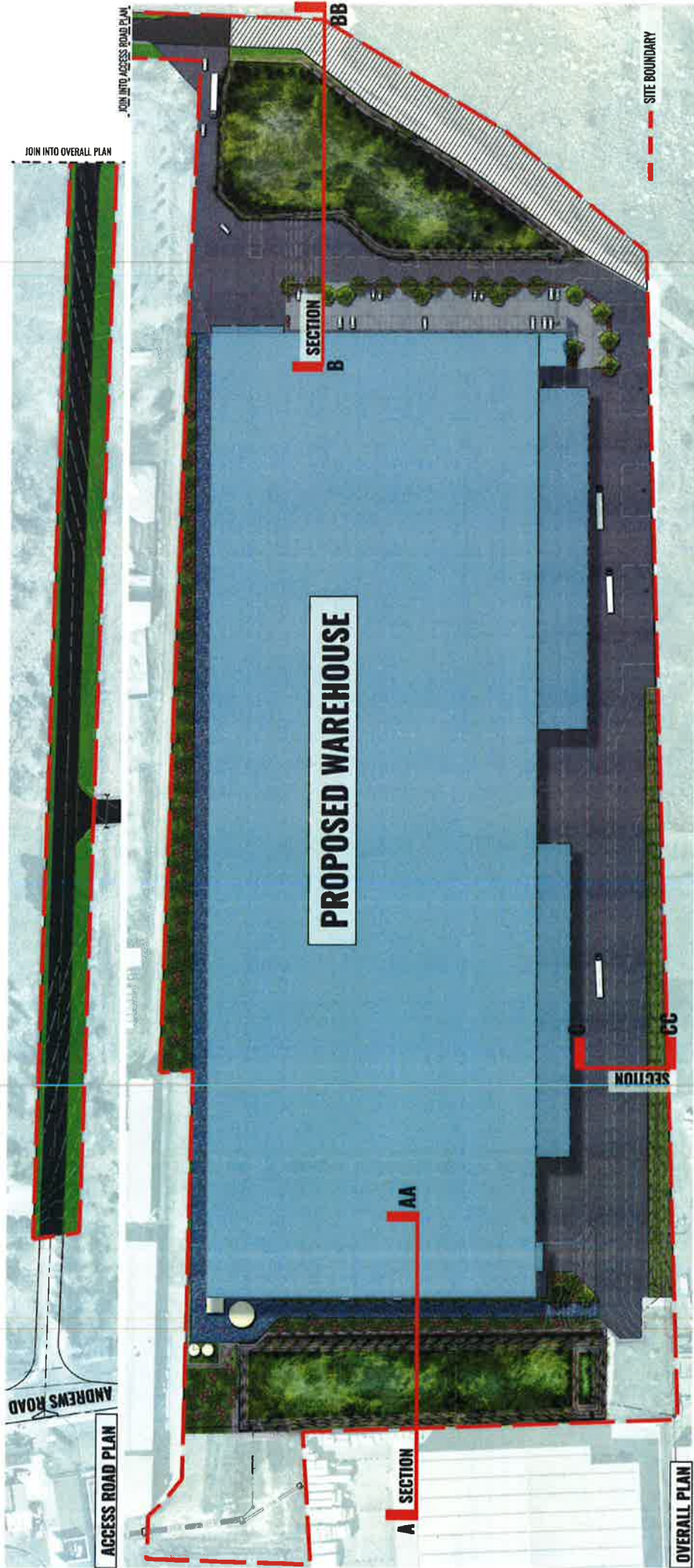


Proposed Warehouse Development

128 Andrews Road, Penrith NSW 2749

Landscape Documentation for Development Approval



Landscape Design Statement

THE PROJECT AT 128 ANDREWS ROAD PENRITH, INVOLVES THE DEVELOPMENT OF A 5HA WAREHOUSE AND INDUSTRIAL ESTATE. THE SITE IS ACCESSED VIA A PROPOSED DRIVEWAY FROM ANDREWS ROAD AND IS LOCATED ADJACENT TO OTHER INDUSTRIAL DEVELOPMENTS. WITHIN THE 2010 PENRITH LEP THE SUBJECT SITE IS IDENTIFIED AS 'LAND WITH SCENIC AND LANDSCAPE VALUES' UNDER CLAUSE 7.5 PROTECTION OF SCENIC CHARACTER AND LANDSCAPE VALUES.

