

LOT 2 DP1287077, 22 MINE LANE WOLUMLA 10 STAGE RESIDENTIAL SUBDIVISION ENGINEERING CONCEPT DESIGN FOR CONCEPT MASTERPLAN

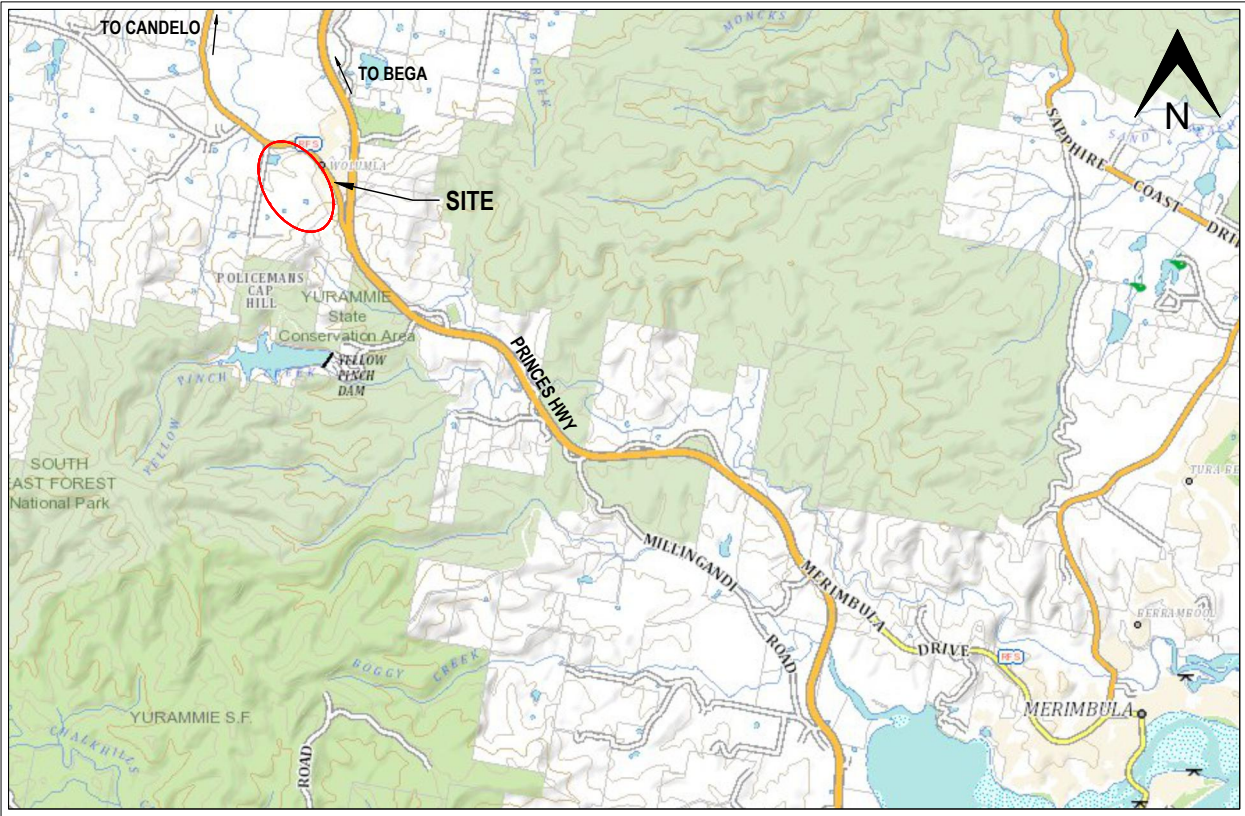
CLIENT: JUNOR INVESTMENTS PTY LTD
LGA: BEGA VALLEY SHIRE COUNCIL
DA: 2023.351



P L A N N E D



LOCALITY PLAN
N.T.S



DRAWING SCHEDULE

2109-P00TTL	TITLE SHEET, DRAWING SCHEDULE & LOCALITY PLAN
2109-L01LOT	STAGE 1 LOT YIELD
2109-L02LOT	STAGE 2-10 LOT YIELD
2109-L05POS	PROPOSED PLAN OF SUBDIVISION - SHEET 1
2109-L06POS	PROPOSED PLAN OF SUBDIVISION - SHEET 2
2109-L07POS	PROPOSED PLAN OF SUBDIVISION - SHEET 3
2109-L08POS	PROPOSED PLAN OF SUBDIVISION - SHORT LINE TABLE
2109-P01GA	CONCEPT ARRANGEMENT - OVERALL
2109-P02NTS	NOTES & LEGEND
2109-P03STG	STAGING PLAN
2109-P04ZN	LAND ZONES
2109-P05GA	CONCEPT ARRANGEMENT - SHEET 1
2109-P06GA	CONCEPT ARRANGEMENT - SHEET 2
2109-P07GA	CONCEPT ARRANGEMENT - SHEET 3
2109-P08GA	MINE LANE INTERFACE CONCEPT ARRANGEMENTS
2109-P09GA	COMMERCIAL AREA CONCEPT ARRANGEMENT
2109-P10RHP	ROAD HIERARCHY PLAN - SUBDIVISION
2109-P11PHP	PEDESTRIAN HIERARCHY PLAN - SUBDIVISION
2109-P12TYPX	TYPICAL CROSS SECTIONS - SHEET 1
2109-P13TYPX	TYPICAL CROSS SECTIONS - SHEET 2
2109-P14TYPX	TYPICAL CROSS SECTIONS - SHEET 3
2109-P15TYPINT	TYPICAL INTERSECTIONS - SHEET 1
2109-P16TYPINT	TYPICAL INTERSECTIONS - SHEET 2
2109-P17INT	OFFSITE INTERSECTIONS - CANDELO WOLUMLA RD/FERNDAL LN
2109-P18INT	OFFSITE INTERSECTIONS - SCOTT ST / RD27
2109-P19INT	OFFSITE INTERSECTIONS - SCOTT ST/BEGA ST
2109-P20INT	OFFSITE INTERSECTIONS - CANDELO WOLUMLA RD / MOMSEN ST
2109-P22INT	OFFSITE INTERSECTIONS - PRINCES HWY/BEGA ST
2109-P23INT	OFFSITE INTERSECTIONS - PRINCES HWY/ CANDELO WOLUMLA RD

2109-P24SD	PRINCES HWY/BEGA ST SISD SIGHT LINES
2109-P25SDLS	PRINCES HWY/BEGA ST SISD SIGHT LINE LONGITUDINAL SECTION
2109-P26SD	PRINCES HWY/CANDELO WOLUMLA RD SISD SIGHT LINES
2109-P27SDLS	PRINCES HWY/CANDELO WOLUMLA RD SISD SIGHT LINE LONGITUDINAL SECTION
2109-P28SD	CANDELO WOLUMLA RD/FERNDAL LN SISD SIGHT LINES
2109-P29SDLS	CANDELO WOLUMLA RD/ FERNDAL LN SISD SIGHT LINE LONGITUDINAL SECTION
2109-P30SD	MOMSEN ST / CANDELO WOLUMLA RD SISD SIGHT LINES
2109-P31SD	LOT 1 DP709399 DWAY / FERNDAL LN SISD SIGHT LINES
2109-P37EW	EARTHWORKS - STAGE 1 - SHEET 1
2109-P38EW	EARTHWORKS - STAGE 1 - SHEET 2
2109-P40SLP	SLOPE ANALYSIS PLAN
2109-P41CON	CONSTRAINTS OVERALL
2109-P42CON	CONSTRAINTS - SHEET 1
2109-P43CON	CONSTRAINTS - SHEET 2
2109-P44CON	CONSTRAINTS - SHEET 3
2109-P45TRP	TREE RETENTION PLAN - SHEET 1
2109-P46TRP	TREE RETENTION PLAN - SHEET 2
2109-P47TRP	TREE RETENTION PLAN - SHEET 3
2109-P50SW	STORMWATER CATCHMENT PLAN
2109-P51SW	STORMWATER - STREAM CLASSIFICATION
2109-P51.1SW	EXISTING WATERCOURSE PHOTOS - SHEET 1
2109-P51.2SW	EXISTING WATERCOURSE PHOTOS - SHEET 2
2109-P51.3SW	EXISTING WATERCOURSE PHOTOS - SHEET 3
2109-P51.4SW	EXISTING WATERCOURSE PHOTOS - SHEET 4

2109-P52SW	EXISTING DAM ARRANGEMENT
2109-P53SW	NORTHERN FLOODWAY PLAN
2109-P54SW	SOUTHERN FLOODWAY PLAN
2109-P56SW	SWP.O.S. - 159 STORMWATER CONTROL FACILITY
2109-P58SW	SWP.O.S. - 905 STORMWATER CONTROL FACILITY
2109-P60WAT	WATER MASTER PLAN - OVERALL SITE
2109-P61WAT	WATER MASTER PLAN - SHEET 1
2109-P62WAT	WATER MASTER PLAN - SHEET 2
2109-P63WAT	WATER MASTER PLAN - SHEET 3
2109-P65WAT	WATER MASTER PLAN - STAGE 1 HYDRAULIC ANALYSIS RESULTS
2109-P70SEW	SEWER MASTER PLAN
2109-P71SEW	SEWER MASTER PLAN
2109-P72SEW	SEWER MASTER PLAN - SHEET 1
2109-P73SEW	SEWER MASTER PLAN - SHEET 2
2109-P74SEW	SEWER MASTER PLAN - SHEET 3
2109-P80UTY	UTILITIES CONCEPT PLAN OVERALL
2109-P81UTY	UTILITIES CONCEPT PLAN - SHEET 1
2109-P82UTY	UTILITIES CONCEPT PLAN - SHEET 2
2109-P83UTY	UTILITIES CONCEPT PLAN - SHEET 3

[illegible]

Date: Friday, 21 March 2025 10:44:28 AM User: AG File: H:\2021\2109_Wolumia\099_2109Svnc\061_dwosSvnc\2109-L01LOT.dwg

SCHEDULE OF SHORT BOUNDARIES				
NO.	BEARING	CHORD	ARC	RADIUS
1	305°8'21"	7.071	-	-
2	79°6'23"	3.281	3.281	91.000
3	258°4'24"	6.452	-	-
4	78°4'24"	6.750	-	-
5	260°8'21"	7.075	-	-
6	76°15'55"	5.752	5.744	91.000
7	258°4'24"	6.748	-	-
8	78°4'24"	1.892	-	-
9	102°41'25"	7.071	-	-
10	147°41'25"	2.611	-	-
11	76°58'56"	4.151	4.151	109.000
12	251°57'47"	2.234	-	-
13	78°52'40"	3.060	3.060	109.000
14	79°54'38"	0.870	0.870	109.000
15	35°8'21"	7.071	-	-
16	280°51'6"	7.071	-	-
17	78°2'13"	2.234	-	-
18	77°23'24"	4.481	4.461	187.000
19	78°4'24"	4.198	-	-
20	229°6'38"	3.366	-	-
21	157°42'29"	2.225	-	-
22	94°6'38"	7.071	-	-
23	49°6'38"	2.000	-	-
24	78°4'24"	4.159	-	-
25	77°48'18"	1.584	1.584	169.000
29	244°54'43"	6.912	-	-
32	235°51'6"	2.763	-	-
33	55°51'6"	0.492	-	-
35	10°51'6"	7.071	-	-
36	280°51'6"	7.071	-	-
37	57°41'16"	6.985	6.987	109.000
38	77°48'18"	1.022	1.022	109.000
39	299°08'29"	-	6.225	79.000
40	325°41'42"	1.436	1.436	54.000
41	165°38'49"	2.114	-	-
42	350°57'7"	3.895	3.895	109.000
44	165°38'49"	3.511	-	-
46	13°18'29"	7.079	-	-
47	178°27'53"	2.792	-	-
48	13°18'29"	7.273	-	-
49	343°37'17"	0.074	-	-
50	208°39'49"	6.506	-	-
51	9°2'48"	6.845	-	-
52	206°27'44"	6.204	-	-
53	49°59'2"	6.000	-	-
54	210°50'51"	6.791	-	-
55	300°50'51"	7.340	-	-
56	190°37'37"	6.502	-	-
57	337°42'29"	2.225	-	-
58	303°4'24"	7.071	-	-

59	210°50'51"	6.791	-	-
60	108°40'24"	7.296	-	-
61	23°22'49"	7.414	-	-
63	32°27'43"	4.676	-	-
64	122°27'30"	2.000	-	-
65	122°27'34"	4.290	-	-
67	290°19'16"	7.096	-	-
68	245°31'32"	3.789	-	-
69	62°47'53"	3.902	3.903	41.000
70	15°56'33"	7.178	-	-
71	337°42'29"	2.225	-	-
72	303°4'24"	7.071	-	-
73	210°50'51"	6.791	-	-
74	108°40'24"	7.296	-	-
75	23°22'49"	7.414	-	-
76	301°38'30"	1.371	1.371	109.000
77	170°8'21"	2.567	-	-
78	190°4'57"	7.185	-	-
79	169°50'39"	6.985	-	-
80	59°37'3"	5.254	5.258	40.000
81	190°51'6"	7.071	-	-
82	100°51'6"	7.071	-	-
83	206°2'54"	6.153	-	-
84	218°12'40"	7.356	-	-
85	67°52'55"	7.431	7.471	21.000
86	237°41'25"	0.343	-	-
87	192°41'25"	7.071	-	-
88	192°41'25"	7.071	-	-
89	59°11'22"	4.762	4.762	91.000
90	34°1'6"	7.124	-	-
91	326°1'32"	1.054	1.054	70.000
92	146°27'25"	0.743	-	-
93	229°6'38"	2.000	-	-
94	184°6'38"	7.071	-	-
95	94°6'38"	7.071	-	-
96	49°6'38"	2.000	-	-
97	78°4'24"	2.083	-	-
98	75°47'15"	7.259	7.261	91.000
99	6°12'11"	5.673	-	-
100	44°21'34"	5.139	5.142	41.000
101	265°46'0"	7.071	-	-
102	76°10'0"	2.728	2.729	41.000
103	78°4'24"	5.261	-	-
104	208°39'49"	6.506	-	-
105	123°4'24"	7.071	-	-
106	310°46'0"	6.688	-	-
107	78°4'24"	2.353	-	-
108	355°46'0"	7.071	-	-
109	213°4'24"	7.071	-	-
110	345°38'49"	3.511	-	-
111	185°43'28"	3.449	-	-
112	165°38'49"	0.046	-	-

NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.

D							DO NOT SCALE Conditions of Use OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE. This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.
C							
B							
A	LAYOUT UPDATED	VAO	AG	VAO	VAO	21/03/2025	
-	INITIAL ISSUE	VAO	AG	VAO	VAO	06/11/2023	
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE	

Date: Friday, 21 March 2025 10:40:13 AM User: AG File: H:\2021\2109_Wolumla\099_2109Sync\061_dwgSync\2109-L08POS.dwg

Survey source: NEAR MAPS
Survey datum: ???

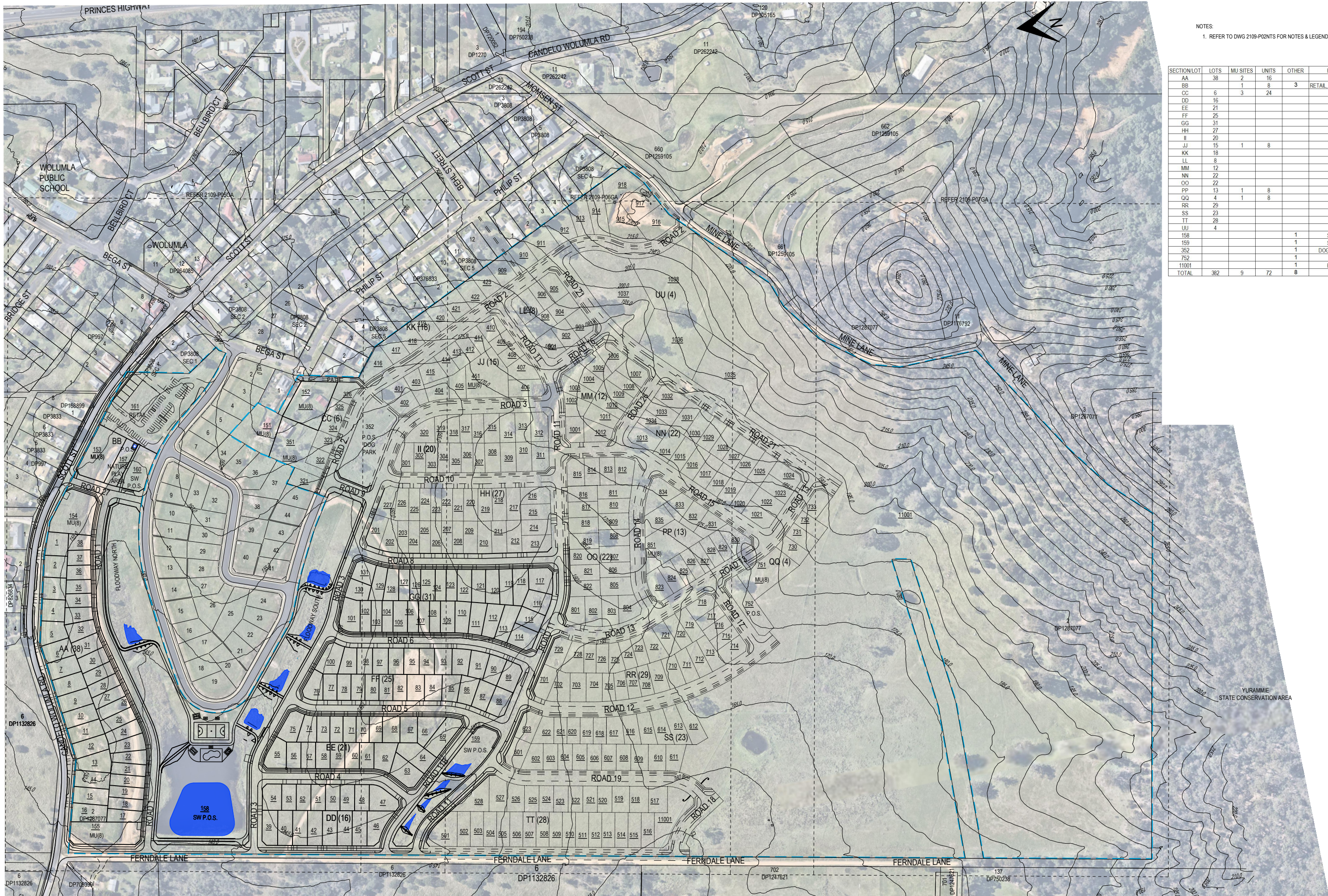
Date: 5/08/2021
Coordinate system: GDA2020 MGAS5



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ??? Date: 10/08/2021
Coordinate system: GDA2020 MGAS5



CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	PROPOSED PLAN OF SUBDIVISION - SHORT LINE TABLE
DRAWING NUMBER	2109-L08POS
AMENDMENT:	A



NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.

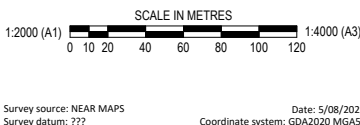
SECTION	LOT	LOTS	MU SITES	UNITS	OTHER	REMARKS
AA	38	2	16			
BB		1	8		3	RETAIL, P.O.S., SWP.O.S.
CC	6	3	24			
DD	16					
EE	21					
FF	26					
GG	31					
HH	27					
II	20					
JJ	15	1	8			
KK	18					
LL	8					
MM	12					
NN	22					
OO	22					
PP	13	1	8			
RR	29	1	8			
SS	23					
TT	28					
UU	4					
158				1		SWP.O.S.
159				1		SWP.O.S.
352				1		DOG PARK P.O.S.
752				1		P.O.S.
11001				1		RESIDUAL
TOTAL	382	9	72	8		

D	LAYOUT ALTERED	VAO	AG	VAO	VAO	21/03/2025
C	PATHS, PREFERRED DWAYS, PONDS, SITE BOUNDARY, TABLES	VAO	AG	VAO	VAO	03/11/2023
B	REVISED LOT LAYOUT	VAO	AG	VAO	VAO	08/09/2023
A	LAYOUT REVISED FOR 600m2 LOTS	VAO	AG	VAO	VAO	07/10/2022
-	INITIAL ISSUE	VAO	PWB	VAO	VAO	11/08/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

Date: Friday, 21 March 2025 1:38:42 PM User: AG File: H:\2021\2109_Wolumla\099_2109sync\061_dwg\Sync\2109-P01GA.dwg

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT Survey datum: ??? Date: 10/08/2021 Coordinate system: GDA2020 MGA55



po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	CONCEPT ARRANGEMENT - OVERALL
DRAWING NUMBER	2109-P01GA
AMENDMENT:	D



STAGE	LOTS	CUM. LOTS	MU SITES	CUM. SITES	UNITS	CUM. UNITS	OTHER	COMMENT
1A	0	0	2	2	16	16		
1B	22	22	2	4	16	32		
1C	16	38		4		32		
1D	21	59		4		32	1	SW P.O.S.
1E	0	59		4		32	3	P.O.S. & SW P.O.S.
1F	25	84		4		32		
1G	16	100	1	5	8	40		
1H	0	100		5		40	1	RETAIL
1I	31	131		5		40		
SUB TOTAL	131		5		40		5	
2	27	158		5		40		
3	26	184	1	6	8	48	1	P.O.S. DOG PARK
4	23	207	1	7	8	56		
5	28	235		7		56		
6	23	258		7		56		
7	33	291	1	8	8	64	1	P.O.S.
8	35	326	1	9	8	72		
9	18	344		9		72		
10	38	382		9		72		
SUB TOTAL	251		4		32		2	
11001							1	RESIDUAL
TOTAL	382		9		72		8	

YURAMMIE
STATE CONSERVATION AREA

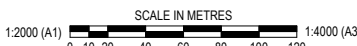
NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.

D	LAYOUT ALTERED, STAGING AMENDED	VAO	AG			
C	4B, 5B, 6B, 9B ADDED	VAO	AG	VAO	27/11/2023	
B	CUMULATIVE LOT COUNT CORRECTED, PATHS, DWAYS, STAGE EXTENTS	VAO	AG	VAO	03/11/2023	
A	LAYOUT ADJUSTMENTS, STAGES ADJUSTED & COLOUR CODED	VAO	AG	VAO	08/09/2023	
-	INITIAL ISSUE	VAO	AG	VAO	07/10/2022	
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

Date: Friday, 21 March 2025 1:41:12 PM User: AG File: H:\2021\2109_Wolumla\099_2109sync001_dwg\Sync2109-P03STG.dwg

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGA55



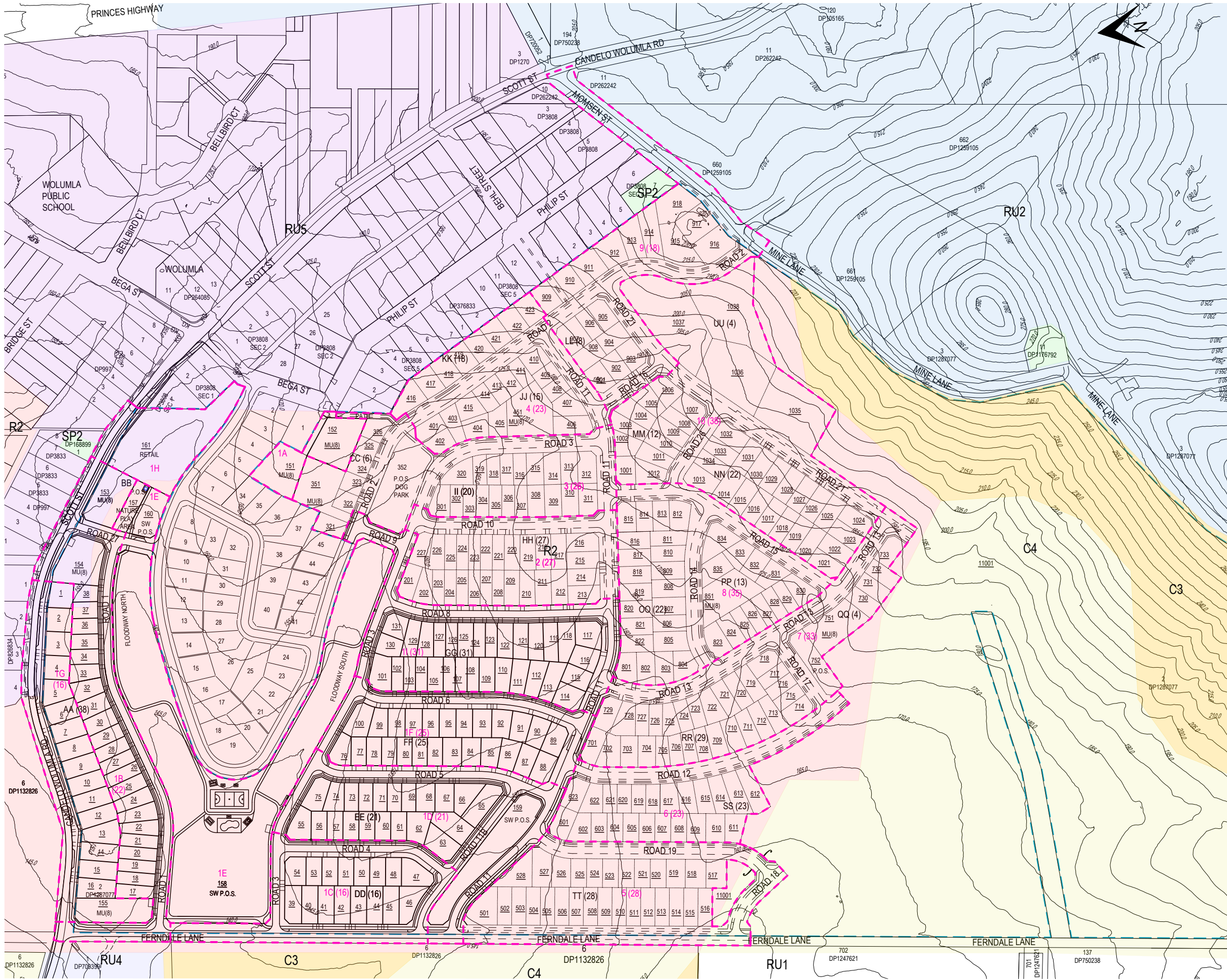
Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???
Date: 10/08/2021
Coordinate system: GDA2020 MGA55

osgood civil resource engineering

OCRE

po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNIOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	STAGING PLAN
DRAWING NUMBER	2109-P03STG
AMENDMENT:	D



- NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.
 2. LAND ZONING DATA OBTAINED FROM ENVIRONMENTAL PLANNING INSTRUMENT - LAND ZONING - SEED, 17/08/2023.
 3. PROPOSED LOTS 274-279, 305, 306, 332-359, 363-365, MU10, 476-481, 486-572 ARE SUBJECT TO REZONING OF C3 & C4 ZONED LAND.

ZONE LEGEND:

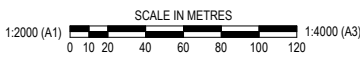
C1	C1 - NATIONAL PARKS & NATURE RESERVES
C3	C3 - ENVIRONMENTAL MANAGEMENT
C4	C4 - ENVIRONMENTAL LIVING
R2	R2 - LOW DENSITY RESIDENTIAL
RU1	RU1 - PRIMARY PRODUCTION
RU2	RU2 - RURAL LANDSCAPE
RU4	RU4 - PRIMARY PRODUCTION SMALL LOTS
RU5	RU5 - VILLAGE
SP2	SP2 - INFRASTRUCTURE

YURAMMIE
STATE CONSERVATION AREA

D					
C					
B	STAGE BOUNDARIES ADDED, LAYOUT REVISED	VAO	AG	VAO	21/03/2025
A	DRAFTING CORRECTED	VAO	AG	VAO	03/11/2023
-	INITIAL ISSUE	AG	AG	VAO	08/09/2023
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
					DATE

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGA55

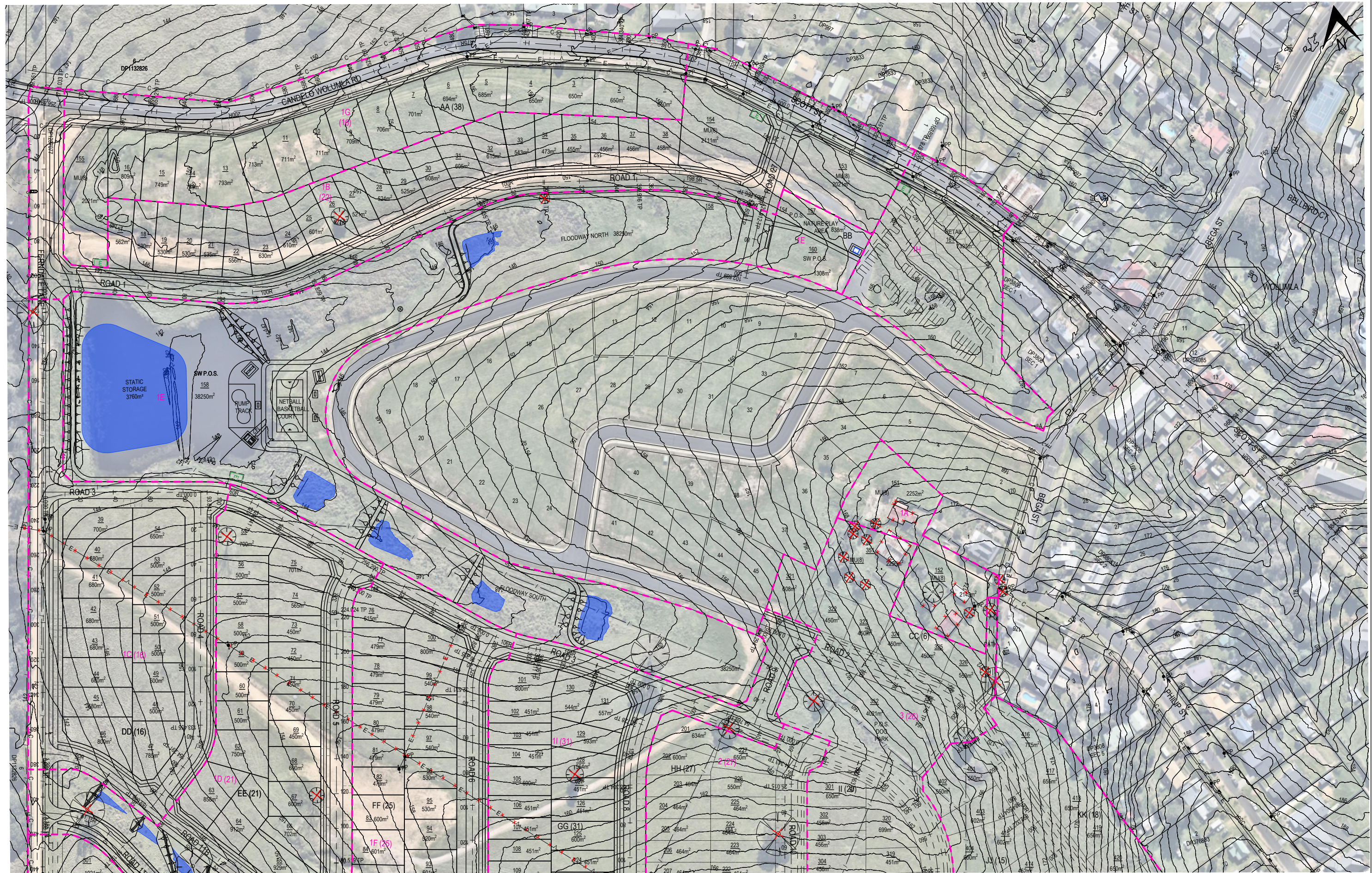


Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???
Date: 10/08/2021
Coordinate system: GDA2020 MGA55



po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	LAND ZONES
DRAWING NUMBER	2109-P04ZN
AMENDMENT:	B

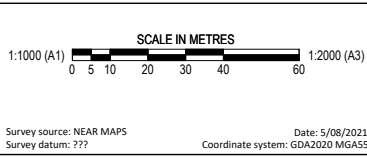


FOR CONTINUATION REFER 2109-P06GA

NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.

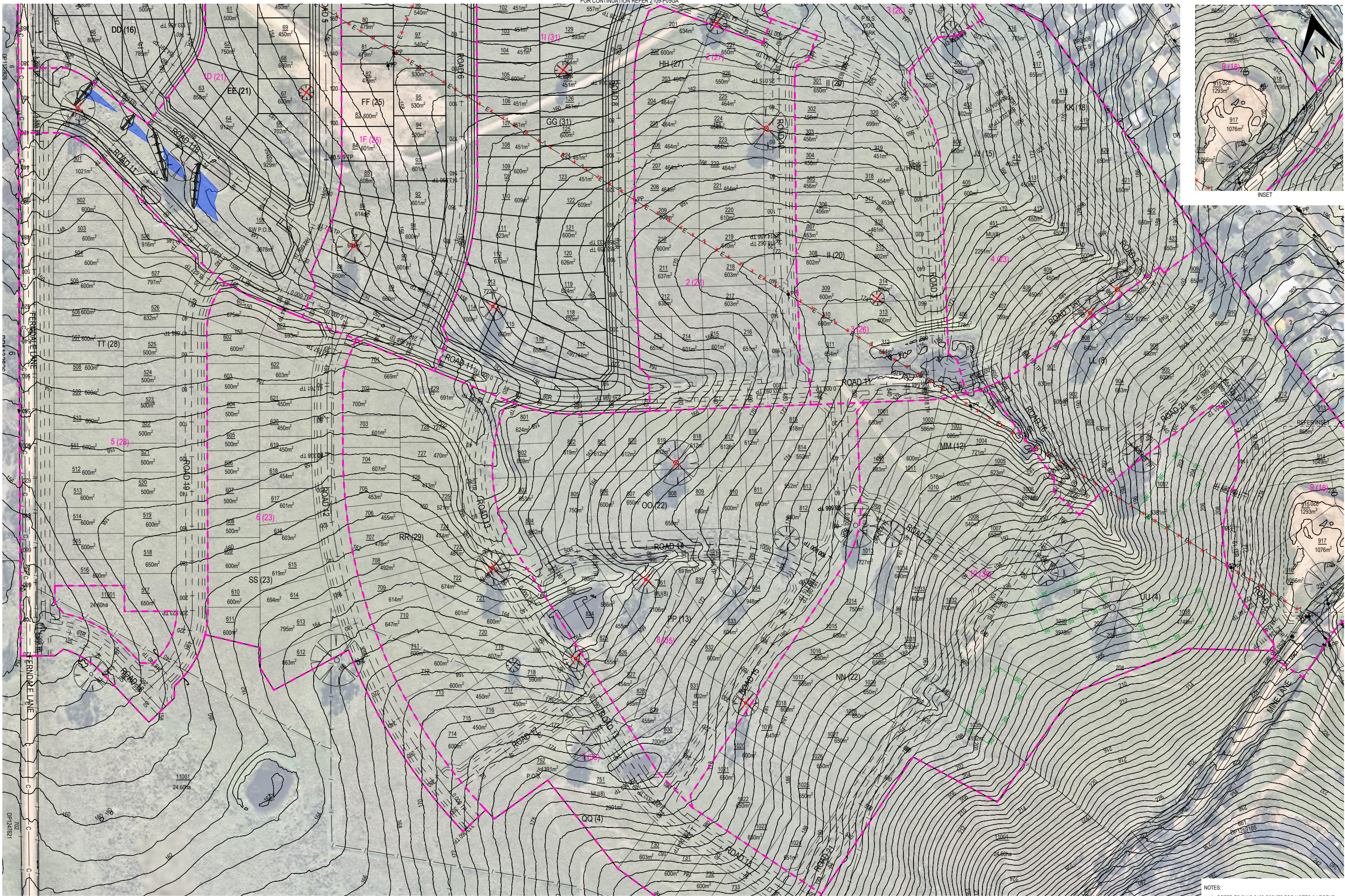
D	LAYOUT UPDATED	VAO	AG	VAO	VAO	21/03/2025
C	INDICATIVE DWY LOCATIONS ADDED, PARKING ADDED, PATHS, 906 LABEL, TREE LABELS, 902 AMENITIES	VAO	AG	VAO	VAO	03/11/2023
B	LAYOUT ADJUSTMENTS	VAO	AG	VAO	VAO	08/09/2023
A	LAYOUT ISSUED FOR 800m² LOTS	VAO	AG	VAO	VAO	07/10/2022
-	INITIAL ISSUE	VAO	PIB	VAO	VAO	11/08/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

DO NOT SCALE
Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



osgood civil resource engineering
OCRE
po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

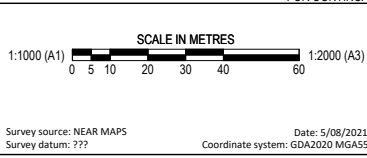
CLIENT PROJECT TITLE
JUNOR INVESTMENTS PTY LTD
LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
CONCEPT ARRANGEMENT - SHEET 1
DRAWING NUMBER **2109-P05GA**
AMENDMENT: **D**



D	LAYOUT UPDATED	VAO	AG	VAO	VAO	21/03/2025
C	INDICATIVE DWY LOCATIONS ADDED, PARKING ADDED, PATHS, TREE LABELS, BIO AREAS	VAO	AG	VAO	VAO	03/11/2023
B	LAYOUT ADJUSTMENTS	VAO	AG	VAO	VAO	08/09/2023
A	LAYOUT REVISSED FOR 800m2 LOTS	VAO	AG	VAO	VAO	07/10/2022
-	INITIAL ISSUE	VAO	PIB	VAO	VAO	11/08/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???

