Attachment A16

Arborist Report





34 CALOOLA CRESCENT, BEVERLY HILLS 2209

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ARBORICULTURAL IMPACT ASSESSMENT REPORT

At

118 – 130 Epsom Road & 905 South Dowling Street, Zetland

Prepared for

Meriton Group

9th June 2022

Prepared by: Ross Jackson

Graduate Certificate in Arboriculture (AQF L 8) Dip. Horticulture (Arboriculture – AQF L 5) Certificate III in Horticulture (Arboriculture) Certificate in Horticulture (Landscape)

Member of the Arboriculture Australia (MAA) Member of the Australian Institute of Horticulture Consulting Arborist Nos.1695

E: jacksonsnatureworks@bigpond.com

DISCLAIMER

The Client acknowledges that this Report, and any opinions, advice or recommendations expressed or given in it, are the information supplied by the Client and on the data inspections, measurements and analysis carried out or obtained by Jacksons Nature Works (JNW) and referred to in the Report. The Client should rely on The Report, and on its contents, only to that extent.

Care has been taken to obtain all information from reliable sources. All data has been verified as far as possible. However, Ross Jackson – Consulting Arborist 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 examined and reflects the health and structure of the trees at the time of inspection. The documented, observations, results, recommendations, and conclusions given may vary after the site visit due to environmental conditions.
- The inspection was limited to visual examination from the base of the subject tree without dissection, 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; &
- Unauthorised use of this report in any form is prohibited and remains the intellectual property of Jacksons Nature Works until all costs are settled.

Ross Jackson

Consulting Arborist

Table of Contents

1. Background and Methodology	4
2. Observations	5
3. Discussions	5
4. Recommendations	6

Annexure A: Observations	8
Annexure B: Tree location plan	16
Annexure C: Tree impact plan	
Annexure D: Typical trunk protection	

1. BACKGROUND and METHODOLOGY

- 1.1 The purpose of this Tree Report is to inform and accompany the development application works at 118 – 130 Epsom Road & 905 South Dowling Street, Zetland – The Site.
- 1.2 The report was prepared for Meriton Group to respond to Council's requirements to consider the development impacts on trees located on and around the Site.
- 1.3 This report outlines the health and condition of the subject trees, the remaining life expectancy of the trees, identifies any visible defects or other problems, describes which trees require pruning, removal, retention or represent a potential hazard and comments on the impact on these trees in relation to the works proposed. The report also provides recommended tree protection measures (Tree Management Plan) to ensure the long-term preservation of the trees to be retained where appropriate.
- 1.4 The Site is a commercial site with gardens at Zetland.
- 1.5 The trees were identified by ground level Visual Tree Assessment (VTA)¹ only in the data collection, taken on 14.4.2022. No aerial (climbing) was undertaken.
- 1.6 All site photographs were taken by the author at the site. All photographs were taken using a digital camera (Canon 7D) with no image enhancement either within the camera or on computer.
- 1.7 The subject trees were located on plans supplied. The trees have been plotted and can be found on Annexure B Tree Location Plan.
- 1.8 The trees were identified and their genus species and common name used. The trees were identified by the use of data collected and compared to G Burnie, S Forrester et al (1997) **Botanica** Random House, Milsons Point, NSW, Australia.
- 1.9 DBH. The Trunk Diameter at Breast Height (1.4 metres above ground level) in centimetres was measured over bark using a metal tape which automatically converts to diameter and assumes a circular trunk cross section.
- 1.10 DRB. The trunk Diameter above Root Buttress in centimetres was measured over bark using a metal tape which automatically converts to diameter and assumes a circular trunk cross section.
- 1.11 Height. Estimated overall height in metres.
- 1.12 Spread. Measured with a metal tape measure and shown in metres.
- 1.13 Useful Life Expectancy (ULE)².A systematic pre-development tree assessment procedure developed by Jeremy Barrell, Hampshire, England. It gives a length of time that the Arborist feels a

² Barrell, Jeremy (1996, 2001) **Pre-development Tree Assessment** Proceedings of the International Conference on Trees and Building Sites (Chicago) International Society of Arboriculture, Illinois, USA

¹ Mattheck, Dr. Clause & Breloer, Helge (1994) – Sixth Edition (2001) **The Body Language of Trees** – **A Handbook for Failure Analysis** The Stationery Office, London, England

particular tree can be retained with an acceptable level of risk based on the information available at the time of the inspection. SULE ratings are Long (retainable for 40 years or more with an acceptable level of risk), Medium, (retainable for 16 - 39 years), Short (retainable for 5 - 15 years) and Removal (tree requiring immediate removal due to imminent hazard or absolute unsuitability).

- 1.14 The Tree Protection Zone (TPZ) and Structural Root Zone (SRZ) have been calculated in terms of AS 4970 2009 Protection of trees on development site Section 3.
- 1.15 Retention value & landscape significance as described by ICAC STARS © have been used for the trees in this report.

1.16 To prepare this report we have reviewed the following documents:

- Detail survey by Real Serve dated 15.5.2020.
- Architectural plans by Mako Architecture dated 7.6.22.
- Landscape plans by Urbis dated XXXXXX.
- Drainage plans by.....?
- Sydney Development Control Plan 2012 Section 3.5.3 Tree Management (DCP); &
- Australian Standard AS 4970 2009 Protection of trees on development sites.

2. OBSERVATIONS as seen on the days of inspection (4.4.2022)

2.1 Our tree observations can be found in Annexure A.

3. DISCUSSIONS

3.1 We have been commissioned by Meriton Group, to examine the health and condition of the trees on and around this development site.

It is proposed to demolish the existing and the construction of new apartment buildings on Site (development works).

3.2 We have examined the trees on site and can suggest the following considerations for the development works:

1. The following are street trees along Council's footpath in Epsom Road and Link Road:

a. *Corymbia maculata* tree numbers: 1A, 1, 2, 2A, 4, 5, 6A, 17A, 18A, 18, 19, 20, 21, 22, 23, 24, 25.

b. *Lophostemon confertus* tree numbers: 6, 7, 8, 9, 9A, 9B, 9C, 10, 11.

All these trees have a high retention value and significance.

The following trees were missed in the survey or may have been recently planted by Council: Tree 1A, 2A, 6A, 9A, 9B, 9C, 17A & 18A.

Retention and protection of these trees is proposed in the Tree Management Plan (TMP).

2. The following trees are scattered around the site: Tree 15, 29 *Corymbia maculata*, tree 16A *Murraya paniculata*, trees 37 – 80 *Ulnus jorullensis* and tree 81 *Angophora costata*,

It is acknowledged the following trees have high retention value: Trees 15 & 29, then trees 37 - 80 have medium retention value and tree 16A & 81 have low retention value.

It is proposed to replant canopy trees on site to compensate for the removal of the 47 trees to ensure the on-going benefit of trees at this location – refer Annexure C.

Note these trees for removal in the TMP.

3. The following trees are classified as Exempt species in Council's DCP and can be removed: Tree 16, 36 *Celtis australis*, tree 26, 28, 36B, 80A & 80B *Gleditsia triacanthos*, tree 36A, 82 - 95 *Grevillea sp.*

Note these trees for removal in the TMP.

3.3 The landscape plans show.....

3.4 The drainage plan show.....

4. RECOMMENDATION

The following recommendations are advised:

- a) Retain the following council street trees: Trees 1A, 1, 2, 2A, 3, 4, 5, 6, 6A, 7, 8, 9, 9A, 9B, 9C, 10, 11, 17A, 17, 18A, 18, 19, 20, 21, 22, 23, 24 & 25.
- b) Remove the following tree on site: Trees 15, 16A, 29, 37 80 & 81.
- c) Remove the following Exempt trees on site: Trees 16, 26, 28, 36, 36A, 36B, 80A, 80B & 82 95.
- d) Tree removal work shall be carried out by an experienced tree surgeon in accordance with *Safe Work Australia Guide for Managing Risks of Tree Trimming and Removal (2016).*
- e) Install the following Tree Protection Measures around the retained street tree: Trees 1A, 1, 2, 2A, 3, 4, 5, 6, 6A, 7, 8, 9, 9A, 9B, 9C, 10, 11, 17A, 17, 18A, 18, 19, 20, 21, 22, 23, 24 & 25, tree protection measures shall be a temporary fence of chain wire panels 1.8 metres in height (or equivalent), supported by steel stakes or concrete blocks as required and fastened together and supported to prevent sideways movement. Existing boundary fences or walls are to be retained shall constitute part of the tree protection fence where appropriate. A sign is to be erected on the tree protection fences of the trees to be retained that the trees are covered by Council's tree preservation orders and that "No Access" is permitted into the tree protection zone;
- f) Trunk protection shall consist of a padding material such as hessian or thick carpet underlay wrapped around the trunk. Timber planks (50mm x 100mm or similar) shall be placed over the padding and around the trunk of the tree at 150mm centres. The planks shall be secured with 8-gauge wire or hoop steel at 300mm spacing. Trunk protection shall extend a minimum height of 2 metres

on 1A, 1, 2, 2A, 3, 4, 5, 6, 6A, 7, 8, 9, 9A, 9B, 9C, 10, 11, 17A, 17, 18A, 18, 19, 20, 21, 22, 23, 24 & 25 – refer Annexure D.

