

PROJECT: **EVENT CARPARK WORKS**

PLANSET: **CONCEPT ENGINEERING WORK**

CLIENT: **NEWCASTLE LEGAL AND CONVEYANCING**



LOCALITY PLAN
NOT TO SCALE

LGA: BLACKTOWN CITY COUNCIL

50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766
LOT 4 DP 1079897

DRAWING LIST		
DWG NO.	REV	DWG TITLE
GENERAL		
PS01-A000	C	COVER SHEET
PS01-A050	C	DEVELOPMENT OVERVIEW PLAN
CONSTRUCTION MANAGEMENT WORKS		
PS01-B300	B	TREE REMOVAL PLAN
EARTHWORKS		
PS01-C100	C	EARTHWORKS GRADING PLAN
PS01-C600	C	EARTHWORKS SITE SECTIONS - SHEET 1
PS01-C601	B	EARTHWORKS SITE SECTIONS - SHEET 2
DRAINAGE		
PS01-E100	C	DRAINAGE PLAN
PS01-E200	B	DRAINAGE DETAILS - SHEET 1
PS01-E201	B	DRAINAGE DETAILS - SHEET 2
PS01-E202	C	DRAINAGE DETAILS - SHEET 3
PS01-E203	A	DRAINAGE DETAILS - SHEET 4
PS01-E300	B	LONGITUDINAL SECTION - SHEET 1
PS01-E301	B	LONGITUDINAL SECTION - SHEET 2
PS01-E302	B	LONGITUDINAL SECTION - SHEET 3
PS01-E600	C	ON SITE DETENTION CATCHMENT PLAN - MODELS & RESULTS
PS01-E700	C	WATER QUALITY CATCHMENT PLAN - MODELS & RESULTS
FINAL CIVIL WORKS		
PS01-G300	C	CARPARK LAYOUT PLAN
PS01-GZ00	C	CARPARK SWEEP PATH PLAN - SHEET 1 - B99 VEHICLE & TRAILER CIRCULATION
PS01-GZ01	C	CARPARK SWEEP PATH PLAN - SHEET 2 - B99 VEHICLE & TRAILER PARKING
PS01-GZ02	C	CARPARK SWEEP PATH PLAN - SHEET 3 - HRV CIRCULATION
PS01-GZ10	A	CARPARK BARRIER TYPICAL DETAILS

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD	SCALE
C	UPDATED TO ADDRESS DPIE RFI 19.08.21	30/08/2021	JS	AW	GH	DM	
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW/MD	GH	DM	
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW/AVG	GH	DM	

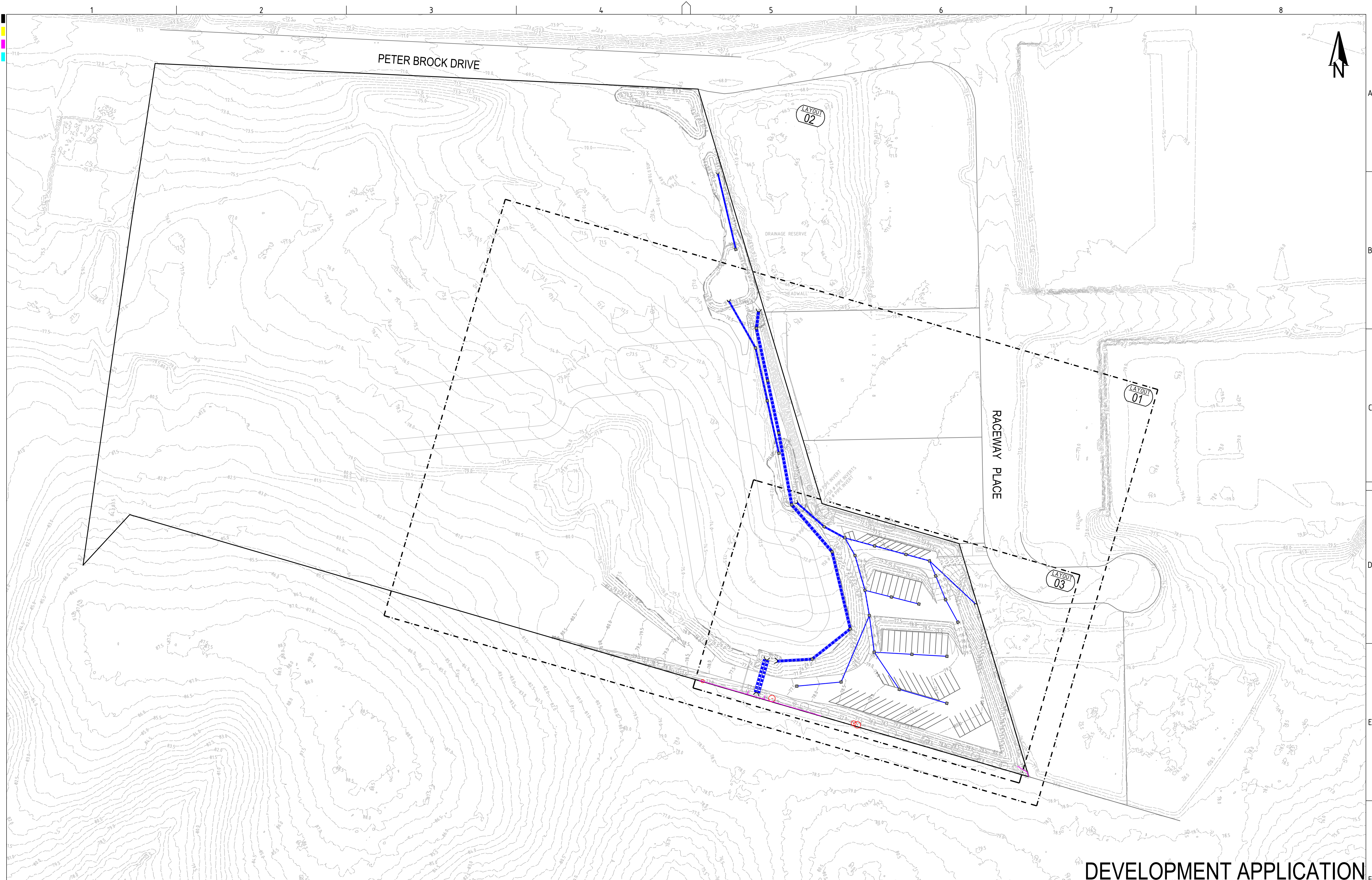
GRID	DATUM	PROJECT MANAGER
N/A	N/A	GH

DISCLAIMER & COPYRIGHT
This plan must not be used for construction unless signed as approved by principal certifying authority.
All measurements in millimetres unless otherwise specified.
This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd.
(C) Copyright Martens & Associates Pty Ltd

CLIENT
NEWCASTLE LEGAL AND CONVEYANCING
PROJECT NAME/PLANSET TITLE
EVENT CARPARK WORKS CONCEPT ENGINEERING WORKS
50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766 LOT 4 DP 1079897

 Consulting Engineers Environment Water Geotechnical Civil	Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767 Email: mail@martens.com.au Internet: www.martens.com.au			

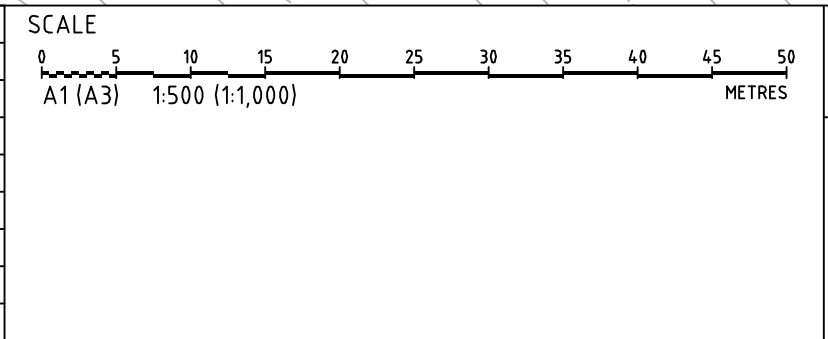
DRAWING TITLE				
COVER SHEET				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108122	PS01	R04	PS01-A000	C



REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD	SCALE	GRID	DATUM	PROJECT MANAGER	CLIENT	martens & Associates Pty Ltd Consulting Engineers Environment Water Geotechnical Civil	DRAWING TITLE			
C	UPDATED TO ADDRESS DPIE RFI 19.08.21	30/08/2021	JS	AW	MD	GH	DM	0 10 20 30 40 50 60 70 80 90 100	MGA	mAHD	GH	NEWCASTLE LEGAL AND CONVEYANCING				
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW	MD	GH	DM	A1 (A3) 1:1,000 (1:2,000)				PROJECT NAME/PLANSET TITLE	DEVELOPMENT OVERVIEW PLAN			
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW	AVG	GH	DM					EVENT CARPARK WORKS CONCEPT ENGINEERING WORKS	PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.
												50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766 LOT 4 DP 1079897	P2108122	PS01	R04	PS01-A050
																REVISION
																C



REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
C	UPDATED TO ADDRESS DPIE RFI 19.08.21	30/08/2021	JS	AW	GH	DM
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW/MD	GH	DM
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW/AVG	GH	DM



GRID
MGA

DATUM
mAHd

PROJECT MANAGER
GH

CLIENT
NEWCASTLE LEGAL AND CONVEYANCING

PROJECT NAME/PLANSET TITLE
EVENT CARPARK WORKS
CONCEPT ENGINEERING WORKS
50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766
LOT 4 DP 1079897

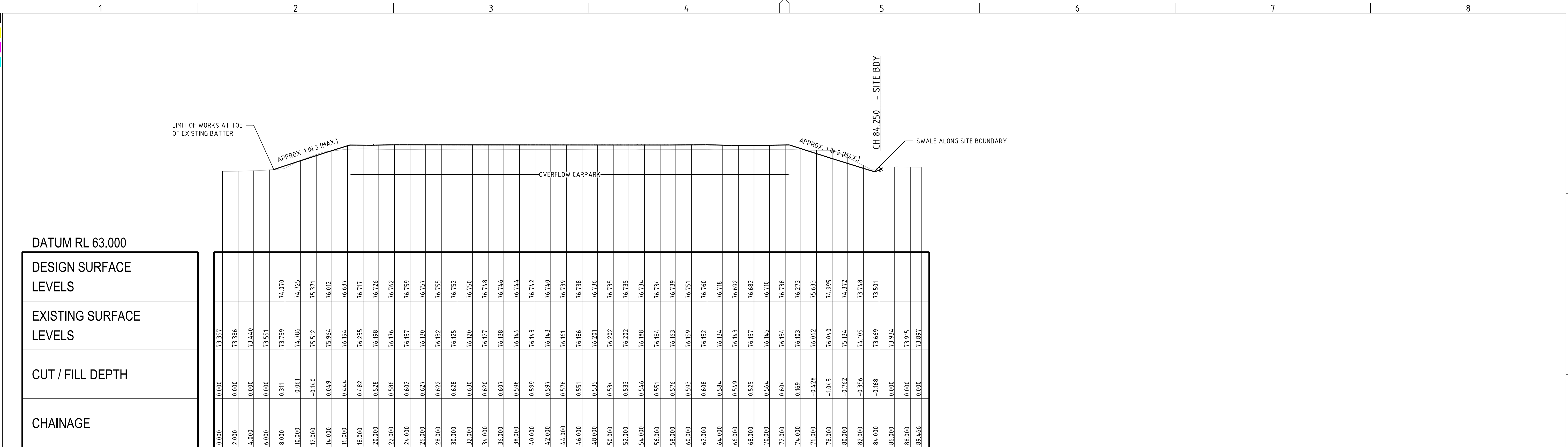
DISCLAIMER & COPYRIGHT
This plan must not be used for construction unless signed as approved by principal certifying authority.
All measurements in millimetres unless otherwise specified.
This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd
(C) Copyright Martens & Associates Pty Ltd

martens
& Associates Pty Ltd

Consulting Engineers
Environment
Water
Geotechnical
Civil

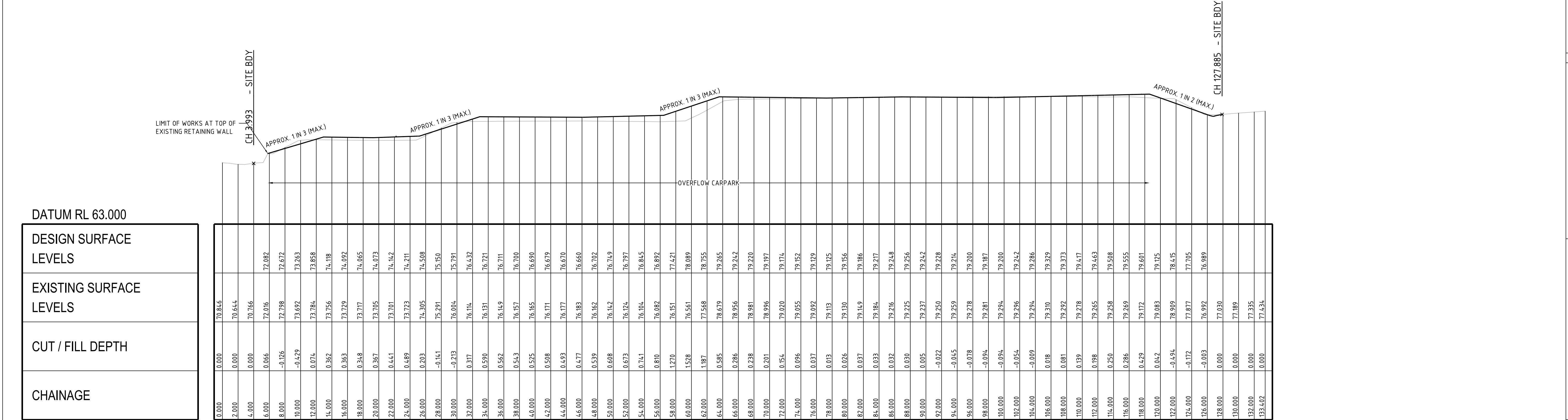
Suite 201, 20 George St, Hornsby, NSW 2077 Australia. Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE EARTHWORKS GRADING PLAN				
PROJECT NO. P2108122	PLANSET NO. PS01	RELEASE NO. R04	DRAWING NO. PS01-C100	REVISION C



SECTION B

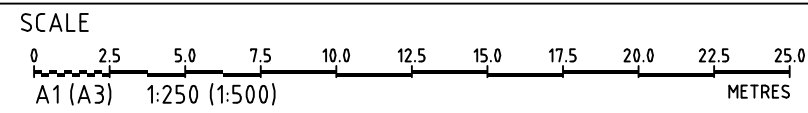
SCALE: HORIZONTAL - 1:250
VERTICAL - 1:250



SECTION A

SCALE: HORIZONTAL - 1:250
VERTICAL - 1:250

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
C	UPDATED TO ADDRESS DPIE RFI 19.08.21	30/08/2021	JS	AW	GH	DM
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW/MD	GH	DM
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW/AVG	GH	DM



