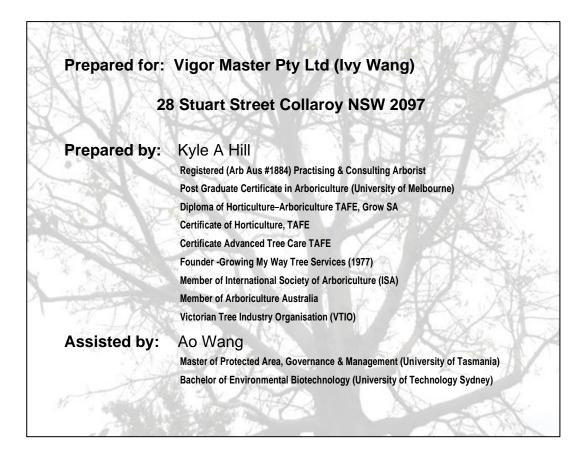
"GROWING MY WAY" Tree Consultants Established 1977 EXCELLENCE in ALL ASPECTS OF TREE MANAGEMENT FULL INSURANCE PROTECTION PO Box 35, Newport Beach NSW 2106 Mobile: 0412-221-962 E-mail: kyleahill@optusnet.com.au ABN 97 965 355 200



Arboriculture Impact Assessment & Site-Specific Preliminary Plan of Management

January 2024









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1. Summary

Vigor Master Pty Ltd (as the Property Owner of 28 Stuart Street Collaroy NSW 2097) via Ivy Wang as property manager, from *Vigor Master Pty Ltd* commissioned the Growing My Way Tree Consultancy (GMW) to prepare an Arboriculture Impact Assessment & preliminary Site - Specific Plan of Management to be linked to a *Development Application* for *Proposed Single House*.

The site is Land Zoned for "R2 Low Density Residential".

The document relates to the subject site, 28 Stuart Street Collaroy NSW 2097.

A total of five (5) trees are discussed in this report.

The subject site shares common boundaries with three (3) same land zoning common boundary adjoining properties & one (1) public road (Stuart Street). All common boundary adjoining properties are developed to contain dwellings & other infrastructure.

Motor vehicle & pedestrian access to the subject site is via Stuart Street.

The sole consent authority is the Northern Beaches Council. (from herein NBC).

Information related to the discussed trees was gathered by onsite data collection with cross referencing to:

- NBC website, online property & environment information website tools.
- Site Survey by Wumara Group, dated 26 August 2020.
- Proposed Plans, Elevations Sections etc., by Vigor Master Pty Ltd, dated 08 January 2023.
- NSW SEPP; 10/50 Vegetation Clearing 'Code of Practice'
- NBC "Tree Management Provisions"
- NBC Heritage Conservation Area & Land Zoning LEP Maps.

The aim of this report is:

- 1. To confirm the viability of the discussed trees, relating to individual health, vigour & condition considering any impact foreseen by the proposed works.
- 2. Provide a list of potential new tree/s suitable for the subject site.
- 3. Provide a Preliminary Site Specific 'Tree Plan of Management'.

This document supports (relative to tree management), the proposal as presented with replacement tree/s that at maturity will least replicate the 'loss of green footprint' provided by the supported to be replaced tree.

We confirm, for trees assessed as able to be retained no compromise to any individual discussed tree's Useful Life Expectancy can reasonably be predicted with implementation of a once DA determination Site Specific Plan of Management has been finalised.

There is ample room within the subject site to plant new, potentially locally indigenous species suitable to & consistent with the subject site/surrounding properties plant community.

Kyle A Hill - AQF level 5, Diploma of Horticulture / Arboriculture, (TAFE NSW & other) & AQF level 8, Post Graduate Certificate in Arboriculture, (University of Melbourne) Practicing/Consulting Arborist) with the assistance of Ao Wang (Master of Protected Area, Governance & Management (University of Tasmania) & Bachelor of Environmental Biotechnology (University of Technology Sydney) has prepared this report based on "Visual Tree Assessment" (VTA) undertaken on Wednesday, 10 January 2024.

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2. Introduction

This report contains observations & recommendations intended to assist in the management of the five (5) trees identified as necessary to be discussed. One (1) tree is located within the front of the subject site. One (1) tree is located within the subject site common boundary adjoining property (26 Stuart Street). The other three (3) trees are located within the rear adjoining common boundary property (30 Stuart Street) confirmed to be within five (5.0m) meters to subject site.

The Australian Standard (AS4970-2009) for the 'Protection of trees on development sites' is the guideline document required to be addressed in this document.

We acknowledge & confirm to be familiar with the NBC "Tree Management Provisions", specifically the planning instruments; Warringah Local Environment Plan, 2011, (from herein, the Warringah LEP 2011), Warringah Development Control Plan 2011 (from herein, the Warringah DCP 2011), NBC DCP plus the NSW government SEPP, Vegetation in Non–Rural Areas.

The sole consent authority is NBC.

The subject site is NOT within an *NBC* designated "*Heritage Conservation Area*". Neither is the subject site, or any common boundary adjoining property listed 'Heritage Items'.

Information related to the discussed trees was gathered by onsite data collection with cross referencing to:

- NBC website, online property & environment information website tools.
- Site Survey by Wumara Group, dated 26 August 2020.
- Proposed Plans, Elevations Sections etc., by Vigor Master Pty Ltd, dated 08 January 2023.
- NSW SEPP; 10/50 Vegetation Clearing 'Code of Practice'
- NBC "Tree Management Provisions"
- NBC Heritage Conservation Area & Land Zoning LEP Maps.

This document includes a Preliminary Site Specific "Plan of Management".

3. Methodology

Assessment Methodology for the discussed trees has been from ground level by eye, using *Visual Tree Assessment (VTA Stage 1),* techniques developed by Claus Mattheck. The principles of *VTA* are illustrated & explained in the widely used reference textbook *"The Body Language of Trees (1994)"*.

Assessment includes:

- Onsite assessment, data collection
- Tree's current condition & likely future health
- Species tolerance to root disturbance &/or development
- Likely present & future risk to persons & property.
- Tree's (public & private landscape) amenity value, considering habitat potential.

No root analysis, soil testing, 'Resistograph'[®] drilling or aerial canopy inspection was undertaken. See the following Appendices for further information:

- Appendix A Glossary of Common Arboreal term
- Attachment A Tree Protection/Management Prior to & During Construction

4. Observations

4.1 The Site

The report discusses trees within the subject site & common boundary adjoining properties. The subject site is 738.3m² in size (by *Site Survey by Wumara Group, dated 26 August 2020.*). The subject site is linked to one (1) public road & three (3) common boundary properties developed to contain residential dwellings.

