

28 January 2019

Cameron Johnson
Sun Property Group Australia Pty Ltd
Suite 39.02, Level 39
100 Miller Street
NORTH SYDNEY NSW 2060

Dear Cameron,

RE: Addendum Letter to Arboricultural Impact Assessment (2517AIA) Reflecting Revised Plans: 307 Sydney Road & 12 Boyle Street, Balgowlah

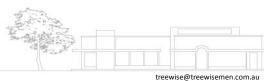
Ref: 2517AIARev

1. Background

- 1.1. This Addendum Letter to earlier Arboricultural Impact Assessment (Ref. 2517AIA dated March, 2018) by Tree Wise Men® Australia Pty Ltd has been prepared taking into account amended Plans.
- **1.2.** The amended Plans have been prepared in response to *Landscape Response* (*Northern Beaches Council*) dated 14.6.2018 to DA 2018/0355.
- **1.3.** Site Image is now the Project Landscape Architect.

2. The Proposed Development

- **2.1.** The proposal is for a Residential Apartment development at 307 Sydney Road and 12 Boyle Street, Balgowlah.
- **2.2.** There have been minor layout changes to the proposal however none of the changes will have an impact on the number of trees to be retained, removed or transplanted.
- 2.3. The Landscape Plan Ref SS18-4015, 101 Issue D, 501 Issue A and 502 Issue A prepared by Site Image dated 24.1.2019 for the new layout has been reviewed. This is attached at Attachment B of this Letter.
- **2.4.** It should be noted that the "tree" circles on the Landscape Plan are depictions of tree canopies from the Survey not Tree Protection Zones as they are indicated on the Tree Protection Plan prepared by Tree Wise Men® Australia Pty Ltd at Attachment E of the Arboricultural Impact Assessment (*Ref. 2517AIA* dated March, 2018).



3. Tree Impacts of Revised Proposal

- **3.1.** Of the twenty four (24) originally assessed trees, eleven (11) will be retained and two (2) will be transplanted (Trees 16 and 21).
- **3.2.** Tree 16 (Canary Island Date Palm, *Phoenix canariensis*) is to be transplanted off site and Tree 21 (Tree Aloe, *Aloidrendron barberae*) is to be transplanted on site within the Courtyard of proposed Unit 5.
- **3.3.** Tree 1 will require minor crown lifting (under pruning) to allow for construction and the proposed landscape.
- 3.4. Trees 5-11 located on adjoining property will require pruning to facilitate the proposed development.
- 3.5. An updated Tree Schedule has been included at Attachment A.

4. Conclusions and Recommendations

- **4.1.** The proposed redesign has minimal additional impact on the assessed trees with no more trees requiring removal than with the earlier layout.
- 4.2. Eleven (11) trees are to be retained and two (2) are to be transplanted; one on and one off site.
- **4.3.** The only ®Retention Value *A* tree (Tree 24) and five (5) of the eight (8) ®Retention Value *B* trees are to be retained thus reflecting a responsive development layout.
- **4.4.** A Transplant feasibility report followed by a site-specific Transplant Method Statement are to be prepared by a professional tree transplant company for the transplantation of the Canary Island Date Palm, *Phoenix canariensis* (Tree 16) and Tree Aloe, *Aloidrendron barberae* (Tree 21).
- **4.5.** Tree 1 will require minor crown lifting. Trees 5 11 on neighbouring property will require pruning to the boundary to allow for the new landscape plantings. The owner's consent should be sought for this pruning.
- **4.6.** The site security fencing is to include shade cloth to enhance screening during construction.
- **4.7.** All pruning works should be undertaken by AQF Level 3 Arborists to AS4373-2007 Pruning of amenity trees.

Kind Regards,

Peter Castor

DIRECTOR

BSc (For.)

