

27 June 2019

Roads and Maritime Services
27-31 Argyle Street,
Parramatta, NSW 2150

Attention: Paheer Rathan;

Dear Sir,

**Re: SYD18/01905/02 (A27339205
Lane Cove West -Proposed Data Centre:**

In response to the comments received 14 May 2019, our return comments are as follows and as shown in Appendix A:

1. Vibration monitoring:

Vibration monitoring will be implemented during construction of the proposed data centre. Our Construction Management Plan will outline the procedure to be utilised on site. The CMP is currently under final development and can be submitted prior to construction.

2. Foundation Design:

The proposed foundation system will be as shown on the attached structural drawing SY180197 SK00/PI prepared by Van Der Meer consulting engineers. Given the depth of the ventilation shaft it is anticipated that there will be no impact on existing LCT asset.

3. Retention System:

There will be no works extending beyond the boundaries of the site. The proposed bio-basin system will be contained on the northern part of the site. There will be no direct impact on the LCT.

4. Additional Boreholes:

At present the single borehole adjacent to the south-eastern boundary of the site gives a reasonable level of certainty on existing site conditions. During construction additional boreholes can/will be undertaken to give an accurate representation of the area adjacent to the LCT ventilation tunnel. This information can be made available to RMS when completed.

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5. Proposed Landscape Treatment:

Refer to the attached plans (LDA 02 and LDA 07) which outlines the proposed landscaping to the southern boundary. The initial planting selections have been amended to incorporate smaller species which will not have any adverse impacts on existing infrastructure beyond the boundary.

6. Other Proposed Works:

Refer to the attached plan which indicates the relationship of proposed inground services zone to the LCT ventilation tunnel easement. The shaded area represents the zone which will have new stormwater, and comms cables installed. We understand that the RL to the top of the stratum ranges from rl 6.5 to rl 10.0 within the zone that crosses our site. The lowest services in this area will be at rl 23.0 approx, some 13.0m above the stratum level. We do not believe there will be any impacts on the easement.

7. As-Built Drawings:

The as-builts of the LCT would be of assistance. We will make contact at the appropriate time to obtain copies. Please advise who the relevant contact person will be.

We trust that the above responses address the concerns raised. We would request a response confirming your acceptance of the return comments at your earliest convenience. If you have any further questions, please contact the undersigned.

Yours sincerely,

A W EDWARDS PTY LIMITED

Dino DiPaolo
Design Manager
Mob: 0415 512 597

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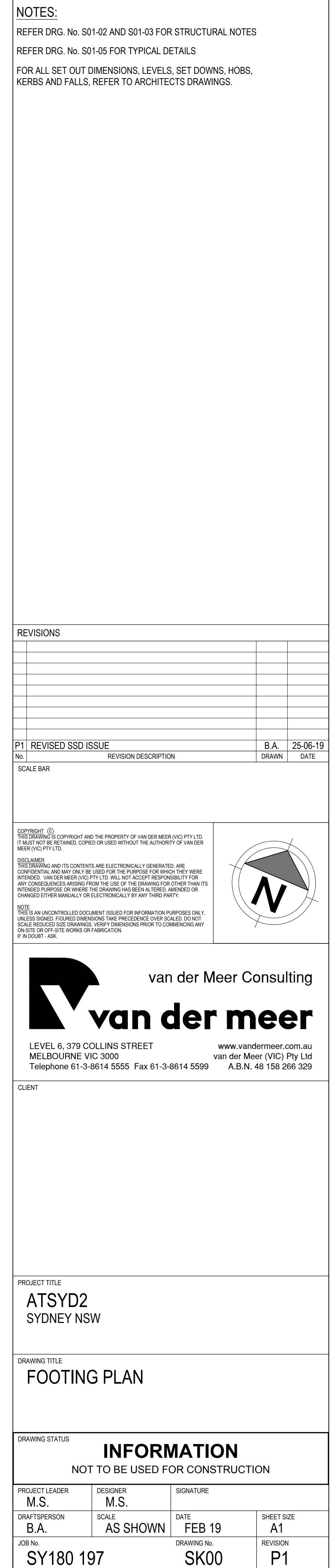
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Appendix A: Support Diagrams:

A W EDWARDS PTY LIMITED

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[illegible]

