

1 OAKHAMPTON ROAD MAITLAND

ARBORICULTURAL IMPACT ASSESSMENT



JULY 2025

Jacaranda mimosifolia



Arboricultural Impact Assessment

1. SITE & CLIENT

Site Address:	1 Oakhampton Road, Maitland, NSW, 2320
Client:	Ben Roose
C/-:	Hutch Architecture
ATTENTION:	Ed Highton
EMAIL/PHONE:	edward@hutcharchitecture.com.au / 0426 457 431
JURISDICTION:	Maitland City Council (MCC)/Awabakal LALC

2. ASSESSING ARBORIST

Company:	Bark. Trees & Landscapes
AQF5 Arborist:	Phillip Williams
Qualifications:	B.Sc.(Arch.), B.Land.Arch., Hort Cert., Dip.Hort.(Arboriculture - No. 6262394), QTRA Reg. No. 7712
Memberships	Institute of Australian Consulting Arborists (ACM91), Australian Institute of Landscape Architects (No. 729)
Phone:	+61 419 619 466
Email:	williams@bark.net.au

3. PROJECT OVERVIEW

Bark has been engaged by Hutch Architecture on behalf of its client, Ben Roose, to undertake an assessment of trees on or near the site of the nominated property (see below) that have the potential to be impacted by the proposed development. The need for an Arborist's report was requested by MCC at a Pre-Lodgement Meeting held on 24 October 2024.

The report is comprised of a condition assessment of the tree describing the state of the trees at pre-construction, including images, and an impact assessment based on the requirements of AS 4790-2025.

The results contained within this report are based on site inspections carried out on 25th February 2025 and 7th April 2025. Since this time, discussions regarding the likely impact of the works have been held with the client and the architect with the aim of retaining significant trees where possible

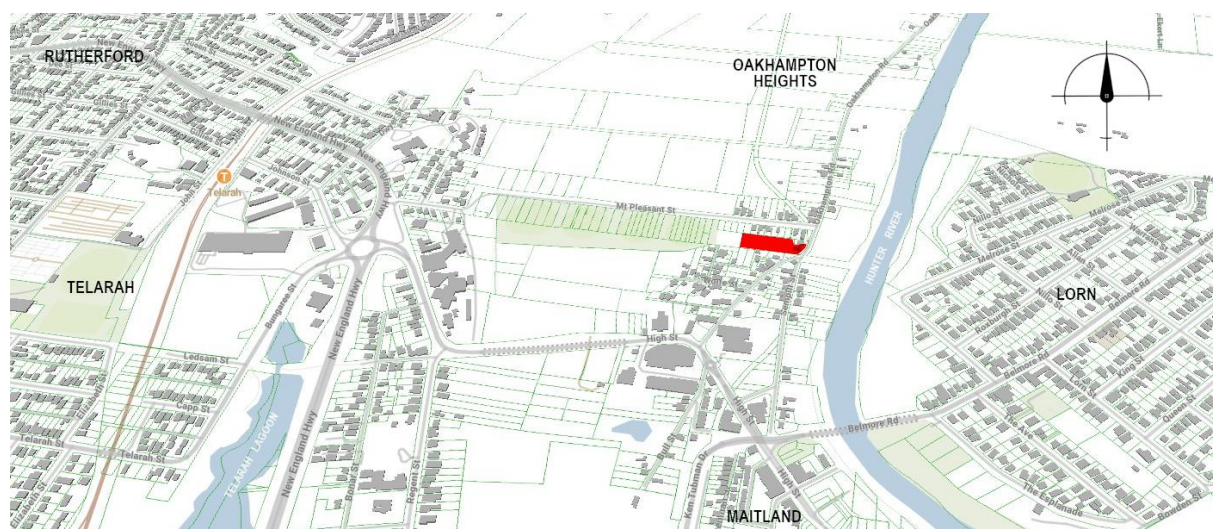


FIGURE 1: LOCATION PLAN
[Base Map Source: <https://meconemosaic.au/>]



4. THE SITE - SUMMARY

ITEM	DETAILS
Local Government Area	Maitland City Council
Site Address	1 Oakhampton Road, Maitland, NSW, 2320
Lot/Section/Plan	1/-/DP666810, 1/-/DP936146
Main Planning Policies	Maitland LEP 2011, Maitland DCP 2011,
Land Zoning	RU1 – Primary Production ¹
Heritage Listing	“Riverview”, Item No.179, Maitland LEP, Local Significance Central Maitland Heritage Conservation Area (Local Significance) Council consent is required to remove vegetation. This can be done as part of the DA.
Significant Tree Register	No listings associated within the site.
Flooding	Declared Floodplain
Pre-clearing Vegetation [Trees Near me]	Hunter Coast Foothills Spotted Gum-Ironbark Grassy Forest <i>Corymbia maculata, Eucalyptus fibrosa, Eucalyptus siderophloia, Eucalyptus umbra, Eucalyptus acmenoides</i>
Current Vegetation [Trees Near Me]	No significant native vegetation. Generally cleared for past agriculture and/or grazing.
Soils/Soil Landscape [Soils Near Me/e-Spade NSW]	Kurosols [soils with a strong increase in clay content between topsoil and subsoil and with strongly acidic subsoils. } Rivermead Soil Landscape [Extensive alluvial terraces]

The site is roughly rectangular in shape and is comprised of a home paddock, to the east containing the main building, “Riverview”, a former surgery and stables. The front door of “Riverview” is accessed from Oakhampton Road whereas vehicular access is off Hannan Street. The western portion of the site is an abandoned paddock now over-run with weeds and grasses. The home paddock consists of a mixed selection of cultural plantings generally in turf but some in overgrown gardens.

“Riverview” is listed in the Maitland LEP as having local significance. The original building was constructed in the 1840s soon becoming known as the Steven Stars Hotel later changing its name to the Emu Inn in 1860. In 1886, the inn was converted to a residence being named “Riverview” by local racing and coal mining identity, Henry J. Adams. Towards the end of the First World War, the building was converted into a private hospital caring for seriously ill adults. It operated until 1937 following which it was converted into flats thereafter remaining as residential accommodation.



FIGURE 2: “RIVERVIEW”.
[SOURCE: GOOGLE STREETVIEW, 2021]

¹ Zoning as stated in Planning Report (NSW Government, 2025) although MCC suggests R1 and RU2 in its Pre-lodgement Meeting Minutes (24/10/2024)

