

Arboricultural Report

272 MAROONDAH HWY, HEALESVILLE, 3777



Report prepared by
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December 2021

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Introduction

This arboricultural report has been prepared by Tabitha Barclay (*BaAppSc (hort)*) and Coral Jeffs (*BaAppSc (hort)*) under instructions by soft loud house architects for the owners at 272 Maroondah Highway, Healesville, located in the Yarra Ranges Council, where an on-site assessment of the trees is required to ascertain the impact of the proposed construction of shop & bar with apartment living above.

There were 3 trees to be addressed, 1 tree is located in the common property at the rear of the property, 1 is in the front – a street tree and 1 is on the neighbouring property to the west; all are numbered on the Site Plan. The size, health and any particular issues for each tree were noted. The general health of the trees assessed varies with some displaying deadwood, showing signs of stress and age, i.e. rot & epicormics. Of the 3 trees assessed, 1 is native and 2 are exotic species.

Site description

2.0

Tabitha Barclay and Coral Jeffs undertook this tree assessment in December 2021. Inspection was made at ground level and observations, recommendations and conclusions reached in light of our experience.

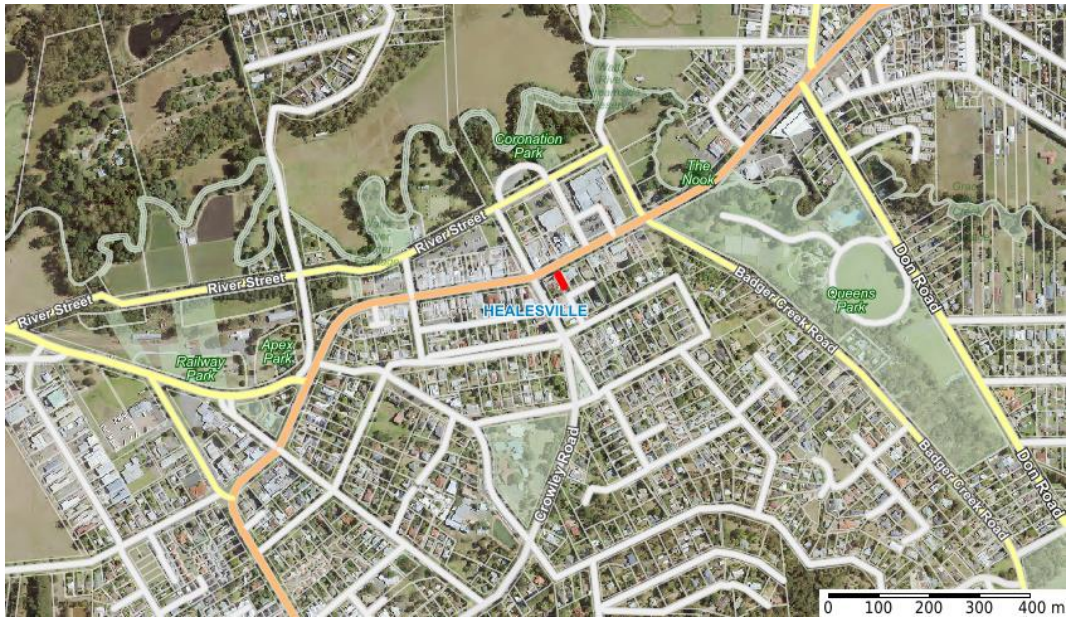
Council Property Number: 203715

Lot/Plan: Lot 1 PS445694

Vicmap SPI: 1\PS445694

Directory Reference: Melway 278 C1

The ~0.06-acre property is located on Maroondah Highway, Healesville, the property has recently been under the current ownership. It is ~89m ASL with a northerly aspect, the property currently consists of a single storey office space with no back-garden area. Two of the trees that have been assessed are in the rear carparking area and beer garden, off Maroondah Hwy and one is a street tree on the Maroondah Hwy. This property exists in a well-established residential area, on the main street in Healesville. There is a mix of smaller and larger properties in the immediate surrounds, with fragmented treed areas.



