

# 158-164 OLD BATHURST ROAD, EMU PLAINS LANDSCAPE DA REPORT

We acknowledge the traditional custodians of the land, and pay our respects to their elders past present and emerging, recognising their continuing connection to land, waters and culture.

Issue	Title	Date	Prepared	Checked
1	Concept Report	10/11/2021	NT/MS	TF
2	Draft DA	24/03/2022	TN/MS	JH
3	Issue for DA	07/04/2022	TN/MS	JH
4	Re-Issue for DA	07/10/2022	TN/MS	JH
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# 1.0 SITE ANALYSIS

# **SITE CONTEXT**

- Located in Emu Plains
- Several local parks reserves within the 1km radius
- Nepean River is located to the North and East
- Major roads and train lines provides good access to the site
- Approximately 8 minutes walk to the Emu Plains Train Station



# **SITE ANALYSIS**

#### Legend

Site Boundary

Existing Trees

Existing Trees & Vegetation

Existing Building

Existing Car Park Park

Open ground

Existing Road



# **EXISTING TREES**

#### Legend

Site Boundary

To be considered for retention as part of site design

Priority for Retention



# **SITE PHOTOS**



#### 2.0 LANDSCAPE DA PLAN

#### **LANDSCAPE PLAN**

#### TREE CANOPY COVERAGE:

The existing tree canopy comprising 726 trees of varying sizes across site. which measured from aerial photographs is covers approximately 15% of the total site area. The proposal will retain 326 trees, which combined with the proposed 282 planted trees, will provides a future canopy coverage of approximately 27 - 28% as the new planting matures.

Additional canopy coverage of can also be acheived across the development by the planting of 3-5 trees per lot of varying sizes in parking and outdoor areas, and allowing for building setbacks which will achieve an estimated 8-9% additional canopy. Overall, the estimated tree canopy coverage that can be acheived as the total tree canopy matures would be between 35% and 37%.

We also note the footpath will have approximately 80% shade cover from the mature tree canopy cover during the warmest months.

To "future-proof" the landscape plantings the selection has judged suitable species for future climate projection ahead to the years up to 2050 Note:

Measurements are based of the individual tree species achieving semi mature height after 15 years.

Street tree planting and numbers spacing has allowed for future driveways and lighting.

The 27-28% site coverage is only applies to the areas with trees shown on the plan



