

Expert Witness Statement

Panel Hearing C219

Prepared for and under instruction of Maddocks

Prepared by
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1. Expert's details

1.1 Name and address of expert

Shannon Brown
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Greenscape Tree Consulting
PO Box 85,
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1.2 Qualifications

2013 - Graduate Certificate in Arboriculture (University of Melbourne)

2011 - Diploma in Horticulture (Arboriculture, Wodonga Tafe)

2007 - Certificate IV in Horticulture (Arboriculture, University of Melbourne)

1.3 Professional Memberships & Accreditations

- International Society of Arboriculture (ISA, 174841)
- Victorian Tree Industry organisation (VTIO, V10510)
- Arboriculture Australia (AA, 2648)
- Quantified Tree Risk Assessment (QTRA) licensed user (3999)
- Previous member of Council Arborist Victoria (CAV) when employed at Council (> 8 years)

1.4 Previous advice

In relation to the implementation of the SLO9 interim control I had provided expert advice prior to the proposed control being sent to the Minister. My role in the early stages was to provide feedback based on my experience in assessing trees that were protected under the following tree controls;

- Significant Landscape Overlay (SLO)
- Vegetation Protection Overlay (VPO)
- Environment Significance Overlays (ESO)
- Local Law (tree controls)

My involvement was quite limited and was based on my experience as a consulting arborist to several councils and private residents across Melbourne. In addition, as an expert I provided feedback to Council in relation to some of the submissions regarding C219. My feedback in relation to the above remains consistent within this report, where comments / opinions crossover.

2. Expert Witness Experience

Shannon Brown has appeared at VCAT as an expert witness and/or co-presenter since 2008. In addition, he regularly provides expert witness statements to VCAT and the Magistrates' Court. Below are the VCAT appearances he has made in 2019 to date.

Golden Oak Mitcham Pty v Whitehorse CC VCAT [P2216-2018], (7 August 2019)

Acting on behalf of Whitehorse CC, trees were assessed, and an expert witness report prepared for VCAT. The dispute was over vegetation removal, protection of existing vegetation and impacts to visual amenity.

DB Empire Pty Ltd v Banyule CC [2019] VCAT 1281, (5 August 2019)

Acting on behalf of Banyule CC, trees were assessed, and an expert witness report prepared for VCAT. The dispute was over the level of encroachment by building and works within the TPZs of two trees, one on an adjoining property and one on the subject site.

Renoco Homes Pty Ltd v Whitehorse CC VCAT P2445/2018, (18 June 2019)

Acting on behalf of Whitehorse CC, trees were assessed, and an expert witness report prepared for VCAT. The dispute was over tree removal within Significant Landscape Overlay - Schedule 9.

Lean v Whitehorse CC [2019] VCAT 1042, (30 May 2019 and 13 June, 2019)

Acting on behalf of Whitehorse CC, trees were assessed, and an expert witness report prepared for VCAT. The dispute was over review of a decision to grant a planning permit to construct five dwellings and tree removal. The applicants have also raised significant concerns about the on-going health and viability of neighbouring trees due to the extensive excavation and fill that is proposed for this development.

Patterson v Whitehorse CC [2019] VCAT 702, (12 March 2019)

Acting on behalf of Whitehorse CC, trees were assessed, and an expert witness report prepared for VCAT. The dispute was over a review of a decision of to grant a planning permit in relation to the retention of vegetation on the site.

Australia Loddon Jino Pty Ltd v Whitehorse CC VCAT P2357/2018, (18 February, 2019)

Acting on behalf of Whitehorse CC, trees were assessed, and an expert witness report prepared for VCAT. The dispute was over the illegal removal of a *Eucalyptus melliodora* – Yellow Box from within the front yard of the property, and the formalising of conditions of the implementation of a Section 173 Agreement.

Stanaway v Whitehorse CC [2019] VCAT 868, (8 February 2019)

Acting on behalf of Whitehorse CC, trees were assessed, and an expert witness report prepared for VCAT. The dispute was over Councils refusal to grant a permit for the removal of a *Quercus robur* - English Oak.

3. Relevant Experience

Shannon Brown has been in the tree industry since 1999. He has worked in the private sector as a climber and groundsman involved in tree removal and pruning. He has worked as a climber and elevated work platform (tower) operator in the commercial power line sector, undertaking the pruning, removal and management of trees in high and low risk bush fire areas and inner-city areas. He has also managed tree safety projects and held positions as a team leader for tree management organisations.

Shannon has held management positions in local government, including Arborist – contract management, Senior Arborist, Planning Arborist with the City of Whitehorse and Coordinator of Environmental Planning in the Town Planning Department with Maroondah Council.

Shannon has worked on projects such as hazard tree management program for electricity supply companies, the grade separation of Nunawading station, Eastland town square development, Ringwood Station redevelopment as well as project managing and the implementation of the VicSmart planning process with Maroondah Council.

He has extensive experience in tree assessment regarding tree health and structure, for trees on residential and commercial sites. In addition, he has extensive experience in the assessment of trees relating to residential and commercial developments. Shannon is one of only a small handful of arborists in Victoria qualified and experienced to assess trees for AusNet Services in high and low risk bush fire areas on the hazard tree assessment program.

Shannon has also written and managed the implementation of council tree management policies for public trees, the establishment and progressive improvement of town planning processes, focusing on tree removal and pruning applications and development sites. Shannon has participated in town planning forums and spoken at public tree management events for local government.

He has been a keynote speaker at industry seminars, speaking on the assessment of trees regarding risk and potential hazards in relation to tree health and structure.

4. Statement of expertise to prepare this report

I have extensive experience in Arboriculture. I carry out the assessment of tree health and structure in a range of environments daily. Tree assessments are carried out for private landowners and commercial and local government organisations.

I have made all the inquiries that I believe are desirable and appropriate and no matters of significance which I regard as relevant have to my knowledge been withheld from the Panel.



Shannon Brown
Director
Greenscape Tree Consulting Pty Ltd

5. Instructions that define the scope of this report

- 1. Respond to summaries of relevant submissions
- 2. Analyse and focus on the proposed controls (including exemptions)

6. Introduction

On 3 April 2019, Whitehorse Council (**Council**) submitted a new request to the Minister of Planning (**the Minister**) to prepare and exhibit Amendment C219 to permanently apply SLO9. SLO9 is currently an interim SLO, which has been in effect since 8 February 2018. On 16 June 2019, Council received notice that the Minister had authorised Council to prepare the amendment subject to conditions.

The amendment was placed on exhibition from 15 July 2019 until 19 August 2019. Council received 307 submissions during exhibition. The submissions raised a number of issues. Greenscape Tree Consulting has been engaged to;

- 1. Respond to summaries of relevant submissions
- 2. Analyse and focus on the proposed controls (including exemptions)

This report will provide comment on points 1 and 2.

7. Documents reviewed for preparation of the report

- 1. City of Whitehorse Minutes, Ordinary Council Meeting, Monday 16 September 2019, pages 103 124.
- 2. City of Whitehorse Minutes, Ordinary Council Meeting, Monday 16 September 2019, summary of submissions, pages 109 121.
- 3. Municipal Wide Tree Study, Whitehorse City Council, March 2019, Issue A 318123, Ethos Urban.
- 4. Schedule 9 to clause 42.03 Significant Landscape Overlay
- 5. Clause 21.05 Environment
- 6. Clause 21.06 Housing
- 7. Clause 22.03 Residential Development
- 8. Clause 22.04 Tree Conservation
- 9. Schedule 9 to clause 42.03 Significant Landscape Overlay With track changes
- 10. Clause 21.05 Environment With track changes
- 11. Clause 21.06 Housing With track changes
- 12. Clause 22.03 Residential Development With track changes
- 13. Clause 22.04 Tree Conservation With track changes
- 14. Maps 01 06 Significant Landscape Overlay
- 15. Maps deleting VPO2 and VPO4

8. Facts, matters and assumptions

This report is based on the documents I have read. Those documents relate directly to the matter of the request made to the Minister by Council to prepare and exhibit Amendment C219 to permanently apply SLO9. In addition, I have relied on my experience in providing arboricultural services to several council planning departments including;

- Banyule City Council
- City of Boroondara
- City of Melbourne
- City of Whitehorse
- Maroondah City Council

My previous experience includes being employed at Whitehorse City Council for seven years, including approximately three years in their Planning department following this I was employed at City of Maroondah for approximately two years as the Coordinator of Environmental Planning. Since 2015 I have been providing independent consultancy services to a number of Melbourne municipalities including Whitehorse City Council.

