Birds Tree Consultancy

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ARBORICULTURAL DEVELOPMENT IMPACT ASSESSMENT REPORT

280-300 Lakemba Street and 64-70 King Georges Road, Wiley Park
REVISION D

07 May 2021

Prepared for
Lakemba Street Development Pty Ltd

Prepared by

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Executive Summary

This Arboricultural Development Impact Assessment Report has been commissioned by Lakemba Street Development Pty Ltd to report on trees within the proposed development site 280-300 Lakemba Street and 64-70 King Georges Road, Wiley Park NSW. It has been commissioned to outline the health, condition and stability of these trees as well as their viability for retention. The scope of this report includes all trees within areas that may be impacted by the proposed development.

All of the subject trees are preserved by Section B3 of Canterbury Council Development Control Plan (DCP) 2012 with the exception of Trees 2, 3, 4, 5, 6, 7, 8 and 17 which are exempt.

Trees 4, 5, 6, 7 and 8 are environmental pest species and are recommended for removal. Trees 1 and 9 are preserved by Section B3 of Canterbury Council DCP 2012 however these trees are species that have low retention value although Tree 1 is a very large established mature tree which increases the retention value.

Tree 11 has a bark inclusion within the primary junction. This structural defect increases the risk of failure of this tree which poses a hazard to life and property. This hazard cannot be mitigated without the removal of this tree. In order to remove this risk and hazard, we recommend the removal of this tree.

Trees 1, 2, 3, 9, 10, 12, 16, 17 have their Tree Protection Zones (TPZ) encroached by the proposed construction and required earthworks for the basement carpark by a major or total encroachment as defined by *AS4970-2009 Protection of Trees on Development Sites.* These trees will not be viable to be retained and are recommended for removal.

Trees 18, 19, 20, 21 have their Tree Protection Zones (TPZ) encroached by the proposed new pedestrian pavement works by a total encroachment as defined by *AS4970-2009 Protection of Trees on Development Sites.* These trees will not be viable to be retained and are recommended for removal.

All other trees are viable to be retained.

Recommendations for tree retention or removal are summarised as follows:

Tree no.	Species	Recommendations	Comments
1.	*Cinnamomum camphora*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
2.	*Schefflera actinophylla*	Exempt	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
3.	*Citrus aurantifolia*	Exempt	Not Viable to be retained due to encroachment by the basement

			excavation of the proposed development
4.	*Ligustrum lucidum*	Exempt	Environmental pest.
5.	*Ligustrum lucidum*	Exempt	Environmental pest.
6.	*Ligustrum lucidum*	Exempt	Environmental pest.
7.	*Ligustrum lucidum*	Exempt	Environmental pest.
8.	*Ligustrum lucidum*	Exempt	Environmental pest.
9.	*Cinnamomum camphora*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development. Low retention value
10.	*Eucalyptus moluccana*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
11.	*Eucalyptus moluccana*	Remove	Bark inclusion.
12.	*Eucalyptus moluccana*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
13.	*Melaleuca linarifolia*	Retain	Earthworks are not to extend past the limit of the basement level and shoring is required.
14.	*Melaleuca linarifolia*	Retain	Earthworks are not to extend past the limit of the basement level and shoring is required.
15.	*Melaleuca linarifolia*	Retain	Earthworks are not to extend past the limit of the basement level and shoring is required.
16.	*Cinnamomum camphora*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
17.	*Morus nigra*	Exempt	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
18.	*Ficus microcarpa*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
19.	*Ficus microcarpa*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development

20.	*Ficus microcarpa*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
21.	*Ficus microcarpa*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development

Contents

1.0 Scope of Works

This Arboricultural Development Impact Assessment Report has been commissioned by Lakemba Street Development Pty Ltd to report on trees within the proposed development site 280-300 Lakemba Street and 64-70 King Georges Road, Wiley Park NSW. It has been commissioned to outline the health, condition and stability of these trees as well as their viability for retention. The scope of this report includes all trees within areas that may be impacted by the proposed development.

On the 15th May 2020, Glenn Bird of Birds Tree Consultancy attended site and inspected the subject trees from the ground. There was no aerial inspection carried out. A Visual Tree Assessment was undertaken in accordance with Visual Tree Assessment (VTA) guidelines (Mattheck and Breloer, 1994). Tree heights were measured using a Nikon Forestry 550 Heightmeter.

This report was revised on 7 May 2021 Revision D in order to assess the development impact based on revised DA Drawings Revision B dated 29/03/2021.

