TREE WISE MEN®
AUSTRALIA PTY LTD

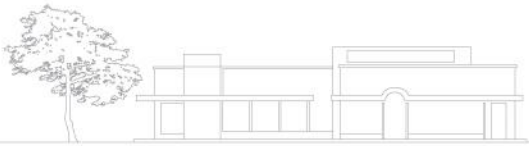
Arboricultural Impact Assessment
For
Project Application for Block 6 and 7 Central Park
Commercial and Retail Adaptive Reuse
At
Kensington Street
Chippendale NSW

Prepared for:

Frasers Broadway Pty Ltd
Level 12, Suite 11, 101 Bathurst St
SYDNEY NSW 2000

Ref: 2230AIA

December 2012



ARBORICULTURAL CONSULTANCY
ACN 002 982 247 ABN 15 002 982 247
84 Fuller Street, Collaroy Plateau NSW 2097
Phone +61 2 9981 5219 Fax +61 2 9971 0881
treewise@treewisemen.com.au
www.treewisemen.com.au

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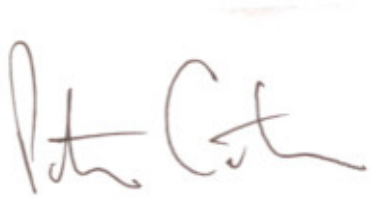
The Client acknowledges that this Report, and any opinions, advice or recommendations expressed or given in it, are based on the information supplied by the Client and on the data, inspections, measurements and analysis carried out or obtained by Tree Wise Men® Australia Pty Ltd (TWM) and referred to in the Report. No guarantee is implied with respect to future tree safety. The Client should rely on the Report and on its contents, only to that extent.



Peter Castor
Director

BSc (For.)
Member: IACA, AA, PIA, LGTRA, MAE (UK)
10 December 2012

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1. EXECUTIVE SUMMARY

1.1 IMPACT ON EXISTING TREES

1.1.1 This Arboricultural Impact Assessment (AIA) was prepared for the Project Application for Blocks 6 & 7 Central Park, Chippendale. An assessment has been made of the existing trees within the properties defined by Blocks 6 and 7 Central Park between Dwyer Street and Outram Street, Chippendale.

1.1.2 All nine (9) existing trees are to be removed to accommodate the proposed development. Demolition of No. 14 Kensington Street will impact on Trees 1, 2 and 3 necessitating their removal. The regrading and decontamination works surrounding the remaining trees will necessitate their removal.

1.1.3 Each of the nine (9) assessed trees was rated as ©Retention Value C (*Could be retained – Should not constrain proposed development)* given the Short SULE and Moderate to Low landscape ©Significance.

1.1.4 Six (6) of the nine (9) tree were Exempt under the City of Sydney Tree Preservation Order 2004.

1.1.5 No significant impact is likely on landscape character as all trees except Tree 4, were located in the rear yards and not visible from Kensington Street. The new buildings adjoining to the east of Block 6 and 7 are yet to be occupied.

1.1.6 The proposed landscaping will significantly improve the landscape quality of the locality. The Softworks drawing, Page 12 of the Public Domain report indicates the five (5) new trees proposed. These proposed trees will have Medium to Long SULE ratings. All five (5) of the proposed trees will be visible from Kensington Street providing an improved streetscape.

2. BACKGROUND

2.1 INTRODUCTION

2.1.1 This Arboricultural Impact Assessment (AIA) was prepared for Frasers Broadway Pty Ltd in relation to proposed Block 6 and 7 Central Park: Commercial and Retail Adaptive Reuse at Kensington Street Chippendale (the subject site).

2.1.2 The purpose of this AIA is to describe and categorise the existing trees on and adjacent to the subject site and to assess the impact of the proposed development on these trees. This AIA will form part of the Project Application.

2.1.3 Australian Standard *AS4970-2009 Protection of trees on development sites* has been used as a benchmark in the preparation of this report.

2.2 THE SUBJECT SITE

2.2.1 The subject site is located on the eastern side of Kensington Street, between Dwyer and Outram Streets, Chippendale as indicated in Detail Survey prepared by Degotardi, Smith & Partners Ref: 31420A10.DWG, Rev. D dated 11.08.11. The Block 10 building at Lot 6 DP 33953 at the corner of Outram Street and Kensington Street is excluded from the subject site (Photo A).

2.2.2 The subject site currently contains a variety of dilapidated, heritage residential and commercial buildings. There is new development fronting Goold Street at near completion adjoining to the east. On the western side of Kensington Street, opposite the subject site are two proposed development sites, Blocks 3B, 3C and 10 and Block 3A, both part of the Central Park site

2.3 THE SUBJECT TREES

2.3.1 The general findings and data collected for each of the subject trees are contained in Tree Schedule (Attachment A). The trees are numbered and located on the Tree Protection Plan (Attachment D).