RIPIARIAN RE-VEGETATION OF THE EXISTING WETLAND TO THE EAST IS PROPOSED FROM THE 20M SETBACK LINE TO THE EDGE OF THE WETLAND. THE DETAILS OF WHICH WILL BE COVERED IN A FUTURE VEGETATION MANAGEMENT

- PLAN. THE LANDSCAPE DESIGN AIMS TO PROVIDE THE FOLLOWING OUTCOMES IN RESPONSE TO THE PRE-LODGEADVICE GIVEN BY PENRITH CITY COUNCIL:
- USE A MIX OF NATIVE ENDEMIC PLANT SPECIES;
 - PROVIDE TREES WITHIN THE CAR PARKING AREA, TO PROVIDE SHADE AMENITY AND CANOPY COVER;
 - FOLLOW THE PENRITH CITY COUNCIL WSUD TECHNICAL GUIDELINES WHEN PREPARING DETAILS OF PLANT SELECTIONS WITH REGARDS TO BIO-FILTRATION BASINS.

Drawing Register:	Drawing Name	Dwg No.	Drawing Name
LDA-00	Landscape Site Masterplan	LDA-06A	Typical Landscape Details 01
LDA-01	Landscape Plan West	LDA-06B	Typical Landscape Details 02
LDA-02	Landscape Plan East	LDA-07	Typical Specification Notes
LDA-03	Landscape Detailed Plan West	LDA-08	Planting Schedules & Images
LDA-04	Landscape Detailed Plan East		
LDA-05	Landscape Sections: AA, BB & CC		

Drawing Title:
Landscape Site Masterplan

DWG No:
LDA-00

Architect:
GEO SCAPES

Site: 215, 264 Victoria Av, Chesham NSW 2007 PH. (02) 9411 1433
www.geoscapes.com.au
LDA 04 020 205 781 MCH 620 205 781

Client:
watson young

Job Number:
181003

Project:
128 Andrews Road

Penrith NSW 2748

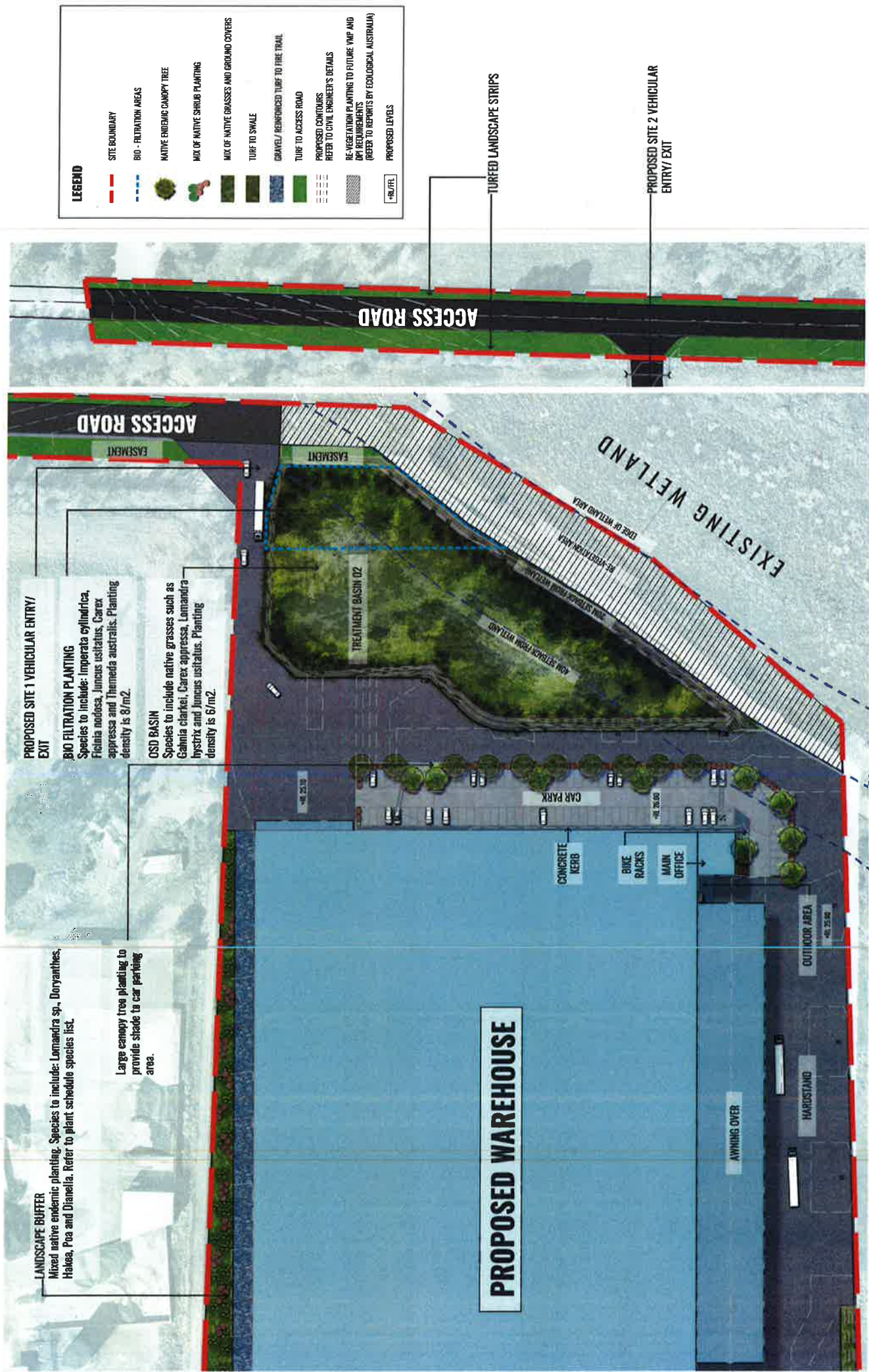
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1:500 @ A3

