

Arboricultural Impact Assessment

3 AYR STREET ASHBURY 6-11-22

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Summary

Tree Management Strategies have been commissioned by Peter Giurissevich to provide an Arboricultural Impact Assessment for 9 trees located on the subject site and adjoining properties at 3 Ayr Street, Ashbury, NSW refer to (Figure 1).

This report aims to:

- Assess the health, condition and retention value of 9 trees.
- Calculate the impact the proposed development will have on 9 trees.
- Suggest sensitive construction or tree protection methods to retain high to medium value trees on the subject site or neighbouring site.
- Recommend the retention or removal of the subject trees.

The Health, Condition and Retention values of nine trees is recorded in the Tree Data Schedule (Appendix 1) and shown in the Tree Impact Plan (Appendix 2).

The developmental Impacts are explored in Developmental Impact and Observations (Section 2) of this report.

Conclusion

The minor incursion to Tree 1 by the stormwater design is deemed acceptable considering adequate tree protection measures are allowed for. The additional impact to Tree 1 by the proposed boundary wall is minimised to an acceptable level with the use of a pier and beam type construction method.

The minor incursion to Tree 6 by the stormwater design is deemed acceptable with no negative health affects expected.

Trees 2, 3, 4, 8 and 9 have major or total incursions to their SRZ's and TPZ's that requires their removal for the proposed development to proceed.

Trees 5 and 7 are unaffected by the development.

Recommendations

Adhere to the Tree Management Plan (Section 3) of this report to ensure the ongoing health of Tree 1.

Remove Trees 2, 3, 4, 8 and 9. Tree removal work to be undertaken in accordance with *AS 4373 Pruning of Amenity Trees*, using a qualified Arborist (minimum Australian Qualification Framework (AQF3) Level Arborist).



1. Introduction

Tree Management Strategies have been commissioned by Peter Giurissevich to provide an Arboricultural Impact Assessment for 9 trees located on the subject site and adjoining properties at 3 Ayr Street, Ashbury, NSW refer to (Figure 1).

The proposed development consists of alterations and additions to the existing dwelling, landscaping and associated stormwater design.

This report aims to:

- Assess the health, condition and retention value of 9 trees.
- Calculate the impact the proposed development will have on 9 trees.
- Suggest sensitive construction or tree protection methods to retain high to medium value trees on the subject site or neighbouring site.
- Recommend the retention or removal of the subject trees.



Figure 1: Subject Site highlighted in red



2. Developmental Impacts and Observations

The Health, Condition, Retention values and photographs of the 9 trees assessed are recorded in the Tree Data Schedule (Appendix 1).

The incursion percentages affecting the theoretical Structural Root Zones (SRZ) and Tree Preservation Zones (TPZ) of the subject trees assessed are shown on the on the Tree Impact Plan (Appendix 2).

The method for this report is outlined in (Appendix 3) Method.

All tree retention values are in accordance with IACA Significance of a Tree, Assessment Rating System (STARS) © (IACA 2010) ©.

The tree impacts detailed below are based on the plans referenced in (Section 4) of this report.

Tree 1 located on the council verge is given a medium retention value and has a minor incursion of 4.37% to its TPZ by the proposed stormwater design. The minor incursion to Tree 1 is deemed acceptable considering adequate tree protection measures are allowed for, refer to the Tree Impact Plan (Appendix 2) and the Tree Management Plan (Section 3) of this report. Tree 1 has a potential additional impact from the proposed new boundary wall that requires sensitive construction in the form of pier and beam construction to ensure minimal impact, refer to the Tree Impact Plan (Appendix 2) and the Tree Management Plan (Section 3) of this report.

Trees 3 and 4 located within the subject site are given a medium retention value and have total incursions to their TPZ's that requires their removal to support the proposed development, refer to the Tree Impact Plan (Appendix 2).

Tree 6 located in the neighbouring property is given a low retention value and has a minor incursion of 2.65% to its TPZ by the proposed stormwater design. The minor incursion to Tree 6 is deemed acceptable considering adequate tree protection measures are allowed for, refer to the Tree Impact Plan (Appendix 2).

Trees 2, 8 and 9 located in the subject site are given a low retention value and have major or total incursions to their TPZ's by the proposed development that requires their removal, refer to the Tree Impact Plan (Appendix 2).