2.3.2 Trees assessed were those indicated on the Detail Survey prepared by Degotardi, Smith & Partners Ref: 31420A10.DWG, Rev. D dated 11.08.11. Additional unsurveyed trees (Trees 1, 2 and 3) (Photo B) were plotted on the Tree Protection Plan in approximate locations only.

2.3.3 The subject trees were assessed with reference to the City of Sydney Tree Preservation Order 2004 (the TPO)[2]. Trees which were Exempt species under the TPO were included if indicated on the Detail Survey. The *Comments* column of the Tree Schedule identifies TPO Exempt species.

[2] The City of Sydney Tree Preservation Order 2004 applies to any tree, with a height equal to or exceeding five (5) metres, and having a single trunk circumference of greater than 300mm (measured 1 metre above ground) or 100mm for multi-trunk species. Exempt Activities are listed at Section 4. Exempt tree species are listed at 4(h).

2.3.4 The existing trees were generally of Poor condition with Short (5-15 years) Safe Useful Life Expectancies (SULE) as a result of the harsh, constrained growing conditions and general lack of grounds maintenance in recent years. All trees were rated with ©Retention Value of C *Should not constrain proposed development* as per Definition of Terms (Attachment C).

2.3.5 Native understorey was absent due to the existing development and landuse. The formal plantings, terraces and lawns which replaced original natural vegetation on the site, were also high disturbed and neglected.

2.3.6 Tree 4 is visible from the Kensington Street carriageway (Photo C). The other assessed trees were disguised from view by the existing buildings on the site.

2.4 THE PROPOSAL

2.4.1 The proposed development is as described in the architectural drawings *For Planning Approval*, dated November, 2012 prepared by Tonkin Zulaikha Greer Architects and Public Domain report dated November, 2012 prepared by Jeppe Aagaard Andersen + Turf Design Studio. Structures at #14 Kensington Street and #42-44 Kensington Street are to be demolished. Recent, mid to late 20th century "add-ons" at the rear of the other properties within the subject site are also to be demolished. We understand that soil remediation works are required to remove soil contaminants from the site. The soil remediation works and regrading for new structures will necessitate the removal of the existing trees.

3. METHODOLOGY

3.1 DATA COLLECTION

3.1.1 In preparation of this Report a ground level, visual tree assessment (VTA)[3] was undertaken on 28th November, 2012. No aerial (climbing) inspections, woody tissue testing or tree root mapping were undertaken as part of this assessment.

3.1.2 Attachment C provides definition of terms used in this Report. Tree heights were estimated based upon my in-field experience. Trunk diameter at breast height (DBH) was measured at 1.4 metres above ground level (unless otherwise stated) and rounded to the nearest 0.1 metre. Structural Root Zones (SRZ) and Tree Protection Zones (TPZ) were rounded to the nearest 0.5 metre.

3.1.3 All tree offsets mentioned in this Report are to centre of trunk unless otherwise stated.

3.2 IDENTIFICATION OF SUBJECT TREES

3.2.1 The subject trees were numbered and labelled on site with white plastic tags as per the Tree Schedule (Attachment A) and Tree Protection Plan (Attachment D).

3.3 DOCUMENTS AND PLANS REFERENCED

3.3.1 The conclusions and recommendations in this Report are based on the *AS4970-2009 Protection of trees on development sites*, the findings from the site inspections, discussions with the client, and analysis of the following Plans and documents:

- Detail Survey, Drawing No. 31420A10.DWG, Rev. D dated 11.08.11 prepared by Degotardi, Smith & Partners
- Set of Planning Approval Architecturals dated November 2012, prepared by Tonkin Zulaikha Greer Architects and
- Public Domain report dated November 2012 prepared by Jeppe Aagaard Andersen + Turf Design Studio.

3.4 AUSTRALIAN STANDARD AS4970-2009

3.4.1 The Australian Standard *AS4970–2009 Protection of trees on development sites* has been used as a benchmark in the preparation of this report and the terminology and impact assessment methodology have been adopted from this document. This AIA complies with *2.3.5 Arboricultural Impact Assessment* of AS4970-2009.

3.4.2 Recommendations have been based on tree ©Retention Value, Vigour, Condition, SULE and construction offsets (refer to Attachment C). Trees with ©Retention Value "A" should be given greater priority for retention than trees with ©Retention Value "B" or "C". Trees with Long (40 years +) SULE should be given greater priority for retention than trees with Short (5-15 years) SULE (refer to Attachment C).

