Project No: 88-92/ELI/17 Report No: 88-92/ELI/AIA/B

ARBORICULTURAL IMPACT ASSESSMENT

88-92 Elizabeth Drive
Liverpool

Prepared for: ST GEORGE COMMUNITY HOUSING

24th January 2018
Revision B

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IACA
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1.0 INTRODUCTION

1.1 Background

1.1.1 This Arboricultural Impact Assessment Report was prepared for St George Community Housing in relation to the proposed redevelopment works at 88-92 Elizabeth Drive, Liverpool. The purpose of this Report is to undertake a Visual Tree Assessment[1] (VTA), determine the impact of the proposed works on the trees, and where appropriate, recommend the use of sensitive construction methods to minimise adverse impacts.

1.1.2 In preparing this Report, the author is aware of and has taken into account the objectives of *Liverpool City Council's Tree Management Policy (2011)*, *Australian Standard 4970 Protection of Trees on Development Sites (2009), Australian Standard 4373 Pruning of Amenity Trees (2007)* and *Australian Standard 2303 Tree Stock for Landscape Use (2015).*

Refer to Methodology **(Appendix 1)**

1.1.3 This impact assessment is based on an assessment of the following supplied documentation/plans only:

- Level 0 (Ground) Rev 18.01.18 – prepared by STZ
- Landscape Plan Level 0 Rev G dated 20.01.18 (LC01) – prepared by Stitch Design Studio

Refer to Plans **(Appendix 2)**

1.2 The Proposal

1.2.1 The supplied plans show the works include:

- Demolition of existing structures and pavements
- Construction of new residential units
- Construction of car parking with a new driveway crossover accessing Elizabeth Drive
- Construction of rainwater and onsite detention tanks
- Associated works and landscaping

Refer to Plans **(Appendix 2)**

2.0 RESULTS

2.1 The Site

2.1.1 The site comprises of three (3) residential allotments (nos. 88, 90 and 92) located on the southern side of Elizabeth Drive, and is bound by residential allotments to the south, east and west.

2.1.2 The site is rectangular in shape and is generally level. A dwelling is located roughly centrally within each separate allotment.

[1] Mattheck & Breloer (2003)

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2.2 The Trees

2.2.1 Twenty five (25) trees/groups of trees were assessed using the VTA[2] criteria and notes, and comprise a mix of Australian native and exotic species. An additional seven (7) trees are located outside of the site boundaries and have been identified alphabetically. The species and Diameter at Breast Height (DBH) measurements of these trees were recorded (estimated in cases of limited access) for the purposes of determining Tree Protection Zone (TPZ) calculations only.

2.2.2 Trees 11 *Sapium sebiferum* (Chinese Tallowwood) and A *Ligustrum lucidum* (Large Leaf Privet) are listed as environmental weeds species by the Department of Primary Industries.[3]

2.2.3 Tree 6 *Schefflera actinophylla* (Umbrella Tree) is listed as an exempt species within the Liverpool City Council's Tree Preservation Order.[4]

2.2.4 A search of the BioNet Atlas of NSW Wildlife Database was undertaken in November 2017. No individual threatened tree species that were listed within this database for the area were identified during the current field investigations of the site. The ecological value of the trees has not been assessed and is beyond the scope of this report.

2.2.5 As required by Clause 2.3.2 of *Australian Standard 4970 Protection of Trees on Development Sites (2009)*, each of the trees assessed has been allocated a Retention Value. The Retention Value is based on the tree's Useful Life Expectancy and Landscape Significance with consideration to its health, structural condition and site suitability. The Retention Values do not consider any proposed development works and are not a schedule for tree retention or removal. The trees have been allocated one of the following Retention Values:

- Priority for Retention
- Consider for Retention
- Consider for Removal
- Priority for Removal

2.2.6 Full results of the VTA are shown in the Tree Assessment Schedule **(Appendix 3)**.

3.0 ARBORICULTURAL IMPACT ASSESSMENT

3.1 Trees to be removed

3.1.1 The supplied plans show that twenty four (24) trees within the site are to be removed as part of the proposed development. This includes one (1) tree with a Retention Value of *Consider for Retention* and twenty three (23) trees with a Retention Value of *Consider for Removal.*

3.1.2 Table 1: Trees to be removed

Consider for Retention	Consider for Removal
13	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24 & 25

3.1.3 No trees with a Retention Value of *Priority for Retention* are proposed for removal.

[2] Mattheck & Breloer (2003)
[3] Department of Primary Industries (2017)
[4] Liverpool City Council (2017)

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3.2 Trees to be retained

3.2.1 The supplied plans show that Tree 22 and Trees A-G (which are located on the neighbouring properties) are to be retained.