Trees 5 and 7 are unaffected by the development.

3. Tree Management Plan

The Tree Management Plan is designed to offer detailed design modifications or sensitive construction methods and a step-by-step timeline for Tree Protection Measures.

Step 1: Tree Protection Fence

To ensure the protection of trees affected by the proposed development a Tree Protection Fence is required for Tree 1 as per the detail outline in (Figure 2).

The Tree Protection Fence needs to be erected throughout construction and may be dismantled when landscaping begins. The Project Arborist must certify the protection measures are in the correct location and to specification prior to the commencement of construction.





Step 2: Pier and Beam Construction Tree 1

A pier and beam type construction method shall be employed to construct the new boundary fence within the TPZ of Tree 1.

The pier footings within the TPZ of Tree 1 must be hand dug under the supervision of the Project Arborist. Manual excavation needs to be carried out under the supervision of the Project Arborist to identify roots critical to tree stability. Relocation or redesign of works may be required. Where the Project Arborist identifies roots to be pruned within or at the outer edge of the TPZ, they should be pruned with a final cut to undamaged wood. Pruning cuts should be made with sharp tools such as secateurs, pruners, handsaws or chainsaws. Pruning wounds should not be treated with dressings or paints. It is not acceptable for roots within the TPZ to be 'pruned' with machinery such as backhoes or excavators (CSA 2009).

Step 3: Monitoring

The Project Arborist must inspect all trees to be retained bi-monthly to ensure tree protection measures are being adhered to and the health of all trees is not being adversely affected.

Step 4: General Exclusions within the TPZ

- The following activities shall be excluded within the TPZ:
- Excavation, compaction or disturbance of the existing soil.
- The movement or storage of materials, waste or fill.
- Soil level changes.
- Disposal and runoff of waste materials and chemicals including paint, solvents, cement slurry, fuel and oil.
- Other toxic liquids.
- Movement or storage of plant, machinery, equipment or vehicles.
- Any activity likely to damage the trunk, crown or root system of the trees.

The Project Arborist must be notified in the event any disturbance within the TPZ of trees to be retained is required.

Step 5: Final Certification

Upon completion of construction the Project Arborist will certify that the health and condition of all trees to be retained have not been adversely affected by the development.



4. Referenced Documents

Plans that were referred to for this report include:

Plan Title	Drawing Number	Consultant	Revision	Job/ Number
Tree Impact Plan	Ash.TIP.01	Tree Management Strategies	5-9-22	
Architectural Plans	DA00.00 – DA05.34	JKM Architects	15-7-22	
Landscape Plan	001 to 002	Formed Gardens	1-7-22 C	
Stormwater	DA-SW-100- DA-SW-600	JCO Consultants	28-7-22	



5. Conclusions & Recommendations

Conclusion

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The minor incursion to Tree 6 by the stormwater design is deemed acceptable with no negative health affects expected.

Trees 2, 3, 4, 8 and 9 have major or total incursions to their SRZ's and TPZ's that requires their removal for the proposed development to proceed.

Trees 5 and 7 are unaffected by the development.

Recommendations

Adhere to the Tree Management Plan (Section 3) of this report to ensure the ongoing health of Tree 1.

Remove Trees 2, 3, 4, 8 and 9. Tree removal work to be undertaken in accordance with *AS 4373 Pruning of Amenity Trees*, using a qualified Arborist (minimum Australian Qualification Framework (AQF3) Level Arborist).



6. References

Shigo, A., 1986, A New Tree Biology and Dictionary: facts, photos, and philosophies on trees and their problems and proper care, Snohomish, WA

Council of Standards Australia (August 2009) The Australian Standard for the Protection of Trees on Development Sites (AS 4970 – 2009).

Harris, R., Clark, J., Matheny, N., 2003, Integrated Management of Landscape Trees, Shrubs, and Vines, fourth edition, Prentice Hall, Australia

IACA, 2010, IACA Significance of a Tree, Assessment Rating System (STARS), Institute of Australian Consulting Arboriculturists, Australia, <u>www.iaca.org.au</u>

Disclaimer:

By the nature of their size, weight and miscellaneous structure, constant exposure to the weather and the elements, susceptibility to insects, pest and decay organisms, and trees always pose an inherent degree of hazard and risk from breakage or failure.