[3] VTA – Visual Tree Assessment, undertaken by tree professionals, is a recognised (International Society of Arboriculture, Journal of Arboriculture, Vol. 22 No. 6, Nov. 1996) systematic method of identifying tree characteristics and hazard potential. VTA is also an assessment method described by Claus Mattheck in *The Body Language of Trees – A handbook for failure analysis*. The Stationary Office, London (1994)

3.4.3 Tree Protection Zone (TPZ) and Structural Root Zone (SRZ) are as per *Section 3* of AS 4970-2009 and are defined at Attachment C of this report.

3.4.4 "Construction" for the purpose of this AIA means excavation (greater than 100mm), compacted fill or machine trenching[4]. "Excavation" includes cut batters, boxing–out for the various pavement types, trenching for utilities and footings for retaining walls.

3.4.5 Trees within proposed construction footprints are recommended for removal (**Rm**).

3.4.6 Where construction is proposed within Structural Root Zone (SRZ) offsets, those trees have been similarly recommended for removal (**Rm**). Fully elevated, pier and beam type construction or hand dug services trenches (or horizontal boring) is however possible within a SRZ.

3.4.7 Trees with greater than 25% of the Tree Protection Zone (TPZ) impacted by construction are recommended for removal (**Rm**). There are however different types of construction incursions proposed (e.g. fill, cut, services, pavement type, retaining walls) with varying tree impacts likely. Existing constraints to root development also vary the TPZ. Compacted fill can be equally as damaging to tree longevity: root development is restricted within heavily compacted soils.

3.4.8 Trees to be retained with construction impacting less than 25% of the TPZ area were rated as Retain Plus (**R+**). Specific construction monitoring will be required for the Retain (**R+**) trees (refer to Recommendations).

3.4.9 TPZ encroachments of >10% are defined (3.3.3 of AS4970) as '*major'*. This does not mean that the tree will be fatally injured, but that '*the project arborist must demonstrate that the tree(s) would remain viable'.* Refer to Section 4.2 of this report for explanation of tree retention recommendations.

3.4.10 Where construction is proposed beyond the TPZ, those trees are rated as Retain (**R**) with no specific tree protection design or tree protection monitoring required (refer to Attachment D).

[4] "Construction" is equivalent to "works" as defined at 1.4.9 of AS4970-2009.

4. SUMMARY

4.1 IMPACT ON EXISTING TREES

4.1.1 All nine (9) assessed trees need to be removed given the proposed demolition of all structures at No. 14 and No. 42-44 and the recent "add-ons" at the rear of the other Lots within Block 6 and 7. We understand (pers. comm. Frasers Broadway Pty Ltd representative) that soil remediation works are required where buildings are to be demolished. Regrading is proposed to achieve proposed FFLs and paving RLs within the Tree Protection Zones of the nine (9) trees.

4.1.2 Given all nine (9) trees were rated as ©Retention Value C, no significant impact is expected on existing landscape amenity.

4.1.3 The only tree visible from Kensington Street (Tree 4 a self-seeded, 12 metre tall Chinese Hackberry, *Celtis sinensis)* was growing 0.2 metre from the wall of No. 28 Kensington Street, a building proposed to be retained and refurbished (Photo D). This tree species is an Exempt species under the City of Sydney TPO.

4.1.4 There were two trees (T2 and T8) rated as having Moderate (3) Landscape ©Significance. Tree 2 (Port Jackson Fig, *Ficus rubiginosa)* was growing in a raised bed, 0.5m from the brick wall of No. 14 Kensington Street. The existing root spread will have been confined by the footing of this brick wall which is proposed to be demolished. Harsh crown pruning has been previously undertaken diminishing the amenity value of the tree.

4.1.5 Tree 8 (Jacaranda, *Jacaranda mimosifolia)* also rated as having Moderate (3) Landscape ©Significance was growing within a raised planter (existing RL of 18.57) and as a result will have compromised stability and be likely to be predisposed to windthrow (Photo E). The proposed paving RL17.81 will lead to a significant amount of excavation within the Structural Root Zone (SRZ) thus necessitating tree removal.

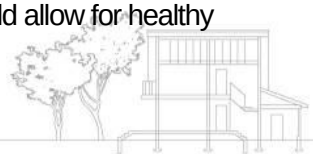
4.1.6 Six (6) of the nine (9) trees were Exempt under the City of Sydney (CoS) TPO. Trees 1, 3, 4 and 6 were listed as *Exempt Species* under *Clause 4(h)* and Tree 5 and 7 were exempt under *Clause 3(i)* being less that 5 metres in height.