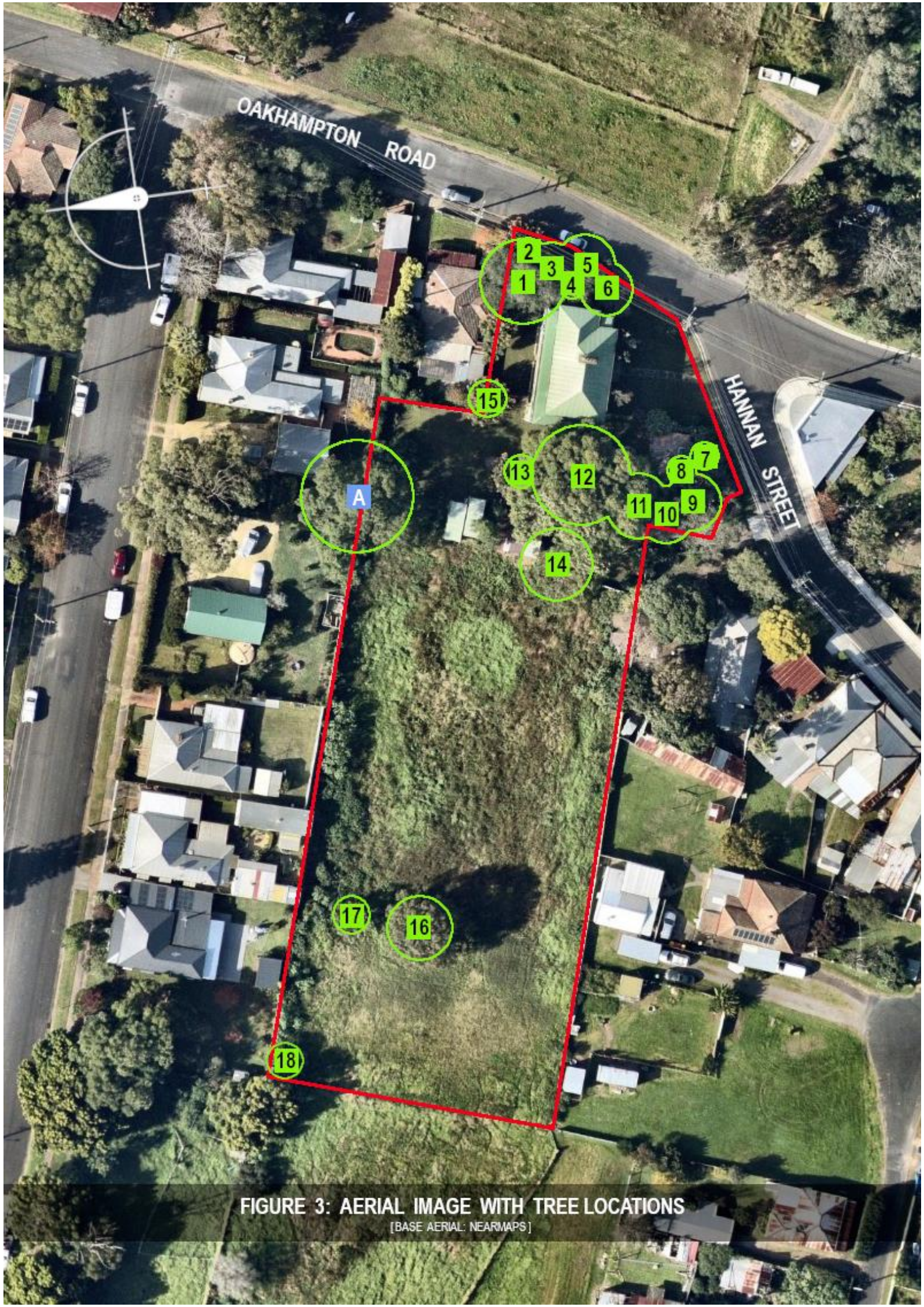


FIGURE 3: AERIAL IMAGE WITH TREE LOCATIONS
[BASE AERIAL: NEARMAPS]



5. RELEVANT CONTROLS OR LEGISLATION

The site is located within the Local Government Area of Maitland.

The site is zoned RU1 (Primary Production) within the *Maitland Local Environmental Plan 2011* (Refer Footnote 1).

Relevant controls relating specifically to tree protection and tree management are addressed in the *Maitland Development Control Plan* (MDCP) 2011, Part B – Environmental Guidelines, B.5 Section ².

The objectives of the MDCP in terms of vegetation preservation and management which are as follows:

- To protect, maintain and enhance bushland, remnant vegetation and tree canopy as assets for the people of Maitland.
- To retain trees for the urban amenity, microclimate, scenic, air and water quality, and social benefits they provide.
- To ensure trees listed on Council's Significant Tree register are not adversely affected by development.
- To implement the mitigation hierarchy of avoid, minimize, offset when considering the clearing of vegetation.³

It should be noted that Development Consent is required for any vegetation to which Clause 5.10 – Heritage Conservation, Maitland LEP 2011 applies.

The following performance criteria and industry standards will be applied by Council when assessing a development application that includes the removal of vegetation within a Heritage Conservation Area⁴:

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS
Heritage items and significant trees are retained in the landscape.	Council may require the replacement of the tree/s where the tree/s; <ul style="list-style-type: none"> • contribute to the amenity of the street, precinct or area; • are part of a group (such as an avenue or stand); or • are contributory to the heritage qualities of the area.
The heritage qualities of the area are maintained.	Council may require a report by a qualified Arborist to be provided confirming the condition of the tree and its reasons for lopping or removal.
Heritage items and significant trees are protected from works that may damage the tree.	Lopping of a tree that is a Heritage Item must be undertaken in accordance with AS4373- 2009 <i>Pruning of amenity trees</i> . Any works in the vicinity of a heritage item or tree must be undertaken in accordance with AS 4970-2009 <i>Protection of trees on development sites</i> .

6. METHODOLOGY

The following is a summary of the approach taken to assess the trees leading to the preparation of this report:

- Visual Tree Inspection (VTA), (Mattheck & Breloer, 1994) was undertaken. All trees were inspected and assessed from the ground. The VTA included all visible above ground parts of the tree including; exposed roots; trunk; branches; and, foliage.
- Diameter at standard height (DSH) and diameter at base–above the basal flare (DAB) measurements were taken and used to calculate the notional root zones (NRZ) and structural root zones (SRZ) of each tree undertaken in accordance with AS 4970 -2025 *Protection of trees on development sites*.

² Draft *Maitland Development Control Plan 2025* is currently on exhibition. The provisions for dealing with vegetation that are associated with a Heritage Item or occur within a Heritage Conservation Area have been changed including the need for the preparation of a Statement of Heritage Impact (SoHI) undertaken by a suitably qualified Heritage Consultant.

³ Page 41, *Maitland Development Control Plan 2011*

⁴ Page 46, *Maitland Development Control Plan 2011*



- Tree structure was assessed by:
 - visual evidence of structural faults and/or potential points of failure;
 - poor pruning practices;
 - physical and/or storm damage;
 - suppressed or distorted growth including trunk divergence and canopy asymmetry.
- Tree health was determined by:
 - canopy density, growth extension, foliage size (applicable to species) and colour;
 - presence of disease and/or pests;
 - termite activity;
 - the amount of deadwood and/or dieback within the crown and its location; and,
 - presence of epicormic growth.
- Life expectancy ratings were assessed using several factors such as: location; species; age; health; and, structure.

It should be noted that the following, more detailed assessment measures did not form part of the VTA inspection:

- No below ground inspections or analyses were undertaken within the root zone.
- No internal inspections or tissue analyses were undertaken on the subject trees.
- No aerial inspections were undertaken.

7. SUMMARY TREE ASSESSMENT

A total of 19 trees were assessed: 18 on site and 1 on an adjoining site (5 Mount Pleasant Street). Three senescent Cypress Pines (Figure A5D) growing close to the southern façade of the residence were not included in the assessment.

All trees have been assessed as cultural plantings (i.e. no remnant native vegetation). Apart from Trees 7 and 14, a Callistemon and a Melaleuca, respectively, all the other trees are exotics.

By using a comparison of historic aerial images (Figure 4), it would appear that Trees 9 (*Erythrina crista-galli*) and Tree 12 (*Jacaranda mimosifolia*) are the oldest trees occurring on site with an approximate age of between 80 and 100 years old. This is supported by their size and current condition. These two trees are the most significant trees on site based on size and landscape value but are unlikely to have strong historic associations to former residents, although this would need to be confirmed by the Heritage Consultant.

The trees located along the Oakhampton Road frontage (Trees 1-6) have been planted close to one another resulting in over-crowding and suppressed growth. These trees have also been routinely pruned and lopped to avoid the overhead powerlines.

Trees 7-11 are growing in densely planted and overgrown garden beds close to the former surgery with Arrowhead Vine (*Syngonium auritum*) growing up their trunks and into the canopies of trees. As noted above, Tree 9 is a significant tree and although it has lost some large branches recently, it has the potential to live successfully for at least another 40 years if properly managed and maintained.

Tree 12 dominates the backyard and is showing no evidence of decline despite sustaining some previous storm damage.

The remaining trees (Trees 13-18) are either more recent plantings or are self-sown, especially the *Cinnamomum camphora* and *Koelreuteria paniculata*.

Only one tree, Tree A (*Jacaranda mimosifolia*), is growing on an adjoining property with the potential to be affected by the works carried out on site due to its size and location near to the common boundary.

A more detailed tree assessment of all trees is presented in Appendix A.