There is no guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future. No responsibility will be accepted for partial or full failure of any tree. No responsibility will be accepted for any damage or injury caused by any tree or part thereof referred to in this report.

While great care is taken to accurately diagnose the condition of a tree, it is impossible to accurately determine the true structural condition of the entire tree and any diagnosis, opinions or recommendations expressed are based on several methods of determining tree health.



7. Appendices

Appendix 1: Tree Data Schedule



No	Genus-species	Common Name	DAB metres (radius) Above Buttress	DBH metres (radius) Breast Ht	SRZ (radius) Metres	TPZ (radius) Metres	Height Metres	Age Young, Semi- Mature, Mature Over Mature	Canopy Spread (Metres) (radius)	Health Good Fair Fair/Poor Poor Dead	Condition Good Fair Fair/Poor Poor Failed	Useful Life Expectancy High Medium Low	Landscape significance High Medium Low	Retention value High Medium Low	Notes
	Tristaniopsis laurina	Water Gum	0.35	0.30	2.13	3.60	6.00	Mature	4.00	Fair	Fair	Medium	Medium	Medium	
2	Camelia sasenqua	Camelia	0.27	0.22	1.91	2.64	5.00	Mature	2.00	Fair/Poor	Fair/Poor	Medium	Low	Low	





No	Genus-species	Common Name	DAB metres (radius) Above Buttress	DBH metres (radius) Breast Ht	SRZ (radius) Metres	TPZ (radius) Metres	Height Metres	Age Young, Semi- Mature, Mature Over Mature	Canopy Spread (Metres) (radius)	Health Good Fair Fair/Poor Poor Dead	Condition Good Fair Fair/Poor Poor Failed	Useful Life Expectancy High Medium Low	Landscape significance High Medium Low	Retention value High Medium Low	Notes
3	Camelia sasenqua	Camelia	0.28	0.33	1.94	3.96	8.00	Mature	2.00	Fair	Fair/Poor	Medium	Medium	Medium	
4	Camelia sasenqua	Camelia	0.30	0.40	2.00	4.80	8.00	Mature	2.00	Fair	Fair/Poor	Medium	Medium	Medium	





No	Genus-species	Common Name	DAB metres (radius) Above Buttress	DBH metres (radius) Breast Ht	SRZ (radius) Metres	TPZ (radius) Metres	Height Metres	Age Young, Semi- Mature, Mature Over Mature	Canopy Spread (Metres) (radius)	Health Good Fair Fair/Poor Poor Dead	Condition Good Fair Fair/Poor Poor Failed	Useful Life Expectancy High Medium Low	Landscape significance High Medium Low	Retention value High Medium Low	Notes
5	Archontopheonix cunninghamiana	Bangalow Palm	0.15	0.13	1.49	1.56	6.00	Semi Mature	1.00	Fair	Fair	Medium	Low	Low	
6	Olea african	African Olive	0.40	0.30	2.25	3.60	10.00	Mature	5.00	Fair	Fair/Poor	Medium	Low	Low	





No	Genus-species	Common Name	DAB metres (radius) Above Buttress	DBH metres (radius) Breast Ht	SRZ (radius) Metres	TPZ (radius) Metres	Height Metres	Age Young, Semi- Mature, Mature Over Mature	Canopy Spread (Metres) (radius)	Health Good Fair Fair/Poor Poor Dead	Condition Good Fair Fair/Poor Poor Failed	Useful Life Expectancy High Medium Low	Landscape significance High Medium Low	Retention value High Medium Low	Notes
7	Archontopheonix cunninghamiana	Bangalow Palm	0.15	0.13	1.49	1.56	16.00	Mature	2.00	Fair	Fair	Medium	Medium	Medium	
8	Thuja plicata	Western Red Cedar	0.28	0.22	1.94	2.64	8.00	Mature	3.00	Poor	Fair/Poor	Medium	Low	Low	