Date: 5/08/2021
Coordinate system: GDA2020 MGAS5

Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???

Date: 10/08/2021
Coordinate system: GDA2020 MGAS5

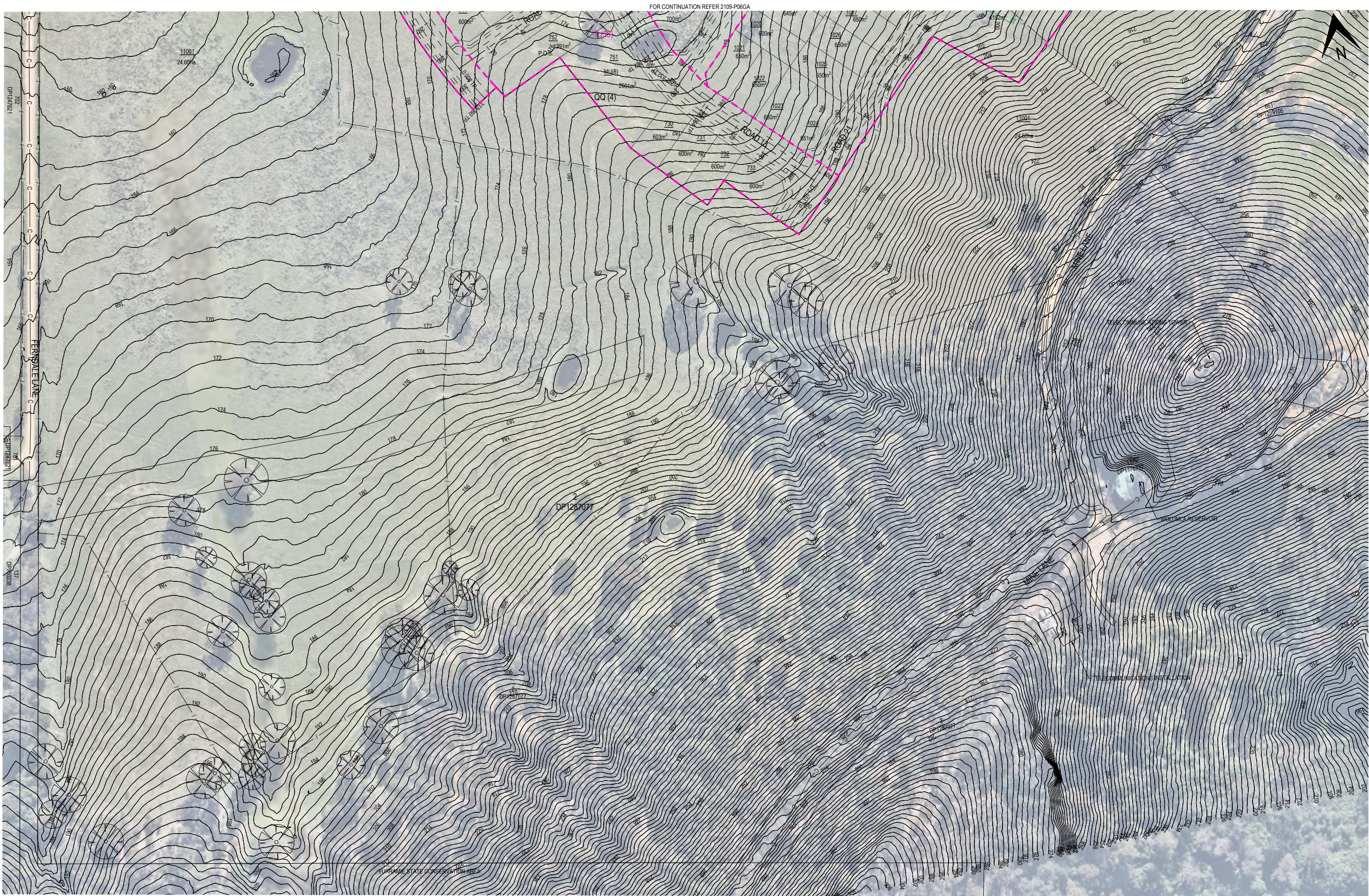
osgood civil resource engineering

OCRE

po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT
PROJECT
TITLE
DRAWING NUMBER
AMENDMENT:

JUNOR INVESTMENTS PTY LTD
LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
CONCEPT ARRANGEMENT - SHEET 2
2109-P06GA
D

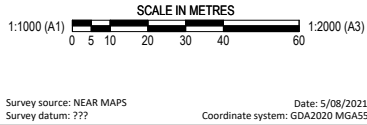


NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.

D	LAYOUT UPDATED	VAO	AG	VAO	VAO	21/03/2025
C	PATHS, TREE LABELS, BIO AREAS	VAO	AG	VAO	VAO	03/11/2023
B	LAYOUT ADJUSTMENTS	VAO	AG	VAO	VAO	08/09/2023
A	LAYOUT REVISED FOR 800m2 LOTS	VAO	AG	VAO	VAO	07/10/2022
-	INITIAL ISSUE	VAO	PIB	VAO	VAO	11/08/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???

Date: 10/08/2021
Coordinate system: GDA2020 MGAS5



po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	CONCEPT ARRANGEMENT - SHEET 3
DRAWING NUMBER	2109-P07GA
AMENDMENT:	D



- NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.
 2. POTENTIAL / INDICATIVE LAYOUT OF COMMERCIAL DEVELOPMENT INCLUDING PARKING SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.
 3. PARKING REQUIREMENTS.
1 / 25m² GFA - TABLE 5.5 BVSC DCP 2013, AMD JAN 2022.
1525m² GFA = 61 SPACES.

D						
C		LAYOUT CHANGES	VAO	AG	VAO	21/03/2025
B		PATH, NATURE PLAY AREA, DRAFTING CORRECTIONS	VAO	AG	VAO	03/11/2023
A		LAYOUT ADJUSTMENTS	VAO	AG	VAO	12/09/2023
-		INITIAL ISSUE	VAO	AG	VAO	07/10/2022
No.	REVISION		DESIGNED	DRAWN	CHECKED	APPROVED
						DATE

Date: Monday, 24 March 2025 1:50:46 PM User: AG File: H:\2021\2109_Wolumla\099_2109Sync\061_dwgSync\2109-P09GA.dwg

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???

Date: 5/08/2021
Coordinate system: GDA2020 MGAS5



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???

Date: 10/08/2021
Coordinate system: GDA2020 MGAS5

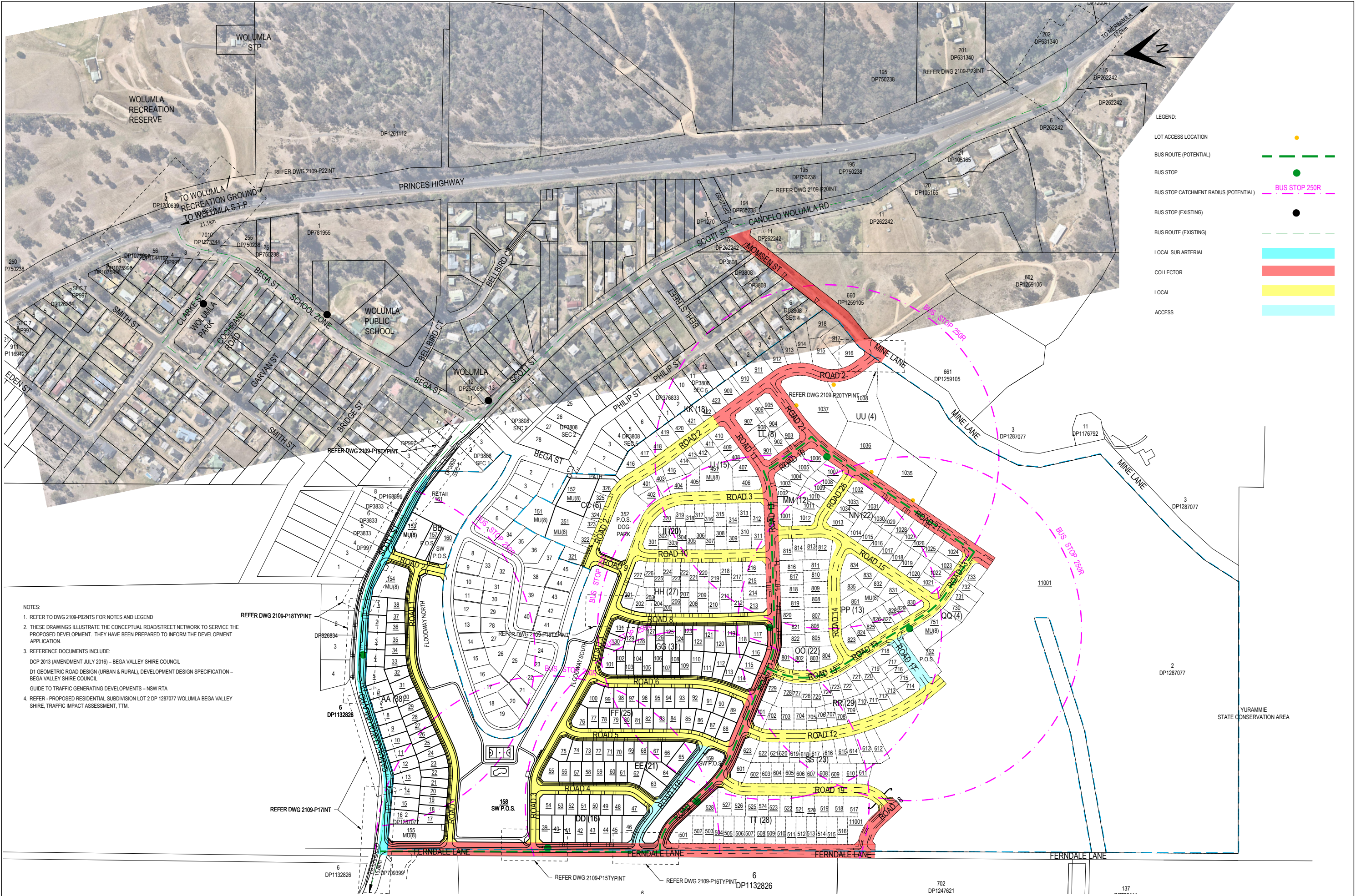


po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT JUNOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE COMMERCIAL AREA CONCEPT ARRANGEMENT

DRAWING NUMBER 2109-P09GA

AMENDMENT: C



NOTES:

1. REFER TO DWG 2109-P02NTS FOR NOTES AND LEGEND
2. THESE DRAWINGS ILLUSTRATE THE CONCEPTUAL ROAD/STREET NETWORK TO SERVICE THE PROPOSED DEVELOPMENT. THEY HAVE BEEN PREPARED TO INFORM THE DEVELOPMENT APPLICATION.
3. REFERENCE DOCUMENTS INCLUDE:
DCP 2013 (AMENDMENT JULY 2016) – BEGA VALLEY SHIRE COUNCIL
D1 GEOMETRIC ROAD DESIGN (URBAN & RURAL), DEVELOPMENT DESIGN SPECIFICATION – BEGA VALLEY SHIRE COUNCIL
GUIDE TO TRAFFIC GENERATING DEVELOPMENTS – NSW RTA
4. REFER - PROPOSED RESIDENTIAL SUBDIVISION LOT 2 DP 1287077 WOLUMLA BEGA VALLEY SHIRE, TRAFFIC IMPACT ASSESSMENT, TTM.

D	LAYOUT UPDATED	VAO	AG	VAO	VAO	21/03/2025
C	PATHS, INDICATIVE DWYS, DRAFTING CORRECTIONS	VAO	AG	VAO	VAO	09/11/2023
B	LAYOUT ADJUSTMENTS	VAO	AG	VAO	VAO	11/09/2023
A	EXISTING TRAFFIC VOLUMES & NOTES	VAO	AG	VAO	VAO	10/11/2022
-	INITIAL ISSUE	VAO	AG	VAO	VAO	14/10/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

Date: Friday, 21 March 2025 1:44:56 PM User: AG File: H:\2021\2109_Wolumla\099_2109Sync\061_dwgSync\2109-P10RHP.dwg

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS Survey datum: ??? Date: 5/08/2021 Coordinate system: GDA2020 MGAS5



Survey source: SPATIAL COLLABORATION PORTLANDSW GOVT Survey datum: ??? Date: 10/08/2021 Coordinate system: GDA2020 MGAS5

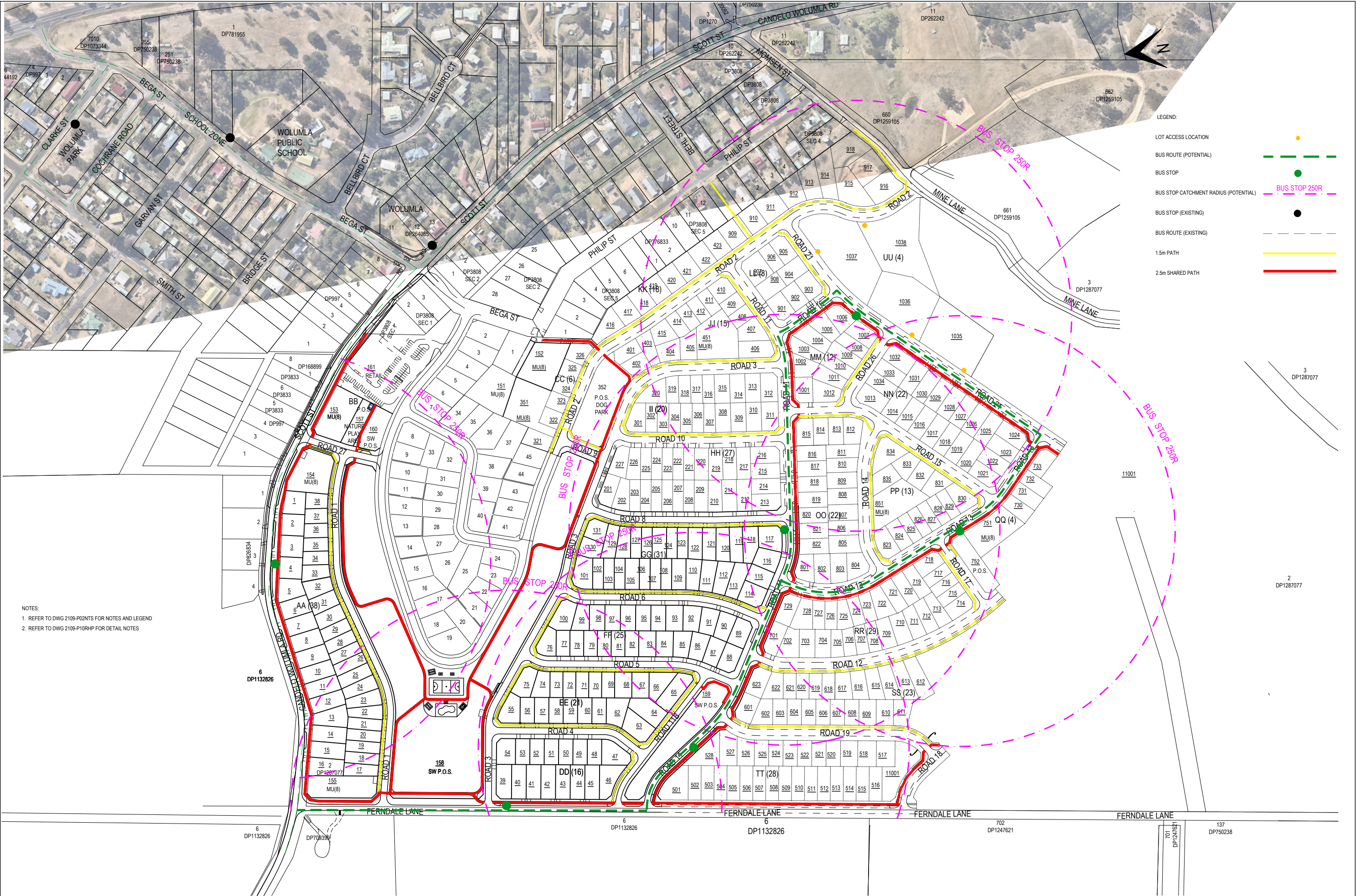


po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT JUNIOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE ROAD HIERARCHY PLAN - SUBDIVISION

DRAWING NUMBER 2109-P10RHP

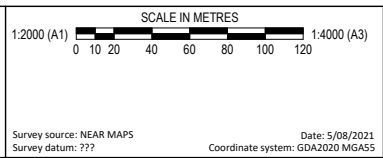
AMENDMENT: D



NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES AND LEGEND
2. REFER TO DWG 2109-P10RHP FOR DETAIL NOTES

D					
C					
B					
A					
-	INITIAL ISSUE	VAO	AG	VAO	VAO
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
					DATE

DO NOT SCALE
Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



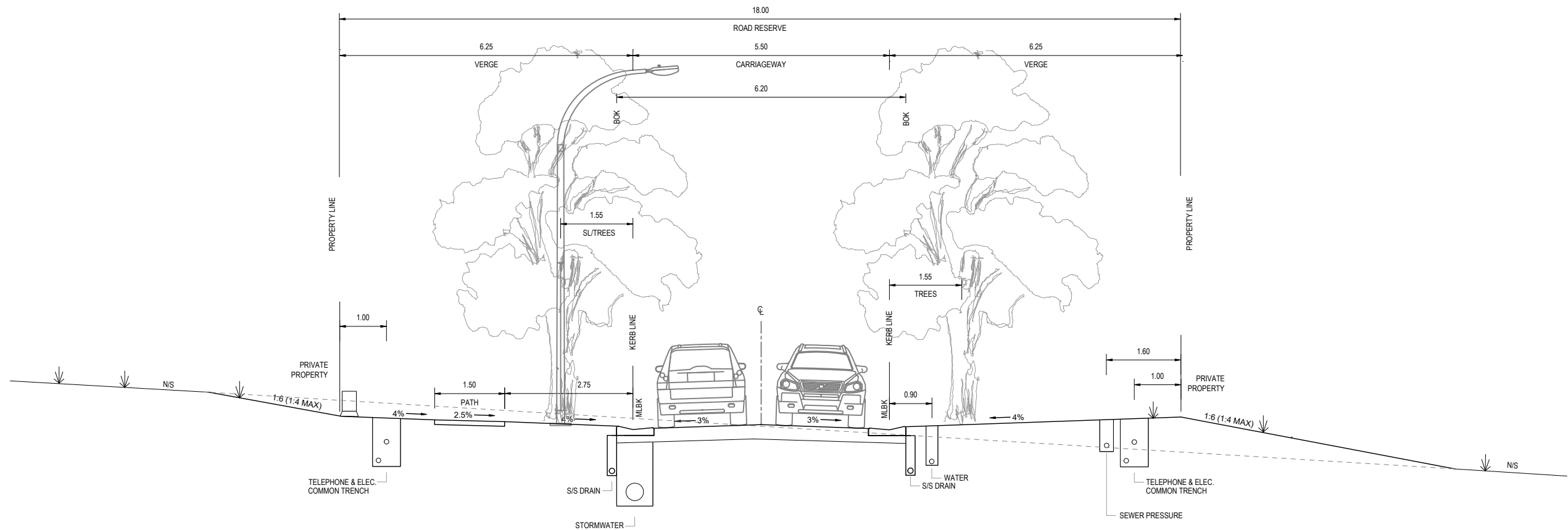
Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGAS55
Survey source: SPATIAL COLLABORATION PORTLANDSW GOVT
Survey datum: ???
Date: 10/08/2021
Coordinate system: GDA2020 MGAS55

osgood civil resource engineering

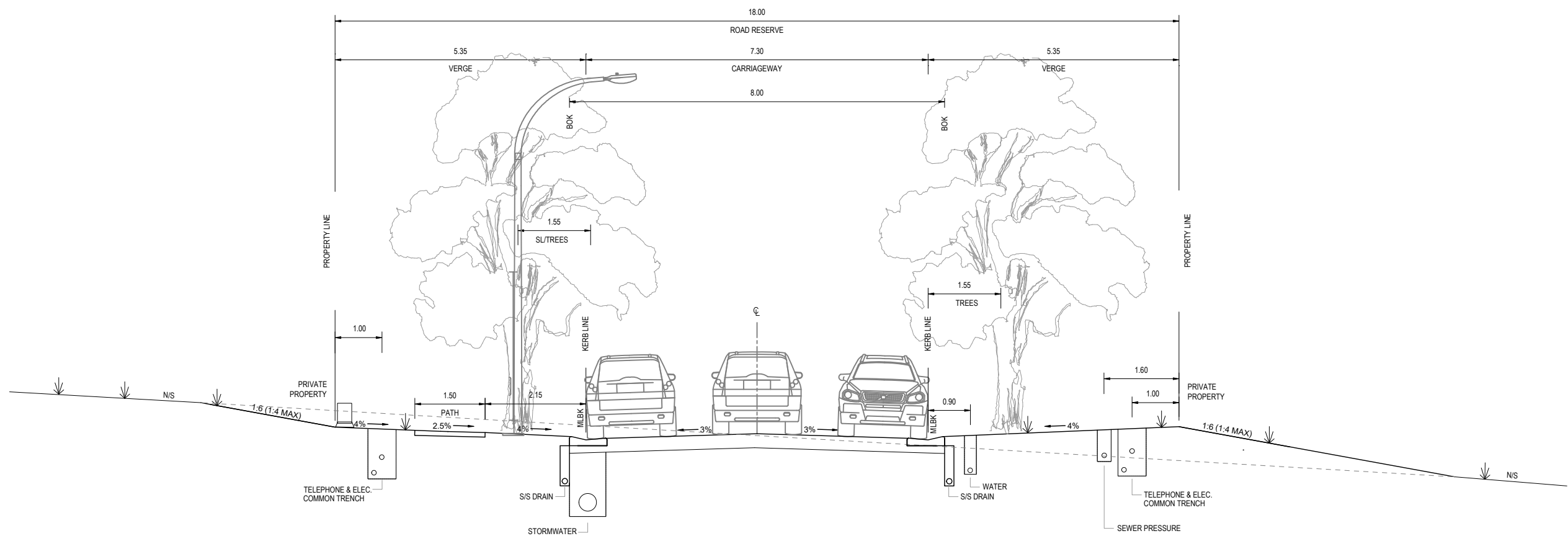
OCRE

po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	PEDESTRIAN HIERARCHY PLAN - SUBDIVISION
DRAWING NUMBER	2109-P11PHP
AMENDMENT:	



TYPICAL SECTION - ACCESS STREET (0-150vpd)
SCALE 1:50

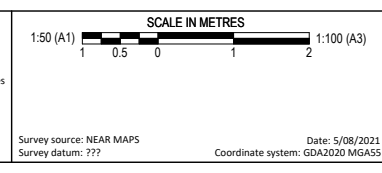


TYPICAL SECTION - LOCAL STREET (151-1000vpd)
SCALE 1:50

D						
C						
B	LOGO ADDED	VAO	AG	VAO	VAO	21/03/2025
A	TYPX ADJUSTED AS PER T.I.A.	VAO	AG	VAO	VAO	11/09/2023
-	INITIAL ISSUE	VAO	AG	VAO	VAO	12/10/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
Date: Friday, 21 March 2025 2:18:33 PM User: AG File: H:\2012\109 Woluma\099 2109Svnc\061 dwsSvnc\109-P12 141TYPX.dwg						

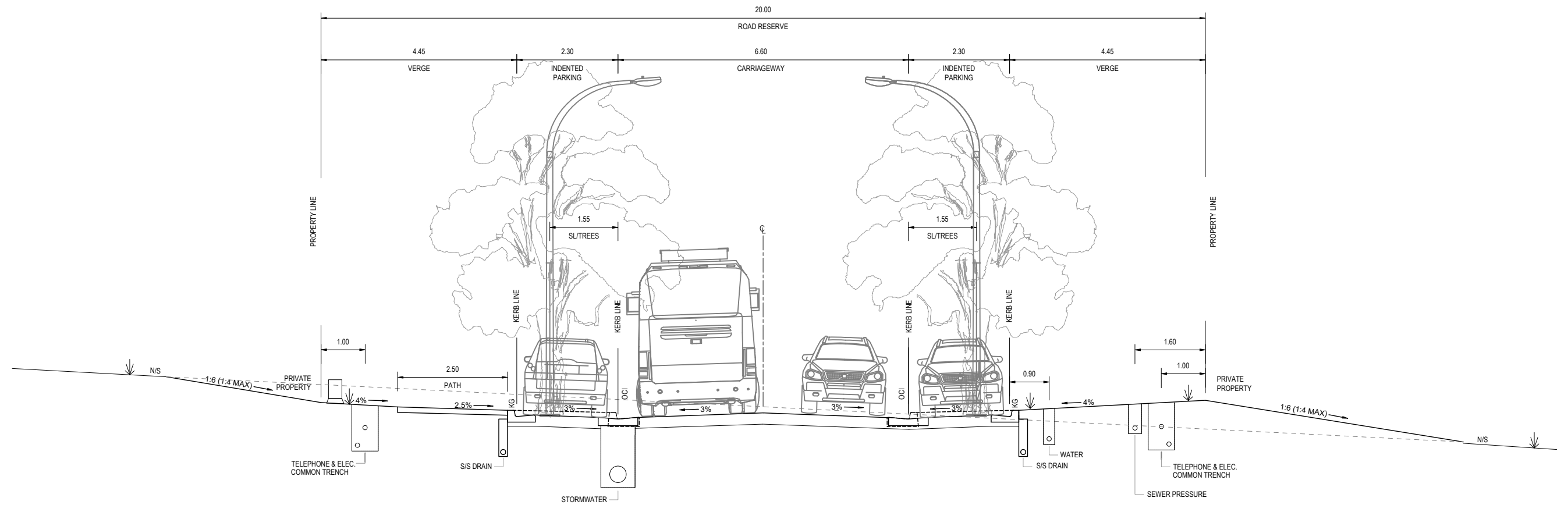
DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

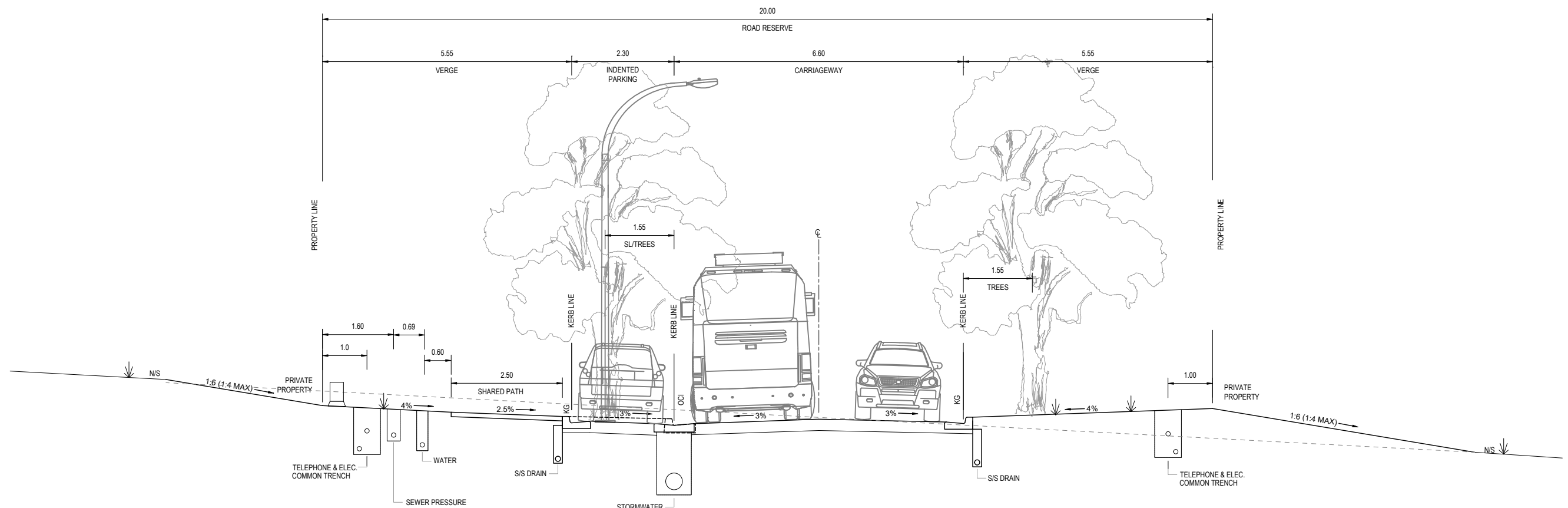


osgood civil resource engineering
OCRE
po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	TYPICAL CROSS SECTIONS - SHEET 1
DRAWING NUMBER	2109-P12TYPX
AMENDMENT:	A



TYPICAL SECTION - COLLECTOR STREET (BUS ROUTE) (1001-3000vpd) (20m RESERVE)
SCALE 1:50



TYPICAL SECTION - COLLECTOR STREET (BUS ROUTE) (1001-3000vpd) (20m RESERVE)
FERNDALE LN
SCALE 1:50

D						CLIENT JUNOR INVESTMENTS PTY LTD PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION TITLE TYPICAL CROSS SECTIONS - SHEET 2 DRAWING NUMBER 2109-P13TYPX AMENDMENT: B
C						
B	BUS ROUTE ALTERED TO 20m WIDE	VAO	AG	VAO	VAO	
A	TYPX ADJUSTED AS PER T.I.A.	VAO	AG	VAO	VAO	
-	INITIAL ISSUE	VAO	AG	VAO	VAO	
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

DO NOT SCALE

Conditions of Use
 OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
 This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

1:50 (A1) SCALE IN METRES 1:100 (A3)

Survey source: NEAR MAPS
 Survey datum: ???

Date: 5/08/2021
 Coordinate system: GDA2020 MGA55

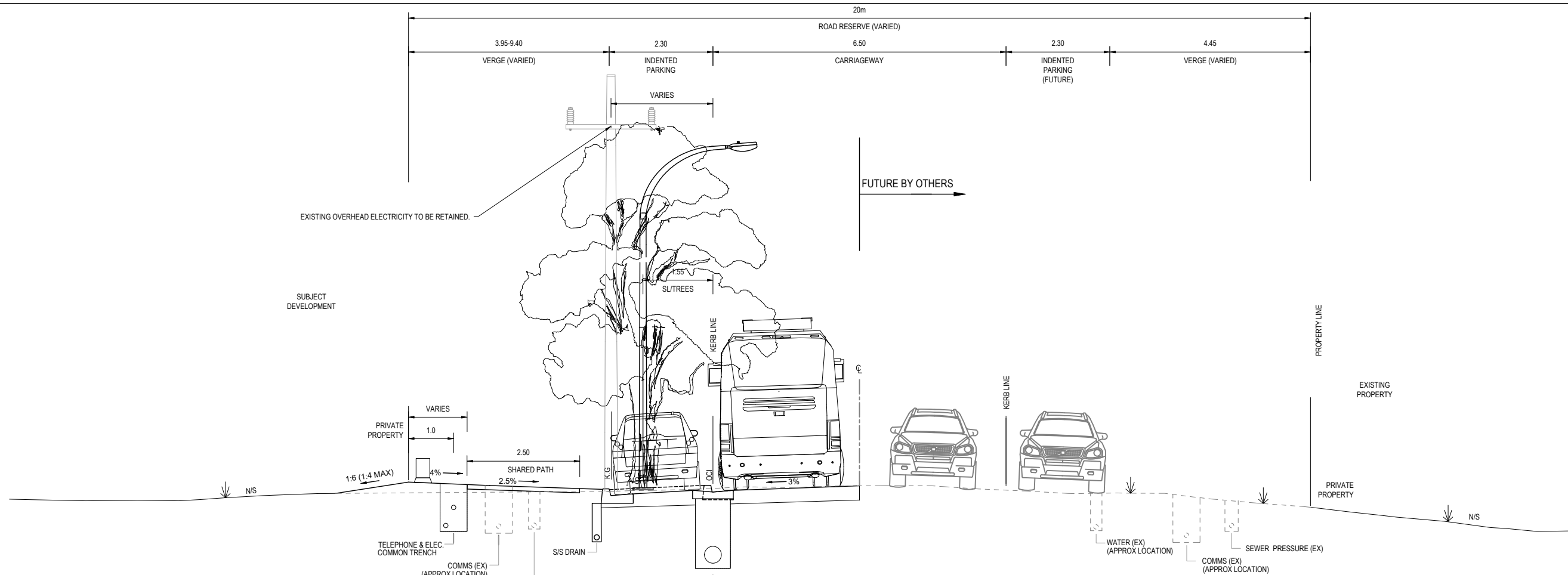
Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
 Survey datum: ???