In providing arboricultural services to councils and the private sector I have had to consider the State and Local Planning Policy Framework. This has given me extensive firsthand experience and countless hours talking to planning consultants, Council planners, Councils, developers, residents and consulting arborists.

In addition, I am on the Victorian Tree Industry organisation (VTIO) consulting arborist group / Council Arborist Victoria (CAV) steering committee that recently reviewed AS4970-2009 *Protection of Trees on Development Sites,* (**the standard**) which provided comments back to Standards Australia in relation to the 10 year review of the standard.

Further, I am on the steering committee of the same group that re-wrote the CAV 'report guidelines.' The 'guidelines' provide a template to which consulting arborists can refer to when submitting arborist reports to Council's in relation to planning applications.

The above-mentioned experiences have allowed me to form opinions and assumptions relative to planning overlays that protect trees. Opinions and assumptions that I draw on daily when inspecting trees in relation to planning applications, and of which many are shared with my peers in the arboricultural industry.

9. A SUMMARY OF THE OPINIONS OF THE EXPERT

9.1 Response to relevant summaries of submissions

9.1.1 Submissions in support of the Amendment

Below is a summary of submissions in support of the Amendment, as provided in the City of Whitehorse Minutes, Ordinary Council Meeting, Monday 16 September 2019, page 109, and my response to those summaries of submissions.

There were a number of submissions that provided support for the Amendment. Submitters who had lived in Whitehorse for a long time stated their concern that they have observed a decline in canopy tree coverage across time. Supporters also expressed that trees are very important for the entire community. Canopy trees contribute to the amenity of the urban environment and regulate the climate, such as reducing the heat island affect in urban areas. Canopy trees regulate air quality, provide habitat for fauna and provide shade for properties which could assist in reducing reliance on artificial cooling of properties in summer.

Submissions in support included strong discussion about the need to protect mature trees and the value that these trees add to the landscape and neighbourhood character of Whitehorse. It was also noted by supporters that canopy trees take a number of years to mature and replanting with new trees does not replicate the benefit of the original tree; instead canopy trees should be retained in the first instance.

The submissions included the following comments:

- Concerned about the loss of tree cover in the municipality
- Support the recognition of the important role canopy tree vegetation has to the broader community
- Very important amendment to the planning laws that will help maintain all the benefits trees provide to the neighbourhoods in Whitehorse
- Need large trees and a complete range of vegetation levels to provide habitat and refuge for birds and other wildlife
- Support this amendment to preserve the leafy character of these suburbs.

Response

A broad concern from submitters who have lived in Whitehorse for a long time stated, 'that they have observed a decline in canopy tree coverage across time.' This is consistent with the feedback I have received from residents in many areas of Melbourne.

Residents will often share stories of how they have seen trees removed from previous development sites, in their street or surrounding area. Often these residents have lived in a municipality for many years and can provide in depth detail (often addresses) of where trees have been removed. Where I can I will usually explain that their area does not have any kind of vegetation control therefore, it is very difficult to retain trees. Often, they are quite surprised to know their trees (trees in their area) are not protected.

When working in municipalities with existing vegetation controls, residents will often remark that 'they moved to the area because of the trees'. Municipalities with existing vegetation controls are more heavily treed and seem to attract people keen to settle in those areas. Even when development is proposed in areas with existing vegetation controls, there seems to be a general acceptance from both arborists, developers and property owners that the retention and protection of trees must be considered. Whereas, areas with no vegetation controls a general 'moonscape' approach seems to be common.

9.1.2 Trees are a safety hazard to property and people

Below is a summary of submissions in relation to 'Trees are a safety hazard to property and/or people', as provided in the City of Whitehorse Minutes, Ordinary Council Meeting, Monday 16 September 2019, pages 109 – 110, and my response to those summaries of submissions.

Many submitters have expressed their concerns about the potential safety hazards associated with trees, including dropping of limbs, complete tree failure or dropping of leaves and debris. Some submitters also raised concerns about damage to property such as to drainage pipes.

It should be emphasised that trees on private property are the responsibility of the private landowners and the introduction of permanent tree protection controls such as the SLO does not remove the responsibility of the land owner to maintain his/her property, including trees, and to minimise any risk from the vegetation. A permit exemption is provided for trees that are dead or dying or are posing an immediate danger (an arborist assessment may be required to determine the health of a tree under this exemption). The issue of planning application related exemptions and costs are discussed in further detail below.

Some submissions raised issues around the liability of Council where a control was placed on trees that necessitated a planning permit for removal. In Timbs v Shoalhaven City Council [2004] the NSW Court of Appeal found that a council was liable for failing to properly consider a request to remove trees that were dangerous. The issue arose because a council employee, when asked if trees could be removed, did not advise the homeowner to make an application, rather he said that the trees could not be removed without permission (which was true). If, however an application had been made, the trees had been competently inspected and a decision made, in good faith, not to allow the removal of the trees there would have been no liability even if the tree had fallen in the wind. The case concluded that liability does not arise because of bad consequences but because of a failure to take reasonable care.

There were several trees mentioned in submissions that had, or were, causing concern for submitters. In some instances, these had been reported to Council who had inspected them for any immediate hazard and concluded that they were healthy and safe or they needed works undertaken. Until Council is made aware of a particular tree it cannot advise or investigate if a tree is dead, dying or dangerous and whether it should be removed on that basis, or whether it needs a planning permit application with an assessment from an independent arborist.

Response

When considering the number of private trees across Melbourne for example, it is unusual when compared to most planning related tree and site assessments to deal with trees that have dropped limbs or even whole tree failure. Whilst it is certainly acknowledged branch failures do occur as do whole tree failures, however, based on my experience both are quite rare, particularly the latter. When the issue of tree safety is raised, in my experience it is usually done on the assumption that something may happen rather than something that has happened.

The Insurance Council of Australia (2019) state in part and in relation to trees, that most risks to property are common-sense dangers. Large trees hanging over houses and drainage gutters blocked with debris are some common risks that consumers encounter. Consumers applying common sense will be able to appropriately mitigate most risks. Therefore, the concerns submitters have expressed in relation to safety hazards such as dropping of limbs, complete tree failure or dropping of leaves and debris (City of Whitehorse Minutes, Ordinary Council Meeting 2019), are issues that the Insurance Council of Australia believes are 'common risks' and with 'common sense' and will be able to appropriately mitigate most risks (Insurance Council of Australia 2019).

This mitigation of risk from the Insurance Council of Australia, falls directly in line with 'private properties being the responsibility of the private landowners' (City of Whitehorse Minutes, Ordinary Council Meeting 2019), and that the introduction of C219 does not reduce in anyway a private landowners responsibility to mitigate risks or their ability to do so in relation to trees. If a private landowner believes a tree is dangerous, they can have it assessed by an arborist. If that arborist has assessed the tree as dangerous, the landowner can apply to Council to have the tree removed.

If assessed by a Council planning arborist as dangerous, there is provision under the scheme (SLO9) for a tree that has 'become dangerous' to be exempt from requiring a permit for its removal. Therefore, C219 does not restrict the removal of dangerous trees in anyway. This in my experience is very similar to the way other vegetation controls are applied across Melbourne. For example, if a tree is dangerous in Banyule or Maroondah an exemption can be given so that a permit is not required for its removal.

It is worthy to note that Australian Bureau of Statistics (2015) shows that between 2004 and 2013 that most deaths directly related to trees were the result of people falling out of them, not trees falling on them.

In relation to the dropping of leaves and debris, there are gutter guarding systems available that work quite well in reducing leaves and debris in gutters and on roofs. It must be noted that this is a common problem across Melbourne, and not having trees overhanging a property will not eliminate leaves and debris being carried by the wind and accumulating on a roof or in the gutter. In addition, the cleaning of gutters is generally seen as a standard maintenance for any homeowner.

In relation to damage to property such as to drainage pipes Roberts, Jackson and Smith (2006) state tree roots follow water gradients in the soil. They continue by saying that if these lead to a leaking pipe then roots will tend to grow along lines of least resistance, such as are likely to be found around cracked, poorly installed or leaking pipework. Roberts, Jackson and Smith (2006) go on to say there is no way in which roots can 'sense' the presence of water in intact pipes, sewers and drains there almost always have to be leaking before roots are 'attracted' to them'. What this means is that if pipes are maintained and upgraded / replaced when necessary tree roots should have no adverse impact on them. Therefore, as with dropping of leaves and debris the maintenance of pipes is generally seen as a standard maintenance for any homeowner.