3.2.2 The supplied plans show stepping stones are proposed within the Tree Protection Zone (TPZ) of Tree 22. Footings for stepping stones within TPZ should be determined by preliminary hand excavation (supervised by the Project Arborist) to enable the retention of roots (>25mmø) where deemed necessary by the Project Arborist. In excavated areas where roots (>25mmø) are present and are to be retained, the footing should be either thinned or the location of the stepping stones should be adjusted.

3.2.3 The supplied plans show no works are proposed within the TPZ areas of Trees A-G.

3.2.4 The location of the rainwater and onsite detention tanks (to be confirmed) should be positioned outside of the TPZ areas of Tree 22 and Trees A-G.

3.3 Replacement Planting

3.3.1 The supplied Landscape Plan shows replacement planting is proposed across the site offset the removal of the trees. Replacement planting should be supplied in accordance with *Australian Standard 2303 (2015) Tree Stock for Landscape Use.*

4.0 CONCLUSION

4.1 Twenty five (25) trees/groups of trees were assessed in preparation of this Report, and comprise a mix of Australian native and exotic species. An additional seven (7) trees are located outside of the site boundaries and have been addressed within this Report. Of the twenty five (25) trees assessed, twenty three (23) trees were determined of being of low Landscape Significance and two (2) trees of moderate Landscape Significance. No trees have been determined to be of high or very high Landscape Significance or have been allocated a Retention Value of *Priority for Retention*.

4.2 The supplied plans show the works include demolition of existing structures and pavements, construction of new residential units and car park, and associated works and landscaping.

4.3 The supplied plans show that Trees 1-21 and 23-25 are to be removed as part of the proposed development. In general, these trees are relatively small specimens which are of low quality.

4.4 The supplied plans show that Trees 22 and A-G can be retained a part of the proposed development. The proposed stepping stones within the TPZ of Tree 22 should be installed using tree sensitive methods as outlined in Section 3.2.2. The location of the rainwater and onsite detention tanks (to be confirmed) should be positioned outside of the TPZ areas of Tree 22 and Trees A-G. TPZ fencing consisting of 1.8m high wire mesh panels supported by concrete feet should be installed at the perimeter of the TPZ areas (within the site) to exclude the development works and prevent construction damage.

4.5 Replacement planting is proposed across the site offset the removal of the trees and should be supplied in accordance with *Australian Standard 2303 (2015) Tree Stock for Landscape Use.*

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5.0 LIMITATIONS & DISCLAIMER

TreeiQ takes care to obtain information from reliable sources. However, TreeiQ can neither guarantee nor be responsible for the accuracy of information provided by others. Plans, diagrams, graphs and photographs in this Arboricultural Report are visual aids only and are not necessarily to scale. This Report provides recommendations relating to tree management only. Advice should be sought from appropriately qualified consultants regarding design/construction/ecological/heritage etc issues.

This Report has been prepared for exclusive use by the client. This Report shall not be used by others or for any other reason outside its intended target or without the prior written consent of TreeiQ. Unauthorised alteration or separate use of any section of the Report invalidates the Report.

Many factors may contribute to tree failure and cannot always be predicted. TreeiQ takes care to accurately assess tree health and structural condition. However, a tree's internal structural condition may not always correlate to visible external indicators. There is no warranty or guarantee, expressed or implied that problems or deficiencies regarding the trees or site may not arise in the future. Information contained in this report covers only the trees assessed and reflects the condition of the trees at the time of inspection. Additional information regarding the methodology used in the preparation of this Report is attached as Appendix 1. A comprehensive tree risk assessment and management plan for the trees is beyond the scope of this Report.

