DARLINGTON TERRACES

Prepared on behalf of
The University of Sydney

LANDSCAPE REPORT
For State Significant Development Application

Revision A
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1.0 INTRODUCTION

This report has been prepared to supplement the landscape drawings that form the documentation package prepared by OCULUS for the State Significant Development Application for the Darlington Terraces project by the University of Sydney.

This report should be read in conjunction with the SSDA landscape drawings, and the Arboricultural Impact Assessment prepared by ArborSafe dated 19.11.2016. Refer also to the USYD Tree Management Plan dated 17.12.19 for more information on how the University of Sydney manages the University's tree population.

1.1 TREE NUMBERS

As noted in the Arboricultural Impact Assessment, the current proposal will require the removal of thirty eight (38) trees. Of these, only one (1) is of High Retention Value and two (2) of Moderate Retention Value. The remaining thirty five (35) trees are of Low Retention Value. Twenty seven trees (27) trees are proposed for removal within the site itself, with a further eleven (11) trees proposed for removal on the south side of Darlington Lane towards Codrington Street adjoining the H69 Codrington Building. The latter trees are Poplars interspersed with Frangipani trees which are resulting in overcrowding and overshadowing of the planting bed along the laneway.

A total of fifty seven (57) trees are proposed for retention as part of the current proposal. These include one (1) tree of High Retention Value (tree no. 11), nine (9) of Moderate Retention Value, and forty six (46) of Low Retention Value. Tree no. 11, a Sydney Blue Gum, was identified for retention at an early stage and the design of the architecture and landscape has sought to accommodate its retention and to enhance the significance of this tree even further by making it a feature within the new courtyard as well as along Darlington Lane. Two further trees of Moderate Retention Value located adjacent to No. 86 Darlington Road have been retained as part of the new pocket park at the corner with Codrington Street.

As part of the current landscape design forming part of this proposal, a total of forty four (44) new trees are proposed to be planted. These include three (3) large sized native trees within the pocket park at the corner of Darlington Road and Codrington Street, eighteen (18) trees within the central courtyard, fourteen (14) trees in the front garden of the existing terraces along Darlington Road, and nine (9) along the west side of Darlington Lane. Therefore, the total number of new trees proposed as part of the landscape design (44no.) exceeds the total number of trees proposed to be removed within the site (27no.).

Retention of the High Value Tree (tree no. 25) was explored at length during the design process, but it was found that the removal of this tree was necessary for the viability of the development. This is discussed at greater length in the Arboricultural Impact Assessment report prepared by ArborSafe and the letter from TreeIQ dated 18.03.2020.

1.2 CANOPY COVER

The existing pre-development tree canopy cover has been calculated as being 1194m2 or 20.7% based on the total site area of 5767m2.

The post-development mature tree canopy cover has been estimated as being 1356m2 or 23.5% of site area. Refer to the tables included in the Appendices for more detail.

Therefore, it is estimated that the mature tree canopy cover of the site will be greater post-development based on the proposal than the existing pre-development situation.

The City of Sydney's Urban Forest Strategy (2013) aims to achieve an average canopy cover of 23% throughout the LGA by 2030. The post-development mature tree canopy cover will meet that target. Refer also to the USYD Tree Management Plan dated 17.12.19 for more information on tree canopy cover.

1.3 BIODIVERSITY

The existing pre-development area of planting on the site has been calculated from the site survey as being 235.7m2 in total or 4.1% based on the total site area of 5,767m2.

The post-development area of planting, including front gardens (222.7m2), central courtyard (468.9m2), roof terraces (59.8m2), pocket park (18.4m2) and Darlington Lane (124.1m2) has been estimated as being 993.9m2 in total or 17.2% of site area - a more than four-fold increase from the existing planted area.

Therefore, the planting area of the site will be significantly greater post-development based on the proposal than the existing pre-development situation.

One of the intents of the landscape design has been to increase biodiversity across the site. All of the proposed tree species, with the exception of those in the Darlington Road front gardens, are native. The Codrington Street pocket park will be planted with 3no. large sized native canopy trees (*Eucalyptus gummifera* and *Syncarpia glomulifera*) to make a significant contribution to the site's future canopy cover and biodiversity, complementing retained existing tree no. 11 (*Eucalyptus saligna*). The central courtyard will be planted with *Banksia citriodora* and *B. plagiocarpa*, and Darlington lane with *Elaeocarpus reticulatus*.

In terms of shrub and ground cover planting, all of the proposed species in the pocket park and roof terrace are native. Nearly 80% of the species proposed for the central courtyard and 60% for Darlington Lane are also native. The proposed predominantly native planting will improve the existing ecological value of the site and add significantly to the future biodiversity and ecological resilience of the site.