GRID	DATUM	PROJECT MANAGER	CLIENT
MGA	mAHD	GH	NEWCASTLE LEGAL AND CONVEYANCING
DISCLAIMER & COPYRIGHT			
This plan must not be used for construction unless signed as approved by principal certifying authority.			
All measurements in millimetres unless otherwise specified.			
This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd			
(C) Copyright Martens & Associates Pty Ltd			
PROJECT NAME/PLANSET TITLE			
EVENT CARPARK WORKS			
CONCEPT ENGINEERING WORKS			
50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766			
LOT 4 DP 1079897			



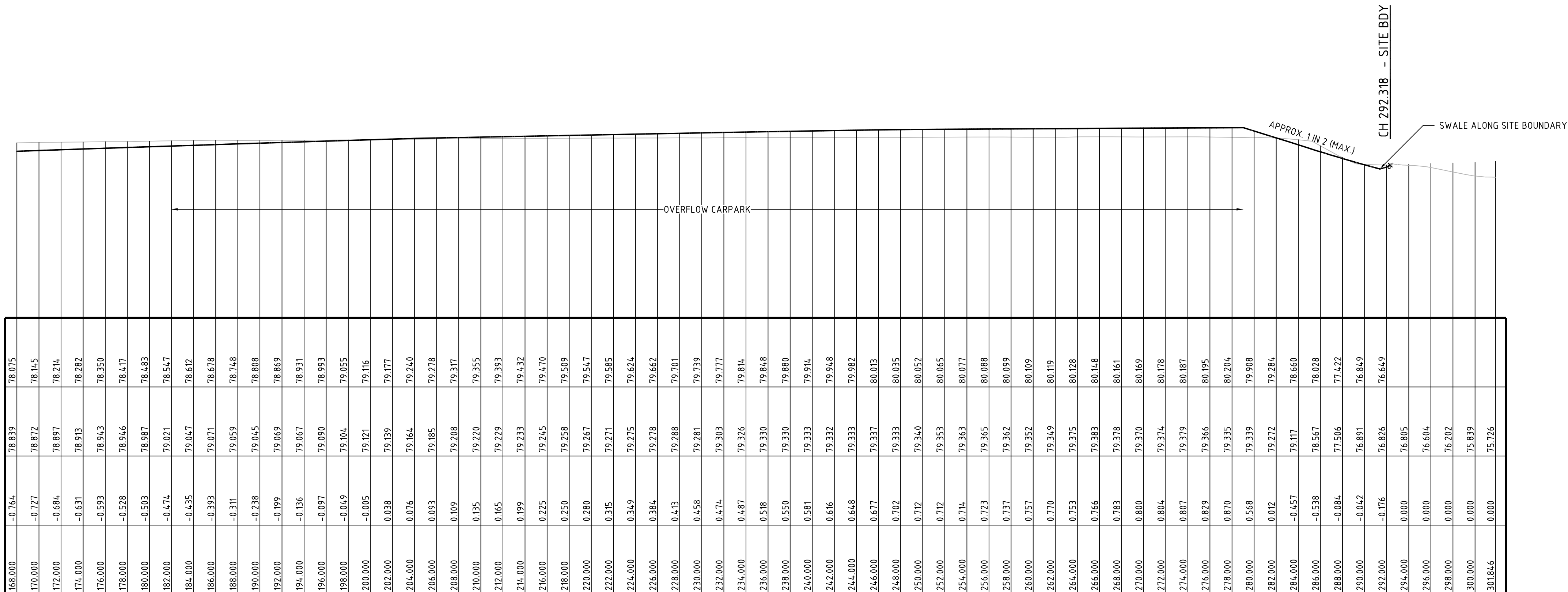
Consulting Engineers
Environment
Water
Geotechnical
Civil

Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE				
EARTHWORKS SITE SECTIONS SHEET 1				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108122	PS01	R04	PS01-C600	C

DEVELOPMENT APPLICATION

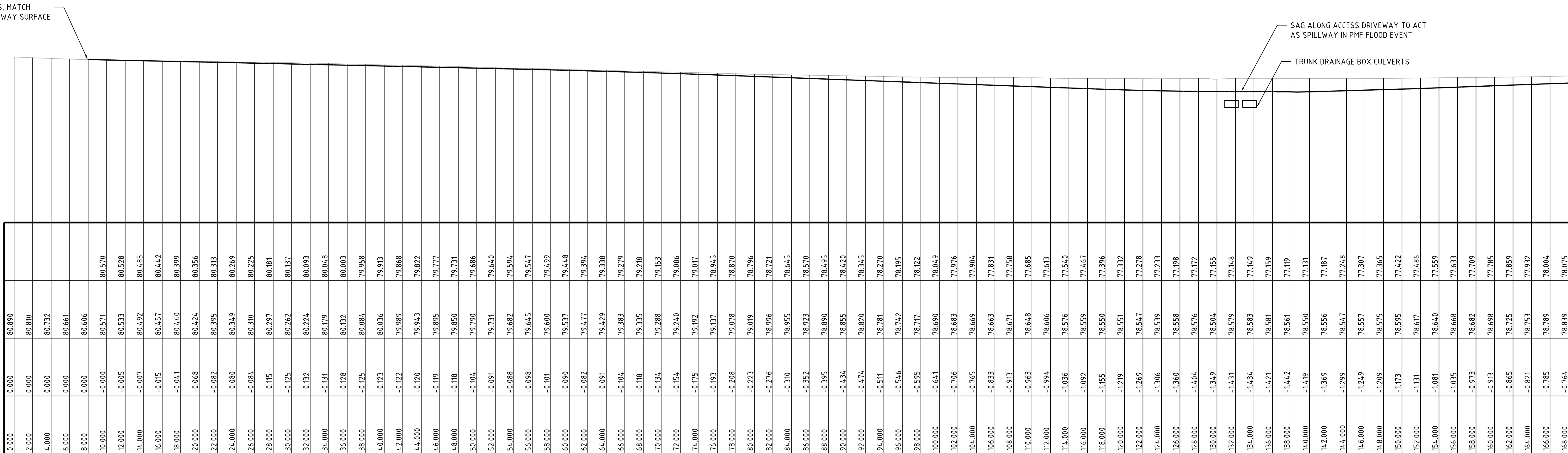
DATUM RL 63.000
DESIGN SURFACE LEVELS
EXISTING SURFACE LEVELS
CUT / FILL DEPTH
CHAINAGE



SECTION C

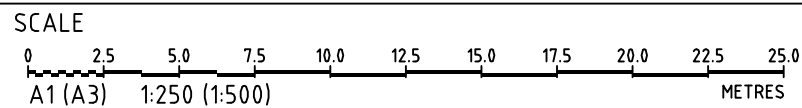
SCALE: HORIZONTAL - 1:250
VERTICAL - 1:250

DATUM RL 63.000
DESIGN SURFACE LEVELS
EXISTING SURFACE LEVELS
CUT / FILL DEPTH
CHAINAGE



SECTION C

SCALE: HORIZONTAL - 1:250
VERTICAL - 1:250

[illegible]

GRID	DATUM	PROJECT MANAGER	CLIENT
MGA	mAHd	GH	NEWCASTLE LEGAL AND CONVEYANCING
DISCLAIMER & COPYRIGHT			PROJECT NAME/PLANSET TITLE
This plan must not be used for construction unless signed as approved by principal certifying authority. All measurements in millimetres unless otherwise specified. This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd. (C) Copyright Martens & Associates Pty Ltd			EVENT CARPARK WORKS CONCEPT ENGINEERING WORKS 50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766 LOT 4 DP 1079897

martens
 & Associates Pty Ltd

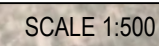
Consulting Engineers

Environment
 Water
 Geotechnical
 Civil

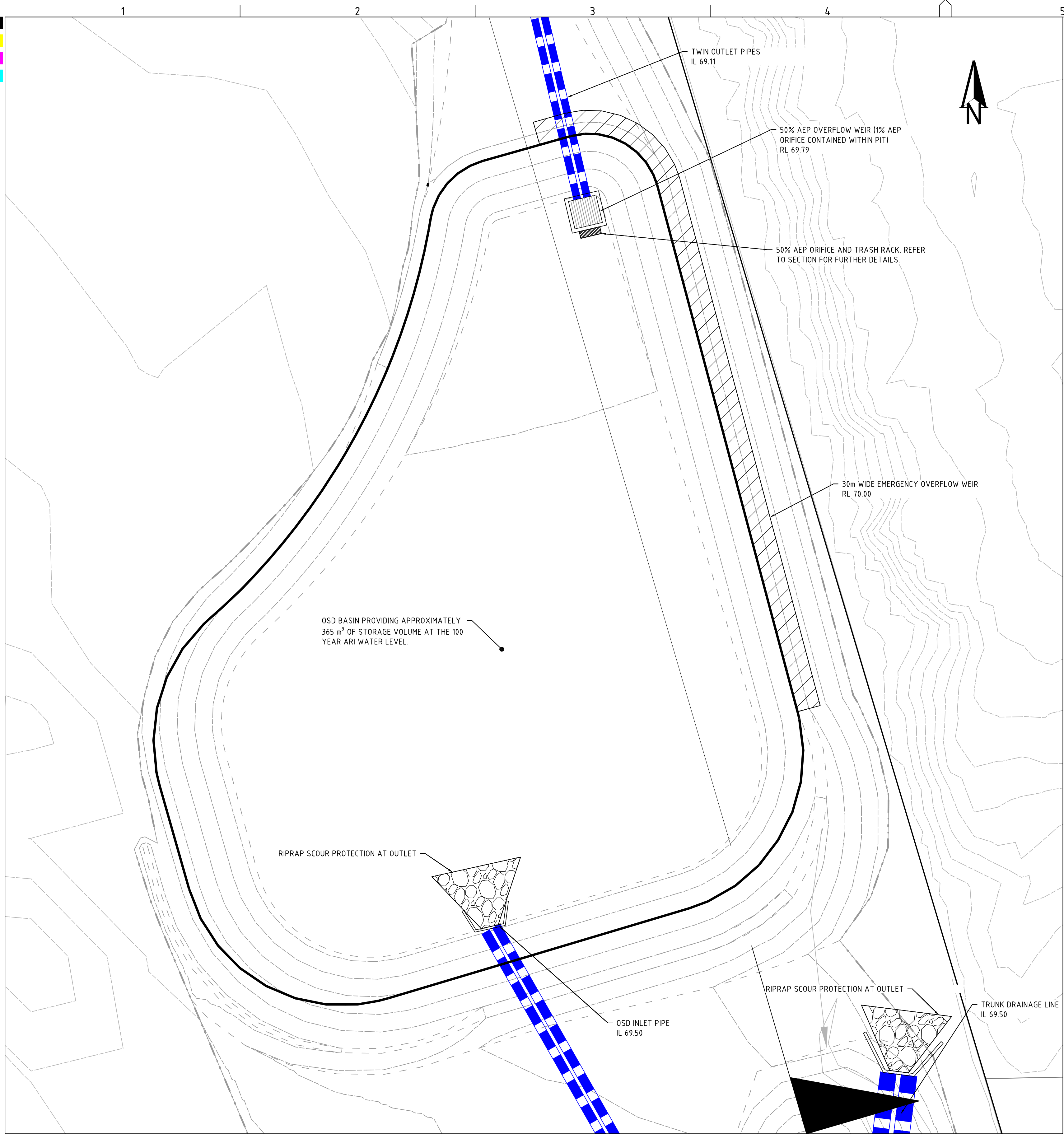
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
 Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE				
EARTHWORKS SITE SECTIONS				
SHEET 2				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108122	PS01	R04	PS01-C601	B

DEVELOPMENT APPLICATION



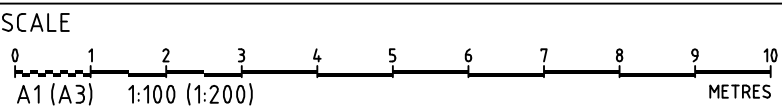
DRAWING TITLE				
DRAINAGE PLAN				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108122	PS01	R04	PS01-E100	C



ONSITE DETENTION PLAN

SCALE 1:100

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW/MD	GH	DM
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW/AVG	GH	DM



GRID	DATUM	PROJECT MANAGER
MGA	mAHD	GH
DISCLAIMER & COPYRIGHT		
This plan must not be used for construction unless signed as approved by principal certifying authority.		
All measurements in millimetres unless otherwise specified.		
This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd.		
(C) Copyright Martens & Associates Pty Ltd		

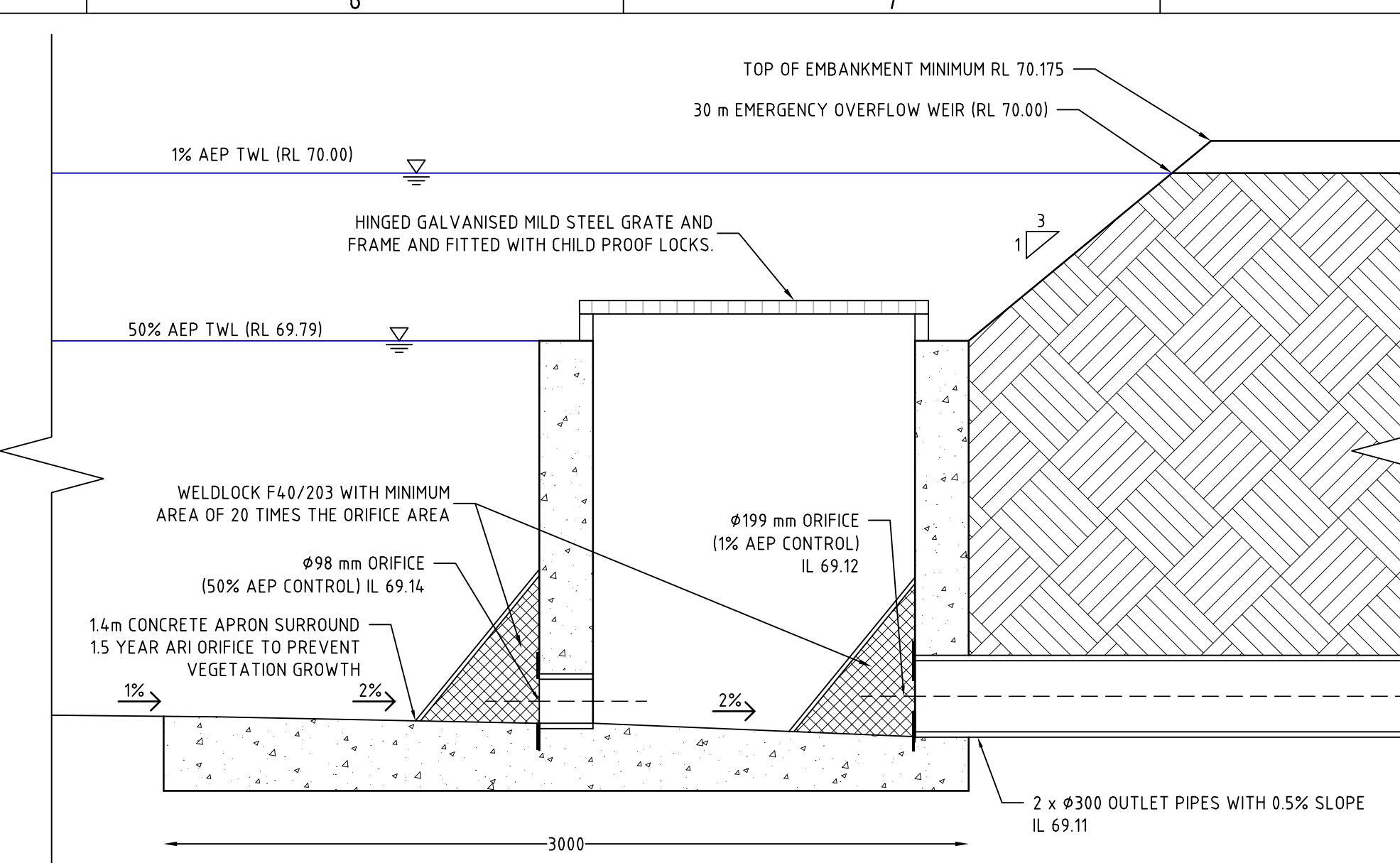
CLIENT
NEWCASTLE LEGAL AND CONVEYANCING
PROJECT NAME/PLANSET TITLE
EVENT CARPARK WORKS CONCEPT ENGINEERING WORKS
50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766 LOT 4 DP 1079897