2.0 Site Analysis

2.1 Site

The subject site is 280-300 Lakemba Street and 64-70 King Georges Road, Wiley Park NSW. The subject trees are located within or adjacent to the boundaries of this site. The site is proposed to be redeveloped involving the construction of new buildings and excavation of basement parking.

2.2 Topography

The site is relatively flat. The area in the vicinity of all trees is flat.

2.3 Identification

Trees are as identified in the attached inspection forms in Appendix C and shown in Tree location Plan A01 in Appendix D.

2.4 Soils

Soil material and horizons were not tested for this report.

3.0 Existing Trees

The following trees were inspected from the ground and the following items identified. Please refer also to the attached inspection data in Appendix C.

3.1 Tree 1. *Cinnamomum camphora*

This mature tree is located 5m from existing dwelling and it is approximately 22m tall with a canopy spread of 20m. It has multiple (4) co-dominant trunks from 1.4m above the base with a diameter at breast height (DBH) of 1560mm. This tree is in good health and condition with minimal deadwood and epicormic growth.

3.2 Tree 2. *Schefflera actinophylla*

This mature tree is approximately 6m tall with a canopy spread of 4m. It has multiple co-dominant trunks from the base with an aggregate DBH of 320mm. This tree is in good health and condition with minimal deadwood and epicormic growth.

3.3 Tree 3. *Citrus aurantifolia*

This mature tree is approximately 4m tall with a canopy spread of 3m. It has a single trunk with a DBH of 260mm. This tree is in good health and condition with minimal deadwood and epicormic growth.

3.4 Tree 4. *Ligustrum lucidum*

This mature tree is approximately 6.5m tall with a canopy spread of 8m. It has a single trunk with a DBH of 400mm. This tree is in good health and condition with minimal deadwood and epicormic growth. This tree is an environmental pest and it is recommended for removal.

3.5 Tree 5. *Ligustrum lucidum*

This mature tree is approximately 5m tall with a canopy spread of 4m. It has multiple co-dominant trunks from the base with an aggregate DBH of 250mm. This tree is in good health and condition with minimal deadwood and epicormic growth. This tree is an environmental pest and is recommended for removal.

3.6 Tree 6. *Ligustrum lucidum*

This mature tree is located on the neighbouring property and it is approximately 6m tall with a canopy spread of 5m. It has multiple co-dominant trunks from the base with an aggregate DBH of 300mm. This tree is in good health and condition with minimal deadwood and epicormic growth. This tree is an environmental pest and is recommended for removal.

3.7 Tree 7. *Ligustrum lucidum*

This mature tree is located on the neighbouring property and it is approximately 6m tall with a canopy spread of 5m. It has a single trunk with a DBH of 300mm. This tree is in good health and condition with

minimal deadwood and epicormic growth. This tree is an environmental pest and is recommended for removal.

3.8 Tree 8. *Ligustrum lucidum*

This mature tree is located on the neighbouring property and it is approximately 3m tall with a canopy spread of 3m. It has multiple co-dominant trunks from the base with an aggregate DBH of 200mm. This tree is in good health and condition with minimal deadwood and epicormic growth. This tree is an environmental pest and is recommended for removal.

3.9 Tree 9. *Cinnamomum camphora*

This mature tree is approximately 9m tall with a canopy spread of 12m. It has a single trunk with a DBH of 370mm. This tree is in good health and condition with minimal deadwood and epicormic growth.

3.10 Tree 10. *Eucalyptus moluccana*

This mature tree is approximately 14m tall with a canopy spread of 6m. It has twin co-dominant trunks from the base with an aggregate DBH of 360mm. This tree is in good health and condition with minimal deadwood and epicormic growth.

3.11 Tree 11. *Eucalyptus moluccana*

This mature tree is approximately 24m tall with a canopy spread of 18m. It has twin co-dominant trunks from the base with an aggregate DBH of 1230mm. This tree is in good health and condition with minimal deadwood and epicormic growth. Due to evidence of a bark inclusion in the primary junction this tree is recommended for removal.

3.12 Tree 12. *Eucalyptus moluccana*

This mature tree is surrounded by bitumen and it is approximately 22m tall with a canopy spread of 16m. It has multiple (3) co-dominant trunks from the base with an aggregate DBH of 1200mm. This tree is in good health and condition with minimal deadwood and epicormic growth.

3.13 Tree 13. *Melaleuca linarifolia*

This mature tree is suppressed and it is approximately 12m tall with a canopy spread of 5m. It has a single trunk with a DBH of 320mm. This tree is in fair health and condition with a thinning canopy, minimal deadwood and epicormic growth.