PROPOSED APZ LANDSCAPE PLANTING						
CODE	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT	SIZE	PLANTING DENSITY	QTY*
	Canopy trees					
ANG COS	<i>Angophora costata</i>	<i>Sydney Red Gum</i>	20m	5L	As Shown	2
COR GUM	<i>Corymbia gummitera</i>	<i>Red Bloodwood</i>	30m	5L	As Shown	3
EUC RES	<i>Eucalyptus resinifera</i>	<i>Red Mahogany</i>	25m	5L	As Shown	2
SYN GLO	<i>Syncarpia glomulifera</i>	<i>Turpentine tree</i>	25m	5L	As Shown	2
	Sub-canopy trees					
ACA PAR	<i>Acacia parramattensis</i>	<i>Parramatta Wattle</i>	12m	5L	As Shown	4
ALL LIT	<i>Allocasurarina littoralis</i>	<i>Black Sheoak</i>	10m	5L	As Shown	9
ELA ret	<i>Elaeocarpus reticulatus</i>	<i>Blueberry Ash</i>	10m	5L	As Shown	10
MEL LIN	<i>Melaleuca linariifolia</i>	<i>Snow in Summer</i>	8m	5L	As Shown	8
	Shrubs 1 per 30m2					
ACA flo	<i>Acacia floribunda</i>	<i>Sally Wattle</i>	6m	5L	As Shown	44
BRE obl	<i>Breynia oblongifolia</i>	<i>Coffee Bush</i>	6m	5L	As Shown	47
BUR spi	<i>Bursaria spinosa subsp. spinosa</i>	<i>Blackthorn</i>	6m	5L	As Shown	46
DOD tri	<i>Dodonaea triquetra</i>	<i>Common Hop Bush</i>	2m	5L	As Shown	40
KUN amb	<i>Kunzea ambigua</i>	<i>Tick Bush</i>	2m	5L	As Shown	35
MEL thy	<i>Melaleuca thymifolia</i>	<i>Thyme Honey myrtle</i>	2m	5L	As Shown	61
TRE tom	<i>Trema tomentosa</i>	<i>Native peach</i>	2m	5L	As Shown	45
	Groundcovers 4 per 1m2					
CEN asi	<i>Centella asiatica</i>	<i>Asiatic pennywort</i>	0.2m	Tubestock	As per VMP	2494
COM cya	<i>Commelina cyanea</i>	<i>Scurvy weed</i>	1m	Tubestock	As per VMP	2494
DIP var	<i>Dipodium variegatum</i>	<i>Blotched hyacinth orchid</i>	1m	Tubestock	As per VMP	2494
ECH cae	<i>Echinopogon caespitosus</i>	<i>Hedgehog Grass</i>	0.75m	Tubestock	As per VMP	2494
ENT mar	<i>Entolasia marginata</i>	<i>Panic Grass</i>	0.3m	Tubestock	As per VMP	2494
ENT str	<i>Entolasia stricta</i>	<i>Right angled grass</i>	0.8m	Tubestock	As per VMP	2494
IMP cyl	<i>Imperata cylindrica</i>	<i>Cogongrass</i>	0.6m	Tubestock	As per VMP	2494
JUN usi	<i>Juncus usitatus</i>	<i>Common Rush</i>	0.6m	Tubestock	As per VMP	2636
MIC sti	<i>Microlaena stipoides</i>	<i>Weeping Grass</i>	0.8m	Tubestock	As per VMP	2784
OPL aem	<i>Oplismenus aemulus</i>	<i>Basket grass</i>	0.3m	Tubestock	As per VMP	2494
OPL imb	<i>Oplismenus imbecillis</i>	<i>Basket grass</i>	0.3m	Tubestock	As per VMP	2494
THE tri	<i>Themeda triandra</i>	<i>Kangaroo Grass</i>	0.7m	Tubestock	As per VMP	2590