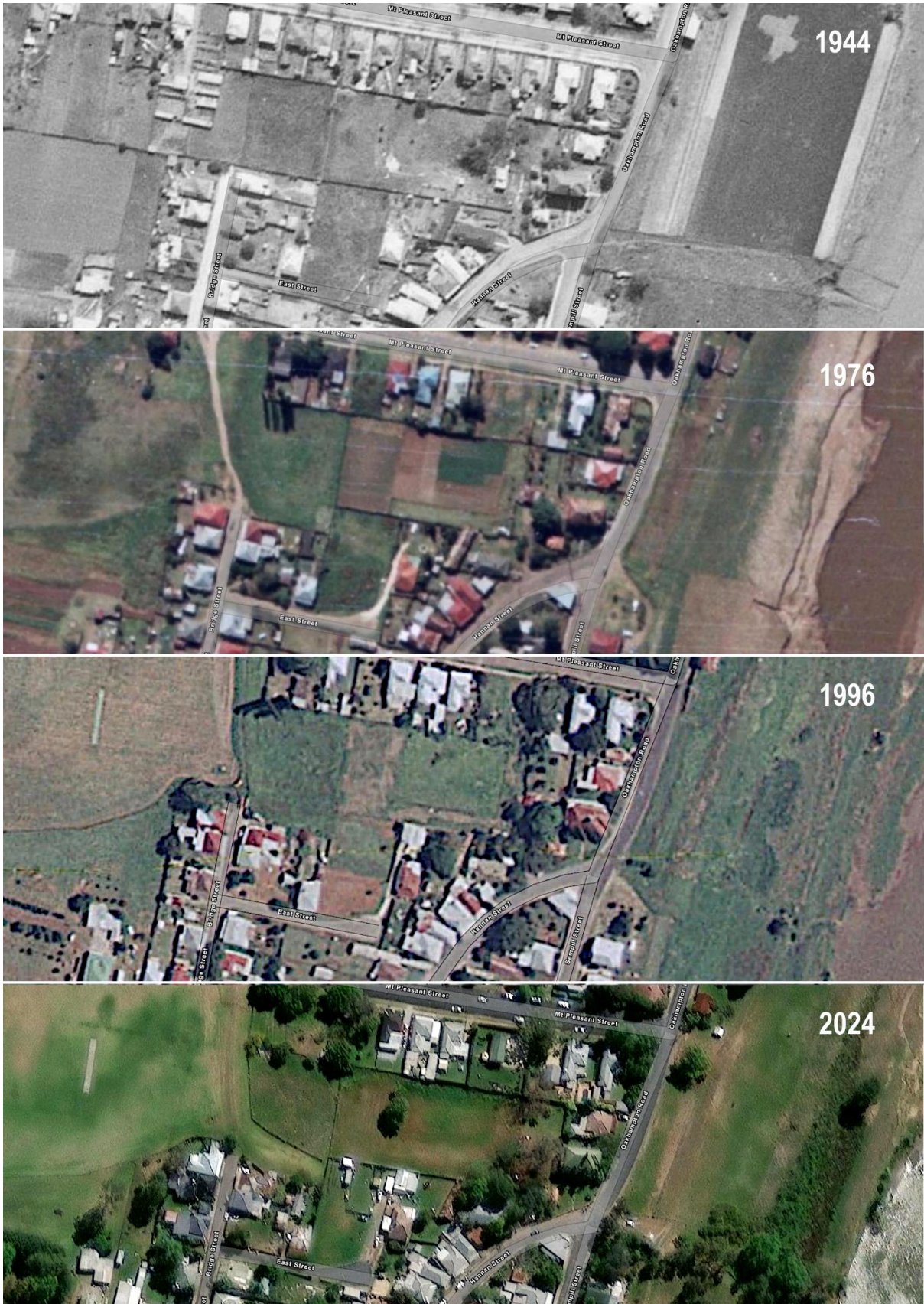


FIGURE 4: HISTORIC AERIAL IMAGE COMPARISON.
[AERIALS: Maitland Maps <https://maps-maitlandcc.hub.arcgis.com/>]



8. PROPOSED DEVELOPMENT

The proposal is seeking to conserve and upgrade the existing building to make it into a family residence. In addition to internal works, that will not impact of the trees growing on site, the gardens are to be upgraded with the construction of a new garage, a large shed (also to accommodate vehicles) and new pool with an associated outside living area. New paths and driveway are also to be provided along with improvements to the existing gardens including new fencing and formal and semi-formal planted areas. To assist in the retention of existing trees, a gravel drive is proposed that runs from Hannan Street to the northern shed and so avoiding potentially damaging excavation and hard surfacing.

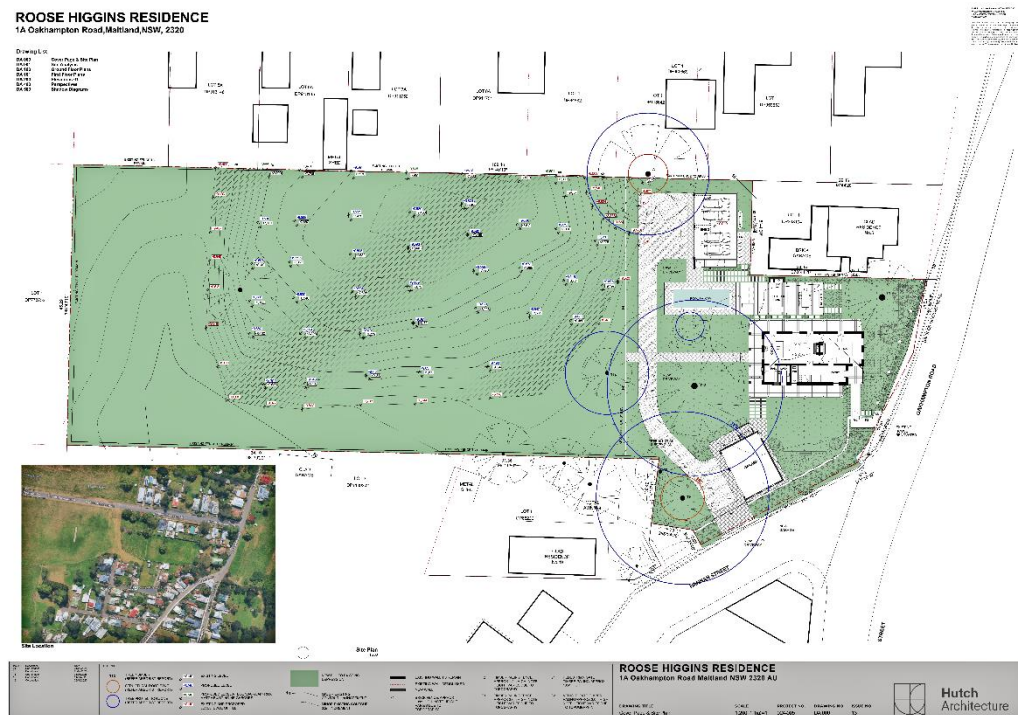


FIGURE 6: SITE PLAN & LANDSCAPE PLAN.
[SOURCE: HUTCH ARCHITECTURE & OCTOPUS GARDEN DESIGN]



9. IMPACT ASSESSMENT

Figure 7 (and Appendix C2) indicates that Trees 2-8, 10, 11 and 15-17 will need to be removed based on the proposed design.

Trees 2-6 are being removed to allow for the implementation of a formal garden to the front of the residence. These trees are not good specimens primarily due to overcrowding and the frequent need for topping to maintain clearances to the overhead power lines.

Trees 7, 8, 10 and 11 are required for removal to enable the driveway and side fencing to be installed. Once again, these trees are not good specimens. It may be possible to retain Tree 10; however, its thick base, as the result of heavy past pruning, will make the installation of a fence difficult and requiring a large portion of the tree to be removed, hence the recommendation for its removal.

It is likely that low branches to Tree 9 will need to be removed so as to allow access to the garage and the shed by larger vehicles. This work would be additional to other tree maintenance work required to improve the long term retention of the trees. All such work will need to be supervised by the Project Arborist and carried out in accordance with the requirements of AS4373-2007.

Trees 15-17 are required to be removed to enable the construction of the outdoor living area/pool and to regrade and fill the western paddock. It has been assumed that these trees are self-sown.

In addition to Tree 9, Trees 12-14 and Tree 18 are to be retained.

Tree A will not be affected resulting from the avoidance of hard surfacing. If required, products such as Truegrid or Geohex can be used to retain gravel where vehicles are making turning movements that normally would displace gravel. The raising of levels within the NRZ of Tree A is to be avoided unless done in 150mm increments with six months provided between the installation of subsequent layers.