Reference should be made to any relevant legislation including Tree Management Controls. All recommendations contained within this Report are subject to approval from the relevant Consent Authority.

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6.0 BIBLIOGRAPHY & REFERENCES

Barrell (1995), 'Pre-development Tree Assessments', in *Trees & Building Sites, Proceedings of an International Conference Held in the Interest of Developing a Scientific Basis for Managing Trees in Proximity to Buildings*, International Society of Arboriculture, Illinois, USA, pp. 132-142

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Simon, Dormer &Hartshorne (1973), *Lowson's Botany*, Bell & Hyman, London

Office of Environment and Heritage (2011), *BioNet Atlas of NSW Wildlife*.

Standards Australia (2009), *Protection of Trees on Development Sites AS-4970*

Standards Australia (2007), *Pruning of Amenity Trees AS-4373*

Standards Australia (2015), *Tree Stock for Landscape Use AS-2303*

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7.0 APPENDICES

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Appendix 1: Methodology

1.1 **Site Inspection**: This report was determined as a result of a comprehensive site during November 2017. The comments and recommendations in this report are based on findings from this site inspection.

1.2 **Visual Tree Assessment (VTA)**: The subject tree(s) was assessed using the Visual Tree Assessment criteria and notes as described in *The Body Language of Trees – A Handbook for Failure Analysis.*[5] The inspection was limited to a visual examination of the subject tree(s) from ground level only. No internal diagnostic testing was undertaken as part of this assessment. Trees outside the subject site were assessed from the property boundaries only.

1.3 **Tree Dimensions**: The dimensions of the subject tree(s) are approximate only.

1.4 **Tree Locations:** The location of the subject tree(s) was determined from the supplied plans.

1.5 **Trees & Development**: Tree Protection Zones, Tree Protection Measures and Sensitive Construction Methods for the subject tree were based on methods outlined in *Australian Standard 4970-2009 Protection of Trees on Development Sites*.

The *Tree Protection Zone* (TPZ) is described in AS-4970 as a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance, so that the tree remains viable.

The *Structural Root Zone* (SRZ) is described in AS-4970 as the area around the base of a tree required for the tree's stability in the ground. Severance of structural roots within the SRZ is not recommended as it may lead to the destabilisation and/or demise of the tree.

In some cases it may be possible to encroach into or make variations to the theoretical TPZ. A *Minor Encroachment* is less than 10% of the area of the TPZ and is outside the SRZ. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ. A *Major Encroachment* is greater than 10% of the TPZ or inside the SRZ. In this situation the Project Arborist must demonstrate that the tree would remain viable. This may require root investigation by non-destructive methods or the use of sensitive construction methods.

1.6 **Tree Health**: The health of the subject tree(s) was determined by assessing:

I. Foliage size and colour
II. Pest and disease infestation
III. Extension growth
IV. Crown density
V. Deadwood size and volume
VI. Presence of epicormic growth

1.7 **Tree Structural Condition**: The structural condition of the subject tree(s) was assessed by:

I. Assessment of branching structure
(i.e co-dominant/bark inclusions, crossing branches, branch taper, terminal loading, previous branch failures)
II. Visible evidence of structural defects or instability
(i.e root plate movement, wounds, decay, cavities, fungal brackets, adaptive growth)
III. Evidence of previous pruning or physical damage
(root severance/damage, lopping, flush-cutting, lions tailing, mechanical damage)

1.8 **Useful Life Expectancy (ULE)**: The ULE is an estimate of the longevity of the subject tree(s) in its growing environment. The ULE is modified where necessary to take in consideration tree(s) health, structural condition and site suitability. The tree(s) has been allocated one of the following ULE categories (Modified from Barrell, 2001):

I. 40 years +
II. 15-40 years
III. 5-15 years
IV. Less than 5 years

[5] Mattheck & Breloer (2003)

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1.9 **Landscape Significance**: Landscape Significance was determined by assessing the combination of the cultural, environmental and aesthetic values of the subject tree(s). Whilst these values are subjective, a rating of high, moderate, low or insignificant has been allocated to the tree(s). This provides a relative value of the tree's Landscape Significance which may aid in determining its Retention Value. If the tree(s) can be categorized into more than one value, the higher value has been allocated.