SMOOTH-BARKED APPLE - RED BLOODWOOD OPEN FOREST						
CODE	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT	SIZE	PLANTING DENSITY	QTY*
	Shrubs 1 per 5m2					
ACA lin	<i>Acacia linifolia</i>	<i>White Wattle</i>	5m	AS PER VMP	As Shown	6
ACA lon	<i>Acacia longifolia</i>	<i>Sydney golden wattle</i>	8m	AS PER VMP	As Shown	6
BRE obo	<i>Breynia oblongifolia</i>	<i>Coffee Bush</i>	6m	AS PER VMP	As Shown	6
DOD tri	<i>Dodonaea triquetra</i>	<i>Common Hop Bush</i>	2m	AS PER VMP	As Shown	6
GRE bux	<i>Grevillea buxifolia</i>	<i>Grey spider flower</i>	2m	AS PER VMP	As Shown	6
GRE ser	<i>Grevillea sericea</i>	<i>Silky Grevillea</i>	2m	AS PER VMP	As Shown	6
KUN amb	<i>Kunzea ambigua</i>	<i>Tick Bush</i>	3m	AS PER VMP	As Shown	6
LEP tri	<i>Leptospermum trinervium</i>	<i>Paperbark Teatree</i>	2m	AS PER VMP	As Shown	6
LEP pol	<i>Leptospermum polygalifolium</i>	<i>Tantoon</i>	3m	AS PER VMP	As Shown	6
OZO dio	<i>Ozothamnus diosmifolius</i>	<i>Rice flower</i>	2m	AS PER VMP	As Shown	6
PER pin	<i>Persoonia pinifolia</i>	<i>Pine leaved Geebung</i>	3m	AS PER VMP	As Shown	6

SMOOTH-BARKED APPLE - RED BLOODWOOD OPEN FOREST						
CODE	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT	SIZE	PLANTING DENSITY	QTY*
PER lin	<i>Persoonia linearis</i>	<i>Narrow leaved Geebung</i>	5m	AS PER VMP	As Shown	6
WOO pun	<i>Woolisia pungens</i>	<i>Snow Wreath</i>	2m	AS PER VMP	As Shown	6
ZIE pil	<i>Zieria pilosa</i>	<i>Hairy Zieria</i>	1.5m	AS PER VMP	As Shown	6
	Groundcovers 4 per 1m2					
ARI vag	<i>Aristida vagans</i>	<i>Threeawn speargrass</i>	0.80m	AS PER VMP	As per VMP	129
AUS pub	<i>Austrostipa pubescens</i>	<i>Speargrass</i>	1.0m	AS PER VMP	As per VMP	129
BLE car	<i>Blechnum cartilagineum</i>	<i>Gristle fern</i>	1.0m	AS PER VMP	As per VMP	129
CEN asi	<i>Centella asiatica</i>	<i>Asiatic pennywort</i>	0.2m	AS PER VMP	As per VMP	129
DIA cae	<i>Dianella caerulea</i>	<i>Blue flax Lily</i>	0.5m	AS PER VMP	As per VMP	129
DIP var	<i>Dipodium variegatum</i>	<i>Blotched hyacinth orchid</i>	1.0m	AS PER VMP	As per VMP	129
ENT str	<i>Entolasia stricta</i>	<i>Right angled grass</i>	0.8m	AS PER VMP	As per VMP	129
IMP cyl	<i>Imperata cylindrica</i>	<i>Cogongrass</i>	0.6m	AS PER VMP	As per VMP	129
LOM lon	<i>Lomandra longifolia</i>	<i>Spiny head Mat rush</i>	0.8m	AS PER VMP	As per VMP	129
MIC sti	<i>Microlaena stipoides</i>	<i>Weeping Grass</i>	0.8m	AS PER VMP	As per VMP	129
OPL aem	<i>Oplismenus aemulus</i>	<i>Basket grass</i>	0.3m	AS PER VMP	As per VMP	129
OPL imb	<i>Oplismenus imbecillis</i>	<i>Basket grass</i>	0.3m	AS PER VMP	As per VMP	129
THE tri	<i>Themeda triandra</i>	<i>Kangaroo Grass</i>	0.7m	AS PER VMP	As per VMP	129