Map 1. Aerial image (Source Yarra Ranges Council Intramaps, 2020)



Map 1a). Close up aerial image (Source Yarra Ranges Council Intramaps, 2020)

The site is zoned Commercial 1 Zone C1Z) with the planning overlays Bushfire Management Overlay – Schedule 1(BMO1), Design and Development – Schedule 12 (DDO12), Heritage Overlay – Schedule 428 (HO428) (no tree controls exist).

	Healesville Commercial Precinct
HO428 Incorporated plan:	
	Healesville Commercial Precinct

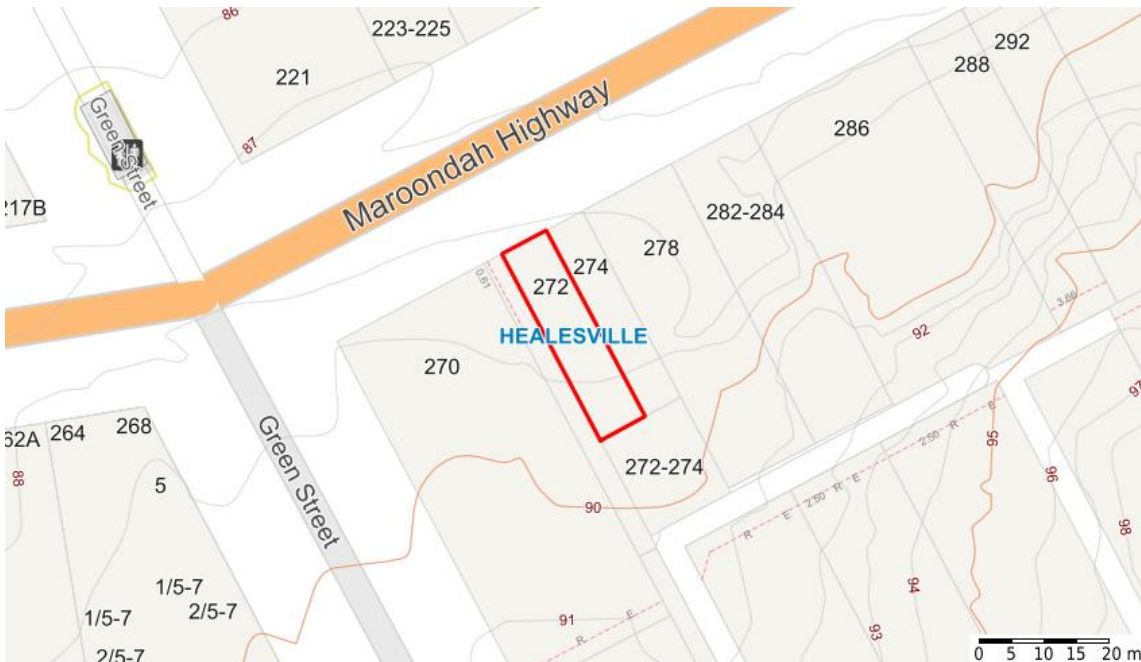
The original indigenous vegetation expected in this area is Highlands Southern Fall EVC 23- Herb-rich Foothill Forest with the predominant tree species being *Eucalyptus radiata*, *E. obliqua*, & *E. cypellocarpa*, and Yarra Ranges Vegetation Community 31

Candlebark Grassy Forest with the expected overstorey species being *Eucalyptus goiniocalyx*, *E. macrorhyncha*, *E. melliodora*, *E. obliqua*, *E. radiata* & *E. rubida*.