Landscape Significance	Description
Very High	The subject tree is listed as a Heritage Item under the *Local Environmental Plan* with a local or state level of significance.
	The subject tree is listed on Council's Significant Tree Register or is considered to meet the criteria for significance assessment of trees and/or landscapes by a suitably qualified professional. The criteria are based on general principles outlines in the Burra Charter and on criteria from the Register of the National Estate.
	The subject tree is a remnant tree.
High	The subject tree creates a 'sense of place' or is considered 'landmark' tree.
	The subject tree is of local, cultural or historical importance or is widely known.
	The subject tree has been identified by a suitably qualified professional as a species scheduled as a Threatened or Vulnerable Species or forms part of an Endangered Ecological Community associated with the subject site, as defined under the provisions of the *Threatened Species Conservation Act* 1995 (NSW) or the *Environmental Protection and Biodiversity Conservation Act* 1999.
	The subject tree is known to provide habitat to a threatened species.
	The subject tree is an excellent representative of the species in terms of aesthetic value.
	The subject tree is of significant size, scale or makes a significant contribution to the canopy cover of the locality.
	The subject tree forms part of the curtilage of a heritage item with a known or documented association with that item.
Moderate	The subject tree makes a positive contribution to the visual character or amenity of the area.
	The subject tree provides a specific function such as screening or minimising the scale of a building.
	The subject tree has a known habitat value.
	The subject tree is a good representative of the species in terms of aesthetic value.
Low	The subject tree is an environmental pest species or is exempt under the provisions of the local Council's Tree Management Controls
	The subject tree makes little or no contribution to the amenity of the locality.
	The subject tree is a poor representative of the species in terms of aesthetic value.
Insignificant	The subject tree is declared a Noxious Weed under the Noxious Weeds Act

1.10 **Retention Value**: Retention Value was based on the subject tree's Useful Life Expectancy and Landscape Significance. The Retention Value was modified where necessary to take in consideration the subject tree's health, structural condition and site suitability. The subject tree(s) has been allocated one of the following Retention Values:

I. Priority for Retention
II. Consider for Retention
III. Consider for Removal
IV. Priority for Removal

ULE		Landscape Significance			
	Very High	High	Moderate	Low	Insignificant
40 years +	Priority for Retention	Priority for Retention		Consider for Removal	Priority for Removal
15-40 years		Priority for Retention	Consider for Retention		
5-15 years		Consider for Retention			
Less than 5 years	Consider for Removal	Priority for Removal			

The above table has been modified from the Footprint Green Tree Significance and Retention Value Matrix.

