



dem

**Landscape Report
for Section 96
Stormwater & Sewer Diversion,
Westfield Warringah Mall, Brookvale**

**for
Scentre Group**

13th October 2015

project no 4296-00

landscan

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level 8 15 help street
chatswood australia

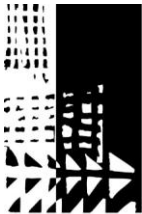
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issue register

Date of Issue	Reason for Issue	Prepared by	Checked by	Signed
03 Dec 2008	Preliminary Issue A	A Beeston	C M ^c Lay	
09 Dec 2008	Da Issue B	A Beeston	A Beeston	<i>A Beeston</i>
24 June 2010	DA Issue C	A Beeston	C M ^c Lay	<i>C M^cLay</i>
13 Oct 2015	Section 96	A Beeston	A Beeston	<i>A Beeston</i>



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contents

- 1 Landscape Design Philosophy 1**
- 1.1 Aim..... 1
- 1.2 New Sewer Diversion & Stormwater to Pittwater Road and Condamine Street 1
- 1.3 ESD Principles 1
- 1.4 Plant List 2



1 Landscape Design Philosophy

1.1 Aim

The landscape design has been prepared to address the environmental and visual requirements of removing the existing vegetation at Warringah Mall. The design aims to soften the impact of the trees removed as a result of the proposed stormwater culvert and sewer diversion alignment along Pittwater Road and Condamine Street at Warringah Mall. Species have been selected that are suitable for planting in the Warringah Council area.

1.2 New Sewer Diversion & Stormwater to Pittwater Road and Condamine Street

The eastern boundary of Warringah Mall is bounded by Pittwater road and Condamine Street. Many large existing trees have been planted along this boundary in the past. There are two significant tree plantings;

1. One grouping is located at the bus stops on Pittwater road and includes a Norfolk Island Pine 20m, Port Jackson Fig 14m and Moreton Bay figs 12m&10m and a Brush Box 14m. This grouping of large substantial trees is visually significant to the street interface and Bus stops. These trees no. 6-11 are noted under Zone D in the Tree Report Warringah Mall Brookvale development 2008 by Treescan.
2. The second grouping of trees located along Condamine Street is made up of mainly large mature melaleuca and casuarinas species from 8 to 16m tall. This grouping of trees is visually prominent from the road and provides screening to Warringah Mall and its carparks. These trees, No.s 15-68 have been captured under the Arboriculture Assessment Report 2015 by Jacksons Nature Works.

The sewer diversion and stormwater concrete culvert located along Pittwater Road and Condamine Street as detailed on the civil drawings is proposing to remove the majority of these trees. This will have a detrimental effect to the street frontage to both these roads. Both the sewer and stormwater will be located underground and provision of new planting over.

The proposed landscaping will aim to soften the impact of the existing vegetation removed and consist of tall clean stemmed trees along the frontage to Condamine and Pittwater. Sweeping curves of turf, banding of low shrubs and groundcovers will be planted beneath medium to large indigenous and native trees to maintain clear sight lines into the site. Species have been selected from Duffy's Forest Ecological Community, Sydney Turpentine Ironbark Forest, Blue Gum High Forest and Warringah Council Basix List. Refer Landscape Plans lask0502 and lask0503.

1.3 ESD Principles

The proposed indicative plant schedule for the site is shown on the landscape plan. Principles of ESD have been incorporated into the design including plant selection with low maintenance and low water demand will be used for proposed planting.

Species have been selected that are suitable for planting in the Warringah City Council Area