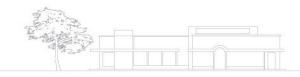
Member: IACA, AA, ISA, LGTRA, PIA, UDIA, MAE (UK)

Attachments:

A: Updated Tree Schedule

B: Site Image Landscape Plan Ref SS18-4015, 101 Issue D, 501 Issue A and 502 Issue A

Attachment A: Updated Tree Schedule



Updated AIA Tree Schedule - 307 Sydney Road & 12 Boyle St, Balgowlah

TREE No.	COMMON NAME/ GENUS SPECIES	DBH (m)	HEIGHT (m)	CANOPY RADIUS (m)	AGE CLASS	VIGOUR	CONDITION	SRZ RADIUS (m)	TPZ RADIUS (m)	ULE	©SIG RATING	©RETENTION INDEX	RECOMMENDATION	COMMENTS
1	Himalayan Cedar, Cedrus deodora	0.5	6	7	М	G	G	2.6	6.0	М	3	В	R+	Retain. Located within 1m of masonry wall to W and 2m to masonry Garage to N. Root restriction possible. Minor crown lifting required to allow for construction and proposed landscape.
2	Laurustinus, Viburnum tinus	0.3 @g	4	4	М	G	G	2.0	3.6	М	4	С	Rm	Remove. Building footprint within SRZ. MDCP Exempt (<5m tall)
3	Sasanqua Camellia, Camellia sasanqua	0.4 @g	4	3	М	G	G	2.3	4.8	М	4	С	Rm	Remove. Within building footprint. MDCP Exempt (<5m tall)
4	Sasanqua Camellia, Camellia sasanqua	0.3 @g	3	2	М	G	G	2.0	3.6	М	4	С	Rm	Remove. Building footprint within SRZ. MDCP Exempt (<5m tall)
5	Cripps' False Cypress, Chamaecyparis obtusa 'Crippsii'	0.3 @g	4	3	М	G	G	2.0	3.6	М	4	С	R+	Retain. Located at #305 Sydney Road. MDCP Exempt (<5m tall). Crown pruning will be required. 225mm S/W within TPZ.
6	Cripps' False Cypress, Chamaecyparis obtusa 'Crippsii'	0.3 @g	4	3	М	G	G	2.0	3.6	М	4	С	R+	Retain. Located at #305 Sydney Road. MDCP Exempt (<5m tall). Crown pruning will be required. 225mm S/W within TPZ.
7	Cripps' False Cypress, Chamaecyparis obtusa 'Crippsii'	0.3 @ g	4	3	М	G	G	2.0	3.6	М	4	С	R+	Retain. Located at #305 Sydney Road. Previously topped at 4m. MDCP Exempt (<5m tall). Crown pruning will be required. 225mm S/W within TPZ.
8	Cripps' False Cypress, Chamaecyparis obtusa 'Crippsii'	0.3 @ g	4	3	М	G	G	2.0	3.6	М	4	С	R+	Retain. Located at #305 Sydney Road. Previously topped at 4m. MDCP Exempt (<5m tall). Crown pruning will be required. 225mm S/W within TPZ.
9	Cripps' False Cypress, Chamaecyparis obtusa 'Crippsii'	0.3 @ g	5	3	М	G	G	2.0	3.6	М	4	С	R+	Retain. Located at #305 Sydney Road. Previously topped at 4m. Crown pruning required. 225mm S/W within TPZ.
10	Sasanqua Camellia, Camellia sasanqua	0.4 @g	4	3	М	G	G	2.3	4.8	M	4	С	R+	Retain. Located at #305 Sydney Road. Previously topped at 2m. MDCP Exempt (<5m tall). Crown pruning required. 225mm S/W within TPZ.