Consulting Engineers

Environment
Water
Geotechnical
Civil

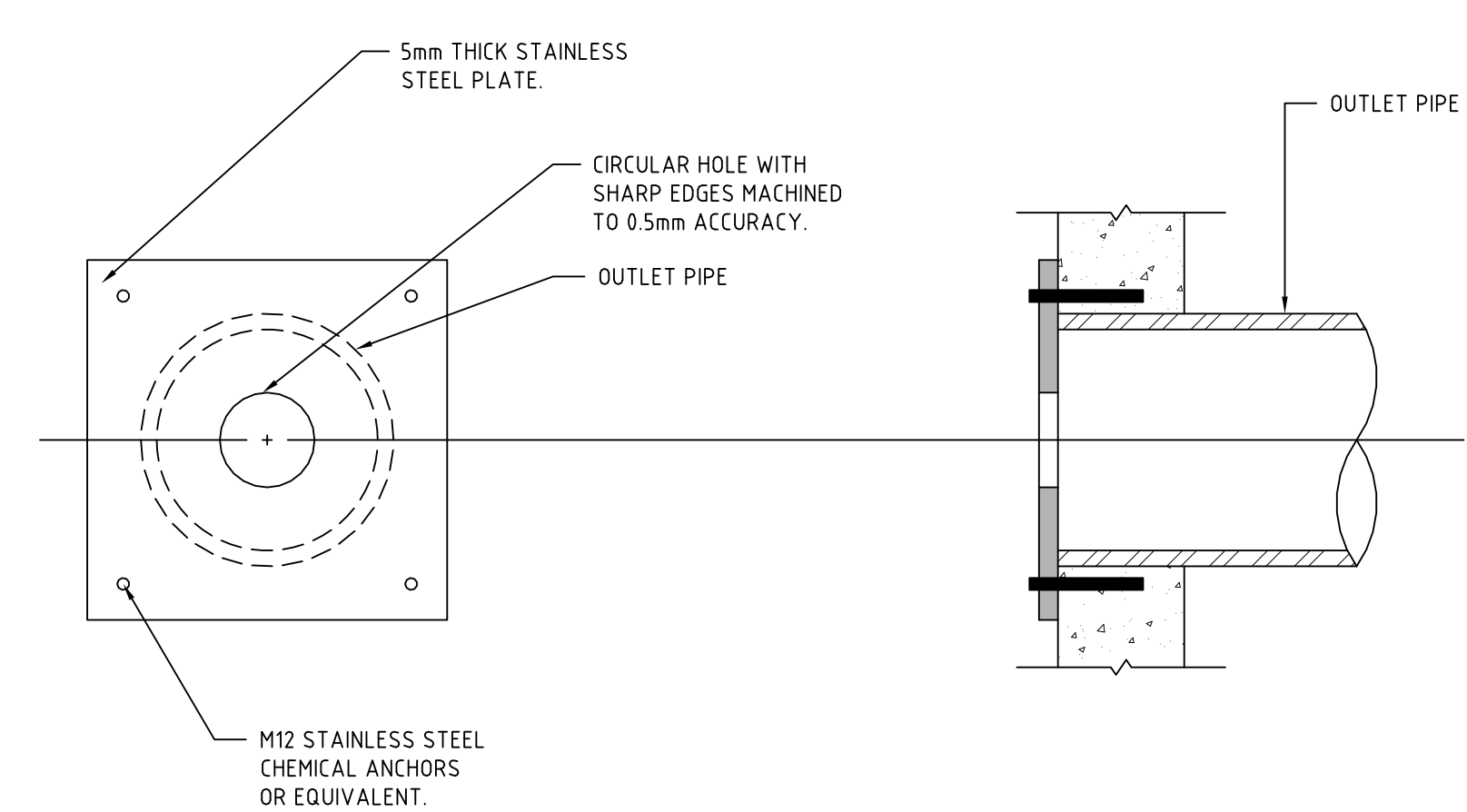
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE				
DRAINAGE DETAILS SHEET 1				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108122	PS01	R04	PS01-E200	B



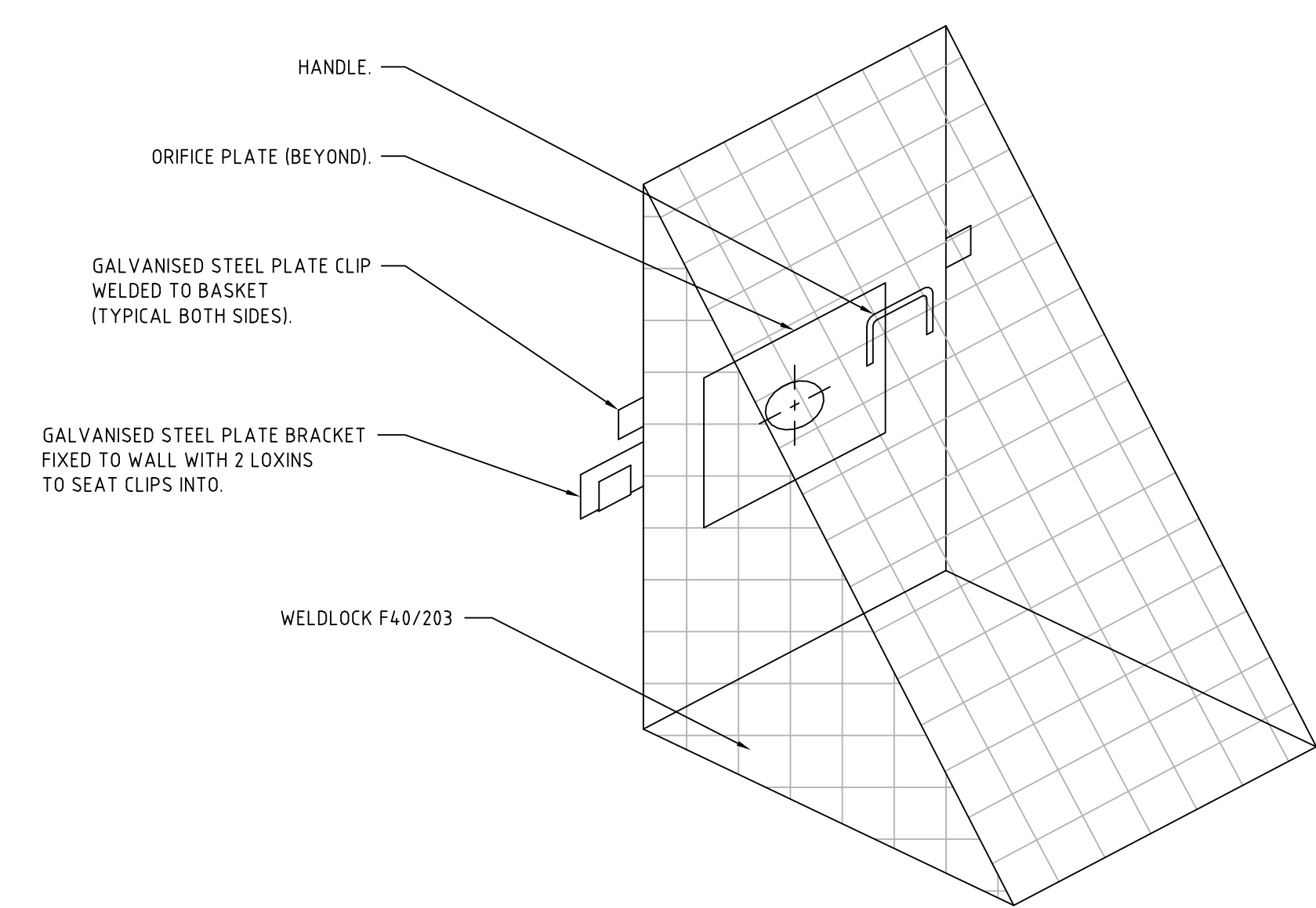
OSD OUTLET STRUCTURE

NOT TO SCALE



TYPICAL ORIFICE PLATE DETAIL

NOT TO SCALE



TRASH SCREEN DETAILS

NOT TO SCALE

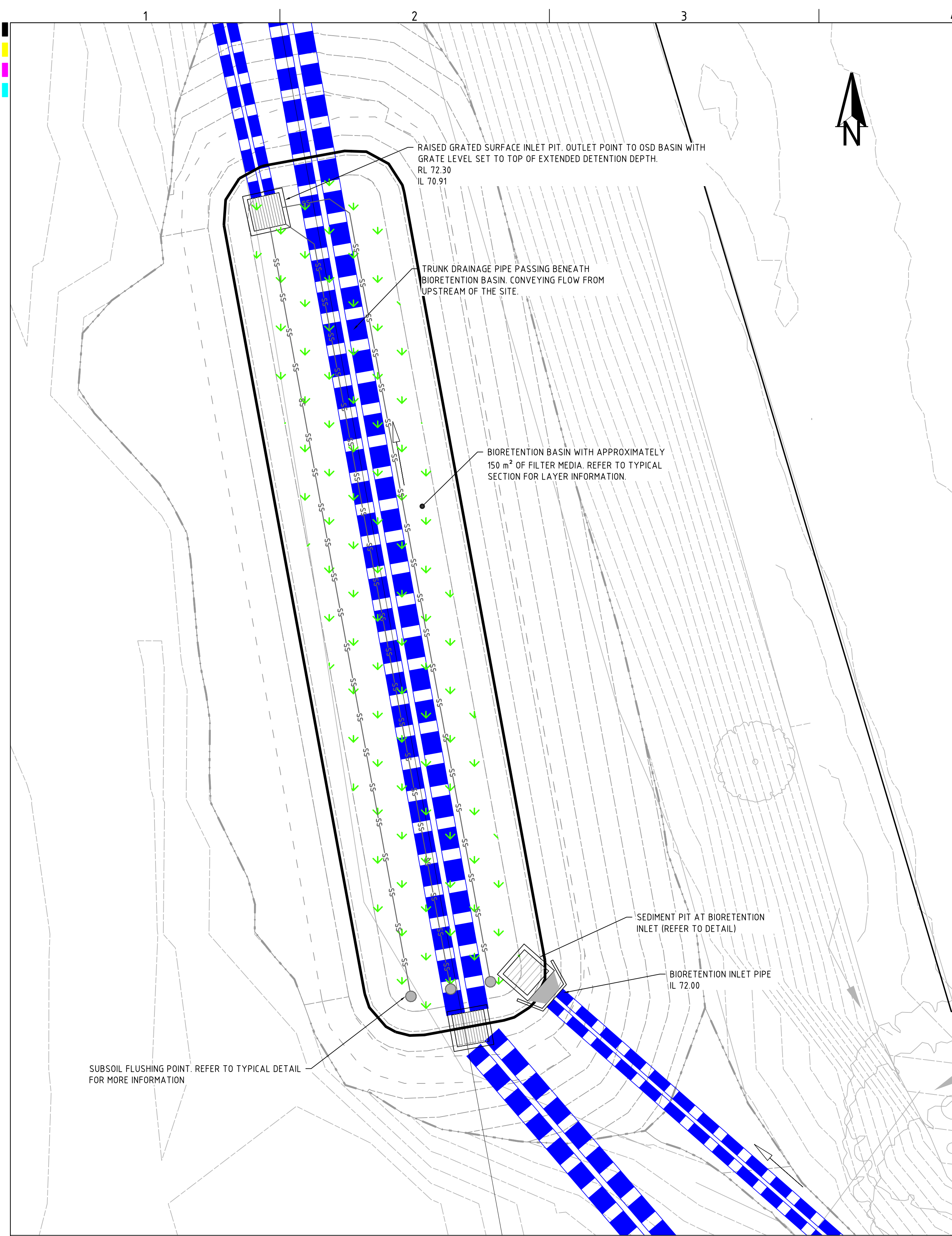
DEVELOPMENT APPLICATION

PRINTED: 11:45 AM 11/03/2021

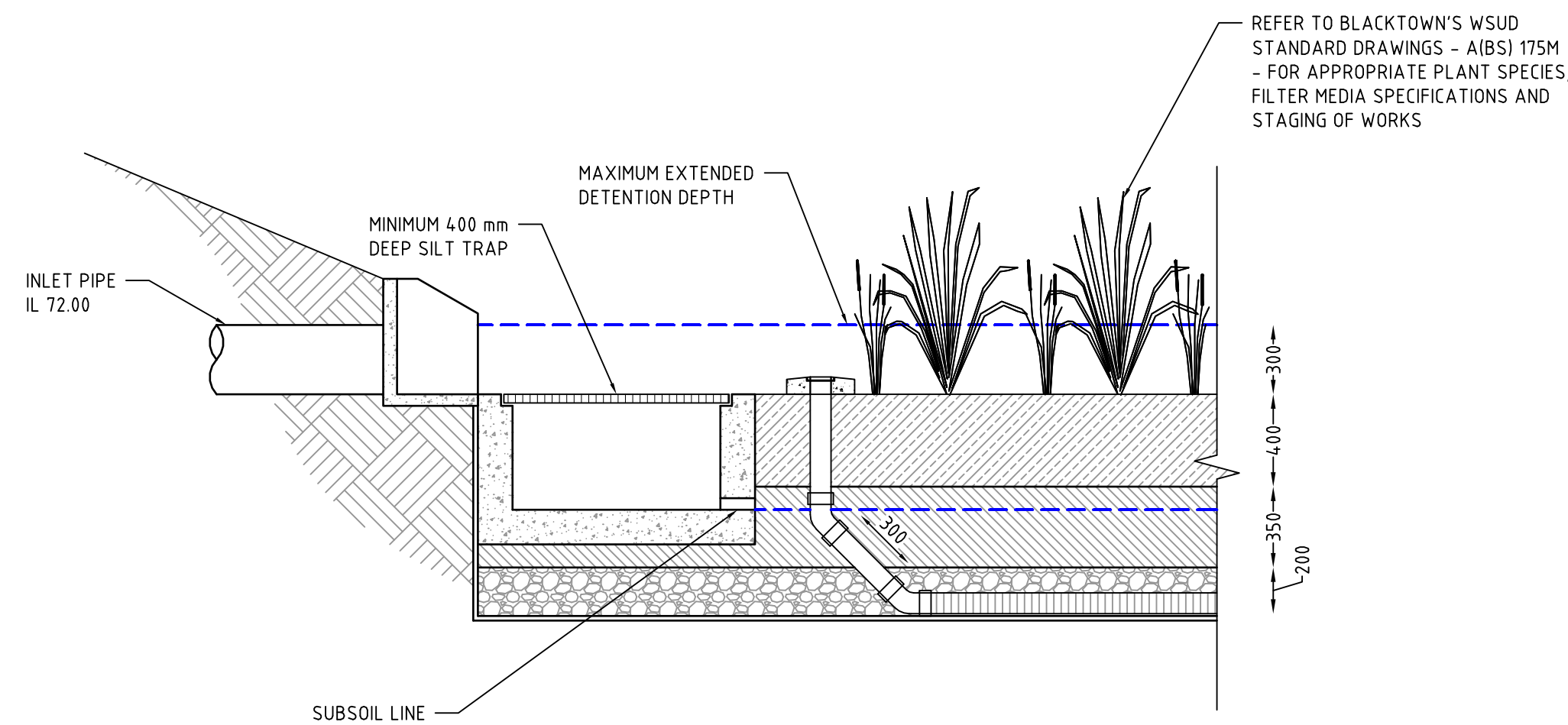
A1 / A3 LANDSCAPE (A1LC_v02.0.01)