- g) That a Tree Management Plan be prepared as part of the Construction Certificate by a consulting arborist who holds the Diploma in Horticulture (Arboriculture), Level 5 or above under the Australian Qualification Framework.
- h) An AQF Level 5 Project Arborist shall be engaged to supervise the building works and certify compliance with all Tree Protection Measures.
- i) The tree location plan can be found on Annexure B; &
- j) The tree impact plan can be found on Annexure C.

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Ross Jackson M.A.A. & M.A.I.H.Co-written byConsulting Arborist 1695Luke JacksonGraduate Certificate in Arboriculture AQF Level 8 (Honours)Arborist AQF Level 5Diploma Horticulture (Arboriculture) – AQF Level 5Certificate III in HorticultureCertificate in Horticulture (Landscape – Honours)Evel 5

Annexure A: Observations as seen on the day of inspection of trees

Tree No	Botanical Name	Age Class	Height (m)	Spread (m)	D.B.H. (cm)	D.R.B. (cm)	TPZ (radius m)	SRZ (radius m)	Condition comments as seen on site	ULE	Landscape significance	Retention value
1A	Corymbia maculata	М	6	2	15	20	2.0	1.7	G vitality, slight lean, trunk injury @ 1m, ST	1	High	High
1	Corymbia maculata	М	9	6	40	45	4.8	2.4	G vitality, basal injury, ST	1	High	High
2	Corymbia maculata	М	9	4	25	30	3.0	2.0	G vitality, small canopy, ST	1	High	High
2A	Corymbia maculata	М	7	3	20	25	2.4	1.8	G vitality, slight lean, ST	1	High	High
3	Corymbia maculata	М	9	8	35	40	4.2	2.3	G vitality, ST	1	High	High
4	Corymbia maculata	М	10	8	40	45	4.8	2.4	G vitality, ST	1	High	High
5	Corymbia maculata	М	9	8	40	45	4.8	2.4	G vitality, ST	1	High	High
86	Lophostemon confertus	М	8	8	65	70	7.8	2.8	G vitality, ST	1	High	High
6A	Corymbia maculata	М	8	3	25	30	3.0	2.0	F vitality, upright small canopy, ST	2	High	High
7	Lophostemon confertus	М	6	6	40	45	4.8	2.4	F vitality, 10% DW, ST	1	High	High
8	Lophostemon confertus	М	8	8	45	50	5.4	2.5	G vitality, ST	1	High	High
9	Lophostemon confertus	М	7	5	30	35	3.6	2.1	G vitality, ST, oblong canopy along street	2	High	High
9A	Lophostemon confertus	SM	3	1	10	10	2.0	1.5	G vitality, ST	2	High	High
9B	Lophostemon confertus	SM	3	1	10	10	2.0	1.5	G vitality, ST	2	High	High
9C	Lophostemon confertus	SM	3	1	10	10	2.0	1.5	G vitality, ST	2	High	High

10	Lophostemon confertus	М	7	7	30	35	3.6	2.1	G vitality, ST	1	High	High
11	Lophostemon confertus	М	6	6	40	45	4.8	2.4	G vitality, ST	1	High	High
12	Removed	-	-	-	-	-	-	-	-	-	-	-
13	Removed	-	-	-	-	-	-	-	-	-	-	-
14	Removed	-	-	-	-	-	-	-	-	-	-	-
15	Corymbia maculata	М	10	8	55	65	6.6	2.8	G vitality	1	High	High
16	Celtis australis	М	8	8	35	40	4.2	2.3	Exempt species	4	Low	Remove
16A	Murraya paniculata	М	5	5	3 x 15	25	3.1	1.8	G vitality, surface roots against building	2	Low	Low
17A	Corymbia maculata	М	5	1	10	10	2.0	1.5	G vitality, pole-like, ST	2	Medium	Low
17	Corymbia maculata	М	8	7	30	35	3.6	2.1	G vitality, ST	1	High	High
18A	Corymbia maculata	М	7	4	20	25	2.4	1.8	G vitality, ST	1	High	High
18	Corymbia maculata	М	9	8	35	40	4.2	2.3	G vitality, ST	1	High	High
19	Corymbia maculata	М	8	4	25	30	3.0	2.0	F vitality, ST, thin canopy density	2	Medium	Medium
20	Corymbia maculata	М	9	8	35	40	4.2	2.3	G vitality, ST	1	High	High
21	Corymbia maculata	М	9	7	30	35	3.6	2.1	G vitality, ST	1	High	High
22	Corymbia maculata	М	9	6	30	35	3.6	2.1	G vitality, ST	1	High	High
23	Corymbia maculata	М	9	9	30	35	3.6	2.1	G vitality, ST	1	High	High
24	Corymbia maculata	М	9	8	35	40	4.2	2.3	G vitality, ST	1	High	High
25	Corymbia maculata	М	9	8	35	40	4.2	2.3	G vitality, ST	1	High	High
26	Gleditsia triacanthos	М	8	7	40	45	4.8	2.4	Exempt species	4	Low	Remove
27	Removed	-	-	-	-	-	-	-	-	-	-	-

28	Gleditsia triacanthos	М	5	3	45	50	5.4	2.5	Exempt species	4	Low	Remove
29	Corymbia maculata	М	8	8	35	40	4.2	2.3	G vitality	1	High	High
30	Corymbia maculata	М	8	8	35	40	4.2	2.3	G vitality	1	High	High
31	Corymbia maculata	М	8	8	35	40	4.2	2.3	G vitality	1	High	High
32	Removed	-	-	-	-	-	-	-	-	-	-	-
33	Removed	-	-	-	-	-	-	-	-	-	-	-
34	Removed	-	-	-	-	-	-	-	-	-	-	-
35	Removed	-	-	-	-	-	-	-	-	-	-	-
36	Celtis australis	М	7	7	2 x 20	40	3.4	2.3	Exempt species	4	Low	Remove
36A	Grevillea sp.	М	4	4	15	20	2.0	1.7	Exempt species	4	Low	Remove
36B	Gleditsia triacanthos	М	6	5	3 x 15	35	3.1	2.1	Exempt species	4	Low	Remove
37- 80	Ulnus jorullensis	М	5	2	20	25	2.4	1.8	G vitality, growing in a hedge	2	Medium	Medium
80A	Gleditsia triacanthos	М	5	5	20	25	2.4	1.8	Exempt species	4	Low	Remove
80B	Gleditsia triacanthos	М	4	4	20	25	2.4	1.8	Exempt species	4	Low	Remove
81	Angophora costata	М	8	6	30	35	3.6	2.1	P vitality, lower basal injury/ longicorn, pruned away from building	4c	Low	Low (Remove)
82- 95	Grevillea sp. (Moonlight)	М	4	3	15	20	2.0	1.7	Exempt species	4	Low	Low (Remove)

Terms used in Tree Survey & Report:

Age Class

(Y) – Young refers to a well-established but juvenile tree. Less than 1/3 life expectancy

(SM) – Semi-mature refers to a tree at growth stages between immaturity and full size. A tree has reached First Adult Form i.e. displays adult characteristics. 1/3 to 2/3 life expectancy

(M)- Mature refers to a full size tree with some capacity for future growth. Older than 2/3 life expectancy

(**OM**) – **Over-mature** refers to a tree approaching decline or already declining. Older than 2/3 life expectancy and showing signs of irreversible decline.

Health refers to a tree's vigour, growth rate, disease and/or insects.

Vitality summarises observations about the health and structure of the tree on a scale of: (G) Good, (F) Fair, (P) Poor & (D) Dead.

Good: Tree is generally healthy and free from obvious signs of structural weaknesses or significant effects of pests and diseases or infection;

Fair: Tree is generally vigorous although has some indication of being adversely affected by the early effects of disease or infection or environmental or mechanical damage. Appropriate tree maintenance can usually improve overall health and halt decline;

Poor: Tree in decline and is not likely to improve with reasonable maintenance practices or has a structural fault such as bark inclusion;

Dead: Tree no longer capable of sustained growth.

Deadwood (**DW**) – deadwood found in canopy as a percentage.

Over Head Power Lines (OHPL) – upper canopy pruned to accommodate power lines at a given height.