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Appendix 2: Plans

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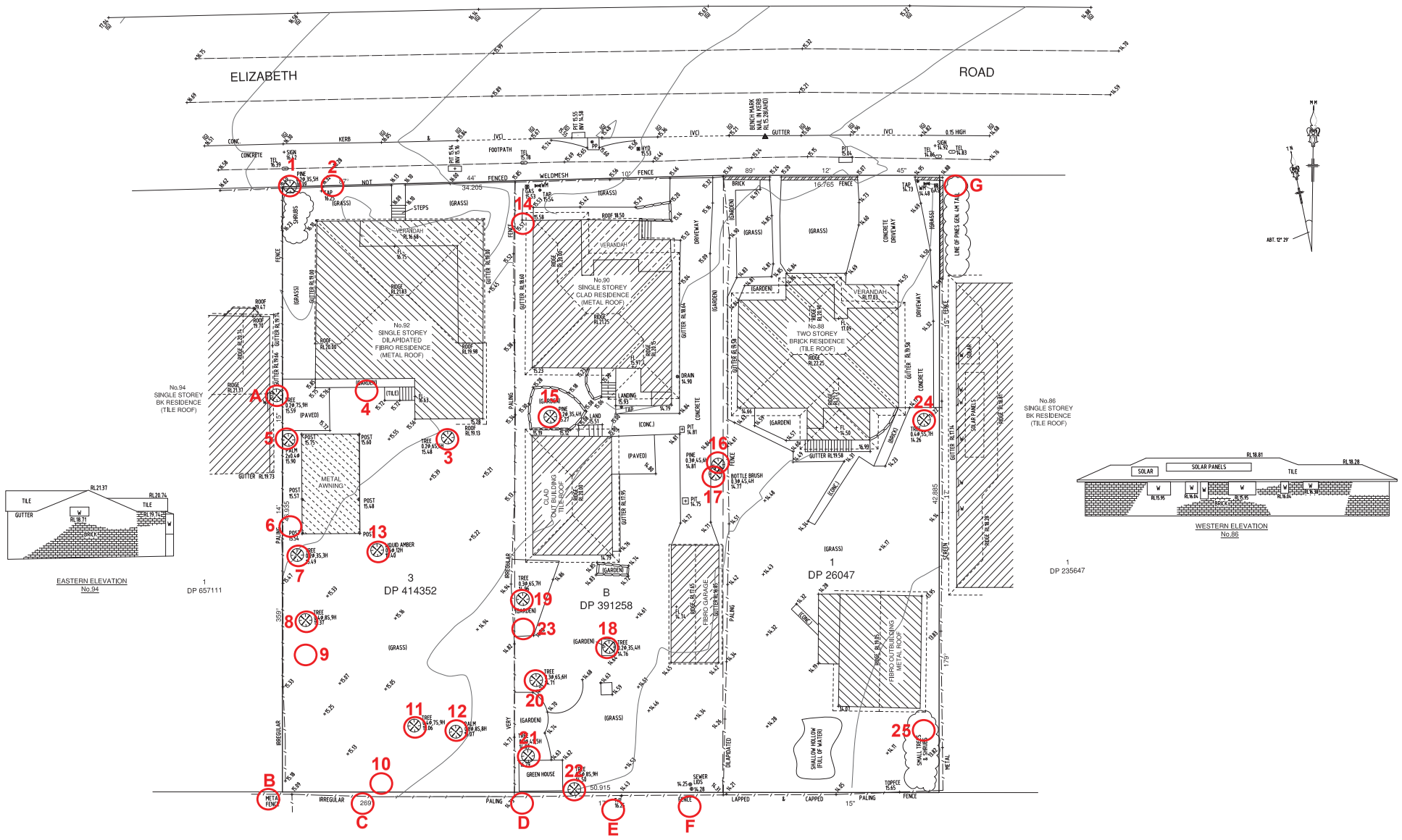

NOTES:

1) TITLE BEARINGS AND DIMENSIONS ARE SHOWN.
BOUNDARY REDEFINITION HAS NOT BEEN UNDERTAKEN.

2) ORIGIN OF LEVELS: PM52184 R.L13.278 (A.H.D.) SCIMS

3) SITE COMPRISES LOT 1 DP 26047, LOT B DP 391258 & LOT 3 DP 414352

4) SITE AREA 2422.1m² BY TITLE DIMENSIONS.

5) UNDERGROUND SERVICES HAVE NOT BEEN INVESTIGATED.

6) (G) DENOTES GUTTER LEVEL.
0.3⊕10S,8H DENOTES INDICATIVE TREE SIZE 0.3 TRUNK DIAMETER, 10 SPREAD, 8 HIGH.

7) TREE NAMES SHOWN CONSTITUTE OUR OPINION ONLY. IF TREE SPECIES IDENTIFICATION IS IMPORTANT FOR DESIGN OR HERITAGE REASONS THEY SHOULD BE DETERMINED BY A QUALIFIED ARBORIST.