No	Genus-species	Common Name	DAB	DBH	SRZ	TPZ	Height	Age	Canopy	Health	Condition	Useful Life	Landscape	Retention	Notes
			metres	metres	(radius)	(radius)	Metres	Young,	Spread	Good	Good	Expectancy	significance	value	
			(radius)	(radius)	Metres	Metres		Semi-	(Metres)	Fair	Fair	High	High	High	
			Above	Breast				Mature.	(radius)	Fair/Poor	Fair/Poor	Medium	Medium	Medium	
			Buttress	Ht				Mature	(/	Poor	Poor	Low	Low	Low	
								Over		Dead	Failed				
								Mature							
9	Shefflera arboricola	Dwarf umbrella Tree	0.30	0.40	2.00	4.80	6.00	Mature	6.00	Fair	Poor	Medium	Low	Low	
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Appendix 2: Tree Impact Plan

Legend

Retention Value





Incursion

TO 1

TPZ = 40.72sqm Incursion Zone(stormwater) 1.78sqm Incursion Zone(stormwater) 1.08sqm Incursion = 4.37%

T02, T03, T04 Trunk Impact (Stormwater)

T05

No Impact

T06

TPZ = 40.72sqm Incursion = 2.65%

T07

No Impact

T08

SRZ = 11.82sqm Incursion Zone(stormwater) 2.82sqm Incursion = 23.86%

TPZ = 29.9sqm Incursion Zone(stormwater) 6.83sqm Incursion = 22.84%

T09

Total Impact

Tree Impact Plan - Appendix 2





Appendix 3: Method

Site Assessment

From the ground, the following information was recorded and displayed in the Tree Data Schedule (Appendix 1).

- Tree genus and species.
- Approximate height spread if deemed applicable.
- Trunk diameter at breast height and above the buttress.
- Age class: young, semi mature, mature, over mature.
- Health.
- Condition.

Observations were recorded and photographed.

Research

The following legislation, documents or websites were reviewed:

- The Australian Standard for the Protection of Trees on Development Sites (AS 4970 2009).
- Inner West City Council Development Control Plan 2016.
- Inner West City Council Local Environmental Plan 2022.



Tree Data Schedule Method

The Health and Condition of Trees one to nine are shown in the Tree Data Schedule (**Appendix 1**) with the methods explained below:

Tree Health

Overall Health (Vigour/Vitality)	Tree vigour is exhibited by crown density, crown cover, leaf colour, leaf size, leaf texture, presence of epicormic growth, ability to withstand predation by pest and disease, resistance and degree of dieback.
Good (Excellent)	Good tree vigour exhibited by no decline in overall health and vigour, height and shape. The specimen is observed to be of excellent condition displaying characteristics that is known for that particular species (what would be the expected condition for that particular species of that age in that location), 0% dieback, full crown density, leaf health, no pest or disease present.
Fair	Fair tree vigour exhibited by moderate decline in overall health and vigour, height and shape. The specimen is observed to be of moderate condition by not displaying characteristics adequately that is known for that particular species (what would be expected for that particular species of that age in that location), less than 10% dieback, 90% of crown foliage density, more than 90% leaf health, acceptable level of pest or disease is evident for the assessing arborist (where it is considered the tree's overall health or condition will not be affected or lead to irreversible decline from pest or disease).
Fair/Poor	Fair to poor tree vigour exhibited by considerable decline in overall health and vigour, height and shape. The specimen is observed to be of less than acceptable condition by not displaying characteristics adequately that is known for that particular species (what would be expected for that particular species of that age in that location), 10-20% dieback, considerable foliage deficiencies, 70-90% foliage density, 70- 90% leaf health, pest or disease infestation at acceptable thresholds for the assessing arborist (where it is considered the tree's overall health or condition will not be affected or lead to irreversible decline from pest or disease).
Poor	Poor vigour exhibited by substantial decline in overall health and vigour, height and shape. The specimen is observed to be of poor condition by not displaying characteristics adequately that is known for that particular species (what would be

	expected for that particular species of that age in that location), 20-30% dieback, considerable foliage deficiencies, 50-70% leaf health, pest or disease infestation at unacceptable infestation level that exceeds thresholds for the assessing arborist (where it is considered the tree's overall health or condition will be affected or lead to irreversible decline from pest or disease).
Very Poor	Very poor vigour exhibited by irreversible decline in overall health and vigour, height and shape. The specimen is observed to be of less than acceptable condition by not displaying characteristics adequately that is known for that particular species (what would be expected for that particular species of that age in that location), 15-50% dieback; severe foliage deficiencies; 30-50% density; 30-50% leaf health; pest or disease infestation at severe infestation level that exceeds thresholds for the assessing arborist (where it is considered the tree's overall health or condition will be affected or lead to irreversible decline from pest or disease).
Dead	Dead tree vigour exhibited by complete decline in overall health and vigour, height and shape. The specimen is observed to be dead by not displaying any characteristics adequately that is known for that particular species (what would be expected for that particular species of that age in that location), tree holds less than 15% foliage; branching is dead throughout canopy, pest or disease infestation at severe infestation level that exceeds thresholds for the assessing arborist (where it is considered the tree's overall health or condition will be affected or lead to irreversible decline from pest or disease).