Date:
02.11.18

North:
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FOR DEVELOPMENT APPROVAL

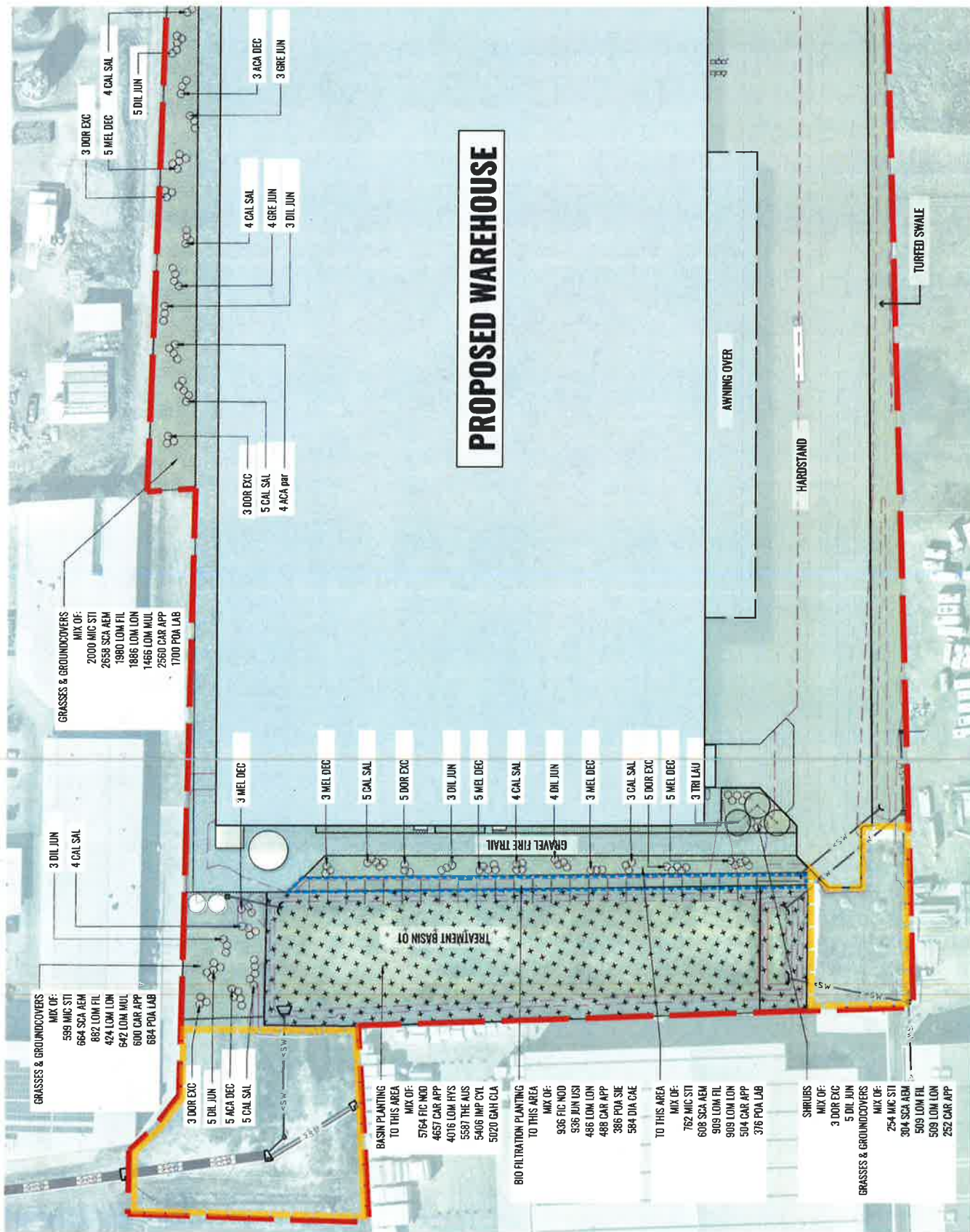
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1	02.11.18	ISSUED	CC	CC
2	18.11.18	REVISED	CC	CC
3	20.11.18	REVISED	CC	CC
4	02.11.19	REVISED	CC	CC