No Geotechnical issues are known to exist relative to tree management.



FIGURE 1: ABOVE ILLUSTRATES THE DISCUSSED TREES RELATIVE TO THE SITE 28 STUART STREET COLLAROY NSW. (AERIAL PHOTOGRAPH FROM MAP DATA NBC IMAGE, JACOBS AEROMETREX)

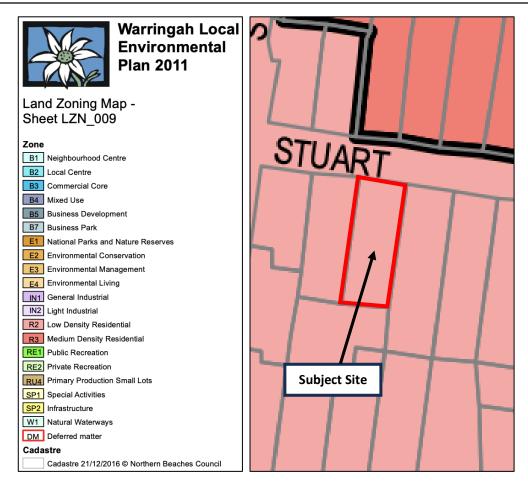


FIGURE 2: CONFIRMS STATUS OF THE SUBJECT SITE RELATIVE R2 LOW DENSITY RESIDENTIAL. (WARRINGAH LOCAL ENVIRONMENTAL PLAN 2011, LAND ZONING MAP - SHEET LZN_009).

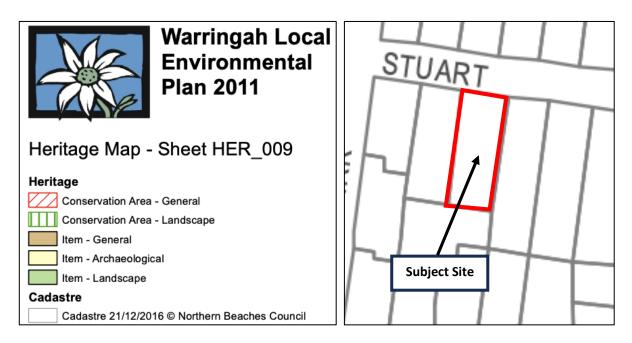


FIGURE 3: CONFIRMS STATUS OF THE SUBJECT SITE RELATIVE TO CADASTRE (WARRINGAH LOCAL ENVIRONMENTAL PLAN 2011, HERITAGE MAP SHEET HER_009)

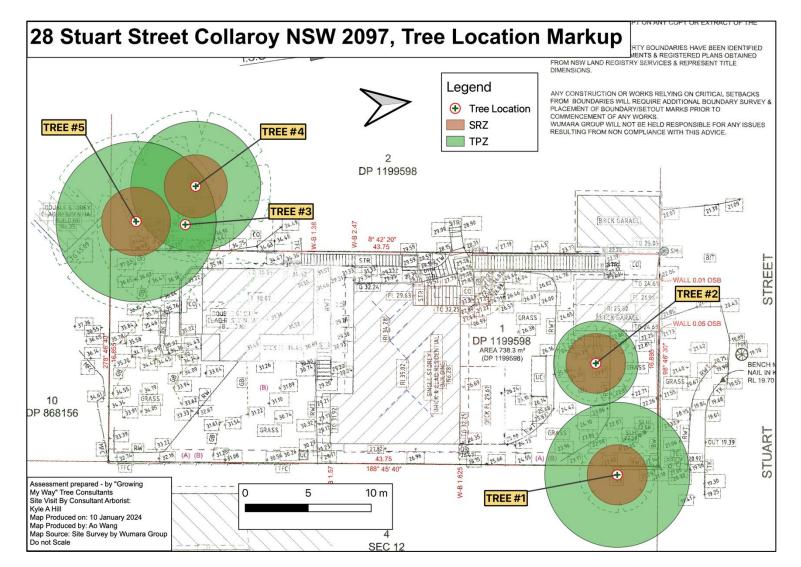


FIGURE 4: NUMBER AND LOCATION OF THE TREES ON SUBJECT SITE. (SITE SURVEY BY WUMARA GROUP, DATED 26 AUGUST 2020)

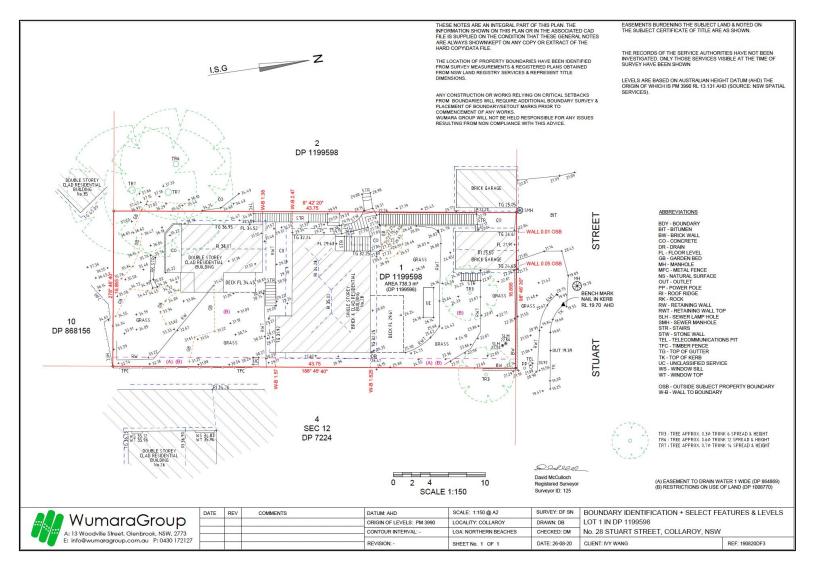


FIGURE 5: THE SITE SURVEY (SITE SURVEY BY WUMARA GROUP, DATED 26 AUGUST 2020)