Tree Condition

Overall Condition (Structure/Stability)	The tree condition as identified by the arborist in regard to defects in structure and stability.
Good (Exceptional specimen)	No damage or decay observed to the root plate, visible basal and /or root flare, stable in ground, well tapered branches with sound open unions. All characteristics within thresholds for the assessing arborist.
Fair (Standard tree – no observable major defects to suggest that there is an increased likelihood of tree or part of tree failure)	Minor damage or decay observed to root plate, trunk or primary branches or branch unions (1 st or 2 nd branch order or scaffolding branch), well-formed branch unions, minor branch end weight or over-extensions within thresholds for the assessing arborist.
Fair/Poor	Moderate damage or decay observed to root plate, trunk or primary branches or branch unions (1 st or 2 nd branch order or scaffolding branch); minimal basal/root flare; acute branch; past branch failure(s); moderate branch end- weight or over-extension approaching thresholds for the assessing arborist.
Poor	Major damage or decay observed to root plate, trunk or primary branches or branch unions (1 st or 2 nd branch order or scaffolding branch) no observable basal and /or root flare; acute branch unions starting to include bark; major branch end-weight or over-extension at or exceeds thresholds for the assessing arborist.
Very Poor	Excessive damage or decay observed to root plate, trunk, primary branch or branch unions (1 st or 2 nd branch order or scaffolding branch), excessive decay or hollows compromising the structural integrity, unstable in ground, excessive branch end-weight, included-bark unions, exceeding thresholds for assessing arborist. Failure probable.
Failed	Failure of root plate or trunk or primary branch or branch unions (1 st or 2 nd branch order or scaffolding branch) or active split between branch unions or severe damage to primary tree structure.



IACA Significance of a Tree, Assessment Rating System (STARS) $\ensuremath{\mathbb{C}}$ (IACA 2010) $\ensuremath{\mathbb{C}}$

In the development of this document IACA acknowledges the contribution and original concept of the Footprint Green Tree Significance & Retention Value Matrix, developed by Footprint Green Pty Ltd in June 2001.

The landscape significance of a tree is an essential criterion to establish the importance that a particular tree may have on a site. However, rating the significance of a tree becomes subjective and difficult to ascertain in a consistent and repetitive fashion due to assessor bias. It is therefore necessary to have a rating system utilising structured qualitative criteria to assist in determining the retention value for a tree. To assist this process all definitions for terms used in the Tree Significance - Assessment Criteria and Tree Retention Value - Priority Matrix, are taken from the IACA Dictionary for Managing Trees in Urban Environments 2009.

This rating system will assist in the planning processes for proposed works, above and below ground where trees are to be retained on or adjacent a development site. The system uses a scale of High, Medium and Low significance in the landscape. Once the landscape significance of an individual tree has been defined, the retention value can be determined.

Tree Significance - Assessment Criteria



High Significance in landscape

- The tree is in good condition and good vigour. The tree has a form typical for the species.
- The tree is a remnant or is a planted locally indigenous specimen and/or is rare or uncommon in the local area or of botanical interest or of substantial age.
- The tree is listed as a Heritage Item, Threatened Species or part of an Endangered Ecological Community or listed on a council's Significant Tree Register.
- The tree is visually prominent and visible from a considerable distance when viewed from most directions within the landscape due to its size and scale and makes a positive contribution to the local amenity.
- The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values.
- The tree's growth is unrestricted by above and below ground influences, supporting its ability to reach dimensions typical for the taxa in situ tree is appropriate to the site conditions.