The approval of C219 will not prevent the removal or management of dead, dying or dangerous trees. In addition, it will not stop property owners from maintaining their dwelling or managing their land as they currently do. It, however, has the potential to improve the landscape character, reduce the visual impact of development and improve the overall environments of the areas it currently covers.

9.1.3 Potential fees / costs associated with planning permit applications

Below is a summary of submissions in relation to 'Potential fees / costs associated with planning permit applications', as provided in the City of Whitehorse Minutes, Ordinary Council Meeting, Monday 16 September 2019, pages 110 – 111, and my response to those summaries of submissions.

A planning application will be required to remove, destroy or lop a tree that is of the size triggered by SLO9. Many submitters opposed the cost of a planning permit application and/or the cost of the arborist report required to be submitted with an application. Some submitters stated that Council is using the proposed controls as a revenue raising mechanism and that fees should be waived.

The Planning and Environment (Fees) Regulations 2016 is outside my area of expertise. Therefore, I have only provided comment on the section below, which relates to arborist reports. The summary of submissions in relation to arborist reports is;

An arborist report is required under Clause 59 of the Planning Scheme for a VicSmart planning application to remove a tree in the SLO. The costs associated with obtaining an arborist report concerns some submitters. The Panel for Planning Scheme Amendment C51 (to implement the Whitehorse Neighbourhood Character Study 2003 and amended SLO schedules) considered that it would be reasonable to ask a proponent to provide an arborist report to Council at their cost where it is unclear if a tree meets an exemption or if the tree is healthy and is proposed for removal for other reasons (page 41 of the Panel Report for Amendment C51). With the interim SLO9 controls, Council has required the submission of arborist reports with applications, which are then reviewed by Council's consultant arborist.

The cost of an arborist report will depend on the circumstances at hand. Officers have undertaken benchmarking and identified that, depending on the number of trees to be assessed, the approximate cost of an arborist report for one tree is \$500 - \$600, with additional trees being charged at \$25-\$100 per tree. This would form a one-off cost to the property owner. Figures greater than this may also have included works to the trees.

A review of other Councils with similar planning controls, shows that for applications for low numbers of trees, Councils are often providing the arborist assessment at a subsidised rate. The Statutory Planning team should consider whether this might be an option in this case.

It should also be noted that some tree maintenance may fall under the 'ornamental pruning' and 'pruning for regeneration' clause, and therefore no permit or arborist report will be required.

Finally, Council could consider allowing the removal of more than one tree per VicSmart application (due to the lesser administrative burden of assessing a small number of trees). This could be further investigated as a local VicSmart control which allows Councils to specify types of applications that can be assessed through the VicSmart application process. In undertaking this review, Council could also consider works within 4 metres of a protected tree through the VicSmart process.

Response

For all the council planning departments I have worked in as a council officer or as an independent consultant arborist they have for the most part required an arborist report as part of the application process whether for tree removal or development. It has been my experience that most applicants accept the requirement for an arborist report as part of the application process. Some have even been satisfied that they have 'covered all bases' and received appropriate advice in relation to their application, and that they haven't just left it to 'a council' to make all the decisions. Working for private clients I have found they are engaged in the 'tree process' and like to receive advice to assist them in submitting the best possible application they can. It's not often I come across applicants that vehemently oppose submitting an arborist report with a planning application.

The cost of an arborist report will depend on the circumstances at hand (City of Whitehorse Minutes, Ordinary Council Meeting 2019). This statement is very true. The responsibility to retain and protect trees does not rely solely on government authorities. Some of that responsibility must reside with the arboricultural industry (**the industry**). Small and large businesses within the industry have the scope to set fees for arboricultural reports based on the 'needs' of the application. With the mobile technology available today an arborist report for a single tree removal (VicSmart) could almost be written on site. With the use of templates, time in writing a basic report could also be reduced.

Therefore, whilst in general the approximate cost of an arborist report for one tree is \$500 - \$600, with additional trees being charged at \$25-\$100 per tree (City of Whitehorse Minutes, Ordinary Council Meeting 2019), there is scope available for the industry to reduce costs where possible, whilst keeping a business financially viable.

As mentioned above, it is important to keep in mind that responsibility to retain and protect trees should not rely solely on government authorities, but developers, designers and arborists play a major part in tree protection and retention too. As part of that responsibility there is scope to reduce the cost of arborist reports.

9.1.4 Imposition on private property rights

Below is a summary of submissions in relation to 'Imposition on private property rights', as provided in the City of Whitehorse Minutes, Ordinary Council Meeting, Monday 16 September 2019, pages 112, and my response to those summaries of submissions.

Many submissions raised the issue of Council imposing control over trees located on private property, often planted by the residents themselves, and thereby intruding into decision making on private land and requiring the property owner to follow externally determined tree regulations.

The introduction of overlay controls on private property is a valid planning measure where a special feature of the land requires protection. Other similar planning controls that Council has previously introduced include Schedules 1-8 of the SLO, the Heritage Overlay (HO) and the permanent Vegetation Protection Overlay (Schedules 1-5). The application of such overlays is consistent with the overall objectives of the Planning and Environment Act 1987 which includes providing for the protection of natural resources and the maintenance of ecological processes and genetic diversity.

Concerns about community benefits at the cost of individual rights is an issue often expressed when new planning provisions are proposed, and in the case of tree protection controls, this relates in part to the ongoing obligation to maintain the tree/s and the associated costs. Through provision of appropriate planning information and advice, Council can play an important role in alleviating landowner concerns about the ability to manage trees on their property, and thereby help minimise loss of significant vegetation in the municipality.

Tree preservation is important on private land as well as public land to maintain a healthy urban forest canopy cover across the municipality of 30% as a minimum. This target is contained in the Urban Forest Strategy which was adopted by Council in 2018 and could include this target in Clause 21.05 (Environment) to link this intention with the planning scheme. The target is based on research which indicates that the full benefits of an urban forest, including cooling of the urban areas, is achieved when the canopy cover reaches 30%. Estimates of current canopy cover may vary depending on the type of assessment tool used and the quality of data involved.

The interim report: Urban Vegetation Cover Analysis prepared by the Department of Environment, Land, Water and Planning (DELWP) estimated that almost 21% of Whitehorse was covered by tree canopy above 3 metres when it was surveyed in 2014. The Discussion Paper (March 2016) prepared as part of the Municipal Wide Tree Study determined that the tree canopy coverage was between 22% – 26% of all land in the municipality in 2016. Council's Tree Study used software called 'i-tree' which did not take tree height into consideration and therefore may have captured trees less than 3 metres in height. This may account for the discrepancy between the two estimates.

More recent data released by DELWP in July 2019 for trees over 3 metres shows that the City of Whitehorse currently has a canopy cover of approximately 18% which indicates a decline in overall canopy coverage across the municipality of 3% in 3 years. Moreover, it is evident that the number of canopy trees greater than 5 metres will likely be less once trees between 3 – 5 metres in height are removed. However only 10% of the municipality is managed by Council and therefore mature trees on both public and private land will need to contribute to the overall canopy cover target of 30%.

Response

It is my experience that residents have an expectation that councils will provide a level of protection to trees on private properties. Whilst I have come across some residents that have planted their own tree(s) and feel as they planted them, they should be able to remove them as and when they wish. I can understand why some residents feel this way. However, it's been my experience working in different municipalities that residents also want trees to be retained, to ensure the character of their area is not detrimentally impacted by the removal of trees.

In addition, developers and perspective homeowners actively seek properties in protected areas because they know how liveable those types of areas are. In fact, many landowners I have dealt with that live in areas that have vegetation controls, will often say 'we bought here because of the tree(s)'. So, whilst some see vegetation controls as an imposition and an encroachment on rights, many others see them as a benefit. The implementation of C219 will assist in Council achieving 30% canopy coverage, which will benefit the overall community, and improve the overall environmental conditions, and will align them with neighbouring councils that have blanket controls

9.1.5 Impact on development

Below is a summary of submissions in relation to 'Impacts on development', as provided in the City of Whitehorse Minutes, Ordinary Council Meeting, Monday 16 September 2019, pages 113 – 114, and my response to those summaries of submissions.

Some submitters are concerned that the proposed tree protection controls will reduce development and/or impact on housing development and affordability. SLO9 will not prohibit subdivision or development. However, new development must address the tree protection controls of the overlay, meaning that careful design and planning will be necessary to make sure development allows for the continuation and good health of the protected tree/s. The decision guidelines will guide outcomes on the value of the tree/s and the contribution to the streetscape and local habitat, and the consideration of options to enable retention of the tree/s. Pre-application planning advice should be sought from Council's Statutory Planning Unit, prior to the commissioning of development plans.