4.2 THE LANDSCAPE PLAN

4.2.1 The proposed landscape is as detailed in the Public Domain report prepared by Jeppe Aagaard Andersen + Turf Design Studio. Five (5) feature trees are proposed in specific locations as indicated on the Precinct Masterplan drawing, Rev. A, Page 5. The fourth paragraph of *Character* under *Project Description, Key Strategies* states:

> "*Each of the courtyard spaces adopts a different character through different tree species. The courtyard between buildings #22 & #28 has a pergola planted with vines on the adjacent roof garden. The roof garden design consists of low maintenance ground covers and slow growing feature planting. The pattern reflecting the fragmented nature of the courtyards below."*

4.2.2 The proposed landscape will be a significant improvement on that existing on the site. Appropriate tree species will be selected at the next stage of the development documentation in accordance with the Landscape & Public Domain Plan. Tree pit design and soil volumes proposed for tree root development should allow for healthy long-term tree growth.



5. RECOMMENDATIONS FOR TREE MANAGEMENT

5.1 TREE REMOVAL

5.1.1 All tree removal works are to comply with the WorkCover NSW Amenity Tree Industry Code of Practice (currently under review) 1998.

5.1.2 Tree removal works should be undertaken by Arborists with minimum AQF Level 3 Arboricultural qualifications. Such Arborists will have the necessary competencies to dismantle trees safely and without damage to adjacent structures proposed to be retained. The structures to be retained should be identified to the contracting Arborist at the time of tender.

5.1.3 Appropriate approval from State and Local Government should be obtained prior to any tree removal.

5.2 TREE RETENTION

5.2.1 No trees are to be retained.

Attachment A: Tree Schedule

Tree Schedule - Blocks 6 & 7 Central Park Project: Kensington Street, Chippendale

TREE No.	COMMON NAME/ GENUS SPECIES	DBH (m)	HEIGHT (m)	CANOPY RADIUS (m)	AGE CLASS	VIGOUR	CONDITION	SRZ RADIUS (m)	TPZ RADIUS (m)	SULE	©SIG RATING	©RETENTION INDEX	RECOMMENDATION	COMMENTS
1	Umbrella Tree, *Schefflera actinophylla*	0.3	8	2	SM	F	P	2.0	3.6	S	4	C	Rm	*Remove for site remediation, regrading and for demolition of southern wall of No. 14 Kensington St. TPO Exempt species. Growing at base of retaining wall. Tree located rear, NE corner of No. 16 Kensington St.*
2	Port Jackson Fig, *Ficus rubiginosa*	0.3 (x3)	8	4	SM	G	F	2.7	6.2	S	3	C	Rm	*Remove for site remediation, regrading and for demolition of southern wall of No. 14 Kensington St. Growing 0.5m from northern brick wall of No. 14 Kensington St. Three trunks from grade. Located at rear of No. 16 Kensington St.*
3	Umbrella Tree, *Schefflera actinophylla*	0.1	6	1	IM	F	P	1.5	2.0	S	4	C	Rm	*Remove for site remediation, regrading and for demolition of southern wall of No. 14 Kensington St. TPO Exempt species. Growing 0.2m from northern brick wall of No. 14 Kensington St. Located at rear of No. 16 Kensington St..*
4	Chinese Hackberry, *Celtis sinensis*	0.4	12	5	SM	G	F	2.3	4.8	S	3	C	Rm	*Remove due to likely structural damage to walling at No. 28 and No. 30-32 Kensington St. TPO Exempt species. Growing 0.2m from wall of No. 28 Kensington St.*
5	Frangipani, *Plumeria acutifolia*	0.1, 0.1	3	2	SM	F	P	1.6	1.8	S	4	C	Rm	*Remove for site remediation and regrading. Trunk damage associated with adjacent construction work to E. Located at rear of No. 28 Kensington St. TPO Exempt given less than 5m tall.*
6	Loquat, *Eriobotrya japonica*	0.2	6	2	SM	G	F	1.7	2.4	S	4	C	Rm	*Remove for site remediation and regrading . TPO Exempt species. Root damage associated with adjacent construction work to E. Located at rear of No. 34 Kensington St.*
7	Kentia Palm, *Howea forsteriana*	0.1	4	2	SM	G	G	1.5	2.0	S	4	C	Rm	*Remove for site remediation and regrading. Located at rear of No. 38 Kensington St. TPO Exempt being less than 5m tall.*
8	Jacaranda, *Jacaranda mimosifolia*	0.3	12	6	M	G	F	2.0	3.6	S	3	C	Rm	*Remove for site remediation and regrading. Growing on raised planter at rear of No. 38 Kensington St. Roots confined.*
9	Cocos Palm, *Syagrus romanzoffianum*	0.3	13	3	M	G	F	2.0	3.6	S	3	C	Rm	*Remove for site remediation and regrading. Growing 0.3m from brick wall at rear of No. 38 Kensington St.*
9														