DRAWING ID: P2108122-PS01-R04-E200

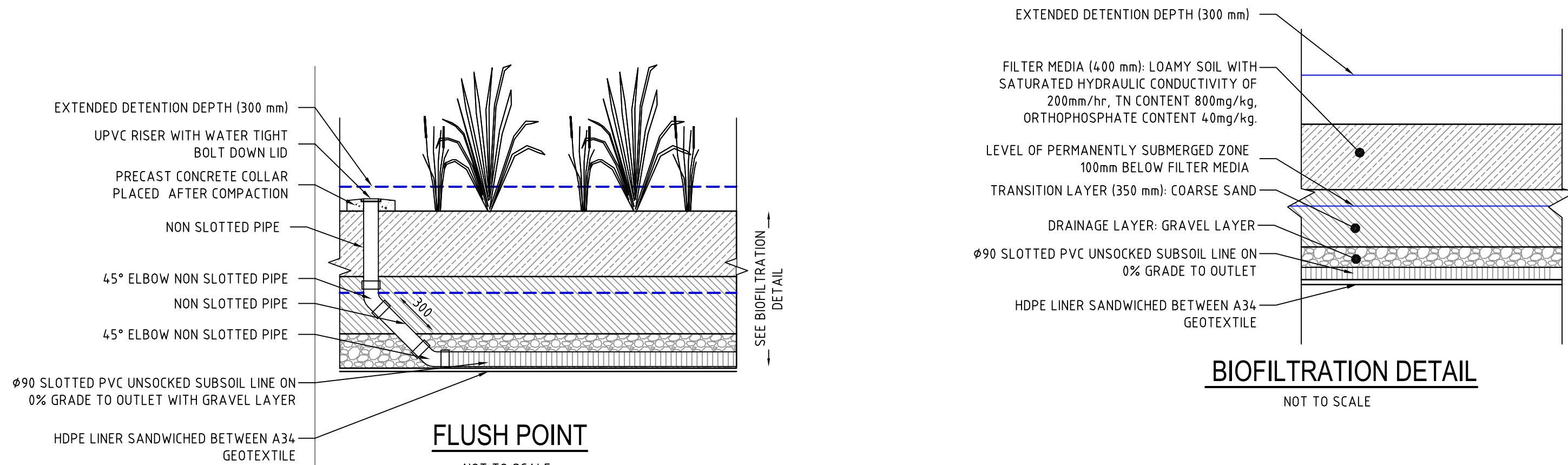
0 10 20 30 40 50 60 70 80 90 100



BIORETENTION BASIN PLAN
SCALE 1:100

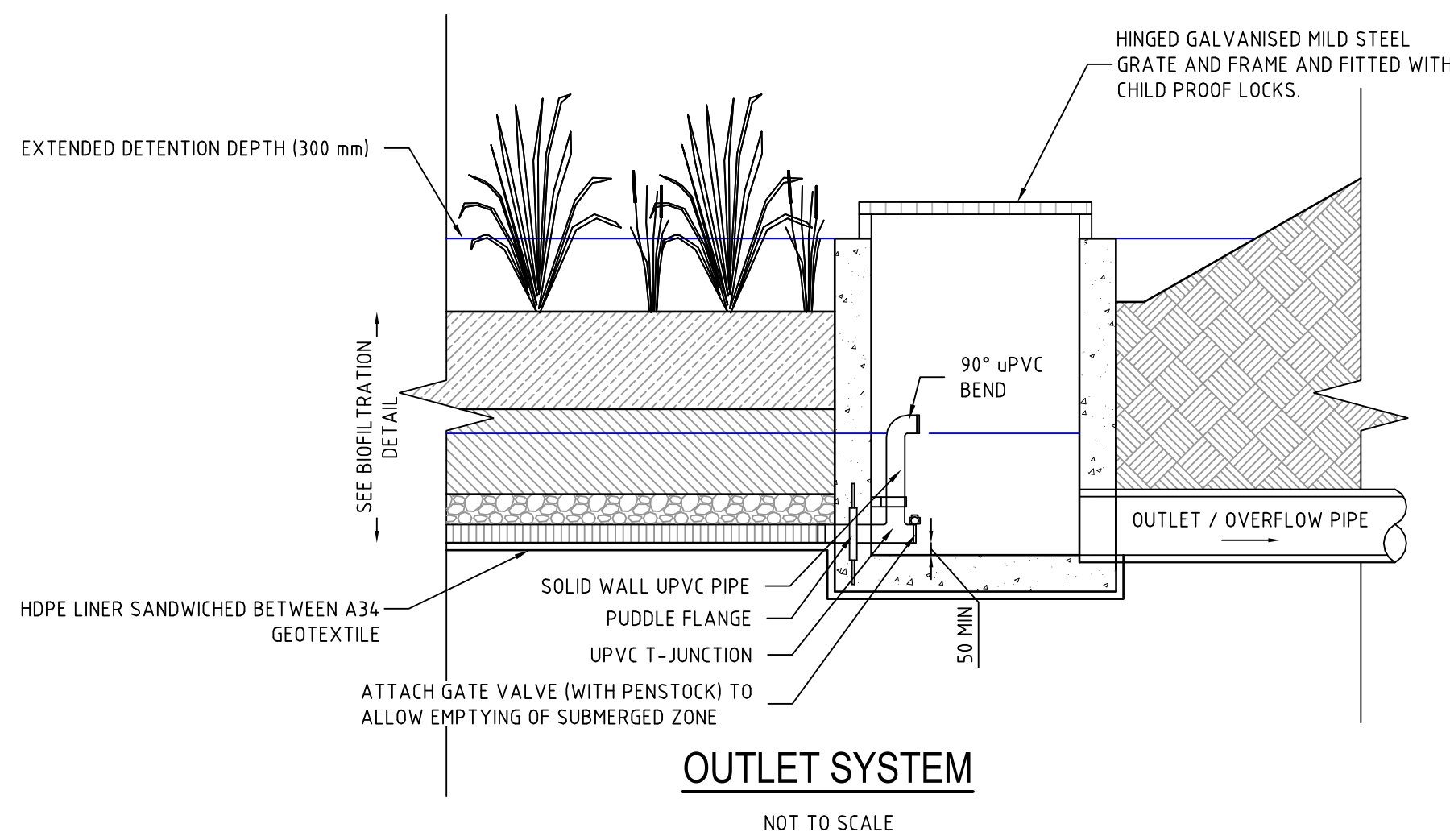


TYPICAL BIORETENTION BASIN PROFILE AND SEDIMENT PIT DETAIL
NOT TO SCALE



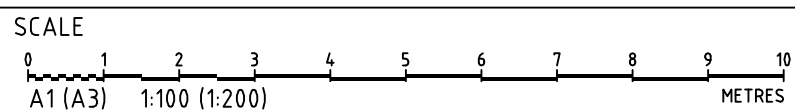
FLUSH POINT
NOT TO SCALE

BIOFILTRATION DETAIL
NOT TO SCALE



OUTLET SYSTEM
NOT TO SCALE

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW/MD	GH	DM
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW/AVG	GH	DM



GRID	DATUM	PROJECT MANAGER
MGA	mAHD	GH
DISCLAIMER & COPYRIGHT This plan must not be used for construction unless signed as approved by principal certifying authority. All measurements in millimetres unless otherwise specified. This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd. (C) Copyright Martens & Associates Pty Ltd		

CLIENT	PROJECT NAME/PLANSET TITLE
NEWCASTLE LEGAL AND CONVEYANCING	EVENT CARPARK WORKS CONCEPT ENGINEERING WORKS
50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766 LOT 4 DP 1079897	



Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

Consulting Engineers
Environment
Water
Geotechnical
Civil

DEVELOPMENT APPLICATION

DRAWING TITLE				
DRAINAGE DETAILS SHEET 2				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108122	PS01	R04	PS01-E201	B

DRAWING ID: P2108122-PS01-R04-E201

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

EASTERN SWALE CALCULATION

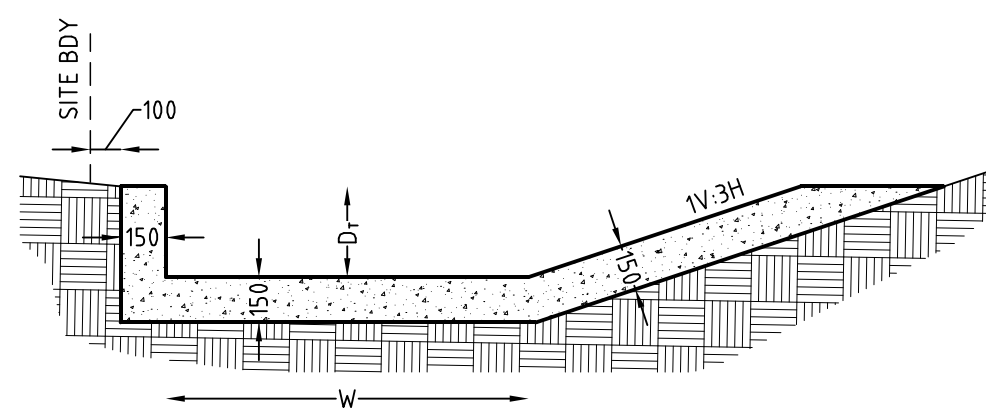
The diagram illustrates a cross-section of an Eastern Swale. It features a 10:1 slope on the left side, a 1% AEP water level (D₁₀₀) indicated by a blue line, and a 300mm freeboard. The swale is bounded by a kerb along the site boundary and a Hob wall on the right. The total width of the raceway is 10.40m, with a 7.80m section on the right. The diagram is labeled 'NOT TO SCALE'.

EASTERN SWALE - TYPICAL SECTION

NOT TO SCALE

EASTERN SWALE					
CHAINAGE	INVERT RL	1% AEP RL (D ₁₀₀)	300mm FREEBOARD REQUIREMENT	TOTAL SWALE DEPTH - INCLUDING KERB (DT)	KERB TOP RL*
0	76.64	76.71	77.01	0.419m	77.059
20	76.222	76.308	76.608	0.538m	76.76
40	75.912	76.038	76.338	0.540m	76.452
60	75.449	75.607	75.907	0.644m	76.093
80	74.528	74.828	74.828	0.513m	74.921
101.235	73.2	73.489	73.789	0.598m	73.798

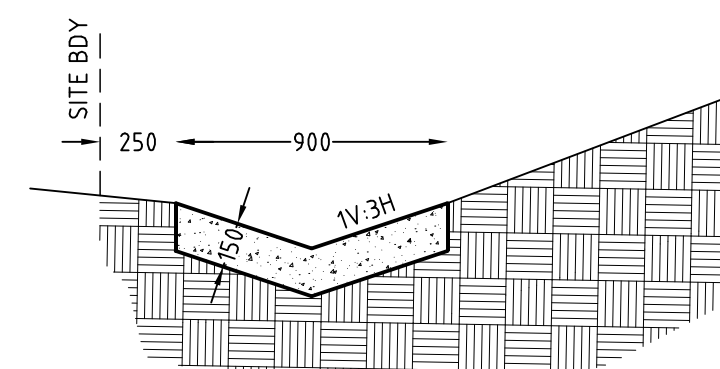
*TO MATCH EXISTING FOOTPATH HEIGHT AT 10 RACEWAY CLOSE



SOUTHERN SWALE - TYPICAL SECTION

NOT TO SCALE

SOUTHERN SWALE					
	CHAINAGE	INVERT RL	BOTTOM WIDTH [w]	FLOW DEPTH [D]	CHANNEL DEPTH [D]
EASTERN SIDE OF CULVERT	0	76.281	0.3m	0.23m	0.3
	30	76	0.5m	0.25m	0.6
WESTERN SIDE OF CULVERT	0	76.851	0.3m	0.18m	0.3
	30	76	0.5m	0.18m	0.6



SPOON DRAIN - TYPICAL SECTION

NOT TO SCALE



RETAINING TO DIVERT FLOWS AWAY FROM NO. 10
RACEWAY PLACE, TOP OF WALL RL 77.50
(MINIMUM 300mm FREEBOARD PROVIDED)