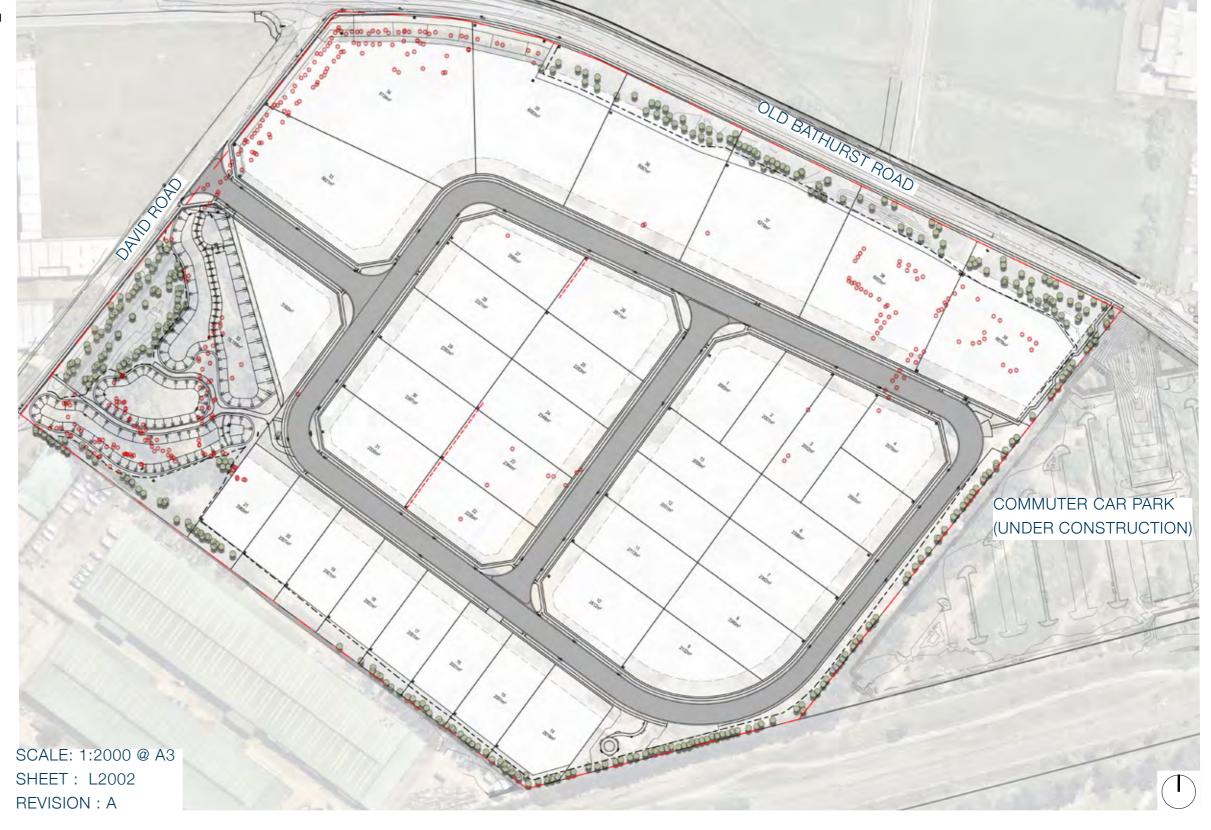
# TREE RETENTION PRIORITY

LEGEND

EXTENT OF WORKS BOUNDARY



EXISTING TREE
RETAINED.REFER ARBORIST
REPORT AND CIVIL DRAWING
TREE TO BE REMOVED
REFER ARBORIST REPORT
AND CIVIL DRAWINGS



#### **STREET TREE - SUBDIVISION**

#### LEGEND

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EXTENT OF WORKS BOUNDARY



EXISTING TREE RETAINED



PROPOSED STREET TREE LOPHOSTEMON CONFERTUS (10m Spacing)



TREES FOR WETLAND SURROUND

#### STREET TREE - SUBDIVISION (8m Spacing)



T1 EUCALYPTUS CAMALDULENSIS (2)



T2 CORYMBIA MACULATA (2)



T3 EUCALYPTUS MELLIODORA (2)



T4 EUCALYPTUS TERETICORNIS (2)



T5 MELALEUCA STYPHELIODES

#### NOTE:

- (1) The street tree spacing is approximately 8m allowing for the verge width of 1.2m and minimum soil depth of 2.0m, achieves a soil volume greater than 80 cubic metres suitable for larger trees as per Table 1: tree size and planting site area, as the Penrith DCP Control Plan 2014, C14 Urban Heat Management
- (2) Foraging trees suitable for the swift parrot (Lathamus discolor)

Street tree planting and numbers spacing has allowed for future driveways and lighting.



# PEDESTRIAN CIRCULATION



#### LEGEND

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EXTENT OF WORKS BOUNDARY



EXISTING TREE RETAINED



PROPOSED TREE (8m Spacing) (SUB DIVISIONS) PROPOSED STREET TREE (10m Spacing)



PRIMARY PATHWAY (1.5m)



SECONDARY PATHWAY (1.5m)



COUNCIL PATHWAY

DECO-GRANITE
PATHWAY



LINK TO COUNCIL PATH



158-164 Old Bathurst Rd For: Penrith City Council

#### INDICATIVE SIGNAGE PLAN



#### LEGEND



EXTENT OF WORKS BOUNDARY



EXISTING TREE

(10m Spacing)



PROPOSED TREE (8m Spacing) (SUB DIVISIONS)



ENTRY STATEMENT SIGNAGE

PROPOSED STREET TREE



SITE IDENTITY SIGNAGE



INTERPRETIVE SIGNAGE (OPTIONAL)

#### NOTE:

- The plans indicates the preferable locations for entry statement and signage.
- Details of signage are to be confirmed post approval to the satisfaction of Council.