Some submissions raised concerns about the impact of the controls on the housing capacity of Whitehorse. Council's Housing Strategy and Neighbourhood Character Study 2014 demonstrated that there is sufficient housing capacity in particular areas of Whitehorse to justify more stringent controls to protect Whitehorse's valued neighbourhoods. This is consistent with the direction provided in Plan Melbourne 2017 - 2050 and State and local planning policy.

As part of Council's submission to the Managing Residential Development Advisory Committee in 2016, Council presented a broad analysis into its land and theoretical dwelling supply based on its proposed new residential zones and other areas where dwellings could be located (such as in commercial areas). The figures showed that Whitehorse can satisfactorily accommodate the expected growth in housing in the municipality to 2036 and beyond within its residential rezoning, as well as protect environmentally sensitive and highly valued neighbourhood character areas for the future. Council rejects any assertion that it is not accommodating its fair share of residential growth. In summary, based on the existing zoning regime, as at 2014:

- Whitehorse's housing requirement to 2036 is 12,997 dwellings (an average of 500 new dwellings per year).
- Whitehorse's theoretical dwelling capacity is 108,755 dwellings.
- Whitehorse theoretically has over eight times the dwelling capacity it requires to meet its future housing needs (95,758 extra dwellings).

The figures do not take into account the lifting of the two-dwelling limit in the Neighbourhood Residential Zone (which was in place when the zones were first introduced). Therefore, the theoretical limit would be higher based on the removal of this limit.

A permit for tree removal is not proposed outside the minimum building setback in the Residential Growth Zone in recognition that this zone is intended to provide for housing at increased densities. This balances the protection of the neighbourhood character and streetscape with the supply of land for future housing growth. This exemption is not proposed for other zones as they are intended to be locations of less intense growth and development.

Some submitters raised concerns about the inability to remove trees that may affect existing, or future, solar panels. It is recognised that factors such as tree type, height and density may affect the extent of overshadowing to a rooftop solar energy facility whereby efficiency and performance is affected. Amendment VC149 (gazetted on 24 July 2019) was aimed at addressing the issue of overshadowing to solar systems due to new development and works.

DELWP also prepared Planning Practice Note 88 – Planning considerations for existing residential rooftop solar energy facilities and a Solar Overshadowing Information Brochure – Homeowners Guide (October 2018) to mitigate and manage impacts. The effects on rooftop solar energy facilities should be mitigated through taking into consideration, but not limited to, the following:

- The appropriate siting and location of the rooftop solar energy facility;
- The extent to which the rooftop solar energy facility has been located to protect it from overshadowing through placement higher on the roof;
- Whether the rooftop solar energy facility is mobile and can be relocated to another area of the roof;
- The type of rooftop solar energy facility and transitioning to an alternative system
 or incorporating system enhancements, e.g. a multiple string system is less
 affected by shading than a single string system. Additionally, system features
 such as micro inverters or bypass diodes assist to enable a system to operate
 with partial shading;
- The type of tree that is planted and whether appropriate consideration has been made, taking into account growth potential such as tree height and crown extent;

- Whether the tree can be appropriately trimmed and pruned without jeopardising the health of the tree; and
- The extent of overshadowing legitimately affecting the operation and efficiency of the solar energy facility.

An express right to solar access remains a contentious issue and has not been well articulated in the Victorian planning system, particularly with respect to solar panels being granted access to direct sunlight. VCAT has experienced several matters which raise this concern in the context of development and overshadowing. John Gurry & Assoc Pty Ltd v Moonee Valley CC & Ors (Red Dot) [2013] VCAT 1258 articulated various factors to be treated as reference points when decision-makers take into consideration potential overshadowing; noting however that each decision must be treated on its own facts. Such factors can include:

- A test of "reasonableness", rather than avoiding overshadowing altogether
- Whether the strategic planning controls and policies affecting the land allow for legitimate expectations for solar access
- Whether relevant solar panels have been placed in an unreasonably vulnerable position on the host building; and
- The length of time the solar panels have been installed on the host building.

As such, overshadowing of solar panels due to trees and whether to grant a permit for tree removal should draw reference to the existing documentation and guidelines that DELWP have prepared as well as other considerations and supporting evidence that emerges on a case by case basis.

Response

Some of the concerns raised by submitters are outside my area of expertise. However, I have provided comments where I have experience in related matters and tree issues.

In relation to some submitters being concerned that the proposed tree protection controls will reduce development and/or impact on housing development, my experience working in municipalities across Melbourne tells me that this is unlikely. As previously mentioned, it is my experience that people actively seek out areas with tree controls and seem to accept that trees need to be retained where possible.

Banyule and Maroondah Councils have vegetation controls over much of their municipalities. When I worked as the Coordinator of Environmental Planning at Maroondah Council, and more recently provided arboricultural consultancy services to the Banyule planning department, applicants wishing to develop in those areas accepted that trees must be retained and designed around where possible, it didn't seem to be an issue. Based on my experiences with those councils, I believe that for the majority of residents and prospective developers (large and small) SLO9 will not be an issue, and that those wishing to develop will accept the tree control and provide due consideration to trees and appropriate design responses where required. Having assessed many applications since the introduction of the interim control, I have seen many applications particularly over the last 12+ months where trees are now being considered, retained and designed around. Whereas prior to the introduction of the interim control proposed development sites were more-or-less moonscaped.

It is worth noting that canopy cover in Maroondah (a neighbouring council) is 24.3%. Maroondah City Council uses SLOs extensively to protect canopy trees in urban areas throughout the municipality (Whitehorse City Council / Ethos Urban 2019). Whereas the Interim Report: Urban Vegetation Cover Analysis (Eastern Region) prepared by Department of Environment, Land, Water and Planning (DELWP) estimates 20.9% of Whitehorse Council is covered by tree Canopy (Whitehorse City Council / Ethos Urban 2019).

The vegetation protection coverage in both Maroondah and Banyule doesn't appear to be restricting development in those municipalities.

In fact, Maroondah City Council (2017) residential development forecasts assume the number of dwellings in Maroondah will increase by an average of 444 dwellings per annum to 51,258 in 2031. In addition, the City of Banyule (2019) residential development forecasts assume the number of dwellings will increase by an average of 469 dwellings per annum to 60,086 in 2036. With both Maroondah and Banyule showing housing growth for the foreseeable future, indicates the vegetation protection controls are not impacting housing growth.

Further, the vegetation protection controls are likely to play a major part in making the municipalities more liveable and environmentally friendly when they reach their end year for the respective studies / forecasts.

I agree with Council's response in relation to solar panels. There are a lot of considerations and factors when determining the best location and configuration of solar panels for a building / dwelling. In my experience trees play only a small part in those considerations. For example, type of tree being deciduous or evergreen, height, spread and seasonal access to solar exposure to a roofline.

Most dwellings in the municipality more-or-less are sited in the middle of a block. It is my experience that a large majority of trees are located on boundaries, with some in the middle of a front yard, and perhaps closer to a dwelling in a rear yard. Point being, it is quite rare for the roof of a dwelling to be completely cut off from solar access. Appendix 1 shows an area in Burwood (where the interim control exists) that provides an example of the rooftops of dwellings as all having solar access.

The aerial photo is from 2018, and only serves as an example to show, that whilst rooflines are at times partially in shade, most have access to solar, and therefore solar panels could be reasonably sited on a roof to have adequate access to function.

Further, and with the above in mind, it is my experience from working in many municipalities that applications to remove trees as a direct result of the shading out of solar panels is quite rare. Most residents seem to be able to have solar panels installed without the need to prune or remove trees. This is a minor issue, that could be easily managed when the test of 'reasonableness' is applied to the installation of solar panels.

9.1.6 Changes to the proposed control and/or permit exemptions

Below is a summary of submissions in relation to 'Changes to the proposed control and/or permit exemptions', as provided in the City of Whitehorse Minutes, Ordinary Council Meeting, Monday 16 September 2019, pages 115 – 117, and my response to those summaries of submissions.

Several submissions proposed changes to the controls and/or permit exemptions.

List of environmental weeds

Some submissions requested the addition of a specific tree species to the exempted environmental weeds list. Council's Consulting Arborist, Tree Education Officer and Senior Environmental Advisor reviewed all of the suggested species and agreed that none of the suggested species warrant inclusion on the exemption list.