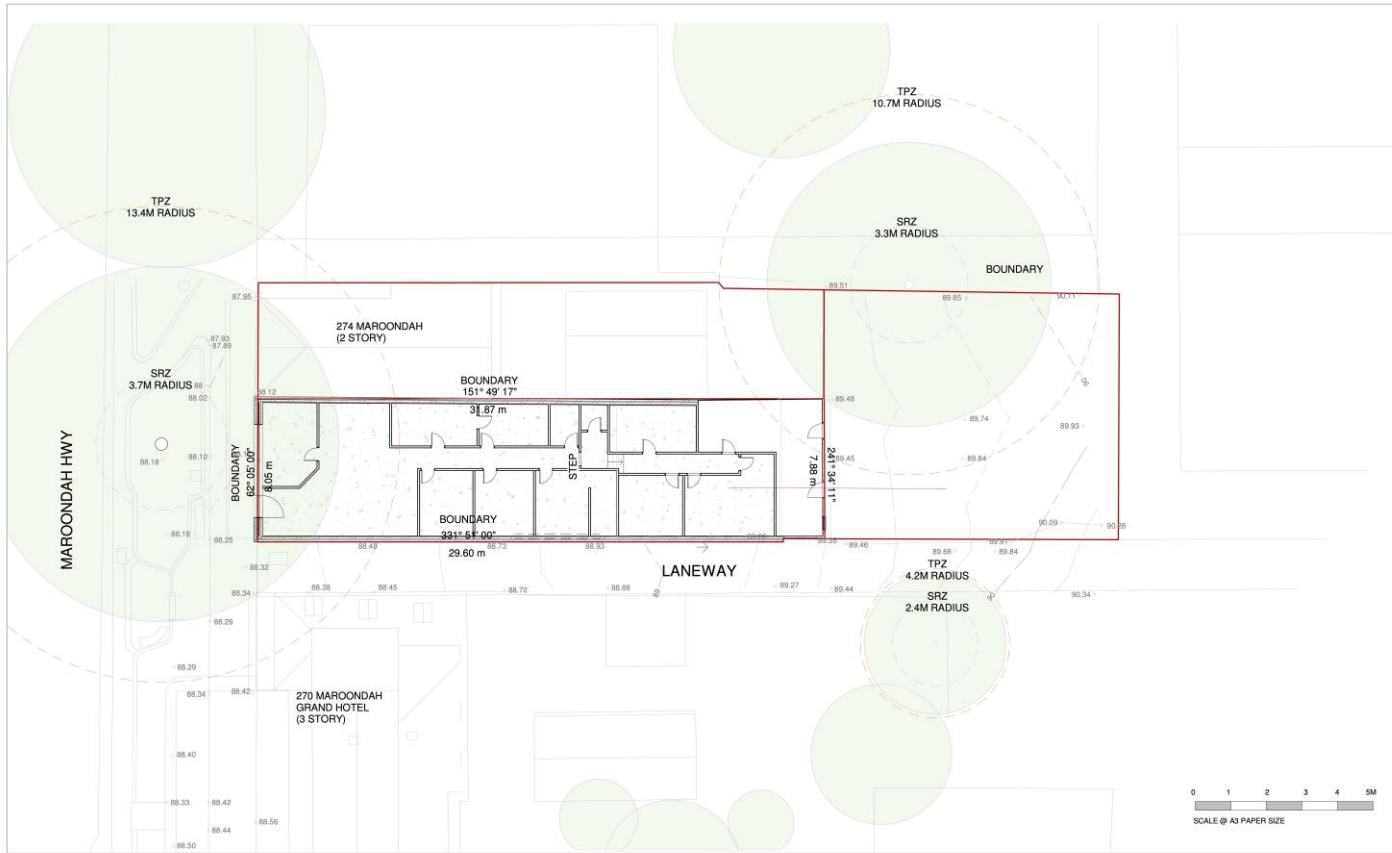
There is no remnant indigenous lower storey species present on the property. The block has long been cleared for commercial use.



Map 2. Location map (Source Yarra Ranges Council Intramaps, 2020)



Map 3. Contour map (Source Yarra Ranges Council Intramaps, 2020)



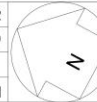
This drawing must be read in conjunction with all other project documents, including the architect's specification, and any architect's instructions issued during the course of the contract. Contractors must verify all dimensions on site before commencing any work or shop drawings. This drawing is not to be used for construction unless indicated.