3.14 Tree 14. *Melaleuca linarifolia*

This mature tree is approximately 11m tall with a canopy spread of 8m. It has a single trunk with a DBH of 450mm. This tree is in good health and condition with minimal deadwood and epicormic growth.

3.15 Tree 15. *Melaleuca linarifolia*

This mature tree is approximately 8m tall with a canopy spread of 8m. It has twin co-dominant trunks from the base with an aggregate DBH of 500mm. This tree is in good health and condition with minimal deadwood and epicormic growth.

3.16 Tree 16. *Cinnamomum camphora*

This semi mature tree is approximately 8m tall with a canopy spread of 6m. It has twin co-dominant trunks from the base with an aggregate DBH of 280mm. This tree is in good health and condition with minimal deadwood and epicormic growth.

3.17 Tree 17. *Morus nigra*

This mature tree is approximately 9m tall with a canopy spread of 6m. It has twin co-dominant trunks from the base with an aggregate DBH of 240mm. This tree is in good health and condition with minimal deadwood and epicormic growth.

3.18 Tree 18. *Ficus microcarpa*

This semi mature street tree is approximately 3m tall with a canopy spread of 2m. It has a single trunk with a DBH of 120mm. This tree is in good health and condition with minimal deadwood and epicormic growth. The crown of this tree has been topiarized into a compact ball.

3.19 Tree 19. *Ficus microcarpa*

This semi mature street tree is approximately 3m tall with a canopy spread of 2m. It has a single trunk with a DBH of 130mm. This tree is in good health and condition with minimal deadwood and epicormic growth. The crown of this tree has been topiarized into a compact ball.

3.20 Tree 20. *Ficus microcarpa*

This semi mature street tree is approximately 3m tall with a canopy spread of 2m. It has a single trunk with a DBH of 130mm. This tree is in good health and condition with minimal deadwood and epicormic growth. The crown of this tree has been topiarized into a compact ball.

3.21 Tree 21. *Ficus microcarpa*

This semi mature street tree is approximately 3m tall with a canopy spread of 2m. It has a single trunk with a DBH of 150mm. This tree is in good health and condition with minimal deadwood and epicormic growth. The crown of this tree has been topiarized into a compact ball.

4.0 Landscape Significance of Trees

4.1 Landscape Significance

The significance of a tree within the landscape is a factor of the health and condition of the tree, vitality, the form of the tree, environmental, cultural, amenity and heritage value.

4.2 Methodology of Determining Landscape Significance

For the purpose of this report, the Significance of a Tree, Assessment Rating System (STARS) as developed by the Institute of Australian Consulting Arborists (IACA) has been implemented. Please refer to Appendix A for greater detail of this assessment system. This system defines Landscape Significance for individual trees as High, Medium or Low Significance.

4.3 Landscape Significance of Subject Trees

Based on our assessment of the subject trees and implementation of the IACA Significance of a Tree, Assessment Rating System, the Landscape Significance of the Subject Trees was determined as shown in Table 1.

Tree no.	Species	Landscape Significance
1.	*Cinnamomum camphora*	Medium
2.	*Schefflera actinophylla*	Low
3.	*Citrus aurantifolia*	Low
4.	*Ligustrum lucidum*	Low
5.	*Ligustrum lucidum*	Low
6.	*Ligustrum lucidum*	Low
7.	*Ligustrum lucidum*	Low
8.	*Ligustrum lucidum*	Low
9.	*Cinnamomum camphora*	Medium
10.	*Eucalyptus moluccana*	High
11.	*Eucalyptus moluccana*	High
12.	*Eucalyptus moluccana*	High
13.	*Melaleuca linarifolia*	High
14.	*Melaleuca linarifolia*	High
15.	*Melaleuca linarifolia*	High
16.	*Cinnamomum camphora*	Low
17.	*Morus nigra*	Low
18.	*Ficus microcarpa*	Medium
19.	*Ficus microcarpa*	Medium
20.	*Ficus microcarpa*	Medium
21.	*Ficus microcarpa*	Medium

Table 1 - Landscape Significance

5.0 Subject Tree Retention Value

5.1 Tree Retention Value Methodology

For the purpose of this report, the Tree Retention Values have been assessed by incorporating Landscape Significance Values as determined in 4.0 with the Useful Life Expectancy of the subject trees and assessing the retention values based on the Tree Retention Value Priority Matrix as developed by the Institute of Australian Consulting Arborists (IACA). Please refer to Appendix B for greater detail of this Tree Retention Value Priority Matrix. This matrix defines Landscape Significance for individual trees as High, Medium or Low Retention Value as well as Priority for Removal.