CH / HOB WALL ON NO.
10 RACEWAY PLACE

CH 161.647 - SITE BDY

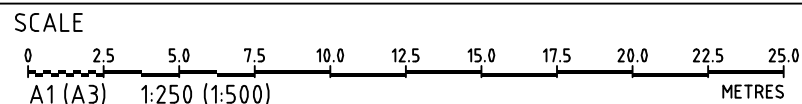
DATUM RL 63.000

CHAINAGE	CUT / FILL DEPTH	EXISTING SURFACE LEVELS	DESIGN SURFACE LEVELS
0.000	-0.260	76.603	76.344
2.000	-0.238	76.592	76.354
4.000	-0.216	76.580	76.364
6.000	-0.209	76.582	76.374
8.000	-0.224	76.608	76.384
10.000	-0.224	76.617	76.394
12.000	-0.214	76.617	76.404
14.000	-0.204	76.617	76.414
16.000	-0.194	76.617	76.424
18.000	-0.184	76.617	76.434
20.000	-0.174	76.617	76.444
22.000	-0.164	76.618	76.454
24.000	-0.169	76.633	76.464
26.000	-0.173	76.646	76.474
28.000	-0.175	76.659	76.484
30.000	-0.180	76.673	76.494
32.000	-0.204	76.707	76.504
34.000	-0.213	76.726	76.514
36.000	-0.193	76.716	76.524
38.000	-0.176	76.710	76.534
40.000	-0.180	76.723	76.544
42.000	-0.192	76.745	76.554
44.000	-0.204	76.767	76.564
46.000	-0.209	76.783	76.574
48.000	-0.204	76.788	76.584
50.000	-0.199	76.793	76.594
52.000	-0.194	76.798	76.604
54.000	-0.191	76.805	76.614
56.000	-0.191	76.814	76.624
58.000	-0.190	76.823	76.634
60.000	-0.204	76.848	76.644
62.000	-0.222	76.875	76.654
64.000	-0.235	76.899	76.664
66.000	-0.240	76.913	76.674
68.000	-0.244	76.928	76.684
70.000	-0.249	76.942	76.694
72.000	-0.251	76.954	76.704
74.000	-0.250	76.963	76.714
76.000	-0.249	76.972	76.724
78.000	-0.248	76.981	76.734
80.000	-0.247	76.990	76.744
82.000	-0.246	76.999	76.754
84.000	-0.226	76.990	76.764
86.000	-0.204	76.978	76.774
88.000	-0.184	76.968	76.784
90.000	-0.177	76.970	76.794
92.000	-0.169	76.972	76.804
94.000	-0.161	76.975	76.814
96.000	-0.153	76.977	76.824
98.000	-0.146	76.979	76.834
100.000	-0.151	76.995	76.844
102.000	-0.169	77.023	76.854
104.000	-0.179	77.043	76.864
106.000	-0.175	77.049	76.874
108.000	-0.172	77.055	76.884
110.000	-0.174	77.068	76.894
112.000	-0.178	77.082	76.904
114.000	-0.182	77.096	76.914
116.000	-0.186	77.110	76.924
118.000	-0.190	77.123	76.934
120.000	-0.194	77.137	76.944
122.000	-0.198	77.151	76.954
124.000	-0.202	77.165	76.964
126.000	-0.206	77.179	76.974
128.000	-0.209	77.193	76.984
130.000	-0.213	77.207	76.994
132.000	-0.217	77.221	77.004
134.000	-0.221	77.235	77.014
136.000	-0.225	77.249	77.024
138.000	-0.239	77.272	77.034
140.000	-0.274	77.317	77.044
142.000	-0.281	77.334	77.054
144.000	-0.294	77.358	77.064
146.000	-0.308	77.381	77.074
148.000	-0.327	77.410	77.084
150.000	-0.350	77.444	77.094
152.000	-0.374	77.477	77.104
154.000	-0.223	77.337	77.114
156.000	-0.130	77.254	77.124
158.000	-0.224	77.357	77.134
160.000	-0.058	77.202	77.144
161.791		77.374	

SECTION C (SOUTH-EASTERN SWALE AND SPOON DRAIN)

SCALE: HORIZONTAL - 1:250

VERTICAL - 1:250

[illegible]

GRID	DATUM	PROJECT MANAGER	CLIENT
MGA	mAHd	GH	NEWCASTLE LEGAL AND CONVEYANCING
DISCLAIMER & COPYRIGHT			PROJECT NAME/PLANSET TITLE
This plan must not be used for construction unless signed as approved by principal certifying authority. All measurements in millimetres unless otherwise specified. This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd. (C) Copyright Martens & Associates Pty Ltd			EVENT CARPARK WORKS CONCEPT ENGINEERING WORKS 50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766 LOT 4 DP 1079897

martens
 & Associates Pty Ltd

Consulting Engineers

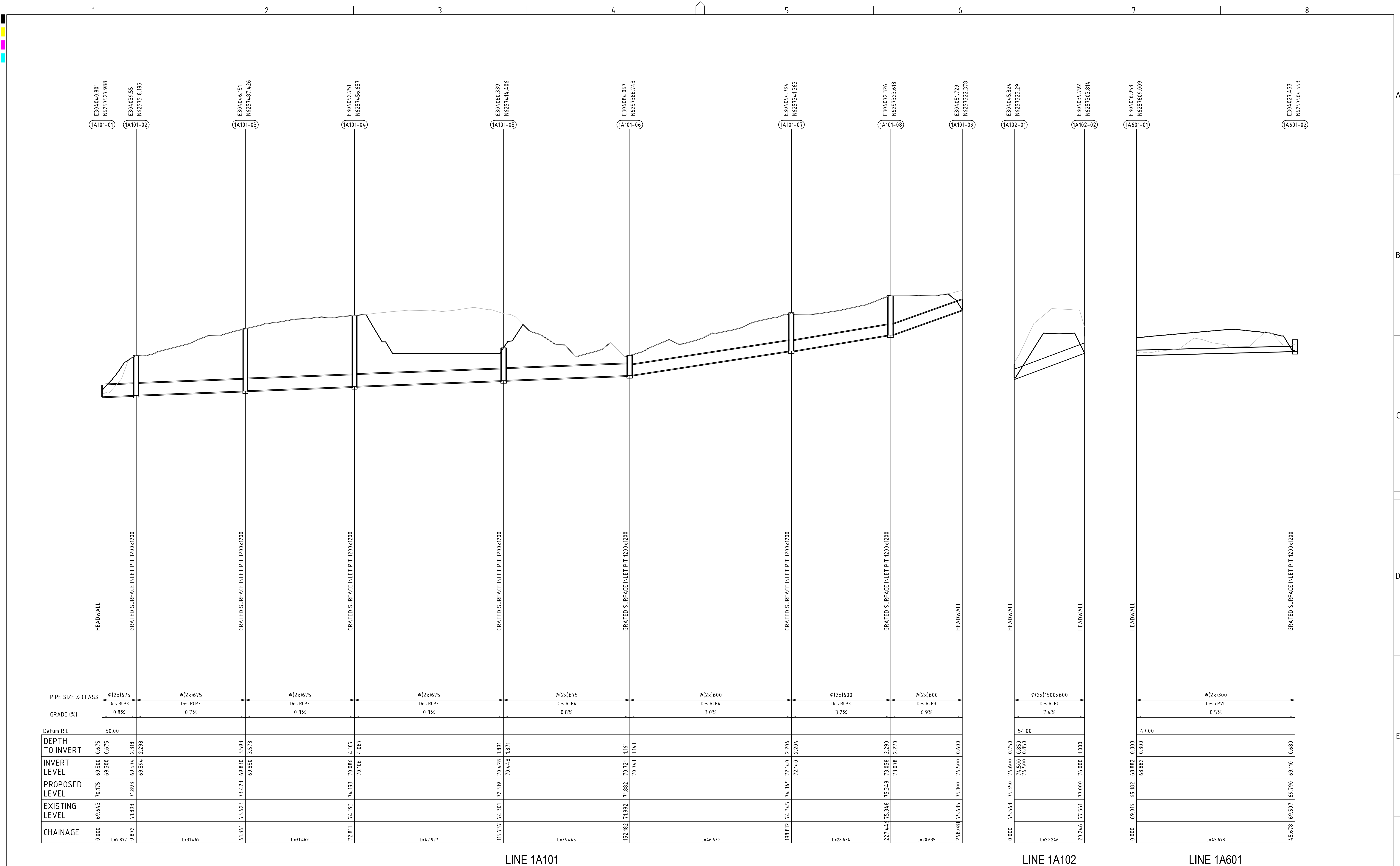
Environment
 Water
 Geotechnical
 Civil

Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
 Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE				
DRAINAGE DETAILS SHEET 4				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108122	PS01	R04	PS01-E203	A

DEVELOPMENT APPLICATION

A1 / A3 LANDSCAPE (A1LC_v02.0.01)



REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW/MD	GH	DM
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW/AVG	GH	DM

SCALE

A1 (A3) 1:500 (1:1,000)

A1 (A3) 1:100 (1:200)

GRID MGA

DATUM mAHD

PROJECT MANAGER GH

CLIENT NEWCASTLE LEGAL AND CONVEYANCING

PROJECT NAME/PLANSET TITLE

EVENT CARPARK WORKS

CONCEPT ENGINEERING WORKS

50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766

LOT 4 DP 1079897

martens

& Associates Pty Ltd

Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767 Email: mail@martens.com.au Internet: www.martens.com.au

Consulting Engineers

Environment

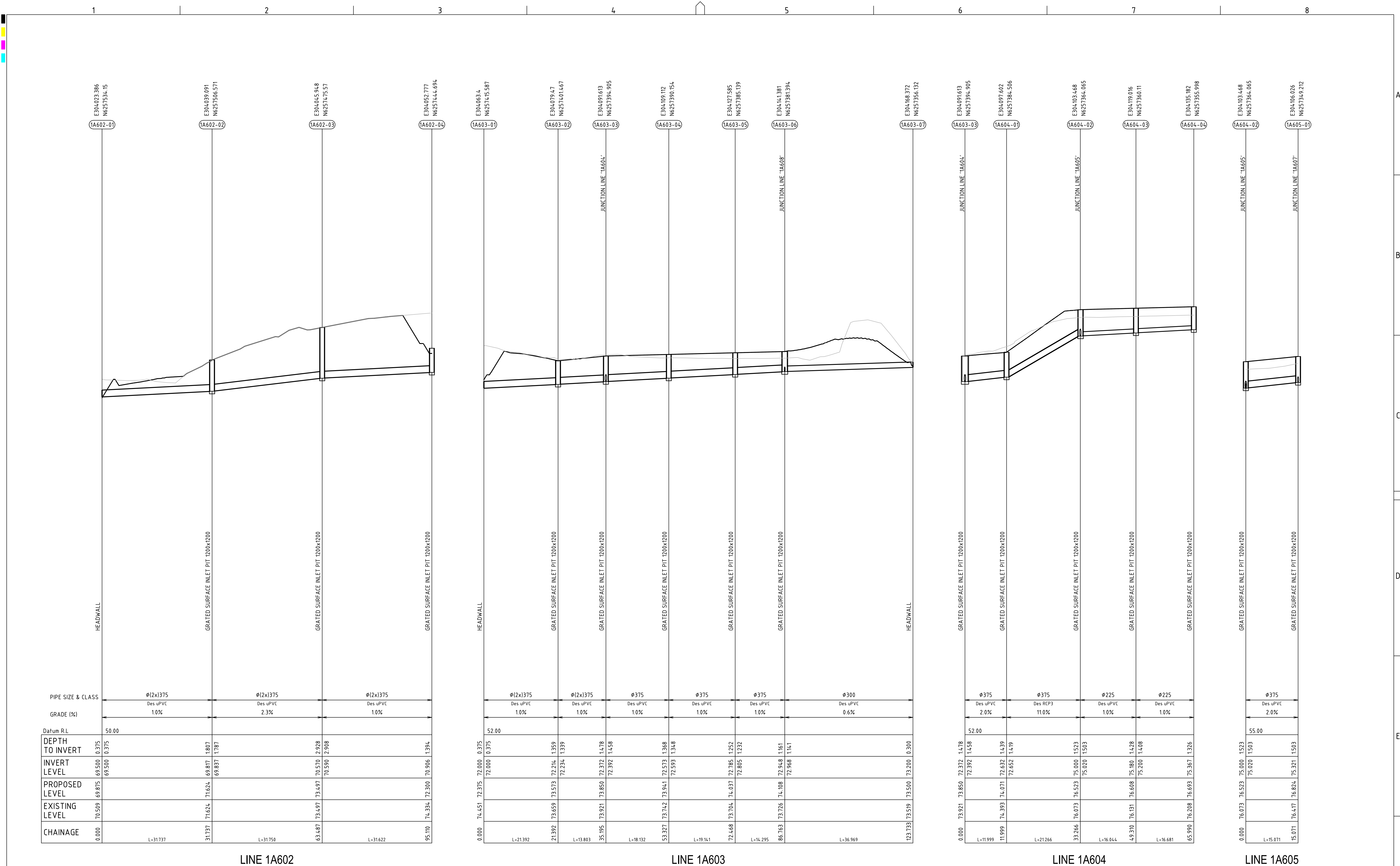
Water

Geotechnical

Civil

DRAWING TITLE				
LONGITUDINAL SECTION SHEET 1				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108122	PS01	R04	PS01-E300	B

DRAWING ID: P2108122-PS01-R04-E300



REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW/MD	GH	DM
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW/AVG	GH	DM

SCALE

0 5 10 15 20 25 30 35 40 45 50

A1 (A3) 1:500 (1:1,000)

0 1 2 3 4 5 6 7 8 9 10

A1 (A3) 1:100 (1:200)

GRID
MGA

DATUM
mAHD

PROJECT MANAGER
GH

CLIENT
NEWCASTLE LEGAL AND CONVEYANCING

PROJECT NAME/PLANSET TITLE
EVENT CARPARK WORKS
CONCEPT ENGINEERING WORKS
50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766
LOT 4 DP 1079897