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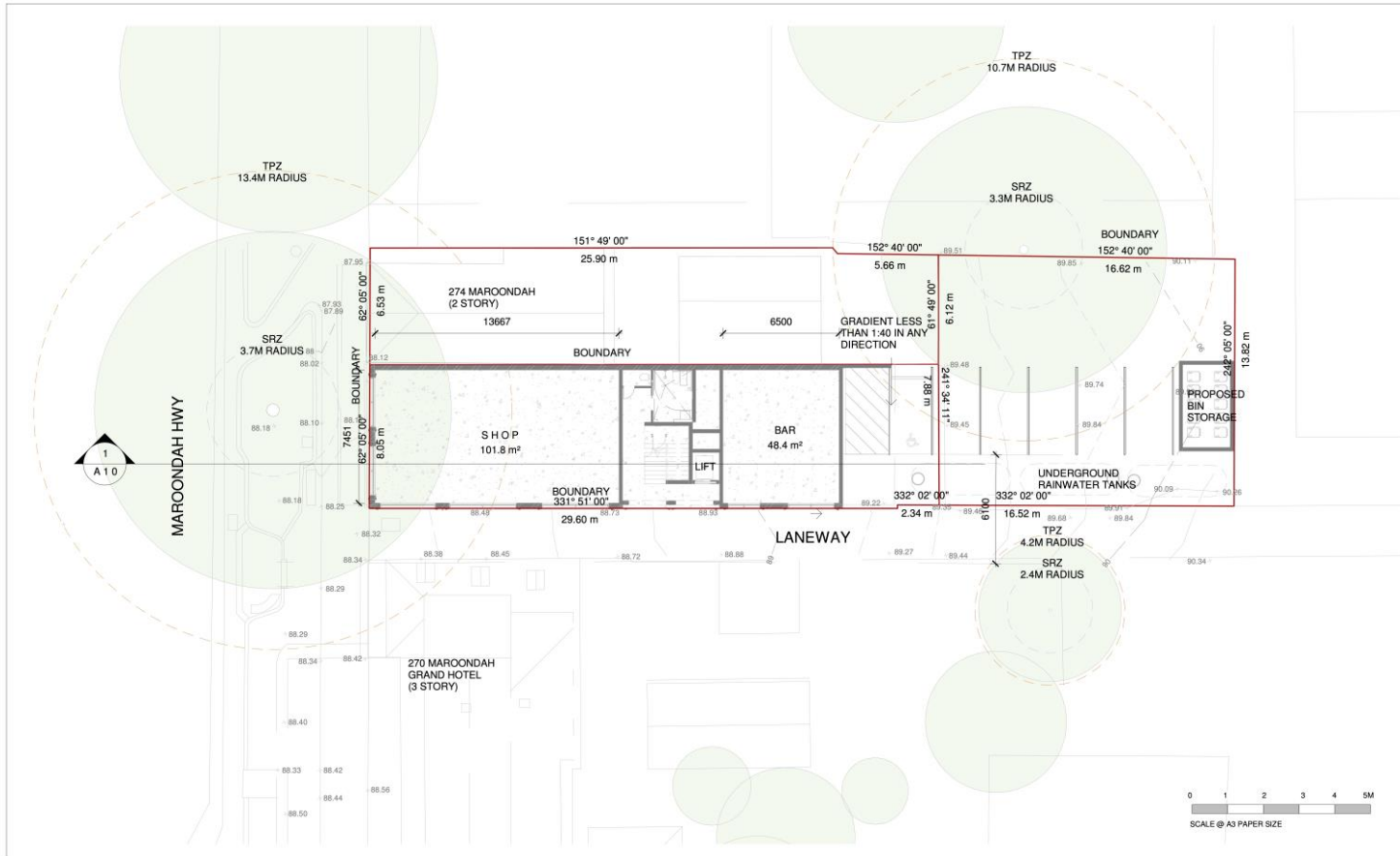
soft loud house architects
 29 PARKVIEW AVENUE OCEAN GROVE
 tel: 1300 732 050 email: info@softloud.com.au
organic architecture for environment, community and spirit

issued	DBF-SHOP
DRAFT P.P 14/12/2021	272 MAROONDAH HWY HEALESVILLE
NOT FOR CONSTRUCTION	EXISTING FLOORPLAN

sheet	E 0 2
scale @ A3	1 : 200
date	DEC 20 2 1
drawn	J N



Map 4. Site map existing conditions (rear area within TPZ of tree 2 is currently used as a carparking area and bin storage)