1.4 Plant List

	Botanic Name	Common Name	Height	Spread	Community
	TREES				
As	<i>Acmena smithii</i>	Lilly Pilly	10m	6m	BGHF
Aco	<i>Angophora costata</i>	Sydney Red Gum	20m	12m	DFEC
Bi	<i>Banksia integrifolia</i>	Coastal Banksia	14m	8m	
Bs	<i>Banksia serrata</i>	Old Man Banksia	6m	3m	DFEC
Er	<i>Elaeocarpus reticulatus</i>	Blueberry Ash	6m	3m	BGHF
Epu	<i>Eucalyptus punctata</i>	Grey Gum	20m	12m	STIF
Ero	<i>Eucalyptus robusta</i>	Swamp Mahogany	10-20m	4-8m	
Lc	<i>Lophostemon confertus</i>	Brush Box	15m	10m	
Sg	<i>Syncarpia glomulifera</i>	Turpentine	18m	8m	STIF
TI'L'	<i>Tristaniopsis laurina</i> 'Luscious'	Luscious Water Gum	6m	5m	
	SHRUBS				
Be	<i>Banksia ericifolia</i>	Heath Banksia	2m	2m	BASIX
Bsp	<i>Banksia spinulosa</i>	Hairpin Banksia	1.5m	1.5m	DFEC
Ca	<i>Correa alba</i>	White Correa	1.5m	1m	BASIX
C'CC'	<i>Callistemon</i> 'Captain Cook'	Captain Cook	1.2m	1m	
De	<i>Doryanthes excelsa</i>	Gynea Lily	1.5m	1.5m	
Gl	<i>Grevillea linearifolia</i>	Linear Leaf Grevillea	2m	2m	
Gs	<i>Grevillea sericea</i>	Pink Spider Flower	1.5m	1m	
Gsp	<i>Grevillea speciosa</i>	Red Spider Flower	1.5m	1.5m	
Lf	<i>Lambertia formosa</i>	Mountain Devil	1.5m	1.5m	
Lt	<i>Leptospermum</i> 'Pacific Beauty'	Pacific Beauty	2m	1.5m	
S'AS'	<i>Syzygium</i> 'Aussie Southern'	Dwarf Lilly Pilly	2.5m	2m	
Wfr	<i>Westringia fruticosa</i>	Coastal Rosemary	2m	5m	
Wf'S'	<i>Westringia fruticosa</i> 'Smokey'	Dwarf Westringia	0.8m	0.8m	
	GROUNDCOVERS/CLIMBERS				
Cap	<i>Carex appressa</i>	Tall Sedge	0.8m	0.6m	
Dc'B'	<i>Dianella caerulea</i> 'Breeze'	Dianella Breeze	0.5m	0.5m	DFEC
Dc'CB'	<i>Dianella caerulea</i> 'Cassa Blue'	Cassa Blue	0.4m	0.4m	DFEC
Dc'LJ'	<i>Dianella caerulea</i> 'Little Jess'	Little Jess	0.4m	0.4m	DFEC
D'SS'	<i>Dianella</i> 'Silver Streak'	Flax Lily	0.5m	0.4m	
G'BR'	<i>Grevillea</i> 'Bronze Rambler'	Grevillea Bronze Rambler	0.3m	1.5m	
H'MH'	<i>Hardenbergia</i> 'Mini Ha-Ha'	Purple Coral Pea	0.3m	1.5m	STIF
In	<i>Isolepis nodosa</i>	Knobby Club Rush	0.8m	0.6m	
LI'T'	<i>Lomandra longifolia</i> 'Tanika'	Tanika	0.4m	0.4m	BGHF
LI	<i>Lomandra longifolia</i>	Lomandra	0.8m	1m	BGHF
Pa'N'	<i>Pennisetum alopecuroides</i> 'Nafray'	Nafray	0.6m	0.6m	
PI'E'	<i>Poa labillardieri</i> 'Eskdale'	Poa Eskdale	0.4m	0.4m	
Tj	<i>Trachelospermum jasminoides</i>	Star Jasmine	0.4m	1.5m	

DFEC
STIF
BGHF
BASIX

DUFFY'S FOREST ECOLOGICAL COMMUNITY
SYDNEY TURPENTINE IRONBARK FOREST
BLUE GUM HIGH FOREST
WARRINGAH COUNCIL BASIX LIST

EXISTING MINI MAJOR

EXISTING CAR RAMP DN FROM L1 CARPARK

EXISTING BUS INTERCHANGE

LOADING DOCK

WARRINGAH MALL
TARGET HOME

EXISTING TREES TO BE
RETAINED AND PROTECTED

BUS STOP TO BE
RETAINED AND
PROTECTED

PROPOSED 5500 WIDE
EASEMENT FOR SEWER
REFER TO ENGINEERS
DRAWINGS

PROPOSED SOFT
LANDSCAPE WORKS
BOUNDARY

EXISTING TREES TO BE
REMOVED REFER TREE REPORT
WARRINGAH MALL BROOKVALE
DEVELOPEMNT DATED NOVEMBER 2008
PREPARED BY TREESCAN