Updated AIA Tree Schedule - 307 Sydney Road & 12 Boyle St, Balgowlah

TREE No.	COMMON NAME/ GENUS SPECIES	DBH (m)	HEIGHT (m)	CANOPY RADIUS (m)	AGE CLASS	VIGOUR	CONDITION	SRZ RADIUS (m)	TPZ RADIUS (m)	ULE	©SIG RATING	©RETENTION INDEX	RECOMMENDATION	COMMENTS
11	Japanese Camellia, Camellia japonica	0.2 @ g	2	1	SM	F	G	1.7	2.4	М	4	С	R+	Retain. Located at #305 Sydney Road. MDCP Exempt (<5m tall). Crown pruning will be required. 225mm S/W within TPZ.
12	Monterey Cypress (cultivar), Cupressus macrocarpa 'cv.'	0.3	6	N2, S0, E3, W0	ОМ	F	Р	2.1	3.6	S	3	С	Rm	Remove. Building footprint within SRZ. Heavily lopped on W side.
13	Monterey Cypress (cultivar), Cupressus macrocarpa 'cv.'	0.3	7	N4, S0, E3, W0	ОМ	F	Р	2.1	3.6	S	3	С	Rm	Remove. Building footprint within SRZ. Heavily lopped on W side.
14	Monterey Cypress (cultivar), Cupressus macrocarpa 'cv.'	0.5 @ g	7	4	ОМ	F	F	2.5	6.0	S	3	С	Rm	Remove. Building footprint within SRZ. Heavily lopped on N side.
15	River Peppermint, Eucalyptus elata	0.8	11	N10, S0, E8, W3	М	F	F	3.1	9.6	S	3	С	Rm	Remove. Building footprint within SRZ. Bedrock at grade within TPZ.
16	Canary Island Date Palm, Phoenix canariensis	0.7	11	3	М	G	G	1.5	4.0	L	3	В	Т	Transplantable elsewhere off site. Building footprint within SRZ. Raised rootcrown (aerial roots) due to underlying bedrock.
17	Frangipani, Plumeria acutifolia	0.4 @g	4	N6, S5, E2, W6	М	G	F	2.3	4.8	L	3	В	R+	Retain. Not plotted correctly on Survey. Located at #14 Boyle Street. MDCP Exempt (<5m tall).
18	Bangalow Palm, Archontophoenix cunninghamiana	0.3	12	2	М	G	G	1.0	3.0	М	3	В	Rm	Remove. Building footprint within SRZ. Not on Survey.
19	Old Man Banksia, Banksia serrata	0.2	4	3	SM	G	F	1.8	2.4	М	4	С	Rm	Remove. Building footprint within SRZ. Not on Survey. MDCP Exempt (<5m tall).

Updated AIA Tree Schedule -307 Sydney Road & 12 Boyle St, Balgowlah

TREE No.	COMMON NAME/ GENUS SPECIES	DBH (m)	нЕІGНТ (m)	CANOPY RADIUS (m)	AGE CLASS	VIGOUR	CONDITION	SRZ RADIUS (m)	TPZ RADIUS (m)	ULE	©SIG RATING	©RETENTION INDEX	RECOMMENDATION	COMMENTS
20	Ponytail Palm, Beaucarnea recurvata	0.3	3	2	М	G	G	1.0	3.0	L	3	В	Rm	Remove. Building footprint within SRZ. Not on Survey. MDCP Exempt (<5m tall).
21	Tree Aloe, Aloidrendron barberae	0.3	4	2	М	G	G	2.1	3.6	L	3	В		Transplantable else where on site. Building footprint within SRZ. Not on Survey. Recently pruned on N side. MDCP Exempt (<5m tall).
22	Weeping Bottlebrush, Callistemon viminalis	0.1, 0.2	5	3	М	G	F	1.9	2.4	М	3	В	Rm	Remove. Building footprint within SRZ. Not on Survey.
23	Scarlet Bottlebrush, Callistemon citrinus	0.3 @ g	5	3	М	G	F	1.9	2.4	М	3	В	R+	Retain. Not on Survey. Located at #14 Boyle Street.
24	Australian Red Cedar, Toona ciliata	0.5	8	6	М	G	G	2.6	6.0	М	2	Α		Retain. Not on Survey. Street tree, Boyle Street. Surface roots in lawn. Proposed Driveway within TPZ.
24							ī							

Updated AIA Tree Schedule - 307 Sydney Road & 12 Boyle St, Balgowlah

Summary Data

©RETENTION INDEX	NO. OF TREES		
А	1		
В	8 15		
С			
D	0		
Total	24		

RECOMMENDATION	NO. OF TREES		
R	0		
R+	11		
Т	2		
Rm	11		
Total	24		

©RETENTION INDEX	RECOMMENDATION									
WRETENTION INDEX	R	R+	Т	Rm	NI					
А	0	1	0	0	0					
В	0	3	2	3	0					
С	0	7	0	8	0					
D	0	0	0	0	0					

Attachment: 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.

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 DBH measurement cannot be taken at 1.4m the height at which it has been taken is indicated.

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.

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 area 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 or 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 0.3 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. 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.

TPZ ENCROACHMENT – The cut or compacted fill encroachment within the nominal TPZ. The Tree Protection Zone is X12 trunk diameter (DBH) as per 3.2 of AS4970-2009. Refer to the Tree Retention section of the AIA for methods/design used to minimise encroachments.