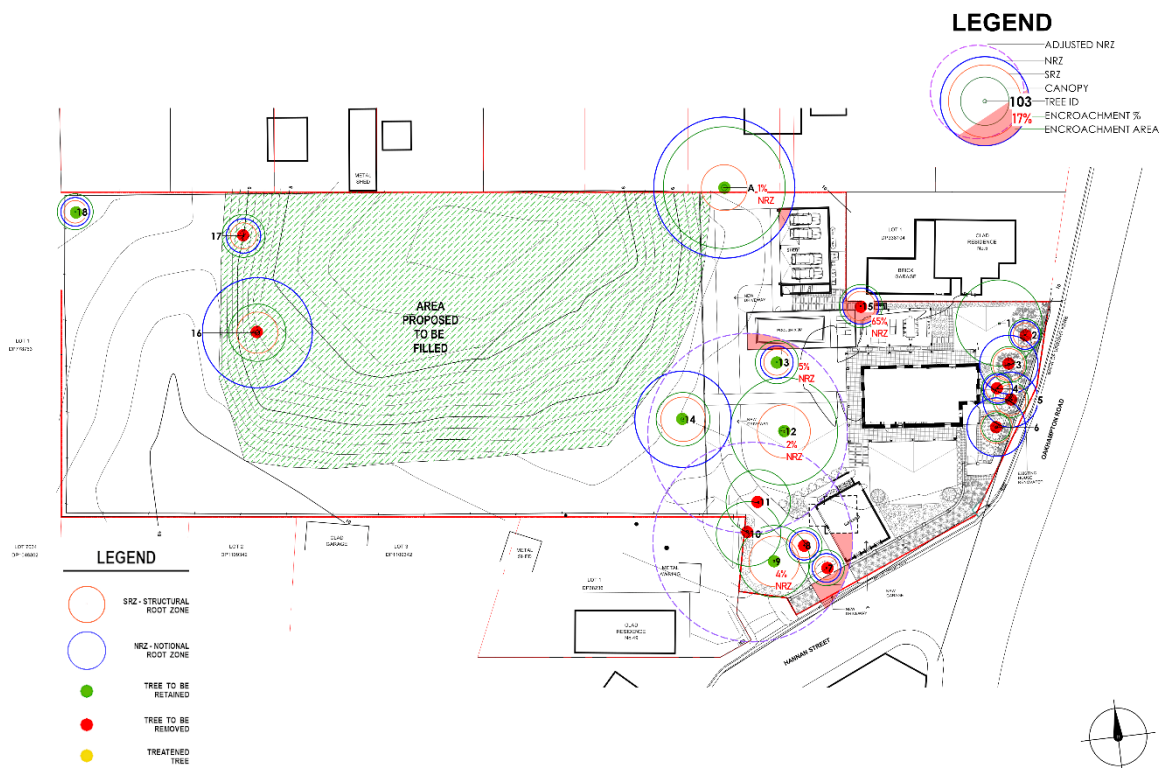


FIGURE 7: TREE IMPACT ASSESSMENT DIAGRAM.
[SOURCE: HUTCH ARCHITECTURE & OCTOPUS GARDEN DESIGN]



10. RECOMMENDATIONS

Based on the above assessment, the following is recommended:

- that permission be sought to remove Trees 2-8, Trees 10-11 and Trees 15-17 (a total of 12 trees);
- that Trees 1, 9 12-14 and Tree 18 be retained and protected as required;
- that permission be sought to selectively remove branches to Tree 9 for the purpose of providing access and for general tree maintenance with the work being done in accordance with AS4373-2007 and *Guide to Managing Risks of Tree Trimming and Removal Work*; and,
- that the Preliminary Tree Protection Plan (refer Appendix D) be developed as part of the detailed design phase of the project and implemented as a means of safeguarding the trees to be retained.

11. REFERENCES

Draper, D. & Richards, P.A.	<i>Dictionary for Managing Trees in Urban Environments</i> . CSIRO, Collingwood Vic, 2009
Link Tree System Ltd. (Barrell, J.)	<i>Arboricultural Journal</i> 1993, Vol. 17pp. 33-46, 01/03/98
Maitland City Council	<i>Maitland Development Control Plan 2011</i>
Maitland City Council	<i>Maitland Maps</i> , https://maps-maitlandcc.hub.arcgis.com
Mattheck, C. & Breloer, H.	<i>The Body Language of Trees: A Handbook for Failure Analysis</i> . TSO, London, England, 1994
NSW Government	<i>NSW Map</i> , https://www.argis.com
NSW Government	<i>Property Report: 1 Oakhampton Road, Maitland, 2320</i>
NSW Government	<i>SEED</i> , https://www.seed.nsw.gov.au
NSW Government	<i>Soils Near Me</i> , https://www.soilsnearme.app/explore
NSW Government	<i>Trees Near Me</i> , https://www.treesnearme.app/explore
Placemark Consultants	<i>Maitland "Riverview": A History by Peter Smith., 28 May 2018</i>
Safe Work Australia	<i>Guide to Managing Risks of Tree Trimming and Removal Work</i> , Australian Government, 2016
Standards Australia	<i>Australian Standard: AS 4970-2025 Protection of trees on development sites</i> , 2025
Standards Australia	<i>Australian Standard, AS 4373-2007 Pruning of amenity trees</i> , 2007

12. DISCLAIMER

This report has been prepared for the intended use by the client only.

All observations, recommendations and advice expressed within this report are based on the following:

- the requirements and practices contained within AS 4970-2025 *Protection of trees on development sites*;
- the training and professional experience of the consulting arborist;
- observations made at the time of inspection; and,
- information either supplied by the client, other consultants (where applicable) or supplementary research.

Trees are dynamically growing organisms that change over time. No guarantee is implied with respect to future tree condition or safety beyond the advice and recommendations made within the report based on observations made at the time of the inspections. It is recommended that trees be inspected periodically, at least, annually and after major storm events.



13. APPENDICES

APPENDIX A: TREE IMAGES

The following images are intended to provide a record of the condition of the trees at the time of the inspection (2025/02/25 & 2025/04/07) and to provide a frame of reference for future observations. Further details on each tree are provided in Appendix B.