# **WETLAND DESIGN**













# LANE PATHWAY CONNECTION







- 1.5m Staggered pathway design to retain the existing trees while breaking the monotony for linear pathway in narrow lane.
- Pockets of planting around pathways to develop interest
- Connection to Old Bathurst Road and Emu Plains station.

# SWIFT PARROT ECOLOGY CORRIDOR(SPEC) CORRIDOR BREAK OUT AREA



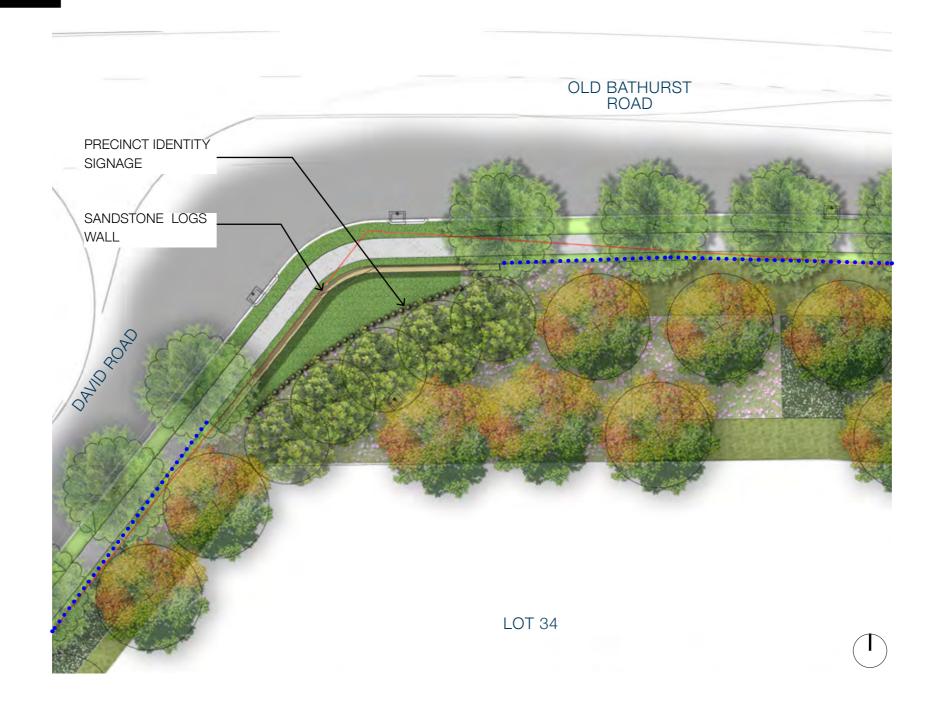




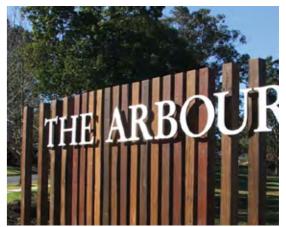
- Break out area providing seating to the users and interpretive signage to address endangered species / ecology etc.
- Break out area and Swift Parrot Ecology Corridor further supplemented with trees that provide habitat for Swift Parrot.