TREE No.	COMMON NAME/ GENUS SPECIES	DBH (m)	HEIGHT (m)	CANOPY RADIUS (m)	AGE CLASS	VIGOUR	CONDITION	SRZ RADIUS (m)	TPZ RADIUS (m)	SULE	©SIG RATING	©RETENTION INDEX	RECOMMENDATION	COMMENTS

©SIG. RATING	NO. OF TREES
1	0
2	0
3	4
4	5

©RETENTION INDEX	NO. OF TREES
A	0
B	0
C	9
D	0

RECOMMENDATION	NO. OF TREES
R	0
R+	0
T	0
Rm	9

COMMON NAME/GENUS SPECIES CULTIVAR - Common names can vary with selected texts. Where species is unknown, "*sp*." indicated after genus. Where cultivar is unknown "*cv*" indicated after species. The number in brackets e.g. (x9) after the species indicates the number of trees in this tree group.

DBH - Diameter at Breast Height. Tree trunk diameter measured at breast height (1.4 metres above ground level). Fabric diameter tape is used which assumes a circular cross section. Multiple measurements indicate multiple trunks. Where more than three trunks exist, DBH is indicated as the diameter "@ grade". Where DBH measurement cannot be taken at 1.4m, the height at which it has been taken, is indicated.

CANOPY RADIUS – Average canopy radius (widest + narrowest ÷ 2). Circular canopy depictions on Tree Plan/Survey are indicative only. Where canopy spread was significantly skewed, all four cardinal point measurements were recorded.

AGE CLASS - **Immature (IM), Semi-mature (SM), Mature (M), Over-mature (OM).** Assessment of the tree's current Age. A **Mature (M)** tree has reached a near stable size (biomass) above and below ground. Trees can have a Mature age class for >90% of life span. **Over-mature (OM)** trees show symptoms of irreversible decline and decreasing biomass.

VIGOUR - Good (G), Fair (F) or Poor (P). The general appearance of the canopy/foliage of the tree at the time of inspection. Vigour can vary with the season and rainfall frequency. A tree can have Good vigour but be hazardous due to Poor condition. A tree in Good vigour has the ability to sustain its life processes. Vigour is synonymous with health.

CONDITION - **Good (G), Fair (F) or Poor (P).** The general form and structure of the trunk/s and branching. Trunk lean, trunk/branch structural defects, canopy skewness or other hazard features are considered.

SRZ RADIUS - Structural Root Zone. The area around a tree required for tree stability. Earthworks should be prohibited within the SRZ. The SRZ is calculated from the formula and graph at Figure 1 of AS4970-2009. The SRZ graph has been adapted from the work of Claus Mattheck (1994). DBH + 10% has been used for the calculation of SRZ. Where DBH is measured at grade of at a height other than 1.4m above grade, 10% has not been added.

TPZ RADIUS – Tree Protection Zone. Radial offset (m) of twelve times (12X) trunk DBH measured from centre of trunk (for trees less than 0.2 metre DBH minimum TPZ is 2.0 metres). To satisfactorily retain the tree construction activity (both soil cut and fill) must be restricted within this offset. TPZ offsets are rounded to the nearest 0.1 metre. Existing constraints to root spread can vary TPZ. Generally an area equivalent to the TPZ should be available to the tree post development. Encroachment occupying up to 10% of the TPZ area is acceptable without detailed rootzone assessment. Encroachments greater than 10% require specific arboricultural assessment.

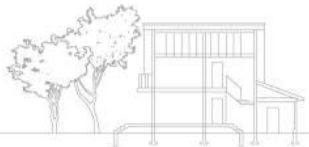
SULE - Safe Useful Life Expectancy. A systematic pre-development tree assessment procedure developed by Jeremy Barrell, Hampshire, England. The SULE method used in this assessment has been adapted for simplified use within the field. It gives a length of time that the Arborist feels a particular tree 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).

©SIG. RATING - ©Significance Rating Scale (see Appendix C)

©RETENTION INDEX (see Appendix C)

RECOMMENDATIONS - Retain ***(R)***, ***Retain Plus (R+)***, ***Transplant* (T)** or ***Remove (Rm)***.

COMMENTS - Comments relating to the location, surroundings and hazard potential of the trees at the time of inspection and where applicable the reason for removal.



Attachment B: Site Photographs

Photo A: Current streetscape looking north from corner of Kensington and Outram Streets. Brick building in the foreground is excluded from Blocks 6 and 7. Tree 4 Chinese Hackberry is visible adjacent to No. 28 Kensington St.