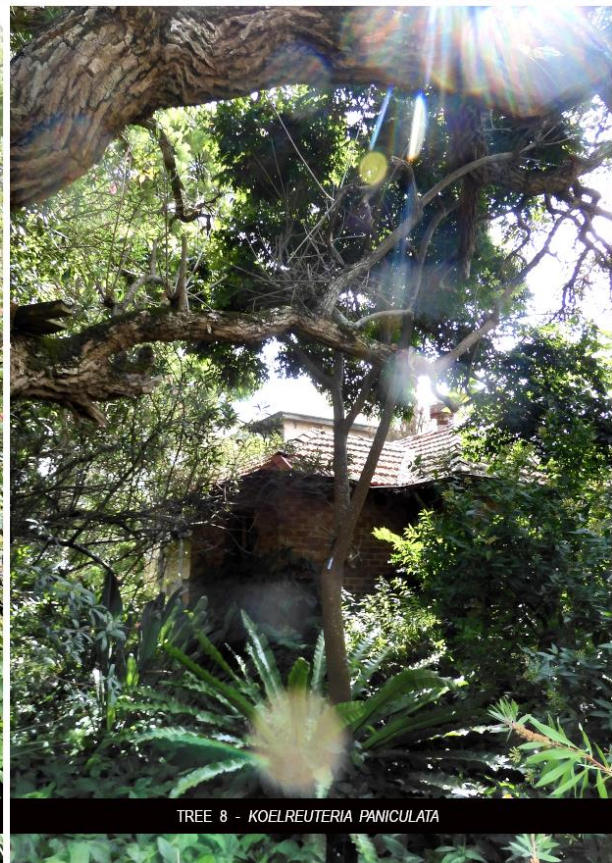
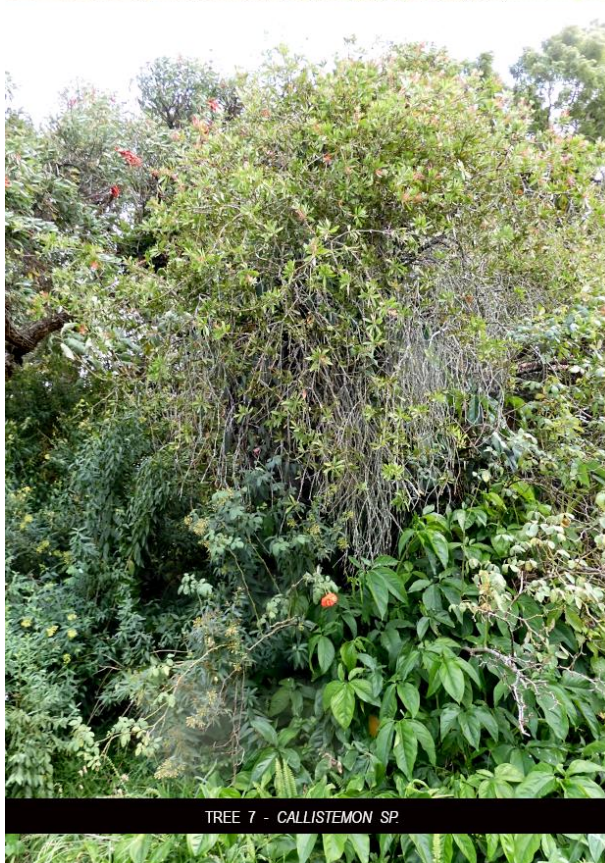
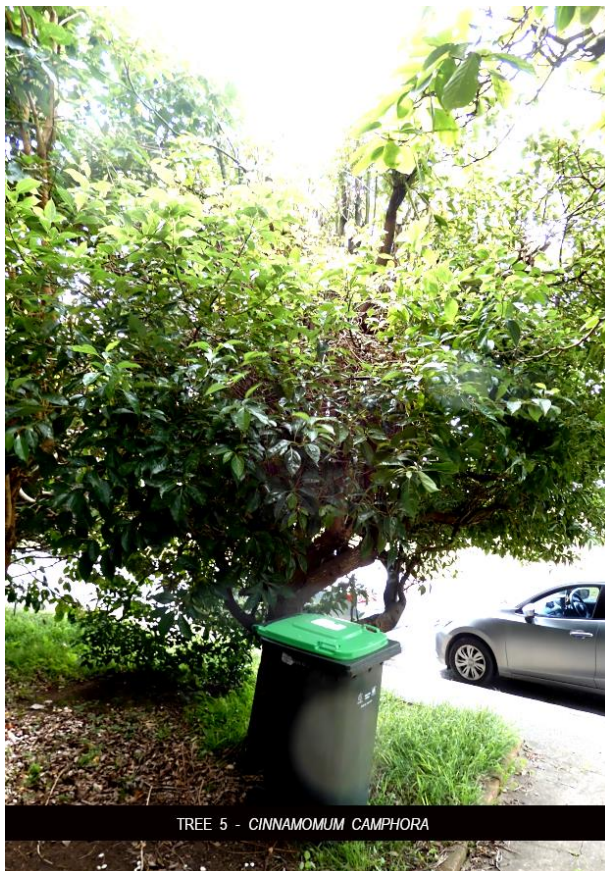
FIGURE A1: Trees 1-4 (INSPECTED 2025/02/25)





A	B
C	D

FIGURE A2: Trees 5-8 (INSPECTED 2025/02/25)





A	B
C	D

FIGURE A3: Trees 9-12 (INSPECTED 2025/02/25)





A	B
C	D

FIGURE A4: Trees 13-16 (INSPECTED 2025/02/25 & 2025/04/07)

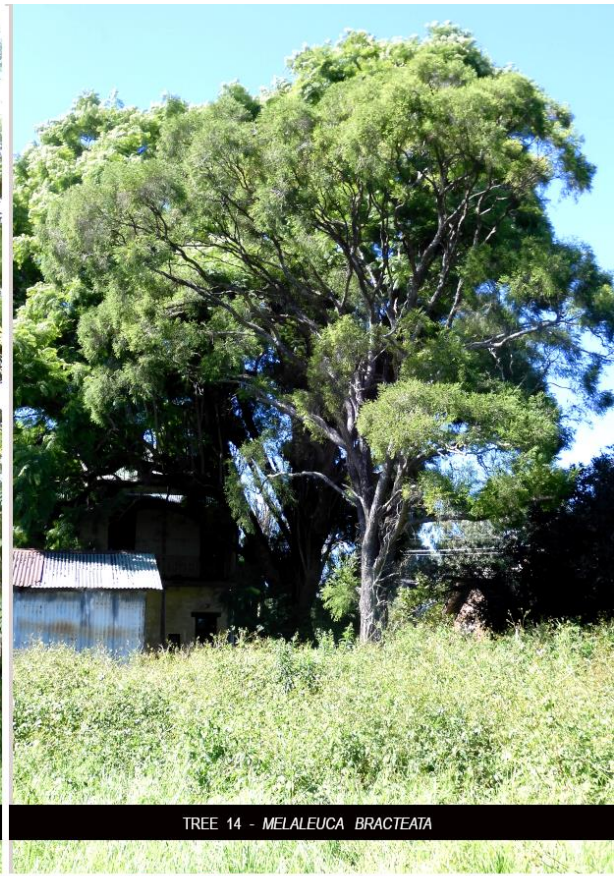




FIGURE A5: Trees 17- 18, A (INSPECTED 2025/02/25 & 2025/04/07)