# **IDENTITY SIGNAGE LOTS 34**









- Indicative signage

LEGEND

EXTENT OF WORKS BOUNDARY

(10m Spacing)
PROPOSED TREE

PLANTING (NATIVE GRASSES) PLANTING (SHRUBS PLANTING

PLANTING

PATHWAY (CONCRETE)

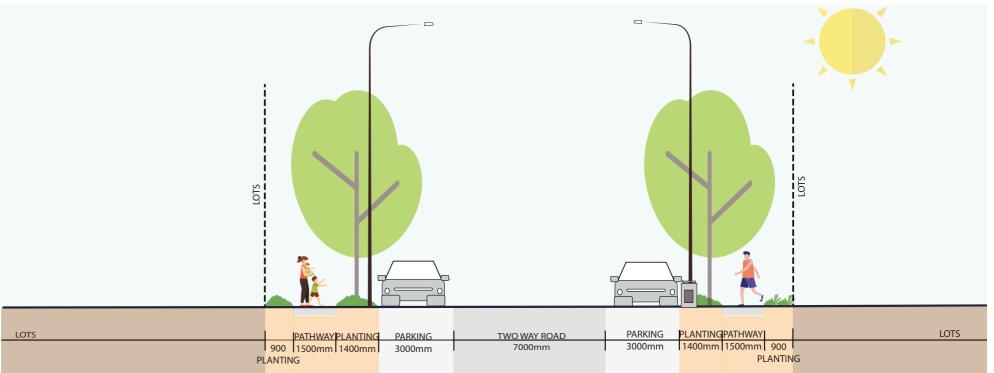
BOUNDRY FENCE

PROPOSED STREET TREE

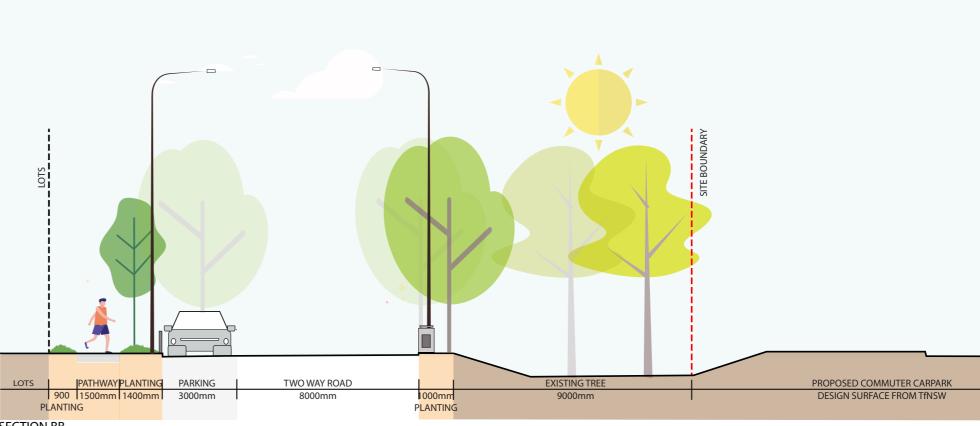
PROPOSED FEATURE TREE CORYMBIA MACULATA

# **SECTIONS**





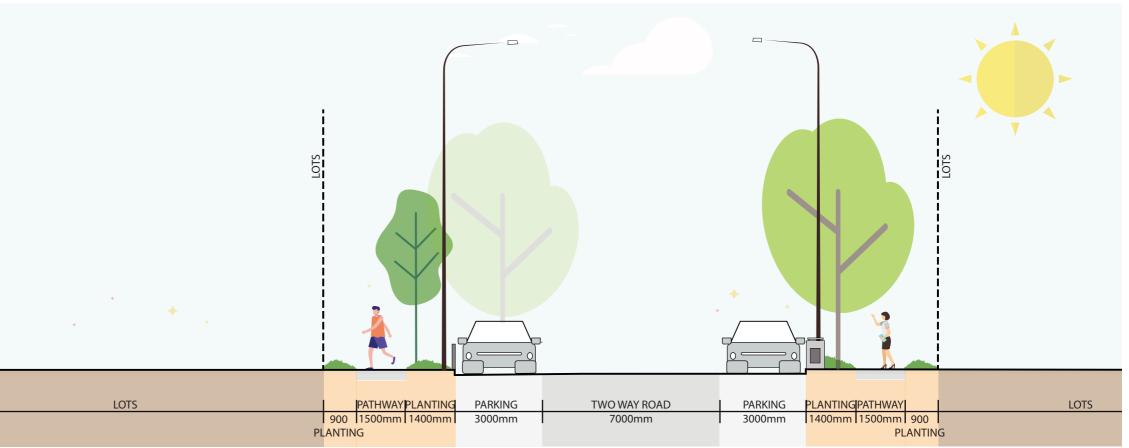
SECTION AA



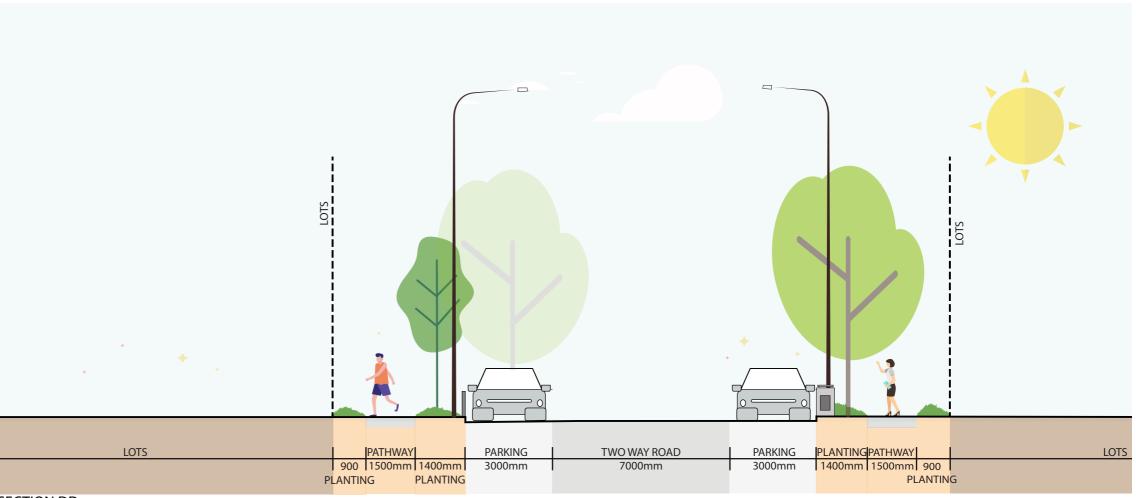