SWAMP OAK FLOODPLAIN FOREST - CONTAMINATED LAND AREA :1594m2						
CODE	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT	SIZE	PLANTING DENSITY	QTY*
	Shrubs 1 per 5m2					
BRE obo	<i>Breynia oblongifolia</i>	<i>Coffee Bush</i>	6m	AS PER VMP	As Shown	83
BUR spi	<i>Bursaria spinosa subsp. spinosa</i>	<i>Native Blackthorn</i>	3m	AS PER VMP	As Shown	83
DOD tri	<i>Dodonaea triquetra</i>	<i>Common Hop Bush</i>	5m	AS PER VMP	As Shown	83
MEL thy	<i>Melaleuca thymifolia</i>	<i>Thyme Honey myrtle</i>	2m	AS PER VMP	As Shown	83
TRE tom	<i>Trema tomentosa</i>	<i>Native peach</i>	1.5m	AS PER VMP	As Shown	83
	Groundcovers 4 per 1m2					
ARI vag	<i>Aristida vagans</i>	<i>Threeawn speargrass</i>	0.80m	AS PER VMP	As per VMP	516
AUS pub	<i>Austrostipa pubescens</i>	<i>Speargrass</i>	1.0m	AS PER VMP	As per VMP	516
BLE ind	<i>Blechnum indicum</i>	<i>Swamp water fern</i>	1.0m	AS PER VMP	As per VMP	516
CEN asi	<i>Centella asiatica</i>	<i>Asiatic pennywort</i>	0.2m	AS PER VMP	As per VMP	516
COM cya	<i>Commelina cyanea</i>	<i>Scurvy weed</i>	1m	AS PER VMP	As per VMP	516
DIA cae	<i>Dianella caerulea</i>	<i>Blue flax Lily</i>	0.5m	AS PER VMP	As per VMP	516
ECH cae	<i>Echinopogon caespitosus</i>	<i>Hedgehog Grass</i>	0.8m	AS PER VMP	As per VMP	516
ENT mar	<i>Entolasia marginata</i>	<i>Panic Grass</i>	0.6m	AS PER VMP	As per VMP	516
FIC nod	<i>Ficinia nodosa</i>	<i>Knobby club rush</i>	0.8m	AS PER VMP	As per VMP	516
GAH cla	<i>Gahnia clarkiei</i>	<i>Tall Sawsedge</i>	0.8m	AS PER VMP	As per VMP	516
IMP cyl	<i>Imperata cylindrica</i>	<i>Cogongrass</i>	0.6m	AS PER VMP	As per VMP	516
JUN usi	<i>Juncus usitatus</i>	<i>Common Rush</i>	0.6m	AS PER VMP	As per VMP	516
LOM lon	<i>Lomandra longifolia</i>	<i>Spiny head Mat rush</i>	0.8m	AS PER VMP	As per VMP	516
MIC sti	<i>Microlaena stipoides</i>	<i>Weeping Grass</i>	0.8m	AS PER VMP	As per VMP	516
OPL imb	<i>Oplismenus imbecillis</i>	<i>Basket grass</i>	0.3m	AS PER VMP	As per VMP	516
THE tri	<i>Themeda triandra</i>	<i>Kangaroo Grass</i>	0.7m	AS PER VMP	As per VMP	516