The species included Camphor Laurel, Early Black Wattle, Poplars, Bay trees, all types of Pittosporum, non-native trees, Moreton Bay fig, Gum trees, Liquid Amber, Oleander, Lilly Pilly, Privet, Paperbarks, conifers and Pine Trees.

One submitter suggested that the Environmental Weed list should say "comprised of" instead of "including" as the word "including" is not definitive. Legal advice about the interpretation of this exemption concluded that the word "including" is not definitive and therefore does not list the species to the exclusion of all others, as was the intention of the exemption. It is proposed to clarify the words preceding the Environmental Weed list.

Response

Very few of the Genus and species proposed to be included in 'a weed list' by submitters are on the Agriculture Victoria (2017) declared noxious weeds list. Many of the Genus and species proposed to be included by submitters could be more associated with a site personally connected with a submitter rather than, the Genus and species being a weed, by definition being 'a plant growing wild, especially in cultivated ground to the exclusion or injury of the desired crop' (Ermert & Clapp 1998).

The only trees listed on the Agriculture Victoria (2017) declared noxious weeds list that relate to any of the trees proposed by the submitters to be listed as weeds are;

- Acacia erioloba Giraffe Thorn
- Acacia karroo Karoo Thorn

These two trees relate through Genus with the 'Early Black Wattle', which is *Acacia mearnsii* – Early Black Wattle. However, Giraffe Thorn and Karoo Thorn are very different from Early Black Wattle.

Whilst it is reasonable to believe that some submitters may have a plant growing where it is not wanted however, are unlikely to be to the exclusion or injury of the desired crop or garden to a point where they out compete all planted vegetation. In addition, excluding an entire Genus such as Gum trees (*Eucalyptus*) and Paperbarks (*Melaleuca*) (more listed above) is very poor practice from a bio-security perspective. Genus and species diversity will keep the canopy of an urban forest strong, will be more readily able to respond to pests and diseases that attack a particular Genus and more likely to provide more opportunity for fauna to exist and survive in the urban context.

In addition, the mix of leaf shape, colour and size, along with bark colour and texture, and a mix of canopy shapes, provides a more interesting visual impact than having only a small mix of Genus and or species. Therefore, based on some of the above, it was determined that none of the suggested species warrant inclusion on the exemption list, which I believe is a reasonable and fair decision.

Tree height and trunk circumference thresholds

Some submissions requested changes to the height and girth at which a planning permit would be triggered. A benchmarking exercise undertaken for the Municipal Tree Study has shown that canopy trees become visible in the streetscape at 5 to 6 metres in height and begin to contribute to the neighbourhood character and create a relationship to the scale of buildings. Part 2 of the Municipal Tree Study analysed the "and/or" requirement whereby either the height or circumference or both trigger a planning permit. The Study concluded that the triggers ensure that the control is targeting trees that are large enough to have an impact on neighbourhood character or will become significant canopy trees into the future. It is not recommended that the triggers be changed.

Some submissions queried how a measurement can be taken when the tree has multiple trunks. The measurement is of a single trunk circumference. Therefore, if a tree is multitrunked, if the largest of those trunks meets the circumference trigger than a permit would be required. If a tree has five trunks for example and none of them is or greater than the circumference trigger, then a permit is not required.

Response

The above response by the Council in relation to the request to change the height and girth at which a planning permit would be triggered, is reasonable. In my opinion, it is very important to ensure trees 5 metres in height are captured under the trigger. Trees species that have the potential to grow greater than 12 metres in height at maturity, however, are 5 metres in height when they meet the permit trigger, are effectively our next generation of canopy trees. These trees must be given protection measures that allow them to reach maturity, so that the municipality (the Council and residents) have effective measures to ensure canopy continues to exist and increase into the future. This also provides a direct link to the benefits of retaining and protecting of trees in urban environments.

The retention and protection of trees in urban environments has been well documented. Harris, Clark and Matheny (2004) have listed benefits as being (but not limited to) the following;

- Trees perform important environmental and social functions
- Tree preservation may be part of a larger conservation program
- Vegetation improves air quality
- Air temperature, wind (moderation of wind speed) and energy savings
- Stormwater runoff and erosion control
- Noise reduction
- Physiological and social benefits

• Economic value (such as greater sale prices of houses with trees on the property)

Trees become visible in the streetscape at 5 to 6 metres in height and begin to contribute to the neighbourhood character and create a relationship to the scale of buildings (City of Whitehorse Minutes, Ordinary Council Meeting 2019).

In addition, trees at 5 metres in height are already starting to provide benefits as listed above. Therefore, the permit triggers proposed in relation to height and circumference are more than reasonable.

Proximity of trees to dwellings and in-ground pools

Some submissions proposed changes to the exemptions relating to the distance from a dwelling or in ground swimming pool where the proposed permit exemption will apply to trees located less than 3m from these assets. The exemption for trees within 3 metres of a house aligns with provisions in Clause 22.04 of the Planning Scheme which also recommends a minimum separation distance of 3 metres between trees and buildings and works in SLO9 (4 metres in SLO 1-8 and VPO sites) to protect both the root system and the building foundations. This distance is also consistent with exemptions that apply for all of the SLOs in the City of Maroondah. Yarra Ranges and Knox provide exemptions for trees within 2 metres of buildings, which means that SLO9 is proposed to be more generous in this regard. This distance also assists residents, developers and applicants on adequate separation from buildings for new tree planting. It is not recommended that this exemption be modified.

Further to the above, the Amendment proposes to exempt the need for a planning permit to remove, destroy or lop a tree within 3 metres from an in-ground swimming pool. The exemption does not explicitly state that it applies to existing in-ground swimming pools, which was the intention of the exemption. It is proposed to add the word "existing" to the exemption relating to in-ground swimming pools.

Response

The exemptions relating to the distance from a dwelling or in ground swimming pool where the proposed permit exemption will apply to trees located less than 3m from these assets, is reasonable. Having been the Coordinator of Environmental Planning in the Town Planning Department with Maroondah Council, I was responsible for assessing trees where the 3-metre exemption applied, under the Maroondah Planning Scheme. The exemption read as;

 A tree within 3 metres of an existing house or other building (Maroondah planning scheme 2019).

I found that the exemption was quite easy to administer, and simple to understand for both Council officers, residents and other stakeholders. The exemption of 3 metres instead of 4 metres, is good because trees that I have seen that are considered nuisance are generally 2 – 3 metres from a dwelling. Trees beyond 3 metres can generally be managed. If they can't and pose a risk or are a nuisance there are other avenues that can be taken to have them removed.

Space required for tree planting

Some submissions requested changes to the provision relating to the requirement for a minimum area of 35m2 for a tree in SLO9 rather than the provision of a minimum area of 50m2 as per the SLO1-8. The Tree Conservation Policy at Clause 22.04 refers to a minimum planting area (to establish new trees) of 50m². These provisions were intended to apply to the existing SLOs 1 - 8 due to the nature of the Bush Environment Character areas covered by SLO1-8 and the larger native and indigenous tree species preferred in these landscapes. The same tree planting area is not appropriate for the areas proposed to be covered by SLO9 (Bush Suburban and Garden Suburban Character areas) due to the prevailing lot sizes, setbacks, predominant tree species size and potential for more growth and change. The decision guidelines in SLO9 require Council to consider the appropriate area for a new tree, including whether the planned location will enable the future growth of the canopy and root system to maturity and whether there is adequate space for the offset planting.

Response

Using the tree size to soil volume relationships (Figure 1) by Urban (2008), we can see that with an area containing $35m^2$ ($35m^3$ in relation to figure 1) of soil volume a tree can achieve a diameter at breast height (DBH) of almost 50cm.

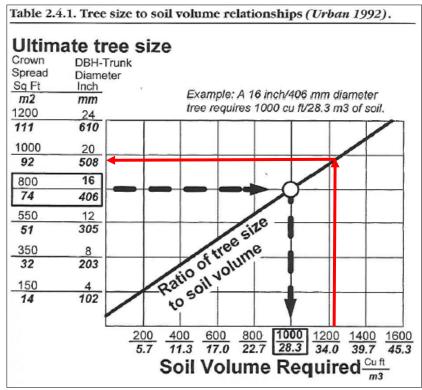


Figure 1. Soil volume chart used to show tree size to soil volume relationships, the red arrows show what 35m³ of soil volume equals in relation to the DBH.

To show how soil volume, tree height and DBH relate, I have used information from a report I did in 2018, I have also used the below example in a VCAT hearing. The example does not exactly reflect a soil volume of 35m^2 equalling a DBH of approximately 50cm. However, it is used to give a general idea of how tall a tree can grow with a certain amount of soil volume relative to a DBH.