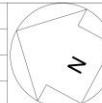


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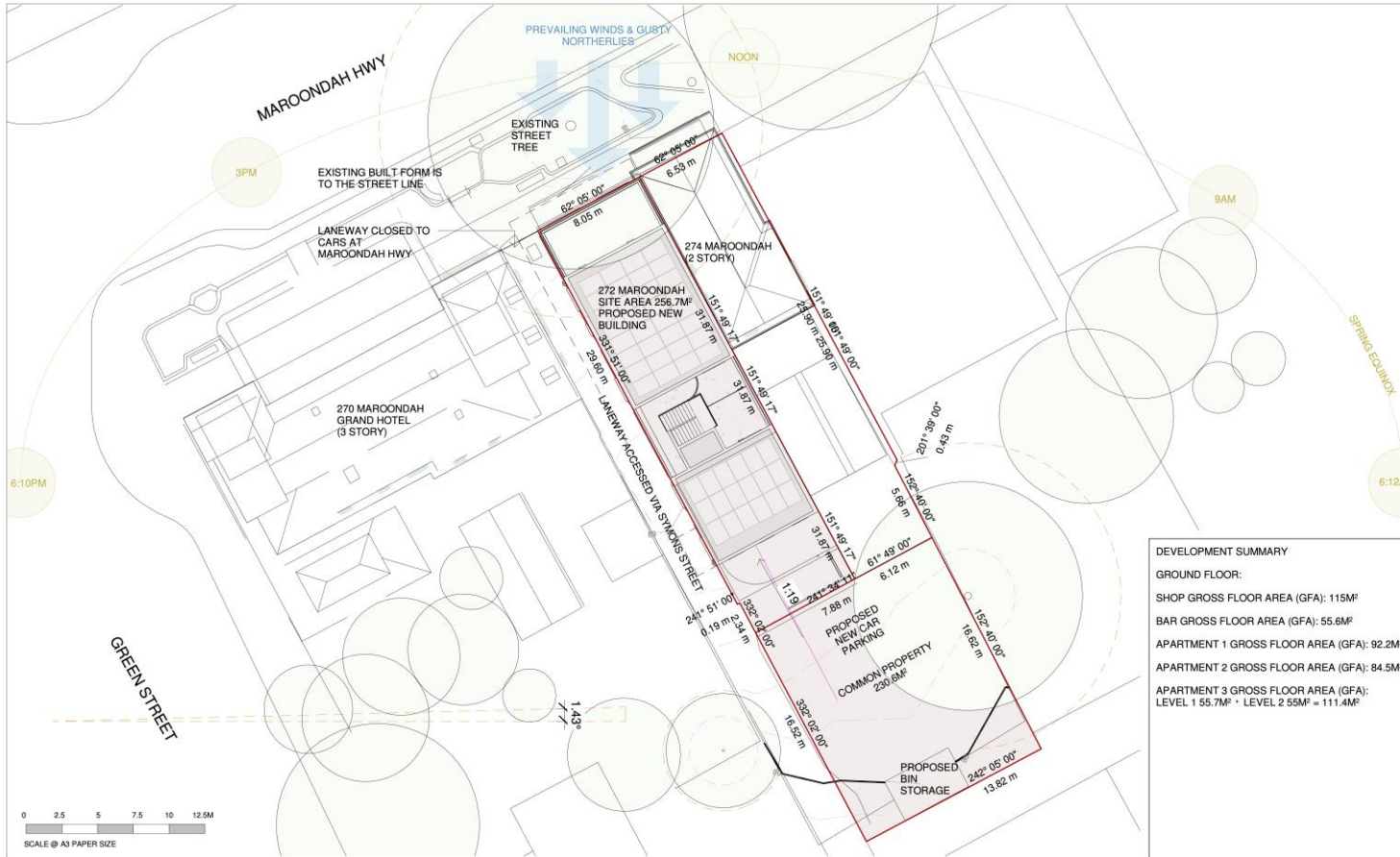
issued	DBF - SHOP
DRAFT P.P 14/12/2021	272 MAROONDAH HWY HEALESVILLE
NOT FOR CONSTRUCTION	PROPOSED GROUND FLOOR

sheet	A 0 2
scale @ A3	1 : 200
date	DEC 20 21
drawn	J N



This drawing must be read in conjunction with all other project documents, including the architects specification, and any architects instructions issued during the course of the contract. Contractors must verify all dimensions on site before commencing any work or shop drawings. This drawing is not to be used for construction unless indicated.