Height expressed in metres refers to estimated overall height of tree.

Next Door tree (ND) – tree located in the neighbour's property.

Street Tree (ST) – tree located in Councils footpath reserve.

Spread expressed in metres refers to estimated spread of crown at the drip line.

(**DBH**) **Diameter at Breast Height** expressed in millimetres refers to the trunk diameter at 1.4 metres above ground level. Where there are multiple trunks the combined diameter has been calculated in terms of Appendix A - AS 4970 - 2009, shown in brackets.

(DRB) Diameter above Root Buttress expressed in millimetres refers to the trunk diameter above root buttress.

(TPZ) Tree Protection Zone & Structural Root Zone (SRZ) as defined by AS 4970 – 2009 Section 3

(ULE) The various ULE categories indicate the useful life anticipated for an individual tree or trees assessed as a group. Factors such as the location, age, condition and vitality of the tree are significant to the determination of this rating. Other influences such as the tree's effect on better specimens and the economics of managing the tree successfully in its location are also relevant to ULE (Barrell 1993, 1995, 2001).

ULE RATING (UPDATED 1/4/01) BARRELL

1.Long ULE:	2.Medium ULE:	3.Short ULE:	4.Remove:	5.Small, young or regularly pruned:
Trees that appear to be retainable at the time of assessment for more than 40 years with an acceptable level of risk.	Trees that appear to be retainable at the time of assessment for more than 15-40 years with an acceptable level of risk.	Trees that appear to be retainable at the time of assessment for more than 5-15 years with an acceptable level of risk.	Trees that should be removed within the next 5 years.	Trees that can be reliably moved or replaced.
(A) Structurally sound trees located in positions that can accommodate future growth	(A) Trees that may only live between 15 and 40 more years.	(A) Trees that may only live between 5 and 15 more years.	(A) Dead, dying, suppressed or declining trees because of disease or inhospitable conditions.	(A) Small trees less than5 Metres in height.
(B) Trees that could be made suitable for retention in the long term by remedial tree care.	(B) Trees that could live for more than 40 years but may be removed for safety or nuisance reasons.	(B) Trees that could live for more than 15 years but may be removed for safety or nuisance reasons.	(B) Dangerous trees because of instability or recent loss of adjacent trees.	(B) Young trees less than 15 years old but over 5 metres in height.
(C) Trees of special significance for historical, commemorative or rarity reasons that would warrant extraordinary efforts to secure their long term retention.	(C) Trees that could live for more than 40 years but may be removed to prevent interference with more suitable individuals or to provide space for new planting.	(C) Trees that could live for more than 15 years but may be removed to prevent interference with more suitable individuals or to provide space for new planting.	(C) Dangerous trees because of structural defects including cavities, decay, included bark, wounds or poor form.	(C) Formal hedges and trees intended for regular pruning to artificially control growth.
	(D) Trees that could be made suitable for retention in the medium term by remedial tree care.	(D) Trees that require substantial remedial tree care and are only suitable for retention in the short term.	(D) Damaged trees that are clearly not safe to retain.	
			(E) Trees that could live for more than 5 years but may be removed to prevent interference with more suitable individuals or to provide space for new planting.	
			(F) Trees that are damaging or may cause damage to existing structures within 5 years.	
			(G) Trees that will become dangerous after removal of other trees for the reasons given in (A) to (F).	
			(H) Trees in categories (A) to (G) that have a high wildlife habitat value and, with appropriate treatment, could be retained subject to regular review.	

IACA Significance of a Tree, Assessment Rating System (STARS)© (IACA 2010)©

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. An example of its use in an Arboricultural report is shown as Appendix A.

Tree Significance - Assessment Criteria

1. 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 Councils 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.

2. Medium Significance in landscape

- The tree is in fair-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*.

3. Low Significance in landscape

- The tree is in fair-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/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.

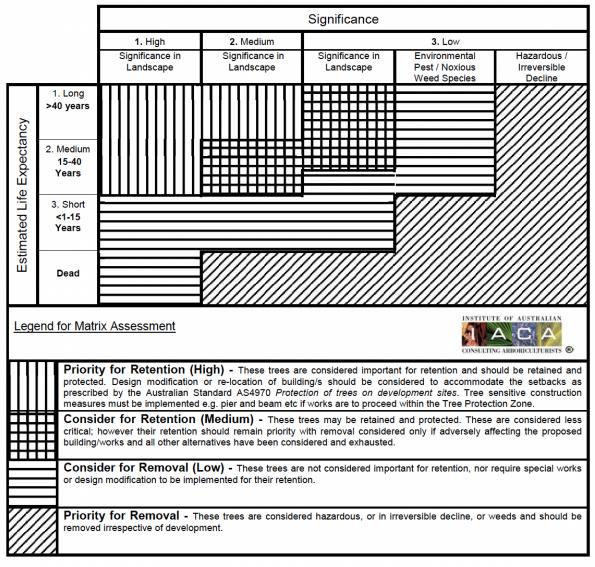
The tree is to have a minimum of three (3) criteria in a category to be classified in that group.

Note: The assessment criteria are for individual trees only, however, can be applied to a monocultural stand in its entirety e.g. hedge.

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



Table 1.0 Tree Retention Value - Priority Matrix.



USE OF THIS DOCUMENT AND REFERENCING

The IACA Significance of a Tree, Assessment Rating System (STARS) is free to use, but only in its entirety and must be cited as follows:

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

REFERENCES

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

Draper BD and Richards PA 2009, Dictionary for Managing Trees in Urban Environments, Institute of Australian Consulting Arboriculturists (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

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

Appendix A

The following example shows the IACA **Significance** of a **Tree**, **Assessment Rating System** (STARS) used in an Arboricultural report.

Tree Significance

Determined by using the Tree Significance - Assessment Criteria of the *IACA* Significance of a Tree, Assessment Rating System (STARS)© (IACA, 2010), Appendix B.

Trees 14, 16, 17/3, 19 and 20/4 are of high significance with the remaining majority of medium significance and a few of low significance. Tree 14 is significant as a prominent specimen and a food source for indigenous avian fauna. Tree 16 as a non-locally indigenous planting is of good from and prominent *in situ*; Tree 17/3 as a stand of 6 street trees along the Davey Street frontage screening views to and from the site and contiguous with trees in Victoria Park extending the aesthetic influence of the urban canopy to the site. Similarly for Trees 20/4 as street trees in Long Road and Tree 19 as an extant exotic planting as a senescent component of the original landscaping. The trees of low significance are recent plantings as fruit trees – Avocados, and 1 Cootamundra Wattle as a non-locally indigenous tree in irreversible decline and potentially structurally unsound.

Significance Scale

1 – High	Significance Scale	1	2	3
2 – Medium 3 – Low	Tree No. / Stand No.	14, 16, 17/3, 19, 20/4	1/1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12/2, 15, 18, 21/5	3, 13, 22

Tree Retention Value

Determined by using the Retention Value - Priority Matrix of the IACA Significance of a Tree, Assessment Rating System (STARS)© (IACA, 2010), Appendix B.

Retention Value

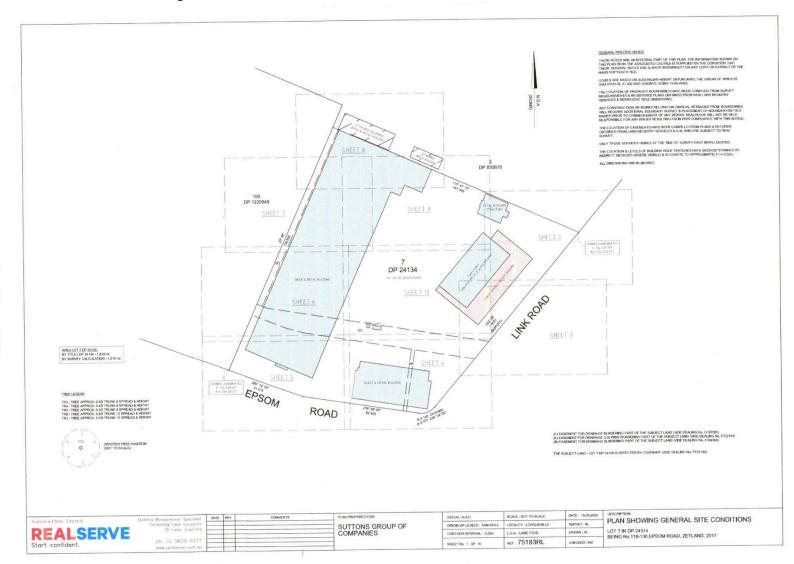
High – Priority for Retention Medium – Consider for Retention Low – Consider for Removal Remove - Priority for Removal