1.4 GROWING CONDITIONS

The landscape design has endeavoured to balance providing maximum planting area and suitable soil volumes for planters with the creation of useable communal open space, particularly within the central courtyard and roof terraces.

All of the planters in the central courtyard, front gardens, pocket park and east side of Darlington lane are on natural ground, with only the roof terrace planters being on structural slab. The limited space within the central courtyard and requirements for accessibility and usability has created some constraints on planter sizes. Most of the planters are raised up in order to create greater privacy for rooms, however, these still connect with natural ground. The proposed small trees have been located in larger planters with sufficient soil volume to support their growth. Planter areas, depths and volumes are noted on the planting plans.

The proposed planters on the two roof terraces will have 5-600mm soil depth in compliance with the Apartment Design Guide and the City of Sydney Landscape Code. All of the planters in the central courtyard and roof terraces will be provided with an automatic irrigation system to promote successful establishment and strong ongoing growth.

Proposed planters within the Codrington Street pocket park, the Darlington Road front gardens and the west side of Darlington Lane will all be at-grade, deep soil planters. These planters will promote and support the long-term growth of the proposed planting, notably the large sized tree species in the pocket park.

The indicative plant species selections have been chosen to respond to the different growing conditions expected in different parts of the site. The pocket park and roof terraces face east and north and will be exposed to high levels of solar access, therefore, the species proposed are those that can tolerate full sun. In other areas, such as the central courtyard and Darlington Lane, there will be varying amounts of sun and shade, including areas with heavy shade, and so the plant species here include shade loving plants.

1.5 PRIVACY

The central courtyard is overlooked by bedroom windows, creating the potential for privacy issues, specially where ground level windows face onto the courtyard or onto each other. The landscape design has endeavoured to work with architectural devices such as privacy screens to ensure adequate privacy for residents.

Planters have been raised to assist with privacy and taller dense plant species selected for use in key areas where screening is required for bedroom windows. These include planters which sit between the central courtyard and bedrooms on either side or those that are located between opposite facing windows at the rear of the existing terraces. These taller screening plants will grow to provide privacy for ground level bedroom windows from views from the central courtyard and other windows. Taller screening/hedge plants are indicated on the planting plans and plant schedule.

APPENDICES

1. Tree Canopy Cover Calculations

OCULUS

TREE CANOPY SCHEDULE: PRE-DEVELOPMENT
S14-028 DARLINGTON TERRACES

Date: 11.05.20
Issue #: A
Client: The University of Sydney

Existing Trees

Tree Number	Species	Common Name	Height (m)	Spread (m)	Canopy Area (m2)
1	*Grevillea robusta*	Silky Oak	12	5	19.625
2	*Allocasurina toralosa*	Forest Sheoak	10	5	19.625
3	*Banksia serrata*	Saw-toothed Banksia	<5	<5	7.065
4	*Banksia serrata*	Saw-toothed Banksia	6	<5	7.065
5	*Callistemon citrinus*	Crimson Bottlebrush	5	<5	7.065
6	*Syzygium paniculatum*	Magenta Brush Cherry	10	8	50.24
7	*Mangifera indica*	Mango	8	8	50.24
8	*Elaeocarpus reticulatus*	Blueberry Ash	10	4	12.56
9	*Elaeocarpus reticulatus*	Blueberry Ash	0	0	0
10	*Syzygium paniculatum*	Magenta Brush Cherry	10	6	28.26
11	*Eucalyptus saligna*	Sydney Blue Gum	25	18	254.34
12	*Syzygium paniculatum*	Magenta Brush Cherry	10	5	19.625
13	*Elaeocarpus reticulatus*	Blueberry Ash	5	6	28.26
14	*Elaeocarpus reticulatus*	Blueberry Ash	8	4	12.56
15	*Syzygium paniculatum*	Magenta Brush Cherry	10	3	7.065
16	*Syzygium paniculatum*	Magenta Brush Cherry	8	3	7.065
17	*Celtis australis*	European Nettle Tree	10	10	78.5
18	*Murraya paniculata*	Orange Jessamine	4	4	12.56
19	*Elaeocarpus reticulatus*	Blueberry Ash	4	2	3.14
20	*Brachychiton acerifolius*	Illawarra Flame Tree	10	10	78.5
21	*Tobouchina laurina*	Tibouchina	6	8	50.24
22	*Leptospermum petersonii*	Lemon Scented Tea Tree	<5	<5	7.065
23	*Leptospermum petersonii*	Lemon Scented Tea Tree	8	5	19.625
24	*Leptospermum petersonii*	Lemon Scented Tea Tree	8	5	19.625
25	*Quercus Ilex*	Evergreen Oak	15	15	176.625
26	*Leptospermum petersonii*	Lemon Scented Tea Tree	5	7	38.465
27	*Robinia pseudoacacia 'Frisa'*	Golden Robinia	8	8	50.24
28	*Banksia serrata*	Saw-toothed Banksia	6	2	3.14
29	*Banksia serrata*	Saw-toothed Banksia	6	2	3.14
30	*Tristaniopsis laurina*	Kanooka	6	5	19.625
31	*Callistemon salignus*	Willow Bottlebrush	7	6	28.26
32	*Banksia serrata*	Saw-toothed Banksia	6	2	3.14
51	*Plumeria spp*	Frangipani	3	2	3.14
52	*Plumeria spp*	Frangipani	3	2	3.14
53	*Tibouchina granulosa*	Tibouchina	7	3	7.065
54	*Callistemon citrinus*	Crimson Bottlebrush	5	3	7.065
55	*Syzygium paniculatum*	Magenta Brush Cherry	8	2	3.14
56	*Grevillea spp.*	Grevillea	5	2	3.14
57	*Plumeria spp*	Frangipani	6	5	19.625
58	*Plumeria spp*	Frangipani	4	2	3.14
59	*Plumeria spp*	Frangipani	4	2	3.14
60	*Plumeria spp*	Frangipani	4	2	3.14
61	*Plumeria spp*	Frangipani	5	2	3.14