martens & Associates Pty Ltd

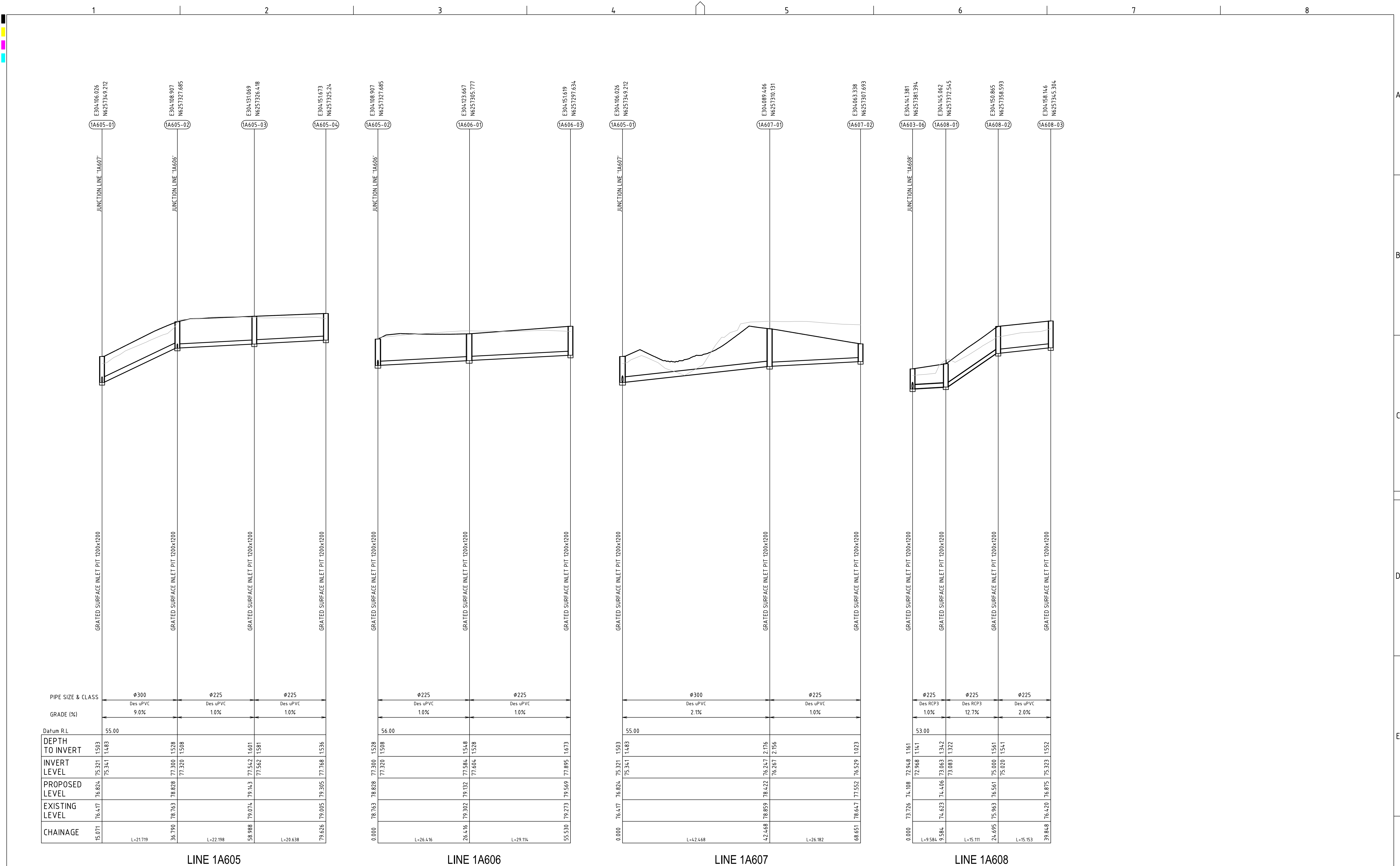
Consulting Engineers

Environment
Water
Geotechnical
Civil

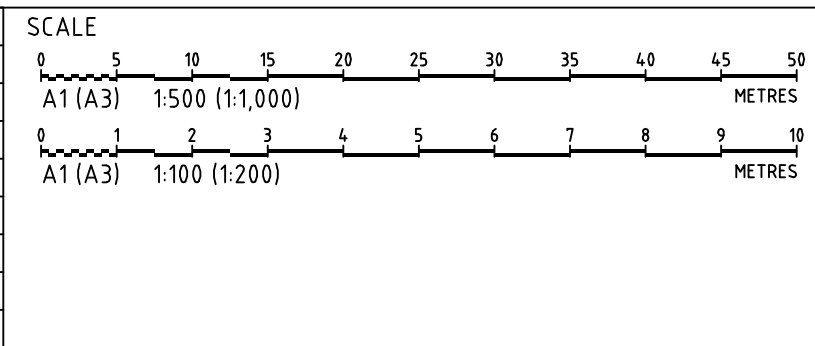
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767 Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE				
LONGITUDINAL SECTION SHEET 2				
PROJECT NO. P2108122	PLANSET NO. PS01	RELEASE NO. R04	DRAWING NO. PS01-E301	REVISION B

DRAWING ID: P2108122-PS01-R04-E301



REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW/MD	GH	DM
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW/AVG	GH	DM



GRID
MGA

DATUM
mAHD

PROJECT MANAGER
GH

CLIENT
NEWCASTLE LEGAL AND CONVEYANCING

PROJECT NAME/PLANSET TITLE
EVENT CARPARK WORKS
CONCEPT ENGINEERING WORKS
50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766
LOT 4 DP 1079897

DISCLAIMER & COPYRIGHT
This plan must not be used for construction unless signed as approved by principal certifying authority.
All measurements in millimetres unless otherwise specified.
This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd
(C) Copyright Martens & Associates Pty Ltd

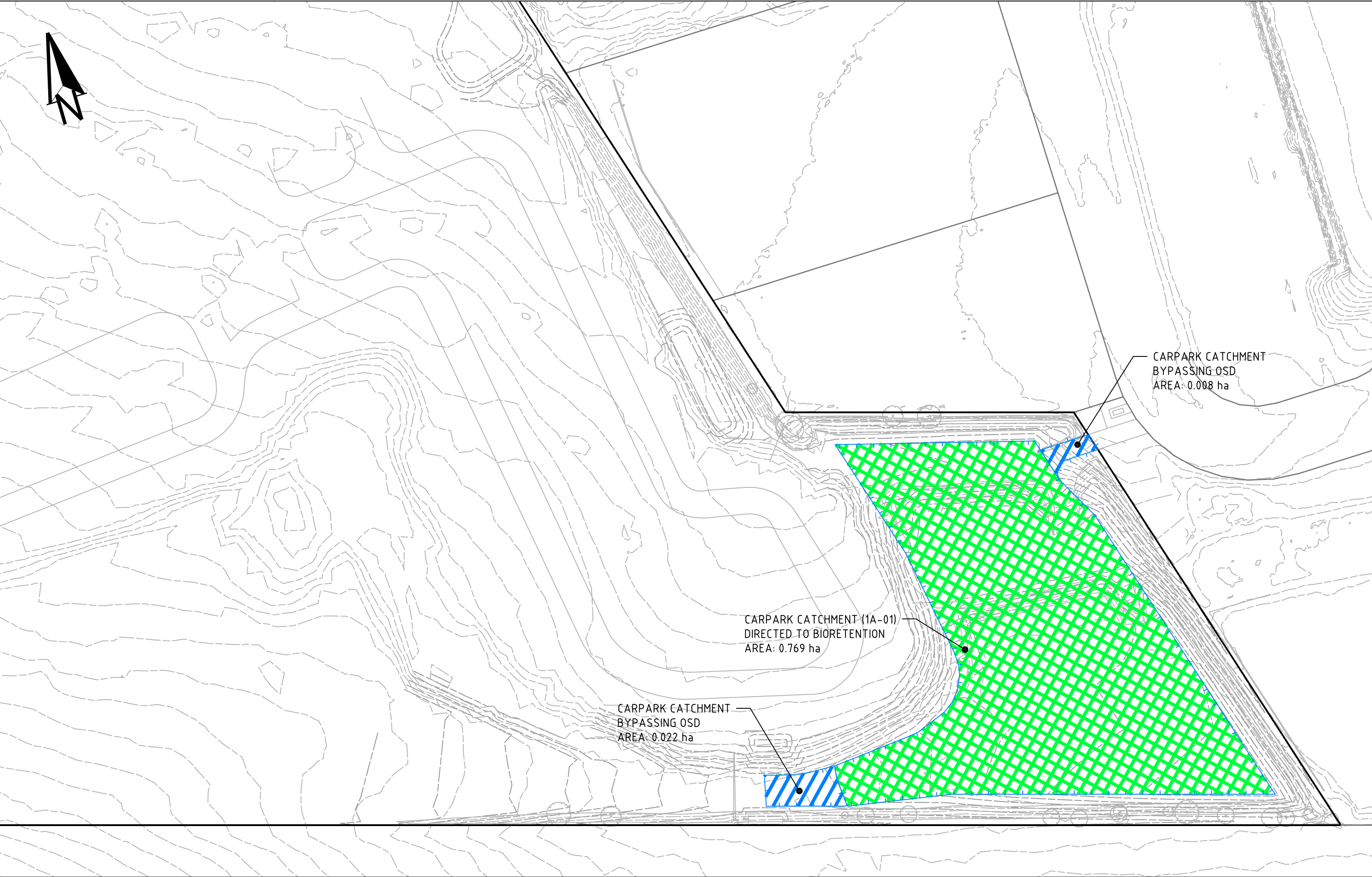


Consulting Engineers
Environment
Water
Geotechnical
Civil

Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE				
LONGITUDINAL SECTION SHEET 3				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108122	PS01	R04	PS01-E302	B

DEVELOPMENT APPLICATION



OSD CATCHMENT PLAN (POST-DEVELOPMENT)

SCALE 1:1000

Project Details:

Project Title

50 Peter Brock Drive, Eastern Creek

Address

Peter Brock Drive

Reference Number

P2108122

General Site Data:

Site Area (m²)

8020 m²

Area Draining to OSD (m²) (Max Bypass 15%)

7634 m²

OSD Location

Above Ground

OSD Discharge Location

Channel or Swale

The preliminary storage requirements below the 50% AEP Weir is 240.6m³ & the storage below the 1% AEP weir is 364.3m³. This requirement will differ if there is a drowned orifice.

Filter Cartridges:

Will filter cartridges be used to manage water quality?

No

Discharge Location Data:

⑤ RL of 50% AEP Orifice Centreline

63.190 m

Number of 50% AEP Orifices

2

⑥ RL of 1% AEP Orifice Centreline

63.220 m

Number of 1% AEP Orifices

2

Is the 1% AEP Water Surface Level in the Channel Known or Assumed

Use an Assumed WSL

⑨ Invert of channel/swale at the point of discharge

66.500

⑩ Top of channel/swale bank at the point of discharge

68

OSD Data:

① Average RL of the base of the OSD Storage Area

63.23

② Length of Emergency Overflow Weir (m)

30.000

③ RL of Emergency Overflow Weir

70.000

The 50% AEP storage volume is 240.60m³. What is the 50% AEP WSL?

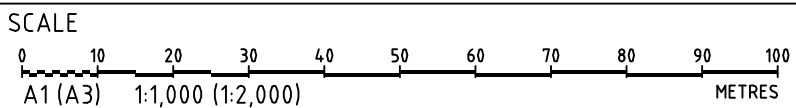
63.730

BLACKTOWN CITY COUNCIL OSD SPREADSHEET INPUTS

Site:	
Address	Peter Brock Drive
Site Area	8020 m ²
Site Area NOT Draining to OSD	326 m ²
Bypass	4%
Reduced Levels (AHD):	
① RL at top Weir	70.175
① Average RL of the base of the OSD Storage Area	63.230
② RL of Emergency Overflow Weir	70.000
RL of 50% AEP Overflow Weir	63.730
⑤ RL of 50% AEP Orifice Center Line	63.190
⑥ RL of 1% AEP Orifice Center Line	63.220
⑨ RL of Invert of Channel at point of discharge	66.500
⑩ RL of Channel Bank at point of discharge	68.000
Minimum RL of Garage Floor	70.175
Minimum RL of Habitable Floor	70.275
OSD Volume:	
Required Storage BELOW the 50% AEP Overflow Weir	240.600
Required Storage BELOW Emergency Overflow Weir	364.310
Discharge Details:	
Using Filter Cartridges to manage Water Quality	No
Discharge Location	Channel/Swale With an Assumed WSL
Length of Emergency Overflow Weir	30.000
Maximum 50% AEP Site Discharge	30.124
Maximum 50% AEP Orifice Discharge	30.124
Maximum 1% AEP Site Discharge	134.124
Maximum 1% AEP Orifice Discharge	134.124
Orifice Details:	
Number of 50% AEP Orifices	2.000
Number of 1% AEP Orifices	2.000
50% AEP Orifice Diameter (mm)	36.000
1% AEP Orifice Diameter (mm)	183.500

BLACKTOWN CITY COUNCIL OSD SPREADSHEET OUTPUTS

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
C	UPDATED TO ADDRESS DPIE RFI 19.08.21	30/08/2021	JS	AW	GH	DM
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW/MD	GH	DM
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW/AVG	GH	DM



GRID	DATUM	PROJECT MANAGER
MGA	mAHD	GH
DISCLAIMER & COPYRIGHT This plan must not be used for construction unless signed as approved by principal certifying authority. All measurements in millimetres unless otherwise specified. This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd. (C) Copyright Martens & Associates Pty Ltd		

CLIENT	NEWCASTLE LEGAL AND CONVEYANCING
PROJECT NAME/PLANSET TITLE	EVENT CARPARK WORKS CONCEPT ENGINEERING WORKS
50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766 LOT 4 DP 1079897	

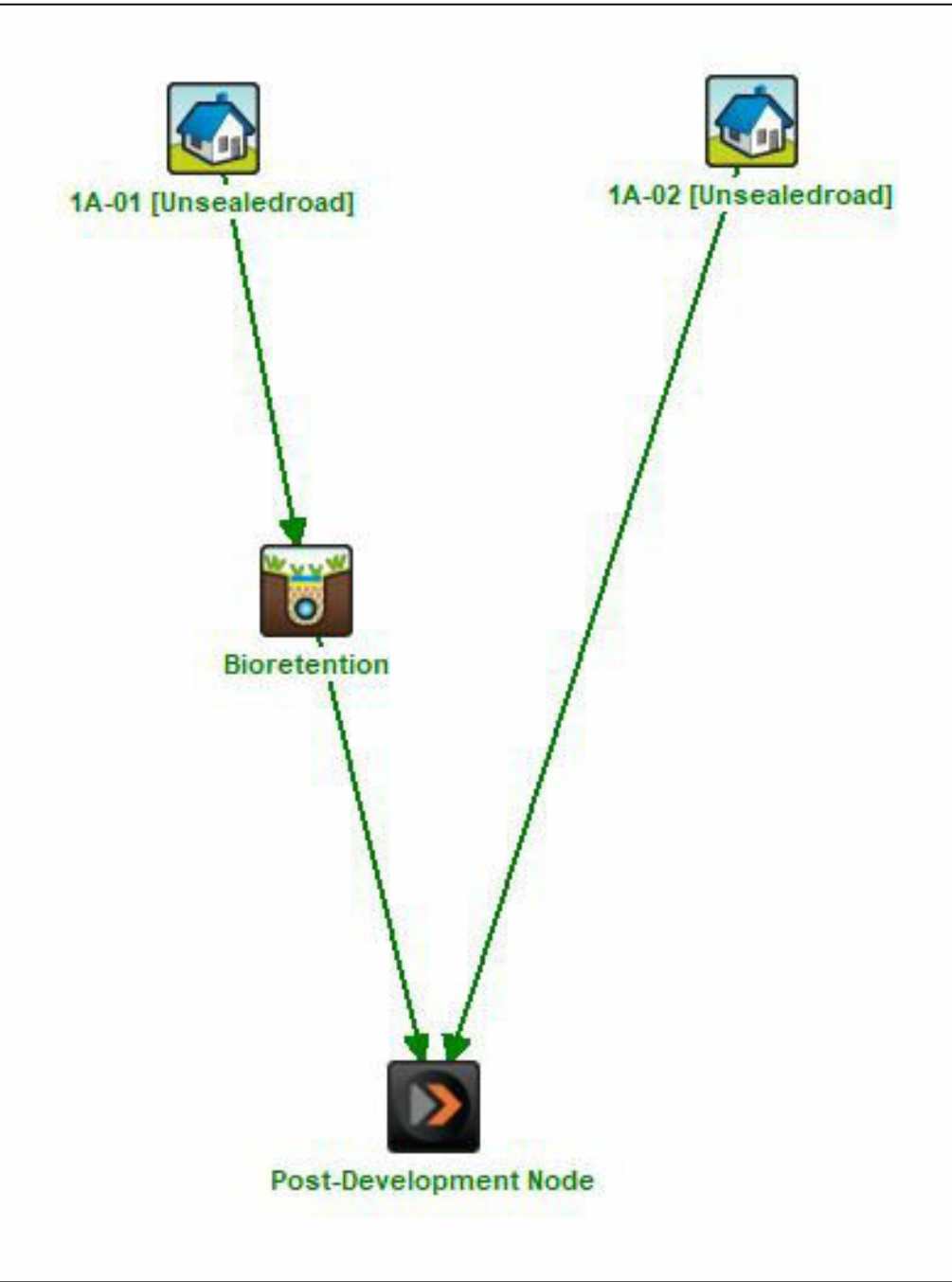
Consulting Engineers

Environment
Water
Geotechnical
Civil

Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DEVELOPMENT APPLICATION

DRAWING TITLE ON SITE DETENTION CATCHMENT PLAN MODELS & RESULTS				
PROJECT NO. P2108122	PLANSET NO. PS01	RELEASE NO. R04	DRAWING NO. PS01-E600	REVISION C