ISSUE	DATE	AMENDMENT

TITLE: PLAN SHOWING SELECTED DETAIL & LEVELS OVER No.88-92 ELIZABETH ROAD, LIVERPOOL

LGA:	LIVERPOOL	REFERENCE:	24485
CLIENT:	SGCH	DATE: 24-3-17	SHEET 1
SCALE (AT A1) 1:150	DATUM: AHD	SURVEYOR: AW	

Norton Survey Partners
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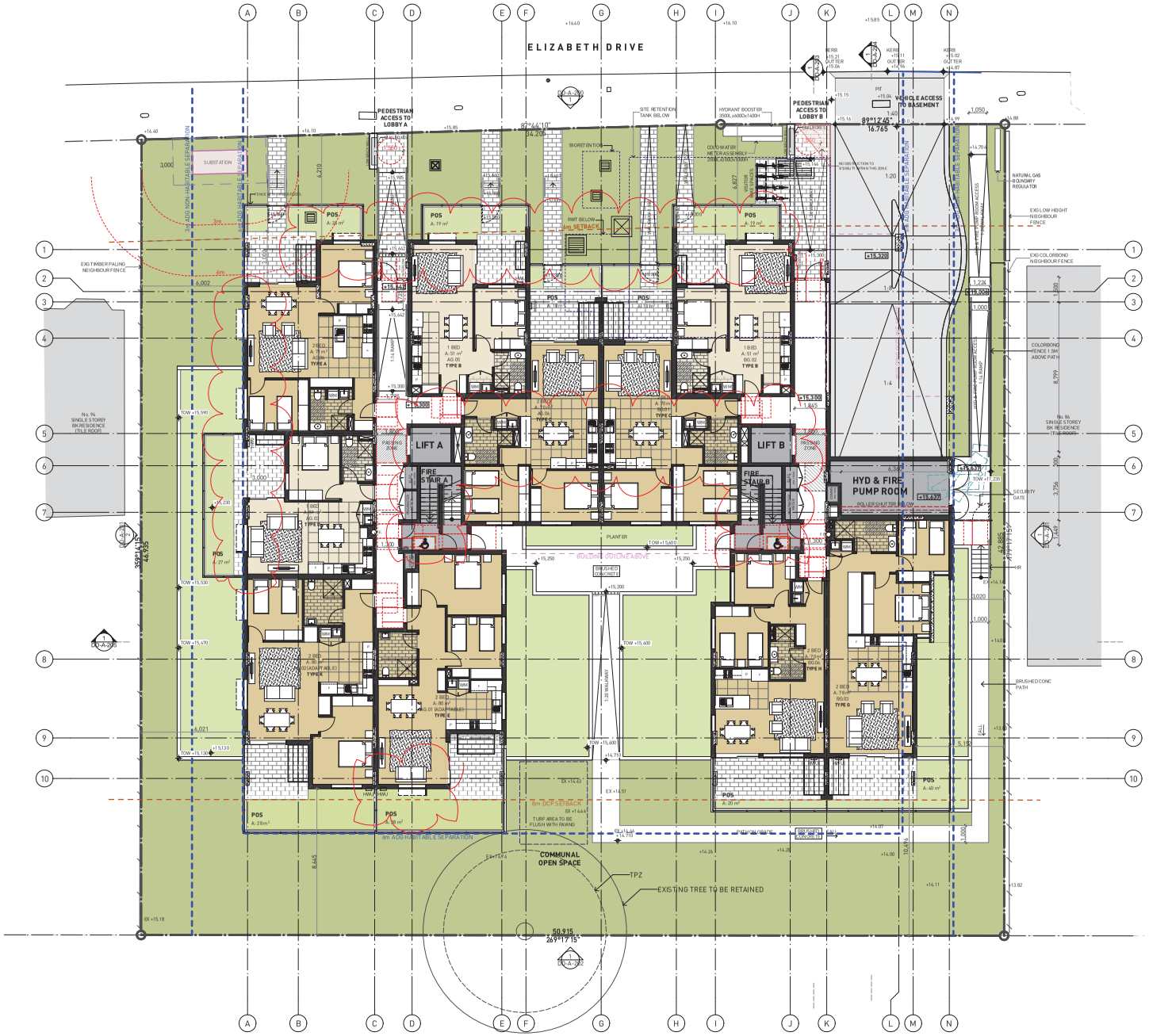

LEVEL 0
1:250

0

10m - 1:200
5.0m - 1:100
2.5m - 1:50
1.25m - 1:25

FOR DA

REV - 18-01-2018

LEVEL 0 (GROUND)

DEVELOPMENT APPLICATION

SGCH ELIZABETH DRIVE

ST GEORGE COMMUNITY HOUSING LTD

17_043 DA-A-101

ARCHITECTURE URBAN PLANNING
M1/147 McEvoy Street Alexandria NSW 2015
P 02 9516 2022 **E** email@smithtzannes.com.au
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Nominated Architect: Peter Smith (Reg 7024)

SMITH & TZANNES

REVISION HISTORY

REVISION	DESCRIPTION	DATE APPROVED
A	GATEWAY 2.2	12/10/17
B	GATEWAY 2.2	02/11/17
C	GATEWAY 2.2	09/11/17
D	GATEWAY 2.3	05/12/17
E	GATEWAY 2.3	06/12/17
F	GATEWAY 2.3	08/12/17
G	DA ISSUE	22/01/18

CLIENT

St George Community Housing Ltd.