SECTION BB

# **SECTIONS**





SECTION CC



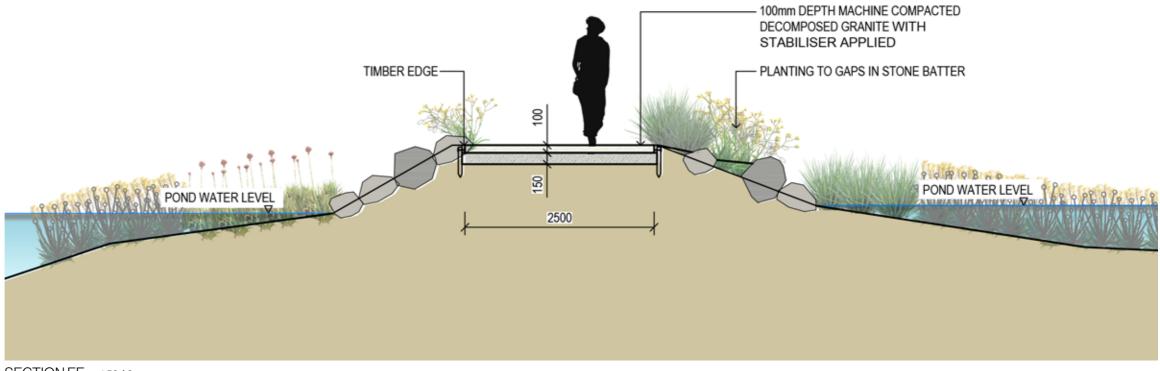
SECTION DD

# **SECTIONS**



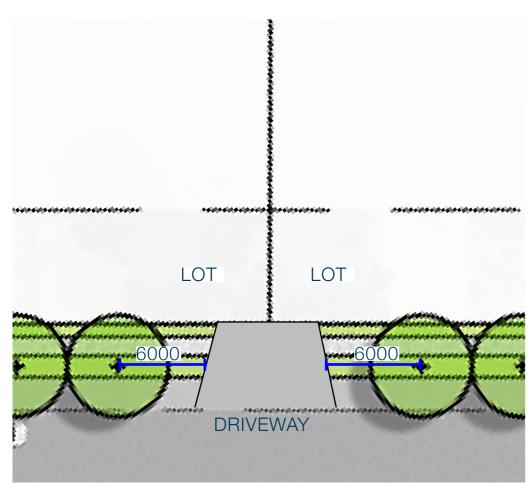
#### NOTE:

- Design intent for a Deco granite gravel pathway through wetland to provide connnectivity to David Road.
- Further detailed design to be worked out during design development stage



SECTION EE 1:50 A3

#### **TREE PLANTING - OFFSETS**

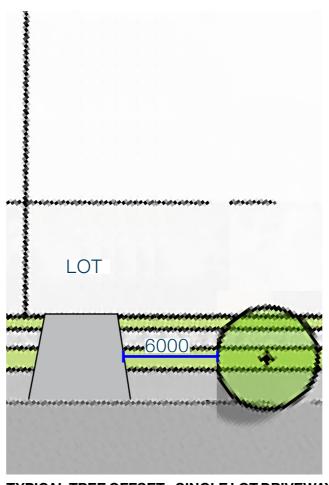


TYPICAL TREE OFFSET - COMMON DRIVEWAYS