Map 5. Proposed site plan showing trees and TPZ/SRZ and encroachment



DEVELOPMENT SUMMARY	
GROUND FLOOR:	
SHOP GROSS FLOOR AREA (GFA):	115M ²
BAR GROSS FLOOR AREA (GFA):	55.6M ²
APARTMENT 1 GROSS FLOOR AREA (GFA):	92.2M ²
APARTMENT 2 GROSS FLOOR AREA (GFA):	84.5M ²
APARTMENT 3 GROSS FLOOR AREA (GFA):	LEVEL 1 55.7M ² + LEVEL 2 55M ² = 111.4M ²

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issued	DBF-SHOP
DRAFT P.P 14/12/2021	272 MAROONDAH HWY HEALESVILLE
NOT FOR CONSTRUCTION	PROPOSED SITE PLAN

sheet	A 0 1
scale @ A3	1 : 250
date	DEC 20 2 1
drawn	JN



This drawing must be read in conjunction with all other project documents, including the architects specification, and any architects instructions issued during the course of the contract. Contractors must verify all dimensions on site before commencing any work or stop drawings. This drawing is not to be used for construction unless indicated.

Map 5a. Site map proposed

Table 1. Tree List at 272 Maroondah Hwy, Healesville

No.	Species	DBH cm	TPZ m	SRZ m	Hgt- m	Wth- m	L.S.	Sig.	ULE yrs	Struct	Roots	Cpy	Ret Value	R/ Ret	Notes
1	<i>Ulmus procera</i>	112	13.4	3.7	22	N-S 20 E-W 20	Mat	High	10+ (With work)	3	2	4	High	Ret	NS. Growing in mulched garden bed as part of main road avenue of trees, existing rocks retaining wall, bitumen footpath, curb & channel, services and road within SRZ/TPZ, existing incursion ~90% into TPZ, was pollarded long ago – not maintained, scalloped/wide bifurcation – has been braced, rot & grass growing in centre of co-dependants, has had some pruning, lots of epicormics, fine & large deadwood.
2	<i>Ulmus procera</i> (English Elm)	42 + 38 + 68 =89	10.7	3.3	22	N-S 18 E-W 13	Mat +	Mod	15+	3	1	3	Mod	Ret	NDE/on edge of Common Property. Bifurcated from base – repeated, W co-dependant fused @1.2m, hollowing between co-dependants, fine & large deadwood, large broken branch in centre of canopy, lots of suckering up to 10m away, curb & channel, bitumen carpark within SRZ/TPZ – cracking concrete & bitumen,

No.	Species	DBH cm	TPZ m	SRZ m	Hgt- m	Wth- m	L.S.	Sig.	ULE yrs	Struct	Roots	Cpy	Ret Value	R/ Ret	Notes
															building within TPZ, existing incursion ~60% of TPZ, lots of epicormics.
3	<i>Grevillea robusta</i> (Silky Oak)	35 <i>estimated</i>	4.2	2.4 <i>estima- ted</i>	18	N-S 8 E-W 8	Mat	Mod	10+	4	2	4	Mod	Ret	NDW. Growing in beer garden of hotel, access not gained, some broken branches, high symmetrical bifurcation, has had some pruning, bitumen laneway, carparking, fences within SRZ/TPZ.

Legend:

DBH = Diameter at Breast Height, measured in centimetres,
Hgt = Height, measured in metres

Wth = Width, measured in metres

TPZ = Tree Protection Zone, calculated as 12 x DBH

SRZ = Structural Root Zone

L.S. = Life stage: Young, Mat = Mature, Sen = Senescing

Sig. = Significance, assessed as high, moderate or low

ULE = Useful Life Expectancy, estimated in years

Struct. = Structure scored out of 5 (1=poor to 5=excellent)