To gain an idea of how tall a tree will grow relative to its DBH I randomly selected 10 trees all different species from tree reports that had been written and trees assessed by qualified arborist's as being 8m to 12m in height. Table 1 provides a breakdown of the DBHs and their corresponding tree heights. Table 2 shows the average DBH as being 41.7cm and the average height as 10.3m.

This means that based on the trees randomly selected from the reports, a 10.3m high tree would have an approximate DBH of 41.7cm.

If we use the above as a guide only, and we know that the availability of $35m^2$ soil volume equals a DBH of approximately 50cm according to tree size to soil volume relationships by Urban (2008), and we know that a 10.3m high tree would have an approximate DBH of 41.7cm, and the average height of a tree with a 41.7cm DBH according to my sample group, is 10.3m, it is reasonable to believe with a soil volume of $35m^2$, leading to a DBH of 50cm, a tree could grow to between 10-15m in height, possibly higher.

A tree 10 - 15m in height within the context of SLO9 could be considered a canopy tree. Therefore, the requirement of an area of $35m^2$ of soil volume for a tree in SLO9, is likely to be adequate for the development of a canopy tree, and therefore reasonable for SLO9 areas.

Table 1

DBH (cm)	Tree Height (m)
47	11
35	11
35	11
25	9
48	12
38	10
76	12
15	9
40	9
58	9
Total = 417	Total = 103

Average

417/10 = 41.7 DBH	103/10 = 10.3m

Table 2

DBH (cm)	Tree Height (m)
39	8
40	9
41 (Average)	10 (Average)
42	11
43	12

Public transport infrastructure

Yarra Trams and the Department of Transport made submissions to include an additional exemption to allow the removal of trees to maintain the function of the on road public transport network, including tramways. The majority of tram infrastructure would be located in a Road Zone or on public land where the proposed controls do not apply and there are existing exemptions proposed for powerlines and public utilities.

However tramways is a defined term within the Planning Scheme and has assets which may require the need to manage vegetation. Most bus layover areas are located within land not affected by the proposed controls. However works associated with bus and tram operations can include platforms, tram track and overhead infrastructure, roadway alterations including kerbing, awnings, street furniture, driver facilities and substations. Some of these may be located on land that is proposed to be covered by SLO9. Therefore it is proposed to include the following exemption: "The removal, destruction or lopping of a tree to the minimum extent necessary to maintain the safe and efficient function of the existing on-road public transport network (including tramways) to the satisfaction of the Department of Transport". By only exempting the existing on-road network, this means any works for future public transport infrastructure will require consideration by Council.

VicRoads made a submission requesting a change to the exemptions in SLO9, which is currently expressed as:

A permit is required to remove, destroy or lop a tree. This does not apply to:

• A tree on public land or in a road reserve removed by or on behalf of Whitehorse City Council.

VicRoads requests the following change (addition represented in bold underline):

A permit is required to remove, destroy or lop a tree. This does not apply to:

• A tree on public land or in a road reserve removed by or on behalf of Whitehorse City Council or the relevant road authority.

The SLO header clause (Clause 42.03) includes a table of exemptions, including that a permit would not be required by a public authority to remove, destroy or lop vegetation for emergency works or road safety, including to maintain the safe and efficient function of an existing public road. Therefore, the planning scheme already adequately considers the importance of road safety. It is not considered that the roads authority would require a permit beyond maintaining the public road network. It is not recommended that the exemption proposed by the submitter be included.

Response

It seems the SLO header clause (Clause 42.03) that includes a table of exemptions adequately addresses Yarra Trams and the Department of Transport concerns. Considering a permit would not be required by a public authority to remove, destroy or lop vegetation for emergency works or road safety, including to maintain the safe and efficient function of an existing public road, allows vegetation works to a point where safety issues relating to vegetation can be addressed without the need to apply for a permit. This will allow Yarra Trams and the Department of Transport to address safety concerns with minimal delay, therefore minimising risk and disruption to a transport network.

9.1.7 The Intent of the control

Below is a summary of submissions in relation to 'The Intent of the control', as provided in the City of Whitehorse Minutes, Ordinary Council Meeting, Monday 16 September 2019, page 117, and my response to those summaries of submissions.

Some submitters queried the intent or rationale for the proposed permanent controls, particularly if they did not have any trees currently on their property. Some submissions stated that the introduction of the controls will discourage landowners from planting trees, or retaining trees as they approach the threshold, and therefore the proposed control will not achieve the objectives of the planning scheme. Some submitters queried the significance of the landscape across Whitehorse and whether a blanket wide control is justified.

The intent of the controls is to protect current, as well as future trees that contribute to the landscape and neighbourhood character and provide numerous benefits to the community beyond the private property on which they sit, such as fauna habitat, cooling of properties, supply of oxygen and contribution to visual amenity. Properties devoid of trees currently, may contain trees in the future that will be afforded protection under the SLO9.

Response

I believe it is unlikely landowners in any great number would not plant trees as a result of the permanent control. It is my experience that even landowners that perhaps do not like trees as much as some others on their properties, will still generally plant trees. However, they will likely be more species and location specific. In addition, a landowner cutting down trees before they reach 5 metres in height is unlikely. There is some effort needed in even the removal of a 4-5 metre tree.

For example, it may not be able to be removed in one piece (cut from the bottom), therefore ladders may be required, which is dangerous, so a landowner may need to engage an arborist.

A 4-5 metre tree will generally be a lot bigger once it's on the ground than what the lay person expects. There is a lot of effort required to cut it up and fit it in a green bin and the right tools are required to do so. In my experience once a landowner has done it, they usually won't do it again, because of the level of work involved in removing even a small tree. Further, people in my experience are reluctant to remove trees that they have paid for and planted themselves.

The concerns of some submitters that 'the controls will discourage landowners from planting trees or retaining trees as they approach the threshold' is more of an 'urban myth' than a reality in my experience. I cannot see it happening, certainly to the extent where it compromises the overall canopy of the municipality or impacts the integrity of the control.

9.1.7 Other comments

Below is a summary of submissions in relation to 'Other comments', as provided in the City of Whitehorse Minutes, Ordinary Council Meeting, Monday 16 September 2019, page 117, and my response to those summaries of submissions.

Some submissions raised other comments, or comments not directly relating to the Amendment. Other comments included:

Removal of trees by developers

Some submitters called for a distinction between "residents" and "developers". Any property has the potential ability to be developed subject to the requirements of the Planning Scheme. Council cannot distinguish between property owners who wish to develop a property and property owners who do not wish to develop their properties.

The SLO9 is a 'forward thinking' control protecting existing and future trees (as discussed above) and that any property may become a re-development site into the future. Furthermore, as previously discussed, the VicSmart controls and associated fees are specifically constructed with residents (versus developers) in mind.

Some submissions queried the removal of vegetation from sites in their area. Without the submissions providing exact details, it is possible that a permit had been issued before the introduction of the temporary SLO9 on 8 February 2018, however a property owner may not have acted on the permit until recently. If Council becomes aware of or is advised of concerns about illegal tree removal this will be investigated by Council's Planning Enforcement team.

Response

I agree with the above response by Council in relation to the call from submitters for a distinction between 'residents' and 'developers.' As indicated in Council's response any property can be developed (subject to the requirements of the Planning Scheme) in addition, any landowner can become a 'developer'. Therefore, putting an 'us' and 'them' clause in the control would not be practical or workable in my opinion.

Further, VicSmart controls and associated fees are specifically constructed with residents (versus developers) in mind, as explained by Council.

Process to introduce the controls

Some submissions queried how the interim controls were introduced and the absence of any consultation. Interim controls are temporary controls that are not implemented through a full planning scheme amendment process and therefore do not go on public exhibition. The request for interim controls was made under section 20(4) of the Planning and Environment Act 1987 based on the criteria outlined in the Practice Note "Intervention in Planning and Heritage Matters".

A request for interim, municipal wide controls was made to protect trees while the planning scheme amendment for the permanent controls is prepared. This is a common approach when a feature (such as trees, heritage buildings etc.) needs to be protected until a proposed permanent control has been fully considered and reviewed through the planning scheme amendment process. The interim controls have been extended until 30 June 2020.