5.2 Retention Value of Subject Trees

Based on our assessment of the subject trees and implementation of the IACA Tree Retention Value Priority Matrix, the Retention Values of the Subject Trees were determined as shown in Table 2.

Tree no.	Species	Retention Value
1.	*Cinnamomum camphora*	Medium
2.	*Schefflera actinophylla*	Low
3.	*Citrus aurantifolia*	Low
4.	*Ligustrum lucidum*	Low
5.	*Ligustrum lucidum*	Low
6.	*Ligustrum lucidum*	Low
7.	*Ligustrum lucidum*	Low
8.	*Ligustrum lucidum*	Low
9.	*Cinnamomum camphora*	Medium
10.	*Eucalyptus moluccana*	High
11.	*Eucalyptus moluccana*	High
12.	*Eucalyptus moluccana*	High
13.	*Melaleuca linarifolia*	High
14.	*Melaleuca linarifolia*	High
15.	*Melaleuca linarifolia*	High
16.	*Cinnamomum camphora*	Low
17.	*Morus nigra*	Low
18.	*Ficus microcarpa*	Medium
19.	*Ficus microcarpa*	Medium
20.	*Ficus microcarpa*	Medium
21.	*Ficus microcarpa*	Medium

Table 2 – Tree Retention Value

6.0 Impact of Development

6.1 Tree Protection Zone

Tree Protection Zones (TPZs) have been defined for the subject trees in order to define the encroachment of the proposed development in accordance with *AS4970-2009*. The TPZs required have been taken as a circular area with a radius 12 x the diameter at breast height of the tree. This requirement is in line with Australian Standard AS 4970-2009 Protection of Trees on Development Sites. This standard defines a maximum of 10% encroachment to be minimal encroachment. Any encroachment over 10% requires the site arborist to give consideration as to the viability of the tree due to the proposed development.

Tree no.	Species	TPZ Radius (m)	Encroachment (%)
1.	*Cinnamomum camphora*	18.72	100
2.	*Schefflera actinophylla*	3.84	100
3.	*Citrus aurantifolia*	3.12	100
4.	*Ligustrum lucidum*	N/A	N/A
5.	*Ligustrum lucidum*	N/A	N/A
6.	*Ligustrum lucidum*	N/A	N/A
7.	*Ligustrum lucidum*	N/A	N/A
8.	*Ligustrum lucidum*	2.4	N/A
9.	*Cinnamomum camphora*	4.44	100
10.	*Eucalyptus moluccana*	4.32	100
11.	*Eucalyptus moluccana*	N/A	N/A
12.	*Eucalyptus moluccana*	14.4	32
13.	*Melaleuca linarifolia*	3.84	0
14.	*Melaleuca linarifolia*	5.4	5
15.	*Melaleuca linarifolia*	6	7
16.	*Cinnamomum camphora*	3.36	100
17.	*Morus nigra*	2.88	100
18.	*Ficus microcarpa*	2	100
19.	*Ficus microcarpa*	2	100
20.	*Ficus microcarpa*	2	100
21.	*Ficus microcarpa*	2	100

6.2 Development Impact

6.2.1 Tree 1 *Cinnamomum camphora*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be totally encroached by the proposed development. This tree will not be viable to be retained under the proposed development.

6.2.2 Tree 2 *Schefflera actinophylla*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be totally encroached by the proposed development. This tree will not be viable to be retained under the proposed development.

6.2.3 Tree 3 *Citrus aurantifolia*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be totally encroached by the proposed development. This tree will not be viable to be retained under the proposed development.

6.2.4 Tree 4 *Ligustrum lucidum*

This tree is recommended for removal.

6.2.5 Tree 5 *Ligustrum lucidum*

This tree is recommended for removal.

6.2.6 Tree 6 *Ligustrum lucidum*

This tree is recommended for removal.

6.2.7 Tree 7 *Ligustrum lucidum*

This tree is recommended for removal.

6.2.8 Tree 8 *Ligustrum lucidum*

This tree is recommended for removal.

6.2.9 Tree 9 *Cinnamomum camphora*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be totally encroached by the proposed development. This tree will not be viable to be retained under the proposed development.

6.2.10 Tree 10 *Eucalyptus moluccana*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be totally encroached by the proposed development. This tree will not be viable to be retained under the proposed development.

6.2.11 Tree 11 *Eucalyptus moluccana*

This tree is recommended for removal.