ULE – Useful Life Expectancy. The length of time from the date of inspection that the Arborist estimates the tree will live and provide a useful positive contribution to the landscape amenity of the site. ULE ratings are **Long** (retainable for 40 years or more), **Medium** (retainable for 16-39 years), **Short** (retainable for 5-15 years) and **Removal** (tree requiring immediate removal due to imminent risk or absolute unsuitability).

©SIG. RATING - ©Significance Rating Scale (see notes over)

©RETENTION INDEX (see notes over)

RECOMMENDATIONS – Retain (R) No TPZ encroachments, Retain Plus (R+) Acceptable levels of TPZ encroachment, Transplant (T) Remove (Rm) or Previously Removed (PR).

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.

©SIG. RATING – ©Significance Rating Scale. A site specific qualitative evaluation of a tree relative to the existing land use 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* ULE and a ©Significance Rating of 1. Likewise it is possible for a tree to be given a *Long* ULE and a ©Significance Rating of 4 (e.g. weed species).

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 tree 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 ULE 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)	 Should not constrain proposed development: potentially hazardous or poor specimen or environmental or noxious weed 			

		©Significance Rating							
©Ret	ention Index	1	2	3	4				
	Long (40+ years)	,		В	O				
ULE Rating	Medium (15-40 years)	Í							
ULER	Short (5-15 years)	E	3	С	D				
	Remove (< 5 years)	D							

Attachment B: Site Image Landscape Plan Ref. SS18-4015, 101

Issue D, 501 Issue A and 502 Issue A

307 Sydney Road, 12 Boyle Street Balgowlah, NSW

Landscape Development Application

Drawing Schedule

Drawing Number	Drawing Title	Scale
000	Landscape Coversheet	N/A
101	Landscape Plan	1:100
501	Landscape Details	As Shown
502	Landscape Areas	As Shown

NOT FOR CONSTRUCTION

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The contractor shall check and verify all work on site (including work by others) before commencing the landscape installation. Any discrepancies are to be reported to the Project Manager or Landscape Architect prior to commencing work. Do not scale this drawing. Any required dimensions not shown shall be referred to the Landscape Architect for confirmation.

B Architectural Coordination
A FOR COMMENT

Issue Revision Description

 SM
 NM
 24.01.2019

 LM
 NM
 19.12.2018

 Drawn
 Check
 Date

LEGEND

Key Plan:





www.siteimage.com.au

Project:

Sun Property Group

Project:

avel 1, 3-5 Baptist Street
Redfem NSW 2016
Australia

Tel: (61 2) 8332 5600
Fax: (61 2) 9698 2877

Project:

307 Sydney Road and

12 Boyle Street, Balgowlah

Drawing Name:

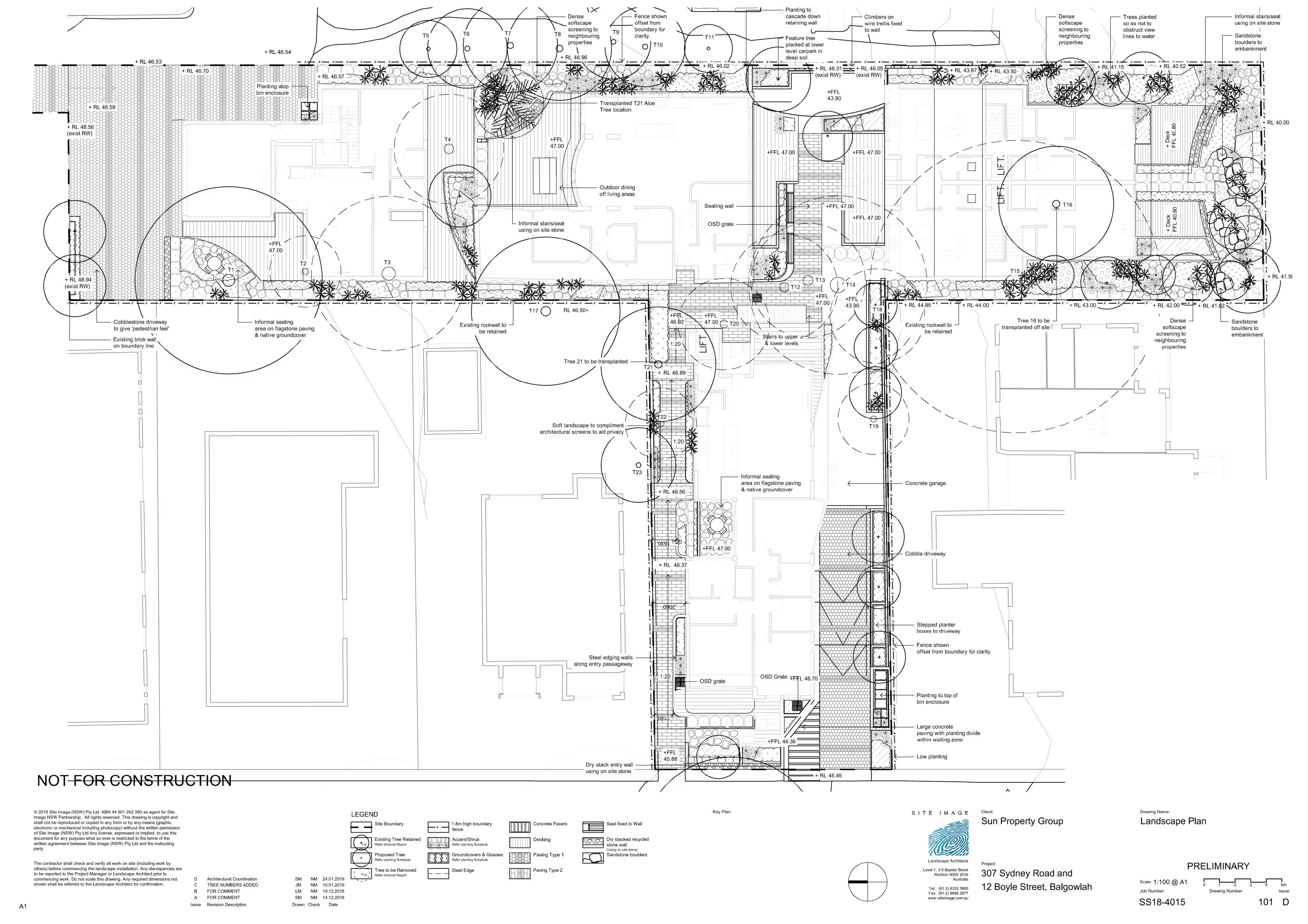
Coversheet

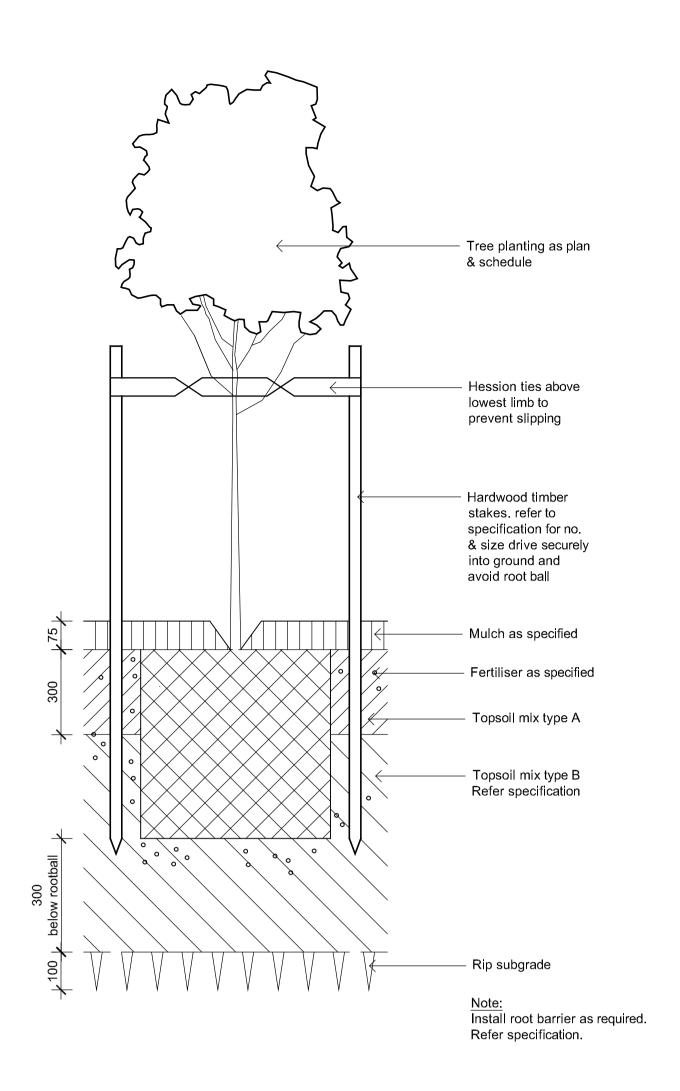
PRELIMINARY

Scale: 1:100 @ A1 0 1 2 3 4 5m

Job Number: Drawing Number: Issue:

SS18-4015 000 B

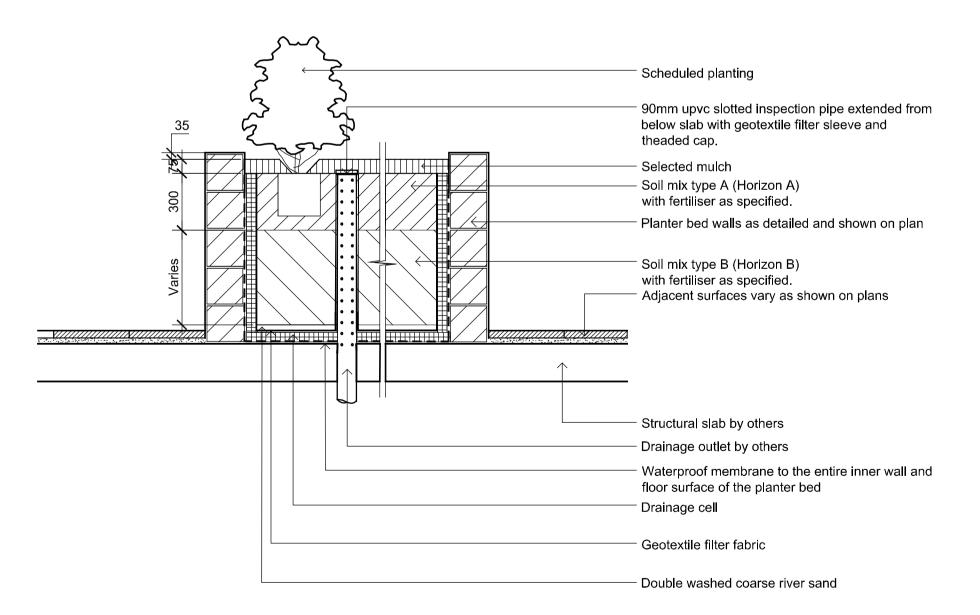




Detail 75-200L Tree Planting on Grade

 Tree planting as plan & schedule Hession ties above lowest limb to prevent slipping Hardwood timber stakes. refer to specification for no. & size drive securely into ground and avoid root ball Selected mulch (Horizon O) Topsoil mix type A (Horizon A) with fertiliser as specified Topsoil mix