PROPOSED LANDSCAPE CONSISTS
OF BANDS OF LOW GROUNDCOVERS
AND TURF ALONG THE BOUNDARY
WITH CLEAN STEMMED INDIGENOUS
TREES TO MAINTAIN CLEAR SIGHT LINES

PROPOSED STORMWATER
TO ENGINEERS DRAWINGS

PROPOSED LANDSCAPE CONSISTS
OF BANDS OF LOW GROUNDCOVERS
AND TURF ALONG THE BOUNDARY
WITH CLEAN STEMMED INDIGENOUS
TREES TO MAINTAIN CLEAR SIGHT LINES

PITTWATER ROAD

LEGEND

- SITE BOUNDARY
- CARPARK TO ARCHITECTS DETAILS
- PROPOSED STORMWATER CULVERTS
- SEWER EASEMENT
- PROPOSED TURF
- TREES TO BE REMOVED
- EXISTING TREES TO BE RETAINED
- PROPOSED TREE PLANTING
- PROPOSED SHRUBS & GROUNDCOVERS

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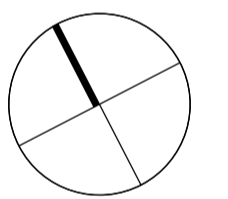
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amendments		verified				
no.	date	amendment	by	chk'd	int	chk'd
a01	28.11.08	coordination & review	ab	ab	ab	ab
a02	03.12.08	client review & coordination	ab	ab	ab	ab
a03	09.12.08	draw issue	pn	pn	cm	cm
a04	25.06.10	draw issue	ab	ab	cm	cm
a05	01.10.15	SECTION 96 - SEWER DIVERSION	pn	pn	ab	ab

north point



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Warringah Mall, NSW

Scentre Design & Construction Pty Ltd
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 consultant