Roots = root environment health, scored out of 5

Cpy = Canopy health, scored out of 5, NA= Not available -
winter

R/Ret = tree proposed to be R=Removed/Ret=Retained

NGL = Natural Ground Level

SR = Structural Roots

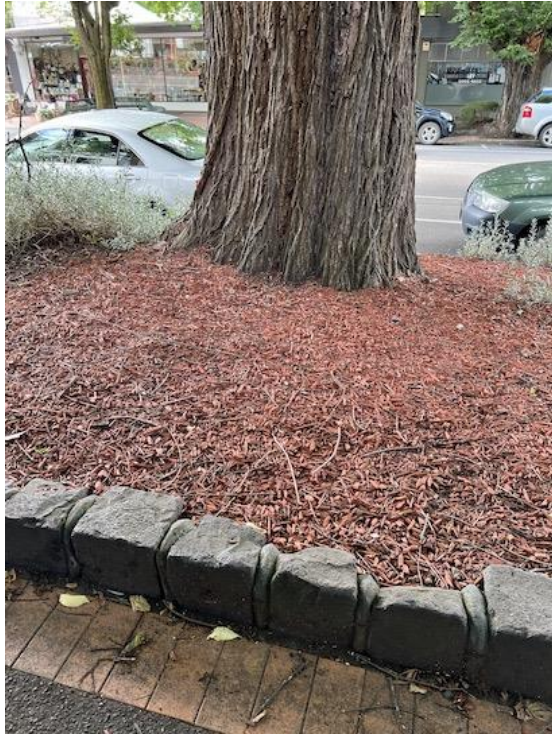
NS = Naturestrip / Road Reserve

ND = Next Door Property, N, E, W or S

DS = Defendable Space

CS = Canopy Separation

Pictorial Assessment



Tree 1 root zone



Tree 1 canopy



Tree 1 canopy overhanging building



Tree 1 canopy streetscape.



Tree 2 root zone



Tree 2 canopy



Tree 2 trunk roots cracking curbing & bitumen



Tree 2 suckers ~10m away



Tree 3 on fenceline



Tree 3 canopy



Laneway alongside west of subject building, Tree #2. Next door rear area, Tree #1



This proposed development will have minimal impact on trees assessed- all trees are proposed for retention with no greater than existing encroachment into their Tree Protection and Structural Root zones.

Trees proposed for retention with existing encroachment >10%

Tree #1 is an English Elm, (*Ulmus procera*) which is a street tree planted along the Maroondah Hwy. As part of an avenue, this tree contributes enormous aesthetic value to the streetscape of the Healesville township. It currently has encroachment into its SRZ and TPZ well beyond normal accepted tolerances under the Australian Standard (as most street trees do) however its health and vigour is still good and despite some structural issues (which could be improved by maintenance and pruning) this tree can be retained with no additional encroachment from the development proposal.

Tree #2 is another English Elm, younger than its Maroondah Hwy counterpart, located in the rear common land behind the buildings. This tree also has existing incursion into its TPZ and SRZ well beyond normal accepted tolerances under the Australian Standard. It is felt that the amenity value of this tree for shade provision and aesthetics can be maintained, and proposed works have been designed to avoid any additional TPZ encroachment. This tree needs some professional pruning to removal recently broken limbs and reshape the canopy.

Tree # 3, is Silky Oak (*Grevillea robusta*) located in the beer garden of the neighbouring Grand Hotel. This most likely self-seeded tree has existing encroachment into its SRZ and TPZ from many of the hard landscaping elements of its surroundings. There is no incursion expected from the proposed development.

Root barriers

Ideally the works within the root zones of Trees #1 & 2 would take place in Autumn after leaf fall. The time window of May-Oct is preferable for root pruning (as needed) prior to the installation of a root barrier. This is highly recommended for English Elms as their roots can be extremely invasive particularly once disturbed, having the tendency to produce suckers. Elm root systems are generally widespread, shallow and fibrous. It is recommended that the carparking surface remain permeable, with no encroachment greater than existing for Tree #2. A maintainable root barrier (with both chemical and physical properties) should be installed between the TPZ periphery and the underground water tanks by an operational arborist.

Tree Protection Zones

Generally, Tree Root Protection Zones (TPZ) should be fenced off and a thick layer of protective mulch applied to 100mm depth and to be placed to the dripline of trees. This will not be possible in this location. Any excavations should aim at retaining/restoring natural ground levels where appropriate and possible. Access for demolition and building should be easy due to the existing rear accessway, but it is prudent that materials are not stored within TPZ areas, as this will increase the encroachment area beyond acceptable tolerances.

It is imperative to watch and maintain the health of all remaining trees, during and post works. The integrity of the trees may be altered through this process and while some may thrive with continued maintenance, others may decline, regular monitoring is essential.

References

5.0

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