Drawing Title: Landscape Plan East	DWG No:	LDA-02	Architect: GEO SCAPES Suite 215, 264 Victoria Ave, Chesham NSW 2567 Ph: (02) 9411 1445 www.geoscapes.com.au ABN 64 620 205 781 ACH 620 206 781	Client: watson young	Scale: 1:500 @ A1 1:1000 @ A3	Date: 02.11.18	Job Number: 181003	North: 	FOR DEVELOPMENT APPROVAL			
									Revision	Description	Date	Checked
									1	LA-04/18	02.11.18	CS
									2	LA-04/18	02.11.18	CS
									3	LA-04/18	02.11.18	CS
									4	LA-04/18	02.11.18	CS
									5	LA-04/18	02.11.18	CS
									6	LA-04/18	02.11.18	CS
									7	LA-04/18	02.11.18	CS
									8	LA-04/18	02.11.18	CS
									9	LA-04/18	02.11.18	CS
									10	LA-04/18	02.11.18	CS

128 Andrews Road
Penrith NSW 2748





PROPOSED WAREHOUSE

LEGEND

- SITE BOUNDARY
- BIO - FILTRATION AREAS
- BASIN AREA
- MIX OF NATIVE GRASSES AND GROUNDCOVERS
- NATIVE ENDOMIC TREE PLANTING
- MIX OF NATIVE SHRUB PLANTING
- PLANTING CODES (REFER TO PLANTING LIST LDA-03)
- PROPOSED CONTOURS (REFER TO CIVIL ENGINEER'S DETAILS)
- UNIMPROVED AREA

Drawing Title:
Landscape Detailed Plan West
LDA-03

DWC No:

Client:
watson young

Architect:
GEO SCAPES

Unit 215, 26A Victoria Av, Chesham NSW 2667 Ph: (02) 9411 1485
www.geoscapes.com.au
ABN 64 670 202 781 AUM 620 205 791