4.2 The Proposal

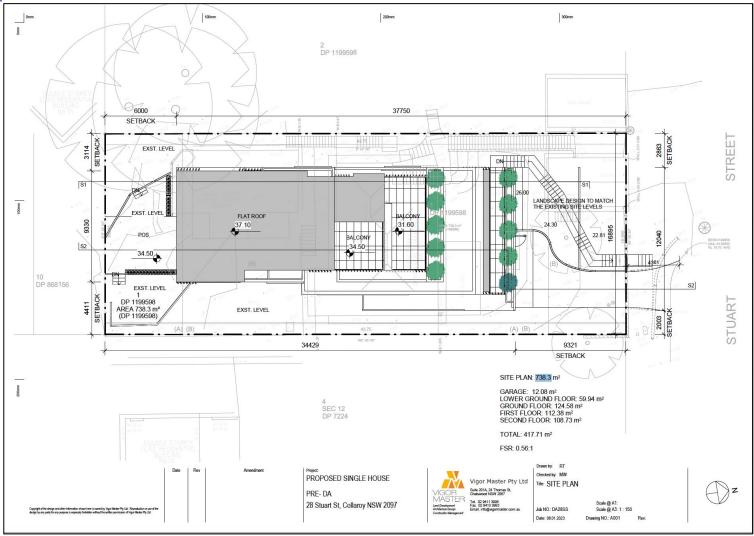


FIGURE 6: ILLUSTRATES PROPOSED SITE PLAN

Growing My Way Tree Services

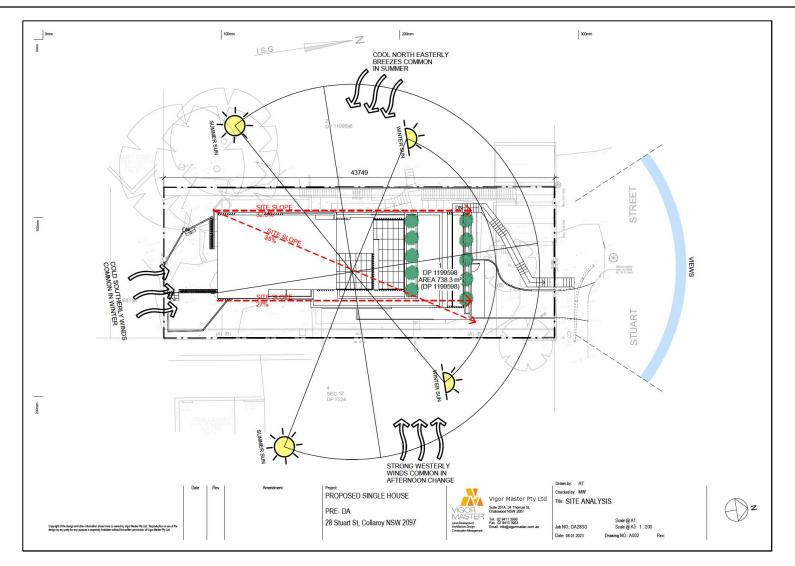


FIGURE 7: ILLUSTRATES PROPOSED SITE ANALYSIS

Growing My Way Tree Services

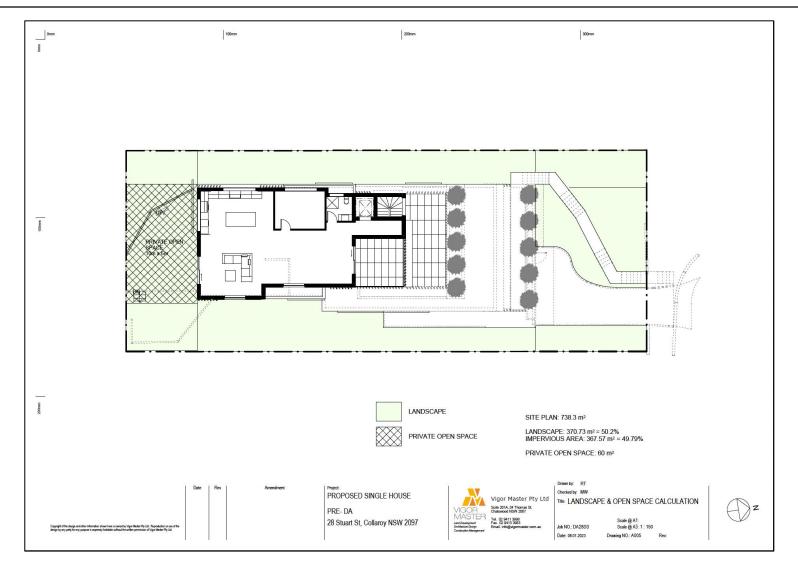


FIGURE 8: ILLUSTRATES PROPOSED LANDSCAPE & OPEN SPACE CALCULATION

Growing My Way Tree Services

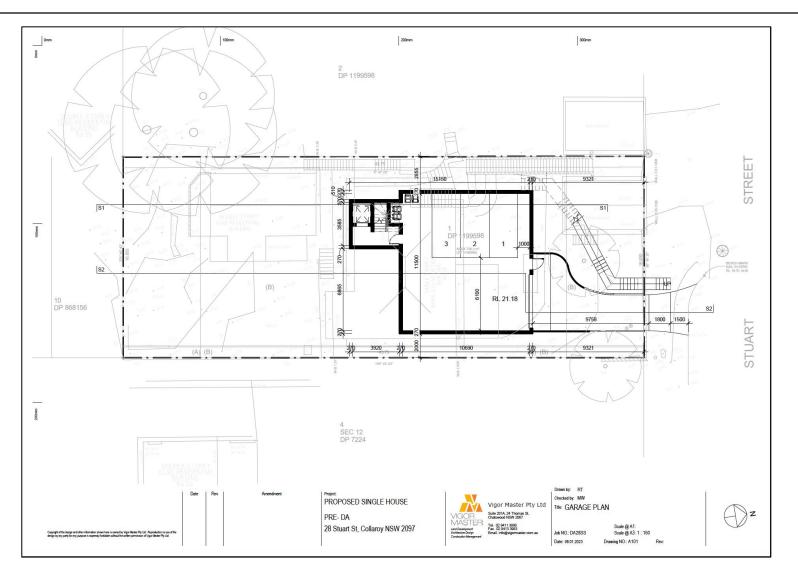


FIGURE 9: ILLUSTRATES PROPOSED GARAGE PLAN

Growing My Way Tree Services

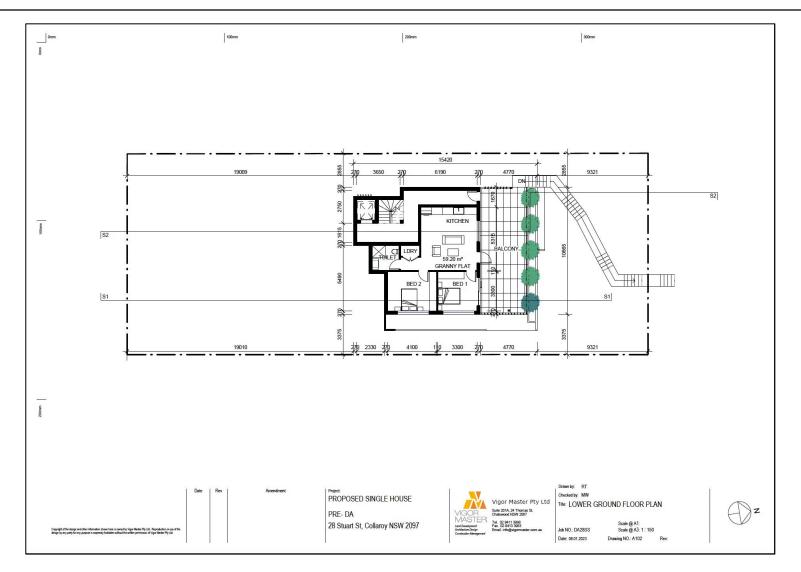


FIGURE 10: ILLUSTRATES PROPOSED LOWER GROUD FLOOR PLAN

Growing My Way Tree Services

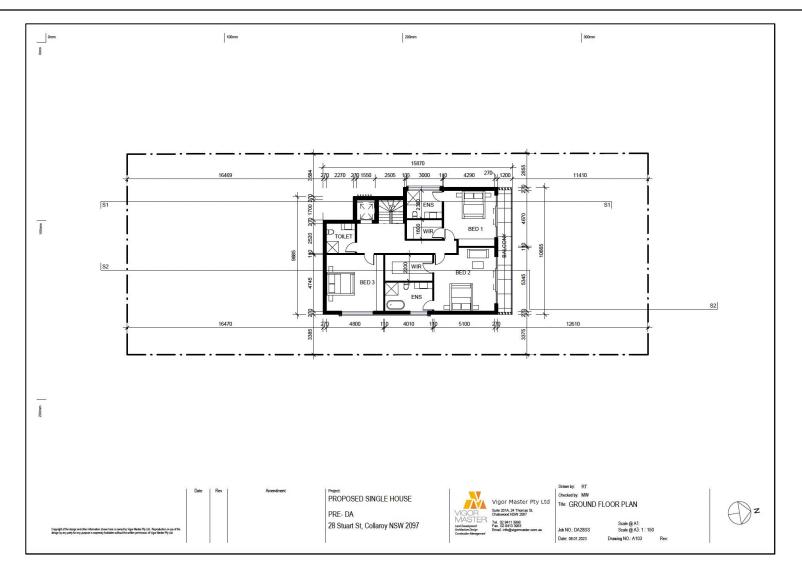


FIGURE 11: ILLUSTRATES PROPOSED GROUND FLOOR PLAN

Growing My Way Tree Services

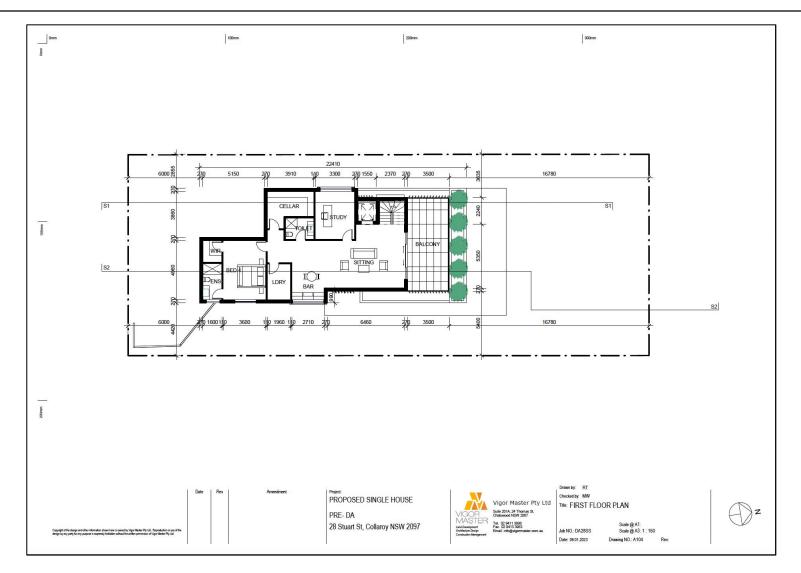


FIGURE 12: ILLUSTRATES PROPOSED FIRST FLOOR PLAN

Growing My Way Tree Services