PROJECT

88-92 Elizabeth Drive, Liverpool, NSW

DRAWING TITLE

LANDSCAPE PLAN- LEVEL 0

Sheet 1 of 1

SCALE

1:100 @ A1

DRAWN	CHECKED	PLOT DATE
SM	SM	20/01/18
PROJECT No.	**DRAWING No.**	**REVISION**
17_009	LC01	G

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Appendix 3: Tree Assessment Schedule

Tree No.	Species	DBH (mm)	Height (m)	Radial Crown Spread (m)	Health Rating	Structural Rating	Comments	ULE (years)	L/Significance	Retention Value	Radial TPZ (m)	Radial SRZ (m)	Implication
1	*Cupressus* sp. (Cypress)	100x7	4	2	Good	Good	Branch inclusion/s, minor.	5-15	Low	Consider for Removal	3	1.9	Remove.
2	*Plumeria acutifolia* (Frangipani)	100x4	2	2	Good	Good		15-40	Low	Consider for Removal	2.4	1.7	Remove.
3	*Lagerstroemia indica* (Crepe Myrtle)	100x8	5	3	Good	Good		15-40	Low	Consider for Removal	3.6	2	Remove.
4	*Magnolia xsoulangiana* (Saucer Magnolia)	75x2	3	2	Good	Good	Star picket abrading branch.	15-40	Low	Consider for Removal	2	1.5	Remove.
5	*Archcontophoenix cunninghamii* (Bangalow Palm)	300	9	2	Good	Good	Group of 2. Trunk of W tree pushing over fence and limited clearance from neighbouring dwelling.	15-40	Low	Consider for Removal	3.6	2	Remove.
6	*Schefflera actinophylla* (Umbrella Tree)	250 @grade	3	1	Good	Good	Branch inclusion/s, minor.	5-15	Low	Consider for Removal	3	1.9	Remove.
7	*Psidium guajava* (Common Guava)	100 50x3	3	2	Good	Good		15-40	Low	Consider for Removal	2	1.5	Remove.
8	*Melaleuca bracteata* (Black Teatree)	300	7	4	Good	Good	Crown density 75-100%. Small (<25mm) & medium (25-75mm) diameter deadwood in moderate volumes.	5-15	Low	Consider for Removal	3.6	2	Remove.

Tree No.	Species	DBH (mm)	Height (m)	Radial Crown Spread (m)	Health Rating	Structural Rating	Comments	ULE (years)	L/Significance	Retention Value	Radial TPZ (m)	Radial SRZ (m)	Implication
9	*Macadamia integrifolia* (Macadamia)	50x3	3	2	Good	Good		15-40	Low	Consider for Removal	2	1.5	Remove.
10	*Leptospermum petersonii* (Lemon Scented Teatree)	100x2 75x2	3	2	Good	Good	Crown density 75-100%. Small (<25mm) diameter deadwood in moderate volumes.	5-15	Low	Consider for Removal	2.4	1.7	Remove.
11	*Sapium sebiferum* (Chinese Tallowwood)	300	7	4	Fair	Good	Small (<25mm) & medium (25-75mm) diameter deadwood in moderate volumes. Crown density 75-100%. Previous branch failure/s.	5-15	Low	Consider for Removal	3.6	2	Remove.
12	*Phoenix canariensis* (Date Palm)	850	6	3	Good	Good		15-40	Low	Consider for Removal	4	n/a	Remove.
13	*Quercus palustris* (Pin Oak)	500	12	4	Good	Good	Small (<25mm) & medium (25-75mm) diameter deadwood in low volumes.	15-40	Moderate	Consider for Retention	6	2.5	Remove.
14	*Camellia sasanqua* (Sasanqua Camellia)	50x 5	3	1	Good	Good		5-15	Low	Consider for Removal	2	1.5	Remove.
15	*Cupressus* sp. (Cypress)	100 50x2	3	1	Good	Good		5-15	Low	Consider for Removal	2	1.5	Remove.
16	*Cupressus* sp. (Cypress)	250	6	1	Good	Good	Branch inclusion/s, minor. Extensively crown lifted. Poor form. Wound/s, no visible signs of decay.	5-15	Low	Consider for Removal	3	1.9	Remove.
17	*Callistemon citrinus* (Lemon Scented Bottle Brush)	100x2 75x3	3	2	Good	Good		5-15	Low	Consider for Removal	2.4	1.7	Remove.