SHEET JOINS laSW0503

SHEET JOINS laSW0503

drawing title

landscape
 stormwater plan
 sheet 2 of 3

section 96

original	scale	drawn	project no.
b1	1:250	PN	4296-00

drawing no.	rev no.
lasw0502	a05

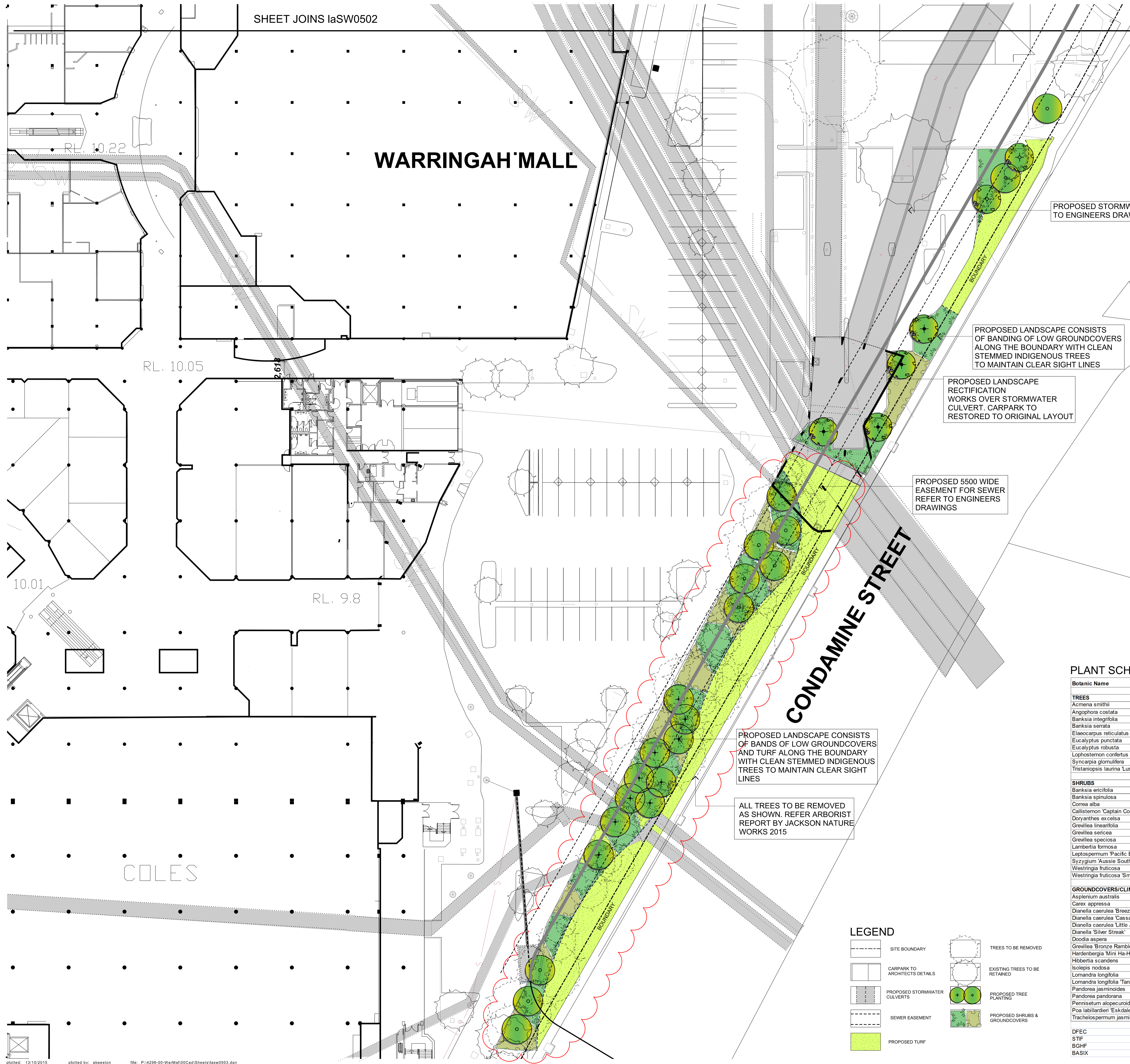
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	a04	25.06.10	issue	ab	cm	ab	ab	
	a05	01.10.15	SECTION 96 - SEWER DIVERSION	PN	PN	AB	AB	



PROPOSED STORMWATER TO ENGINEERS DRAWINGS

PROPOSED LANDSCAPE CONSISTS OF BANDING OF LOW GROUNDCOVERS ALONG THE BOUNDARY WITH CLEAN STEMMED INDIGENOUS TREES TO MAINTAIN CLEAR SIGHT LINES

PROPOSED LANDSCAPE RECTIFICATION WORKS OVER STORMWATER CULVERT, CARPARK TO RESTORED TO ORIGINAL LAYOUT

PROPOSED 5500 WIDE EASEMENT FOR SEWER REFER TO ENGINEERS DRAWINGS

PROPOSED LANDSCAPE CONSISTS OF BANDS OF LOW GROUNDCOVERS AND TURF ALONG THE BOUNDARY WITH CLEAN STEMMED INDIGENOUS TREES TO MAINTAIN CLEAR SIGHT LINES