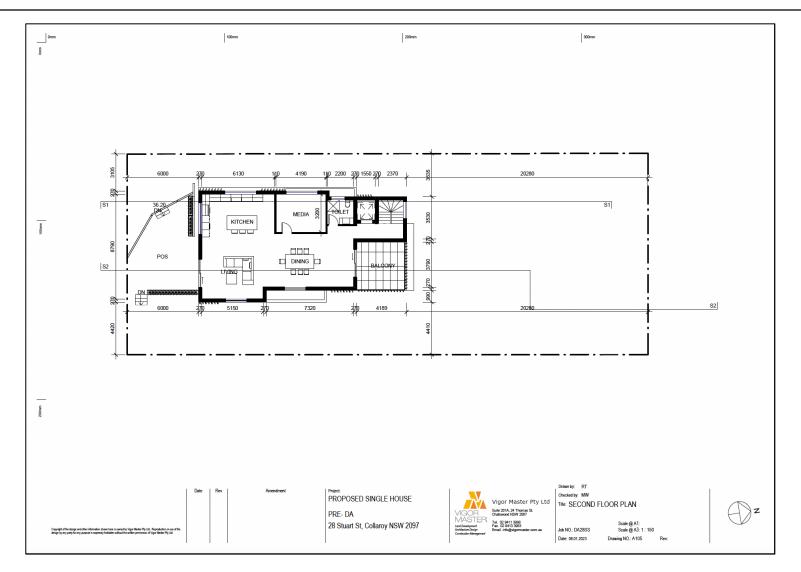


FIGURE 13: ILLUSTRATES PROPOSED SECOND FLOOR PLAN

Growing My Way Tree Services

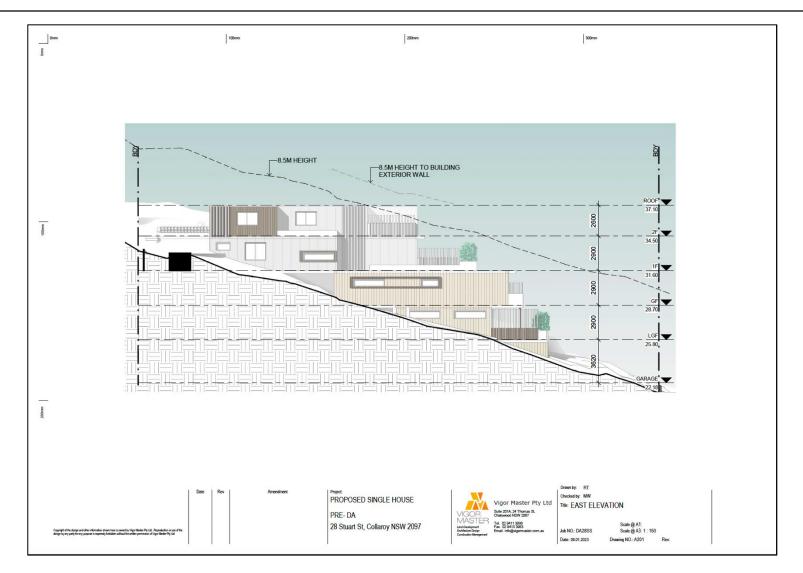


FIGURE 14: ILLUSTRATES PROPOSED EAST ELEVATION

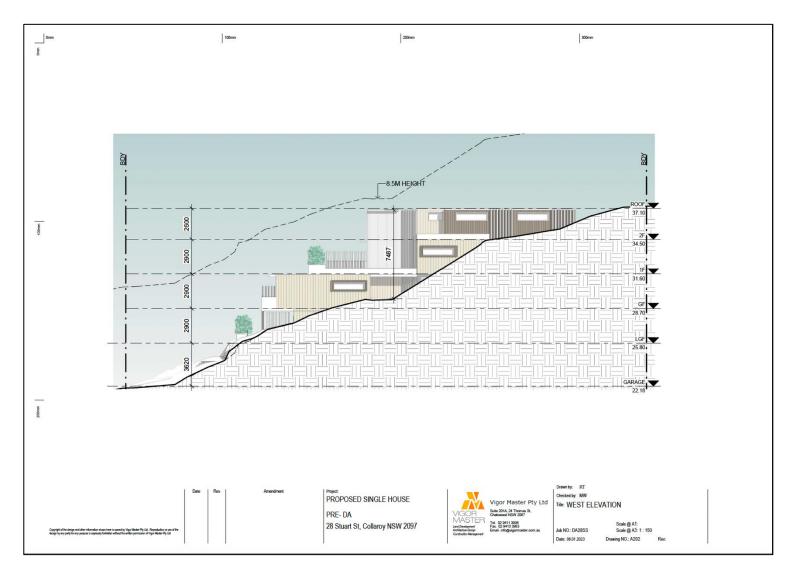


FIGURE 15: ILLUSTRATES PROPOSED WEST ELEVATION



FIGURE 16: ILLUSTRATES PROPOSED ELEVATIONS

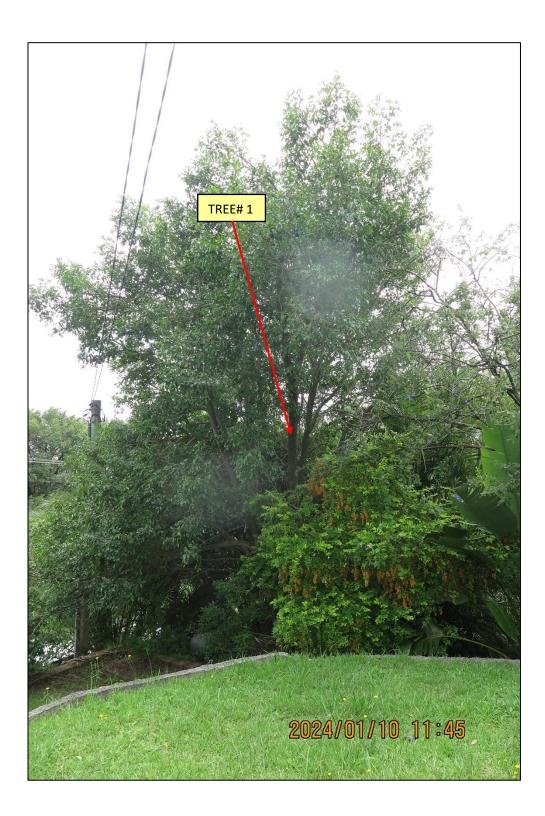
4.3 The Trees – Summary Table

Read this table in conjunction with Appendix A– Common Arboreal Terms

	Trees Recommended for rer					Trees Recommended for retention					
	Exempt or Weed species					Trees retainable but of low amenity/significance					
	Identification	Height (m)	Crown (m)	DBH (m)	TPZ (m)	SRZ (m)	Age	Health/ Vigour	Retention & Significance Value	Structure/Form	Comments