- MIN 6M

NOTE:

DRIVEWAYS WIDTH AND LOCATIONS TO BE CONFIRMED

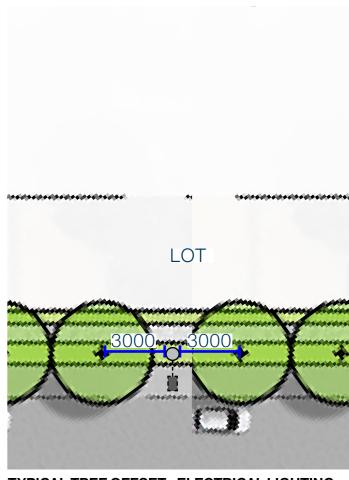


TYPICAL TREE OFFSET - SINGLE LOT DRIVEWAY

- MIN 6M

NOTE:

DRIVEWAYS WIDTH AND LOCATIONS TO BE CONFIRMED



TYPICAL TREE OFFSET - ELECTRICAL LIGHTING - MIN 3M

# **MATERIALS PALETTE**

Concrete



Sandstone walls to entry areas / breakout spaces



Decomposed Granite Path



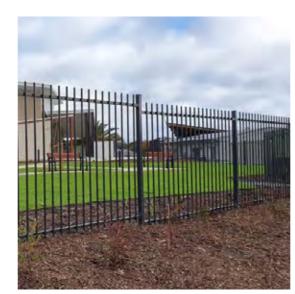
Public seating



Zig Zag path with planting (Laneway)