Date: 10/08/2021
 Coordinate system: GDA2020 MGA55

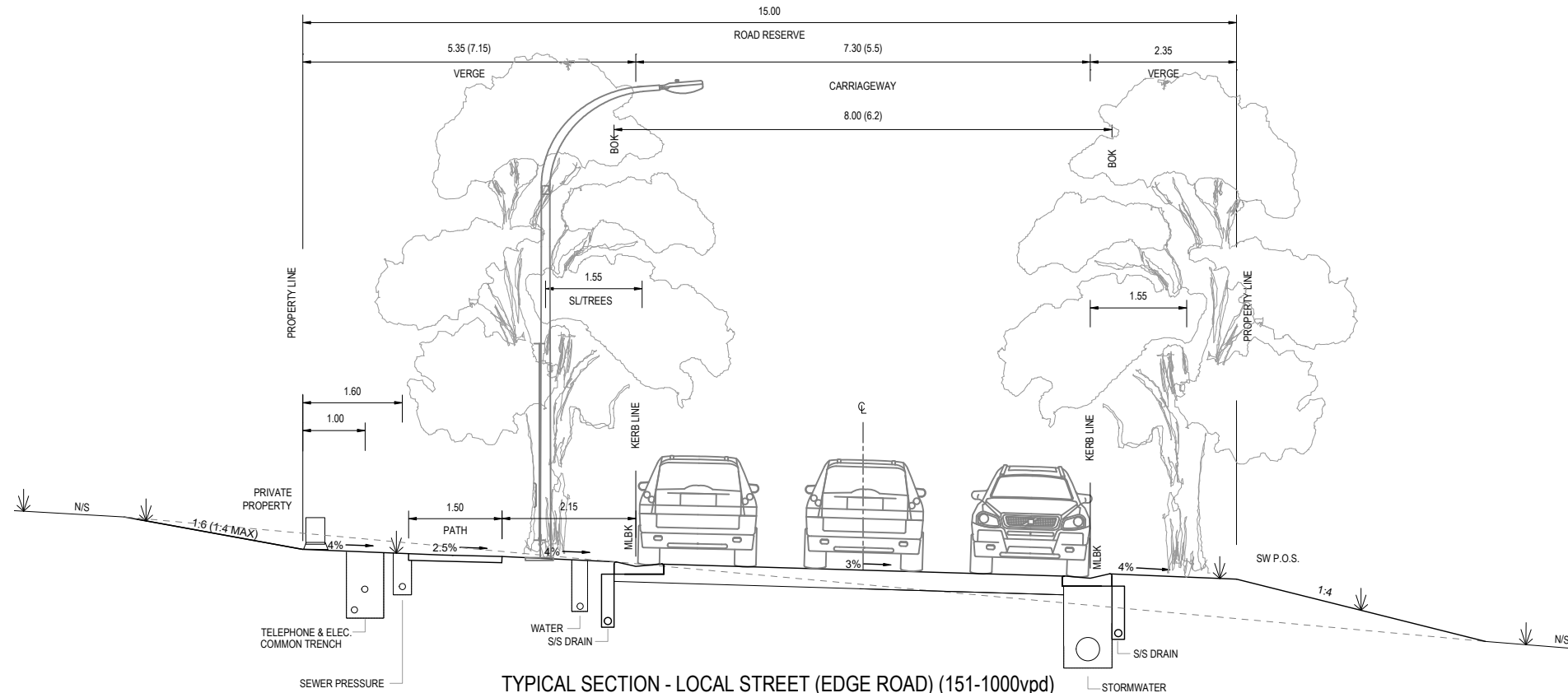
osgood civil resource engineering

OCRE

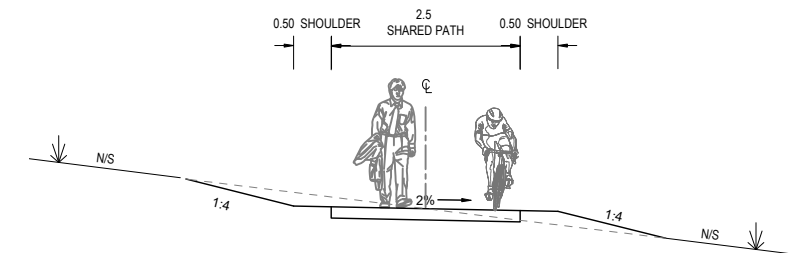
po box 181
 bermagui nsw 2546
 p 02 6494 0239
 m 0408 361 612



TYPICAL SECTION - LOCAL SUB ARTERIAL ROAD (3001-6000vpd)
CANDELO WOLUMLA RD / SCOTT ST
SCALE 1:50

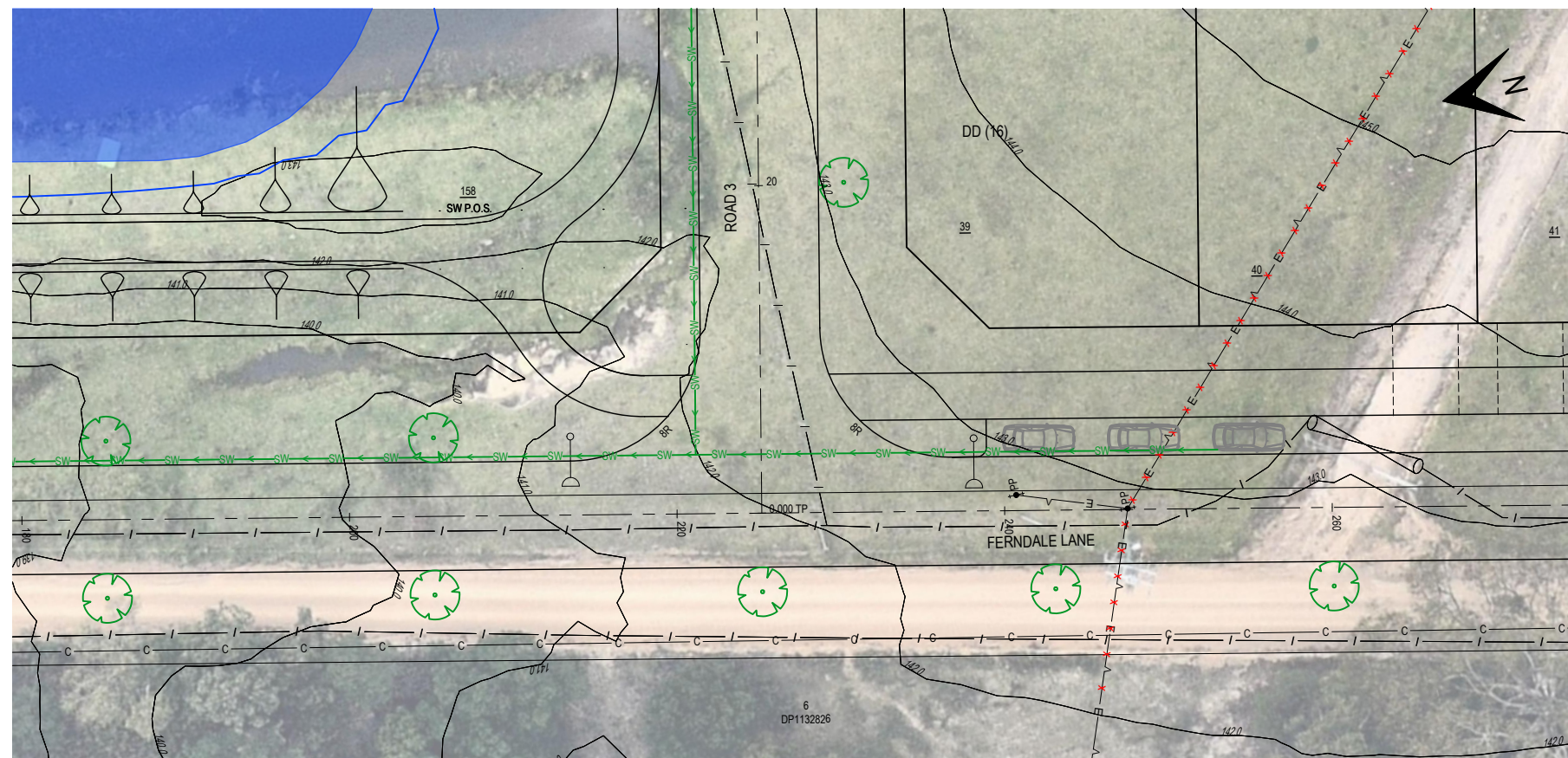
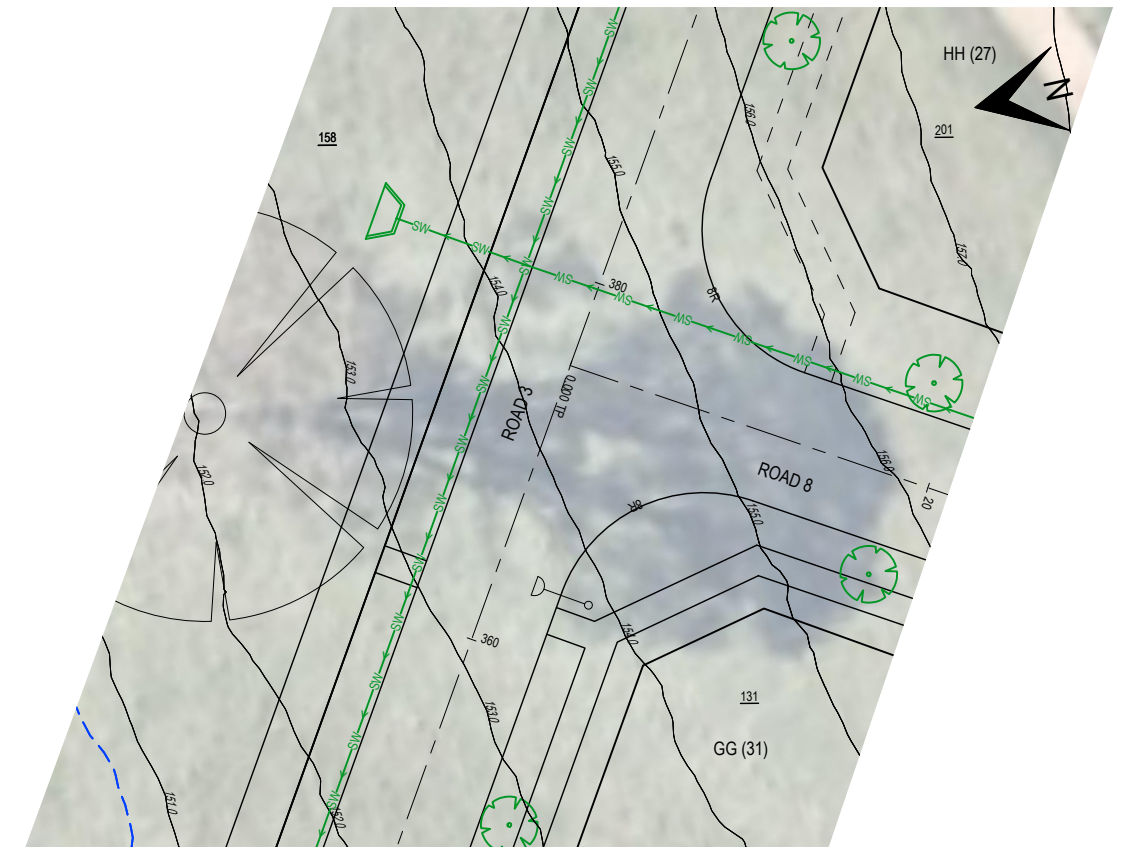


TYPICAL SECTION - LOCAL STREET (EDGE ROAD) (151-1000vpd)
(ACCESS ST - EDGE ROAD (0-150vpd))
SCALE 1:50



TYPICAL SECTION - SHARED PATH (OPEN SPACE)
SCALE 1:50

D	EXISTING OVERHEAD POWER TO RETAINED SCOTT ST, EDGE ROAD ADDED	VAO	AG	VAO	VAO	21/03/2025	DO NOT SCALE Conditions of Use OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE. This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.	1:50 (A1) 1:100 (A3) SCALE IN METRES	 Wolumla Valley ESTATE	osgood civil resource engineering OCRE po box 181 bermagui nsw 2546 p 02 6494 0239 m 0408 361 612	CLIENT	JUNOR INVESTMENTS PTY LTD
C	CANDELO WOLUMLA / SCOTT ST SECTION UPDATED	VAO	AG	VAO	VAO	27/11/2023					PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
B	FIRE TRAIL DELETED, SHARED PATH	VAO	AG	VAO	VAO	09/11/2023					TITLE	TYPICAL CROSS SECTIONS - SHEET 3
A	TYPX ADJUSTED AS PER T.I.A.	VAO	AG	VAO	VAO	11/09/2023					DRAWING NUMBER	2109-P14TYPX
-	INITIAL ISSUE	VAO	AG	VAO	VAO	12/10/2022					AMENDMENT:	D
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE	Survey source: NEAR MAPS Survey datum: ???	Date: 5/08/2021 Coordinate system: GDA2020 MGA55	Survey source: SPATIAL COLLABORATION PORTALNSW GOVT Survey datum: ???	Date: 10/08/2021 Coordinate system: GDA2020 MGA55		

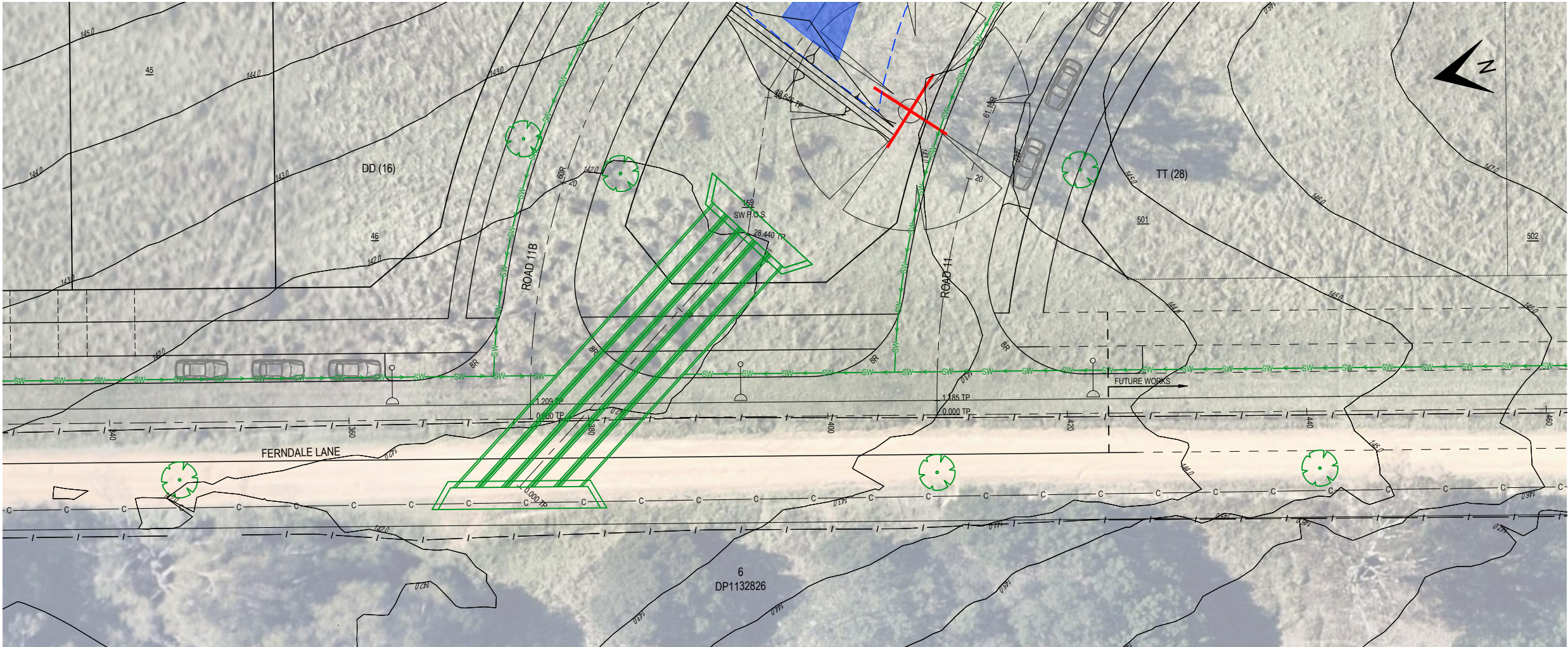


NOTES:

1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.

D						DO NOT SCALE Conditions of Use OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE. This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.	1:200 (A1) SCALE IN METRES 2104 (A3)	Volumula Valley ESTATE	osgood civil resource engineering OCRE	po box 181 bermagui nsw 2546 p 02 6494 0239 m 0408 361 612	CLIENT	JUNOR INVESTMENTS PTY LTD	AMENDMENT: A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
C					PROJECT						LOT 2 DP1287077 WOLUMULA - RESIDENTIAL SUBDIVISION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
B					TITLE						TYPICAL INTERSECTIONS - SHEET 1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
A	UPDATED LAYOUT	VAO	AG	VAO	21/03/2025						DRAWING NUMBER	2109-P15TYPINT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
-	INITIAL ISSUE	VAO	AG	VAO	09/11/2023																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
NO	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.



FERNDALE LANE / ROAD 11B & FERNDALE LANE / ROAD 11

D					
C					
B					
A	LAYOUT UPDATED	VAO	AG	VAO	21/03/2025
-	INITIAL ISSUE	VAO	AG	VAO	09/11/2023
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED

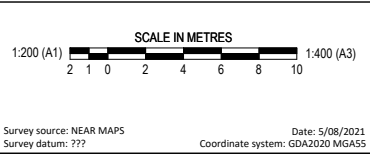
Date: Friday, 21 March 2025 1:27:49 PM

User: AG

File: H:\2021\12\109_Wolumla\099_2109Sync\061_dwg\Sync\2109-P15TYPINT.dwg

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.





osgood civil resource engineering

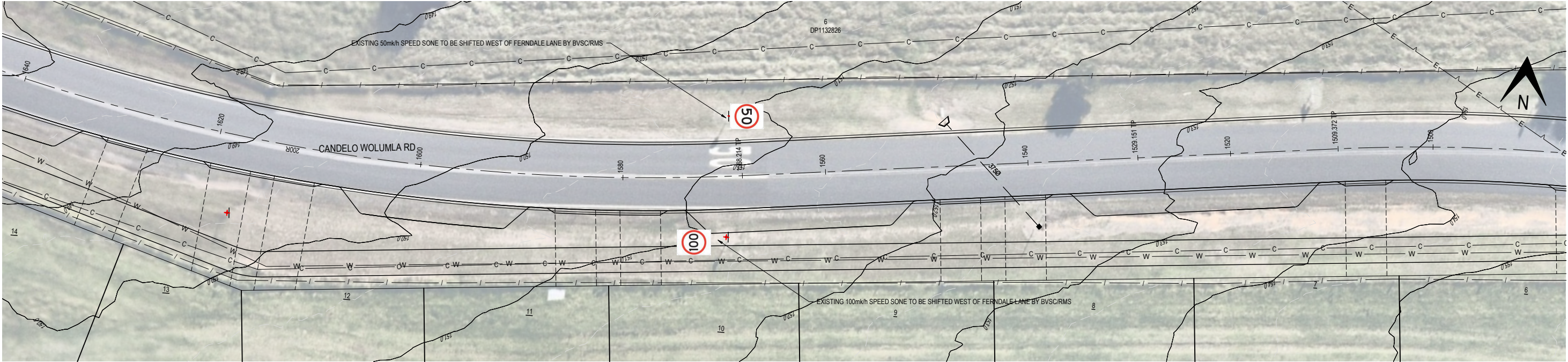


po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	TYPICAL INTERSECTIONS - SHEET 2
DRAWING NUMBER	2109-P16TYPINT
AMENDMENT:	A



CANDELO WOLUMLA RD CH1780 - CH1640



CANDELO WOLUMLA RD CH1640 - CH1500

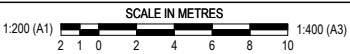
NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES AND LEGEND

D					
C					
B	VP ADJUSTED	AG	AG	VAO	VAO
A	TRAFFIC FIGURES REMOVED, BAL & BAR ADDED, CANDELO WOLUMLA / MOISEN INT REMOVED, DWG RENUMBERED	VAO	AG	VAO	VAO
-	INITIAL ISSUE	VAO	AG	VAO	VAO
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
					DATE

Date: Monday, 24 March 2025 2:44:27 PM User: AG File: H:\2021\2109_Wolumla\099_2109Sync\051_dwgSync\2109-P17_18_19INT.dwg

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS Survey datum: ??? Date: 5/08/2021 Coordinate system: GDA2020 MGAS5



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT Survey datum: ??? Date: 10/08/2021 Coordinate system: GDA2020 MGAS5

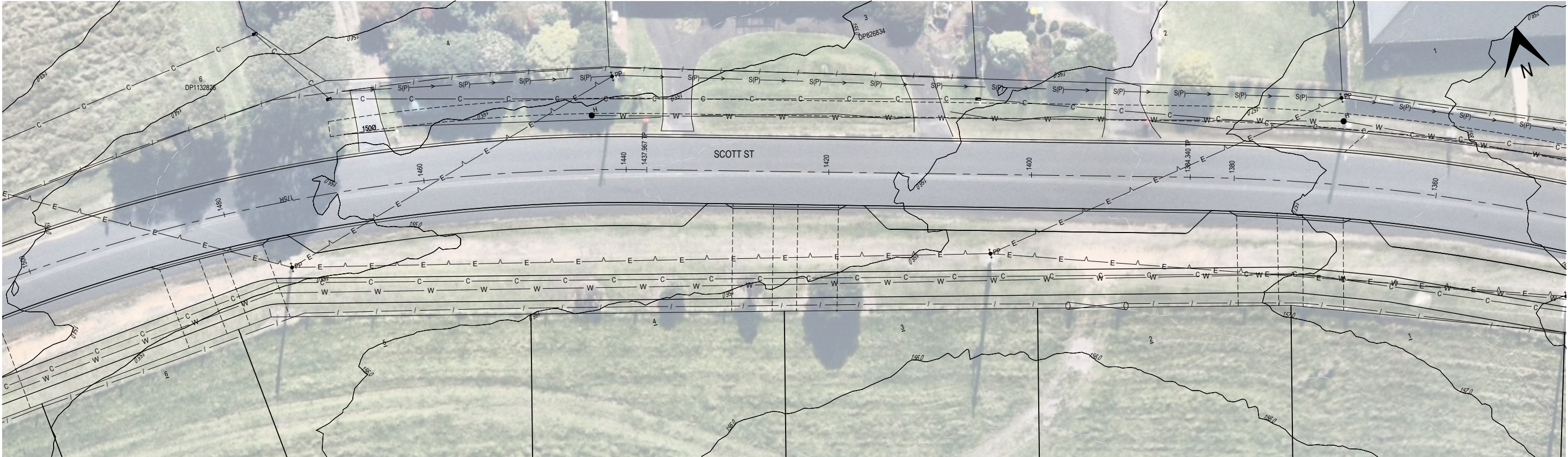


po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

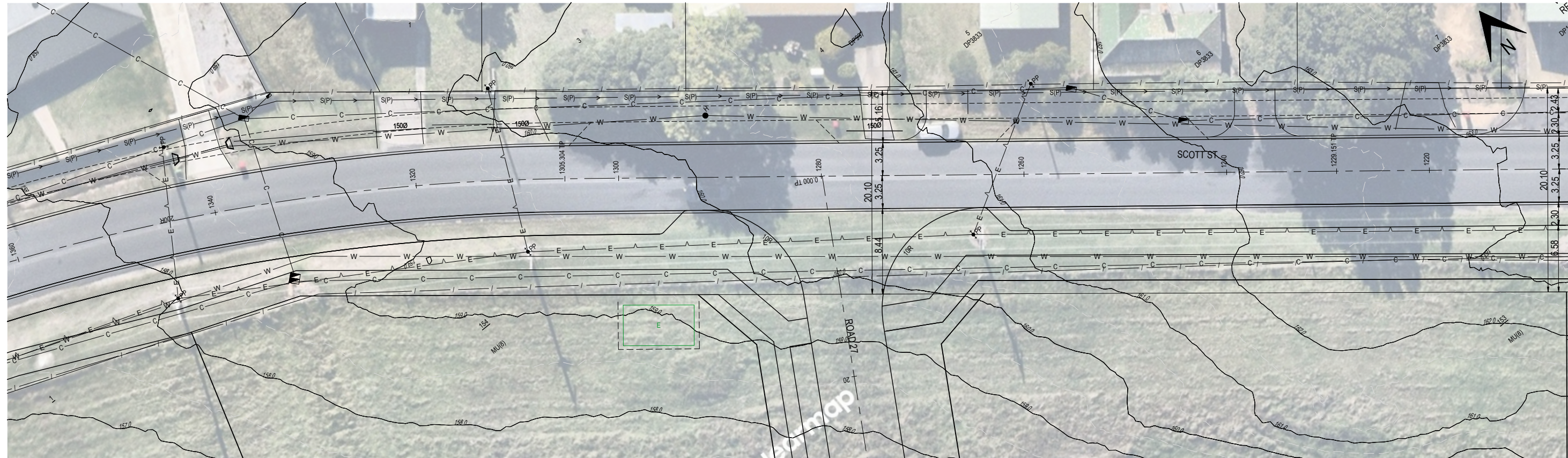
CLIENT JUNOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE OFFSITE INTERSECTIONS - CANDELO WOLUMLA RD/FERNDAL LN

DRAWING NUMBER 2109-P17INT

AMENDMENT: B



SCOTT ST CH1500 - CH1360



SCOTT ST CH1360 - CH1220

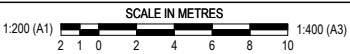
NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES AND LEGEND

D						
C						
B						
A		VP ADJUSTED, POSSIBLE SCOTT ST WIDENING	AG	AG	VAO	VAO
-		INITIAL ISSUE	VAO	AG	VAO	VAO
No.		REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
						DATE

Date: Monday, 24 March 2025 2:44:27 PM User: AG File: H:\2021\2109_Wolumla\099_2109Sync\061_dwgSync\2109-P17_18_19INT.dwg

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS Survey datum: ??? Date: 5/08/2021 Coordinate system: GDA2020 MGAS5



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT Survey datum: ??? Date: 10/08/2021 Coordinate system: GDA2020 MGAS5

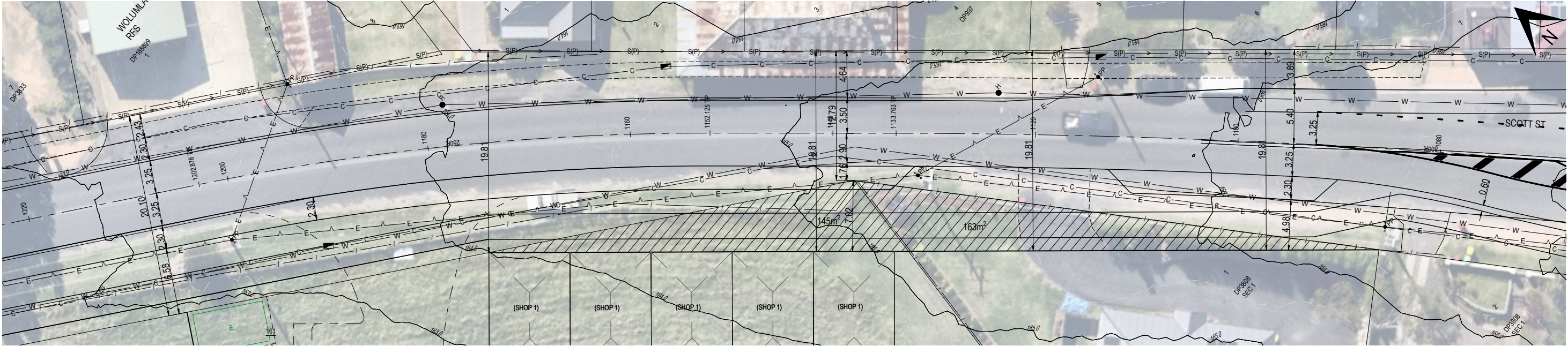


osgood civil resource engineering
po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

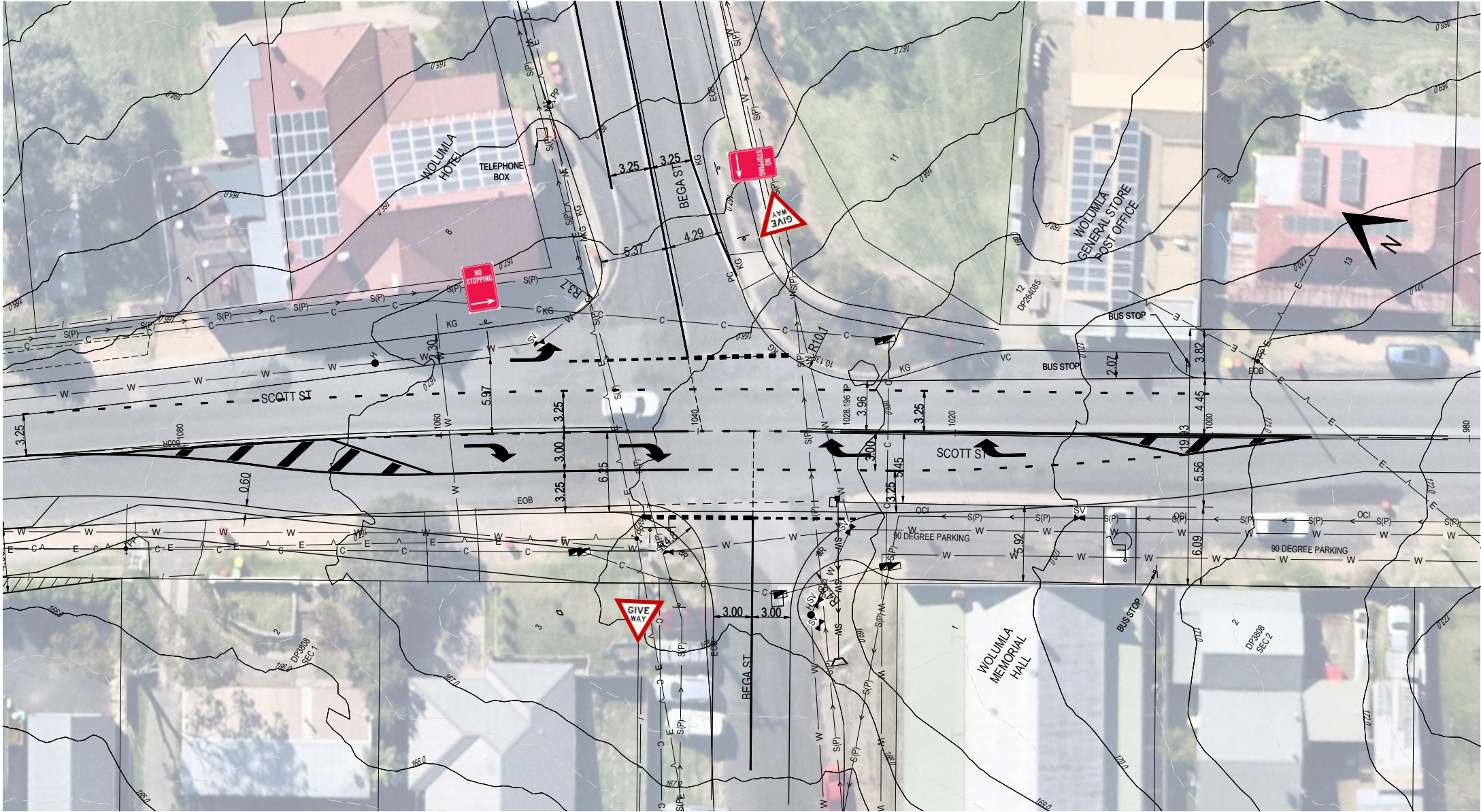
CLIENT JUNOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE OFFSITE INTERSECTIONS - SCOTT ST / RD27

DRAWING NUMBER 2109-P18INT

AMENDMENT: A



SCOTT ST CH1220 - CH1080



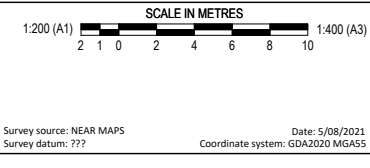
SCOTT ST CH1080 - CH980

NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES AND LEGEND

No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
D						
C						
B	VP ADJUSTED, POSSIBLE SCOTT ST WIDENING	AG	AG	VAO	VAO	21/03/2025
A	TRAFFIC FIGURES REMOVED, DWG RENUMBERED	VAO	AG	VAO	VAO	09/11/2023
-	INITIAL ISSUE	VAO	AG	VAO	VAO	10/11/2022

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???

Date: 5/08/2021
Coordinate system: GDA2020 MGAS5

Survey source: SPATIAL COLLABORATION PORTLANDSW GOVT
Survey datum: ???

Date: 10/08/2021
Coordinate system: GDA2020 MGAS5

osgood civil resource engineering

OCRE

po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	OFFSITE INTERSECTIONS - SCOTT ST/BEGA ST
DRAWING NUMBER	2109-P19INT
AMENDMENT:	B

NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES AND LEGEND



MINE LANE / ROAD 2

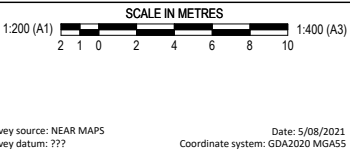


CANDELO WOLUMLA RD/MOMSEN ST

D					
C					
B	LOGO ADDED	VAO	AG	VAO	21/03/2025
A	TRAFFIC FIGURES REMOVED, DWG RENUMBERED	VAO	AG	VAO	09/11/2023
-	INITIAL ISSUE	VAO	AG	VAO	09/11/2023
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
Date: Monday, 24 March 2025 9:08:41 AM					
User: AG					
File: H:\2021\2109_Wolumla\099_2109Sync\061_dwgSync\2109-P17_18_19INT.dwg					

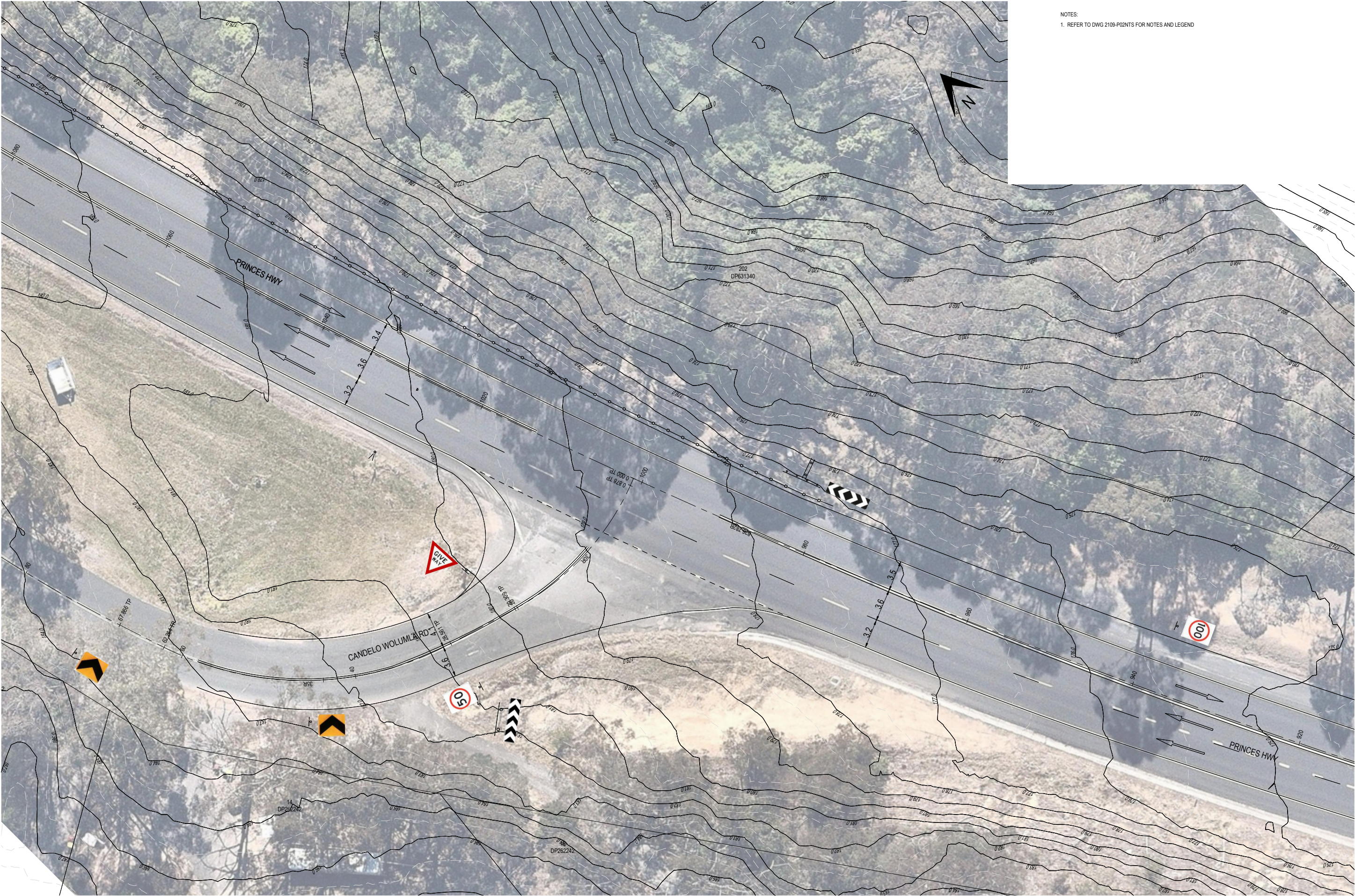
DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



osgood civil resource engineering
po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	OFFSITE INTERSECTIONS - CANDELO WOLUMLA RD / MOMSEN ST
DRAWING NUMBER	2109-P20INT
AMENDMENT:	B

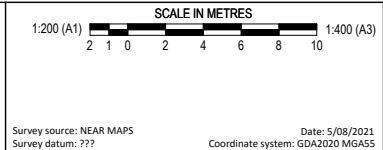


NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES AND LEGEND

D					
C					
B	LOGGO ADDED	VAO	AG	VAO	21/03/2025
A	TRAFFIC FIGURES REMOVED	VAO	AG	VAO	09/11/2023
-	INITIAL ISSUE	VAO	AG	VAO	11/10/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
Date: Friday, 21 March 2025 2:16:25 PM					
User: AG					
File: H:\2021\2109_Wolumla\099_2109Sync\051_dwg\Sync\2109-P17_18_19INT.dwg					

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.





Wolumla Valley
ESTATE

osgood civil resource engineering



po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	OFFSITE INTERSECTIONS - PRINCES HWY/ CANELO WOLUMLA RD
DRAWING NUMBER	2109-P23INT
AMENDMENT:	B

NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES AND LEGEND



SAFE INTERSECTION SIGHT DISTANCE (SISD) PARAMETERS NORTH			
POSTED SPEED	100km/h		
DESIGN SPEED	100km/h		
RT	2.5s	DESIREABLE MINIMUM REACTION TIME. AGRD04A.	
GRADE	2.00%	2% UPGRADE FOR SOUTHBOUND TRAFFIC.	
SISD	262m	SISD FROM AGRD04A. TABLE 3.2. NOT CORRECTED FOR UPGRADE.	