Scale:
1:500 @ A1
1:1000 @ A3

Date:
02.11.18

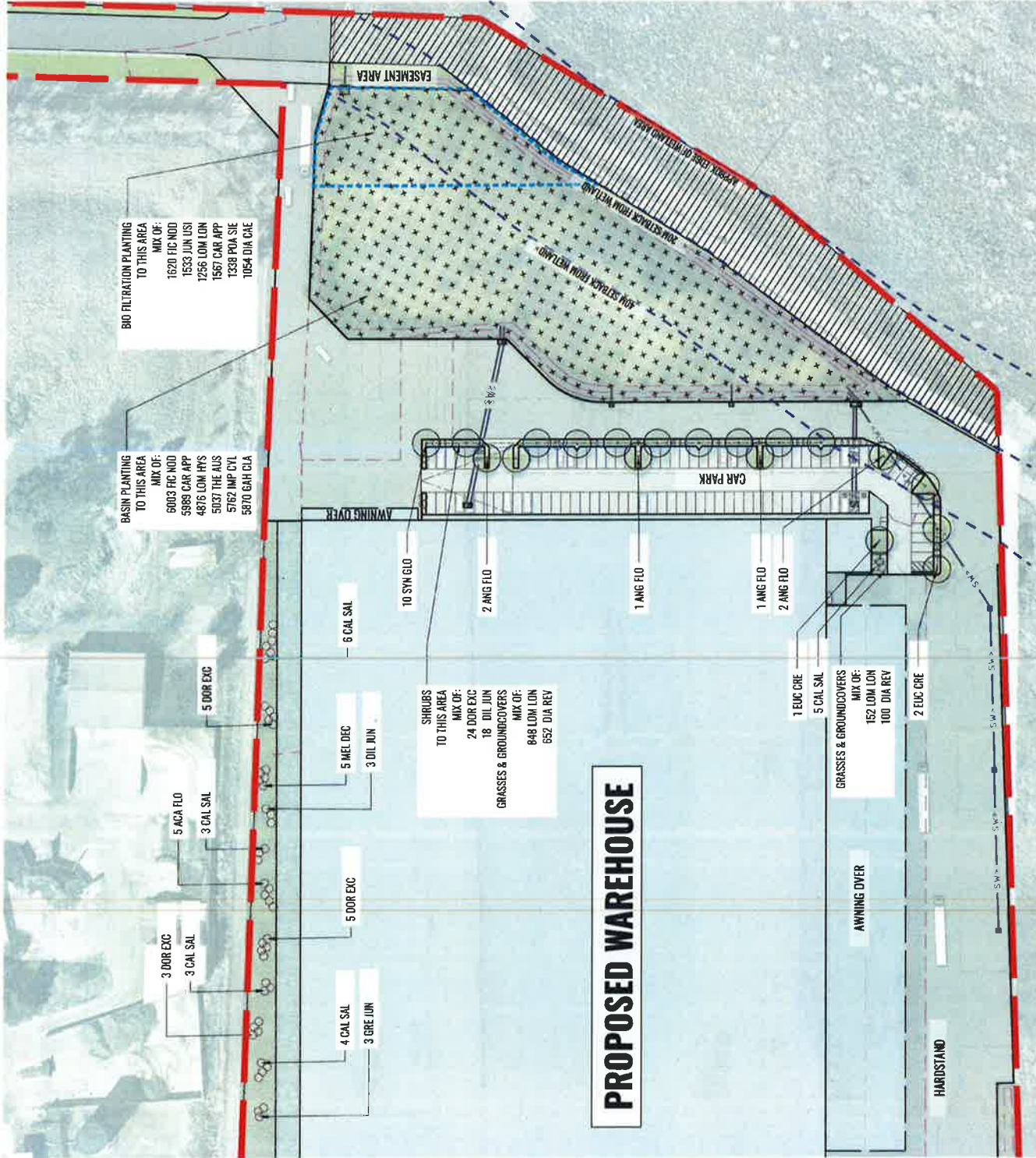
Job Number:
181003

North:
North Arrow

Project:
128 Andrews Road
Perth NSW 2748

FOR DEVELOPMENT APPROVAL

Revision	Date	Description	Drawn	Checked
1	12.11.18	ISSUED FOR APPROVAL	DC	DC
2	18.11.18	REVISED	DC	DC
3	20.11.18	REVISED	DC	DC
4	22.11.18	REVISED	DC	DC



LEGEND

	SITE BOUNDARY
	BIO - FILTRATION AREAS
	BASIN AREA
	MIX OF NATIVE GRASSES AND GROUNDCOVERS
	NATIVE ENDORIC TREE PLANTING
	MIX OF NATIVE SHRUB PLANTING
	PLANTING CODES (REFER TO PLANTING LIST LDM-08)
	PROPOSED CONTOURS REFER TO CIVIL ENGINEER'S DETAILS
	RE-VEGETATION PLANTING TO FUTURE WMP AND DIP REQUIREMENTS (REFER TO REPORTS BY ECOLOGICAL AUSTRALIA)

Scale:		North:	Job Number:	Date:	FOR DEVELOPMENT APPROVAL					
Scale	Scale				Revision	Description	Drawn	Checked		
1:500 @ A1	1:1000 @ A3		181003	02.11.18	Rev	Draw				
					1	1	1	1		
					2	2	2	2		
					3	3	3	3		
Project:		128 Andrews Road		Parramatta NSW 2148						



Client:



Architect:



Suite 215, 36A Victoria Ave, Chesham NSW 2867 Ph: (02) 9411 1465
www.geoscapes.com.au
ABN 64 620 265 781 ACH 620 205 781

Drawing Title:
Landscape Detailed Plan East
LDA-04
DWG No:



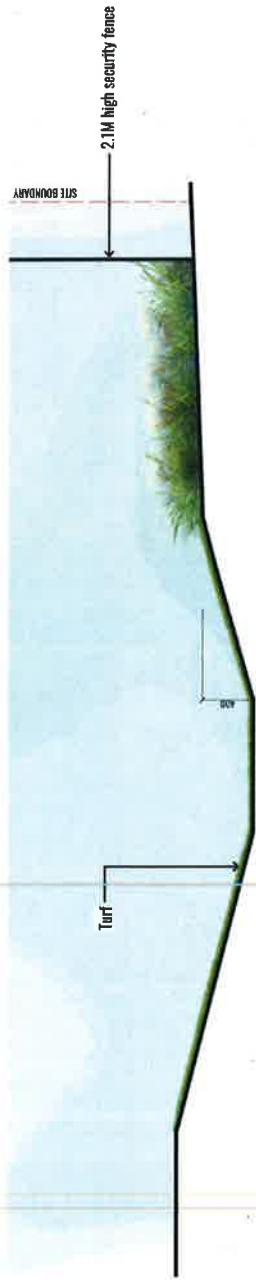
SECTION LOCATIONS



Section AA
1:100



Section BB
1:200



Section CC
1:200

Drawing Title:
Landscape Sections - AA & BB & CC

DWG No:
IDA-05

Architects:
GEOSCapes

Suite 215, 294 Victoria Ave, Chesham NSW 2067 Ph: 02 9411 1405
www.geoscapes.com.au A/CN 620 205 781

Architects:
watson young

Client:

Cadence

Scale:

AS SHOWN

Date:

02.11.18

Job Number:

181003

North:

N/A

Project:

128 Andrews Road

Penrith NSW 2748

FOR DEVELOPMENT APPROVAL			
Revisions	Drawn	Checked	Decided
A	02.11.18	02.11.18	02.11.18
B	02.11.18	02.11.18	02.11.18
C	02.11.18	02.11.18	02.11.18