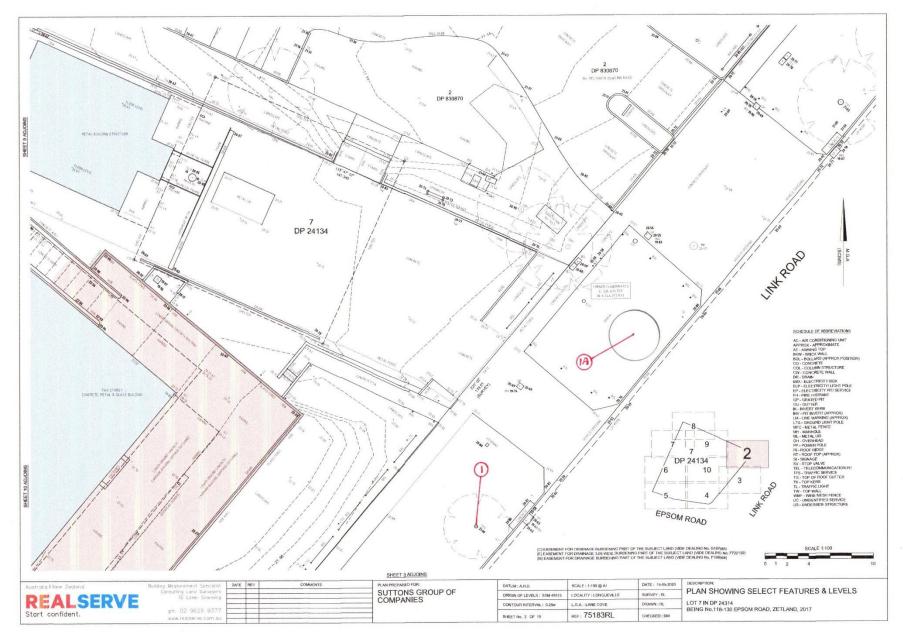
Retention Value	High Priority for Retention	Medium Consider for Retention	Low Consider for Removal	Remove Priority for Removal
Tree No. / Stand No.	1/1, 5, 17/3*, 19	2, 4, 6, 7, 8, 9, 10, 11, 14, 15, 16, 18, 20/4*, 21/5	3, 12/2, 13,	22

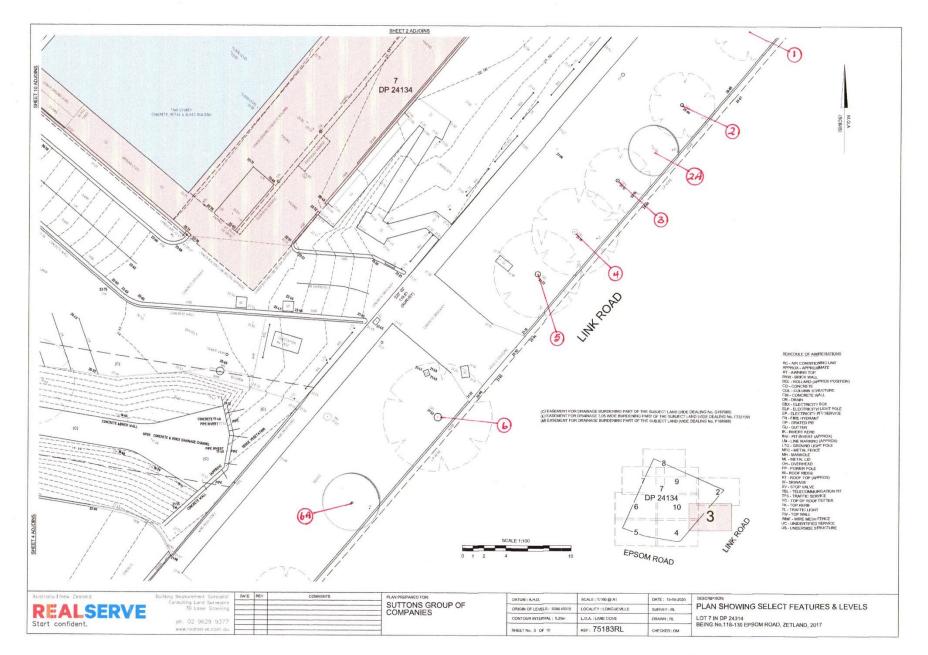
* Trees located within the neighbouring property and should be retained and protected.

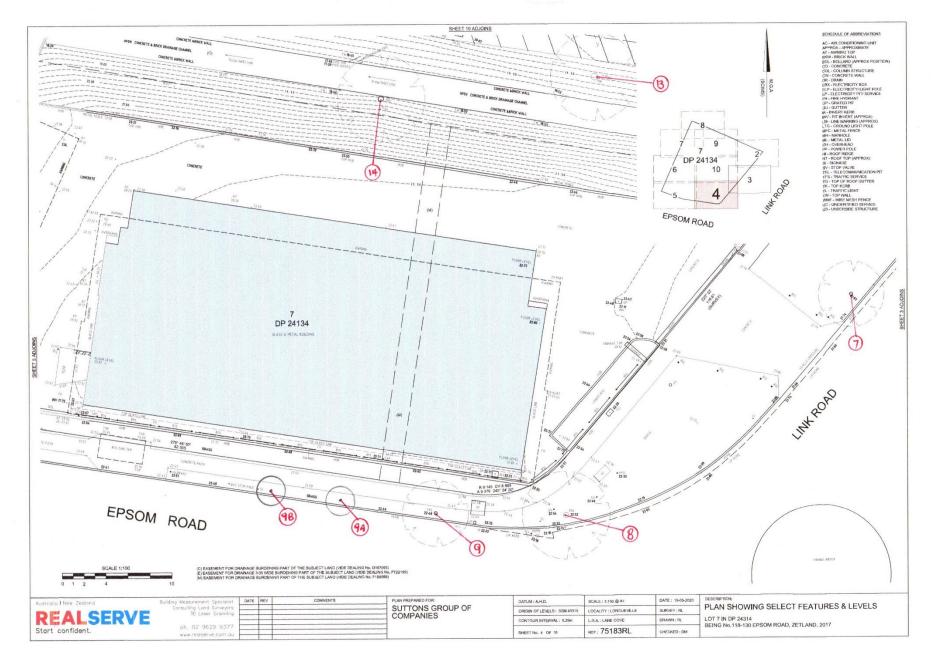
IACA 2010, IACA Significance of a Tree, Assessment Rating System (STARS), Institute of Australian Consulting Arboriculturists, www.iaca.org.au