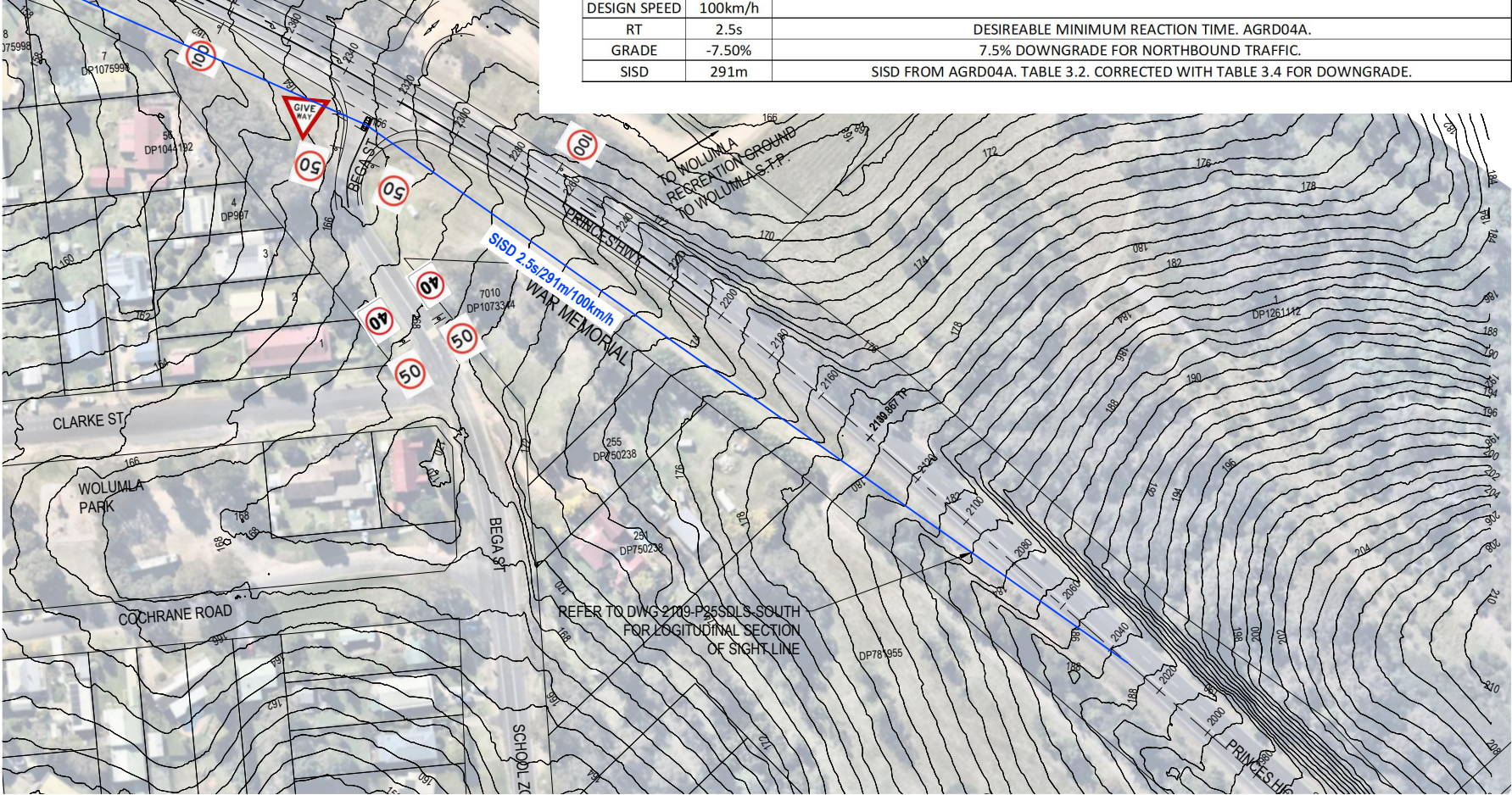


VIEW TO NORTH
BEGA ST > PRINCES HWY



VIEW TO SOUTH
BEGA ST > PRINCES HWY

SAFE INTERSECTION SIGHT DISTANCE (SISD) PARAMETERS SOUTH			
POSTED SPEED	100km/h		
DESIGN SPEED	100km/h		
RT	2.5s	DESIREABLE MINIMUM REACTION TIME. AGRD04A.	
GRADE	-7.50%	7.5% DOWNGRADE FOR NORTHBOUND TRAFFIC.	
SISD	291m	SISD FROM AGRD04A. TABLE 3.2. CORRECTED WITH TABLE 3.4 FOR DOWNGRADE.	

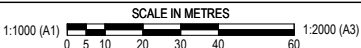


D					
C					
B					
A	SISD - 100km/h	AG	AG	VAO	VAO
-	INITIAL ISSUE	AG	AG	VAO	VAO
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
					DATE

Date: Friday, 21 March 2025 12:27:07 PM User: AG File: H:\2021\2109_Wolumla\099_2109Sync\061_dwg\Sync\2109-P24_26_28SD.dwg

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS Survey datum: ??? Date: 5/08/2021 Coordinate system: GDA2020 MGAS5



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT Survey datum: ??? Date: 10/08/2021 Coordinate system: GDA2020 MGAS5

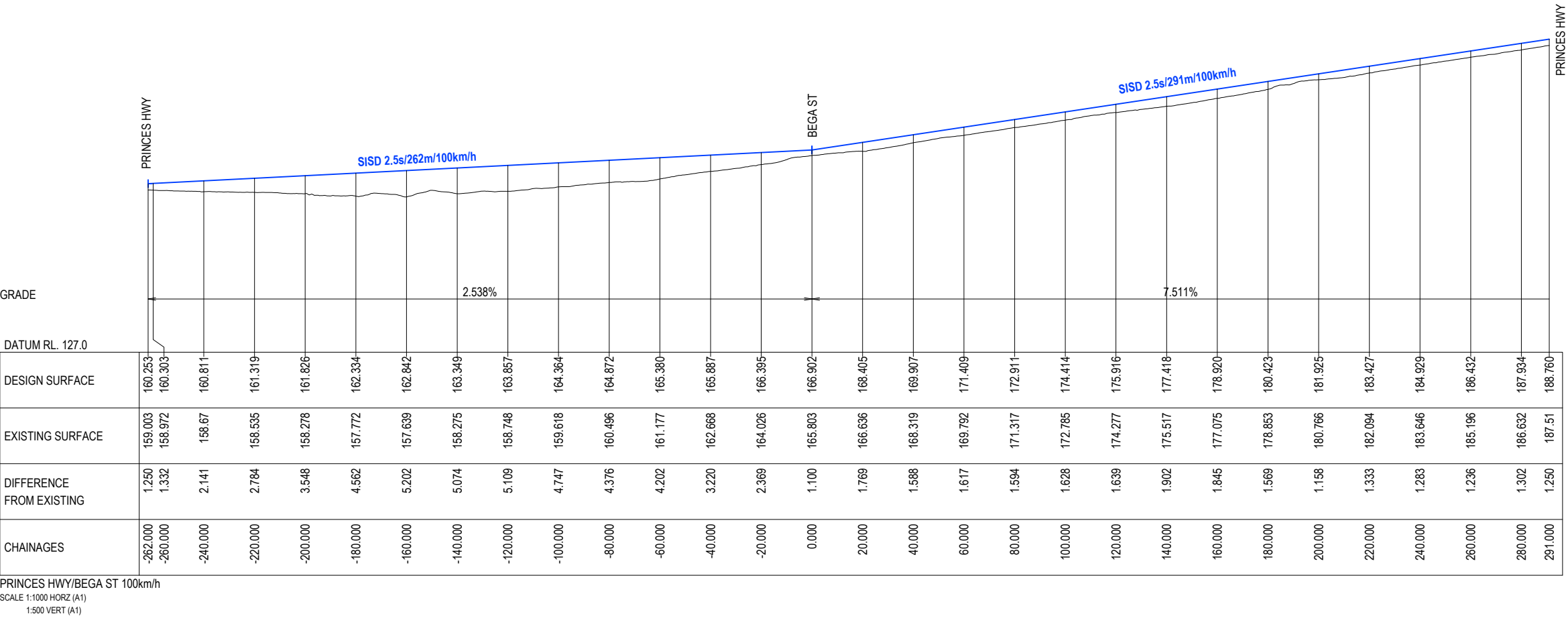


po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT JUNOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE PRINCES HWY/BEGA ST
SISD SIGHT LINES

DRAWING NUMBER 2109-P24SD

AMENDMENT: A



D						
C						
B						
A	DESIGN SPEED - 100km/h	AG	AG	VAO	VAO	21/03/2025
-	INITIAL ISSUE	AG	AG	VAO	VAO	02/05/2023
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

Date: Monday, 24 March 2025 3:18:44 PM

User: AG

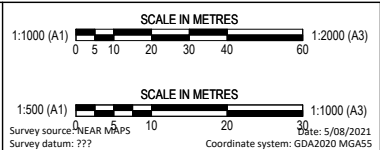
File: H:\2021\2109_Wolumla\099_2109Sync\061_dwgSync\02109-P25_27_29SDLS.dwg

DO NOT SCALE

Conditions of Use

OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.

This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.





Wolumla Valley ESTATE

Survey source: SPATIAL COLLABORATION PORTALNSW GOVT

Survey datum: ???

Date: 10/08/2021

Coordinate system: GDA2020 MGASS



osgood civil resource engineering

OCRE

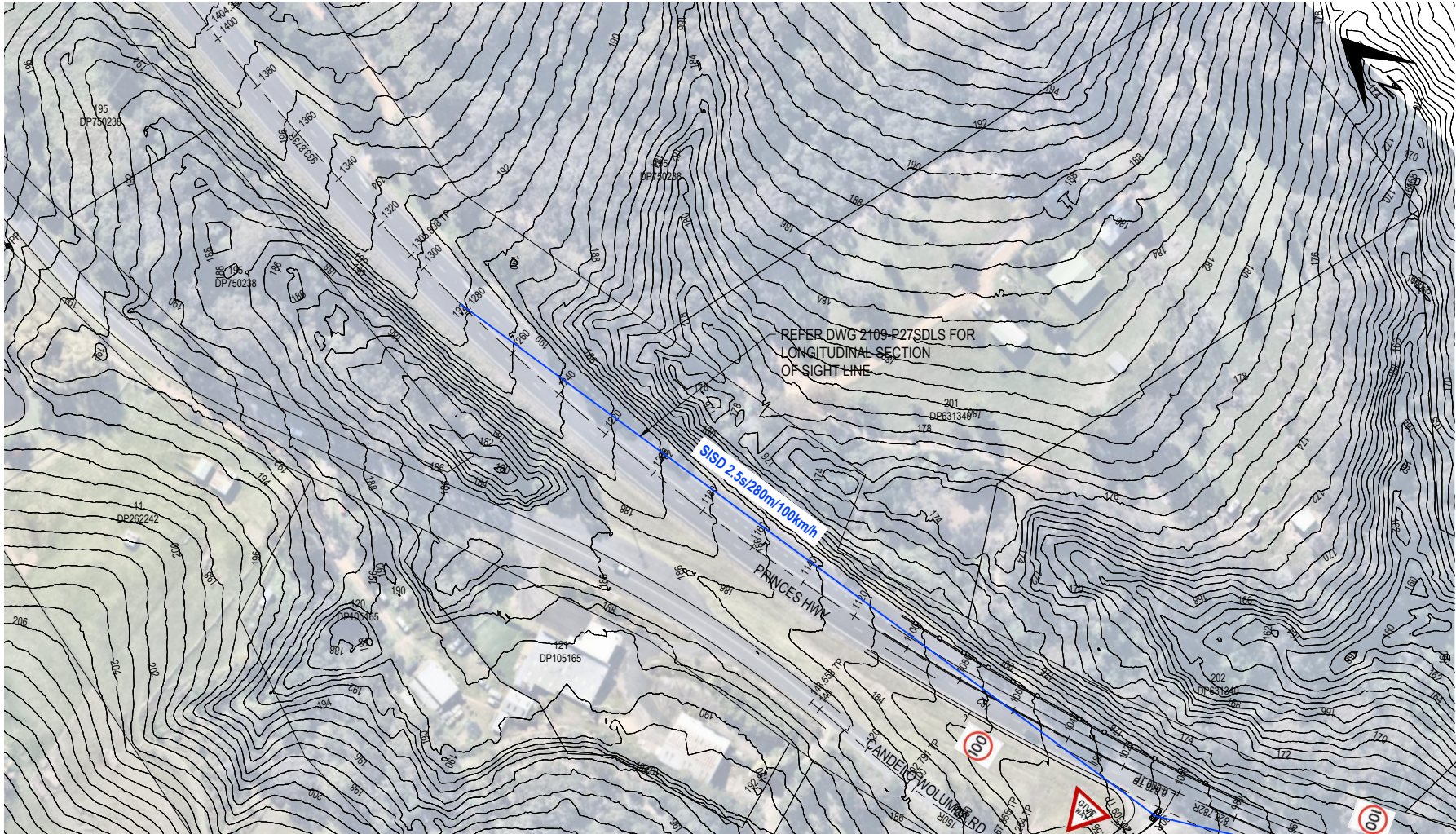
po box 181

bermagui nsw 2546

p 02 6494 0239

m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	PRINCES HWY/BEGA ST SISD SIGHT LINE LONGITUDINAL SECTION
DRAWING NUMBER	2109-P25SDLS
AMENDMENT:	A



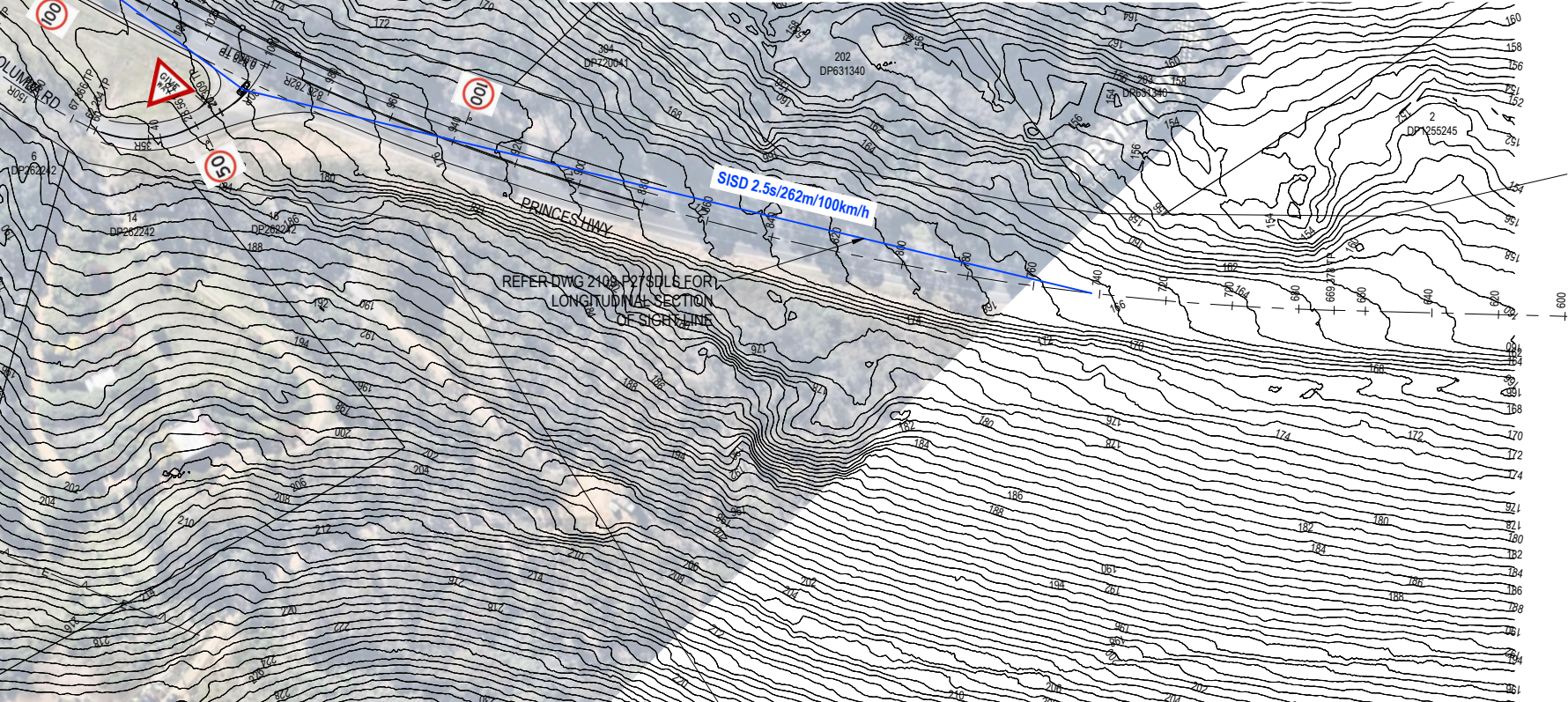
SAFE INTERSECTION SIGHT DISTANCE (SISD) PARAMETERS SOUTH		
POSTED SPEED	100km/h	
DESIGN SPEED	100km/h	
RT	2.5s	DESIREABLE MINIMUM REACTION TIME. AGRD04A.
GRADE	5.00%	5% UPGRADE FOR NORTHBOUND TRAFFIC.
SISD	262m	SISD FROM AGRD04A. TABLE 3.2. NOT CORRECTED FOR UPGRADE.



VIEW TO SOUTH
CANDELO WOLUMLA RD > PRINCES HWY



VIEW TO NORTH
CANDELO WOLUMLA RD > PRINCES HWY

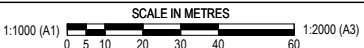


SAFE INTERSECTION SIGHT DISTANCE (SISD) PARAMETERS NORTH		
POSTED SPEED	100km/h	
DESIGN SPEED	100km/h	
RT	2.5s	DESIREABLE MINIMUM REACTION TIME. AGRD04A.
GRADE	-5.00%	5% DOWNGRADE FOR SOUTHBOUND TRAFFIC.
SISD	280m	SISD FROM AGRD04A. TABLE 3.2. CORRECTED FOR DOWNGRADE.

NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES AND LEGEND

No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
A	SISD - 100km/h	AG	AG	VAO	VAO	21/03/2025
-	INITIAL ISSUE	AG	AG	VAO	VAO	02/05/2023

DO NOT SCALE
Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



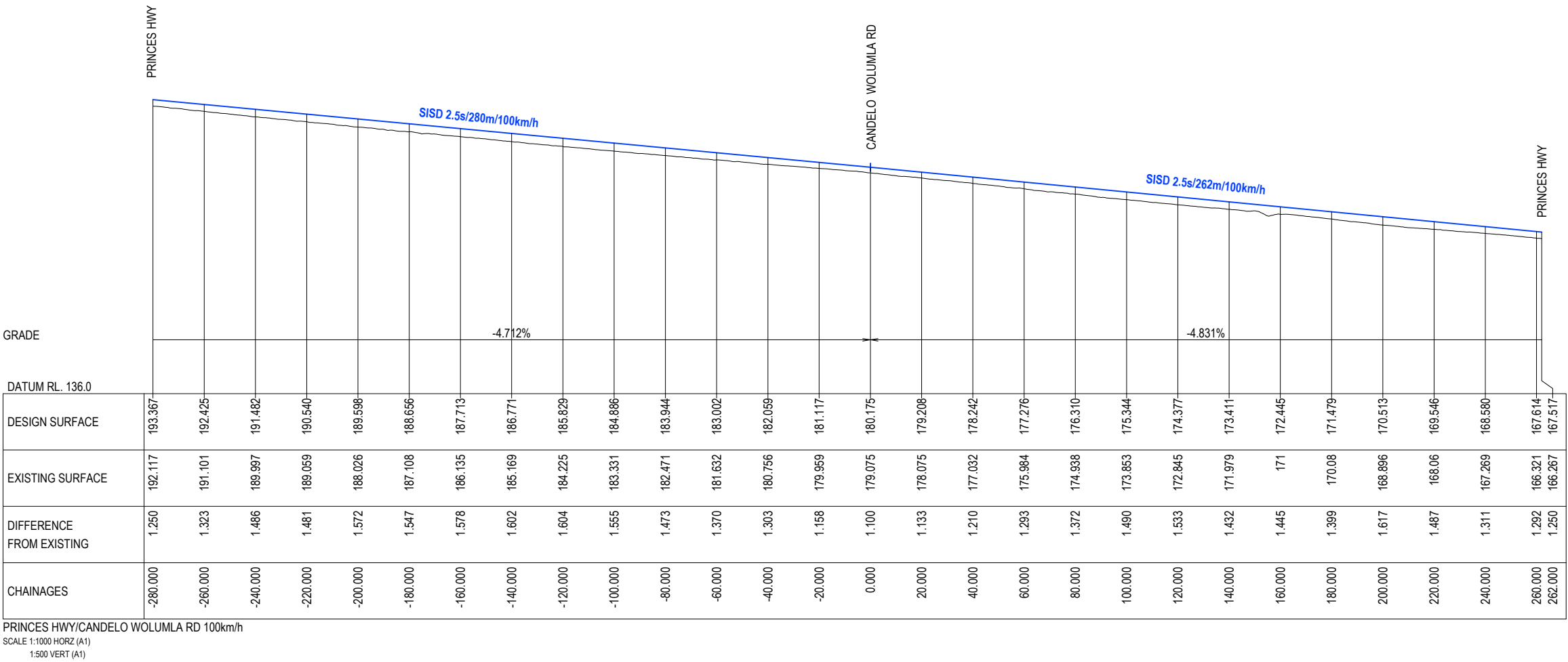
Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGAS5

Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???
Date: 10/08/2021
Coordinate system: GDA2020 MGAS5



po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	PRINCES HWY/CANDELO WOLUMLA RD SISD SIGHT LINES
DRAWING NUMBER	2109-P26SD
AMENDMENT:	A



D					
C					
B					
A	DESIGN SPEED - 100km/h	AG	AG	VAO	VAO
-	INITIAL ISSUE	AG	AG	VAO	02/05/2023
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
		DATE			

Date: Monday, 24 March 2025 3:18:44 PM

User: AG

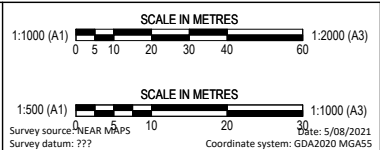
File: H:\2021\2109_Wolumla\099_2109Sync\051_dwgSync\2109-P25_27_29SDLS.dwg

DO NOT SCALE

Conditions of Use

OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.

This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

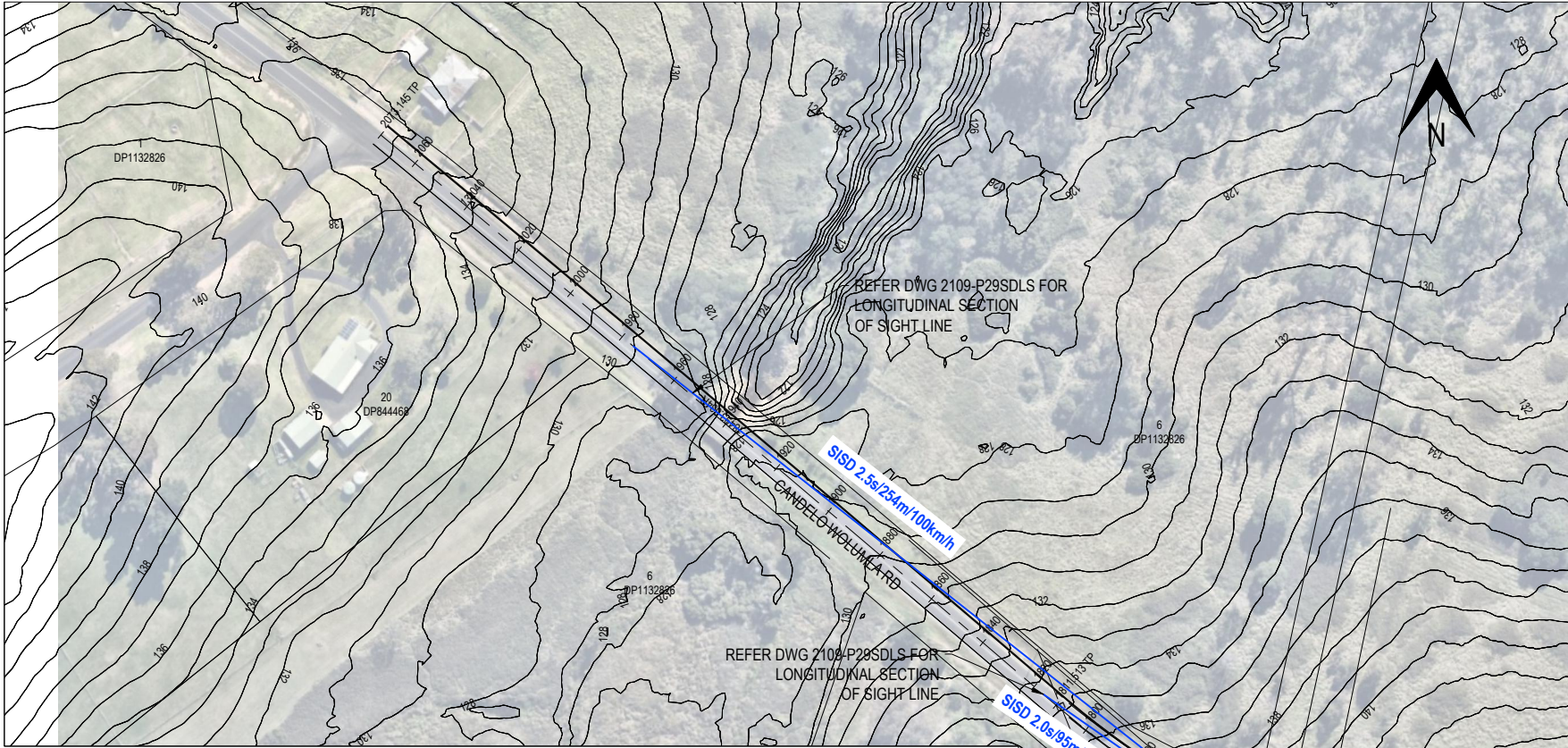


osgood civil resource engineering

OCRE

po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	PRINCES HWY/CANDELO WOLUMLA RD SISD SIGHT LINE LONGITUDINAL SECTION
DRAWING NUMBER	2109-P27SDLS
AMENDMENT:	A



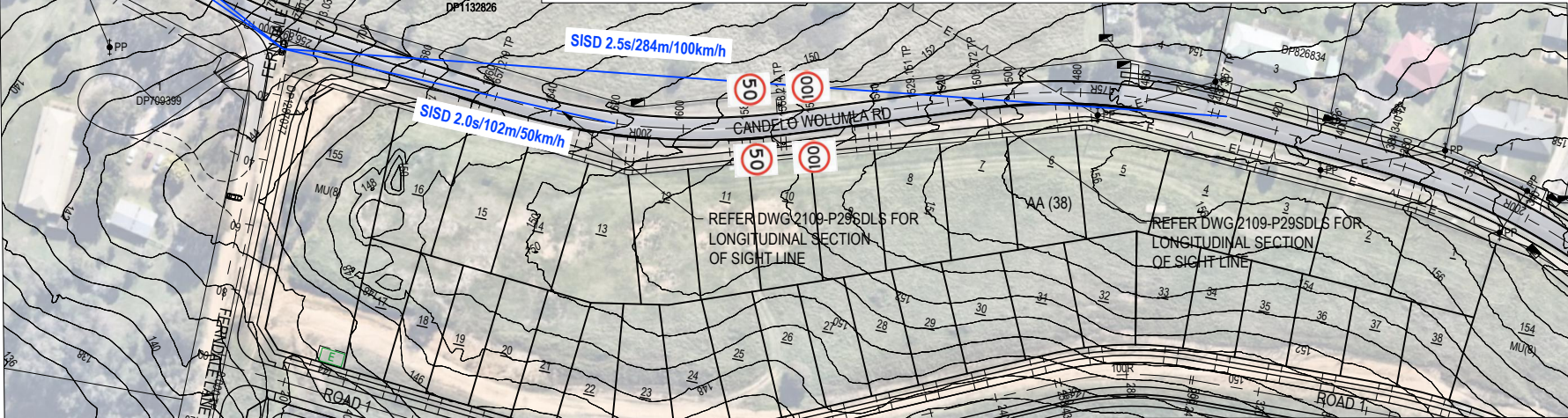
VIEW TO EAST
FERNDALE LN > CANDELO WOLUMLA RD

SAFE INTERSECTION SIGHT DISTANCE (SISD) PARAMETERS WEST 100km/h			
POSTED SPEED	100km/h		
DESIGN SPEED	100km/h		
RT	2.5s	DESIREABLE MINIMUM REACTION TIME FOR DESIGN SPEED.	
GRADE	3.00%	3% UPGRADE FOR EASTBOUND TRAFFIC.	
SISD	254	SISD FROM AGRD04A, TABLE 3.2.CORRECTED FOR UPGRADE WITH TABLE 3.4.	

SAFE INTERSECTION SIGHT DISTANCE (SISD) PARAMETERS WEST 50km/h			
DESIGN SPEED	50km/h		
RT	2.0s	DESIREABLE MINIMUM REACTION TIME FOR DESIGN SPEED.	
GRADE	3.00%	3% UPGRADE FOR EASTBOUND TRAFFIC.	
SISD	95m	SISD FROM AGRD04A, TABLE 3.2. CORRECTED FOR UPGRADE WITH TABLE 3.4.	



VIEW TO WEST
FERNDALE LN > CANDELO WOLUMLA RD



SAFE INTERSECTION SIGHT DISTANCE (SISD) PARAMETERS EAST 100km/h			
POSTED SPEED	100km/h		
DESIGN SPEED	100km/h		
RT	2.5s	DESIREABLE MINIMUM REACTION TIME, AGRD04A.	
GRADE	-6.00%	6% DOWNGRADE FOR WESTBOUND TRAFFIC.	
SISD	284m	SISD FROM AGRD04A, TABLE 3.2. CORRECTED FOR DOWNGRADE WITH TABLE 3.4.	

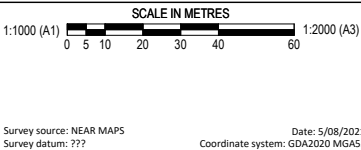
SAFE INTERSECTION SIGHT DISTANCE (SISD) PARAMETERS EAST 50km/h			
DESIGN SPEED	50km/h		
RT	2.0s	DESIREABLE MINIMUM REACTION TIME FOR DESIGN SPEED.	
GRADE	-6.00%	6% DOWNGRADE FOR WESTBOUND TRAFFIC.	
SISD	102m	SISD FROM AGRD04A, TABLE 3.2. CORRECTED FOR DOWNGRADE WITH TABLE 3.4.	

NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES AND LEGEND

D					
C					
B					
A	SISD - 100km/h & 50km/h, LAYOUT UPDATED	AG	AG	VAO	VAO
-	INITIAL ISSUE	AG	AG	VAO	VAO
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED

Date: Friday, 21 March 2025 12:27:07 PM
User: AG
File: H:\2021\2109_Wolumla\099_2109Sync\061_dwgSync\2109-P24_26_28SD.dwg

DO NOT SCALE
Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

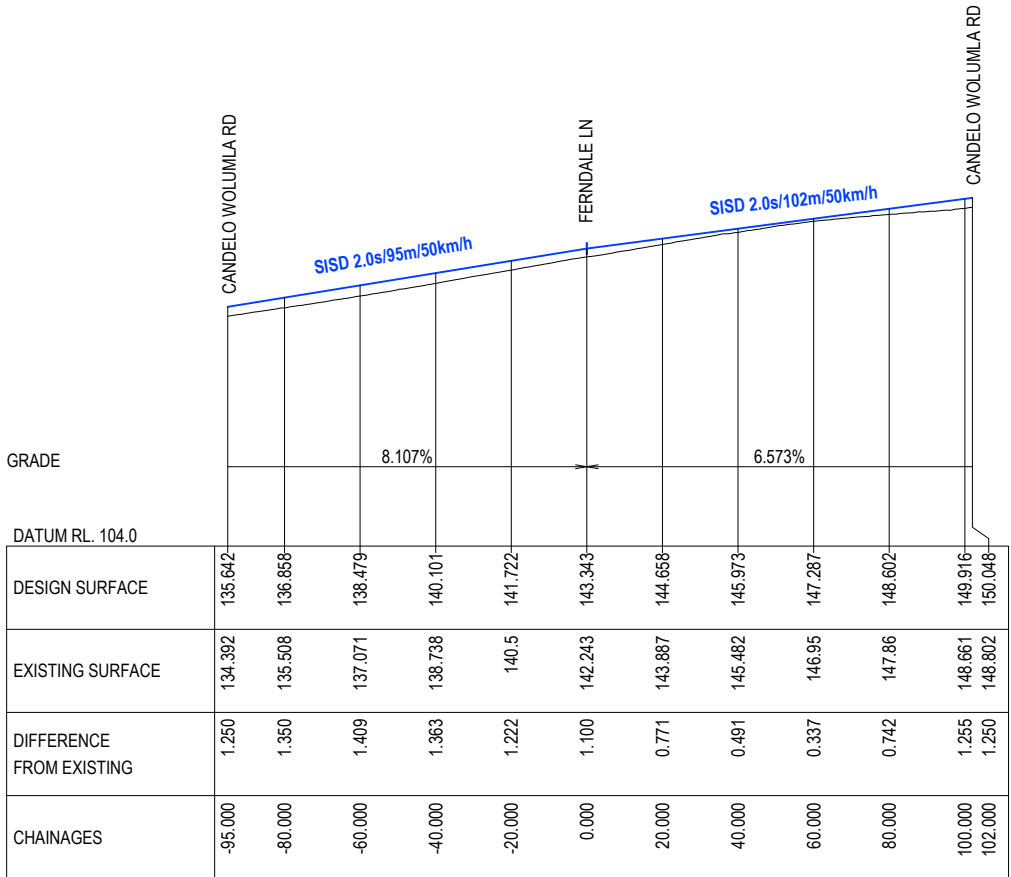
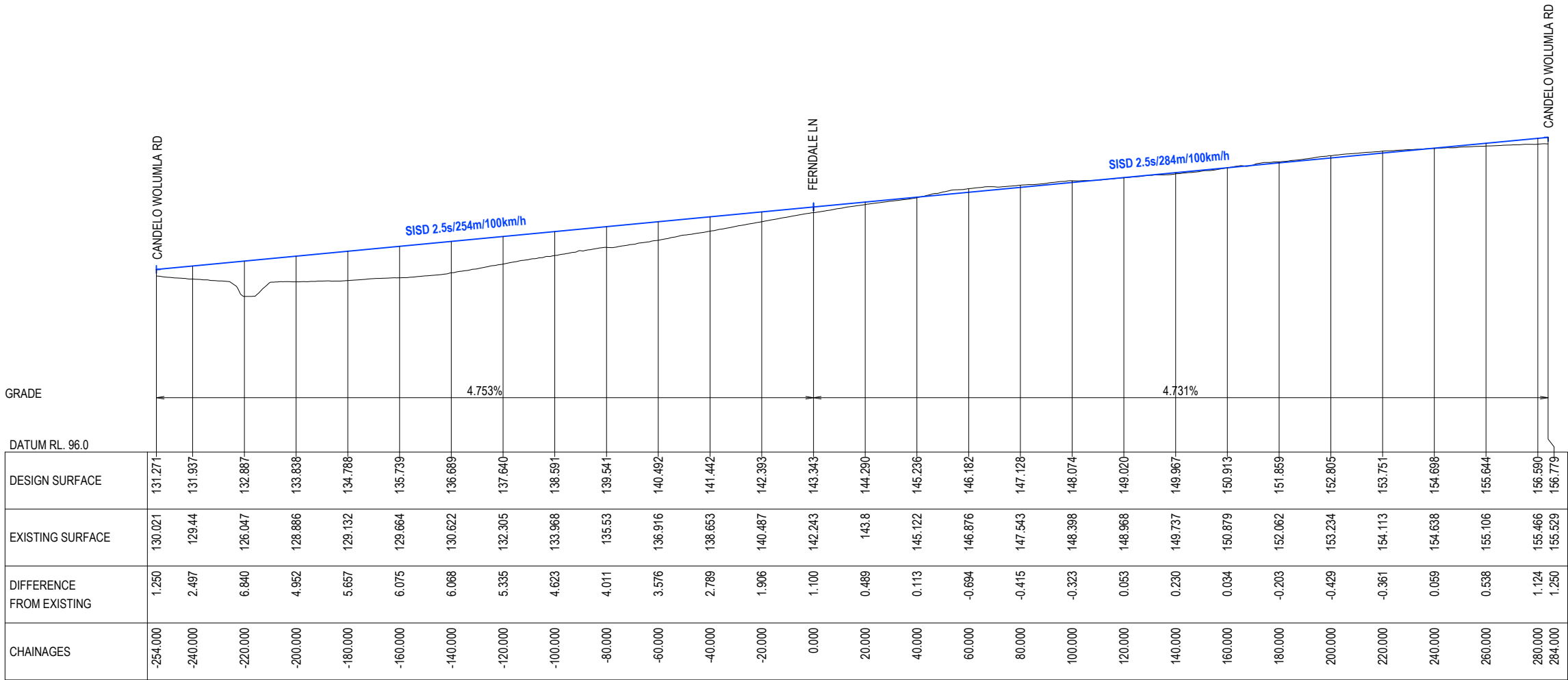


Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGAS5
Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???
Date: 10/08/2021
Coordinate system: GDA2020 MGAS5



po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	CANDELO WOLUMLA RD/FERNDAL LANE SISD SIGHT LINES
DRAWING NUMBER	2109-P28SD
AMENDMENT:	A



D					
C					
B					
A	DESIGN SPEED - 100km/h & 50km/h	AG	AG	VAO	VAO
-	INITIAL ISSUE	AG	AG	VAO	02/05/2023
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
					DATE

Date: Monday, 24 March 2025 3:18:44 PM

User: AG

File: H:\2021\2109_Wolumla\099_2109Sync\051_dwg\Sync\2109-P25_27_29SDLS.dwg

DO NOT SCALE

Conditions of Use

OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.