1	Glochidion ferdinandi (Cheese Tree)	<8.00	<6.50	0.48	5.76	2.39	М	Good & Good	High & High	Typical	RETAIN, PROTECT & MANAGE Standard Temporary Fencing and Manual Excavation where necessary will be specified
2	<i>Callistemon citrinus</i> (Crimson Bottlebrush)	<6.50	<7.50	0.28	3.36	2.37	Μ	Fair to Good & Fair to Good	Moderate & Moderate	Typical	<u>Replace</u> : Tree located within the proposed new work footprint.
3	Stump	<1.00									
4	Brachychiton acerifolius (Illawarra Flame Tree)	<9.00	<8.00	0.43	5.16	2.51	М	Fair to Good & Fair to Good	Low & Low	Typical	<u>RETAIN</u> , <u>PROTECT</u> & <u>MANAGE</u> Standard Temporary Fencing
5	<i>Lagunaria patersonia</i> (Norfolk Island Hibiscus)	<11.00	<13.00	0.53	6.36	2.73	М	Good & Good	Low & Low	Typical	RETAIN, PROTECT & MANAGE Standard Temporary Fencing and Manual Excavation where necessary will be specified

4.4 Tree & Site Images

(Photographs taken on Wednesday,10 January 2024 (Canon G1X MkII digital camera)