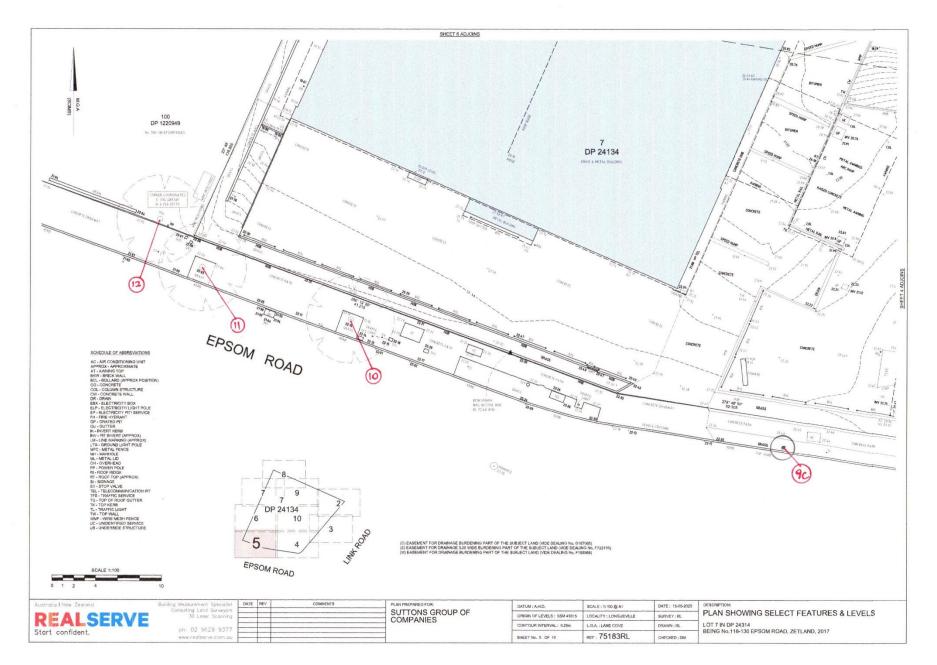
Annexure B: Tree location plans

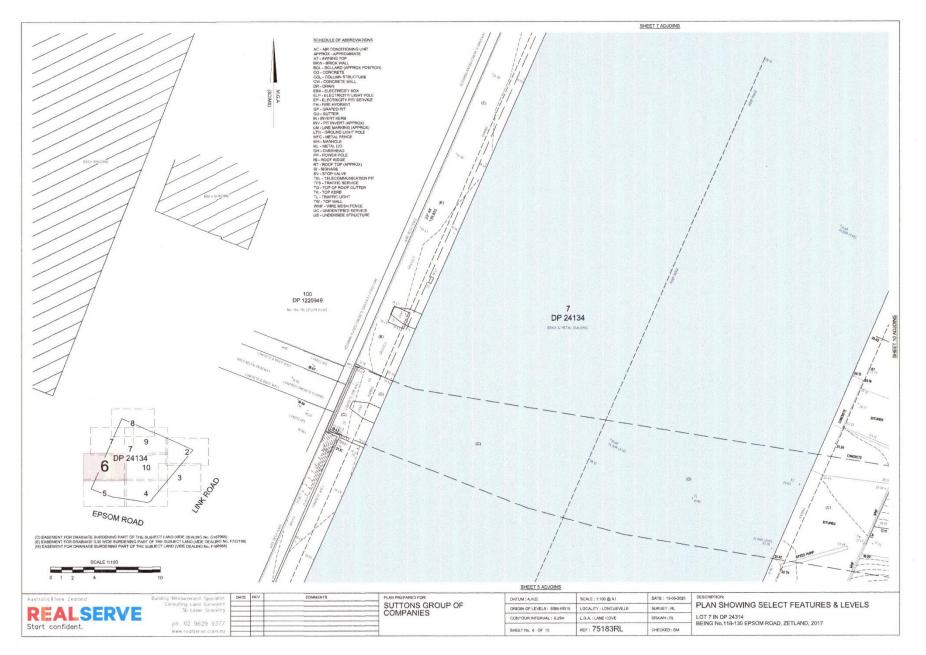


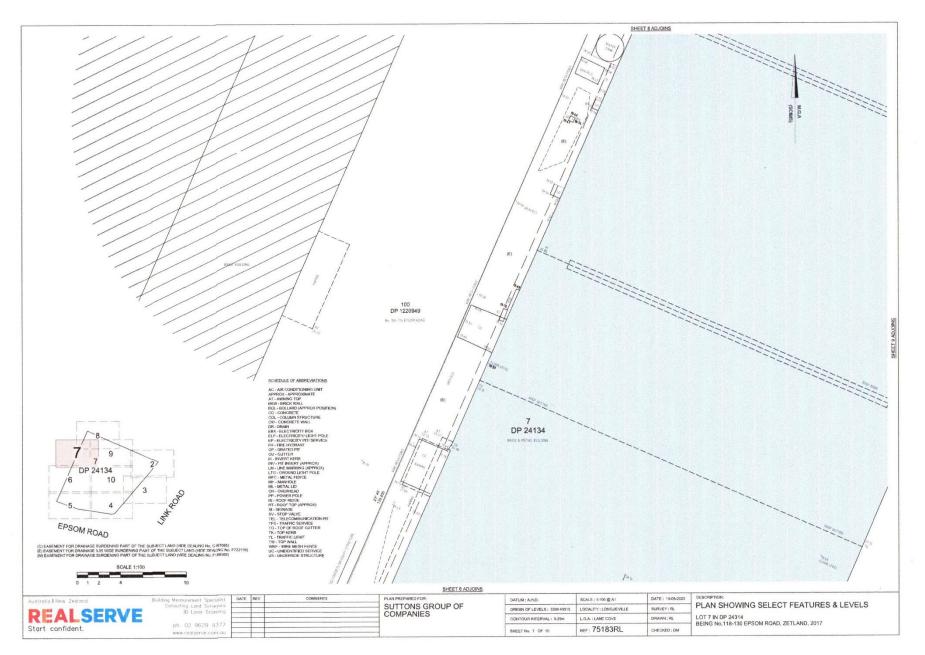


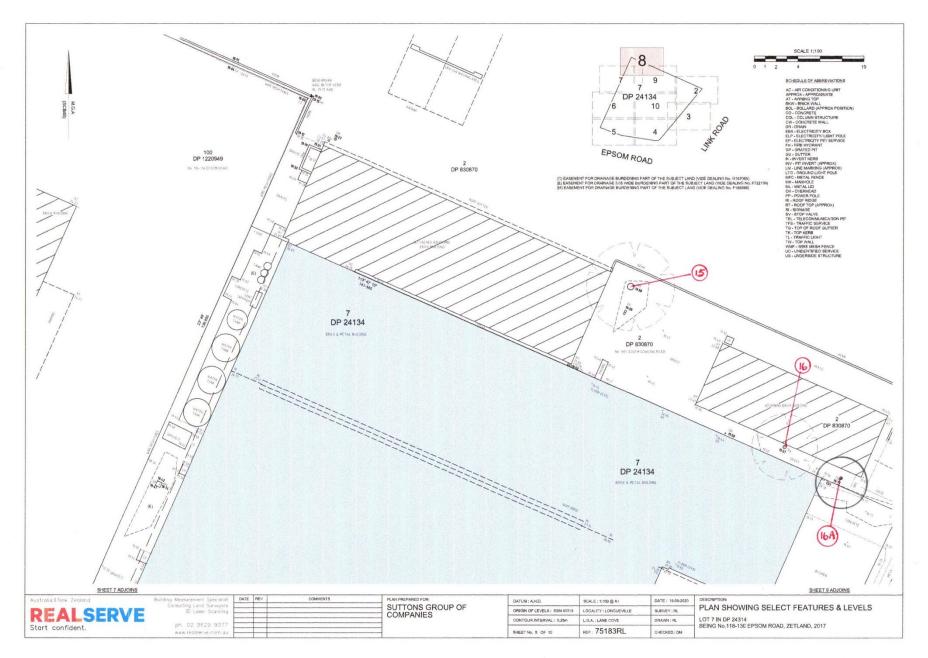


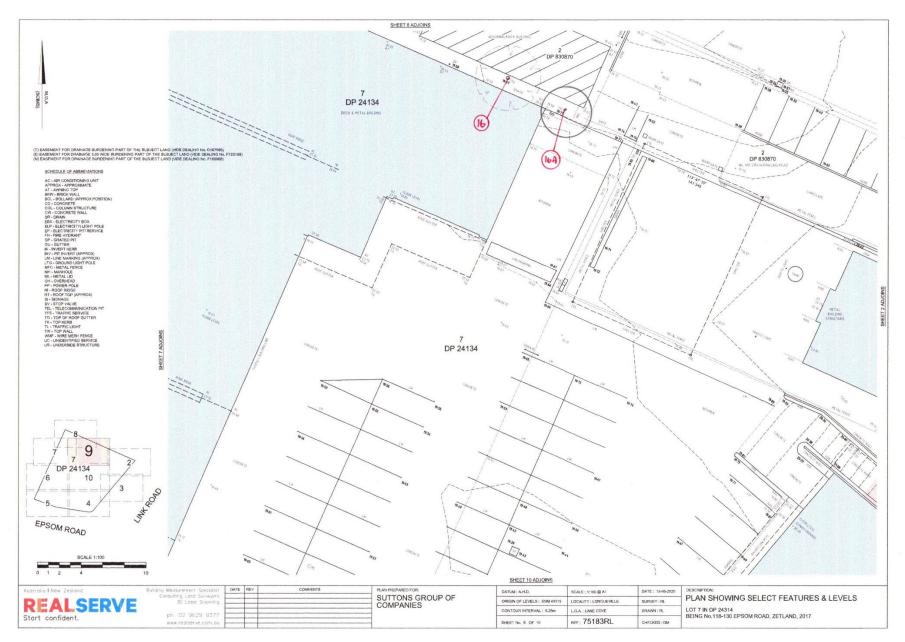


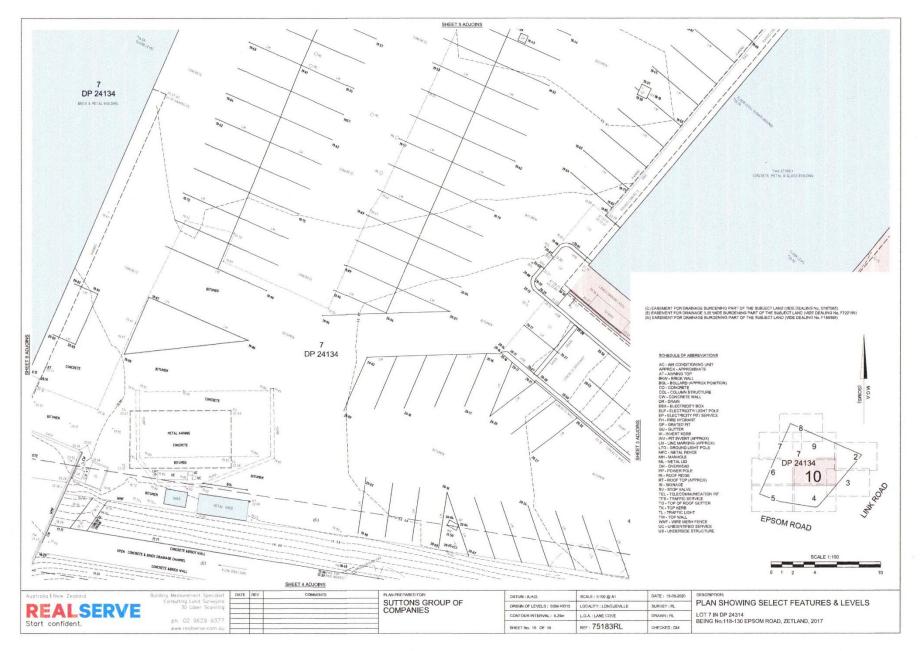


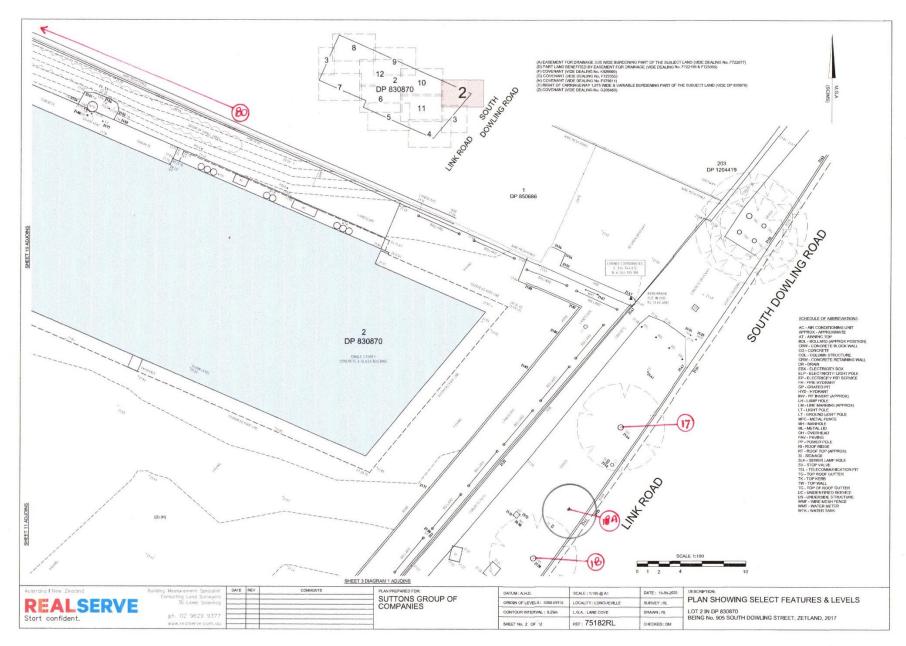


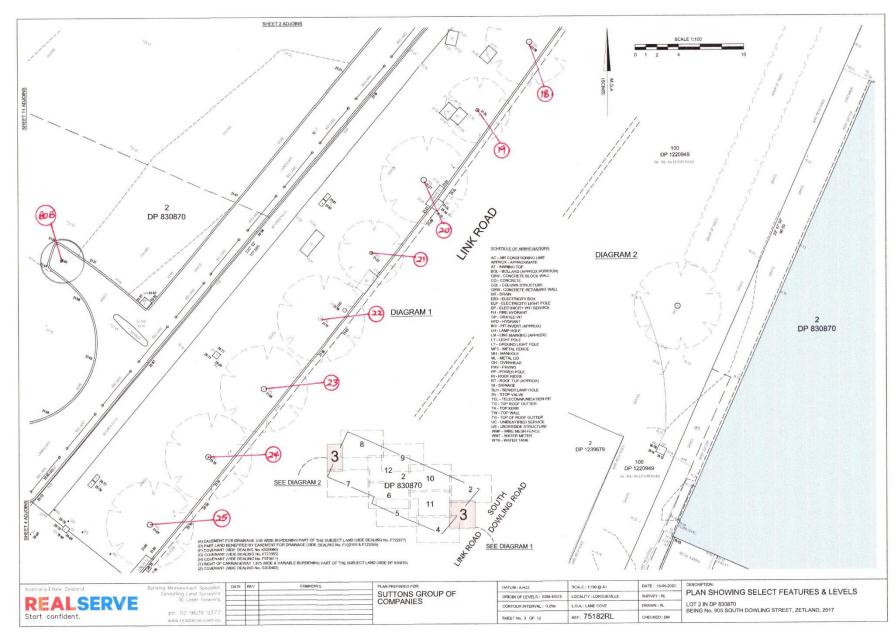


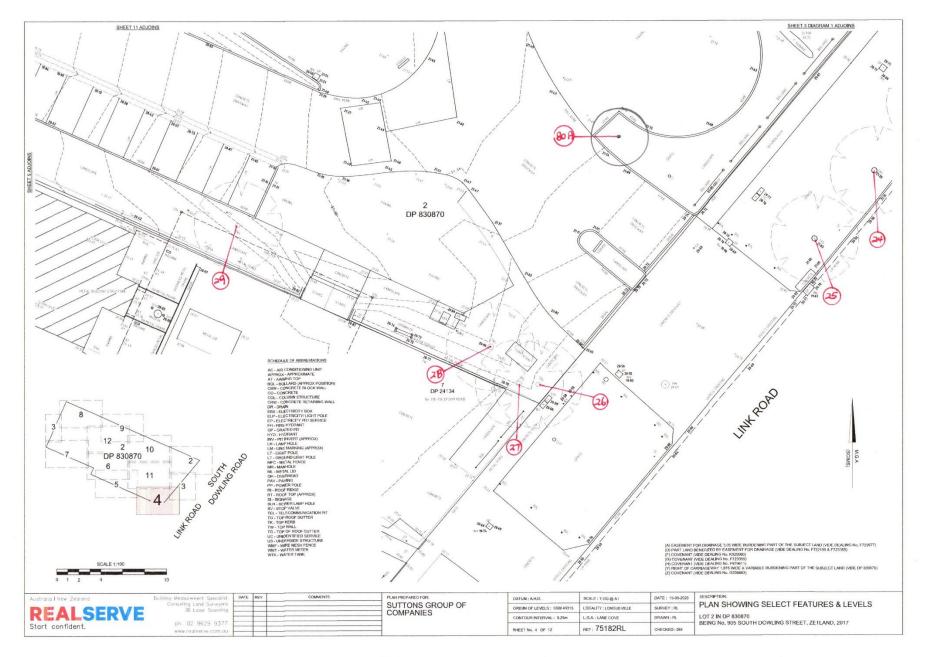