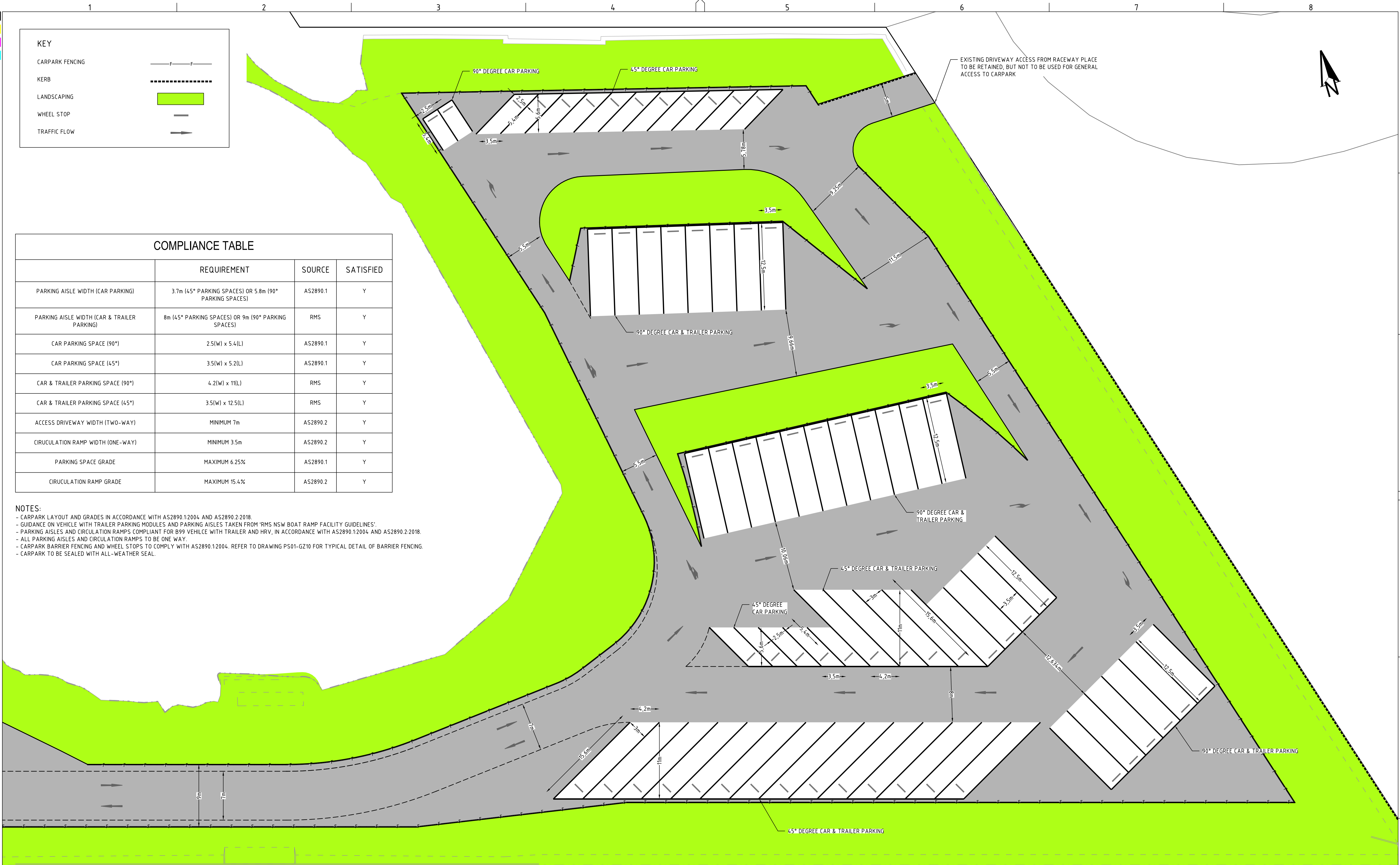


MUSIC MODEL LAYOUT (P2108122MUS01V01)

Treatment Train Effectiveness - Post-Development Node			
	Sources	Residual Load	% Reduction
Flow (ML/yr)	5.84	5.34	8.6
Total Suspended Solids (kg/yr)	1090	146	86.6
Total Phosphorus (kg/yr)	1.72	0.523	69.6
Total Nitrogen (kg/yr)	12.7	5.62	55.9
Gross Pollutants (kg/yr)	152	5.72	96.2

TARGET	COMPLIES
85%	Y
65%	Y
45%	Y
90%	Y

MUSIC MODEL RESULTS (P2108122MUS01V01)

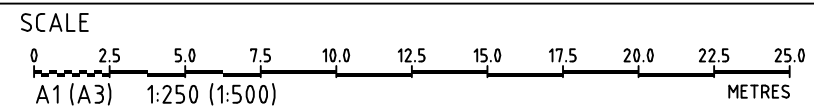


COMPLIANCE TABLE			
	REQUIREMENT	SOURCE	SATISFIED
PARKING AISLE WIDTH (CAR PARKING)	3.7m (45° PARKING SPACES) OR 5.8m (90° PARKING SPACES)	AS2890.1	Y
PARKING AISLE WIDTH (CAR & TRAILER PARKING)	8m (45° PARKING SPACES) OR 9m (90° PARKING SPACES)	RMS	Y
CAR PARKING SPACE (90°)	2.5(W) x 5.4(L)	AS2890.1	Y
CAR PARKING SPACE (45°)	3.5(W) x 5.2(L)	AS2890.1	Y
CAR & TRAILER PARKING SPACE (90°)	4.2(W) x 11(L)	RMS	Y
CAR & TRAILER PARKING SPACE (45°)	3.5(W) x 12.5(L)	RMS	Y
ACCESS DRIVEWAY WIDTH (TWO-WAY)	MINIMUM 7m	AS2890.2	Y
CIRCULATION RAMP WIDTH (ONE-WAY)	MINIMUM 3.5m	AS2890.2	Y
PARKING SPACE GRADE	MAXIMUM 6.25%	AS2890.1	Y
CIRCULATION RAMP GRADE	MAXIMUM 15.4%	AS2890.2	Y

NOTES:

- CARPARK LAYOUT AND GRADES IN ACCORDANCE WITH AS2890.1:2004 AND AS2890.2:2018.
- GUIDANCE ON VEHICLE WITH TRAILER PARKING MODULES AND PARKING AISLES TAKEN FROM 'RMS NSW BOAT RAMP FACILITY GUIDELINES'.
- PARKING AISLES AND CIRCULATION RAMPS COMPLIANT FOR B99 VEHICLE WITH TRAILER AND HRV, IN ACCORDANCE WITH AS2890.1:2004 AND AS2890.2:2018.
- ALL PARKING AISLES AND CIRCULATION RAMPS TO BE ONE WAY.
- CARPARK BARRIER FENCING AND WHEEL STOPS TO COMPLY WITH AS2890.1:2004. REFER TO DRAWING PS01-GZ10 FOR TYPICAL DETAIL OF BARRIER FENCING.
- CARPARK TO BE SEALED WITH ALL-WEATHER SEAL.

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
C	UPDATED TO ADDRESS DPIE RFI 19.08.21	30/08/2021	JS	AW	GH	DM
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW/MD	GH	DM
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW/AVG	GH	DM



GRID	DATUM	PROJECT MANAGER
MGA	mAHD	GH
DISCLAIMER & COPYRIGHT		
This plan must not be used for construction unless signed as approved by principal certifying authority.		
All measurements in millimetres unless otherwise specified.		
This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd.		
(C) Copyright Martens & Associates Pty Ltd		

CLIENT	NEWCASTLE LEGAL AND CONVEYANCING
PROJECT NAME/PLANSET TITLE	EVENT CARPARK WORKS CONCEPT ENGINEERING WORKS
50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766 LOT 4 DP 1079897	

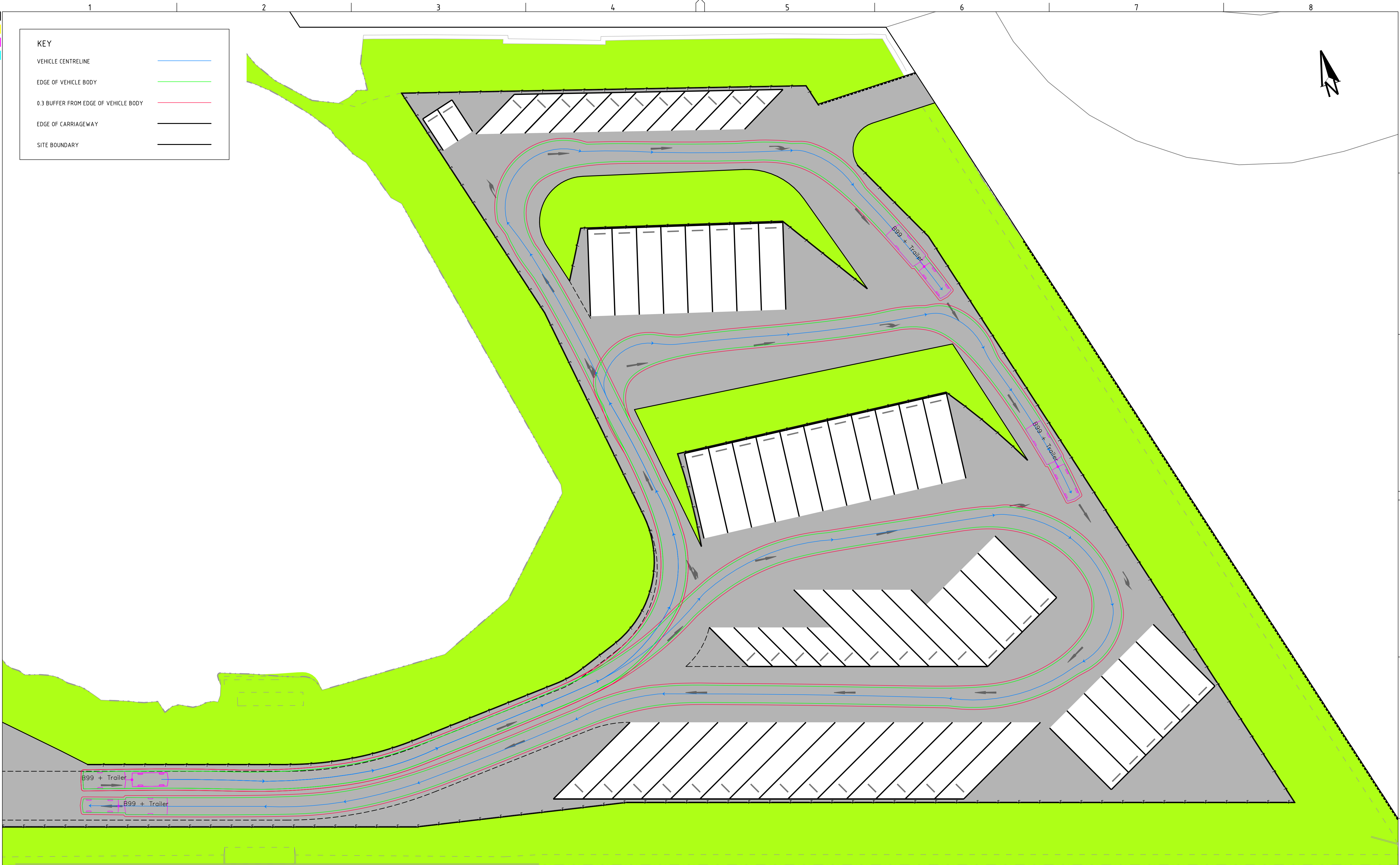


Consulting Engineers
Environment
Water
Geotechnical
Civil

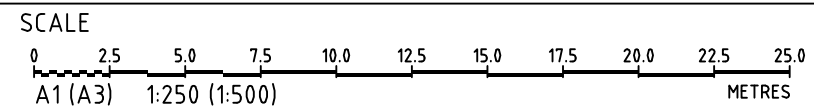
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DEVELOPMENT APPLICATION

DRAWING TITLE				
CARPARK LAYOUT PLAN				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108122	PS01	R04	PS01-G300	C



REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
C	UPDATED TO ADDRESS DPIE RFI 19.08.21	30/08/2021	JS	AW	GH	DM
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW/MD	GH	DM
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW/AVG	GH	DM



GRID
MGA

DATUM
mAHD

PROJECT MANAGER
GH

CLIENT
NEWCASTLE LEGAL AND CONVEYANCING

PROJECT NAME/PLANSET TITLE
EVENT CARPARK WORKS
CONCEPT ENGINEERING WORKS

50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766
LOT 4 DP 1079897

DISCLAIMER & COPYRIGHT
This plan must not be used for construction unless signed as approved by principal certifying authority.
All measurements in millimetres unless otherwise specified.
This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd.
(C) Copyright Martens & Associates Pty Ltd