Medium Significance in landscape

- The tree is in fair to good condition and good or low vigour.
- The tree has form typical or atypical of the species.
- The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area.
- The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street.
- The tree provides a fair contribution to the visual character and amenity of the local area.
- The tree's growth is moderately restricted by above or below ground influences, reducing its ability to reach dimensions typical for the taxa in situ.

Low Significance in landscape

- The tree is in fair to poor condition and good or low vigour.
- The tree has form atypical of the species.
- The tree is not visible or is partly visible from surrounding properties as obstructed by other vegetation or buildings.
- The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area.
- The tree is a young specimen which may or may not have reached dimension to be protected by local Tree Preservation orders or similar protection mechanisms and can easily be replaced with a suitable specimen.
- The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa in situ tree is inappropriate to the site conditions.
- The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms.
- The tree has a wound or defect that has potential to become structurally unsound.
- Environmental Pest/Noxious Weed Species.
- The tree is an Environmental Pest Species due to its invasiveness or poisonous/allergenic properties.
- The tree is a declared noxious weed by legislation.
- Hazardous and or Irreversible Decline.
- The tree is structurally unsound and/or unstable and is considered potentially dangerous.
- The tree is dead, or is in irreversible decline, or has the potential to fail or collapse in full or part in the immediate to short term.

The tree is to have a minimum of three (3) criteria in a category to be classified in that group.

Note: The assessment criteria are for individual trees only, however, can be applied to a mono-cultural stand in entirety.

Tree Managemen Strategies

Useful Life Expectancy (ULE)

Useful life expectancy (ULE) is a measure of a trees remaining lifespan regarding its health, condition and locality ULE categories were measured as:

- a) Long (greater than 40 years)
- b) Medium (between 15 and 40 years)
- c) Short (between 1 and 15 years)
- d) Dead

Tree Retention Value - Priority Matrix



REFERENCES

Australia ICOMOS Inc. 1999, The Burra Charter – The Australian ICOMOS Charter for Places of Cultural Significance, International Council of Monuments and Sites, <u>www.icomos.org/australia</u>

Draper BD and Richards PA 2009, *Dictionary for Managing Trees in Urban Environments*, Institute of Australian Consulting Arboriculturist (IACA), CSIRO Publishing, Collingwood, Victoria, Australia.

Footprint Green Pty Ltd 2001, Footprint Green Tree Significance & Retention Value Matrix, Avalon, NSW Australia, www.footprintgreen.com.au

Tree Managemen Strategies

Tree Protection Zone and Structural Root Zone Method

Following the VTA, The Tree Preservation Zones and Structural Root zones were calculated and added to the Tree Data Schedule (Appendix 1) and the Tree Impact Plan (Appendix 2) with the methods explained below:

<u>The Structural Root Zone</u> (SRZ) is the area around the base of a tree required for its stability. The woody root growth and soil cohesion in this area are necessary to hold the tree upright; therefore, there are no variations to its size. The SRZ is normally circular with the trunk at its centre and is expressed by its radius in metres (AS – 4970). Due to the potential of causing instability of a tree, it is highly recommended that no roots within its SRZ are pruned or removed. SRZ, which is the area required for tree stability, was calculated as follows: SRZ radius = (D x 50) 0.42 x 0.64.

The Tree Protection Zone (TPZ) is the principle means of protecting trees on development sites. The TPZ is a combination of the root area and crown area that requires protection. It is an area isolated from construction disturbance, so that the tree remains viable (AS – 4970). The radius of the TPZ is calculated for each tree by multiplying its DBH x 12. TPZ = DBH Х 12 diameter (DBH = trunk measured at 1.4m above ground level). The radius of the TPZ is measured from COT (Centre of the trunk).

Variations to the Tree Protection Zone (TPZ)

General

It may be possible to encroach into or make variations to the standard TPZ. Encroachment Includes excavation, compacted fill and machine trenching.

Minor encroachment

If the proposed encroachment is less than 10% of the area of the TPZ and is outside the SRZ, detailed root investigations should not be required. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ. Variations must be made by the project arborist considering relevant factors. (Figure 3) demonstrates some examples of possible encroachment into the TPZ up to 10% of the area.

Major encroachment

If the proposed encroachment is greater than 10% of the TPZ or inside the SRZ the project arborist must demonstrate that the tree(s) would remain viable. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ. This may require root investigation by non-destructive methods and consideration of relevant factors listed in the Clause.



Figure 3

