PSP, we request the following changes:

- Cross sections for the adjacent arterial roads should be provided, as well as an updated version of the frontage road requirements.
- We support the addition of the Bus Capable Access Street Level 2.
- Include a cross section for a laneway.
- Include detailed cross sections of the Linear Park, particularly where it abuts a proposed road cross section, as shown in Figure 6-2.

Traffic Analysis

In regard to the traffic analysis provided, we seek the following:

- Details of the intersection analysis undertaken, particularly for Mickleham Road / Elevation Boulevard that is expected to operate over capacity.
- Proposed mitigation measures to address the numerous intersections and road segments anticipated to be operating over capacity by interim conditions.
- An explanation of the additional mitigation measures required to ensure satisfactory capacity at the Mickleham Road / Elevation Boulevard intersection and an outline of how they will be funded.
- In regards to the above, we feel that a specific reference in the PSP will be required, to identify that Mickleham Road / Elevation Boulevard will not be a benchmark intersection and that appropriate consideration is included in the subsequent ICP.

We understand that there is a desire to create connected communities and good public transport accessibility, however the success of a residential community can easily be undermined by high through volumes bypassing the arterial road network.

We look forward to your consideration of the above mentioned matters.

Yours sincerely,



Hilary Marshall
Director: Traffic
Ratio Consultants