This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

SCALE IN METRES

1:1000 (A1) 0 5 10 20 30 40 60 1:2000 (A3)

SCALE IN METRES

1:500 (A1) 0 10 20 30 40 60 1:1000 (A3)

Survey source: NEAR MAPS

Survey datum: ???

Coordinate system: GDA2020 MGAS55

Wolumla Valley

ESTATE

Survey source: SPATIAL COLLABORATION PORTALNSW GOVT

Survey datum: ???

Coordinate system: GDA2020 MGAS55

osgood civil resource engineering

OCRE

po box 181

bermagui nsw 2546

p 02 6494 0239

m 0408 361 612

Date: 10/08/2021

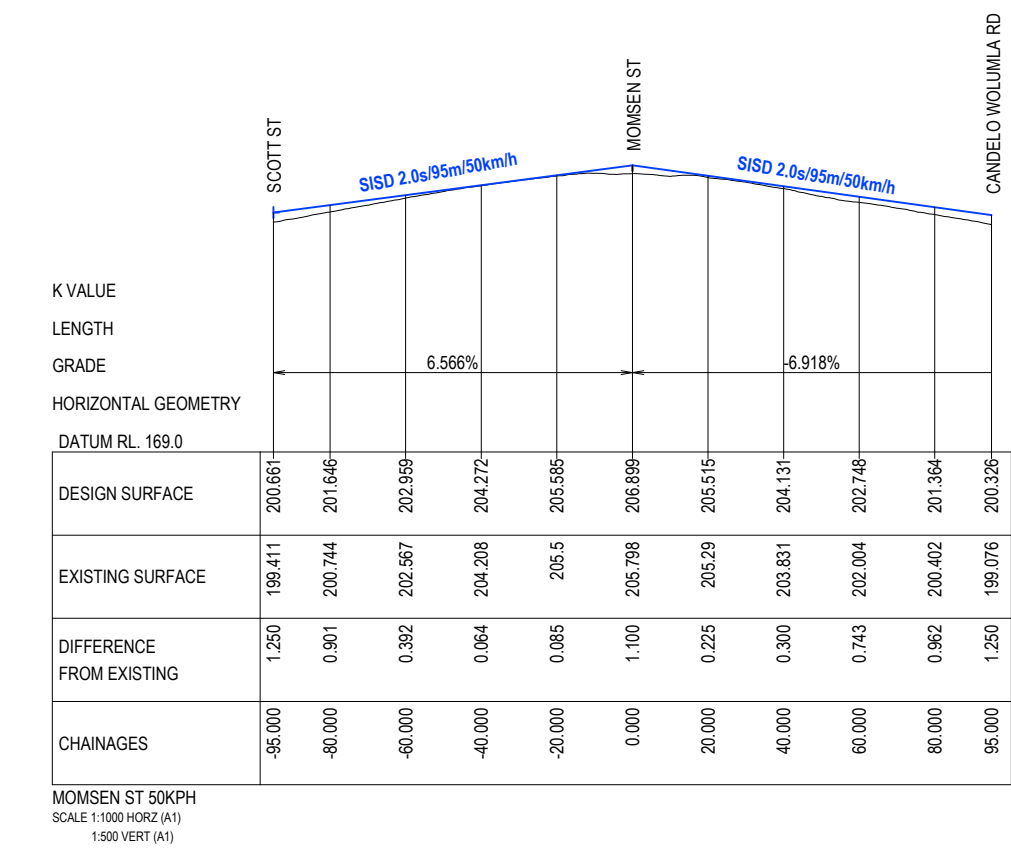
CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	CANDELO WOLUMLA RD/ FERNDAL LN
	SISD SIGHT LINE LONGITUDINAL SECTION
DRAWING NUMBER	2109-P29SDLS
AMENDMENT:	A



SAFE INTERSECTION SIGHT DISTANCE (SISD) PARAMETERS NORTH 50km/h		
POSTED SPEED	50km/h	
DESIGN SPEED	50km/h	
RT	2.0s	DESIREABLE MINIMUM REACTION TIME. AGRD04A.
GRADE	-6.60%	6.6% DOWNGRADE FOR NORTHBOUND TRAFFIC.
SISD	95m	SISD FROM AGRD04A. TABLE 3.2. NOT CORRECTED FOR DOWNGRADE.



VIEW TO NORTH
MOMSEN ST > SCOTT ST



SAFE INTERSECTION SIGHT DISTANCE (SISD) PARAMETERS SOUTH 50km/h		
POSTED SPEED	50km/h	
DESIGN SPEED	50km/h	
RT	2.0s	DESIREABLE MINIMUM REACTION TIME. AGRD04A.
GRADE	-6.90%	6.9% DOWNGRADE FOR SOUTHBOUND TRAFFIC.
SISD	95m	SISD FROM AGRD04A. TABLE 3.2. NOT CORRECTED FOR DOWNGRADE.

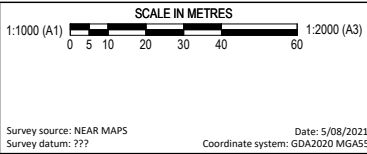


VIEW TO SOUTH
MOMSEN ST > CANELO WOLUMLA RD

NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES AND LEGEND

D					
C					
B					
A					
-	INITIAL ISSUE	AG	AG	VAO	VAO
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
					DATE

DO NOT SCALE
Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGAS5



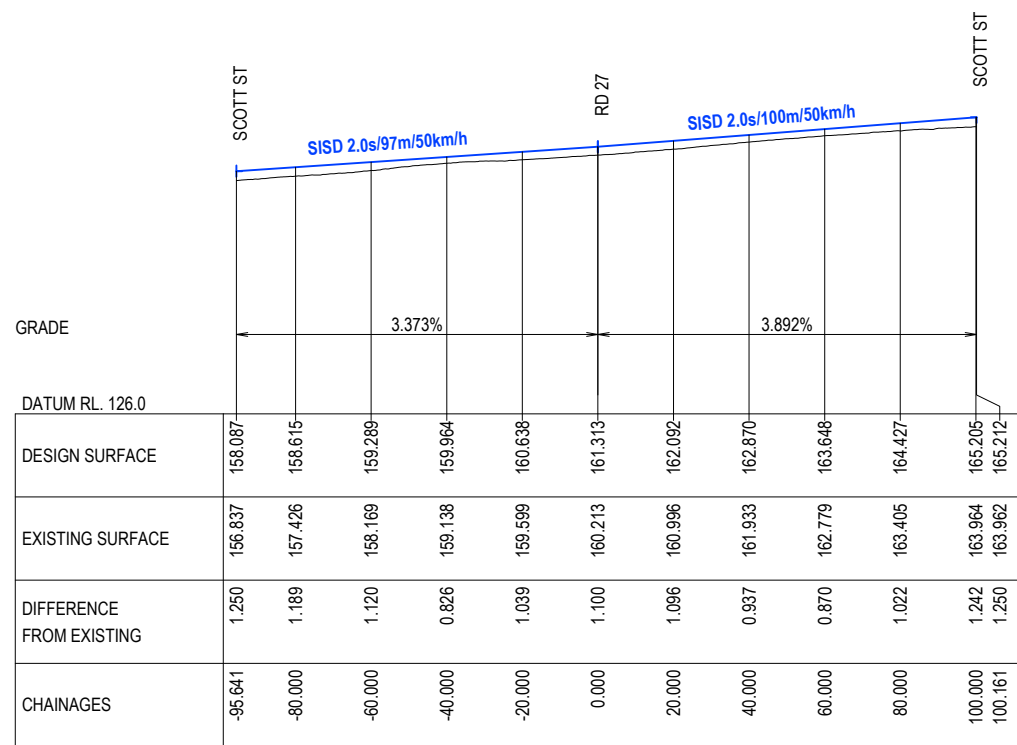
po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	MOMSEN ST / CANELO WOLUMLA RD SISD SIGHT LINES
DRAWING NUMBER	2109-P30SD
AMENDMENT:	



SAFE INTERSECTION SIGHT DISTANCE (SISD) PARAMETERS WEST 50km/h		
POSTED SPEED	50km/h	
DESIGN SPEED	50km/h	
RT	2.0s	DESIREABLE MINIMUM REACTION TIME FOR DESIGN SPEED.
GRADE	-3.70%	3.7% UPGRADE FOR EASTBOUND TRAFFIC.
SISD	97m	SISD FROM AGRD04A, TABLE 3.2. NOT CORRECTED FOR UPGRADE

SAFE INTERSECTION SIGHT DISTANCE (SISD) PARAMETERS EAST 50km/h		
POSTED SPEED	50km/h	
DESIGN SPEED	50km/h	
RT	2.0s	DESIREABLE MINIMUM REACTION TIME FOR DESIGN SPEED.
GRADE	3.70%	3.7% DOWNGRADE FOR WESTBOUND TRAFFIC.
SISD	100m	SISD FROM AGRD04A, TABLE 3.2. CORRECTED FOR DOWNGRADE WITH TABLE 3.4

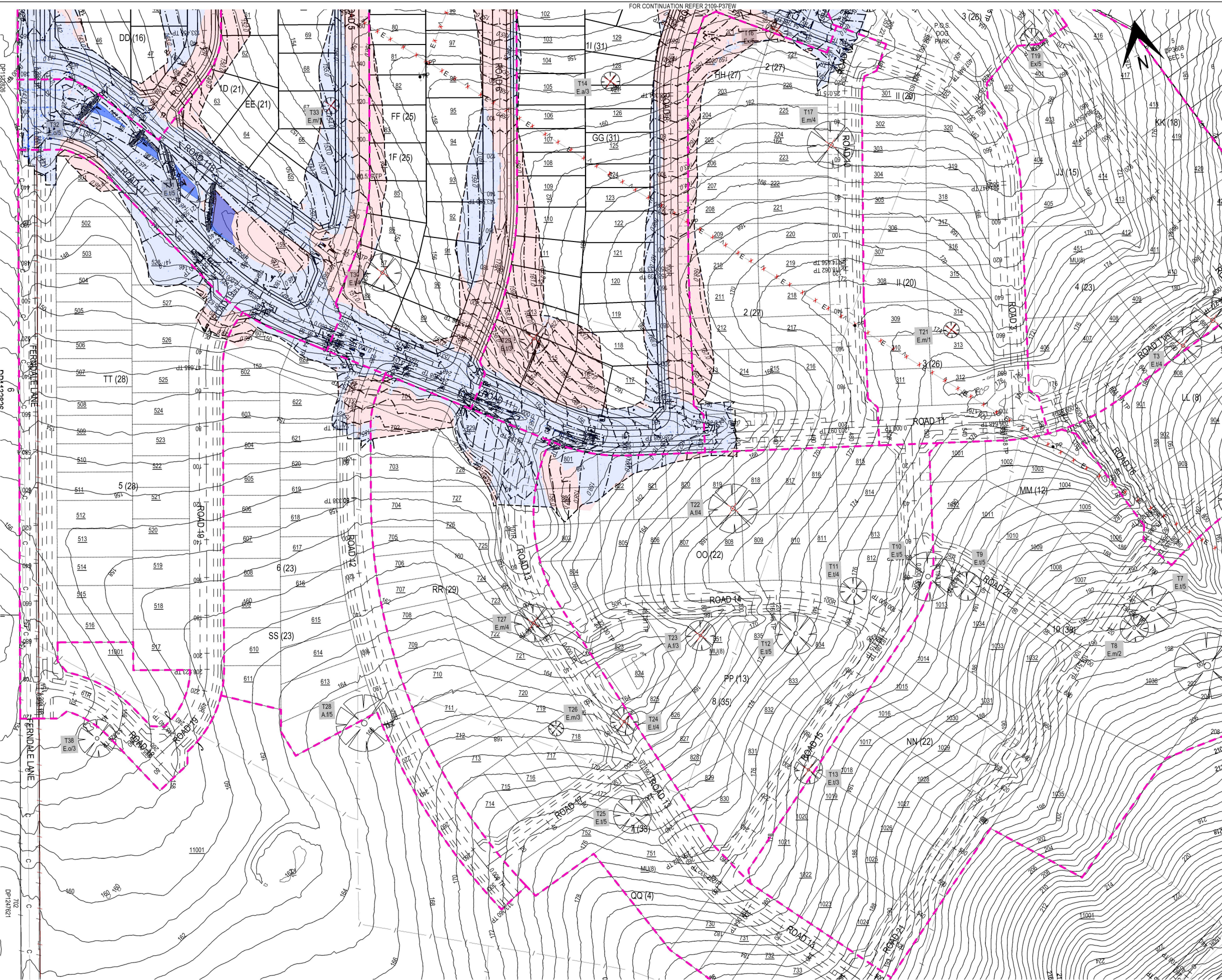


RD 27/SCOTT ST INTERSECTION 50km/h
SCALE 1:1000 HORZ (A1)
1:500 VERT (A1)

NOTES:

1. REFER TO DWG 2109-P02NTS FOR NOTES AND LEGEND

[illegible]



NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.

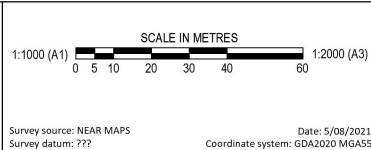
EARTHWORK QUANTITIES - 12/11/2024			
STAGE	CUT [m³]	FILL [m³]	AREA [m²]
1A	0	0	0
1B	4200	5700	17200
1C	5700	3700	14800
1D	2700	11500	19700
1E	20100	22400	27400
1F	2400	4900	11300
1G	2200	100	7600
1H	100	200	1300
1I	7400	13400	24700
TOTAL	44800	61900	124000

* NOTE - EARTHWORK QUANTITIES ARE CALCULATED FROM THE EXISTING SURFACE TO THE CONCEPT DESIGN SURFACE. THEY DO NOT ACCOUNT FOR BOXING OF PAVEMENTS OR STRIPPING OF TOPSOIL.

No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
A	REVISED LAYOUT	VAO	AG	VAO	VAO	21/03/2025
B	INITIAL ISSUE	VAO	AG	VAO	VAO	09/11/2023

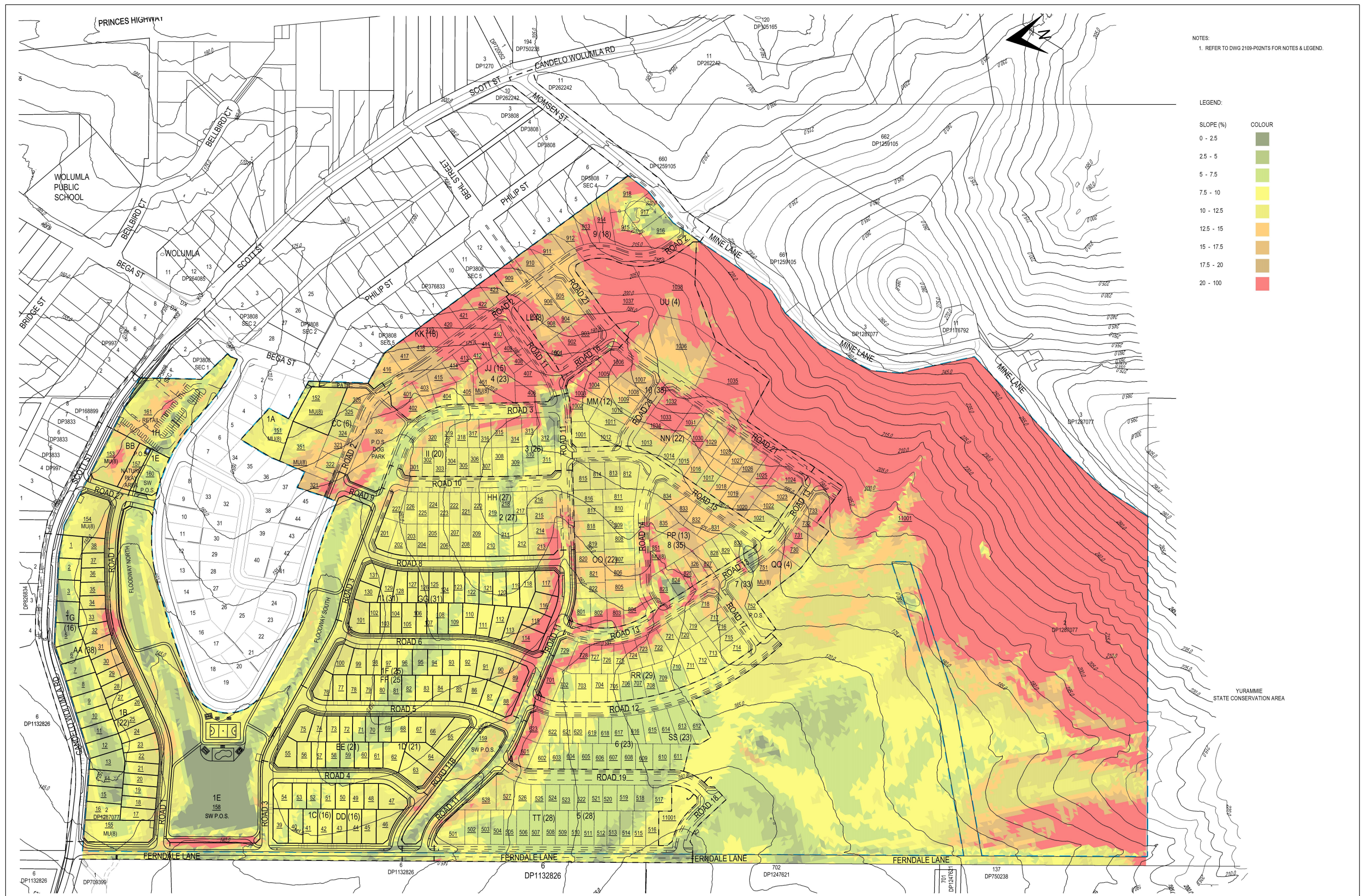
Date: Friday, 21 March 2025 2:52:20 PM User: AG File: H:\2021\2109_Wolumla\099_2109sync\051_dwg\Sync\2109-P37EW.dwg

DO NOT SCALE
Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

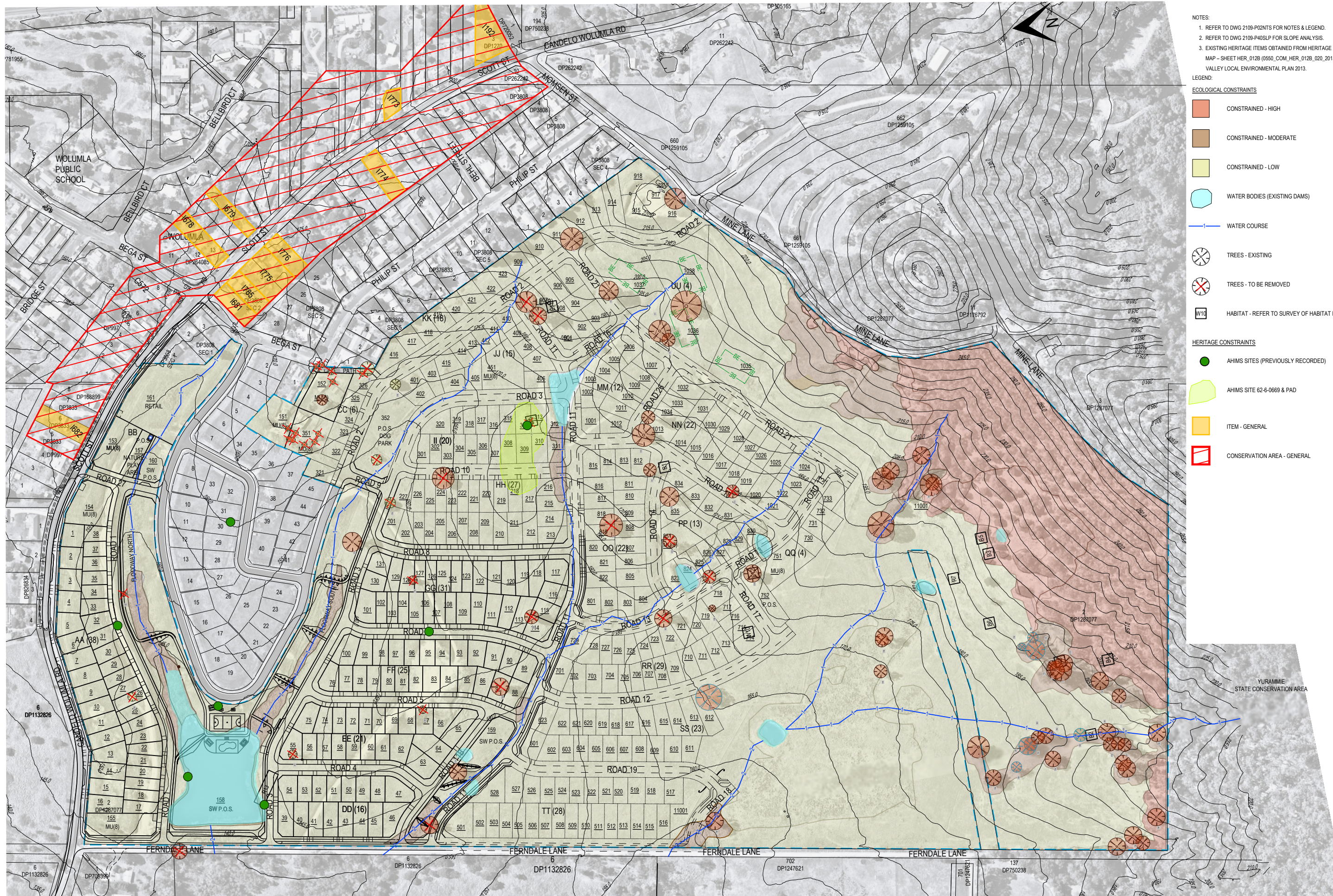


po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	EARTHWORKS - STAGE 1 - SHEET 2
DRAWING NUMBER	2109-P38EW
AMENDMENT	A



D						DO NOT SCALE Conditions of Use OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE. This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.	1:2000 (A1) SCALE IN METRES 01020406080100120 1:4000 (A3) Survey source: NEAR MAPS Survey datum: ??? Date: 5/08/2021 Coordinate system: GDA2020 MGA55	Volumia Valley ESTATE Survey source: SPATIAL COLLABORATION PORTALNSW GOVT Survey datum: ??? Date: 10/08/2021 Coordinate system: GDA2020 MGA55	osgood civil resource engineering OCRE po box 181 bermagui nsw 2546 p 02 6494 0239 m 0408 361 612	CLIENT JUNIOR INVESTMENTS PTY LTD	
C										PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION	
B										TITLE	
A	LAYOUT UPDATED	VAO	AG	VAO	VAO					21/03/2025	SLOPE ANALYSIS PLAN
-	INITIAL ISSUE	VAO	AG	VAO	VAO					09/11/2023	
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE	DRAWING NUMBER 2109-P40SLP	AMENDMENT: A			



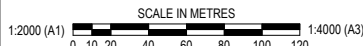
NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.
2. REFER TO DWG 2109-P40SLP FOR SLOPE ANALYSIS.
3. EXISTING HERITAGE ITEMS OBTAINED FROM HERITAGE MAP - SHEET HER_012B (0550_COM_HER_012B_020_20130524), BEGA VALLEY LOCAL ENVIRONMENTAL PLAN 2013.

- LEGEND:
- ECOLOGICAL CONSTRAINTS**
- CONstrained - HIGH
 - CONstrained - MODERATE
 - CONstrained - LOW
 - WATER BODIES (EXISTING DAMS)
 - WATER COURSE
 - TREES - EXISTING
 - TREES - TO BE REMOVED
 - HABITAT - REFER TO SURVEY OF HABITAT FEATURES
- HERITAGE CONSTRAINTS**
- AHMS SITES (PREVIOUSLY RECORDED)
 - AHMS SITE 62-6-0669 & PAD
 - ITEM - GENERAL
 - CONSERVATION AREA - GENERAL

D					
C					
B	TREE 36 RETAINED	AG	AG	VAO	VAO
A	LAYOUT UPDATED	VAO	AG	VAO	VAO
-	INITIAL ISSUE	VAO	AG	VAO	VAO
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
					DATE
					14/04/2025
					21/03/2025
					06/12/2023

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGA55

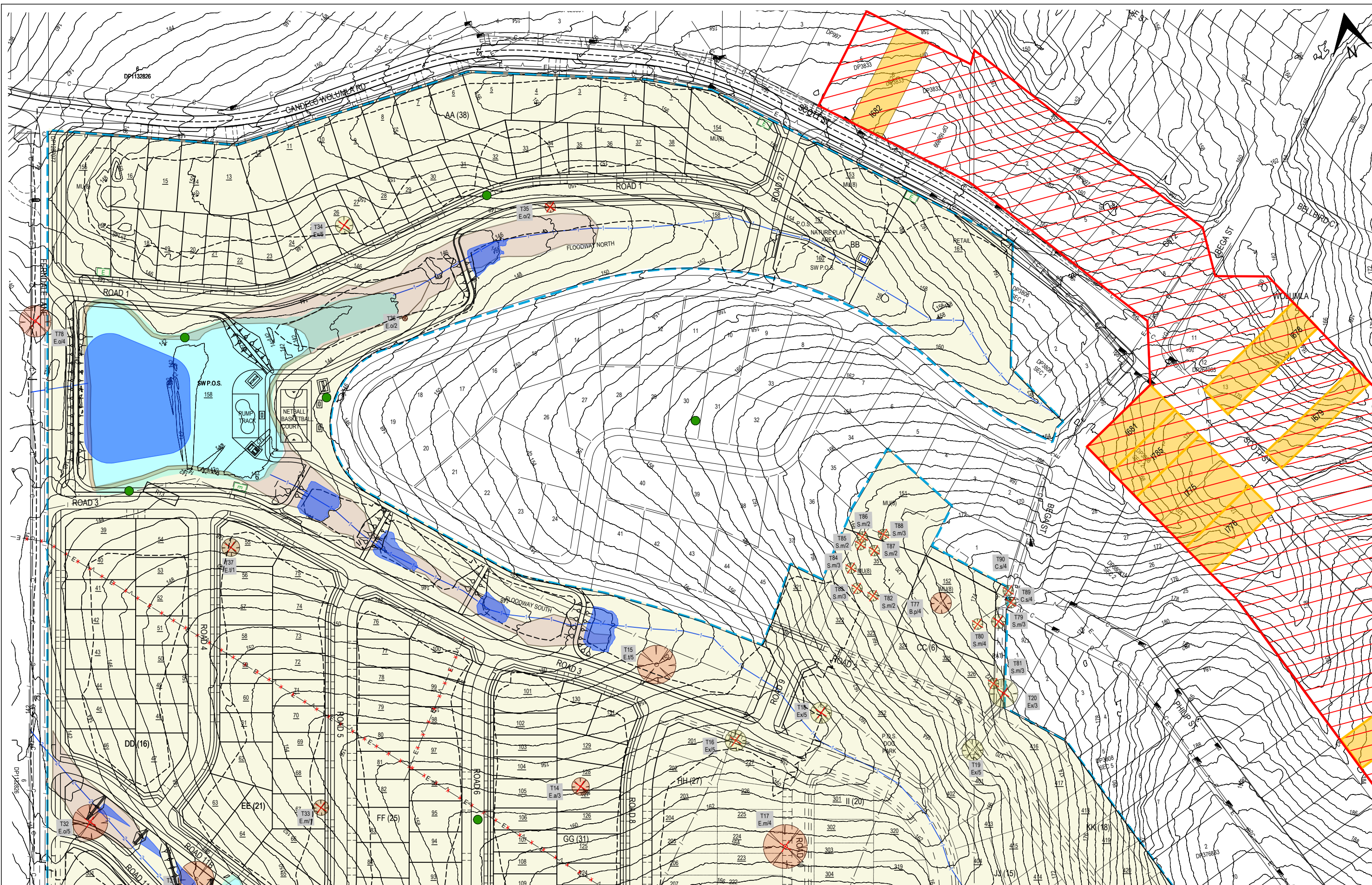


Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???
Date: 10/08/2021
Coordinate system: GDA2020 MGA55



po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	CONSTRAINTS OVERALL
DRAWING NUMBER	2109-P41CON
AMENDMENT:	B



NOTES:

1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.
2. REFER TO DWG 2109-P41CON FOR DETAILED NOTES & LEGEND.

D						
C						
B						
A	TREE 36 RETAINED	AG	AG	VAO	VAO	14/04/2021
-	INITIAL ISSUE	VAO	AG	VAO	VAO	21/03/2021
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

DO NOT SCALE

Conditions of Use

OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.

This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

SCALE IN METRES

1:1000 (A1) 0 5 10 20 30 40 60 1:2000 (A3)

Survey source: NEAR MAPS Date: 5/08/2022
Survey datum: ??? Coordinate system: GDA2020 MGA5



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT Date: 10/08/2021
Survey datum: 322 Coordinate system: GDA2020 MGA55



osgood civil resource engineering
OCRE

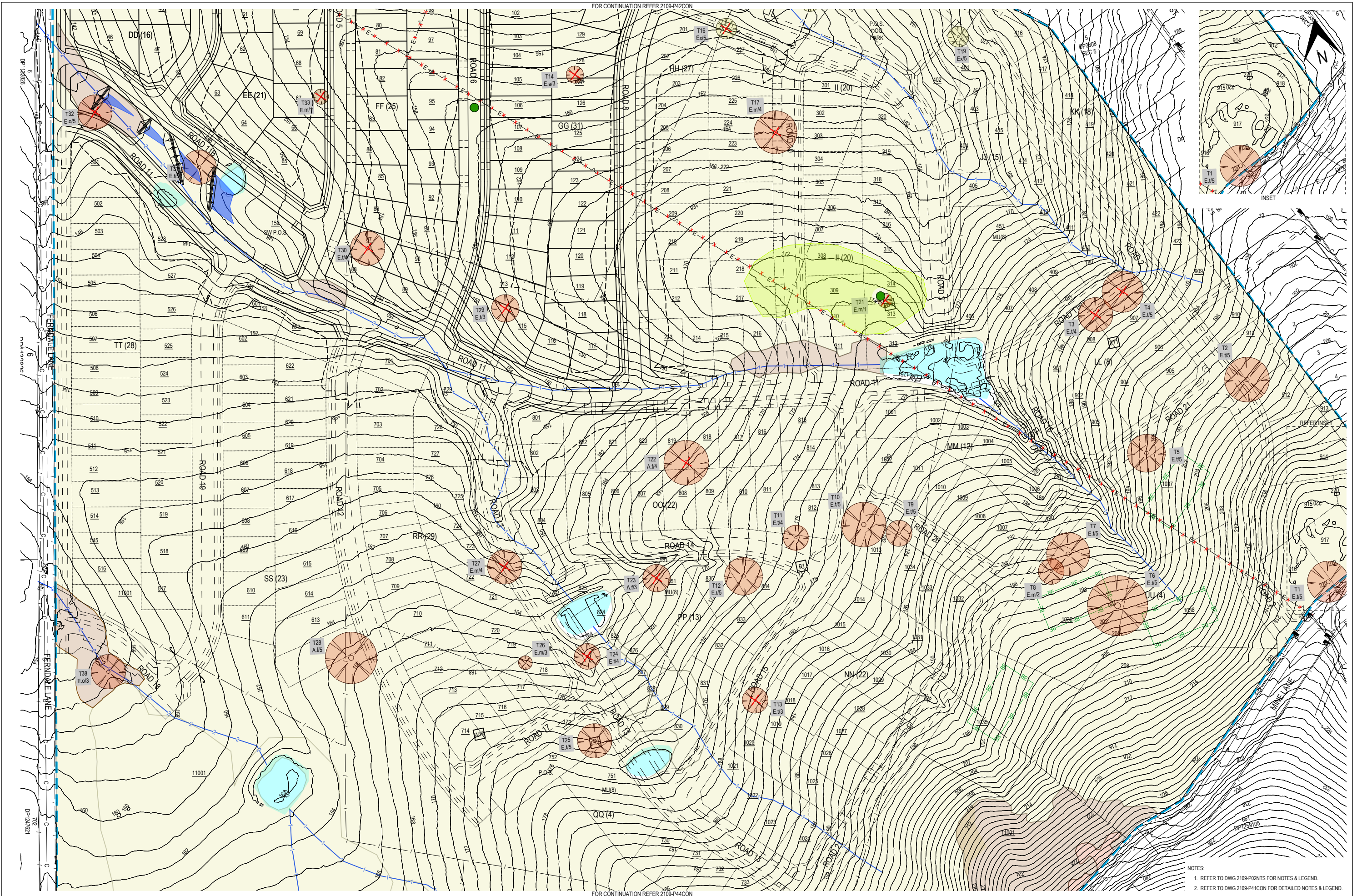
po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION

CONSTRAINTS - SHEET 1

DRAWING NUMBER 2109-P42CON

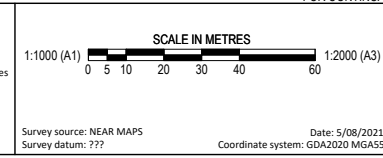
AMENDMENT: A



D					
C					
B					
A					
-	INITIAL ISSUE	VAO	AG	VAO	VAO
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
					DATE
					21/03/2025

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



osgood civil resource engineering

OCRE

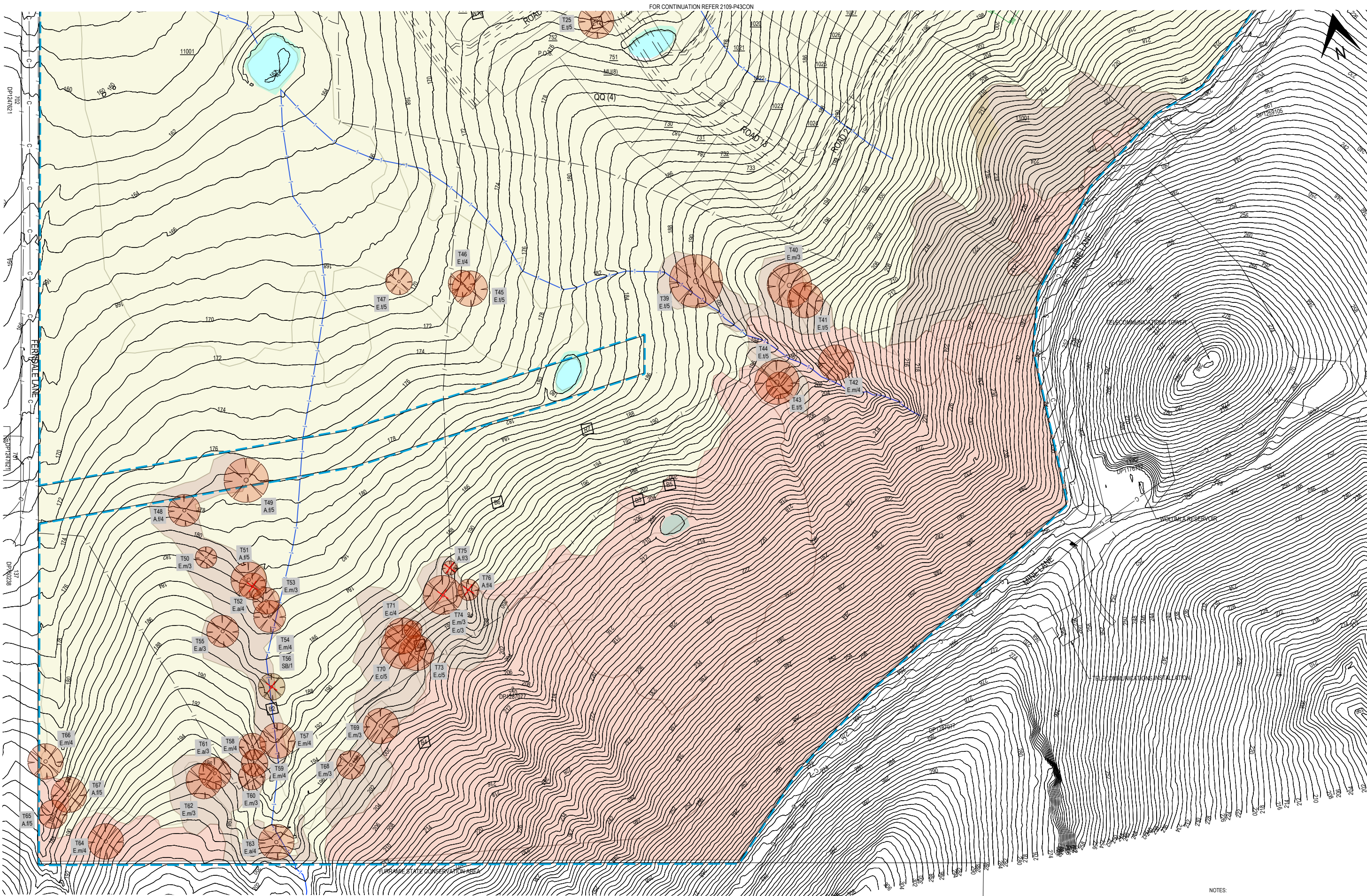
po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT PROJECT TITLE
**JUNOR INVESTMENTS PTY LTD
LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION**

CONSTRAINTS - SHEET 2

DRAWING NUMBER **2109-P43CON**

AMENDMENT:



- NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.
 2. REFER TO DWG 2109-P41CON FOR DETAILED NOTES & LEGEND.