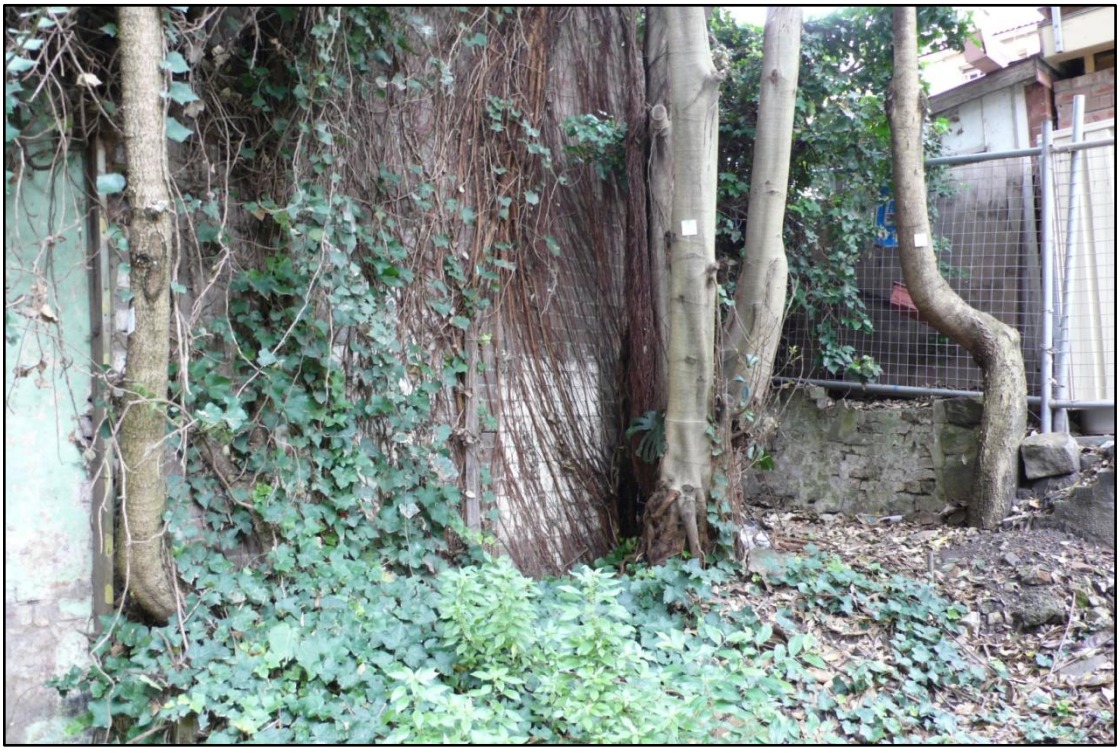


Photo B: Unsurveyed Trees 1, 2 and 3 in northeastern corner of No. 16 Kensington St. Regrading will necessitate tree removal.

Photo C: Tree 4 Chinese Hackberry, in narrow easement between No. 28 and No. 30-32 Kensington St. Given likely damage to building to be retained this tree is to be removed.

Photo D: Tree 4 adjacent wall of No. 28.

Photo E: Trees 7 and 8 at rear of No. 38 Kensington St showing location in raised planter. Proposed grading will necessitate tree removal.

Attachment C: Definition of Terms

COMMON NAME/GENUS SPECIES CULTIVAR – Common names can vary with selected texts. Where species is unknown, "*sp*." indicated after genus. Where cultivar is unknown "*cv*" indicated after species. The number in brackets e.g. (x9) after the species indicates the number of trees in this tree group.

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CANOPY SPREAD RADIUS – Average canopy radius (widest + narrowest ÷ 2). Circular canopy depictions on Tree Plan/Survey are indicative only. Where canopy spread was significantly skewed, all four cardinal point measurements were recorded.

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TPZ RADIUS – Tree Protection Zone. Radial offset (m) of twelve times (12X) trunk DBH measured from centre of trunk (for trees less than 0.3 metre DBH minimum TPZ is 2.0 metres). To satisfactorily retain the tree construction activity (both soil cut and fill) must be restricted within this offset. TPZ offsets are rounded to the nearest 0.1 metre. Existing constraints to root spread can vary TPZ. Generally an area equivalent to the TPZ should be available to the tree post development. Encroachment occupying up to 10% of the TPZ area is acceptable without detailed rootzone assessment. Encroachments greater than 10% require specific arboricultural assessment.

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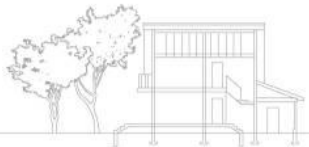
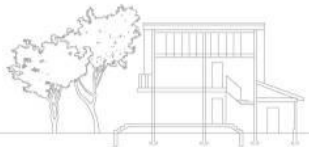


©SIG. RATING – ©Significance Rating Scale. A site specific qualitative evaluation of a tree relative to the existing landuse developed by Tree Wise Men® Australia Pty Ltd. Takes into consideration the impact of the tree on the surrounding landscape, streetscape and bushland. Rarity, habitat value, historical/cultural value and structural form of the tree are considered in this rating system. It is possible for a tree to have a Short SULE and a ©Significance Rating of 1. Likewise it is possible for a tree to be given a Long SULE and a ©Significance Rating of 4 (e.g. weed species). The ©Significance Ratings used in this Report are as outlined in Table 1.