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1005 JUNE 2005

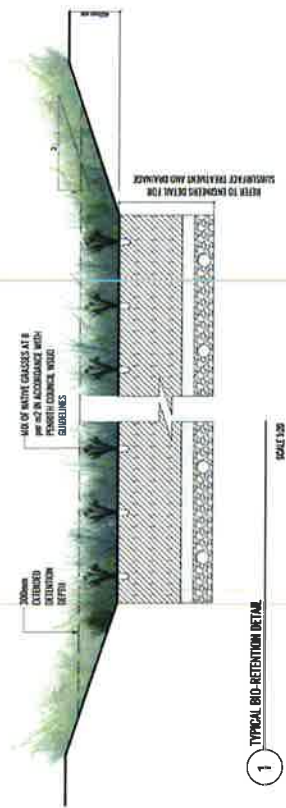
LEGEND

- ♂ - Male
- ♀ - Female
- L♂ - Laminaria
- F♂ - Female
- L♀ - Laminaria
- M♀ - Mangelia

TYPICAL 4000x4000mm BASIN PLANTING.
 MAJOR: (REFERS TO BE PLANTED IN MAJOR)
 MINOR: (REFERS TO BE PLANTED IN MINOR)
 BACKING NUMBERS SPECIFIED IN PLANT SCHEDULE. FOR 80x-ATTENTION SPECIES, REFER TO 10A-400.

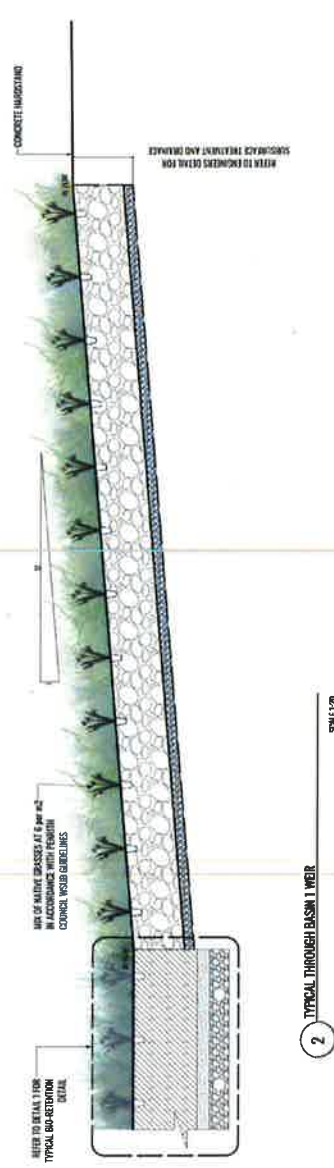
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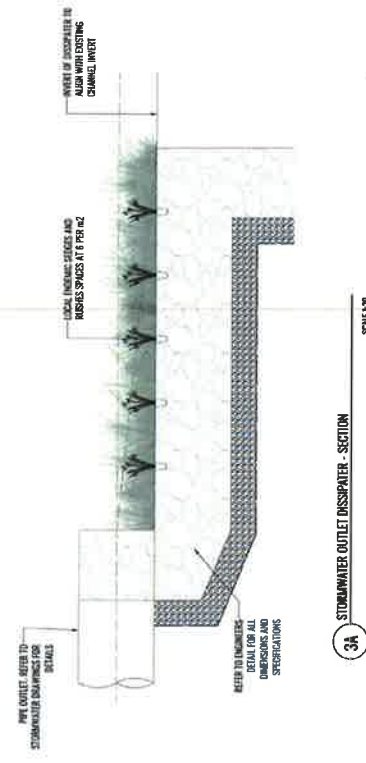
1 TYPICAL BIO-RETENTION DETAIL

SCALE 1:20



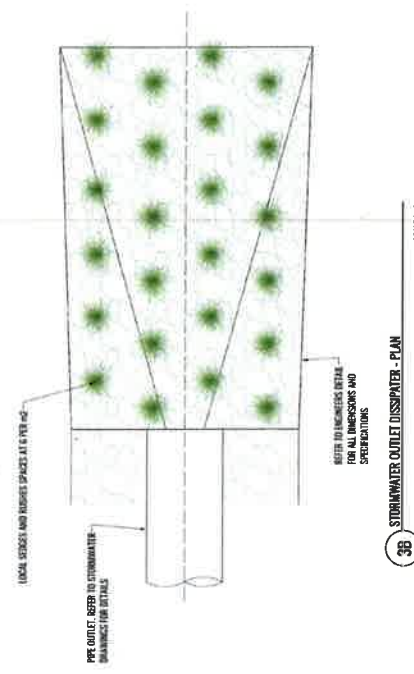
2 TYPICAL THROUGH BASIN 1 WEIR

SCALE 1:20



3A STORMWATER OUTLET DISSIPATER - SECTION

SCALE 1:20



3B STORMWATER OUTLET DISSIPATER - PLAN

SCALE 1:20

Drawing Title:
Typical Landscape Details Sheet 02
LDA-06B
DWG No:

GEOSCAPES
Suite 215, 264 Victoria Ave, Chesham NSW 2567 PH: (02) 9417 1435
www.geoscapes.com.au
ABN 64 620 265 781 ACH 620 265 781

Architect:
watson young

Client:



Scale:	Date:	Job Number:	North:	Revision:	Description	Drawn:	Checked:
AS SHOWN	02.11.18	181003	N/A	Rev	Date	Rev	Date
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				4	20.11.18	20.11.18	20.11.18
				5	20.11.18	20.11.18	20.11.18
				6	20.11.18	20.11.18	20.11.18
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128 Andrews Road
Penrith NSW 2748

General

Maintenance shall mean the care and maintenance of the landscape works by accepted horticultural practice as rectifying any defects that become apparent in the landscape works under normal use. The landscape contractor shall attend the site on a weekly basis to maintain the landscape works for the term of the maintenance period commencing from practical completion.

Standards

All grown or purchased plant stock must conform to all the conditions and requirements given in NATSPEC Guide: Specifying Trees. Soils to be in accordance with AS4419, mulching composts and conditioners to be in accordance with AS4454. Soils should conform to best practice specifications as listed in the Landscape Soils Handbook (Simon Leake & Elke Haeger 2017).

Rubbish Removal

During the term of the maintenance period the Landscape Contractor shall undertake rubbish removal from the site on a weekly basis to ensure the site remains in tidy condition.

Weed Eradication

Weed growth that may occur in grassed, planted or mulched areas is to be removed using environmentally acceptable methods i.e. non-residual glyphosate herbicide (e.g. 'Roundup', applied in accordance with the manufacturer's directions).

Tree Replacement

Trees shall show signs of healthy vigorous growth and be free from disease and not exhibit signs of stress prior to handover to the client. Any trees or plant that die or fail to thrive, or are damaged or stolen will be replaced. Replacement material shall have the maintenance period extended in accordance with the landscape contract conditions. Trees and plant materials shall be equal to the minimum requirements of species specified and approved material delivered to site. Should the condition decline from the approved sample the Superintendent reserves the right to reject the tree / plants.
Frequency: as required.

Stakes

Adjust and/or replace stakes and ties where required. Remove staking and guying when instructed by the Superintendent

Pruning

Selective pruning may be required during the establishment period to promote a balanced canopy structure. These activities shall be carried out to the best horticultural and industry practice. All pruned material is to be removed from site.

Mulched Surfaces

All planter beds and garden areas shall have a minimum depth of 75mm Forest Fines mulch. All mulch is to be free of deleterious matter such as soil, weeds and sticks.

Mulched surfaces are to be kept clean and tidy and free of any deleterious material and foreign matter. Reinstate depths to a uniform level of 75mm with mulch as specified, mulch to be free of any wood material impregnated with CCA or similar toxic treatment. Top up mulch levels prior to handover to client.

Watering

Implement an appropriate hand watering regime in areas not irrigated in association with current watering programme to maintain plant health and vigour. The program shall reflect seasonal conditions and plant species.

Frequency: Weekly or as required.

Soil

Non-Australian native garden beds to have soil installed consisting of 50% existing site topsoil and 50% new topsoil equal or equivalent to 'Organic Garden Mix' as supplied by Australian Native Landscapes. Australian native garden beds to have soil installed consisting of 50% existing site topsoil and 50% new topsoil equal or equivalent to 'Native Low 'P' Mix' as supplied by Australian Native Landscapes. All garden bed areas to have minimum 300mm depth topsoil, 100mm depth to turf areas.

Pest and Disease Control

The Landscape Contractor shall spray for pests and disease infestations when the pest and fungal attack has been positively identified and when their populations have increased to a point that will become detrimental to plant growth. Apply all pesticides to manufacturer's directions.

Frequency: weekly inspection

Fertilising

Generally check for signs of nutrient deficiencies (yellowing of leaves, failure to thrive), and adapt fertiliser regime to suit. Fertiliser should be applied at the beginning and the end of the (summer) growing season.