The interim controls are based on the Municipal Wide Tree Study that was undertaken in 2016. The Municipal Wide Tree Study included community consultation and Council invited feedback on the draft study in April and May 2016. Council received a variety of feedback which was incorporated into the final report. The Municipal Tree Study Final Options and Recommendations Report (June 2016) ultimately recommended that Council extend the Significant Landscape Overlay (SLO) to all residential zoned land in the municipality. Council determined to request interim controls to extend the SLO in its request to the Minister for Planning for the initial authorisation for the permanent controls. More information about the Tree Study and final report can be found online at:

https://www.whitehorse.vic.gov.au/whitehorse-tree-study

A small number of submitters queried the amendment process for the permanent controls, or made reference to the controls being introduced without consultation. Council is required to undertake the Amendment process according to the Planning and Environment Act 1987, which includes a statutory exhibition process when comment can be made and a possible independent planning panel where submitters have the opportunity to be heard. This provides a transparent process through which property owners can provide feedback. This current exhibition period is the formal process for Council to consult on the proposed permanent controls. As noted above, Council also sought feedback on the Municipal Wide Tree Study that lead to the proposed controls.

Response

The above is largely outside my area of expertise and therefore I have not provided comment. However, The Municipal Tree Study Final Options and Recommendations Report (June 2016) that ultimately recommended Council extend the Significant Landscape Overlay (SLO) to all residential zoned land in the municipality, is relatively consistent with the feedback I receive from residents in that they 'want trees to be protected'.

Trees on nature strips

Many submitters raised concerns about trees planted on nature strips. Some submitters wanted to see more trees on public land. Under Council's Urban Forest Strategy, street trees and trees on public land will generally only be removed if, in the opinion of the Council arborist, the tree is dead, dying or dangerous. The interim Urban Forest Strategy does currently allow for the removal and replacement of healthy street trees where a significant portion of the existing trees need to be removed and replacement of all trees will provide a benefit for management or amenity. The process is termed a "streetscape upgrade".

It has been recognised that the application of this provision over the last year does not serve residents or the objectives of the Urban Forest Strategy. It is proposed to revise this provision in the next version of the Urban Forest Strategy so that removal of trees other than under the provision of "dead, dying or dangerous" must meet the objectives of the Urban Forest Strategy to the satisfaction of the General Manager - Infrastructure.

The Urban Forest Strategy also notes that it will work with relevant agencies to establish further canopy cover and prevent canopy removal on public land, including Council land and land managed by Melbourne Water, Parks Victoria and VicRoads. Submissions which referred to pruning or planting of street trees or trees on public land do not relate to the Amendment and have been referred to Council's ParksWide Department.

Response

The above are matters that are addressed by Council policy, therefore I have not provided comment.

Council's resources to manage additional planning permit applications

As part of the Amendment documentation Council was required to detail how the new planning provisions will impact on the resources and administrative costs of Council. When the interim schedule to the SLO was introduced by Amendment C191 on 8 February 2018, Council experienced an increase in planning permit applications for tree removals across the municipality and this was confirmed by Part 2 of the Municipal Wide Tree Study. The Study noted that a "precise calculation of the effect of SLO9 in terms of permit numbers is not possible because of the complexity of planning controls and the fact that an individual application may address a number of different matters" (page 31).

Council anticipated this increase in planning permit applications by allocating ongoing funding in the 2017-18 budget for additional staff, which included up to 3 arborists, up to 2 enforcement officers and 1 administrative officer. The cost was estimated at approximately \$499,000 per annum for salaries (plus 12.5% on costs such as superannuation) and approximately \$163,000 upfront capital costs which would include overheads such as office space and fleet vehicles etc. This Amendment includes several additional planning permit exemptions than the interim controls, which will reduce the number of permit applications. Notwithstanding a potential reduction as a result of including additional permit exemptions, Council is resourced to assess future planning permit applications.

Response

The above is outside my area of expertise and a matter for Council, therefore I have not provided comment.

9.2 Analyse and focus on the proposed controls (including exemptions)

I have reviewed and analysed the following Clauses as requested;

- Schedule 9 to clause 42.03 Significant Landscape Overlay
- Clause 21.05 Environment
- Clause 21.06 Housing
- Clause 22.03 Residential Development
- Clause 22.04 Tree Conservation

I have read through each Clause including the track changes. My responses are in the Tables below. Each table has four headings;

- Clause (E.g. Clause 21.05 Environment)
- Section with comments
- Existing or proposed track changes
- My response / recommendations

The heading 'Clause' refers to the section of the Whitehorse Planning Scheme that was reviewed. The heading 'Section with comments' refers to the subclause I have provided comment on. The heading 'Proposed with track changes' outlines the section of the specific Clause where track changes (changes) have been proposed, and the heading 'My response / recommendations' are my comments on and recommendations in relation to that specific change or existing section of the Clause.

Where I have not provided comment, I am in general agreement with the Clauses. Therefore, have only provided comments where I believe new comments or further changes are required. Where I have written 'no track changes were made to this dot point' indicates that that part of a Clause has not been altered or there has not been a new Clause proposed by Council. The sections under Response / recommendations that have been italicised and underlined indicate where I have made recommendations that I believe Council should consider for inclusion in the Clauses reviewed.

9.2.1 Schedule 9 to clause 42.03 Significant Landscape Overlay

Table 3

Schedule 9 to clause 42.03 Significant Landscape Overlay	Sections with comments	With track changes	Response / recommendations
4.0 Application requirements	First sentence	Applicants must provide a report from a suitably qualified arborist to:	There should be a definition of what a 'suitably qualified arborist' means? For example; A professional who possesses the technical competence gained through experience and related training to provide for or supervise the management of trees and other woody plants in residential, commercial and public landscapes (International Society of Arboriculture 2007).
4.0 Application requirements	Dot point 2	Outline the measures to be taken, particularly during the construction phase, to ensure the long-term preservation of trees on, or adjoining, the development site.	Measures should be in line with accepted arboricultural practices.

Schedule 9 to clause 42.03 Significant Landscape Overlay	Sections with comments	With track changes	Response / recommendations
5.0 Decision Guidelines	Dot point 10	If it is not appropriate to select an indigenous or native tree species, the selected species should be drought tolerant.	It is recommended to include the following at the end of the sentence and have a proven ability to be able to reach maturity within the broader Melbourne area / region.
5.0 Decision Guidelines	To be placed as a dot point under Sub-clause 5.0	Add to existing dot points under Sub-clause 5.0	Whether the footings and foundations are appropriately designed so that dwellings are not affected by soil movement, whether within the vicinity of existing mature trees or newly planted trees associated with the development.

Schedule 9 to clause 42.03 Significant Landscape Overlay	Sections with comments	With track changes	Response / recommendations
4.0 Application requirements –	Proposed to be added as a	Not currently with Clause	For inclusion under 4.0
Proposed to be included	third dot point	42.03	Application requirements;
			The following should be considered in relation to 'the long-term preservation of trees on, or adjoining, a development site' loss of soil volume, loss of tree roots (through severance and damage) and loss of space for canopy growth is limited.

9.2.2 Clause 21.05 Environment

Table 4

Clause 21.05 Environment	Sections with comments	With track changes	Response / recommendations
21.05-3 Objectives	Dot point 7	To protect and enhance the tree canopy cover in residential areas of the municipality.	This is a good inclusion to the Objectives. The only suggestion I'd make is that include the word retain. E.g. To protect, <u>retain</u> and enhance the tree canopy cover in residential areas of the municipality.
21.05-4 Strategies	Dot point 3	Ensuring that the replanting of tall trees and indigenous vegetation is appropriate to the type of vegetation in the area and enhances and retains biodiversity (no track changes were made to this dot point).	That the following be an extension to the existing dot point or inclusion as a new dot point. Ensuring that the replanting of tall trees,tall trees with spreading canopies and indigenous

Clause 21.05 Environment	Sections with comments	With track changes	Response / recommendations
21.05-4 Strategies	Dot point 6	Identifying those buildings, structures and features of historical significance within the municipality (no track changes were made to this dot point).	That the following be an extension to the existing dot point or inclusion as a new dot point. Identifying those buildings, structures, <i>trees</i> and features of historical significance within the municipality.
21.05-4 Strategies	Dot point 6	Identifying those buildings, structures and features of historical significance within the municipality (no track changes were made to this dot point).	Should the historical significance of trees be a separate dot point? If so, should it be defined as E.g. A tree greater than 50 years old, remnant of garden design from a particular period, and use of specific species at certain times in the history of the area.
21.05-4 Strategies	End of dot points page 4 under 21.05-4	Recommend a new dot point	Use of tree sensitive construction methods to minimise impacts on trees.
21.05-5 Implementation	Dot point 7	Applying a Vegetation Protection Overlay to identified significant vegetation (no track changes were made to this dot point).	Applying a Vegetation Protection Overlay to identified significant vegetation,that also considers unique trees, or a species deemed to have a high potential to become a significant tree in time.