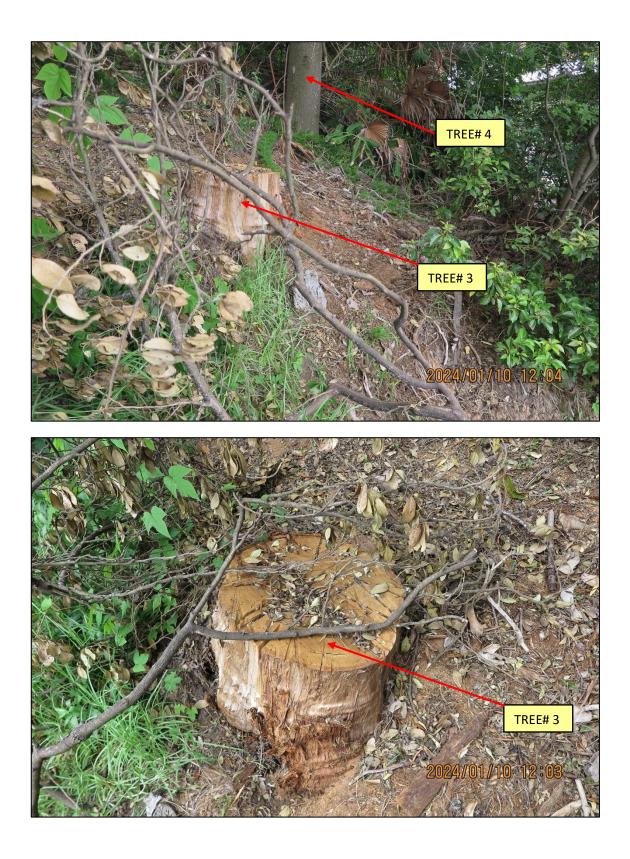




FIGURE 17: ABOVE & PREVIOUS PAGE PHOTOGRAPHS ILLUSTRATES THE FIVE (5) DISCUSSED TREE LOCATIONS & SITE FEATURES

5. Discussion

5.1 General Discussion /Tree Environments:

The total number of trees discussed is five (5).

TREE #1: Glochidion ferdinandi (Cheese Tree)

TREE #1 is located within the adjoining to the subject site common boundary property, front yard, near Stuart Street boundary.

The proposed new work is confirmed to breach the TPZ total surface area for TREE #1.

By our calculation, the total TPZ surface area of TREE #1 is 104.14m². The proposed new work equates to an approximate 20.06m² mathematical disturbance of total TPZ surface area for Tree #1. This equates to approximately 19.8% of total TPZ surface area, (defined by AS4970-2009 as a Major Encroachment).

Factually, the TREE #1 breached area (by proposed works) has for the very long term existed by virtue of the long term existing common boundary dividing retaining wall (structure as well as landscape components).

In the event significant diameter 'live root/s' (greater than 50mm in diameter), are exposed by excavation for the new driveway/garage the direct input of the retained Project Arborist is essential. They must determine the most appropriate management strategy to be adopted for the situation. The strategy adopted is to be documented with supporting evidence photographs prepared by the retained project arborist. This documentation is essential to confirm as close as possible to best Arboriculture Practice being applied.

On this basis, TREE #1 requires; common boundary temporary isolation fencing (metal mesh panels with above ground supports) as well as intensive management of its 'live root' system during excavation.

TREE #2: Callistemon citrinus (Crimson Bottlebrush)

TREE #2 is located within the front yard of subject site. It is too close to the proposed new drive and concrete stairs/footpath to provide reconfigured access to the subject site. TREE #2, by virtue of the breaches to both the calculated Tree Protection Zone (from herein TPZ) & Structural Root Zone (from herein SRZ) total surface areas has been assessed as required to be replaced.

By our calculation, the total TPZ surface area for TREE #2 is 35.44m². The proposed new works (driveway/garage/pathway) disturbance within the TPZ surface area equates to approximately 15.13m² of the total TPZ surface area. This is equivalent to 42.7% of total TPZ surface area, defined by *AS4970-2009* as a Major Encroachment.

We suggest the replacement tree/s be planted as far from any permanent existing (neighbours) & new lot infrastructure as possible. The replacement tree/s must be sourced from a grower/supplier whose stock is certified to meet the production benchmarks as described within the *Australian Standard (AS2303- 2015 Tree stock for landscape use)*.

Required new replacement tree/s are to be professionally planted & and maintained for at least a minimum full Sydney active growing season. defined as being from mid-August through late May.

<u>TREE #3</u>:

TREE #3 does not exist, only a stump was able to be confirmed as present. It is located

within the subject site common boundary adjoining property rear yard.

No management strategy is required to be discussed.

TREE #4: Brachychiton acerifolius (Illawarra Flame Tree)

TREE #4 is located within the subject site common boundary adjoining property rear yard . It is confirmed to be within 5.00 meters to the subject site boundary.

The proposed new work has NO breaches the TPZ total surface area for TREE #4.

On this basis, TREE #4 only requires management in the form of a . During the Commencement of the construction works TREE #4 required TPZ temporary 'temporary metal mesh fencing panels with above ground supports'.

TREE #5: Lagunaria patersonia (Norfolk Island Hibiscus)

TREE #5 is located within the subject site common boundary adjoining properties rear yard within 5 meters to the subject site boundary.

The proposed new work breaches the TPZ total surface area for TREE #5.

By our calculation, the total TPZ surface area of TREE #1 is 126.97m². The proposed new work equates to an approximate 0.36m² mathematical disturbance of total TPZ surface area for Tree #1. This equates to approximately 0.3% of total TPZ surface area, defined by AS4970-2009 as a Minor Encroachment).

In the event significant diameter 'live root/s' (greater than 50mm in diameter), are exposed the direct input & documentation with supporting evidence photographs from the retained project arborist is essential to confirm as close as possible to best Aboriculture Practice being applied.

On this basis, TREE #5 requires only management in the form of common boundary temporary isolation fencing (metal mesh panels with above ground supports) prior to the commencement & during all processes of construction work

NBC policy when trees have been approved to be removed by impacts of proposed development is to replace those trees with new trees so as that at maturity the new tree/s at the minimum mimics the existing 'green footprint'.

New trees are specified to be sourced from growers/suppliers whose stock is certified to meet the production benchmarks of the Australian Standard (AS23023-2015 Tree stock for landscape use). New trees are to be professionally planted & managed for a minimum of one coastal Sydney growing season (late August through early June).