62	*Callistemon viminalis*	Weeping Bottlebrush	9	2	3.14
63	*Callistemon viminalis*	Weeping Bottlebrush	8	2	3.14
64	*Plumeria spp*	Frangipani	4	2	3.14
65	*Plumeria spp*	Frangipani	3	2	3.14
				TOTAL (m2)	1193.985
				% of Site Area	20.70%

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TREE CANOPY SCHEDULE: POST-DEVELOPMENT
S14-028 DARLINGTON TERRACES

Date: 11.05.20
Issue #: A
Client: The University of Sydney

Existing Trees

Tree Number	Species	Common Name	Height (m)	Spread (m)	Canopy Area (m2)
1	*Grevillea robusta*	Silky Oak	12	5	19.625
2	*Allocasurina toralosa*	Forest Sheoak	10	5	19.625
3	*Banksia serrata*	Saw-toothed Banksia	<5	<5	7.065
4	*Banksia serrata*	Saw-toothed Banksia	6	<5	7.065
11	*Eucalyptus saligna*	Sydney Blue Gum	25	18	254.34
51	*Plumeria spp*	Frangipani	3	2	3.14
52	*Plumeria spp*	Frangipani	3	2	3.14
53	*Tibouchina granulosa*	Tibouchina	7	3	7.065
54	*Callistemon citrinus*	Crimson Bottlebrush	5	3	7.065
55	*Syzygium paniculatum*	Magenta Brush Cherry	8	2	3.14
56	*Grevillea spp.*	Grevillea	5	2	3.14
57	*Plumeria spp*	Frangipani	6	5	19.625
58	*Plumeria spp*	Frangipani	4	2	3.14
59	*Plumeria spp*	Frangipani	4	2	3.14
60	*Plumeria spp*	Frangipani	4	2	3.14
61	*Plumeria spp*	Frangipani	5	2	3.14
62	*Callistemon viminalis*	Weeping Bottlebrush	9	2	3.14
63	*Callistemon viminalis*	Weeping Bottlebrush	8	2	3.14
64	*Plumeria spp*	Frangipani	4	2	3.14
65	*Plumeria spp*	Frangipani	3	2	3.14
				Subtotal Existing Trees (m2)	379.155

Proposed Trees (mature size)

Number of Trees	Species	Common Name	Height (m)	Spread (m)	Canopy Area (m2)
Darlington Road Front Gardens					
14	*Plumeria spp*	Frangipani	6	5	274.75
Codrington Street Park					
2	*Eucalyptus gummifera*	Red Bloodwood	25	10	157
1	*Syncarpia glomulifera*	Turpentine	30	10	78.5
Central Courtyard					
9	*Banksia citriodora*	Lemon Myrtle	8	4	113.04
9	*Banksia plagiocrpa*	Hinchinbrook Banksia	6	5	176.625
Darlington Lane					
9	*Elaeocarpus reticulatus*	Blueberry Ash	15	5	176.625
				Subtotal Proposed Trees (m2)	976.54
				TOTAL (m2)	1355.695
				% of Site Area	23.51%