Consulting Engineers

Environment
Water
Geotechnical
Civil

Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

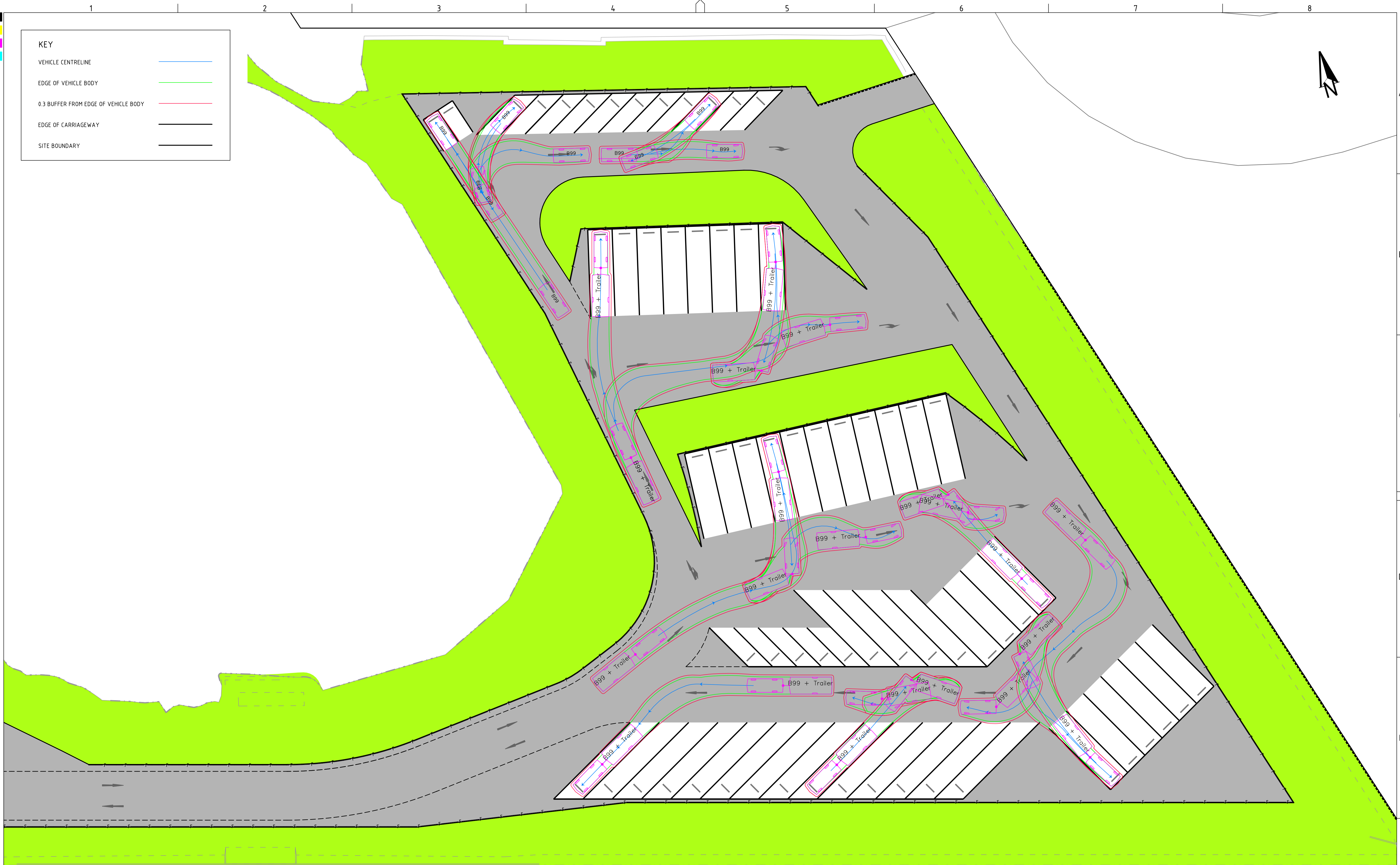
DRAWING TITLE				
CARPARK SWEEP PATH PLAN SHEET 1 B99 VEHICLE & TRAILER CIRCULATION				
PROJECT NO. P2108122	PLANSET NO. PS01	RELEASE NO. R04	DRAWING NO. PS01-GZ00	REVISION C

DEVELOPMENT APPLICATION

PRINTED: 11:45 AM 11/08/2021

A1 / A3 LANDSCAPE (A1LC_v02.0.01)

DRAWING ID: P2108122-PS01-R04-GZ00



REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
C	UPDATED TO ADDRESS DPIE RFI 19.08.21	30/08/2021	JS	AW	GH	DM
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW/MD	GH	DM
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW/AVG	GH	DM

SCALE
0 2.5 5.0 7.5 10.0 12.5 15.0 17.5 20.0 22.5 25.0
A1 (A3) 1:250 (1:500) METRES

GRID
MGA
DATUM
mAHD
PROJECT MANAGER
GH
DISCLAIMER & COPYRIGHT
This plan must not be used for construction unless signed as approved by principal certifying authority.
All measurements in millimetres unless otherwise specified.
This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd
(C) Copyright Martens & Associates Pty Ltd

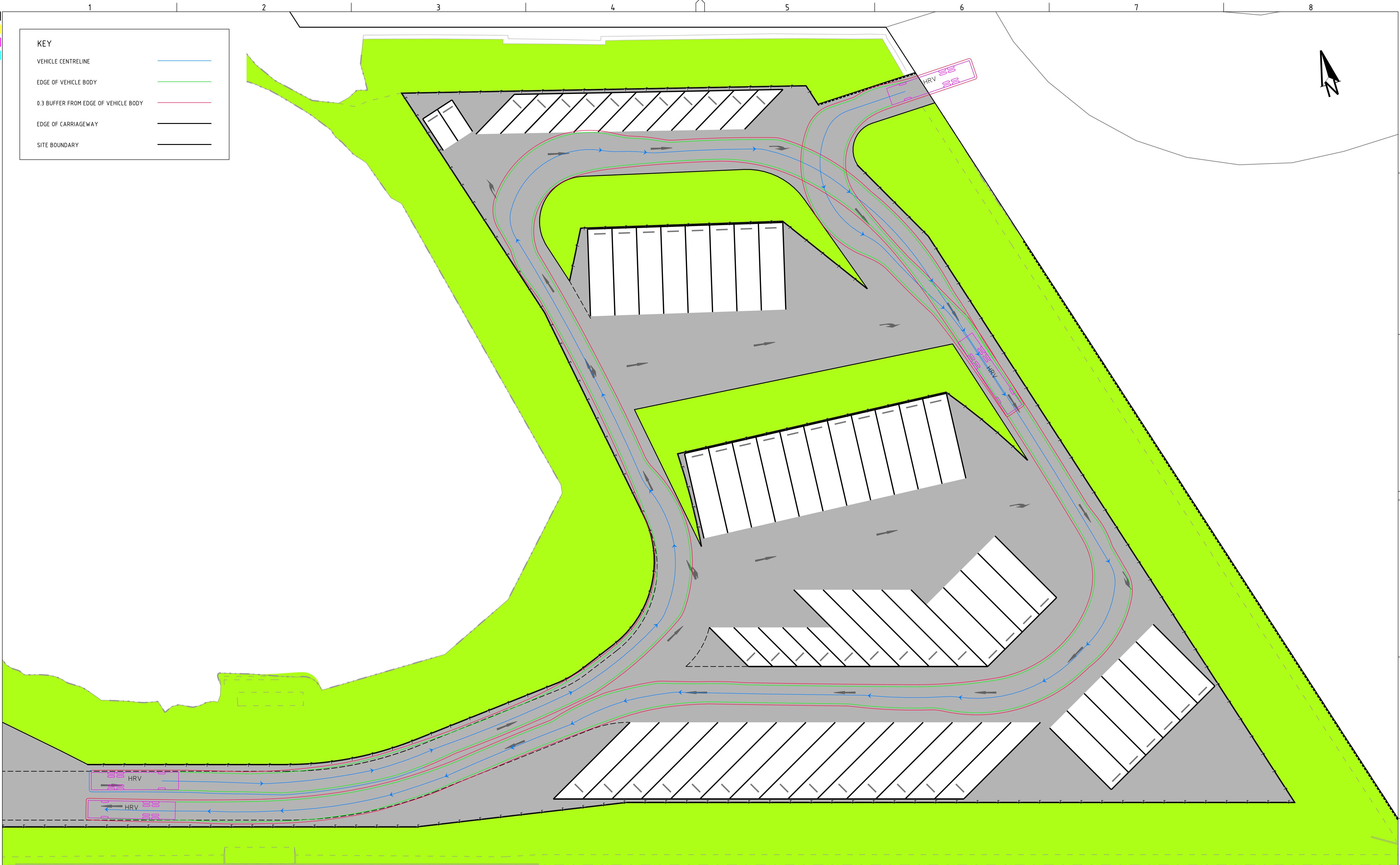
CLIENT
NEWCASTLE LEGAL AND CONVEYANCING
PROJECT NAME/PLANSET TITLE
EVENT CARPARK WORKS
CONCEPT ENGINEERING WORKS
50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766
LOT 4 DP 1079897

martens
& Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DEVELOPMENT APPLICATION

DRAWING TITLE				
CARPARK SWEEP PATH PLAN SHEET 2 B99 VEHICLE & TRAILER PARKING				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108122	PS01	R04	PS01-GZ01	C

DRAWING ID: P2108122-PS01-R04-GZ01



REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
C	UPDATED TO ADDRESS DPIE RFI 19.08.21	30/08/2021	JS	AW	GH	DM
B	UPDATED TO ADDRESS DPIE RFI 13.05.21	30/07/2021	JS	AW/MD	GH	DM
A	DPIE RFI 22.12.2020	29/03/2021	JS	AW/AVG	GH	DM

SCALE

0 2.5 5.0 7.5 10.0 12.5 15.0 17.5 20.0 22.5 25.0

A1 (A3) 1:250 (1:500) METRES

GRID

MGA

DATUM

mAHD

PROJECT MANAGER

GH

CLIENT

NEWCASTLE LEGAL AND CONVEYANCING

PROJECT NAME/PLANSET TITLE

EVENT CARPARK WORKS

CONCEPT ENGINEERING WORKS

50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766

LOT 4 DP 1079897

DISCLAIMER & COPYRIGHT

This plan must not be used for construction unless signed as approved by principal certifying authority.

All measurements in millimetres unless otherwise specified.

This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd.

(C) Copyright Martens & Associates Pty Ltd

martens

& Associates Pty Ltd

Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767

Email: mail@martens.com.au Internet: www.martens.com.au

Consulting Engineers

Environment

Water

Geotechnical

Civil

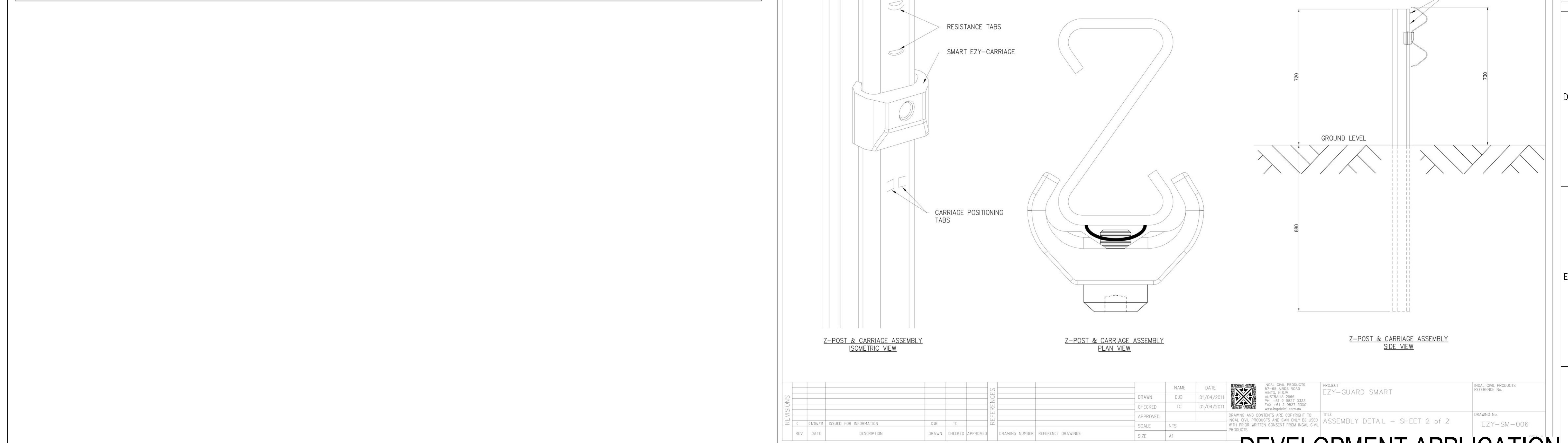
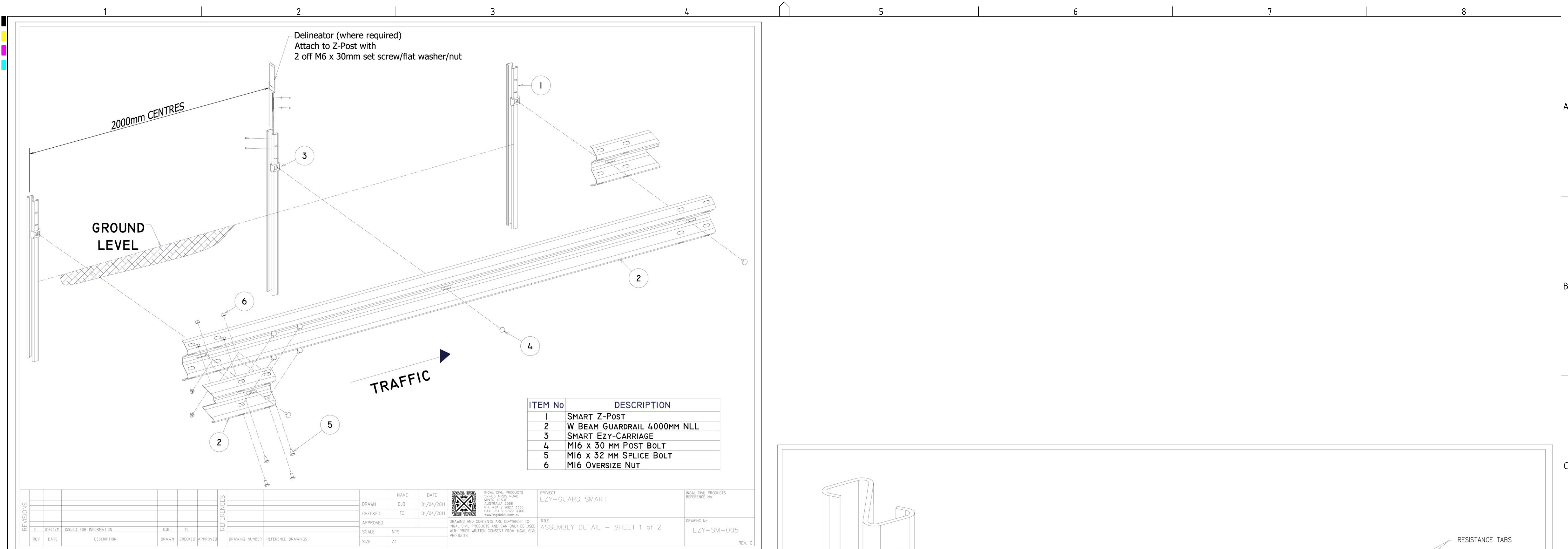
DRAWING TITLE				
CARPARK SWEEP PATH PLAN				
SHEET 3				
HRV CIRCULATION				
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P2108122	PS01	R04	PS01-GZ02	C

DRAWING ID: P2108122-PS01-R04-GZ02

DEVELOPMENT APPLICATION

PRINTED: 11/08/2021 10:00 AM
USER: A3333333

A1 / A3 LANDSCAPE (A1LC_v02.0.01)



DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD	SCALE	GRID	DATUM	PROJECT MANAGER	CLIENT	 Consulting Engineers Environment Water Geotechnical Civil Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767 Email: mail@martens.com.au Internet: www.martens.com.au	DRAWING TITLE CARPARK BARRIER TYPICAL DETAILS			
A	UPDATED TO ADDRESS DPIE RFI 19.08.21	30/08/2021	JS	AW	GH	DM		N/A	N/A	GH	NEWCASTLE LEGAL AND CONVEYANCING					
								DISCLAIMER & COPYRIGHT This plan must not be used for construction unless signed as approved by principal certifying authority. All measurements in millimetres unless otherwise specified. This drawing must not be reproduced in whole or part without prior written consent of Martens & Associates Pty Ltd. (C) Copyright Martens & Associates Pty Ltd								
								PROJECT NAME/PLANSET TITLE EVENT CARPARK WORKS CONCEPT ENGINEERING WORKS 50 PETER BROCK DRIVE, EASTERN CREEK, NSW 2766 LOT 4 DP 1079897								
A1 / A3 LANDSCAPE [A1L_C_v02.0.0.0]																