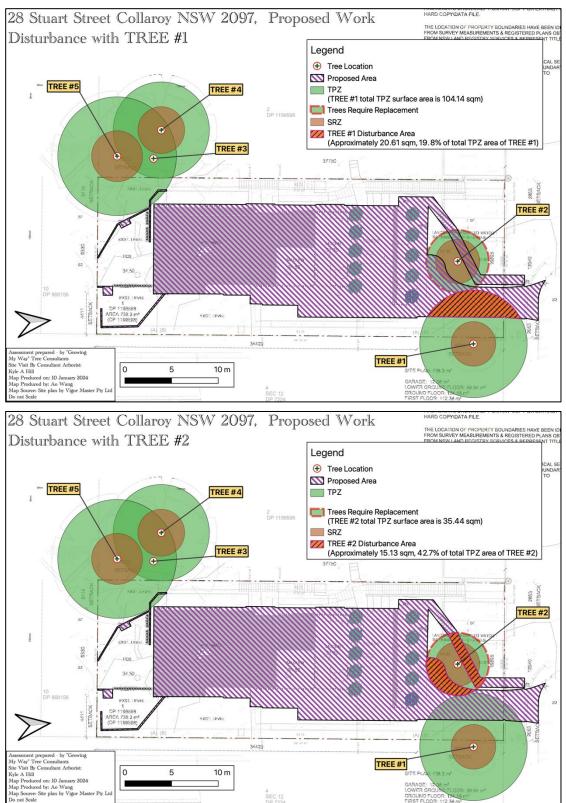
Tree removal can only be undertaken by suitably qualified practitioners (or those always supervised/instructed by such a person) in compliance with the provisions within the WorkSafe NSW, (old WorkCover *NSW*) "Amenity Tree Industry – Code of Practice 1998".

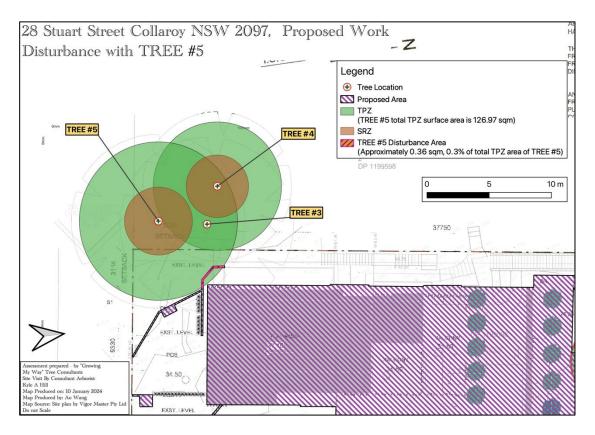
See the following page potentially suitable to the subject site tree species list is provided within this document. (The list includes both Exotic & Australian Native species. It is not necessarily the only species potentially chosen/specified for the subject site. We additionally, acknowledge that species availability may have an impact on the preferred chosen species.)

• Acer buergerianum (Trident Maple) as a deciduous option.

- o Backhousia citriodora (Lemon Scent Myrtle)
- Banksia integrifolia (Coast Banksia)
- o Banksia serrata (Old Man Banksia)
- Livistona australis (Cabbage Tree Palm)
- Melaleuca linariifolia (Snow in Summer)
- *Michelia champaca* (Himalayan Magnolia)
- Tristaniopsis laurina 'Luscious'[™] (Watergum Cultivated Variety)
- Waterhausea floribunda 'Green Avenue'™ (Weeping Lilly Pilly)

5.2 TPZ / SRZ Tree Disturbance Calculation Diagrams





5.3 Preliminary Site Specific "Tree Plan of Management"

Pre-Commencement of Works

- Establish builders common boundary fencing to establish isolation for all discussed as able to be retained in a viable manner.
- Remove TREE #2.
- > Install as a group planting 'temporary metal mesh fencing panels with above ground.
- TPZ installations (builders common boundary fencing) must be 'signed off' as being AS4970-2009 compliant. This requires documentation to be in writing with supporting photographic evidence. This document must be provided to the appointed Principle Certifying Authority.
- In the unlikely event, excavation (completed manually) exposes a 'live root' of a significant diameter it can only be managed & documented relative to the management strategy applied by the retained Project Arborist. Again, this requires documentation to be in writing with supporting photographic evidence. This document must be provided to the appointed Principle Certifying Authority.

Commencement of and During Works

- > Ensure common boundary isolation fencing is always intact.
- All demolition of existing infrastructure within any retained, managed & protected tree TPZ/SRZ is to be completed manually, especially when 'live roots' of a significant diameter belonging to any retained trees may be exposed. Any exposed 'live root' of a significant diameter must be covered until the required input & documentation from the retained Project Arborist can be obtained. Preferably, any 'live root' exposed would be covered in subject site topsoil. If this is not practicable, hessian or geotextile matting kept moist can

be used until able to be covered & isolated from the proposed works.

Any 'live roots' of any diameter exposed ideally should be covered if not by subject site topsoil, damp, hessian, or similar suitable geotextile matting to reduce any desiccation of 'live roots' by exposure to direct sunlight.

Post Completion of Works

- Confirm the presence & condition of all required by the DA determination 'Conditions of Consent' individual trees required to be retained.
- The above is to be certified in writing with supporting photographic evidence as being DA determination 'Conditions of Consent' plus AS4970-2009 provisions compliant relative to all required to be retained trees.
- All documentation from each stage of works must be provided to the appointed Principle Certifying Authority as soon as is reasonably possible post each stage of works being completed.

6. Conclusions

- The proposal in its present format is considered as able to be built without any compromise to any discussed tree with respect to individual useful Life Expectancy with implementation of the once finalised Site Specific 'Tree Plan of management'.
- This document can be submitted to the NBC assessment officers for review & approval in its present form.

If you have any questions relating to this report or implementation of recommendations, please contact Kyle Hill on 0412-221-962.

Yours faithfully,

Kyle A. Hill (AQF level 5 & 8 Practicing & Consulting Arborist)

7. Limitations on the use of this report

This report is to be utilised in its entirety only. Any written or verbal submission, report or presentation that includes statements taken from the findings, discussions, conclusions or recommendations made in this report, may only be used where the whole of the original report (or a copy) is referenced in, & directly attached to that submission, report or presentation.

8. Assumptions

Care has been taken to obtain information from reliable resources. All data has been verified insofar as possible; however, Growing My Way Tree Services, can neither guarantee nor be responsible for the accuracy of information provided by others.

Unless stated otherwise:

Information contained in this report covers only the trees that were examined & reflects the condition of the trees at the time of inspection.

The inspection was limited to visual examination of the subject trees without dissection, excavation, probing or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future.

9. Recommended References

- Barrell, J. 1993. '*Preplanning Tree Surveys: Safe Useful Life Expectancy (SULE) is the Natural Progression*', Arboricultural Journal 17:1, February 1993, pp.
- Barrell, J. 1995, '*Pre-development Tree Assessments*', in Trees & Building Sites, Proceedings of n International Conference Held in the Interest of Developing a Scientific Basis for Managing Trees in Proximity to Buildings, International Society of Arboriculture, Illinois
- Dr. G. Watson & Dr. D. Neely, 'Trees & Building Sites', LSA Illinois USA 1995

Dr. N. Matheny & Dr. J.R. Clark, 'Trees & Development', ISA Illinois USA 1998

Phillip J. Craul, 'Urban Soil in Landscape Design', J. Wiley & Sons, New York USA 1992

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Hitchmough, J.D. 1994. 'Urban Landscape Management', Inkata Press, Sydney.