Clause 21.05 Environment	Sections with comments	With track changes	Response / recommendations
Clause 21.05-2 Environment	Key issues, dot point 3	Promotion of vegetation protection and regeneration	Promotion of vegetation protection and regeneration through accepted arboricultural practices.

9.2.3 Clause 21.06 Housing

Table 5

Clause 21.06 Housing	Sections with comments	With track changes	Response / recommendations
21.06-1 Overview	Last sentence of the second paragraph, page 1.	Trees and vegetation are considered one of the most significant determinants of neighbourhood character in the municipality, and therefore tree preservation and regeneration is of vital importance if the character of residential areas is to be maintained and enhanced (no track changes were made to this dot point).	Include –planting. E.g. Trees and vegetation are considered one of the most significant determinants of neighbourhood character in the municipality, and therefore tree preservation, planting and regeneration is of vital importance if the character of residential areas is to be maintained and enhanced.
21.06-2 Key Housing Principles	Add to dot points, page 3.	No track changes were made to this section.	Consider adding as an additional dot point; <u>Design housing that</u> <u>encourages existing trees to</u> <u>be retained and protected</u> <u>wherever possible.</u>

9.2.4 Clause 22.03 Residential Development

Table 6

Clause 22.03 Residential Development	Sections with comments	With track changes	Response / recommendations
22.03-2 Objectives	Dot point 6	To ensure that new development provides adequate vegetation and gardens consistent with the preferred neighbourhood character (no track changes were made to this dot point).	Include – trees. E.g. To ensure that new development provides adequate vegetation and gardens <i>including trees</i> , consistent with the preferred neighbourhood character.

8.2.5 Clause 22.04 Tree Conservation

Table 7

Clause 22.04 Tree Conservation	Sections with comments	With track changes	Response / recommendations
22.04-2 Objectives	Dot point 1	To improve the tree canopy cover in residential areas across the municipality.	Include – and increase. E.g. To improve <u>and increase</u> the tree canopy cover in residential areas across the municipality.
22.04-2 Objectives	Dot point 4	To assist in the management of the City's tree canopy by ensuring that new development minimises the loss of significant trees (no track changes were made to this dot point).	Include – healthy and. E.g. To assist in the management of the City's tree canopy by ensuring that new development minimises the loss of <u>healthy and</u> significant trees.
22.04-2 Objectives	Last dot point	To promote the regeneration of trees through the provision of adequate open space and landscaping areas in new development.	Include – the retention. E.g. To promote <u>the retention</u> and regeneration of trees through the provision of adequate open space and landscaping areas in new development.

Clause 22.04 Tree Conservation	Sections with comments	With track changes	Response / recommendations
22.04-3 Policy - Tree retention	Last dot point page 1	All trees that are to be retained on a development site be protected with appropriate measures, particularly during the construction phase.	All trees that are to be retained on a development site be protected with appropriate measures <u>and in accordance with accepted arboricultural practices</u> , particularly during the construction phase.
22.04-3 Tree retention	Tree replanting	New upper canopy trees be planted and significant trees that are unable to be retained be replaced to ensure that the treed canopy of the City is maintained in the long term (no track changes were made to this dot point).	Change to include; New upper canopy trees be planted and significant trees that are unable to be retained be replaced to ensure that the treed canopy of the City is at a minimum maintained, however increased where possible to meet with the 30% canopy cover to be achieved in the municipality.
22.04-3 Tree retention	Techniques for successful tree retention dot point 3	If a driveway needs to be within 3 metres of the tree trunk, a driveway constructed on top of natural ground level so that no excavation occurs, and the introduction of filling is avoided (no track changes were made to this dot point).	Change to include; If a driveway needs to be within 3 metres of the tree trunk, the <u>driveway is to be</u> <u>porous and</u> constructed on top of natural ground level so that no excavation occurs, and the introduction of filling is avoided.

Clause 22.04 Tree Conservation	Sections with comments	With track changes	Response / recommendations
22.04-3 Tree retention	Techniques for successful tree retention dot point 3	Locating services such as drainage and cabling outside of the tree's root zone or a minimum of 3 metres from the tree trunk. If this cannot be achieved, services are to be thrust bored under the root system (no track changes were made to this dot point).	Change to include; Locating services such as drainage and cabling outside of the tree's <i>Tree Protection Zone (TPZ)</i> or a minimum of 3 metres from the tree trunk <i>(whichever is greater)</i> . If this cannot be achieved, services are to be thrust bored under the root system, <i>to a minimum depth of 1 metre below Natural Ground Level (NGL)</i> .
22.04-3 Tree retention	Techniques for successful tree retention dot point 3	Avoidance of stripping topsoil from around the tree as most of a tree's absorbing roots are located in this area (no track changes were made to this dot point).	Change to include; No stripping topsoil within the Tree Protection Zone (TPZ) of any tree as most of a tree's absorbing roots are located in this area.

Clause 22.04 Tree Conservation	Sections with comments	With track changes	Response / recommendations
22.04-5 Application requirements	First sentence	Applicants for all proposals must provide a report from a suitably qualified arborist to (no track changes were made to this dot point.	Suitably qualified arborist should be defined. For example; A professional who possesses the technical competence gained through experience and related training to provide for or supervise the management of trees and other woody plants in residential, commercial and public landscapes (International Society of Arboriculture 2007).
22.04-5 Application requirements	Dot point 2	Outline the measures to be taken, particularly during the construction phase, to ensure the long-term preservation of trees on, or adjoining, the development site.	Change to include; Outline the measures to be taken, particularly during the construction phase, to ensure the long-term preservation of trees on, or adjoining, the development site. Measures should be in accordance with accepted arboricultural practices.

10. Conclusion

I have Responded to summaries of relevant submissions. In general, I am in agreeance with Councils response to submitters. I have provided a response to submissions where required under the instructions that define the scope of this report. In addition, I have analysed and focused on the proposed controls (including exemptions). I have provided comment where necessary in relation to these controls.

From an arboricultural perspective the introduction of C219 will be a positive step forward for the overall environment of the municipality. It will not impede residents and has the structures built into it to ensure landowners still have control over their properties and development can still occur. This can all be done whilst ensuring the municipality's urban forest will be increased and improved and will remain healthy for future generations.

11. References

Agriculture Victoria, 2017, *Victoria's consolidated lists of declared noxious weeds and pest animals*, *Declared noxious weeds*, The State of Victoria, Victoria, Australia, Viewed 5 November 2019 < http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/protecting-victoria/legislation-policy-and-permits/declared-noxious-weeds-and-pest-animals-in-victoria>.

Australian Bureau of Statistics, 2015, Causes of Death, Australia, 2013, Underlying cause of death, All causes, Victoria, 2004–2013, Australian Bureau of Statistics, Viewed 4 November 2019

https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3303.02013?OpenDocument

City of Banyule, 2019, *Population forecast, Residential development,* City of Banyule, Viewed 5 November 2019 < https://forecast.id.com.au/banyule/residential-development>.

Ermert, S & Clapp, L 1998, *Gardener's Companion to Weeds*, 2nd edn, Reed New Holland Publishers (Australia) Pty Ltd.

Harris, RW, Clark, JR & Matheny NP 2004, *Arboriculture: Integrated Management of Landscape Trees, Shrubs, and Vines,* Prentice Hall

Insurance Council of Australia, 2019, *Common Risks*, Insurance Council of Australia, Viewed 4 November 2019, < https://www.insurancecouncil.com.au/for-consumers/what-is-risk/common-risks>

International Society of Arboriculture 2007, Glossary of Arboricultural Terms.

Maroondah City Council, 2017, *Health and Wellbeing Statistical Profile August 2017*, Maroondah City Council, Victoria.

Maroondah planning scheme 2019, Schedule 1 to the Significant Landscape Overlay, Permit requirement, Vegetation removal, Maroondah City Council, Victoria.

Roberts, J, Jackson, N & Smith, M 2006, *Tree Roots in the Built Environmental*, Department for Communities and Local Government, The Stationary Office, Norwich, England.

Urban, J 2008, Up by Roots: *Healthy Soils and Trees in the Built Environment*, International Society of Arboriculture, Savoy, Illinois, US.

Whitehorse City Council / Ethos Urban, 2019, Municipal Wide Tree Study, Part 2: Additional Analysis in Garden Suburban and Bush Suburban Character Precincts Final Report, Whitehorse City Council, March — 2019 Issue A - 318123, Whitehorse City Council, Victoria.

Appendix 1