WORKER'S AMENITY AREA PLANTING						
CODE	BOTANICAL NAME	COMMON NAME	MATURE HEIGHT	SIZE	PLANTING DENSITY	QTY*
	Shrubs 1 per m2					
ACA flo	<i>Acacia floribunda</i>	<i>White Sally Wattle</i>	3m	200mm	As Shown	25
CYA aus	<i>Cyathea australis</i>	<i>Rough Tree fern</i>	3m	200mm	As Shown	23
DIC ant	<i>Dicksonia antarctica</i>	<i>Soft Tree fern</i>	2m	200mm	As Shown	31
HAK sal	<i>Hakea salicifolia</i>	<i>Willow leaved Hakea</i>	2m	200mm	As Shown	25
LOM sil	<i>Lomatia silaifolia</i>	<i>Crinkle Bush</i>	2m	200mm	As Shown	25
MEL thy	<i>Melaleuca thymifolia</i>	<i>Thyme honey myrtle</i>	1.2m	200mm	As Shown	25
RUL her	<i>Rulingia hermannifolia</i>	<i>Kerrawang</i>	0.6m	200mm	As Shown	25
	Groundcovers 4 per 1m2					
ASP aus	<i>Asplenium australasicum</i>	<i>Bird's Nest fern</i>	0.5m	Tubestock	As per VMP	220
BAL tet	<i>Baloskion tetraphyllum</i>	<i>Tassel rope rush</i>	1.0m	Tubestock	As per VMP	277
CEN asi	<i>Centella asiatica</i>	<i>Asiatic pennywort</i>	0.2m	Tubestock	As per VMP	277
COM cya	<i>Commelina cyanea</i>	<i>Scurvy weed</i>	1m	Tubestock	As per VMP	152
DIP var	<i>Dipodium variegatum</i>	<i>Blotched hyacinth orchid</i>	1m	Tubestock	As per VMP	277
DOO asp	<i>Doodia aspera</i>	<i>Prickly rasp fern</i>	0.35m	Tubestock	As per VMP	152
FIC nod	<i>Ficinia nodosa</i>	<i>Knobby club rush</i>	0.8m	Tubestock	As per VMP	152
JUN usi	<i>Juncus usitatus</i>	<i>Common Rush</i>	0.6m	Tubestock	As per VMP	152
MIC sti	<i>Microlaena stipoides</i>	<i>Weeping Grass</i>	0.8m	Tubestock	As per VMP	277
OPL aem	<i>Oplismenus aemulus</i>	<i>Basket grass</i>	0.3m	Tubestock	As per VMP	277
OPL imb	<i>Oplismenus imbecillis</i>	<i>Basket grass</i>	0.3m	Tubestock	As per VMP	277
PEL fal	<i>Pellaea falcata</i>	<i>Sickle fern</i>	0.5m	Tubestock	As per VMP	152
PHI xan	<i>Philodendron xanadu</i>	<i>Philodendron</i>	0.8m	Tubestock	As per VMP	152
PHI xan*	<i>Philodendron xanadu</i>	<i>Philodendron</i>	0.8m	Tubestock	As per VMP	42
PLE par	<i>Plectranthus parviflorus</i>	<i>Little spurflower</i>	0.5m	Tubestock	As Shown	277
THE tri	<i>Themeda triandra</i>	<i>Kangaroo Grass</i>	0.7m	Tubestock	As per VMP	277
VIO hed	<i>Viola hedaracea</i>	<i>Native Violet</i>	0.1m	Tubestock	As per VMP	277
* TROUGH PLANTING						

*QTY INDICATIVE
FINAL NUMBERS TO BE CALCULATED AT CC/CONSTRUCTION STAGE

Drawing Title:
Planting Schedule & Images

DWG No:

LDA-07

GEOSCAPHES

LANDSCAPE ARCHITECTS

Suite 215, 284 Victoria Av. Chatswood NSW 2067 Ph. (02) 9411 1485
www.geoscapes.com.au ABN 84 620 205 781 ACN 620 205 781
Registered Landscape Architect #5868

Client:

GREENBOX

Scale:
N/A

Date:
26.06.19

Job Number:
1801108

North:
N/A

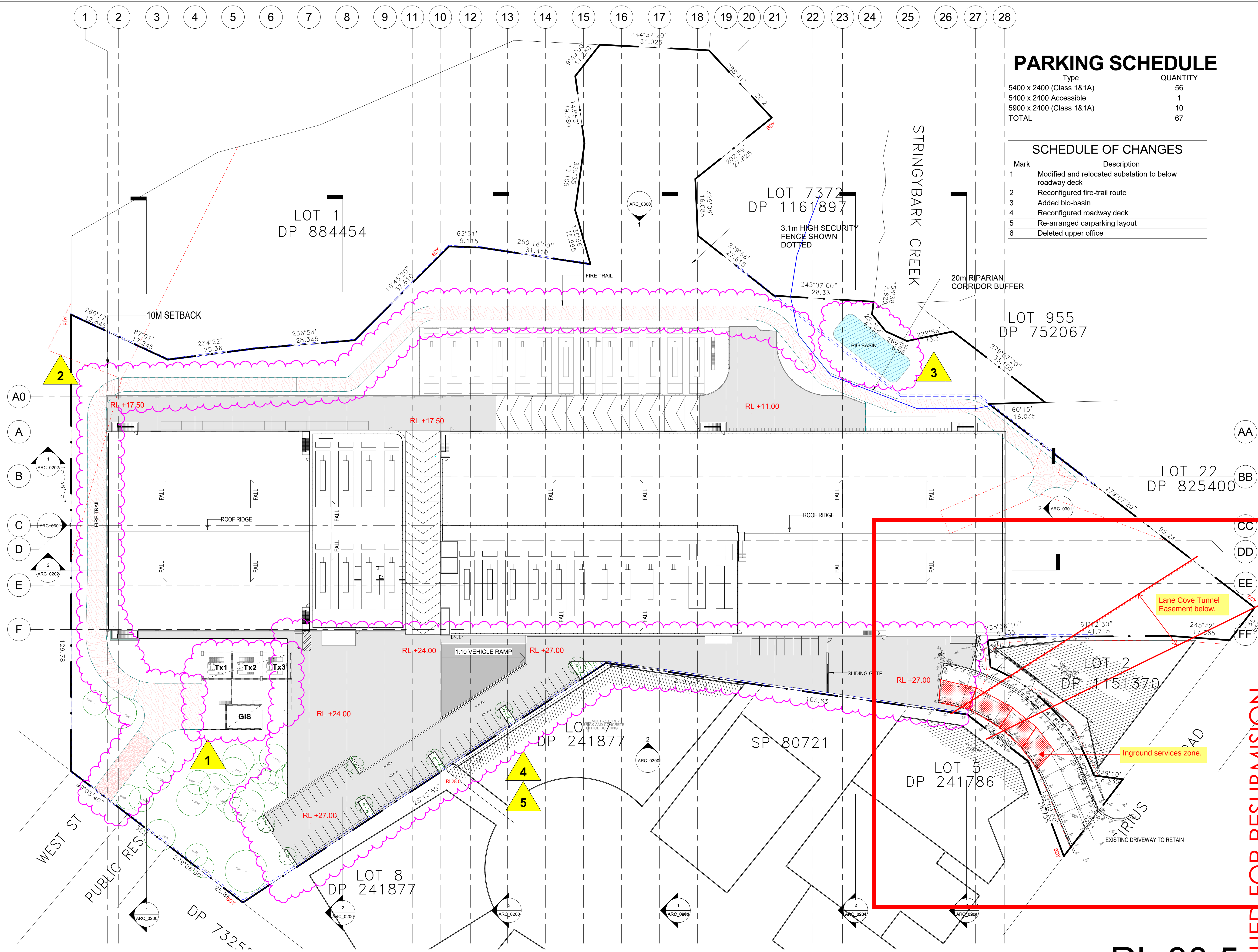
Project:

Proposed Data Centre
Lane Cove West NSW 2066

Revision

FOR DEVELOPMENT APPROVAL

Rev	Date	Description	Drawn	Checked
B	26.06.19	FOR SSD SUBMISSION	SW	BG
A	18.12.18	FOR SSD SUBMISSION	CC	BG



PARKING SCHEDULE

Type	QUANTITY
5400 x 2400 (Class 1&1A)	56
5400 x 2400 Accessible	1
5900 x 2400 (Class 1&1A)	10
TOTAL	67

SCHEDULE OF CHANGES

Mark	Description
1	Modified and relocated substation to below roadway deck
2	Reconfigured fire-trail route
3	Added bio-basin
4	Reconfigured roadway deck
5	Re-arranged carparking layout
6	Deleted upper office

Issue	Date	Description
1	12.12.2018	ISSUE FOR APPROVAL
2	13.12.2018	ISSUE FOR APPROVAL
3	14.12.2018	ISSUE FOR SSD SUBMISSION
4	24.06.19	ISSUED FOR RESUBMISSION

Sc. 1:500 0 5 10 15 25m

Project Manager

Services Design

GREENBOX

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SYDNEY NSW 2000 AUSTRALIA
GREENBOX ARCHITECTURE PTY LTD
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ISO 9001 CERTIFIED QUALITY SYSTEM

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- Do not scale from drawing
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- All materials to be used in accordance with the manufacturer's specifications and instructions and shall comply with the relevant Australian Standards
- Copyright in this drawing and design remain the property of Greenbox Architecture Pty Ltd
- Nominated Architect - Gerard Page; NSW reg No.7247, Vic reg No.3715, Vic reg No.17664, SA reg No.3065, QLD reg No.4538, WA reg No.2489

Client

Project
ATSYD2
1 SIRIUS ROAD LANE COVE WEST

Drawn By
PL

Scale
1:500 @ A1

Checked By
DW

Approved By
AO

Date
24.06.19

Job Number
180095

Project Status
SSD

Drawing Title
ROOF PLAN_RL 30.5

Drawing Number

Issue

ATSYD2_SSD_DRG_ARC_0104

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