6.2.12 Tree 12 *Eucalyptus moluccana*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be encroached by the proposed development by 32% which is a major encroachment as defined by *AS4970-2009*. This tree will not be viable to be retained under the proposed development.

6.2.13 Tree 13 *Melaleuca linarifolia*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will not be encroached by the proposed development. This tree will be viable to be retained under the proposed development.

6.2.14 Tree 14 *Melaleuca linarifolia*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be encroached by the proposed development by 5% which is less than a minor encroachment as defined by *AS4970-2009.* This tree will be viable to be retained under the proposed development.

6.2.15 Tree 15 *Melaleuca linarifolia*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be encroached by the proposed development by 7% which is less than a minor encroachment as defined by *AS4970-2009.* This tree will be viable to be retained under the proposed development.

6.2.16 Tree 16 *Cinnamomum camphora*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be totally encroached by the proposed development. This tree will not be viable to be retained under the proposed development.

6.2.17 Tree 17 *Morus nigra*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be totally encroached by the proposed development. This tree will not be viable to be retained under the proposed development.

6.2.18 Tree 18 *Ficus microcarpa*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be totally encroached by the proposed new pavement works. This tree will not be viable to be retained under the proposed development.

6.2.19 Tree 19 *Ficus microcarpa*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be totally encroached by the proposed new pavement works. This tree will not be viable to be retained under the proposed development.

6.2.20 Tree 20 *Ficus microcarpa*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be totally encroached by the proposed new pavement works. This tree will not be viable to be retained under the proposed development.

6.2.21 Tree 21 *Ficus microcarpa*

The Tree Protection Zone (TPZ) of this tree in accordance with *AS 4970-2009 Protection of Trees on Development Sites* will be totally encroached by the proposed new pavement works. This tree will not be viable to be retained under the proposed development.

7.0 Recommendations

All of the subject trees are preserved by Section B3 of Canterbury Council Development Control Plan (DCP) 2012 with the exception of Trees 2, 3, 4, 5, 6, 7, 8 and 17 which are exempt.

Trees 4, 5, 6, 7 and 8 are environmental pest species and are recommended for removal. Trees 1 and 9 are preserved by Section B3 of Canterbury Council DCP 2012 however these trees are species that have low retention value although Tree 1 is a very large established mature tree which increases the retention value.

Tree 11 has a bark inclusion within the primary junction. This structural defect increases the risk of failure of this tree which poses a hazard to life and property. This hazard cannot be mitigated without the removal of this tree. In order to remove this risk and hazard, we recommend the removal of this tree.

Trees 1, 2, 3, 9, 10, 12, 16, 17 have their Tree Protection Zones (TPZ) encroached by the proposed construction and required earthworks for the basement carpark by a major or total encroachment as defined by *AS4970-2009 Protection of Trees on Development Sites.* These trees will not be viable to be retained and are recommended for removal.

Trees 18, 19, 20, 21 have their Tree Protection Zones (TPZ) encroached by the proposed new pedestrian pavement works by a total encroachment as defined by *AS4970-2009 Protection of Trees on Development Sites.* These trees will not be viable to be retained and are recommended for removal.

All other trees are viable to be retained.

Recommendations for tree retention or removal are summarised as follows:

Tree no.	Species	Recommendations	Comments
1.	*Cinnamomum camphora*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
2.	*Schefflera actinophylla*	Exempt	Not Viable to be retained due to encroachment by the basement excavation of the proposed development

3.	*Citrus aurantifolia*	Exempt	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
4.	*Ligustrum lucidum*	Exempt	Environmental pest.
5.	*Ligustrum lucidum*	Exempt	Environmental pest.
6.	*Ligustrum lucidum*	Exempt	Environmental pest.
7.	*Ligustrum lucidum*	Exempt	Environmental pest.
8.	*Ligustrum lucidum*	Exempt	Environmental pest.
9.	*Cinnamomum camphora*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development. Low retention value
10.	*Eucalyptus moluccana*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
11.	*Eucalyptus moluccana*	Remove	Bark inclusion.
12.	*Eucalyptus moluccana*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
13.	*Melaleuca linarifolia*	Retain	Earthworks are not to extend past the limit of the basement level and shoring is required.
14.	*Melaleuca linarifolia*	Retain	Earthworks are not to extend past the limit of the basement level and shoring is required.
15.	*Melaleuca linarifolia*	Retain	Earthworks are not to extend past the limit of the basement level and shoring is required.
16.	*Cinnamomum camphora*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
17.	*Morus nigra*	Exempt	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
18.	*Ficus microcarpa*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
19.	*Ficus microcarpa*	Remove	Not Viable to be retained due to encroachment by the basement

			excavation of the proposed development
20.	*Ficus microcarpa*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development
21.	*Ficus microcarpa*	Remove	Not Viable to be retained due to encroachment by the basement excavation of the proposed development

8.0 Environmental / Heritage/ Legislative Considerations

None of the subject trees are identified as threatened species or elements of endangered ecological communities within the Threatened Species Conservation Act 1995.