D					
C					
B					
A					
-	INITIAL ISSUE	VAO	AG	VAO	VAO
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
					DATE

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGAS5



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???
Date: 10/08/2021
Coordinate system: GDA2020 MGAS5



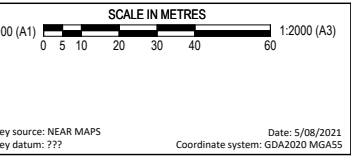
po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	CONSTRAINTS - SHEET 3
DRAWING NUMBER	2109-P44CON
AMENDMENT:	



DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



osgood civil resource engineering

OCRE

po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT JUNIOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE TREE RETENTION PLAN - SHEET 1
DRAWING NUMBER 2109-P45TRP
AMENDMENT: C



D						
C	REVISED LAYOUT	VAO	AG	VAO	VAO	21/03/2025
B	PATHS, INDICATIVE DWAYS, DRAFTING CORRECTIONS, UPDATED IMAGE, ADDED BE	VAO	AG	VAO	VAO	09/11/2023
A	LAYOUT ADJUSTMENTS	VAO	AG	VAO	VAO	11/09/2023
-	INITIAL ISSUE	VAO	AG	VAO	VAO	13/12/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

DO NOT SCALE

Conditions of Use

OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.

This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???

Date: 5/08/2022
Coordinate system: GDA2020 MGA5



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ??? Coordinate

Date: 10/08/2021
em: GDA2020 MGA55



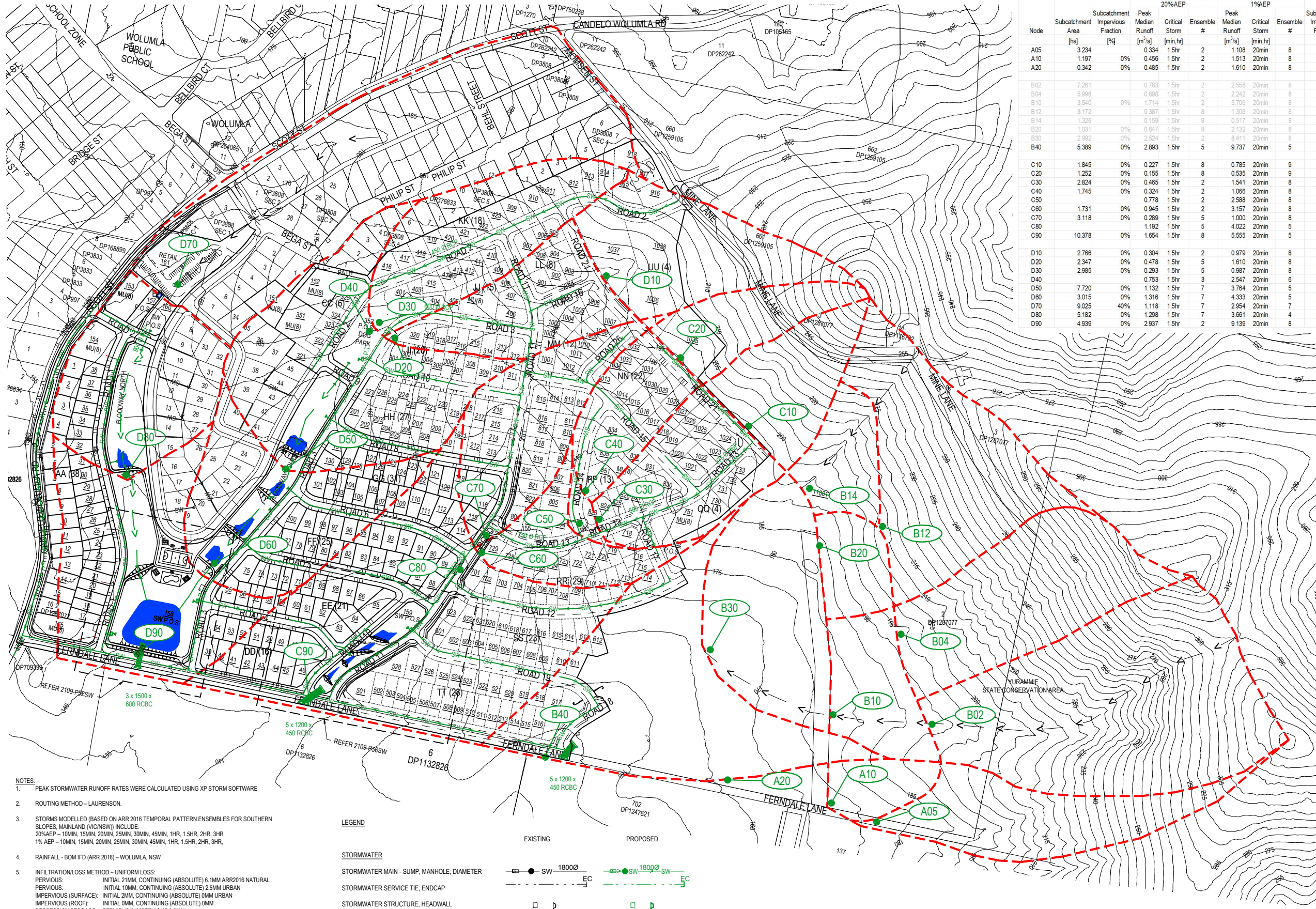
po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT JUNOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION

TREE RETENTION PLAN - SHEET 2

DRAWING NUMBER 2109-P46TRP

AMENDMENT: C



RESULTS:

Node	Subcatchment Area [ha]	Subcatchment Impervious Fraction [%]	Peak Median Runoff [m³/s]	20% AEP Critical Storm [min.hr]	Existing		20% AEP Critical Storm [min.hr]	Developed	
					Ensemble #	Peak Median Runoff [m³/s]		Ensemble #	Peak Median Runoff [m³/s]
A05	3.234		0.334	1.5hr	2	1.108	20min	8	0.334
A10	1.197	0%	0.456	1.5hr	2	1.513	20min	8	0.452
A20	0.342	0%	0.485	1.5hr	2	1.610	20min	8	0.486
B02	7.281		0.783	1.5hr	2	2.558	20min	8	0.783
B04	5.996		0.698	1.5hr	2	2.242	20min	8	0.698
B10	3.540	0%	1.714	1.5hr	2	5.706	20min	8	1.759
B12	3.172		0.387	1.5hr	8	1.306	20min	8	0.387
B14	1.326		0.159	1.5hr	8	0.517	20min	8	0.159
B20	1.031	0%	0.647	1.5hr	8	2.132	20min	8	0.648
B30	2.992	0%	2.524	1.5hr	2	8.411	20min	8	2.613
B40	5.389	0%	2.893	1.5hr	5	9.737	20min	5	3.181
C10	1.845	0%	0.227	1.5hr	8	0.785	20min	9	0.371
C20	1.252	0%	0.155	1.5hr	8	0.535	20min	9	0.405
C30	2.824	0%	0.465	1.5hr	2	1.541	20min	8	0.893
C40	1.745	0%	0.324	1.5hr	2	1.066	20min	8	0.629
C50			0.778	1.5hr	2	2.588	20min	8	1.465
C60	1.731	0%	0.945	1.5hr	2	3.157	20min	8	1.874
C70	3.118	0%	0.289	1.5hr	5	1.000	20min	8	0.712
C80			1.192	1.5hr	5	4.022	20min	5	2.440
C90	10.378	0%	1.654	1.5hr	8	5.555	20min	5	4.191
D10	2.786	0%	0.304	1.5hr	2	0.979	20min	8	0.520
D20	2.347	0%	0.478	1.5hr	5	1.610	20min	8	1.016
D30	2.985	0%	0.293	1.5hr	5	0.987	20min	8	0.683
D40			0.753	1.5hr	3	2.547	20min	6	1.553
D50	7.720	0%	1.132	1.5hr	7	3.764	20min	5	2.795
D60	3.015	0%	1.316	1.5hr	7	4.333	20min	5	3.262
D70	9.025	40%	1.118	1.5hr	7	2.954	20min	7	1.118
D80	5.182	0%	1.298	1.5hr	7	3.651	20min	4	1.610
D90	4.939	0%	2.937	1.5hr	2	9.139	20min	8	4.827

- NOTES:
- PEAK STORMWATER RUNOFF RATES WERE CALCULATED USING XP STORM SOFTWARE
 - ROUTING METHOD - LAURENSEN.
 - STORMS MODELLED (BASED ON ARR 2016 TEMPORAL PATTERN ENSEMBLES FOR SOUTHERN SLOPES, MAINLAND (VIC/NSW)) INCLUDE:
20% AEP - 10MIN, 15MIN, 20MIN, 25MIN, 30MIN, 45MIN, 1HR, 1.5HR, 2HR, 3HR
1% AEP - 10MIN, 15MIN, 20MIN, 25MIN, 30MIN, 45MIN, 1HR, 1.5HR, 2HR, 3HR
 - RAINFALL - BOM IFD (ARR 2016) - WOLUMLA, NSW
 - INFILTRATION/LOSS METHOD - UNIFORM LOSS:
PERVIOUS: INITIAL 21MM, CONTINUING (ABSOLUTE) 6.1MM ARR2016 NATURAL
PERVIOUS: INITIAL 10MM, CONTINUING (ABSOLUTE) 2.5MM URBAN
IMPERVIOUS (SURFACE): INITIAL 2MM, CONTINUING (ABSOLUTE) 0MM URBAN
IMPERVIOUS (ROOF): INITIAL 0MM, CONTINUING (ABSOLUTE) 0MM
DEPRESSION STORAGE: PERVIOUS & IMPERVIOUS 0.0MM.
 - IMPERVIOUS FRACTION - AS PER TABLE.
 - TOTAL SIMULATION TIME - 4 HOURS
 - STORMWATER MODELLING DID NOT INCLUDE ANY SURFACE WATER STORAGE
 - OPEN CHANNEL FLOW CALCULATIONS - MANNINGS, n=0.011 (RCP), 0.015 (PAVEMENT), 0.035 (GRASS).

LEGEND

STORMWATER

STORMWATER MAIN - SUMP, MANHOLE, DIAMETER

STORMWATER SERVICE TIE, ENDCAP

STORMWATER STRUCTURE, HEADWALL

GULLY, TABLE DRAIN OVERLAND FLOW PATH, DIRECTION

CATCHMENT BOUNDARY

CATCHMENT NODE

EMBANKMENT

EXISTING

PROPOSED

SW 1800Ø

SW 1800Ø

SW 1800Ø

SW 1800Ø

SW 1800Ø

SW 1800Ø

SW 1800Ø

SW 1800Ø

SW 1800Ø

SW 1800Ø

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

1:2500 (A1) SCALE IN METRES 1:5000 (A3)

Survey source: NEAR MAPS
Survey datum: ???

Date: 5/08/2021
Coordinate system: GDA2020 MGA55

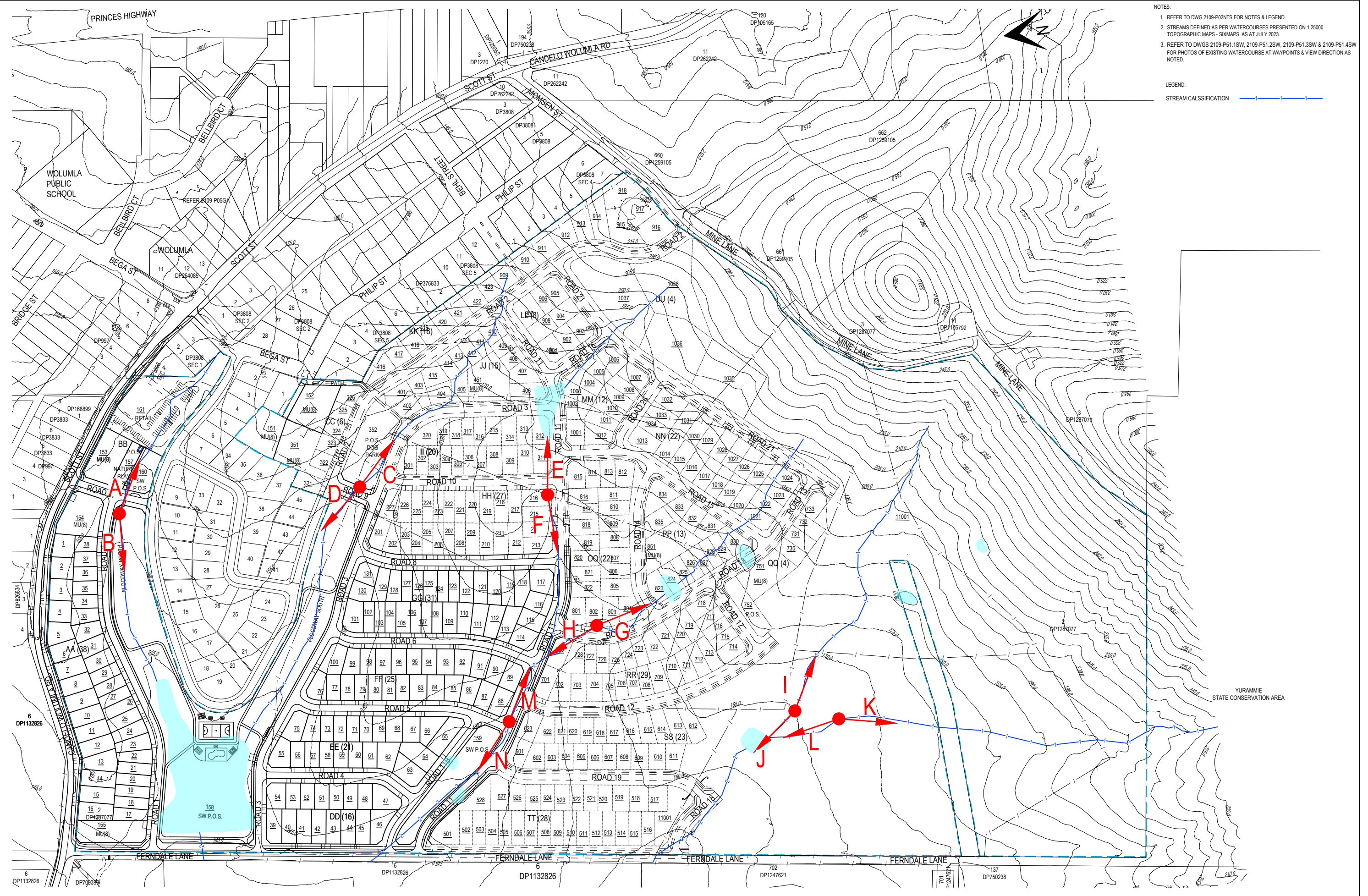
Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???

Date: 10/08/2021
Coordinate system: GDA2020 MGA55



po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT JUNIOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE STORMWATER CATCHMENT PLAN
DRAWING NUMBER 2109-P50SW
AMENDMENT: B

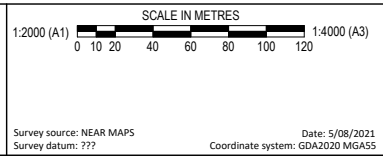


- NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.
 2. STREAMS DEFINED AS PER WATERCOURSES PRESENTED ON 1:25000 TOPOGRAPHIC MAPS - SIXMAPS, AS AT JULY 2023.
 3. REFER TO DWGS 2109-P51.1SW, 2109-P51.2SW, 2109-P51.3SW & 2109-P51.4SW FOR PHOTOS OF EXISTING WATERCOURSE AT WAYPOINTS & VIEW DIRECTION AS NOTED.
- LEGEND:
- STREAM CLASSIFICATION

D					
C					
B	WATERCOURSE PIC WAYPOINTS, LAYOUT UPDATED	VAO	AG	VAO	21/03/2025
A	LAYOUT ADJUSTMENTS, WATER FRONTLAND & VRZ ADDED	VAO	AG	VAO	09/11/2023
-	INITIAL ISSUE	VAO	AG	VAO	12/10/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



osgood civil resource engineering

OCRE

po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

Wolumla Valley ESTATE

CLIENT JUNIOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE STORMWATER - STREAM CLASSIFICATION
DRAWING NUMBER 2109-P51SW
AMENDMENT: B



PIC A



PIC C



PIC B



PIC D

D							DO NOT SCALE Conditions of Use OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE. This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.	Survey source: NEAR MAPS Survey datum: ???	Date: 5/08/2021 Coordinate system: GDA2020 MGA55	Survey source: SPATIAL COLLABORATION PORTALNSW GOVT Survey datum: ???	Date: 10/08/2021 Coordinate system: GDA2020 MGA55	CLIENT	JUNOR INVESTMENTS PTY LTD				
C						PROJECT						LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION					
B						TITLE						EXISTING WATERCOURSE PHOTOS - SHEET 1					
A																	
-	INITIAL ISSUE		AG	AG	VAO	VAO						21/03/2025					
No.	REVISION		DESIGNED	DRAWN	CHECKED	APPROVED						DATE					
Date: Friday, 21 March 2025 4:24:12 PM		User: AG	File: H:\2021\12109_Wolumla\099_2109srcvnc051_dcasVmc2109-PS1SW.dwg														



D						DO NOT SCALE Conditions of Use OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE. This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.	Survey source: NEAR MAPS Survey datum: ???	Date: 5/08/2021 Coordinate system: GDA2020 MGA55		Survey source: SPATIAL COLLABORATION PORTAL/NSW GOVT Survey datum: ???	Date: 10/08/2021 Coordinate system: GDA2020 MGA55	 asgoad civil resource engineering po box 181 bermagui nsw 2546 p 02 6494 0239 m 0408 361 612	CLIENT JUNOR INVESTMENTS PTY LTD	
C					PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION									
B					TITLE EXISTING WATERCOURSE PHOTOS - SHEET 2									
A														
-	INITIAL ISSUE	AG	AG	VAO	VAO								21/03/2025	
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE								DRAWING NUMBER 2109-P51.2SW AMENDMENT:



PIC I



PIC K



PIC J



PIC L

[illegible]

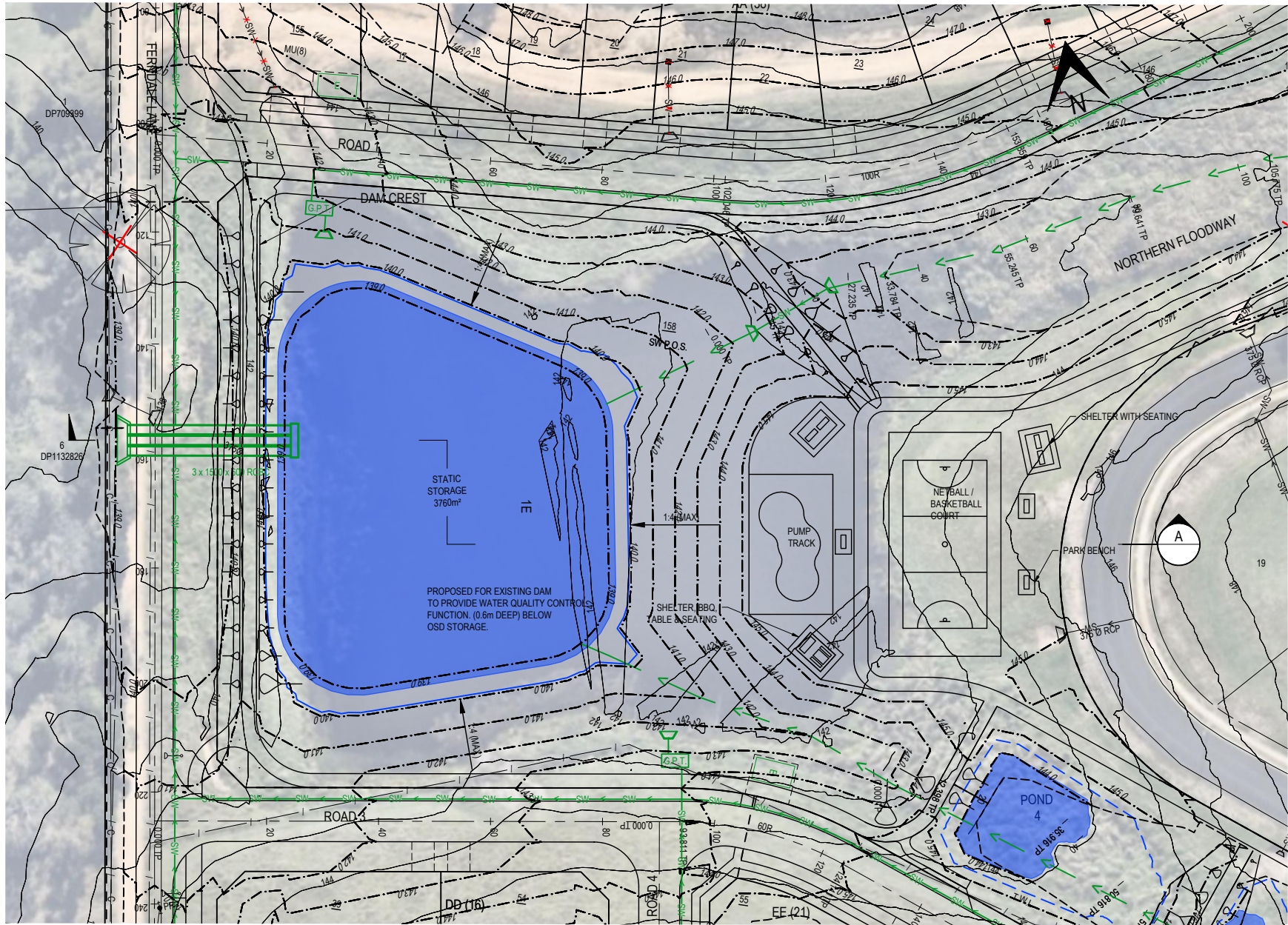


PIC M

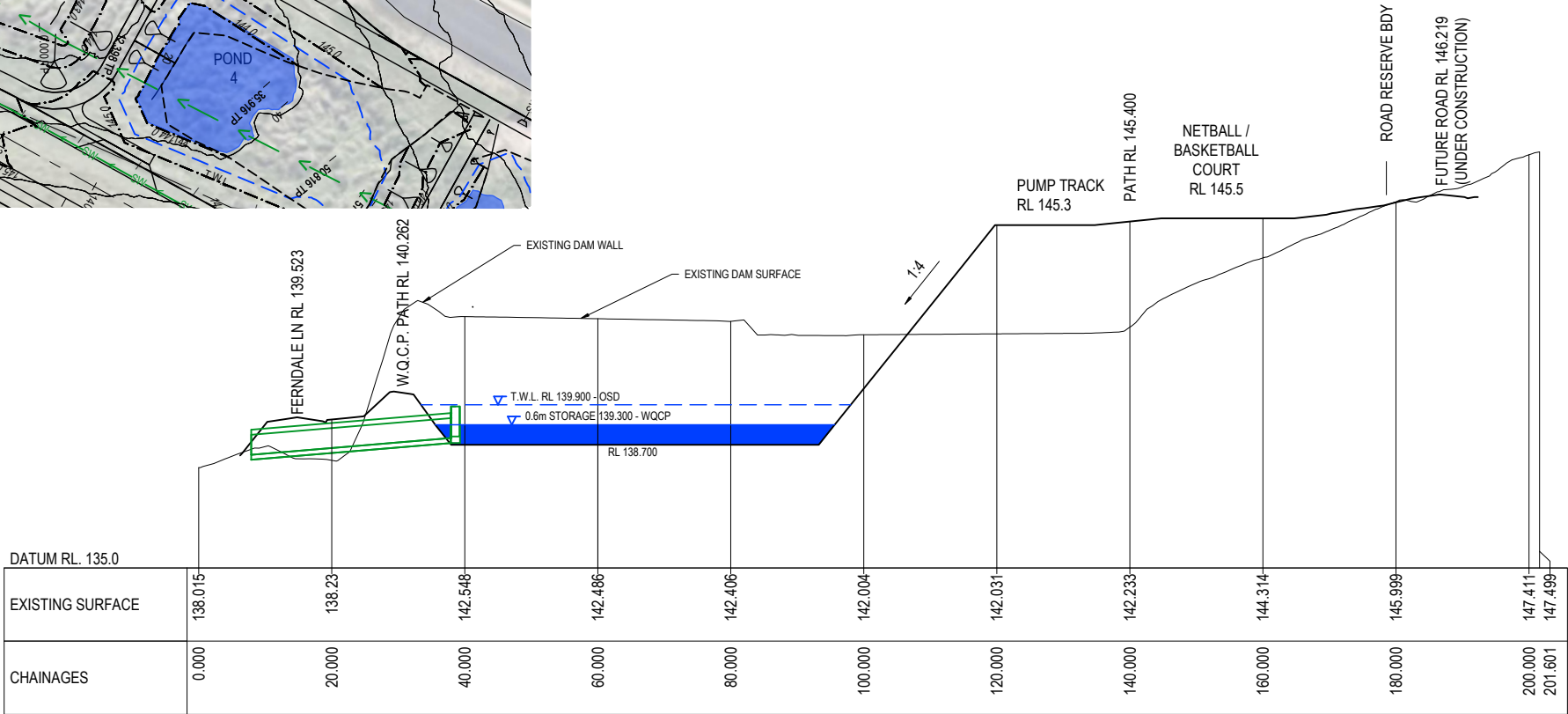


PIC N

D						DO NOT SCALE Conditions of Use OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE. This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.	Survey source: NEAR MAPS Survey datum: ???	Date: 5/08/2021 Coordinate system: GDA2020 MGA55		Survey source: SPATIAL COLLABORATION PORTLANDSW GOVT Survey datum: ???	Date: 10/08/2021 Coordinate system: GDA2020 MGA55		po box 181 bermagui nsw 2546 p 02 6494 0239 m 0408 361 612	CLIENT JUNOR INVESTMENTS PTY LTD
C					PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION									
B					TITLE									
A					EXISTING WATERCOURSE PHOTOS - SHEET 4									
-	INITIAL ISSUE	AG	AG	VAO	VAO									21/03/2025
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE								



- NOTES:
- REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.
- CATCHMENT D
- MODIFIED DAM AREA OSD STORAGE
- RL 139.30 - RL 139.90
- 2458m³
 - FLOODWAY NORTH OSD STORAGE (REFER 2109-P53SW)
POND 2 - 125m³
 - FLOODWAY SOUTH OSD STORAGE (REFER 2109-P54SW)
POND 4, 5, 6, 7, - 1207m³
- TOTAL OSD VOLUME 3790m³.
- OSD REQUIREMENT
1% AEP 20min #8 EVENT - 3581m³.



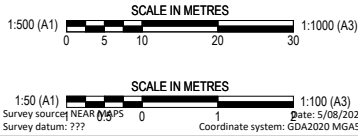
SCALE 1:500 HORZ (A1)
1:100 VERT (A1)

SECTION A

D					
C					
B	LAYOUT UPDATED	VAO	AG	VAO	VAO
A	LAYOUT ADJUSTMENTS, IMAGE, PATHS, SW MAINS UPDATED, AMENITIES ADDED	VAO	AG	VAO	VAO
-	INITIAL ISSUE	VAO	AG	VAO	VAO
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

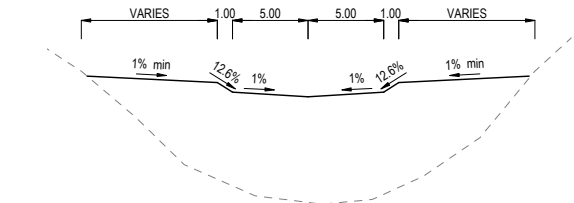
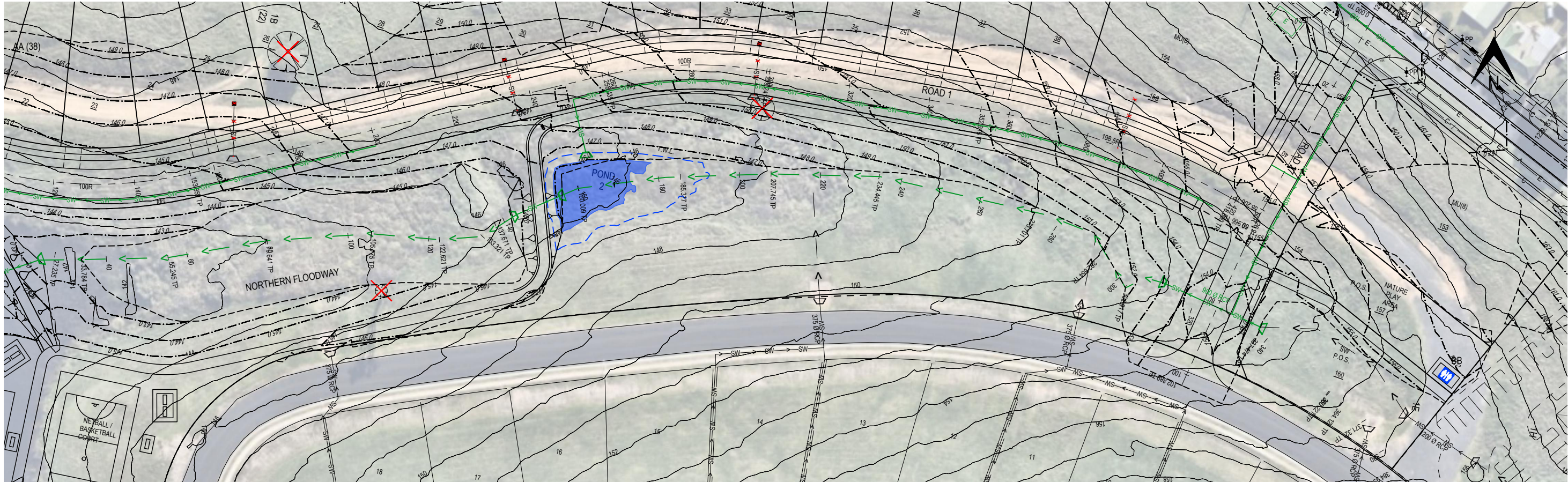


Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???



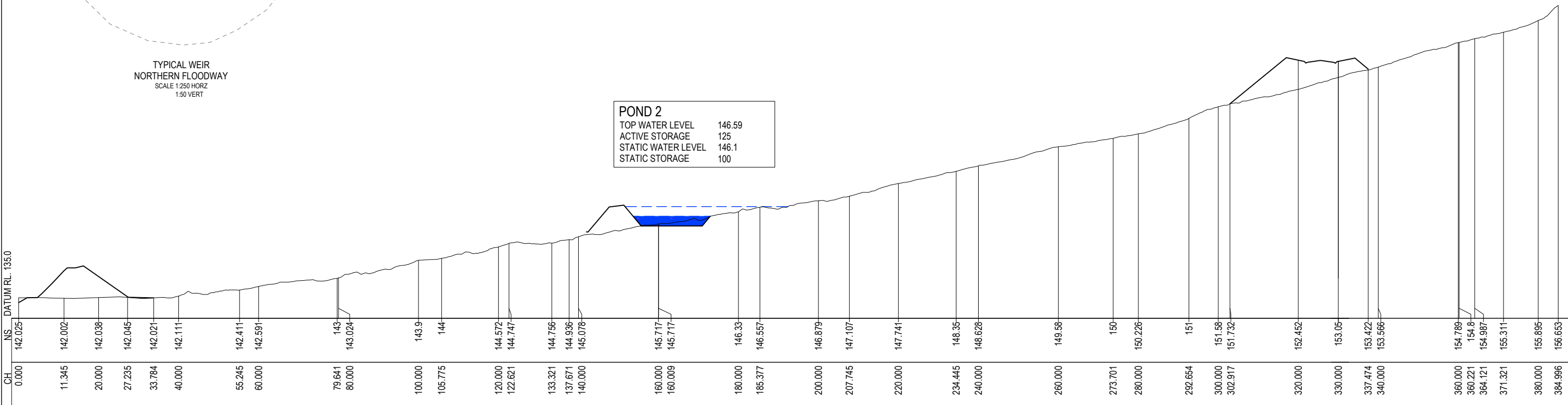
po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	EXISTING DAM ARRANGEMENT
DRAWING NUMBER	2109-P52SW
AMENDMENT:	B



TYPICAL WEIR
NORTHERN FLOODWAY
SCALE 1:250 HORIZ
1:50 VERT

POND 2	
TOP WATER LEVEL	146.59
ACTIVE STORAGE	125
STATIC WATER LEVEL	146.1
STATIC STORAGE	100



NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.