ALL TREES TO BE REMOVED AS SHOWN. REFER ARBORIST REPORT BY JACKSON NATURE WORKS 2015

PITTWATER ROAD

CONDAMINE STREET

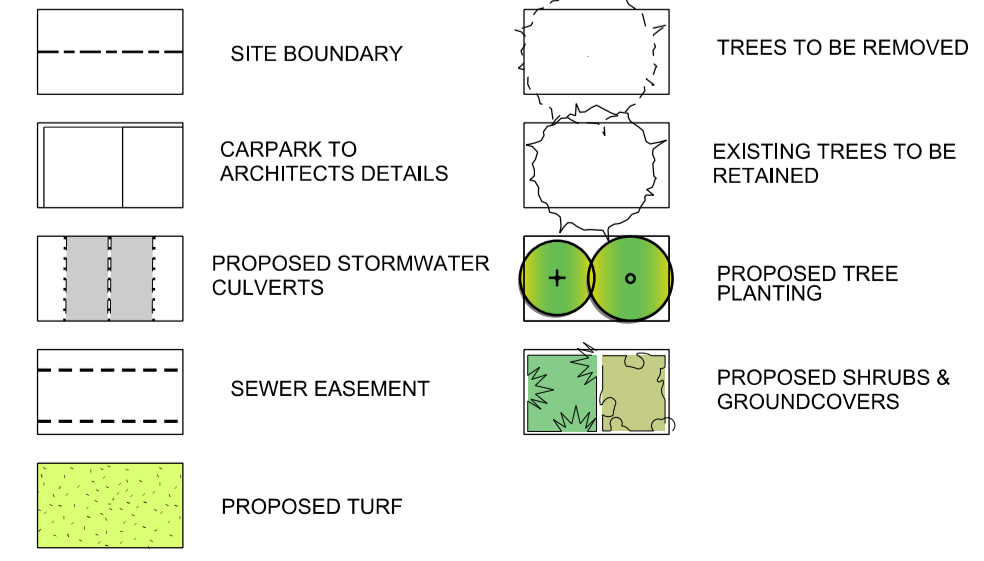
WARRINGAH MALL

COLES

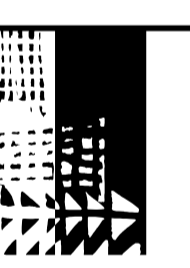
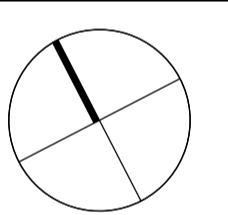
PLANT SCHEDULE

Botanic Name	Common Name	Height	Spread	Community
TREES				
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Tristaniopsis laurina 'Luscious'	Luscious Water Gum	6m	5m	
SHRUBS				
Banksia ericifolia	Heath Banksia	2m	2m	BASIX
Banksia sphaerulosa	Hairpin Banksia	1.5m	1.5m	DFEC
Correa alba	White Correa	1.5m	1m	BASIX
Callistemon 'Captain Cook'	Captain Cook	1.2m	1m	
Doryanthes excelsa	Gymea Lily	1.5m	1.5m	
Grevillea linearifolia	Linear Leaf Grevillea	2m	2m	
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Lambertia formosa	Mountain Devil	1.5m	1.5m	
Leptospermum 'Pacific Beauty'	Pacific Beauty	2m	1.5m	
Syzygium 'Aussie Southern'	Dwarf Lilly Pilly	2.5m	2m	
Westringia fruticosa	Coastal Rosemary	2m	5m	
Westringia fruticosa 'Smokey'	Dwarf Westringia	0.8m	0.8m	
GROUNDCOVERS/CLIMBERS & SHADE TOLERANT PLANTS				
Asplenium australe	Birds Nest Fern	1m	1m	
Carex appressa	Tall Sedge	0.8m	0.6m	
Dianella caerulea 'Breeze'	Dianella Breeze	0.5m	0.5m	DFEC
Dianella caerulea 'Cassa Blue'	Cassa Blue	0.4m	0.4m	DFEC
Dianella caerulea 'Little Jess'	Little Jess	0.4m	0.4m	
Dianella 'Silver Streak'	Flax Lily	0.5m	0.4m	
Doodia aspera	Prickly Rasp Fern	0.3m	0.3m	
Grevillea 'Bronze Rambler'	Grevillea Bronze Rambler	0.3m	1.5m	
Hardenbergia 'Mini Ha-Ha'	Purple Coral Pea	0.3m	1.5m	STIF
Hibbertia scandens	Golden Guinea Vine		Climber	
Isolepis nodosa	Knobby Club Rush	0.8m	0.6m	
Lomandra longifolia	Lomandra	0.8m	1m	BGHF
Lomandra longifolia 'Tanika'	Tanika	0.4m	0.4m	BGHF
Pandorea jasminoides	Bowler of Beauty		Climber	
Pandorea pandorana	Wonga Wonga Vine		Climber	
Pennisetum alopecuroides 'Nafay'	Nafay	0.6m	0.6m	
Poa labillardieri 'Eskdale'	Poa Eskdale	0.4m	0.4m	
Trachelospermum jasminoides	Star Jasmine	0.4m	1.5m	
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BASIX	WARRINGAH COUNCIL BASIX LIST			

LEGEND



North point



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drawing title

landscape
 stormwater plan
 sheet 3 of 3

section 96

original	scale	drawn	project no.
b1	1:250	PN	4296-00

drawing no. **lasw0503** rev no. **A05**