Tree No.	Species	DBH (mm)	Height (m)	Radial Crown Spread (m)	Health Rating	Structural Rating	Comments	ULE (years)	L/Significance	Retention Value	Radial TPZ (m)	Radial SRZ (m)	Implication
18	*Camellia sasanqua* (Sasanqua Camellia)	50x8	3	1	Fair	Good	Crown density 75-100%.	5-15	Low	Consider for Removal	2	1.5	Remove.
19	*Photinia glabra* (Photinia)	200 150x3 100x2	6	3	Fair	Good	Crown density 75-100%. Small (<25mm) diameter deadwood in low volumes.	5-15	Low	Consider for Removal	3.6	2	Remove.
20	*Leptospermum petersonii* (Lemon Scented Teatree)	150x2 50x5	4	3	Good	Good		5-15	Low	Consider for Removal	2.4	1.7	Remove.
21	*Photinia glabra* (Photinia)	100x7	5	4	Fair	Good	Crown density 75-100%. Small (<25mm) diameter deadwood in low volumes.	5-15	Low	Consider for Removal	3	1.9	Remove.
22	*Melaleuca bracteata* (Black Teatree)	400	7	6	Good	Good	Branch inclusion/s, minor. Medium (25-75mm) diameter deadwood. in low volumes.	15-40	Moderate	Consider for Retention	4.8	2.3	Retain. No works within TPZ.
23	*Camellia sasanqua* (Sasanqua Camellia)	25x6	4	1	Good	Good		15-40	Low	Consider for Removal	2	1.5	Remove.
24	*Lagerstroemia indica* (Crepe Myrtle)	100x7 75x2	6	3	Good	Good	Lopped at 1.5m, crown consists of mature epicormic growth.	15-40	Low	Consider for Removal	3.6	2	Remove.
25	*Prunus* sp. (Ornamental Cherry cvs)	100x3 50x5	5	2	Fair	Fair	Crown density 75-100%. Borer.	5-15	Low	Consider for Removal	2.4	1.7	Remove.
A	*Ligustrum lucidum* (Large Leaved Privet)	200									2.4	1.7	Retain. No works within TPZ.

Tree No.	Species	DBH (mm)	Height (m)	Radial Crown Spread (m)	Health Rating	Structural Rating	Comments	ULE (years)	L/Significance	Retention Value	Radial TPZ (m)	Radial SRZ (m)	Implication
B	*Melaleuca bracteata* (Black Teatree)	100x4									2.4	1.7	Retain. No works within TPZ.
C	*Callistemon viminalis* (Weeping Bottlebrush)	100x4									2.4	1.7	Retain. No works within TPZ.
D	*Melaleuca bracteata* (Black Teatree)	300									3.6	2	Retain. No works within TPZ.
E	*Callistemon salignus* (Willow-leaved Bottlebrush)	300									3.6	2	Retain. No works within TPZ.
F	*Melaleuca bracteata* (Black Teatree)	400									4.8	2.3	Retain. No works within TPZ.
G	*Lagerstroemia indica* (Crepe Myrtle)	250									3	1.9	Retain. No works within TPZ.

Appendix 4: Plates

Plate 1: Showing Tree 1 (background) and Tree 2 (foreground)

Plate 2: Showing Tree 11 (right) and Tree 12 (left)

Plate 3: Showing Tree 19 (right) and Tree 23 (left)

Plate 4: Showing Trees B and C, located outside the site boundary