D						
C						
B	LAYOUT UPDATED	VAO	AG	VAO	VAO	21/03/2025
A	LAYOUT ADJUSTMENTS, IMAGE, PATHS, SW MAINS UPDATED	VAO	AG	VAO	VAO	09/11/2023
-	INITIAL ISSUE	VAO	AG	VAO	VAO	12/10/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGAS5



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???
Date: 10/08/2021
Coordinate system: GDA2020 MGAS5



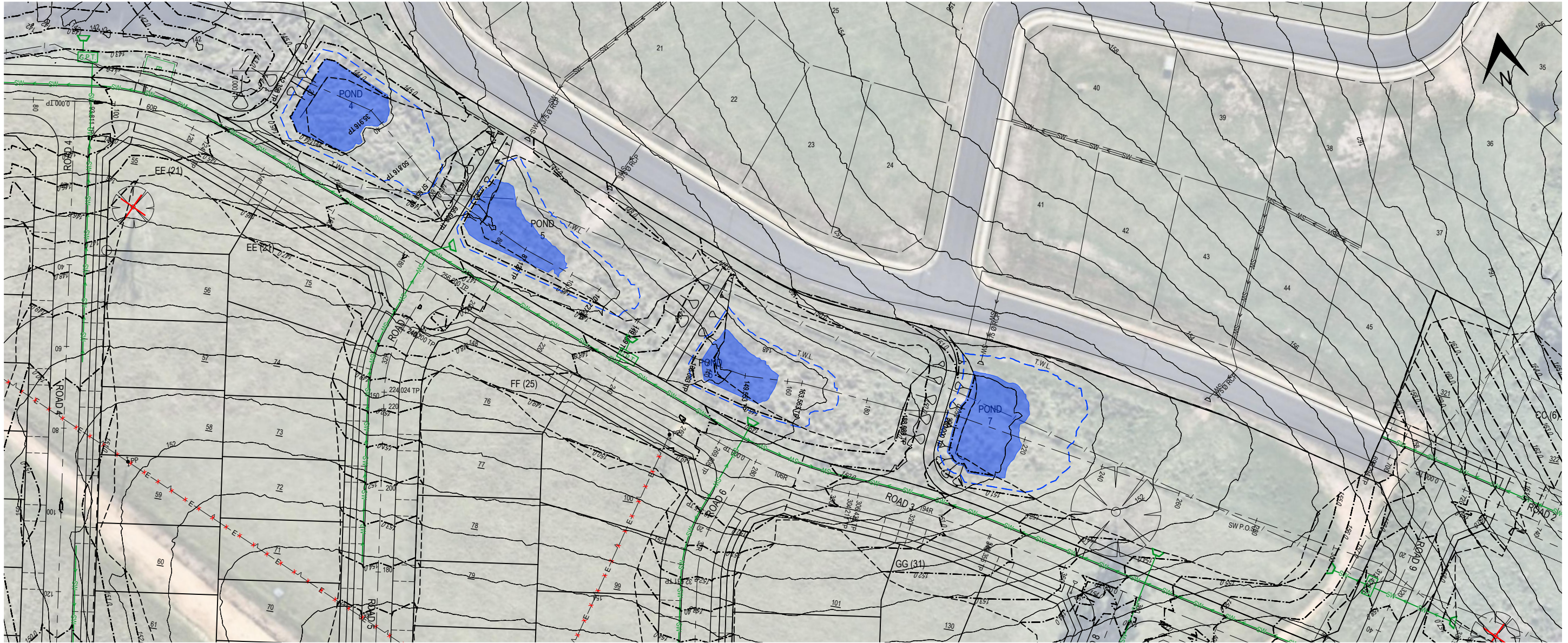
po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT JUNOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE

NORTHERN FLOODWAY PLAN

DRAWING NUMBER 2109-P53SW

AMENDMENT: B

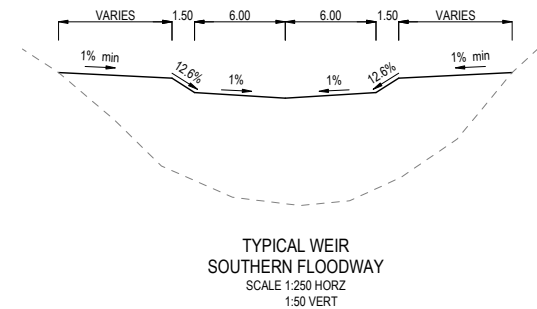
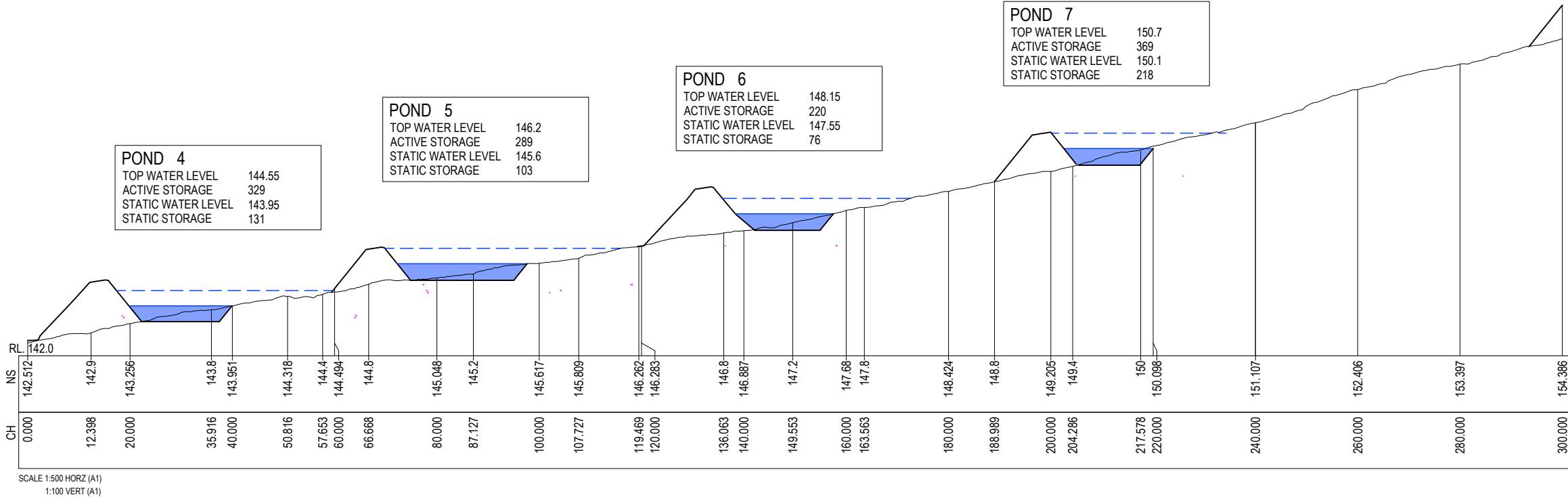


POND 4
TOP WATER LEVEL 144.55
ACTIVE STORAGE 329
STATIC WATER LEVEL 143.95
STATIC STORAGE 131

POND 5
TOP WATER LEVEL 146.2
ACTIVE STORAGE 289
STATIC WATER LEVEL 145.6
STATIC STORAGE 103

POND 6
TOP WATER LEVEL 148.15
ACTIVE STORAGE 220
STATIC WATER LEVEL 147.55
STATIC STORAGE 76

POND 7
TOP WATER LEVEL 150.7
ACTIVE STORAGE 369
STATIC WATER LEVEL 150.1
STATIC STORAGE 218

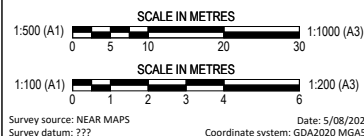


NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.

No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
D						
C						
B	LAYOUT UPDATED, UPDATED GRADING, POND 8 REMOVED	VAO	AG	VAO	VAO	21/03/2025
A	LAYOUT ADJUSTMENTS, IMAGE, PATHS, SW MAINS UPDATED	VAO	AG	VAO	VAO	09/11/2023
-	INITIAL ISSUE	VAO	AG	VAO	VAO	12/10/2022

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

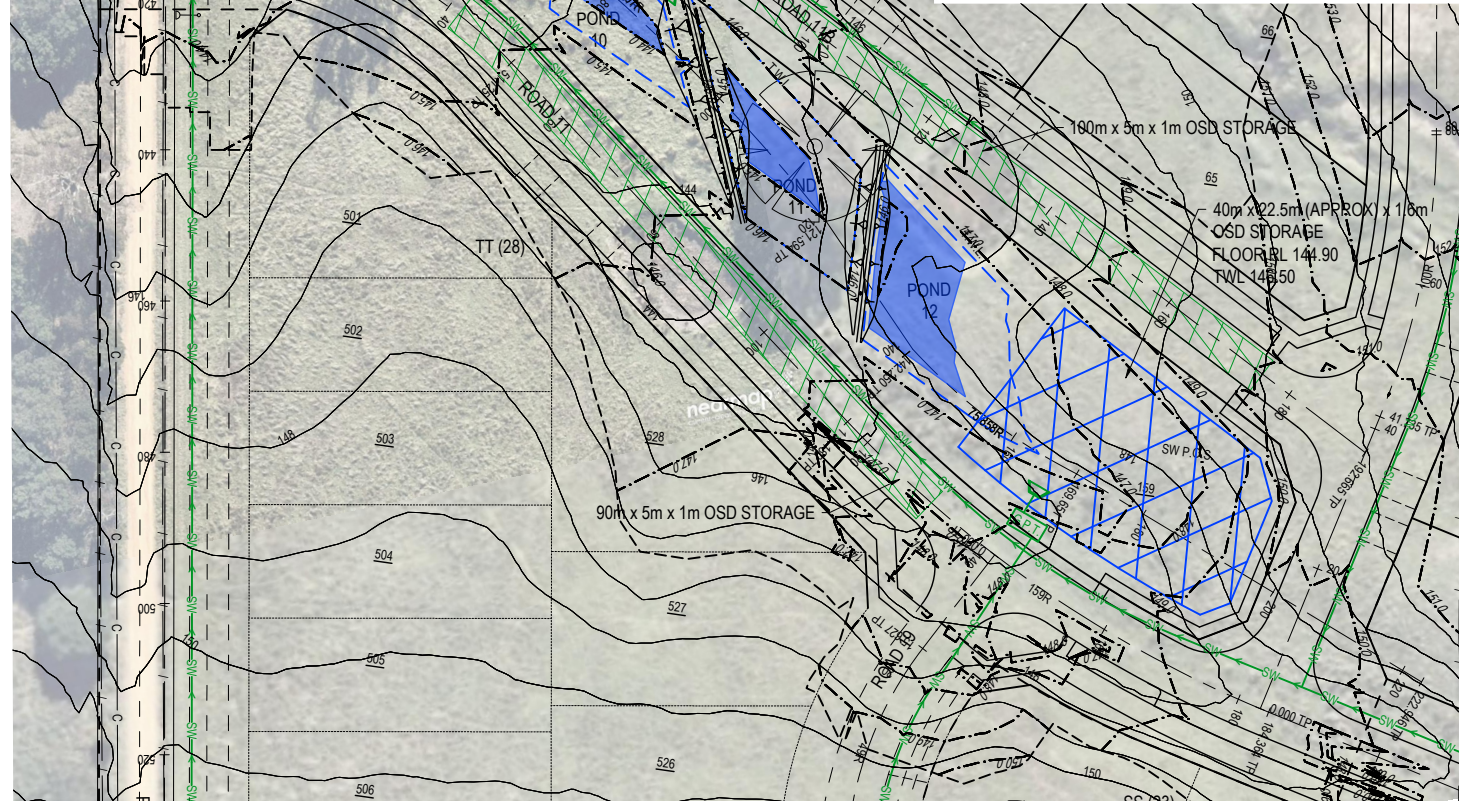
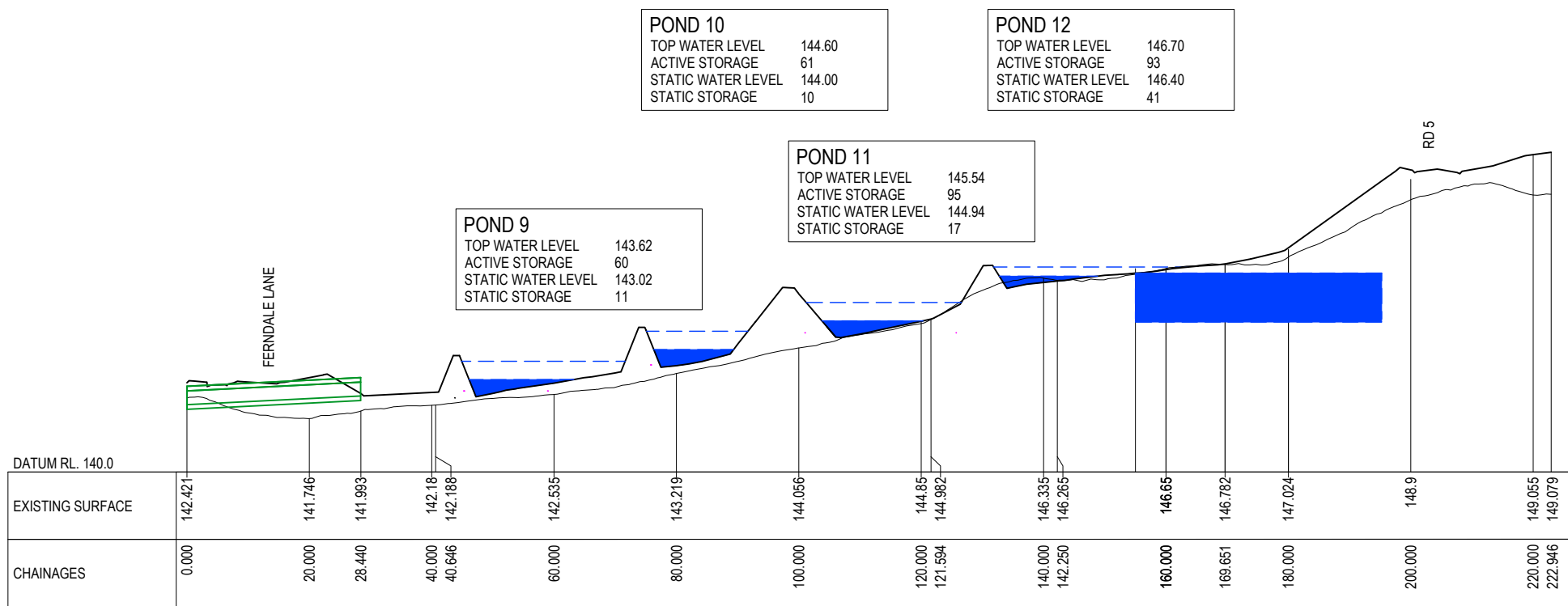
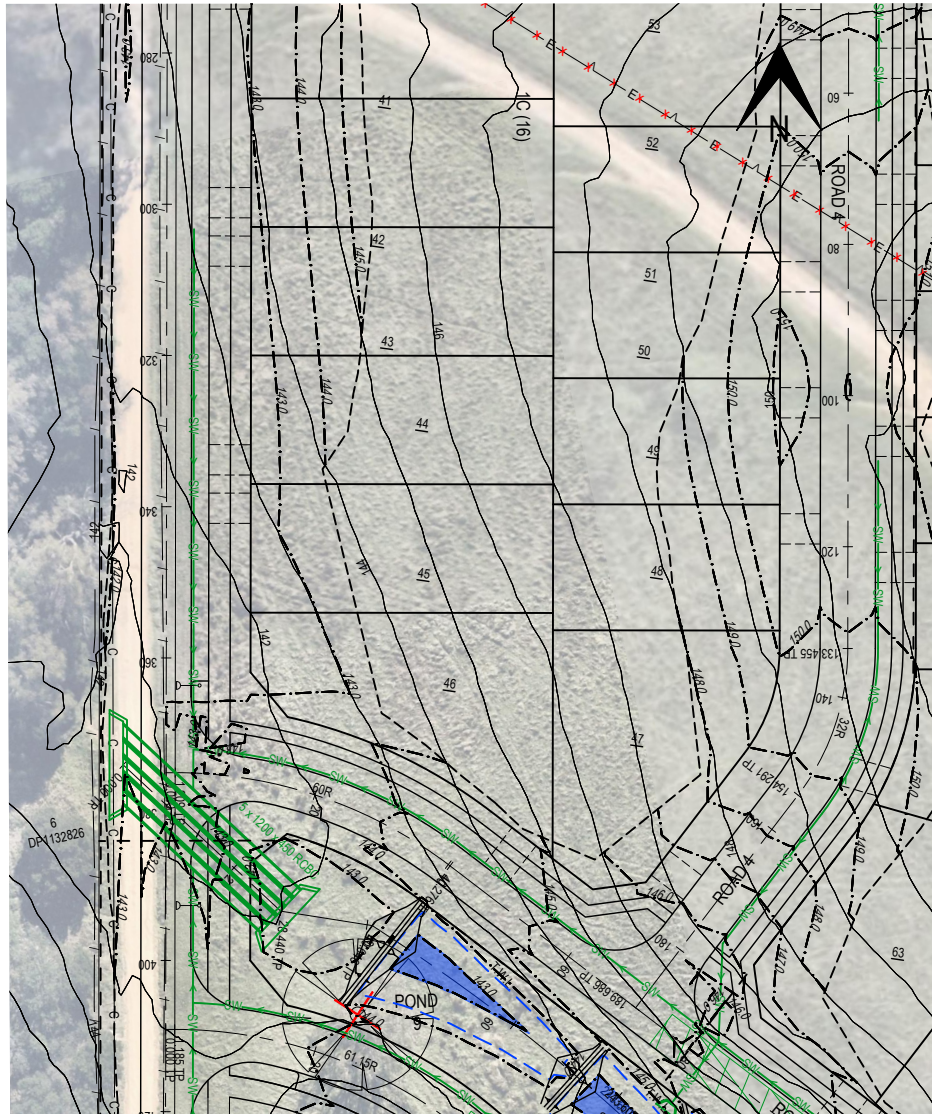


Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGASS



po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT JUNOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE SOUTHERN FLOODWAY PLAN
DRAWING NUMBER 2109-P54SW
AMENDMENT: B



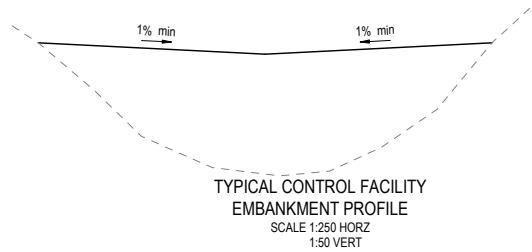
NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.

CATCHMENT C

- POND 9, 10, 11, 12 OSD STORAGE - 309m³.
- P.O.S. OSD STORAGE
900m² x 1.6m = 1440m³
- ROAD 11 + 11B OSD STORAGE
190m x 5m x 1m = 950m³

TOTAL OSD STORAGE - 2699m³.

OSD REQUIREMENT
1% AEP 10min #6 EVENT - 2677m³.



D						
C						
B	LAYOUT UPDATED, REVISED GRADING RD11 & 11B	VAO	AG	VAO	VAO	21/03/2025
A	LAYOUT ADJUSTMENTS, PATHS, IMAGE, SW MAINS, DWG TITLE	VAO	AG	VAO	VAO	09/11/2023
-	INITIAL ISSUE	VAO	AG	VAO	VAO	12/10/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???

Date: 5/08/2021
Coordinate system: GDA2020 MGAS5



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???

Date: 10/08/2021
Coordinate system: GDA2020 MGAS5

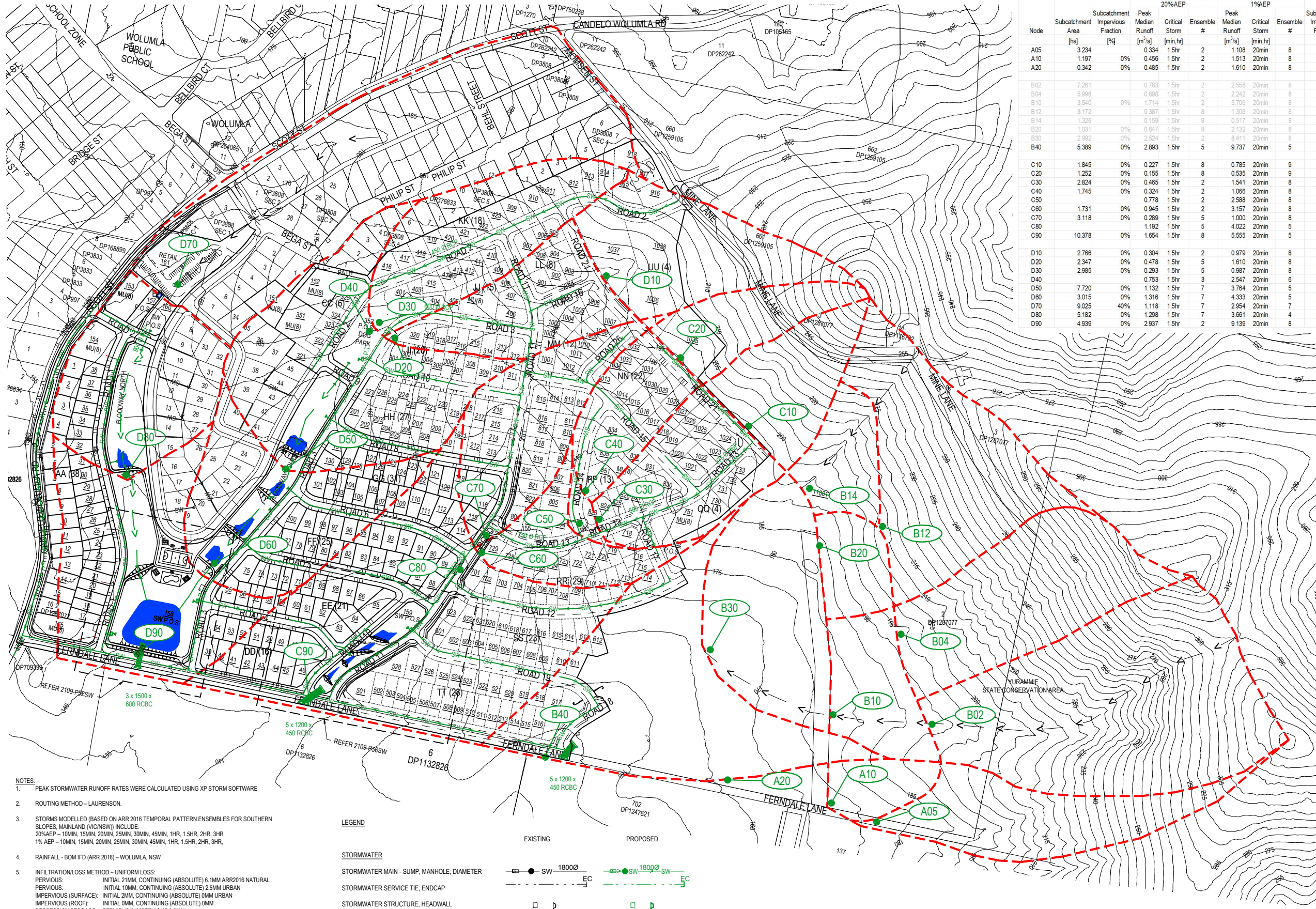


po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT JUNOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE SWP.O.S. - 159 STORMWATER CONTROL FACILITY

DRAWING NUMBER 2109-P56SW

AMENDMENT: B



RESULTS:

Node	Subcatchment Area [ha]	Subcatchment Impervious Fraction [%]	Peak Median Runoff [m³/s]	20% AEP Critical Storm [min.hr]	Existing		20% AEP Critical Storm [min.hr]	Developed	
					Ensemble #	Peak Median Runoff [m³/s]		Ensemble #	Peak Median Runoff [m³/s]
A05	3.234		0.334	1.5hr	2	1.108	20min	8	0.334
A10	1.197	0%	0.456	1.5hr	2	1.513	20min	8	0.452
A20	0.342	0%	0.485	1.5hr	2	1.610	20min	8	0.486
B02	7.281		0.783	1.5hr	2	2.558	20min	8	0.783
B04	5.996		0.698	1.5hr	2	2.242	20min	8	0.698
B10	3.540	0%	1.714	1.5hr	2	5.706	20min	8	1.759
B12	3.172		0.387	1.5hr	8	1.306	20min	8	0.387
B14	1.326		0.159	1.5hr	8	0.517	20min	8	0.159
B20	1.031	0%	0.647	1.5hr	8	2.132	20min	8	0.648
B30	2.992	0%	2.524	1.5hr	2	8.411	20min	8	2.613
B40	5.389	0%	2.893	1.5hr	5	9.737	20min	5	3.181
C10	1.845	0%	0.227	1.5hr	8	0.785	20min	9	0.371
C20	1.252	0%	0.155	1.5hr	8	0.535	20min	9	0.405
C30	2.824	0%	0.465	1.5hr	2	1.541	20min	8	0.893
C40	1.745	0%	0.324	1.5hr	2	1.066	20min	8	0.629
C50			0.778	1.5hr	2	2.588	20min	8	1.465
C60	1.731	0%	0.945	1.5hr	2	3.157	20min	8	1.874
C70	3.118	0%	0.289	1.5hr	5	1.000	20min	8	0.712
C80			1.192	1.5hr	5	4.022	20min	5	2.440
C90	10.378	0%	1.654	1.5hr	8	5.555	20min	5	4.191
D10	2.786	0%	0.304	1.5hr	2	0.979	20min	8	0.520
D20	2.347	0%	0.478	1.5hr	5	1.610	20min	8	1.016
D30	2.985	0%	0.293	1.5hr	5	0.987	20min	8	0.683
D40			0.753	1.5hr	3	2.547	20min	6	1.553
D50	7.720	0%	1.132	1.5hr	7	3.764	20min	5	2.795
D60	3.015	0%	1.316	1.5hr	7	4.333	20min	5	3.262
D70	9.025	40%	1.118	1.5hr	7	2.954	20min	7	1.118
D80	5.182	0%	1.298	1.5hr	7	3.661	20min	4	1.610
D90	4.939	0%	2.937	1.5hr	2	9.139	20min	8	4.827

- NOTES:
- PEAK STORMWATER RUNOFF RATES WERE CALCULATED USING XP STORM SOFTWARE
 - ROUTING METHOD - LAURENSEN.
 - STORMS MODELLED (BASED ON ARR 2016 TEMPORAL PATTERN ENSEMBLES FOR SOUTHERN SLOPES, MAINLAND (VIC/NSW)) INCLUDE:
20% AEP - 10MIN, 15MIN, 20MIN, 25MIN, 30MIN, 45MIN, 1HR, 1.5HR, 2HR, 3HR
1% AEP - 10MIN, 15MIN, 20MIN, 25MIN, 30MIN, 45MIN, 1HR, 1.5HR, 2HR, 3HR
 - RAINFALL - BOM IFD (ARR 2016) - WOLUMLA, NSW
 - INFILTRATION/LOSS METHOD - UNIFORM LOSS:
PERVIOUS: INITIAL 21MM, CONTINUING (ABSOLUTE) 6.1MM ARR2016 NATURAL
PERVIOUS: INITIAL 10MM, CONTINUING (ABSOLUTE) 2.5MM URBAN
IMPERVIOUS (SURFACE): INITIAL 2MM, CONTINUING (ABSOLUTE) 0MM URBAN
IMPERVIOUS (ROOF): INITIAL 0MM, CONTINUING (ABSOLUTE) 0MM
DEPRESSION STORAGE: PERVIOUS & IMPERVIOUS 0.0MM.
 - IMPERVIOUS FRACTION - AS PER TABLE.
 - TOTAL SIMULATION TIME - 4 HOURS
 - STORMWATER MODELLING DID NOT INCLUDE ANY SURFACE WATER STORAGE
 - OPEN CHANNEL FLOW CALCULATIONS - MANNINGS, n=0.011 (RCP), 0.015 (PAVEMENT), 0.035 (GRASS).

LEGEND

STORMWATER

STORMWATER MAIN - SUMP, MANHOLE, DIAMETER

STORMWATER SERVICE TIE, ENDCAP

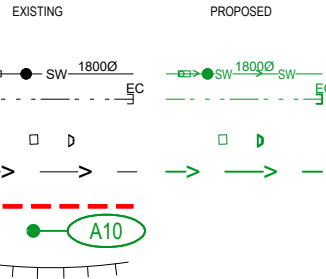
STORMWATER STRUCTURE, HEADWALL

GULLY, TABLE DRAIN OVERLAND FLOW PATH, DIRECTION

CATCHMENT BOUNDARY

CATCHMENT NODE

EMBANKMENT



DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

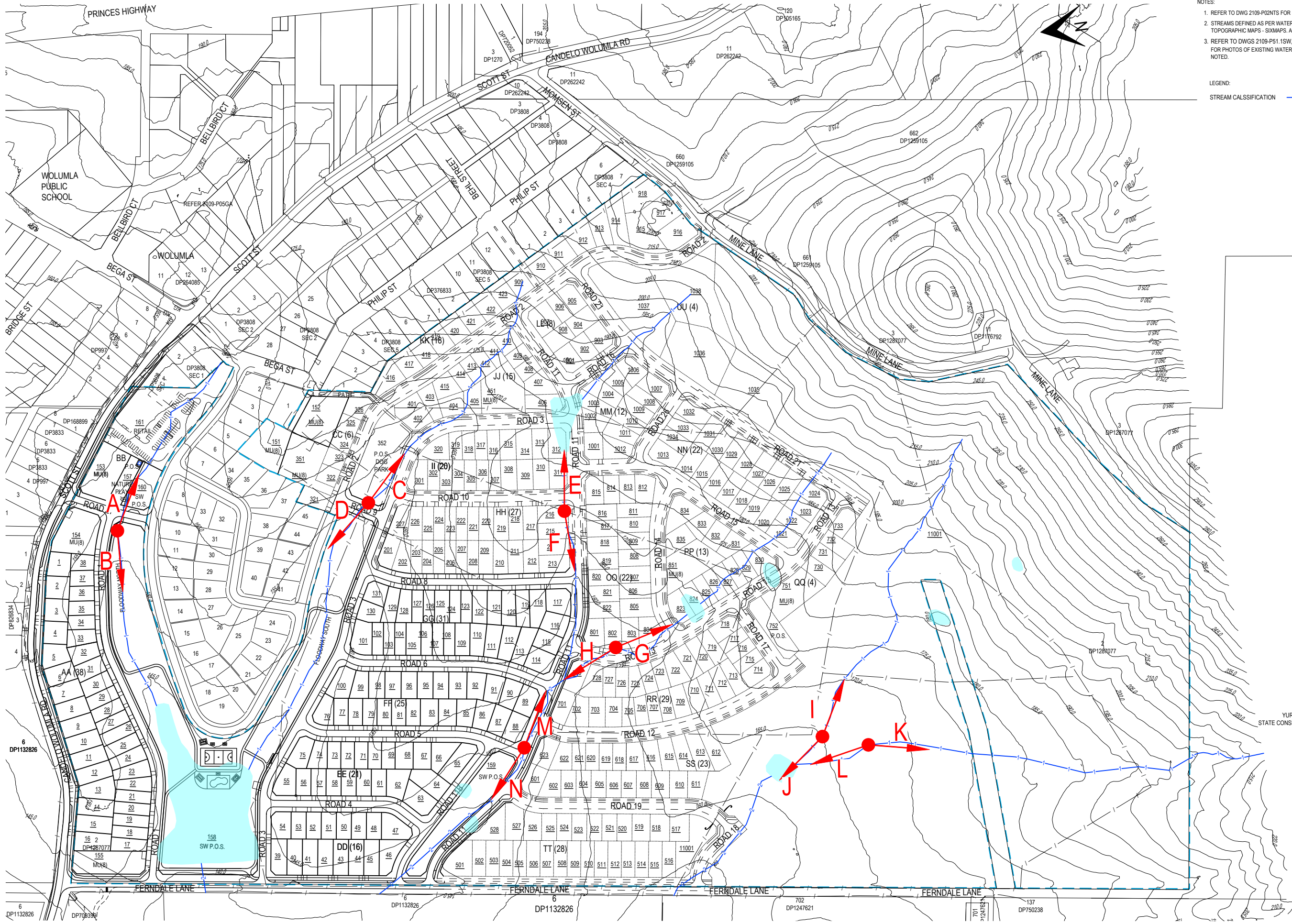


Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGA55



po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT JUNIOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE STORMWATER CATCHMENT PLAN
DRAWING NUMBER 2109-P50SW
AMENDMENT: B

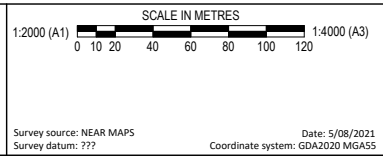


- NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.
 2. STREAMS DEFINED AS PER WATERCOURSES PRESENTED ON 1:25000 TOPOGRAPHIC MAPS - SIXMAPS, AS AT JULY 2023.
 3. REFER TO DWGS 2109-P51.1SW, 2109-P51.2SW, 2109-P51.3SW & 2109-P51.4SW FOR PHOTOS OF EXISTING WATERCOURSE AT WAYPOINTS & VIEW DIRECTION AS NOTED.
- LEGEND:
- STREAM CLASSIFICATION

D					
C					
B	WATERCOURSE PIC WAYPOINTS, LAYOUT UPDATED	VAO	AG	VAO	21/03/2025
A	LAYOUT ADJUSTMENTS, WATER FRONTLAND & VRZ ADDED	VAO	AG	VAO	09/11/2023
-	INITIAL ISSUE	VAO	AG	VAO	12/10/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



CLIENT	JUNIOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	STORMWATER - STREAM CLASSIFICATION
DRAWING NUMBER	2109-P51SW
AMENDMENT:	B



PIC A



PIC C



PIC B



PIC D

D						DO NOT SCALE Conditions of Use OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE. This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.	Survey source: NEAR MAPS Survey datum: ???	Date: 5/08/2021 Coordinate system: GDA2020 MGASS5	Survey source: SPATIAL COLLABORATION PORTALNSW GOVT Survey datum: ???	Date: 10/08/2021 Coordinate system: GDA2020 MGASS5	osgood civil resource engineering OCRE po box 181 bermagui nsw 2546 p 02 6494 0239 m 0408 361 612	CLIENT JUNOR INVESTMENTS PTY LTD PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION TITLE EXISTING WATERCOURSE PHOTOS - SHEET 1	DRAWING NUMBER 2109-P51.1SW AMENDMENT:	
C														
B														
A														
- INITIAL ISSUE		AG	AG	VAO	VAO									21/03/2025
No. REVISION		DESIGNED	DRAWN	CHECKED	APPROVED									DATE
Date: Friday, 21 March 2025 4:24:12 PM		User: AG		File: H:\2021\2109_Wolumla\099_2109Swnc061_dcasVmc2109-P51SW.dwg										



D						DO NOT SCALE Conditions of Use OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE. This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.		asgoad civil resource engineering  po box 181 bermagui nsw 2546 p 02 6494 0239 m 0408 361 612	CLIENT	JUNOR INVESTMENTS PTY LTD
C									PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
B									TITLE	
A										EXISTING WATERCOURSE PHOTOS - SHEET 2
-	INITIAL ISSUE	AG	AG	VAO	VAO				21/03/2025	DRAWING NUMBER
No	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE				
Survey source: NEAR MAPS Survey datum: ???							Date: 5/08/2021 Coordinate system: GDA2020 MGA55	Date: 10/08/2021 Coordinate system: GDA2020 MGA55		



PIC I



PIC K

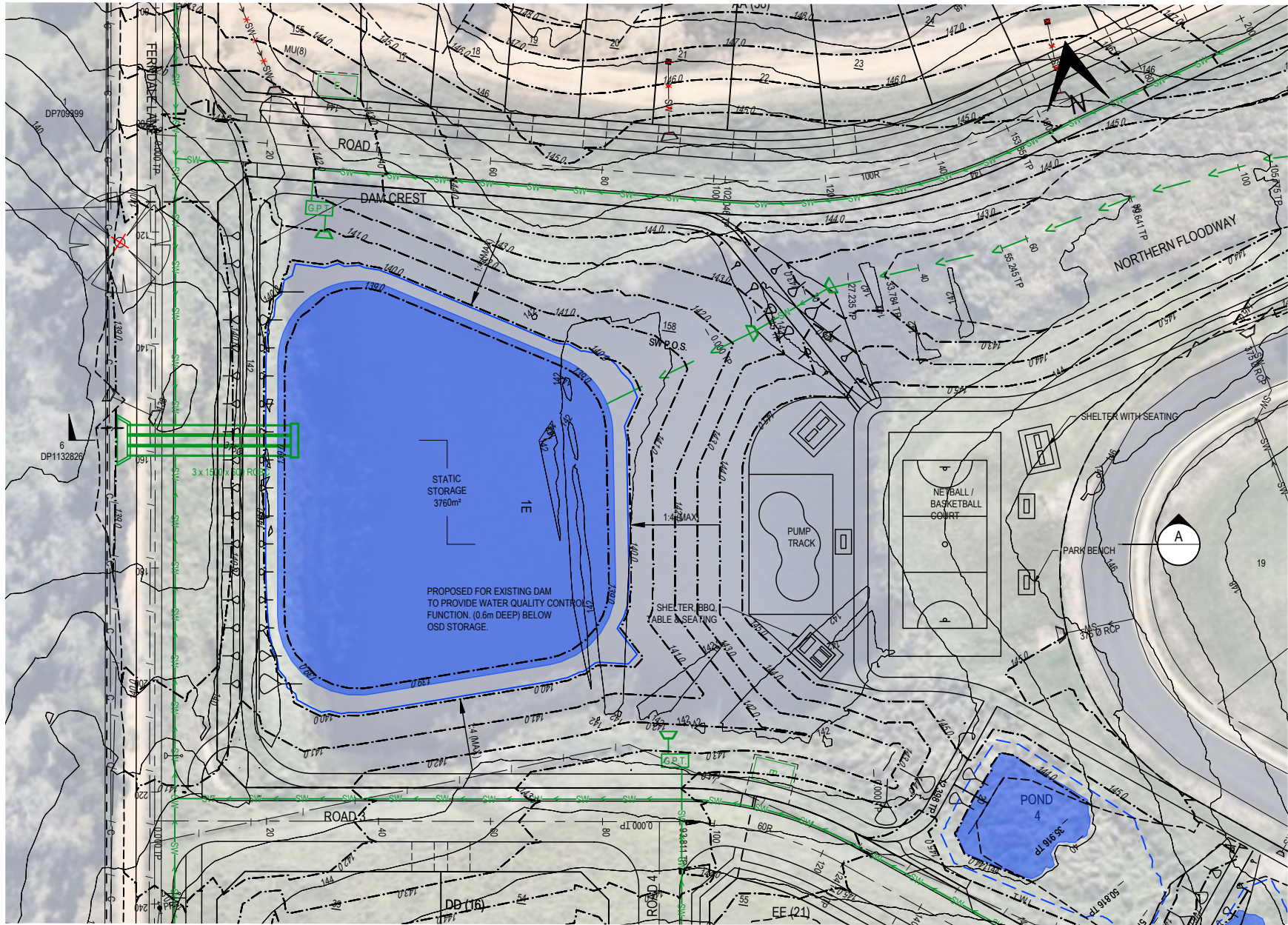


PIC J

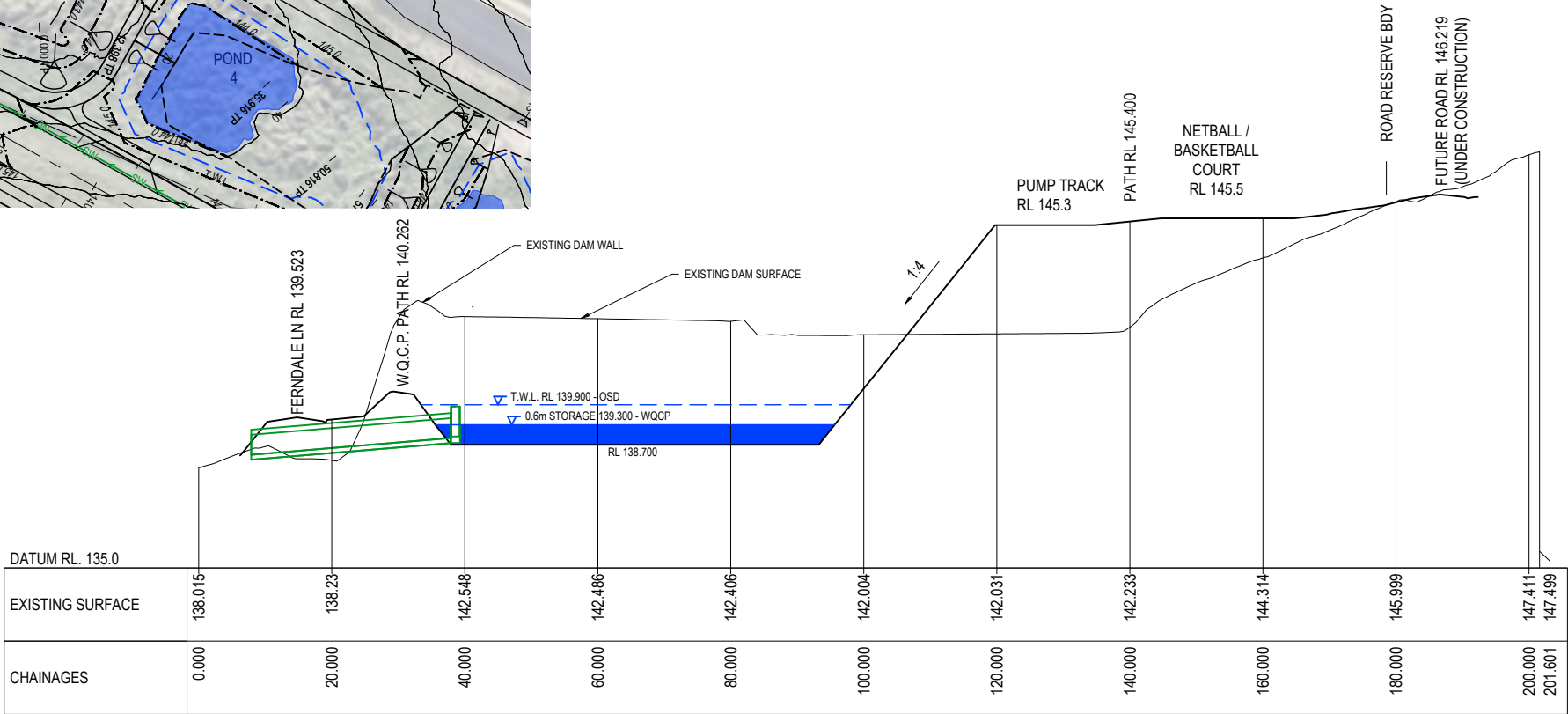


PIC L

[illegible]



- NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.
- CATCHMENT D
- MODIFIED DAM AREA OSD STORAGE
- RL 139.30 - RL 139.90
- 2458m³
 - FLOODWAY NORTH OSD STORAGE (REFER 2109-P53SW)
POND 2 - 125m³
 - FLOODWAY SOUTH OSD STORAGE (REFER 2109-P54SW)
POND 4, 5, 6, 7, - 1207m³
- TOTAL OSD VOLUME 3790m³.
- OSD REQUIREMENT
1% AEP 20min #8 EVENT - 3581m³.