9.0 References

Mattheck, C. Breloer, K. 1993, The Body Language of Trees: A Handbook for Failure Analysis, 12th Impression 2010 The Stationery Office.
AS4970-2009 Protection of Trees on Development Sites : Standards Australia

10.0 Disclaimer

This Appraisal has been prepared for the exclusive use of the Client and Birds Tree Consultancy.
Birds Tree Consultancy accepts no responsibility for its use by other persons. The Client acknowledges that this Appraisal, and any opinions, advice or recommendations expressed or given in it, are based on the information supplied by the Client and on the data inspections, measurements and analysis carried out or obtained Birds Tree Consultancy and referred to in the Appraisal. The Client should rely on the Appraisal, and on its contents, only to that extent.

Every effort has been made in this report to include, assess and address all defects, structural weaknesses, instabilities and the like of the subject trees. All inspections were made from ground level using only visual means and no intrusive or destructive means of inspection were used. For many structural defects such as decay and inclusions, internal inspection is required by means of resistograph or similar. No such investigation has been made in this case. Trees are living organisms and are subject to failure through a variety of causes not able to be identified by means of this inspection and report.

Appendix A Landscape Significance

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.

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.

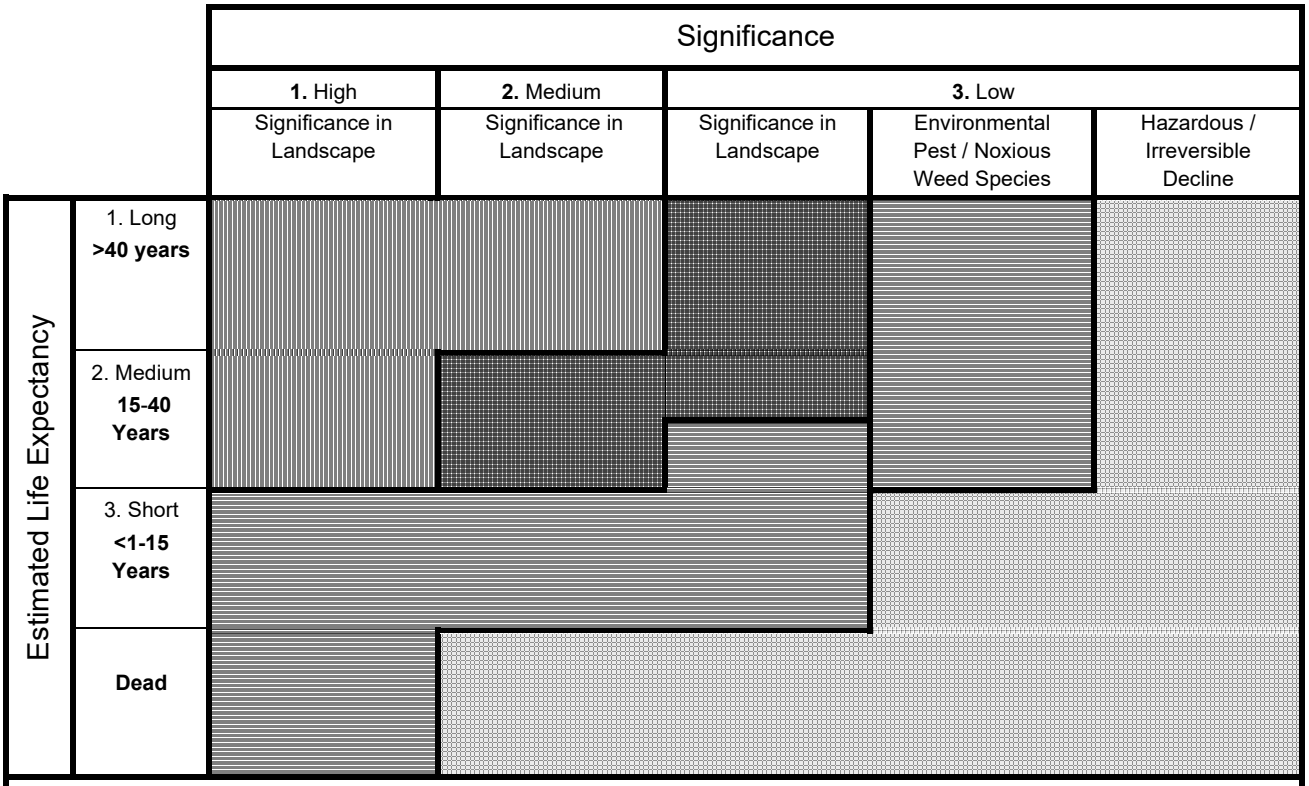
Hazardous/Irreversible Decline

- 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.