APPENDIX A: TREE ASSESSMENT TABLE: ROOSE RESIDENCE, MAITLAND

No	BOTANICAL NAME	COMMON NAME	AGE CLASS	HEIGHT [M]	DBH ¹ [MM]	TPZ [M]	DAB ² [MM]	SRZ [M]	USEFUL LIFESPAN [YEARS]	STRUCTURE	HEALTH	TREE AZ	IMAGE REF (APPX A)	COMMENTS
TREES OCCURRING WITHIN THE NOMINATED SITE AREA														
1	<i>Nerium oleander</i>	Oleander	M	9	N/A	-	N/A	-	+40	F	AV	A1	A1A	1.DBH [900] + DAB [3000] ARE ESTIMATES ONLY DUE TO SIZE AND SPREAD OF TREE AND DIFFICULTY IN ACCESSING BASE TO MEASURE. A TREE WITH NUMEROUS CANES ARISING FROM ITS BASE INDICATING PREVIOUS HEAVY PRUNING. POTENTIAL TO IMPACT OVERHEAD POWERLINES.
2	<i>Koelreuteria paniculata</i>	Golden Rain Tree	SM	6	160 ¹	2.0 [MIN]	190	1.65	15-40	F	AV	A1	A1B	2. [DBH: 120/110] SUPPRESSED GROWTH ARISING FROM OVERCROWDING. POTENTIAL TO IMPACT OVERHEAD POWERLINES WITH PREVIOUS LOPPING HAVING BEEN UNDERTAKEN.
3	<i>Magnolia x solangeana</i>	Saucer Magnolia	M	7	340 ¹	4.08	390	2.23	15-40	F	AV	A1	A1C	3. SUPPRESSED GROWTH ARISING FROM OVERCROWDING. POTENTIAL TO IMPACT OVERHEAD POWERLINES WITH PREVIOUS MOST FOLIAGE OCCURRING TOWARDS THE OUTER CANOPY. LOPPING HAVING BEEN UNDERTAKEN.
4	<i>Morus nigra</i>	Black Mulberry	SM	9	170	2.04	210	1.72	15-40	P	F	Z10	A1D	4. SUPPRESSED GROWTH ARISING FROM OVERCROWDING. PAST PRUNING OF LOWER BRANCHES. SOME DEAD BRANCHES PRESENT WITH SIGNS OF DECAY. POTENTIAL TO IMPACT OVERHEAD POWERLINES.
5	<i>Cinnamomum camphora</i>	Camphor Laurel	SM	7	320	3.84	350	2.13	15-40	P	AV	A1	A2A	5. SIGNS OF EXTENSIVE PREVIOUS PRUNING WITH NUMEROUS WATERSHOOTS PRESENT. POTENTIAL TO IMPACT OVERHEAD POWERLINES.
6	<i>Magnolia x solangeana</i>	Saucer Magnolia	M	7	340 ¹	4.08	390	2.23	15-40	AV	AV	A1	A2B	6. [DBH: 260/170/130] GOOD SPECIMEN, GROWING FREELY WITH WELL-DEVELOPED TRUNK AND FREE OBSTRUCTIONS. SOME PREVIOUS TOPPING HAS OCCURRED. SLIGHT DAMAGE CAUSED BY ROOTS TO ENTRY PATH.
7	<i>Callistemon sp.</i>	Bottlebrush	M	6	150*	2.0 [MIN]	180*	1.61	5-15	AV	F	Z10	A2C	7.* ESTIMATES ONLY DUE TO PRESENCE OF VINE ENCIRCLING TRUNK. REDUCE LONGEVITY DUE TO RAMPANT VINE (GROWING THROUGH CANOPY. POSSIBLY C. CITRINUS. OCCURRING IN IN HEAVILY PLANTED GARDEN BED WITH SYNGONIUM AURITUM (ARROWHEAD VINE) GROWING EXTENSIVELY THROUGH CANOPY.
8	<i>Koelreuteria paniculata</i>	Golden Rain Tree	SM	8	170	2.04	220	2.05	15-40	AV	AV	Z10	A2D	8. FOLIAGE GENERALLY OCCURRING TO THE OUTER CANOPY DUE TO COMPETITION FROM OTHER TREES. CO-DOMINANT TRUNK AT 2M AGL WITH INCLUDED BARK ALTHOUGH UNLIKLEY TO BE A PROBLEM IN THE SHORT-TERM DURE TO UPRIGHT FORM OF THE TREE.
9	<i>Erythrina crista-galli</i>	Cockspur Coral Tree	M	11	1160 ¹	13.92	1150	3.51	15-40	F	F	A2	A3A	9. [DBH: 650/700/650] VERY OLD SPECIMEN WITH THREE, SPREADING CO-DOMINANT TRUNKS OCCURRING 1200MM AGL WITH GOOD UNIONS.SOME LARGE BRANCHES HAVE ALREADY FAILED. SOME DEAD BRANCHES HELD IN CANOPY.
10	<i>Nerium oleander</i>	Oleander	M	6	N/A	-	N/A	-	15-40	F	AV	A1	A3B	10. A TREE WITH NUMEROUS CANES ARISING FROM ITS BASE INDICATING PREVIOUS HEAVY PRUNING. SOME DEADWOOD PRESENT.
11	<i>Nerium oleander</i>	Oleander	M	7	N/A	-	N/A	-	15-40	F	AV	A1	AEC	11. SIMILAR TO TREE 10. SELF-SOWN PRIVET OCCURRING BETWEEN CANES.
12	<i>Jacaranda mimosifolia</i>	Jacaranda	M	22	1180	14.16	1300	3.69	+40	F	AV	A2	A3D	12. DOMINANT TREET WITHIN THE GARDEN. OLD, WELL-DEVELOPED SPECIMEN. PREVIOUS LOSS OF A LARGE BRANCH WITH NOW THE APPEARANCE OF WATERSHOOTS.
13	<i>Koelreuteria paniculata</i>	Golden Rain Tree	SM	7	190	2.28	240	1.81	15-40	F	AV	A2	A4A	13. TREE WITH PRONOUNCED LEAN TO THE WEST AS THE RESULT OF PHOTOTROPIC GROWTH AS THE RESULT OF OVERSHADOWING BY TREE 12. LIKELY TO HAVE BEEN SELF-SOWN.
14	<i>Melaleuca bracteata</i>	Black Tea-tree	M	14	560	6.72	850	3.09	+40	AV	F	A2	A4B	14. ASSUMED TO BE A CULTURAL PLANTING AS NOT NATURALLY OCCURRING AS A COMPONENT OF PRE-CLEARING VEGETATION. LAT-RGE OLD WOUND AT BASE OF TRUNK NOW STABILISED.
15	<i>Koelreuteria paniculata</i>	Golden Rain Tree	M	7	210 ¹	2.52	320	2.05	15-40	F	AV	A2	A4C	15. [DBH: 130/160] TREE LIKELY TO HAVE BEEN SELF-SOWN BASED ON LOCATION CLOSE TO FENCE AND TYPE OF SPECIES. CO-DOMINANT TRUNK FROM BASE.
16	<i>Cinnamomum camphora</i>	Camphor Laurel	M	12	640	7.68	710	2.87	+40	AV	AV	A1	A4D	16. TREE WITH SLIGHT LEAN TO THE EAST AND AN ASYMMETRIC CANOPY. LOCATED ON SIDE OF EMBANKMENT. ASSUMED TO BE SELF-SOWN. EPICORMIC GROWTH THROUGHOUT CANOPY. PREVIOUS PRUNING OF LOWER BRANCHES.
17	<i>Koelreuteria paniculata</i>	Golden Rain Tree	SM	7	200	2.40	240	1.82	+40	P	AV	A1	A5A	17. LARGE SWEEP IN LOWER TRUNK. ASSUMED TOT BE SELF-SOWN
18	<i>Koelreuteria paniculata</i>	Golden Rain Tree	SM	7	160	2.0 [MIN]	170	1.57	+40	F	AV	A2	A5B	18. [DBH: 100/110/60] CO-DOMINANT TRUNK @ 600MM AGL. ASSUMED TOT BE SELF-SOWN
TREES OCCURRING ON NEIGHBOURING SITES THAT ARE LIKELY TO BE AFFECTED BY THE WORKS														
A	<i>Jacaranda mimosifolia</i>	Jacaranda	M	17	820	9.84	920	3.20	+40	F	AV	A2	A5C	A. LOCATED 1200 OFF FENCELINE TO CENTRE OF TRUNK. THE TREE HAS SUFFERED STORM DAMAGE RESULTING IN THE LOSS OF LARGE LIMBS AS EVIDENCED BY THE PRESENCE OF BRANCH TERAS. SOME PRUNING OF OVERHANGING BRANCHES INTO THE SITE HAS OCCURRED WITH LARGE WATERSHOOTS HAVING FORMED.

1. MULTI-TRUNKED TREES HAVE AN AVERAGE MEASUREMENT CALCULATED IN ACCORDANCE WITH AS 4970. 2. DAB = DIAMETER ABOVE BUTTRESS USED WHEN CALCULATING SRZ.

LEGEND															
AGE CLASS	Y	YOUNG SAPLING/HAS NOT REACHED 1 ST ADULT FORM			SM	SEMI-MATURE DBH < 300mm/APPROACHING FULL HEIGHT			M	MATURE DBH BET. 300 -700/APPROACH. MAX HT & SPREAD			OM	OVER-MATURE/SENESCENT LGE DBH, LGE BRANCH FAILURES/STRUCT FAULTS	
STRUCTURE	P	POOR NUMEROUS STRUCTURAL FAULTS/HIGH RISK OF SEVERE FAILURE			F	FAIR STRUCTURAL FAULTS PRESENT /MODERATE RISK OF SEVERE FAILURE			AV	AVERAGE SOME MINOR FAULTS /MODERATE RISK FOR MAJOR FAILURE			EX	EXCELLENT SOME MINOR FAULTS/LOW-MOD RISK OF MINOR FAILURES	
HEALTH	P	POOR SIG. SIGNS OF LOST VIGOUR EG DIEBACK, REDUCED CANOPY			F	FAIR SIGNS OF REDUCED VIGOUR EG LEAF UNDER STRESS, STUNTING			AV	AVERAGE LOCALISED PATCHES OF LOST VIGOUR/NOT WIDESPREAD			EX	EXCELLENT NO EVIDENCE OF STRESS/SIGNS OF NEW GROWTH/WIDESPREAD	
RETENTION	TREES TO BE RETAINED					TREES TO BE REMOVED					TREE TO BE MONITORED DURING & POST CONSTRUCTION				



APPENDIX C: TREE ASSESSMENT DIAGRAMS

FIGURE C1 – NRZ/SRZ DIAGRAM [BASE DRAWING SOURCE: HUTCH ARCHITECTURE]