Table 1: ©Significance Rating Characteristics

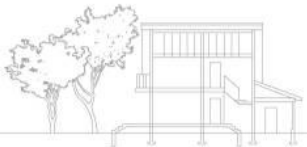
Rating	Significance	Characteristics (some or all)
©Sig. Rating 1	**Exceptional**	▪ Major contribution to site amenity ▪ Remnant specimen ▪ Heritage Listed ▪ Listed on Significant Tree Register ▪ Threatened Species ▪ Good vigour and condition ▪ Cultural significance ▪ Possible habitat for threatened fauna ▪ Excellent, well formed specimen ▪ Rare or unusual species ▪ Large above ground biomass ▪ Unique within the site and surrounds
©Sig. Rating 2	**High**	▪ Considerable contribution to site amenity ▪ Remnant specimen ▪ Good vigour and condition ▪ Threatened Species ▪ Cultural significance ▪ Possible habitat tree for threatened fauna ▪ Well formed specimen ▪ Rare or unusual species ▪ Large or moderate above ground biomass ▪ Other specimens with similar characteristics within the site and surrounds
©Sig. Rating 3	**Moderate**	▪ Minor contribution to site amenity ▪ Remnant or planted ▪ Fair or Poor vigour and condition ▪ Potential for growth ▪ Well formed or asymmetrical form ▪ Other specimens with similar characteristics within the site and surrounds
©Sig. Rating 4	**Low**	▪ Small/poor specimen ▪ Poor vigour and condition ▪ Inappropriate for the location ▪ Minor contribution to landscape amenity ▪ Easily replaced ▪ Weed species or TPO Exempt ▪ Hazardous ▪ Previously ©Sig. Rating 5 tree



©RETENTION INDEX. A site specific assessment of an individual tree's retention value developed by Tree Wise Men® Australia Pty Ltd. Incorporating SULE and ©Significance Rating each tree is allocated a retention value of A, B, C or D. The ©Retention Index values can be described as follows:

©Retention Value A	**Should be retained**	▪ Major redesign may be required (e.g. movement of building footprint, re-alignment of roadway).
©Retention Value B	**Could be retained**	▪ Minor redesign may be required (e.g. level changes, pavement detail).
©Retention Value C	**Could be removed**	▪ Should not constrain proposed development.
©Retention Value D	**Should be removed or permanently fenced off (irrespective of development layout.)**	▪ Imminently dangerous. ▪ In an irreversible state of decline.

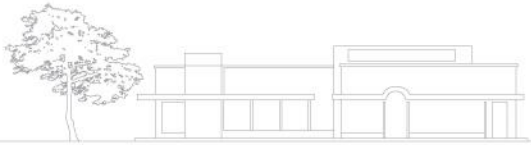
©Retention Index		**©Significance Rating**			
		1	**2**	**3**	**4**
SULE Rating	**Long (40+ years)**	**A**		**B**	**C**
	Medium (15-40 years)				
	Short (5-15 years)	**B**			
	Remove (< 5 years)	**D**			