Drawing Title:

Typical Specification Notes

DWG No:

LDA-07

GEOSCAPES

Suite 215, 264 Victoria Ave, Chesham NSW 2667 Ph: (02) 9471 1435
www.geoscapes.com.au
ABN 64 620 265 781 ACH 620 265 781

Architect:

watson
young

Client:



Scale:

N/A

Date:

02.11.18

Job Number:

181003

North:

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Revision

Rev

Date

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CODE	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT	NATIVE	ENDEMIC	SIZE	PLANTING DENSITY	QTY*
	Native Grasses							
CAR app	<i>Carex appressa</i>	Tall Sedge	1.2m	✓	✓	Tube	6/m2	10646
FIC nod	<i>Ficinia nodosa (Syn. Isolepis nodosa)</i>	Kneebly Clute Rush	1m	✓		Tube	6/m2	11761
GAH cla	<i>Gahnia clausenii</i>	Tall Saw-Sedge	1.5m	✓		Tube	6/m2	10890
IMP cyl	<i>Imperata cylindrica</i>	Blady Grass	1.5m	✓	✓	Tube	6/m2	11168
LOM ten	<i>Lomandra teretifolia</i>	Creek Mat-Rush	1.2m	✓		Tube	6/m2	8892
THE aus	<i>Themeda australis</i>	Kangaroo Grass	1.5m	✓	✓	Tube	6/m2	10524

CODE	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT	MATURE	ENDEMIC	SIZE	PLANTING DENSITY	QTY*
	Native Grasses & Sedges							
CAR app	<i>Carex appressa</i>	Tall Sedge	1.2m	✓		Tube	8/m2	2055
DIA tra	<i>Dianella caerulea</i>	Blue Flax-lily	1m	✓		Tube	8/m2	1638
FIC nod	<i>Ficinia nodosa</i> (Syn. <i>Isoplepis nodosa</i>)	Kneeby Club Rush	1m	✓		Tube	8/m2	2556
JUN usi	<i>Juncus usitatus</i>	Common Rush	1m	✓	✓	Tube	8/m2	2469
LOM ten	<i>Lomandra longifolia</i>	Marrash	1.2m	✓		Tube	8/m2	1742
PDA sie	<i>Poa sieberiana</i>	Grey Tussock grass	0.5m	✓		Tube	8/m2	1724

CODE	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT	NATIVE	ENDEMIC	SIZE	PLANTING PRIORITY
Trees							
ANG flo	<i>Alseodaphne floribunda</i>	Rough-Barked Apple	20m	✓	✓	45L	As Shown
SYN glo	<i>Syncaulus glomeriflora</i>	Turpinia	25m	✓	✓	45L	As Shown
EUC ore	<i>Eucalyptus orbata</i>	Narrow-leaved Ironbark	12-18m	✓	✓	45L	As Shown
TRI lau	<i>Tristanodaphne laurata</i>	Rough Fruit Pittosporum	8m	✓	✓	45L	As Shown
Shrubs							
ACA flo	<i>Acacia floribunda</i>	White Sally Wattle	3-5m	✓	✓	Tube	As Shown
ACA par	<i>Acacia parvifoliolosa</i>	Paranarratta wattle	3-15m	✓	✓	Tube	As Shown
GRE lun	<i>Grevillea juniperina</i>	Juniper-leaved grevillea	3m	✓	✓	Tube	As Shown
CAL sal	<i>Callistemon salignus</i>	Willow Bottlebrush	1-10m	✓	✓	Tube	As Shown
DIL jun	<i>Dillwynia juniperina</i>	Prickly parrot pea	0.5-2.5m	✓	✓	Tube	As Shown
DOR auc	<i>Doryanthes aurea</i>	Gympsa Lily	3m	✓	✓	Tube	As Shown
MEL dec	<i>Melaleuca decora</i>	White Feather Honey Myrtle	7m	✓	✓	Tube	As Shown
Grasses & Groundcovers							
CAR app	<i>Carex appressa</i>	Tail Sedge	1m	✓	✓	Tube	6/m2
DIA rev	<i>Dianella revoluta</i>	Blue Flag-lily, Spreading Flag-lily	1m	✓	✓	Tube	6/m2
LOM fil	<i>Lomandra filiformis</i>	Wattle Mat Rush	0.5m	✓	✓	Tube	6/m2
LOM lon	<i>Lomandra longifolia</i>	Spiny Mat Rush	0.8m	✓	✓	Tube	6/m2
LOM mul	<i>Lomandra multiflora</i>	Many-flowered Mat-rush	0.9m	✓	✓	Tube	6/m2
MIC sti	<i>Microlophus stipoides</i>	Weeping Grass, Meadow Rice-grass	1m	✓	✓	Tube	6/m2
POA ab	<i>Poa abilliana</i>	Tussock Poa	1.2m	✓	✓	Tube	6/m2
SCA sem	<i>Scariosa semida</i>	Fan Flower	0.5m	✓	✓	Tube	6/m2

Particulars		FOR DEVELOPMENT APPROVAL			
Rev	Date	Description	Drains	Checklist	
A	02.03.18	DA 10487	CC	RC	
B	06.03.18	DA 10488	CC	RC	
B	26.03.18	DA 10489	CC	RC	
C	02.03.18	DA 10486	CC	RC	



Confederatus entomus



Acacia floribunda



Therapeutic on-site