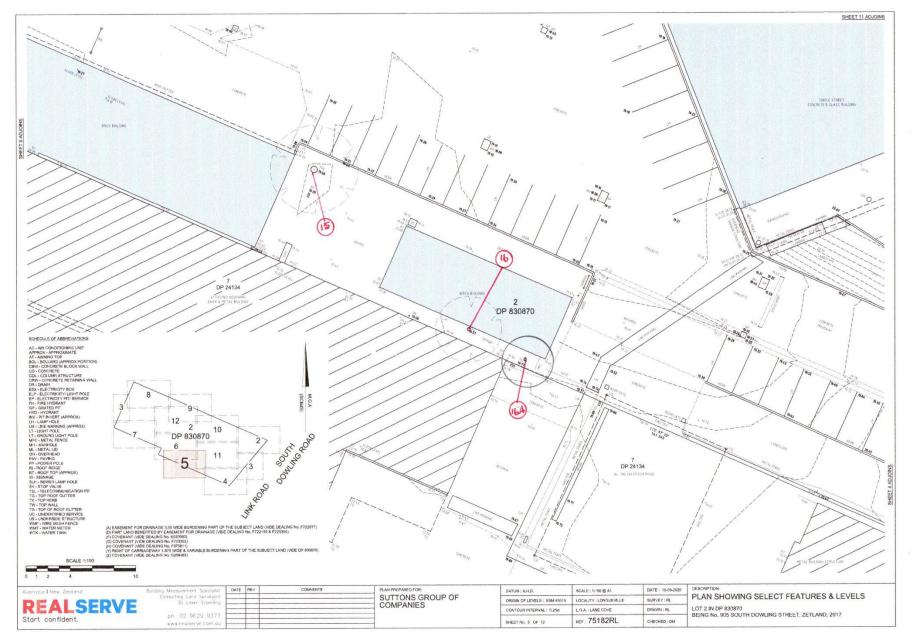


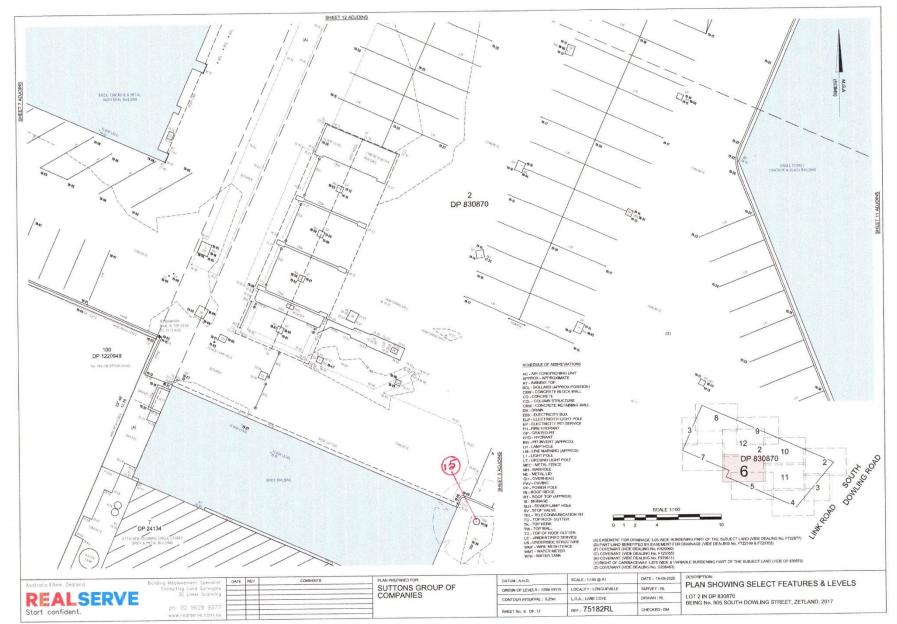


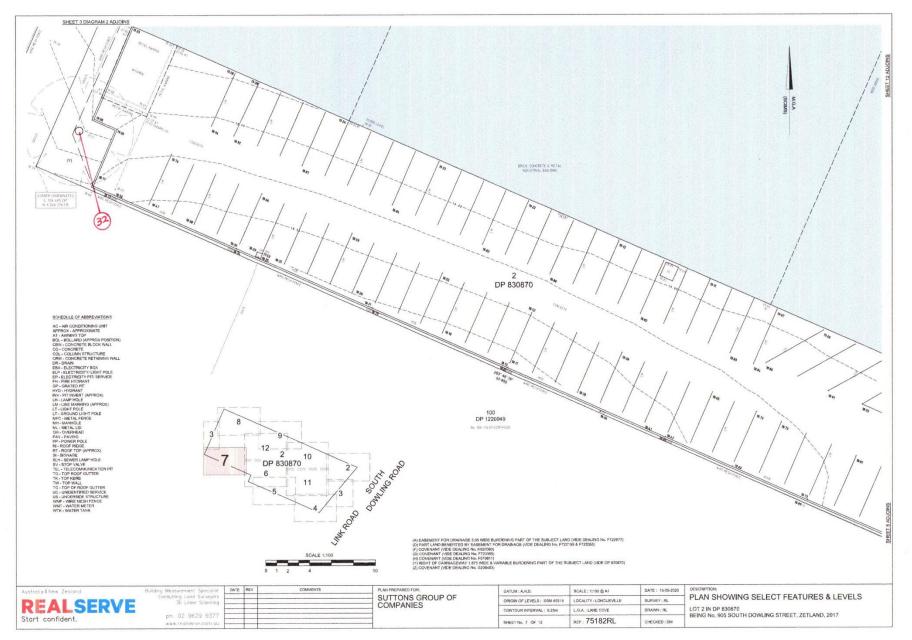


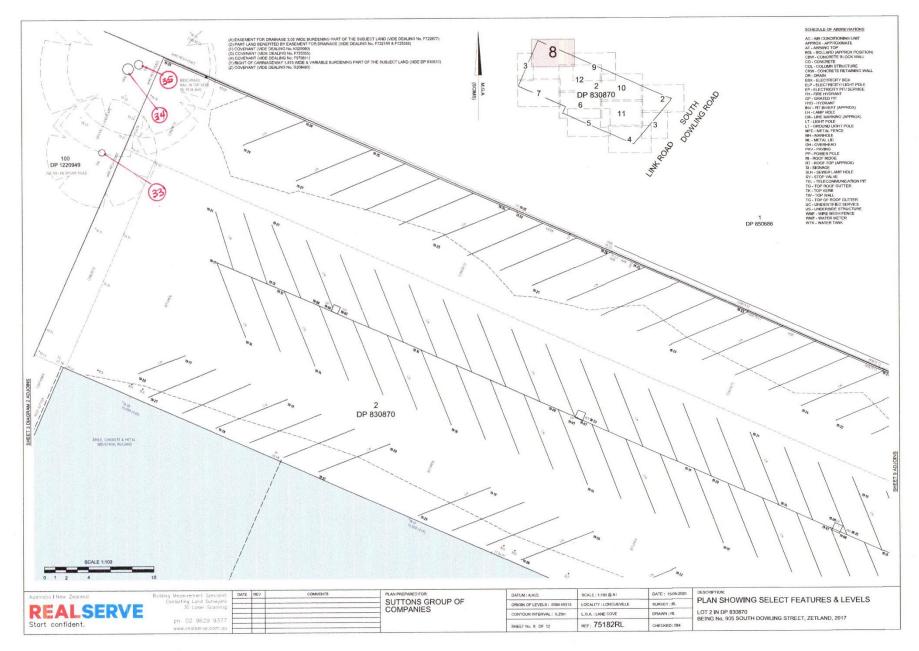


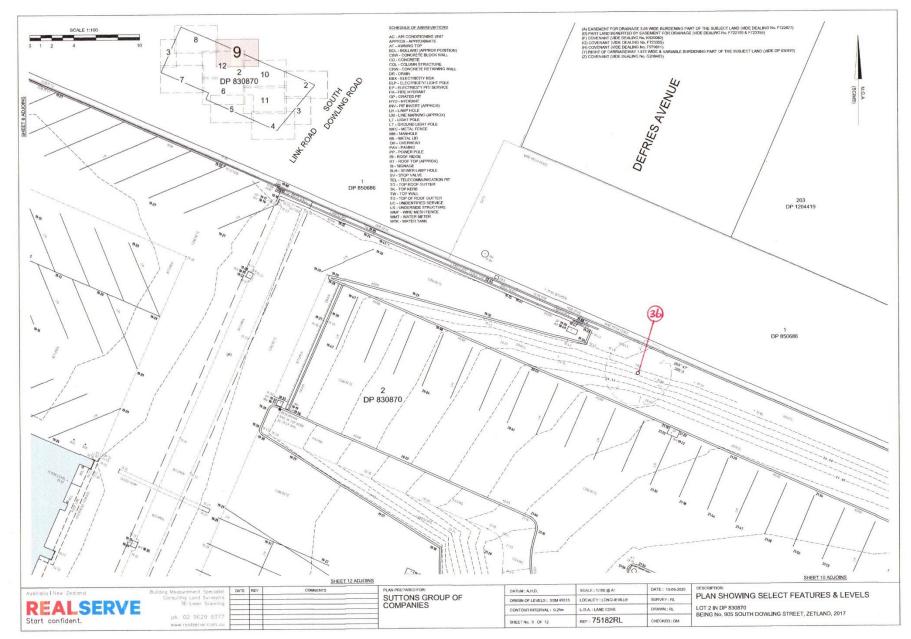


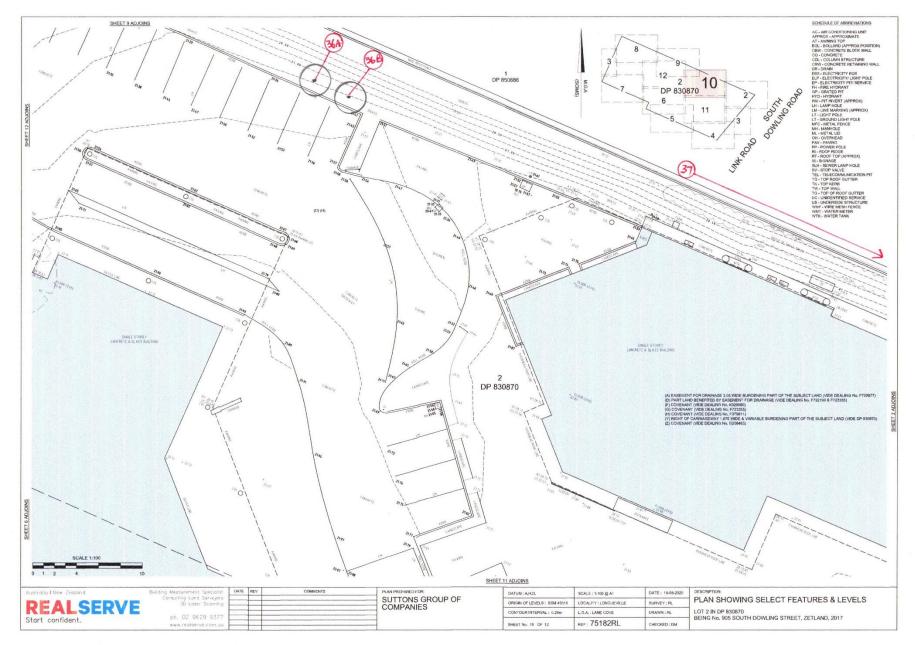


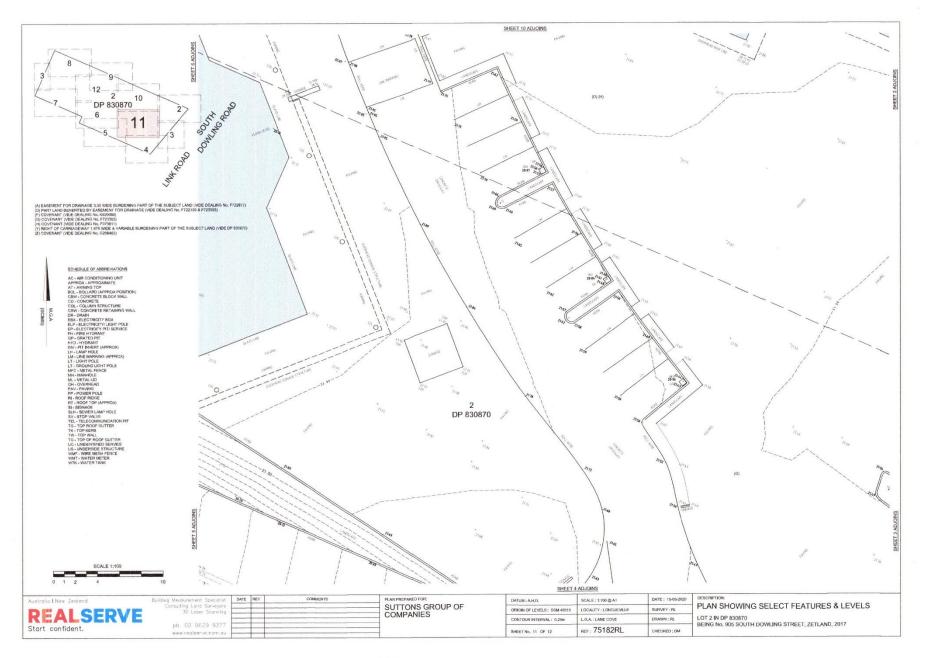


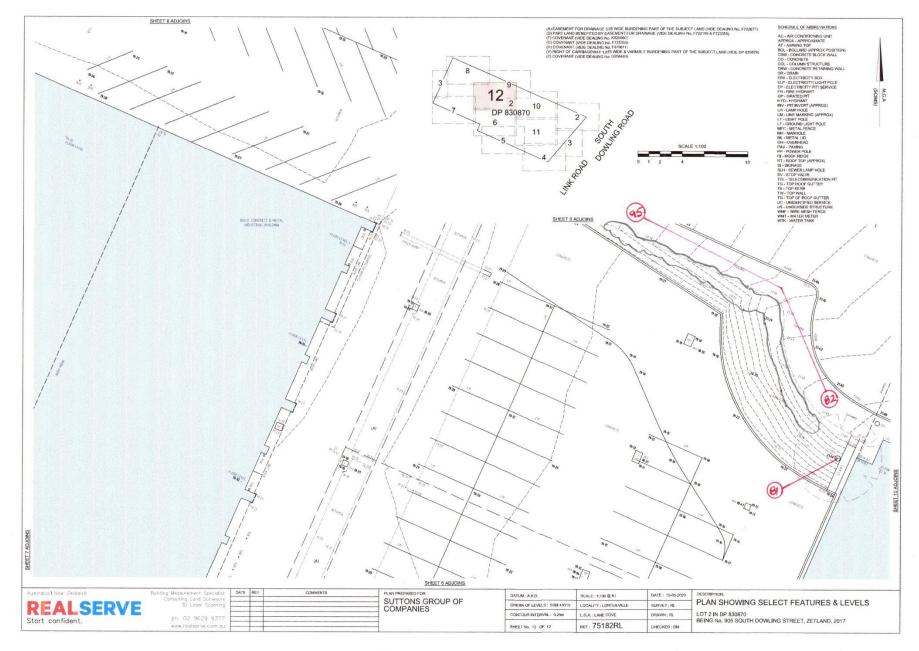




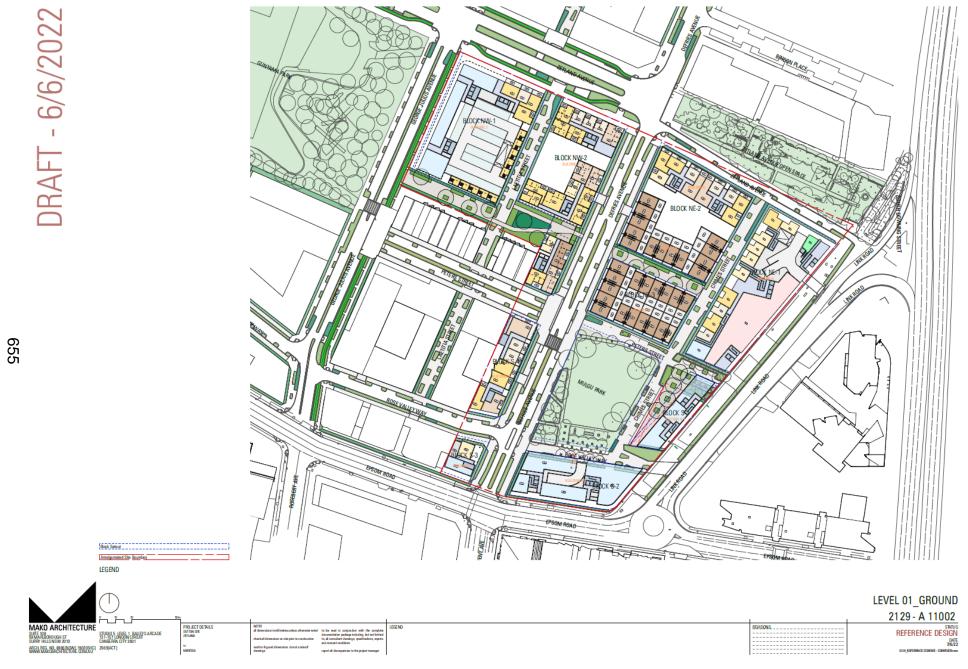


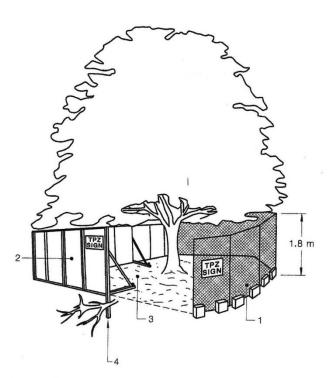






Annexure C: Tree impact plans

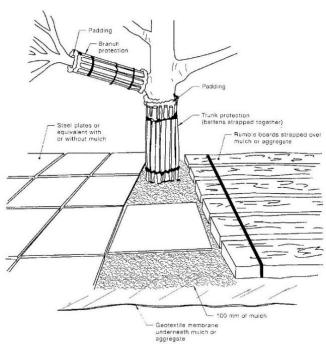




LEGEND:

- Chain wire mesh panels with shade cloth (if required) attached, held in place with concrete feet. Alternative plywood or wooden paling fence panels. This fencing material also prevents building materials or soil entering the TPZ. 2
- 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 3 the TPZ.
- 4 Bracing is permissible within the TPZ. Installation of supports should avoid damaging roots.

FIGURE 3 PROTECTIVE FENCING



NOTES:

- For trunk and branch protection use boards and padding that will prevent damage to bark. Boards are to be 1 strapped to trees. not nailed or screwed.
- 2 Rumble boards should be of a suitable thickness to prevent soil compaction and root damage.

FIGURE 4 EXAMPLES OF TRUNK, BRANCH AND GROUND PROTECTION