Appendix B Tree Retention Values



Legend for Matrix Assessment

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IACA
MANAGING URBAN TREES ®

Priority for Retention (High) - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 *Protection of trees on development sites*. Tree sensitive construction measures must be implemented e.g. pier and beam etc if works are to proceed within the Tree Protection Zone.

Consider for Retention (Medium) - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.

Consider for Removal (Low) - These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.

Priority for Removal - These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.

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

Appendix C – Tree Inspection Data

Birds Tree Consultancy

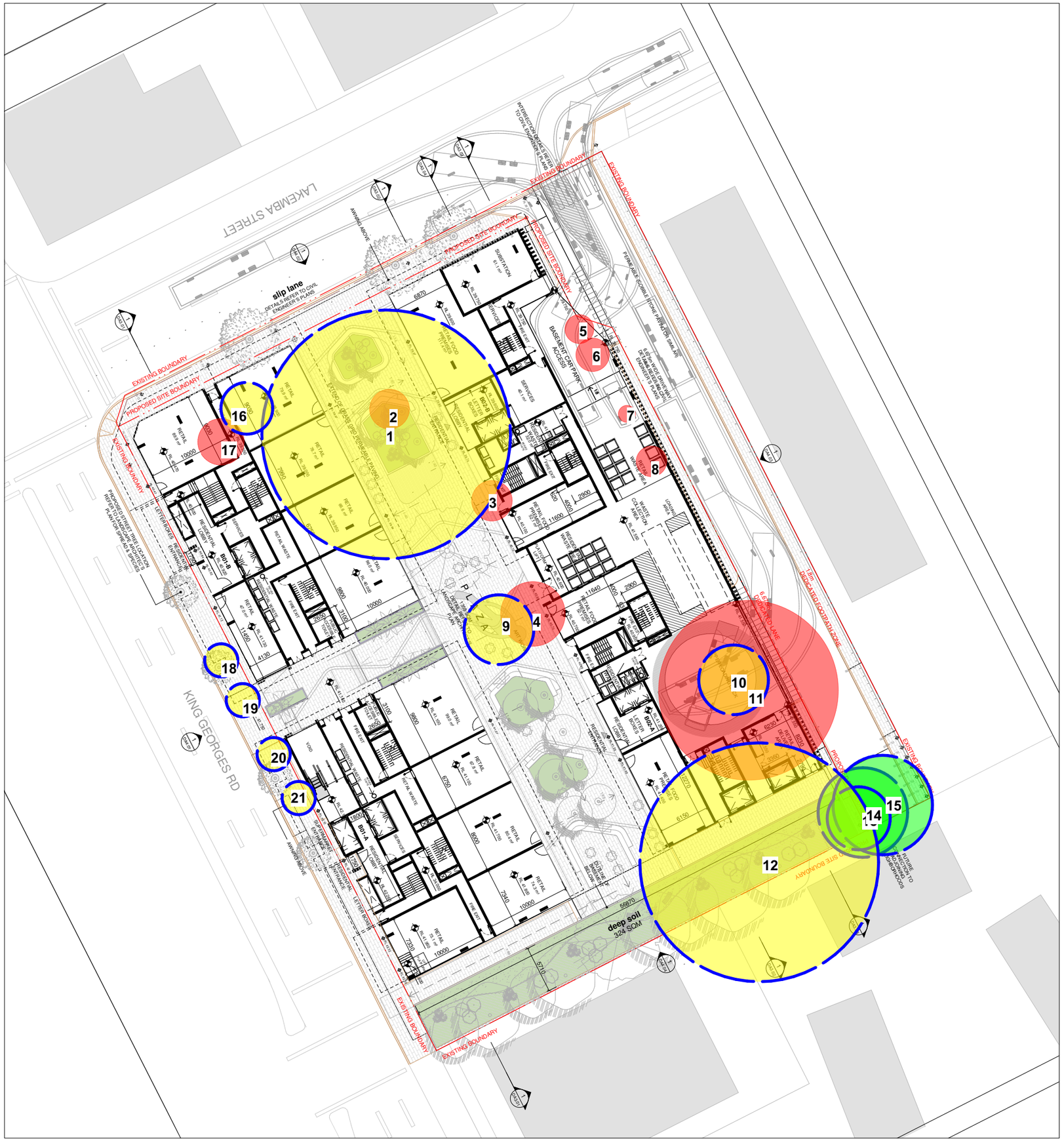
Consulting Arborist• Project Management • Horticultural Consultancy • Landscape Management