Attachment D: Tree Protection Plan

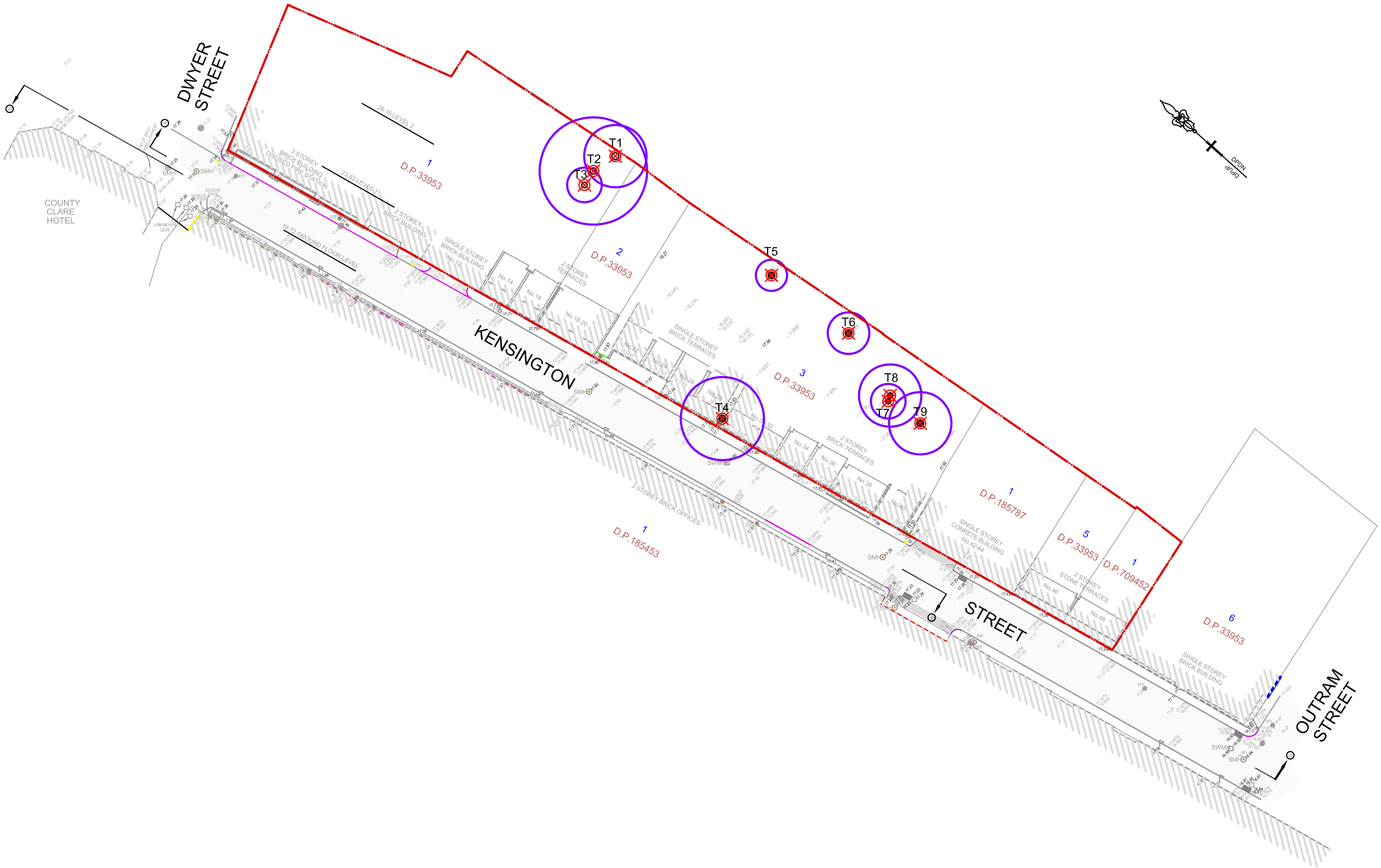
TREE WISE MEN®
AUSTRALIA PTY LTD

Attachment D: Tree Protection Plan



ARBORICULTURAL CONSULTANCY

ACN 002 982 247 ABN 15 002 982 247
84 Fuller Street, Collaroy Plateau NSW 2097
Phone +61 2 9981 5219 Fax +61 2 9971 0881
treewise@treewisemen.com.au
www.treewisemen.com.au



TREE WISE MEN®
AUSTRALIA PTY LTD
ARBORICULTURAL CONSULTANCY
84 Fuller Street, Collaroy Plateau NSW 2097
Phone +61 2 9981 5219 Fax +61 2 9971 0881
treewise@treewisemen.com.au
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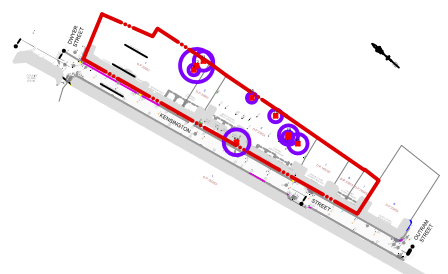
LEGEND	
Site boundary:	
Tree number with trunk as plotted on Site Survey:	T6 ●
Tree number with trunk not plotted on Site Survey (approximate location shown):	T2 ○
Trees requiring removal to facilitate development:	

©Retention Index:	
©Retention Value A TPZ:	
©Retention Value B TPZ:	
©Retention Value C TPZ:	
©Retention Value D TPZ:	



LOCATION PLAN

TITLE:	©TREE PROTECTION PLAN
CLIENT:	Frasers Broadway Pty Ltd
PROJECT:	CENTRAL PARK KENSINGTON STREET CHIPPENDALE
DRAWING NO:	2230TPP SHEET 1 OF 1
DRAWN BY:	MH
BASED ON:	Detail and Elevation Along Kensigton Street between Dwyer Street and Outram Street Chippendale.By Degotardi, Smith & Partners DWG No. 31420A10 Rev D, Dated 11/08/11
DATE:	05/12/2012
REV:	REV DATE:
SCALE:	1:500@A3

0 5 10 25
meters