Mattheck, C. & Breloar, H. 1994 'Body Language of Trees', The Stationery Office, London.

AS 4373:2007, 'Pruning of Amenity Trees', Standards Australia.

AS 4970:2009, 'Protection of Trees on Development Sites'', Standards Australia.

BS 5837:2005, 'Guide for Trees in Relation to Construction', Standards Board, UK.

11. Appendix A – Glossary

Glossary of common Arboreal terms

Age: I Immature refers to a refers to a well-established but juvenile tree

- **SM** *Semi-mature* refers to a tree at growth stages between immaturity & full size
- M Mature refers to a full-sized tree with some capacity for further growth
- LM *Late Mature* refers to a full-sized tree with little capacity for growth that is not yet about to enter decline
- OM Over-mature refers to a tree about to enter decline or already declining
- LS *Live Stag* refers to a tree in a significant state of decline. This is the last life stage of a tree prior to death

Hth & Vig Health & Vigour

Health refers to the tree's form & growth habit, as modified by its environment (aspect, suppression by other tree, soils) & the state of the scaffold (i.e., trunk & major branches), including structural defects such as cavities, crooked trunks, or weak trunk/branch junctions. These are not directly connected with health & it is possible for a tree to be healthy but in poor condition/vigour. Classes are:

Excellent (E), V. Good (VG), Good (G), Fair (F), Declining (D), Poor (P), Very Poor (VP)

Vigour refers to the tree's growth rate/condition as exhibited by the crown density, leaf colour, presence of epicormic shoots, ability to withstand disease invasion & the degree of dieback. **Classes are:**

Excellent (E), V. Good (VG), Good (G), Fair (F), Declining (D), Poor (P), Very Poor (VP)

Useful Life Expectancy (ULE) refers to any individual tree specimen's potential life

expectancy (viability) based on VTA assessment, three groups are described,

Short = Less than Five years

Medium = Five-Fifteen years

Long = more than Fifteen years

- Significant diameter roots are defined as those being greater than 0.05m/50mm in diameter.
- **Diameter at Breast Height (DBH)** refers to the tree trunk diameter at breast height (1.4 metres above ground level)
- **Structural Root Zone (SRZ)** refers to a radial offset which relates to tree stability. This zone is presumed to be main location of the tree's structural support roots. It is calculated using the formula SRZ radius= $(D \times 50)^{0.42} \times 0.64$.
- Primary Root Zone (PRZ) refers to a radial offset of ten (10) times the trunk DBH measured

from the centre of the trunk. This zone often contains a significant amount of (but by no means all a tree's) fine, non-woody roots required for uptake of nutrients, oxygen & water.

Tree Protection Zone (TPZ) is ideally a "No Go Zone" surrounding a tree to aid in its ability to cope with disturbances associated with construction works. TPZ = DBH x 12. Tree protection involves minimising root damage that is caused by activities such as construction. Tree protection also reduces the chance of a tree's decline in health or death & the possibly damage to structural stability of the tree from root damage.

To limit damage to the tree, protection within a specified distance of the tree's trunk must be maintained throughout the proposed development works. No excavation, stockpiling of building materials or the use of machinery is permitted within the TPZ.

A TPZ is required for each tree or group of trees within five metres (unless otherwise specified) of building envelopes.

- **Stem/bark inclusion** refers to a genetic fault in the tree's structure. This fault is located at the point where the stems/branches meet. In the case of an inclusion this point of attachment is potentially weak due to bark obstructing healthy tissue from joining together to strengthen the joint.
- **Decay** refers to the break down tissues within the tree. There are numerous types of decay that affect different types of tissues, spread at different rates & have different effect on both the tree's health & structural integrity.
- Point of Attachment refers to the point at which a stem/branch etc join.
- **Dead wood** refers to any whole limb that no longer contains living tissues (e.g., live leaves &/or bark). Some dead wood is common in several tree species.
- **Die back** refers to the death of growth tips/shoots & partial limbs. Die back is often an indicator of stress & tree health.
- **One dimensional crown** refers to branching habits & leaves that extend/grow in One direction only. There are many causes for this growth habit such as competition & pruning.
- **Crown Foliage Density of Potential (CFDP)** refers to the density of a tree's crown in relation to the expected density of a healthy specimen of the same species. CFDP is measured as a percentage.
- **Epicormic growth/shoots** refers to growth/shoots that are/have sprouted from axillary buds within the bark. Epicormic growth/shoots are a survival mechanism that often indicates the presence of a current or past stress even such as fire, pruning, drought etc.
- Over Head Powerlines (OHP) Over head electricity wiring.

LVOHP Low Voltage Overhead Powerlines

- HVOHP High Voltage Overhead Powerlines
- ABC Aerial Bundled Cable

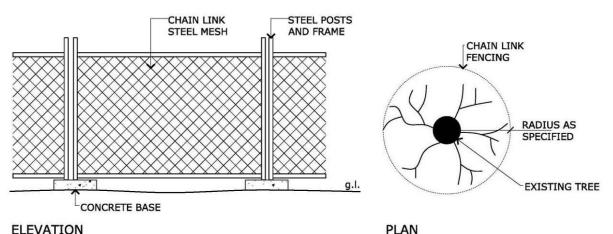
12. Attachment A: Tree Protection/Management **Prior to & During Construction**

The installation of Tree Protection Zone (TPZ) fencing is to be carried out prior to commencement of all works. The most suitable fencing material is 1.8m tall chain link mesh with 50mm metal pole supports, see detail 1: tree protection fencing.

A mulch layer of composted leaf & woodchip to a depth of 75mm is required within the TPZ to aid in retention of soil moisture & to protect soil from contaminants. Water is to be applied by handheld or soaker/leaky hose within TPZ as required & in Accordance with Stage 3 Water Restrictions. Watering is to be carried out by either an Arborist or is to form part of the Builder's/Contractor's contract, with recommended monthly checks by an Arborist.

There is to be no stock piling of building material (including waste), machinery or any other item within TPZ of any retained tree. Access to personnel & machinery, & storage of fuel, chemicals, cement or site sheds is prohibited.

Regular monitoring of protected trees during development works for unforeseen changes or decline, will aid in the success & longevity of the retained trees.



ELEVATION