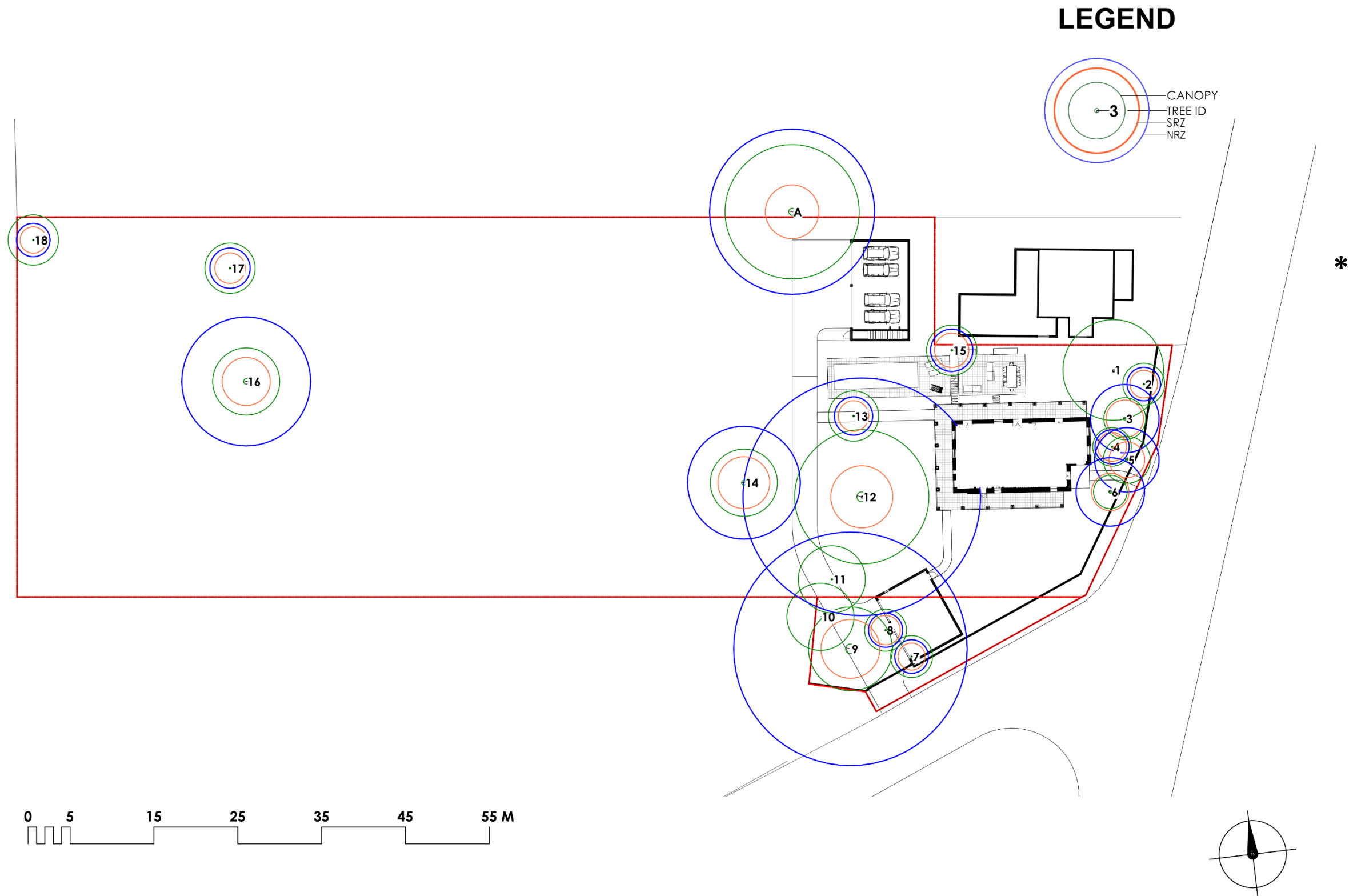
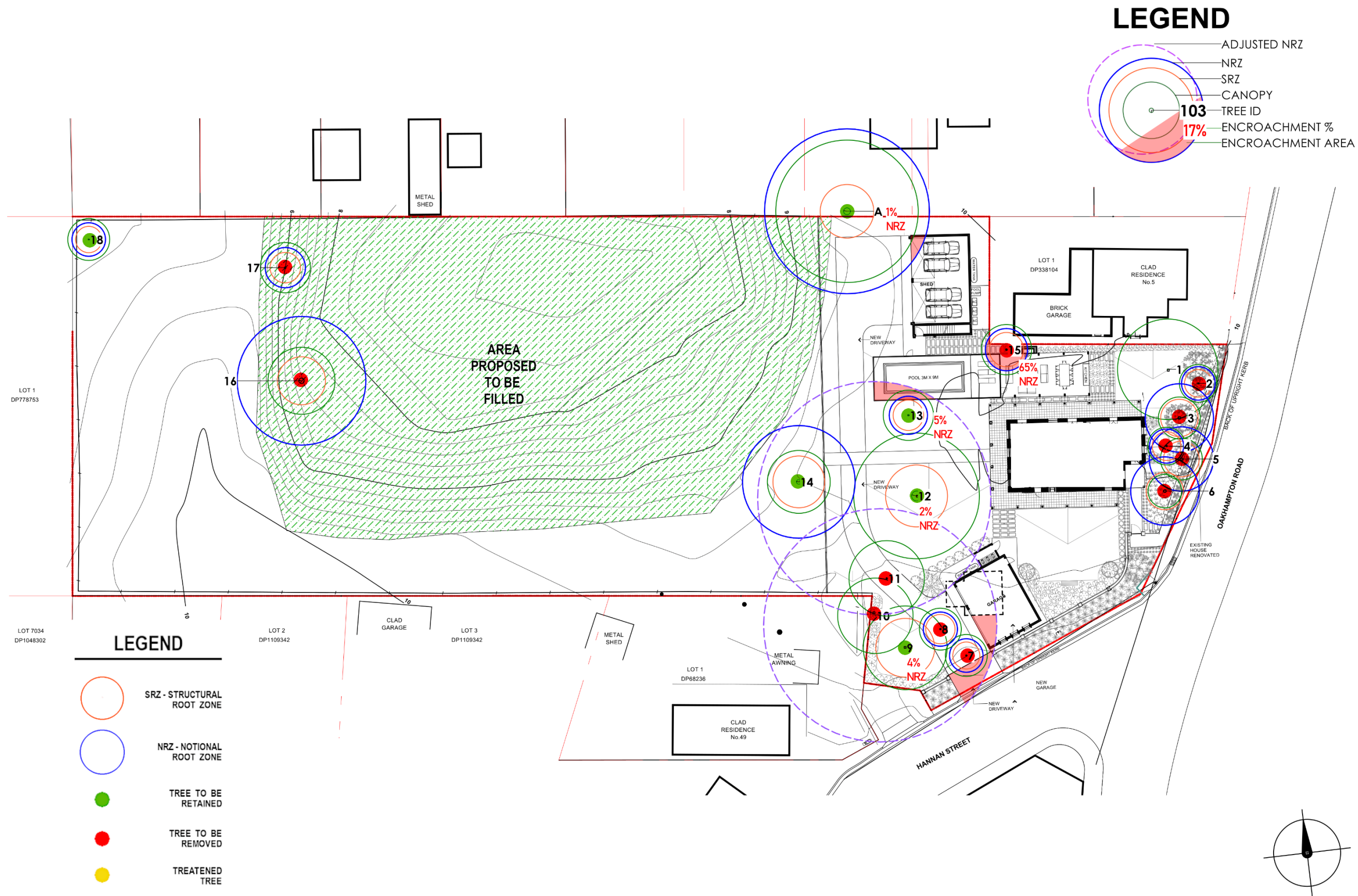




FIGURE C2 – TREE IMPACT ASSESSMENT DIAGRAM [BASE DRAWING SOURCE: HUTCH ARCHITECTURE & OCTOPUS GARDEN DESIGN]





APPENDIX D: PRELIMINARY TREE PROTECTION PLAN (PTPP)

This Preliminary Tree Protection Plan is comprised of the below Tree Protection Specification and the Tree Protection Diagram (TPD) (Figure D3). It will be necessary to develop and amend the PTPP during the detailed design phase so that the specification can properly reflect any changes that occur when finalising the design and taking into consideration the results of more detailed site investigations that may occur post DA.

Tree Protection Specification

The following outlines in detail the responsibilities and work required to be undertaken by the adequately protect the trees to be retained.

D.1 GENERAL INSTRUCTIONS

- A Project Arborist is to be engaged **by the client** for the full period of the contract including the Defects Liability Period.
- The Project Arborist must have qualifications equal to AQF Level 5 Arborist.
- Contact details, including mobile phone number, of the Project Arborist is supplied to the Construction Manager, Site Supervisor and other similar team members.
- Should any damage occur to the trees, both above and below ground components, then contact is to be made with the Project Arborist so that the damage may be inspected and remedial action taken, if required.
- All works proposed to be undertaken within the nominated NRZs of the threatened trees (refer Appendix D1) shall be discussed with the Project Arborist prior to the works commencing to ensure that the appropriate methods and equipment are being employed.
- Give a minimum of 24 hours' notice when requiring the Project Arborist to attend site and advise the client when such requests are made.