Inspection Data 15-May-20

Lakemba Street and King Georges Road Wiley Park

Tree no.	Species	Height (m)	Spread(m)	DBH (mm)	TPZ Radius (m)	Maturity	Trunk (single, twin, multiple @)	Trunk lean	Form/Crown shape	Branching Habit	Crown Distribution	Stability	Branching Structure	Pruning History	Defects	Damage	Overall Health & Vigour	Canopy Density	Foliage	Deadwood	Epicormic Growth	Pest Infestation	Disease	Life expectancy	Env. & Landcape significance	Retention Value	Notes/Comments
1	Cinnamomum camphora	21	20	1560	15	Mature	Multiple (4) @ 1400	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Low	Low	5 m from house
2	Schefflera actinophylla	6	4	320	3.84	Mature	Multiple @ base	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Low	Low	
3	Lime	4	3	260	3.12	Mature	Single	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Low	Low	
4	Ligustrum lucidum	6.5	8	400	4.8	Mature	Single	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Environmental pest	Environmental pest	Environmental pest. Remove
5	Ligustrum lucidum	5	4	250	3	Mature	Multiple @ base	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Environmental pest	Environmental pest	Environmental pest. Remove
6	Ligustrum lucidum	6	5	300	3.6	Mature	Multiple @ base	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Environmental pest	Environmental pest	On neighbouring property. Environmental pest. Remove
7	Ligustrum lucidum	6	5	300	3.6	Mature	Single	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Environmental pest	Environmental pest	On neighbouring property
8	Ligustrum lucidum	3	3	200	2.4	Mature	Multiple @ base	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Environmental pest	Environmental pest	On neighbouring property
9	Cinnamomum camphora	9	12	370	4.44	Mature	Single	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Low	Low	
10	Eucalyptus moluccana	14	6	360	4.32	Mature	Twin @ base	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	High	High	
11	Eucalyptus moluccana	24	18	1230	14.76	Mature	Twin @ base	NIL	Normal	Normal	Balanced	Stable	Suspect, Bark inclusion	No evidence	Bark inclusion	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	High	Low	Bark inclusion. Remove
12	Eucalyptus moluccana	22	16	1200	14.4	Mature	Multiple (3) @ base	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	High	High	Surrounded bitumen
13	Melaleuca linarifolia	12	5	320	3.84	Mature	Single	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Fair	Thinning	Normal	<5%	<5%	No evidence	No evidence	15-40y	High	High	Suppressed
14	Melaleuca linarifolia	11	8	450	5.4	Mature	Single	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	High	High	
15	Melaleuca linarifolia	8	8	500	6	Mature	Twin @ base	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	High	High	
16	Cinnamomum camphora	8	6	280	3.36	Mature	Twin @ base	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Low	Low	
17	Morus nigra	9	6	240	2.88	Mature	Twin @ base	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Low	Low	
18	Ficus microcarpa	3	2	120	2	Mature	Single	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Medium	Medium	Street Tree
19	Ficus microcarpa	3	2	130	2	Mature	Single	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Medium	Medium	Street Tree
20	Ficus microcarpa	3	2	130	2	Mature	Single	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Medium	Medium	Street Tree
21	Ficus microcarpa	9	2	150	2	Mature	Single	NIL	Normal	Normal	Balanced	Stable	Stable	No evidence	Nil	Nil	Good	Normal	Normal	<5%	<5%	No evidence	No evidence	15-40y	Medium	Medium	Street Tree

Appendix D Tree Location Plans



Legend

- Tree to be Retained and Protected
- Tree required to be removed due to proposed development
- Tree to be Removed or exempt from Canterbury Council DCP 2012
- Tree Protection Zone (TPZ) in accordance with AS4970-2009

Birds Tree Consultancy

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glenn@birdstrees.com.au
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Project: Lakemba St Wiley Park
Client: Lakemba Street DVT Pty Ltd
DWG: A01 REVISION D
Plan: Tree Location Plan
Date: 07 May 2021 Scale : 1:500@ A3