Palisade boundary fencing



Decoposed Granite path in Wetland



Bike racks to breakout / public areas



#### **INDICATIVE SIGNAGE PALETTE**

#### PRECINCT SIGNAGE

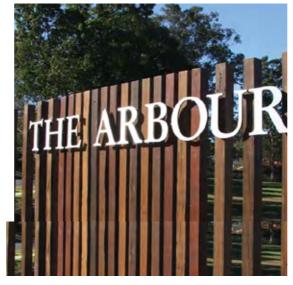






















#### **SOFTSCAPE**

#### **PROPOSED PLANTING PALETTE**

CODE	BOTANIC NAME	COMMON NAME	MATURE HEIGH WIDTH (M)
TREES -	Old Bathurst Road and David Road	d	WIDTH (W)
	Lophostemon confertus	Brush Box	10 x 5
TREES -	Subdivision		
Tl	Eucalyptus camaldulensis (1)	Red River Gum	30 x 15
T2	Corymbia maculata (1)	Spotted Gum	18 x 6
T3	Eucalyptus melliodora (1)	Yellow Gum	15 x 10
T4	Eucalyptus tereticornis (1)	Forest Red Gum	25 x 10
T5	Melaleuca stypheliodes	White Paper Bark	6 x 3
SHRUB	S & ACCENT		
NOTE :	UNDERSTOREY SPECIES TO BE SELEC	TED FROM BELOW LIST	
	Acacia fimbriata	Fringed Wattle	6 x 5
	Bursaria spinosa (1)	Australian Blackthorn	4 x 3
	Doryanthes excelsa	Gymea Lily	2 x 2
	Eremophila debilis	Winter Apple	0.5 x 2
	Grevillea 'Bronze Rambler'	Spiderflower Bronze Rambler	2 x 2
	Grevillea "Molonglo"	Grevillea Molonglo	2 x 2
	Grevillea 'Scarlet Sprite'	Spiderflower Scarlet Sprite	1 x 1
	Indigofera australis (1)	Australian Indigo	1 X 2
	Hardenbergia violacea	Native Sarsparilla	3 x 3
	Melaleuca 'Claret Top'	Honey Myrtle	1 x 0.6
	Melaleuca linariifolia	Flax-leaved Paper Bark	6 x 3
	Melaleuca nodosa	Prickly Leaved Paperbark	3 x 2.5
	Westringia fruticosa	Coastal Rosemary	1 x 1
	•	•	•
GRASS	& GROUNDCOVER MIX		
	Carex apressa	Tall sedge	0.8 x 0.6
	Grevillea 'Poorinda Royal Mantle'	Grevillea	0.5 x 0.5
	Isolepis nodosa	Knobby Club Rush	1 x 0.5
	Juncus usitatus	Tussock Rush	1 x 0.5
	Lomandra 'Hystrix'	Mat Rush	1 x 0.5
	Lomandra 'Tanika'	Tanika Mat Rush	0.75 x 0.75
	Poa labillardierei	Tussock Grass	1 x 1
	Themeda australis	Kangaroo Grass	1 x 1
WETLA	ND MIX / SWALE MIX		
	Carex apressa	Tall sedge	0.8 x 0.6
	Ficinia nodosa	Knobby Club Rush	1 x 0.5
	Juncus usitatus	Tussock Rush	1 x 0.5
	Lomandra longifolia	Spiny-head Mat Rush	1 x 0.5
	Lomandra 'Tanika'	Taika Mat Rush	0.75 x 0.75
	Poa labillardierei	Tussock Grass	1 x 1
	Themeda australis	Kangaroo Grass	1 x 1

TREES TO WETLAND SURROUND		
Eucalyptus robusta (1)	Swamp mahogany	15 x 10
Casuarina glauca (1)	Swamp sheoak	12 x 5
Melalauca linarifolia (1)	Snow in summer	8 x 5
Melaleuca decora	White Feather Honeymyrtle	6 x 4
Eucalyptus amplifolia(1)	Cabbage gum	20 x 10

#### 1. Foraging trees suitable for the swift parrot (Lathamus discolor)

To "future-proof" the landscape plantings the selection has been judged on suitable species for future climate projections ahead to the years up to 2050

For the provision of Street trees for this subdivision. Street & Park Tree Management Plan & Appendix' has been referred.



Lophostemon confertus



Eucalyptus camaldulensis



Eucalyptus leucoxylon



Melaleuca stypheliodes



Eucalyptus sideroxylon rosea



Corymbia maculata



Indigofera australis



Westringia fruticosa



Bursaria spinosa



Doryanthes excelsa



Poa labillardierei



Melaleuca nodosa



Melaleuca linariifolia



Lomandra longifolia



Isolepis nodosa

<b>GRC</b>	<b>1</b> 0	5	5/	\
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