type B (Horizon B) with fertiliser as specified. Coarse washed river sand. Drainage cell wrapped with geotextile filter cloth. Suspended concrete slab by others. Screed surface falls to Hydraulic Engineer's details. Note: Install root barrier as required to protect Waterproof membrane by others. adjacent paths, slabs and paving from root Refer Architects drawings. growth damage. Refer plans & specification.

Detail 75-200L Tree Planting on Structure



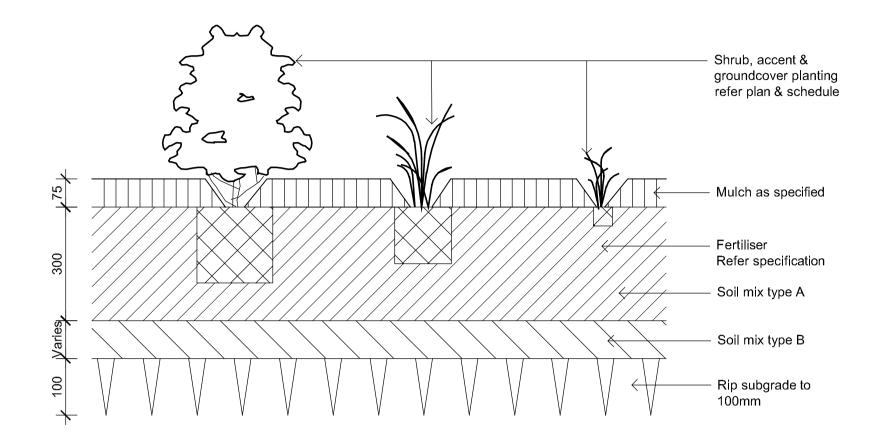
Section - Typical Raised Planter Bed on Structure Inspection riser pipe