D.2 DESIGN/DOCUMENTATION PHASE

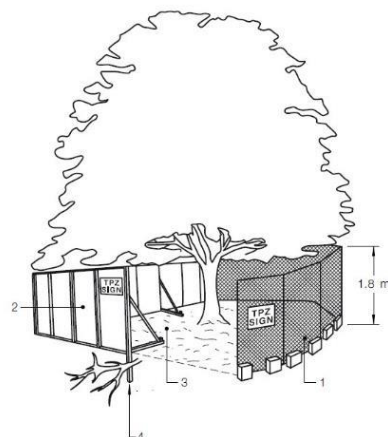
- The Project Arborist shall work with the design team during the detailed design phase providing advice on tree protection matters and final review of documents.
- The Project Arborist should supply a Certificate of Compliance affirming that the proposed works as documented complies with the recommendations of the AIA (Bark, 2025).

D.3 PRE-CONSTRUCTION PHASE

- A pre-construction meeting is to be held on site with the Project Arborist and relevant members of construction team, including the Construction Manager and Site Supervisor (or similar), to discuss all aspects of the TPP including: the erection of tree protection measures and management of the works within the TPZs.
- Erect tree protection measures as described in this TPP and as shown in the Tree Protection Diagram (Appendix C3). Tree Protection Fencing (TPF) shall comply with the requirements of AS 4970-2025 *Protection of trees on development sites*. (Refer Figure D2)
- Signs shall be attached to the TPF (or temporary site fencing, if appropriate) notifying people of the presence of NRZs and shall include the name and contact details of the Project Arborist. (Refer Figure D1 or similar.)



FIGURE D1: EXAMPLE OF TPZ SIGN
SOURCE: www.newsinsigns.com.au



- LEGEND:
- 1 Chain wire mesh panels with shade cloth (if required) attached, held in place with concrete feet.
 - 2 Alternative plywood or wooden paling fence panels. This fencing material also prevents building materials or soil entering the TPZ.
 - 3 Mulch installation across surface of TPZ (at the discretion of the project arborist). No excavation, construction activity, grade changes, surface treatment or storage of materials of any kind is permitted within the TPZ.
 - 4 Bracing is permissible within the TPZ. Installation of supports should avoid damaging roots.

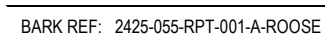
FIGURE D2: TREE PROTECTION FENCING (TPF)
[SOURCE: AS 4970-2025 – NOTE: TPZ = NRZ]

D.4 CONSTRUCTION PHASE

- During induction sessions and toolbox talks with the construction team, and its sub-contractors, if relevant, reference should be made to the restrictions of undertaking work within the NRZs.
- Any excavation works to be carried out within the NRZs shall be supervised by the Project Arborist. This is particularly important when undertaking work within the nominated Monitored Dig Zone as root mapping will be required prior to any excavation works. (Refer Appendix C3).
- Any required branch removal shall only be undertaken with the written approval of the Project Arborist and undertaken in accordance with the requirements of AS 4373-2007 *Pruning of amenity trees*.
- Any exposed roots are to be temporarily protected, such as overlaying form ply sheeting and dampened hessian.
- Any root pruning, if required, shall be inspected and instructions given by the Project Arborist. The work shall then be supervised by the Project Arborist. Only clean, sharp implements are to be used.
- All care should be taken to keep woody roots intact. Any roots encountered being less than 50mm diameter may be neatly severed using clean, sharp tools ensuring not to leave ragged cuts.
- Any root pruning should be undertaken to meet the requirements of AS 4373-2007 *Pruning of amenity trees* with the work being undertaken by at least an AQF3 Arborist in accordance with *Guide to Managing Risks of Tree Trimming and Removal Work* (Safe Work Australia 2016).
- Roots once cut shall be kept moist using hessian-like material until covered over. Severed roots shall be treated with a suitable root growth hormone with the active ingredients Indole-3-Butyric Acid (IBA) and 1-Naphylacetic Acid (NAA) to assist with regeneration of the root system.

D.5 POST-CONSTRUCTION PHASE

- Remove tree protection measures at the completion of the works.
- Arrange for the Project Arborist to undertake a final inspection and provide a certificate confirming that the TPP has been complied with documenting any inconsistencies or departures. This report shall be made available to the consent authority upon request.
- The Project Arborist shall undertake an inspection of the trees two weeks prior to the end of the Defects Liability Period and report on their condition and provide a report detailing the results of the inspection.





APPENDIX E: TREE AZ

The following table provides supplementary information to assist in interpreting the previous tables with respect to Tree AZ classifications.

TREE AZ CATEGORIES	
CATEGORY Z: UNIMPORTANT TREES NOT WORTHY OF BEING A MATERIAL CONSTRAINT	
Local policy exemptions: Trees that are unsuitable for legal protection for local policy reasons including size, proximity and species.	
Z1	Young or insignificant small trees, i.e. below the local size threshold for legal protection.
Z2	Too close to a building i.e. exempt from legal protection because of proximity.
Z3	Species that cannot be protected for other reasons, i.e. scheduled noxious weeds, out of character in a setting of acknowledged importance, etc
High risk of death or failure: Trees that are likely to be removed within 10 years because of acute health issues or severe structural failure	
Z4	Dead, dying, diseased or declining
Z5	Severe damage and/or structural defects where a high risk of failure cannot be satisfactorily reduced by reasonable remediation care, i.e. cavities, decay, included bark, wounds, excessive imbalance, overgrown and vulnerable to adverse weather conditions.
Z6	Instability, i.e. poor anchorage and/or increased exposure.
Excessive nuisance: Trees that are likely to be removed within 10 years because of unacceptable impact on people	
Z7	Excessive, severe and intolerable inconvenience to the extent that a locally recognised court or tribunal would be likely to authorise removal, i.e. dominance, debris and/or interference.
Z8	Excessive, severe and intolerable damage to property to the extent that a locally recognised court or tribunal would be likely to authorise removal, i.e. severe structural damage to surfacing and buildings.
Good management: Trees that are likely to be removed within 10 years through responsible management of the tree population	
Z9	Severe damage and/or structural defects where high risk of failure can be temporarily reduced by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, overgrown and vulnerable to adverse weather conditions.
Z10	Poor condition or location with a low potential for recovery or improvement, i.e. dominated by adjacent trees or buildings and/or poor architectural framework.
Z11	Removal would benefit better adjacent trees, i.e. relieve physical interference and/or suppression.
Z12	Unacceptably expensive to retain, i.e. severe defects requiring excessive levels of maintenance.
<p>NOTE: Z trees with a high risk of death/failure (Z4, Z5 & Z6) or causing severe inconvenience (Z7 & Z8) at the time of assessment and need an urgent risk assessment can be designated as ZZ. ZZ trees are likely to be unsuitable for retention and at the bottom of the categorisation hierarchy. In contrast, although Z trees are not worthy of influencing new designs, urgent removal is not essential and they could be retained in the short term, if appropriate.</p>	
CATEGORY A: IMPORTANT TREES SUITABLE FOR RETENTION FOR MORE THAN 10 YEARS AND WORTHY OF BEING A MATERIAL CONSTRAINT	
A1	No significant defects and could be retained with minimal remedial care.
A2	Minor defects that could be addressed remedial care and/or work to adjacent trees.
A3	Special significance for historical, cultural, commemorative or rarity reasons that would warrant extraordinary efforts to retain for more than 10 years.
A4	Trees that may be worthy of legal protection from ecological reasons (Advisory requiring specialist assessment)
<p>NOTE: Category A1 trees that are already large and exceptional, or have potential to become so with minimal maintenance, can be designated as AA at the discretion of the assessor. Although all A trees are sufficiently important to be material constraints, AA trees are at the top of the categorisation hierarchy and should be given the most weight in any selection process.</p>	
<p>CAUTION: Tree AZ assessments must be carried out by a competent person qualified and experienced in arboriculture. The preceding category descriptions are designed to be a brief field reference and are not to be self explanatory. They must be read in conjunction with the most current explanations published at www.treeaz.com</p>	
Tree AZ was designed by Barrell Tree Consultancy (www.barrelltreecare.co.uk) and is reproduced with their permission.	

REV	DESCRIPTION	DATE
A	DRAFT REPORT FOR CLIENT REVIEW	2025-07-16