NOT FOR CONSTRUCTION

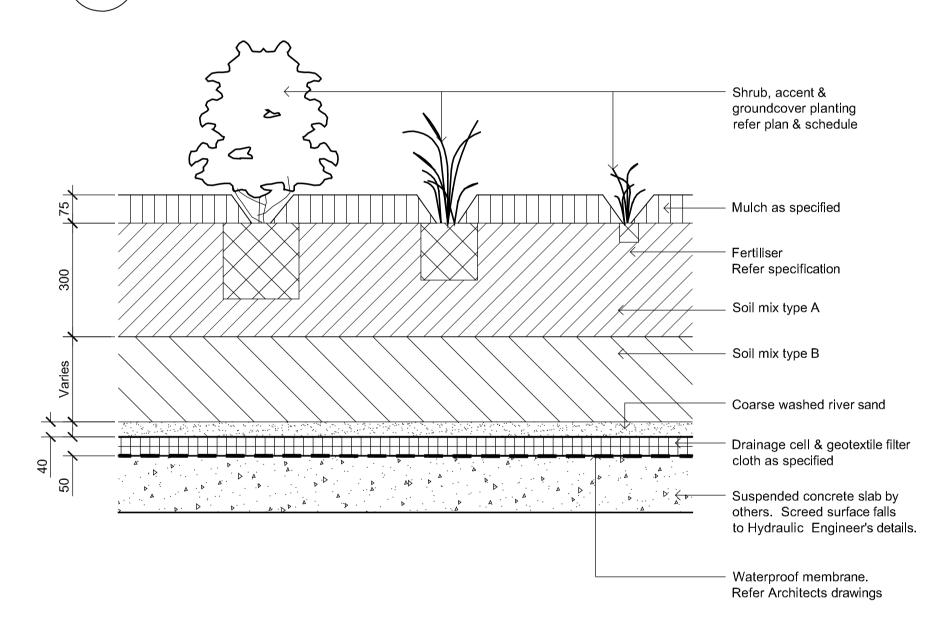
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The contractor shall check and verify all work on site (including work by others) before commencing the landscape installation. Any discrepancies are to be reported to the Project Manager or Landscape Architect prior to commencing work. Do not scale this drawing. Any required dimensions not shown shall be referred to the Landscape Architect for confirmation.

Key Plan: LEGEND



Detail Shrub Accent & Groundcover Planting on Grade



Detail Shrub Accent & Groundcover Planting on Structure

SITE IMAGE Landscape Architects Level 1, 3-5 Baptist Street

Fax: (61 2) 9698 2877

www.siteimage.com.au

Sun Property Group

Drawing Name: Landscape Details

SS18-4015

307 Sydney Road and 12 Boyle Street, Balgowlah Tel: (61 2) 8332 5600

PRELIMINARY Job Number: Drawing Number:

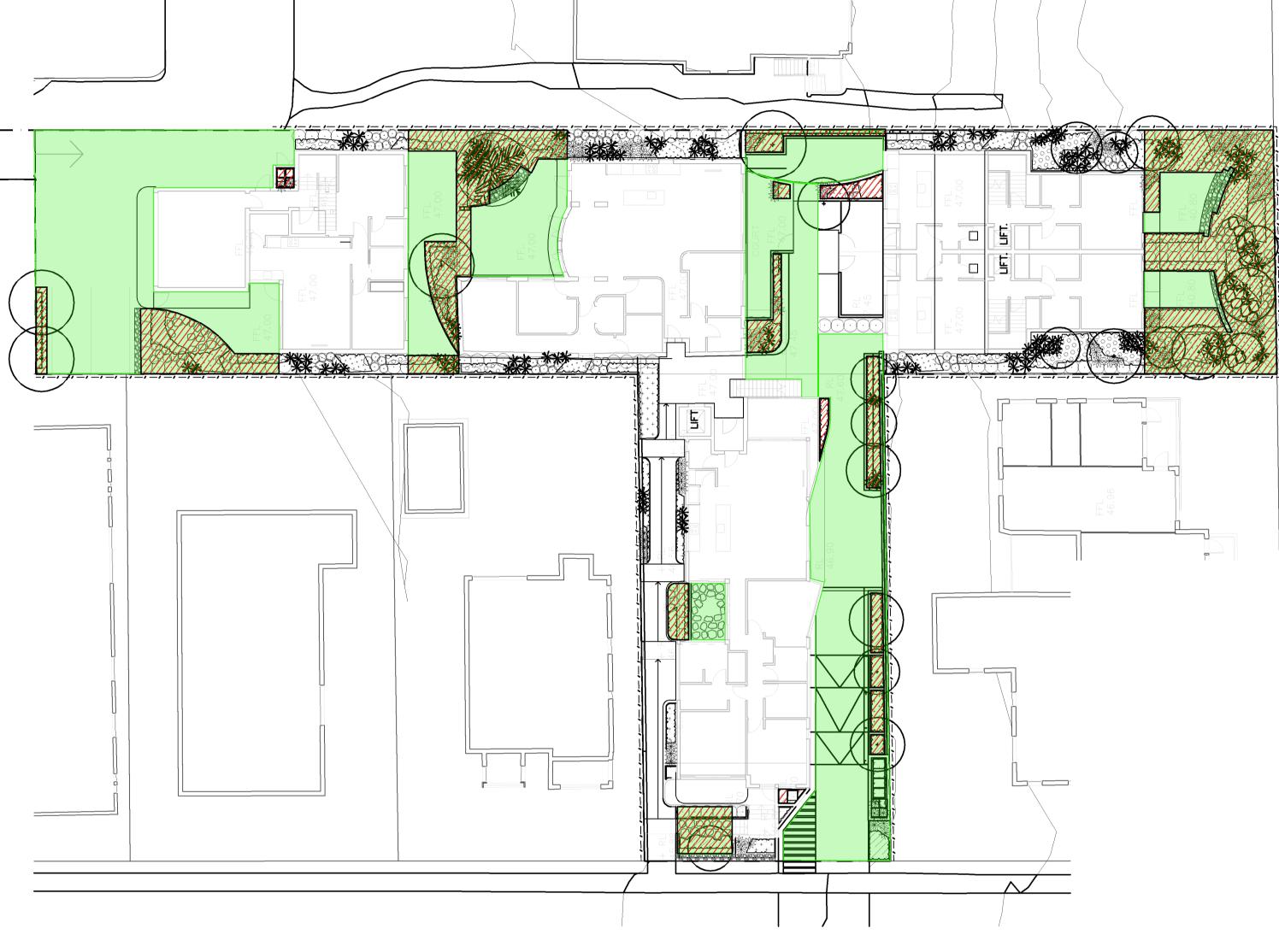
501 A

A FOR COMMENT

LM NM 19.12.2018 Drawn Check Date

Issue Revision Description





01 Landscape Areas - Total Soft Landscape & Permeable Driveway

Landscape Areas - DCP Soft Landscape & Total Open Space

NOT FOR CONSTRUCTION

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The contractor shall check and verify all work on site (including work by others) before commencing the landscape installation. Any discrepancies are to be reported to the Project Manager or Landscape Architect prior to commencing work. Do not scale this drawing. Any required dimensions not shown shall be referred to the Landscape Architect for confirmation.

LEGEND

Total Soft Landscape - 354m²

Permeable Driveway - 131m²

Soft Landscape as per DCP Requirements - 220m²

Total Open Space - 965.6m²

Key Plan:

SITE IMAGE

Sur

Landscape Architects

Level 1, 3-5 Baptist Street
Redfem NSW 2016
Australia

Tel: (61 2) 8332 5600 Fax: (61 2) 9698 2877

www.siteimage.com.au

Sun Property Group

Project: 307 Sydney Road and 12 Boyle Street, Balgowlah Drawing Name:

Landscape Details

SS18-4015

PRELIMINARY

Scale: AS SHOWN

Job Number: Drawing Number:

A FOR COMMENT
Issue Revision Description

SM NM 24.01.2019 Drawn Check Date

-

Α1

1ssue: **A**