DATUM RL. 135.0	0.000	20.000	40.000	60.000	80.000	100.000	120.000	140.000	160.000	180.000	200.000	201.601
EXISTING SURFACE	138.015	138.23	142.548	142.486	142.406	142.004	142.031	142.233	144.314	145.999	147.411	147.499
CHAINAGES	0.000	20.000	40.000	60.000	80.000	100.000	120.000	140.000	160.000	180.000	200.000	201.601

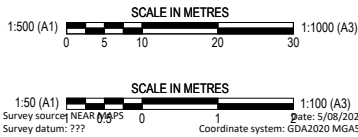
SCALE 1:500 HORZ (A1)
1:100 VERT (A1)

SECTION A

D					
C	TREE 36 RETAINED	AG	AG	VAO	VAO
B	LAYOUT UPDATED	VAO	AG	VAO	VAO
A	LAYOUT ADJUSTMENTS, IMAGE, PATHS, SW MAINS UPDATED, AMENITIES ADDED	VAO	AG	VAO	VAO
-	INITIAL ISSUE	VAO	AG	VAO	VAO
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

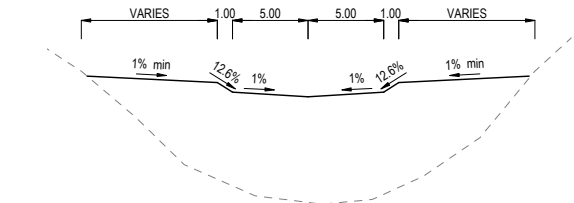
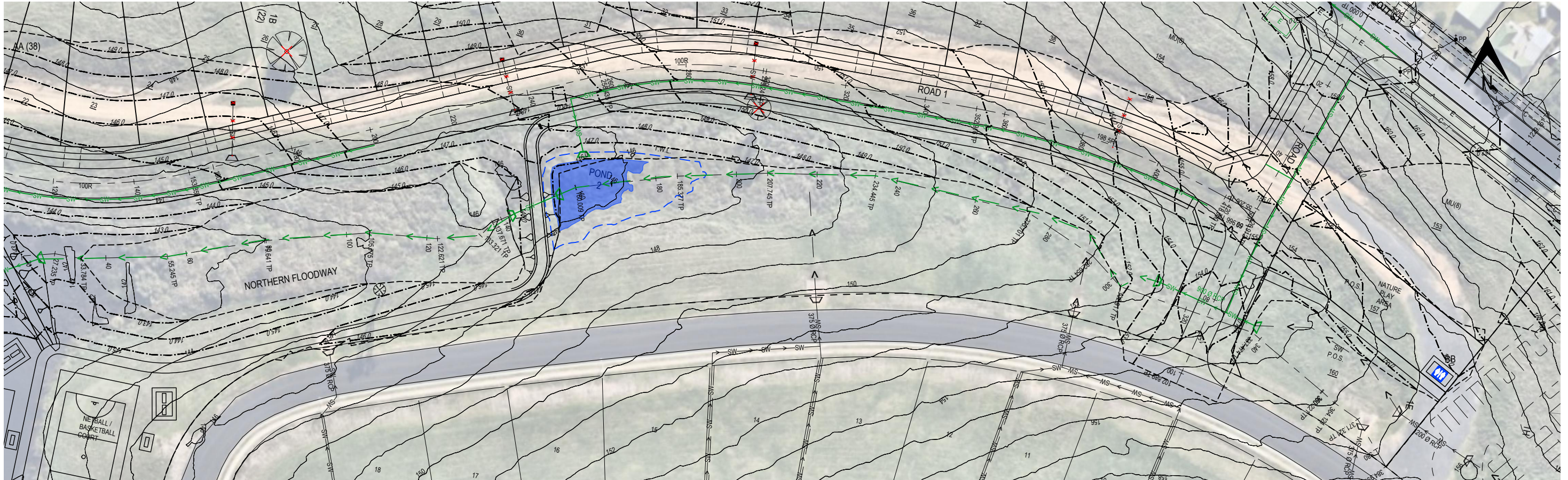


Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???



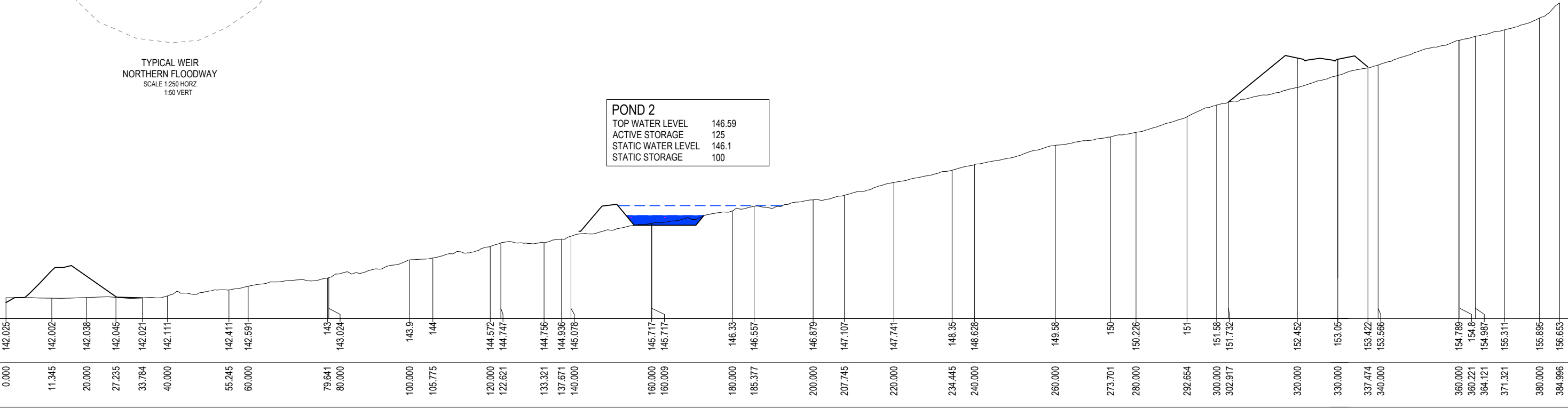
po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	EXISTING DAM ARRANGEMENT
DRAWING NUMBER	2109-P52SW
AMENDMENT:	C



TYPICAL WEIR
NORTHERN FLOODWAY
SCALE 1:250 HORIZ
1:50 VERT

POND 2	
TOP WATER LEVEL	146.59
ACTIVE STORAGE	125
STATIC WATER LEVEL	146.1
STATIC STORAGE	100



NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.

D						
C	TREE 36 RETAINED	AG	AG	VAO	VAO	14/04/2025
B	LAYOUT UPDATED	VAO	AG	VAO	VAO	21/03/2025
A	LAYOUT ADJUSTMENTS, IMAGE, PATHS, SW MAINS UPDATED	VAO	AG	VAO	VAO	09/11/2023
-	INITIAL ISSUE	VAO	AG	VAO	VAO	12/10/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGAS5

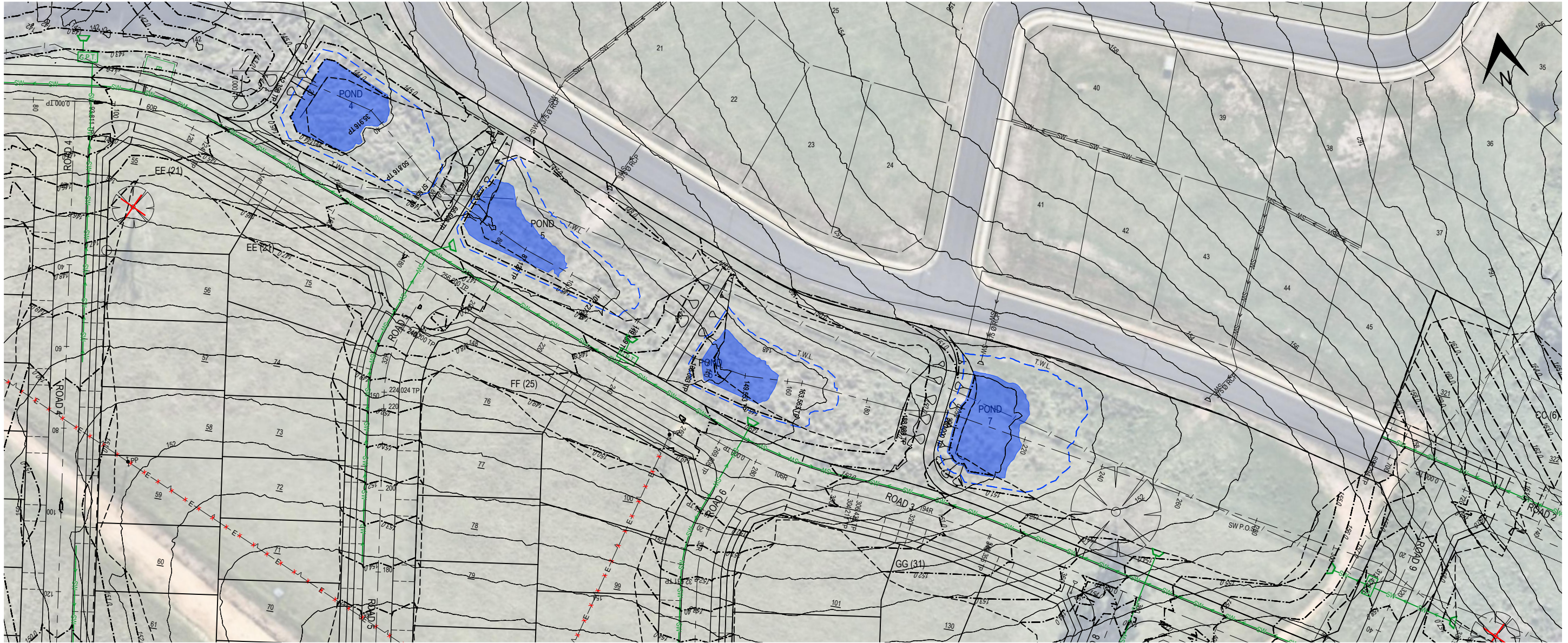


Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???
Date: 10/08/2021
Coordinate system: GDA2020 MGAS5



po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	NORTHERN FLOODWAY PLAN
DRAWING NUMBER	2109-P53SW
AMENDMENT:	C

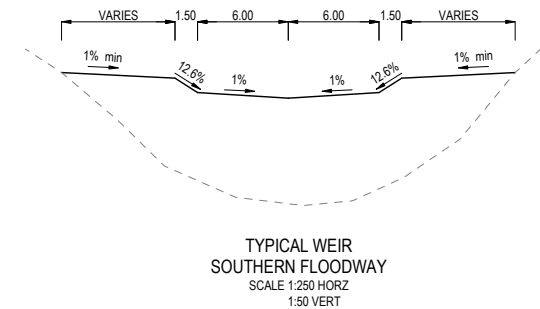
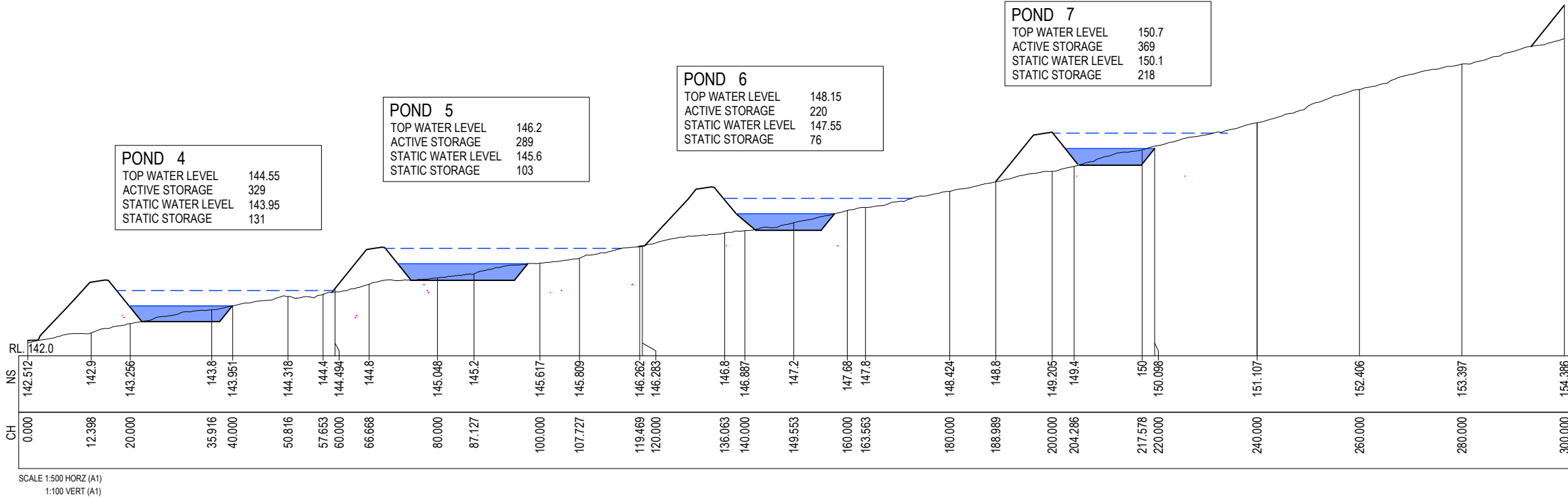


POND 4
TOP WATER LEVEL 144.55
ACTIVE STORAGE 329
STATIC WATER LEVEL 143.95
STATIC STORAGE 131

POND 5
TOP WATER LEVEL 146.2
ACTIVE STORAGE 289
STATIC WATER LEVEL 145.6
STATIC STORAGE 103

POND 6
TOP WATER LEVEL 148.15
ACTIVE STORAGE 220
STATIC WATER LEVEL 147.55
STATIC STORAGE 76

POND 7
TOP WATER LEVEL 150.7
ACTIVE STORAGE 369
STATIC WATER LEVEL 150.1
STATIC STORAGE 218

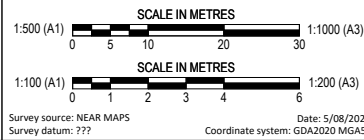


NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.

No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
D						
C						
B	LAYOUT UPDATED, UPDATED GRADING, POND 8 REMOVED	VAO	AG	VAO	VAO	21/03/2025
A	LAYOUT ADJUSTMENTS, IMAGE, PATHS, SW MAINS UPDATED	VAO	AG	VAO	VAO	09/11/2023
-	INITIAL ISSUE	VAO	AG	VAO	VAO	12/10/2022

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

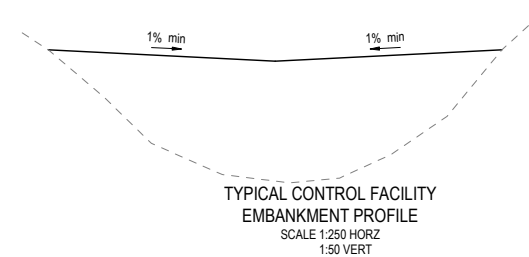
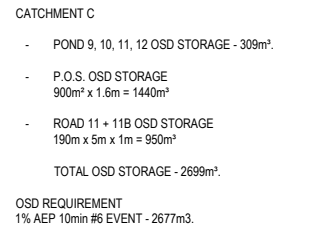
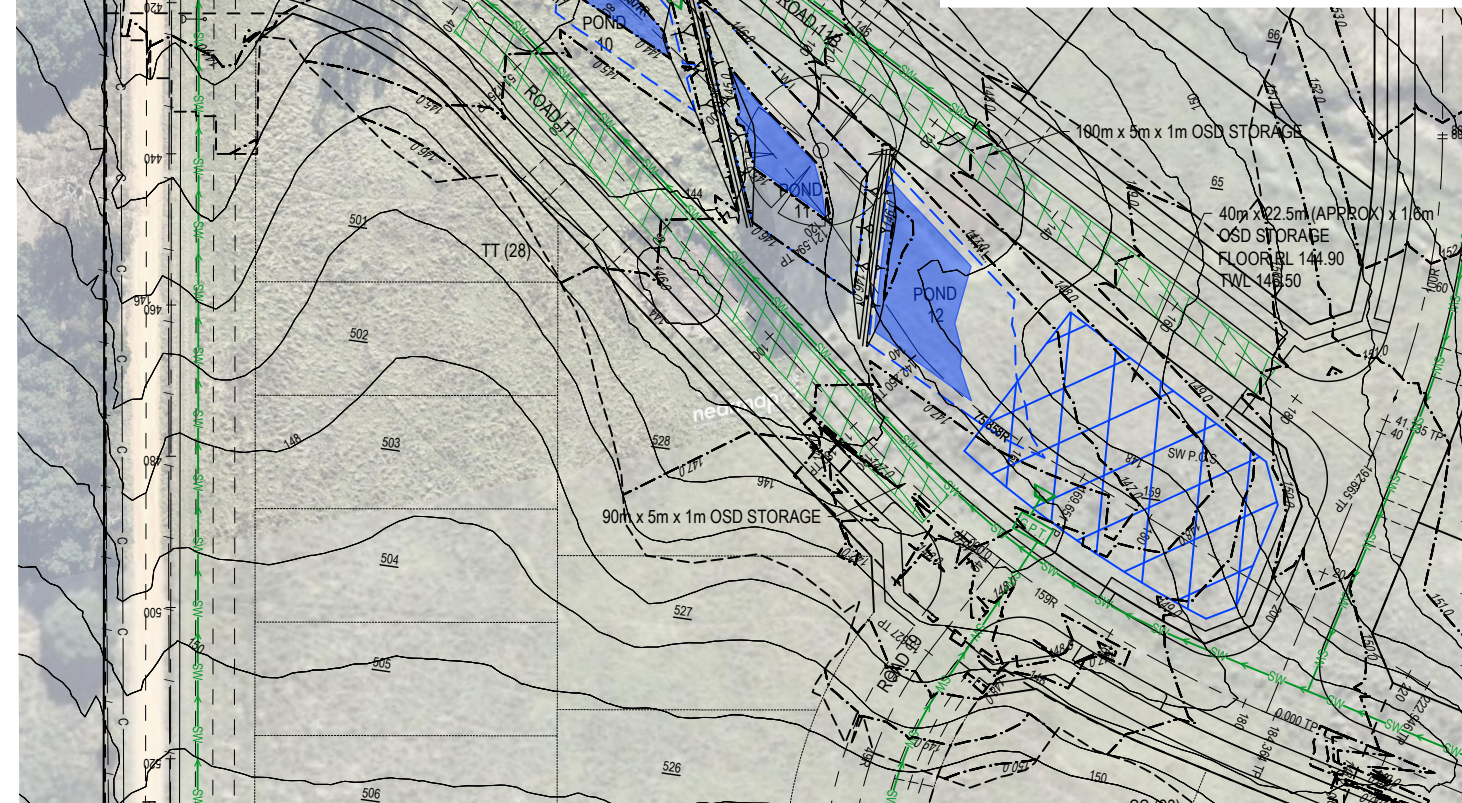


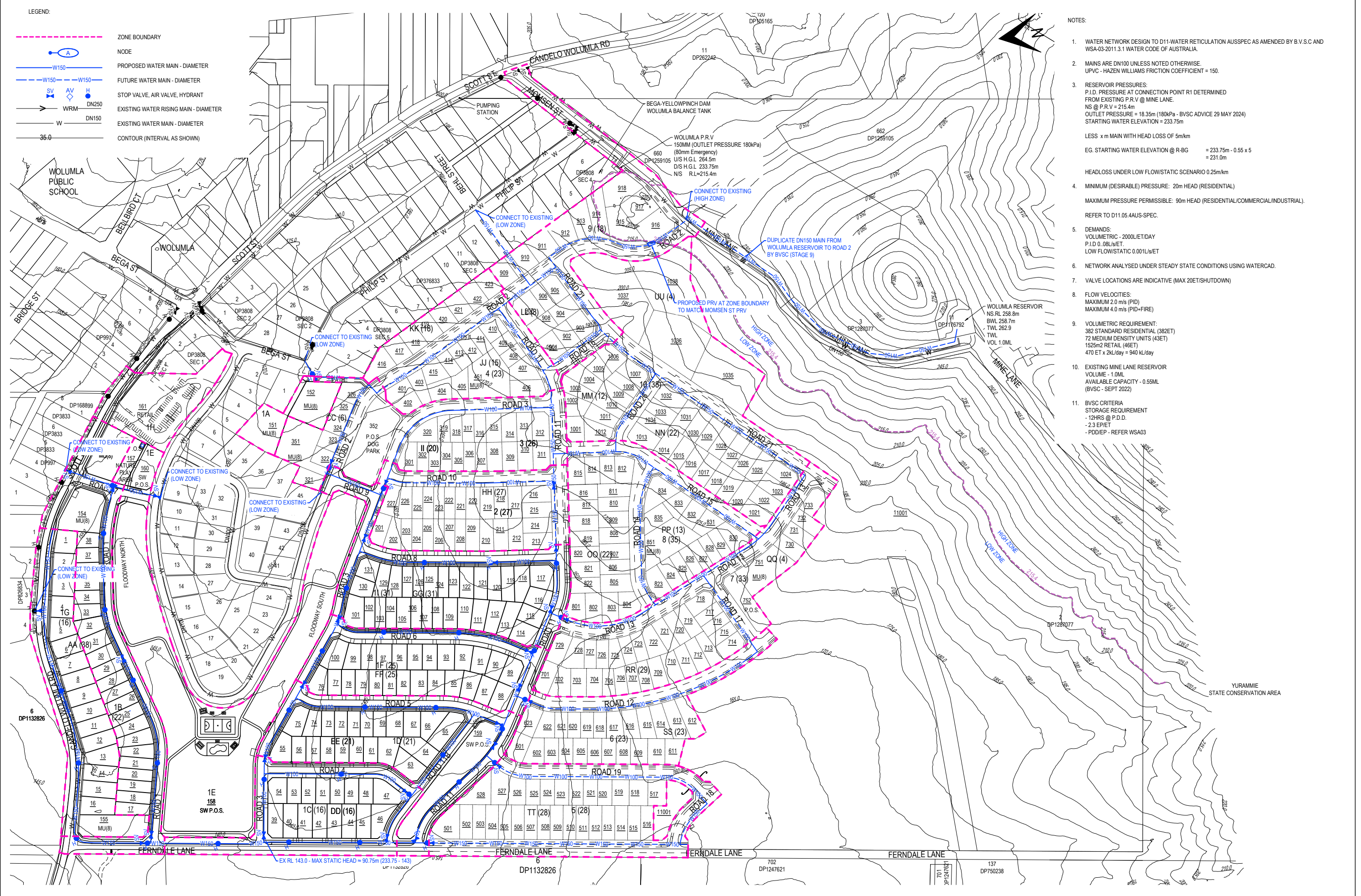
Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGASS

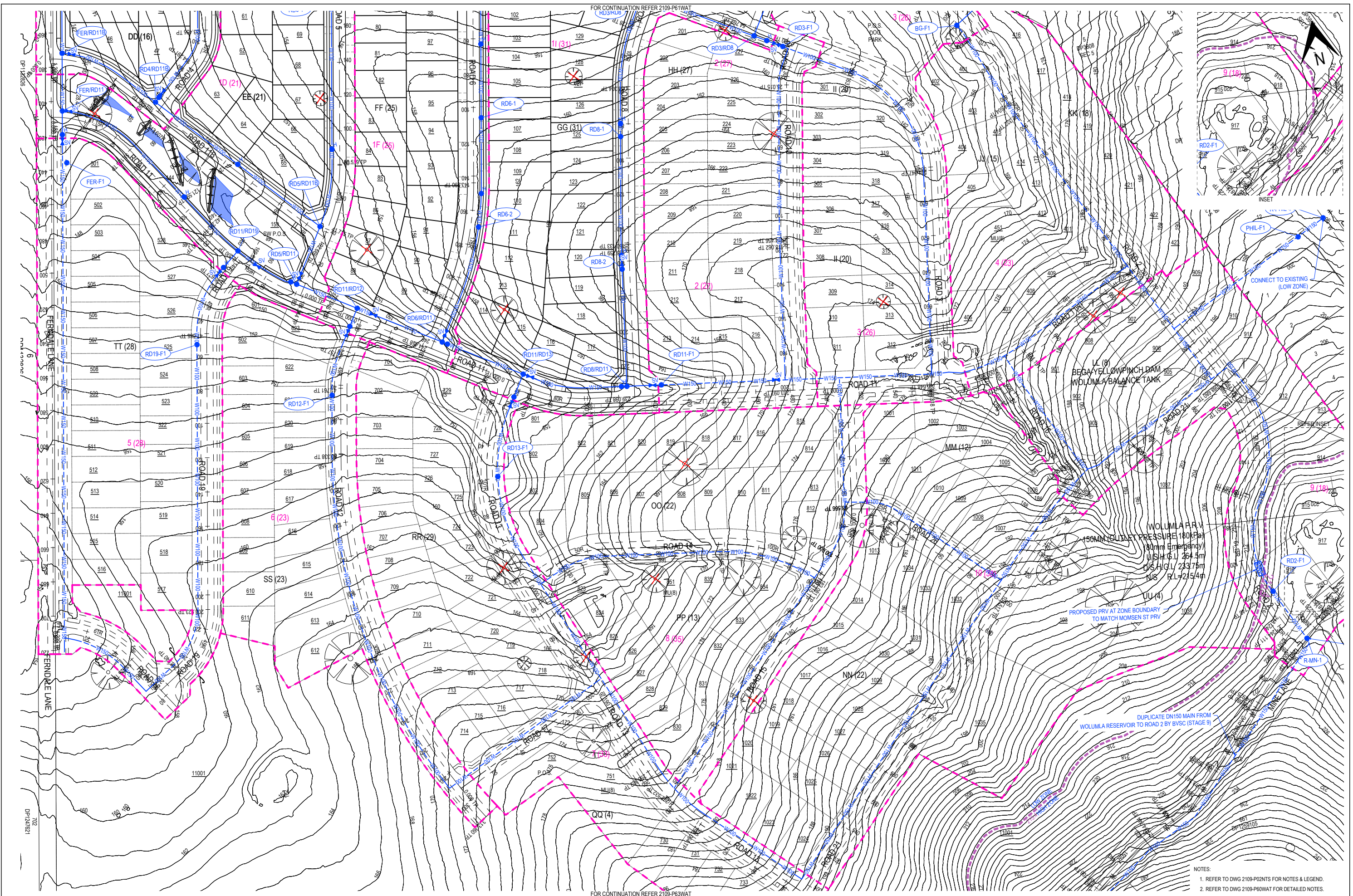


po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	SOUTHERN FLOODWAY PLAN
DRAWING NUMBER	2109-P54SW
AMENDMENT:	B

[illegible]





D					
C					
B					
A	LAYOUT UPDATED	VAO	AG	VAO	VAO
-	INITIAL ISSUE	VAO	AG	VAO	VAO
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
Date: Wednesday, 26 March 2025 1:41:51 PM		User: AG		File: H:\2021\2109 Volume\059 2109Ssmc\061 dwe5Smc\2109-P6\1WAT_dwo	

DO NOT SCALE

Conditions of Use

OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.

This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

SCALE IN METRES

1:1000 (A1) 0 5 10 20 30 40 60 1:2000 (A3)

Survey source: NEAR MAPS
Survey datum: ???

Date: 5/08/2021
Coordinate system: GDA2020 MGA55



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ??? Coordinate

Date: 10/08/2021
m: GDA2020 MGA55



po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	

WATER MASTER PLAN - SHEET 2

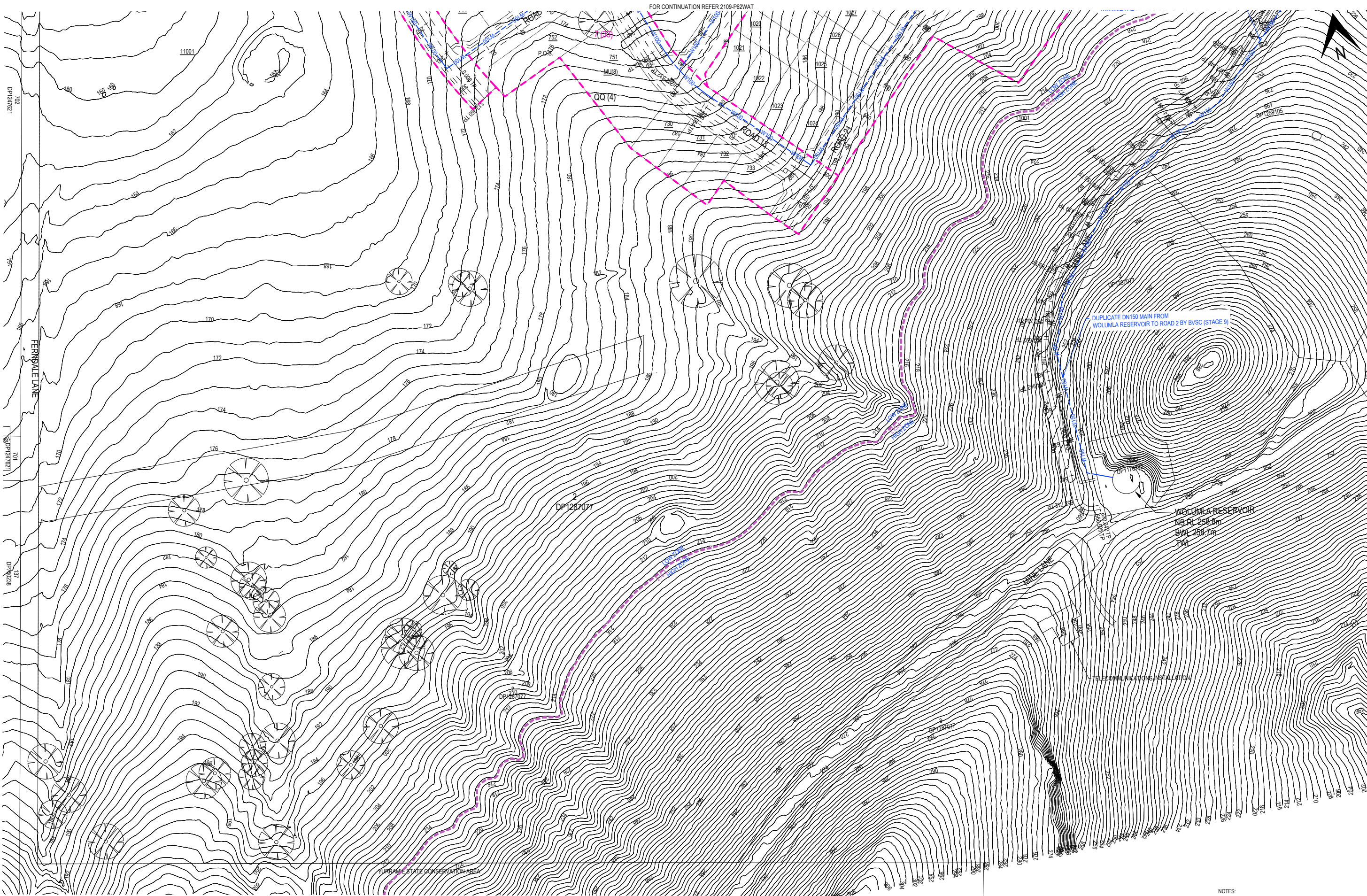
DRAWING NUMBER 2109-P62WAT

AMENDMENT: A

Date: Wednesday, 26 March 2025 1:41:51 PM

User: AG

File: H:\2021\2109_Wolumla\099_2109Sync\061_dwgsSync\2109-P61WAT.dwg

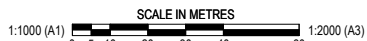


- NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.
 2. REFER TO DWG 2109-P60WAT FOR DETAILED NOTES.

D						
C						
B						
A	LAYOUT UPDATED	VAO	AG	VAO	VAO	21/03/2025
-	INITIAL ISSUE	VAO	AG	VAO	VAO	09/11/2023
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???
Date: 5/08/2021
Coordinate system: GDA2020 MGAS5



Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???
Date: 10/08/2021
Coordinate system: GDA2020 MGAS5



osgood civil resource engineering
po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

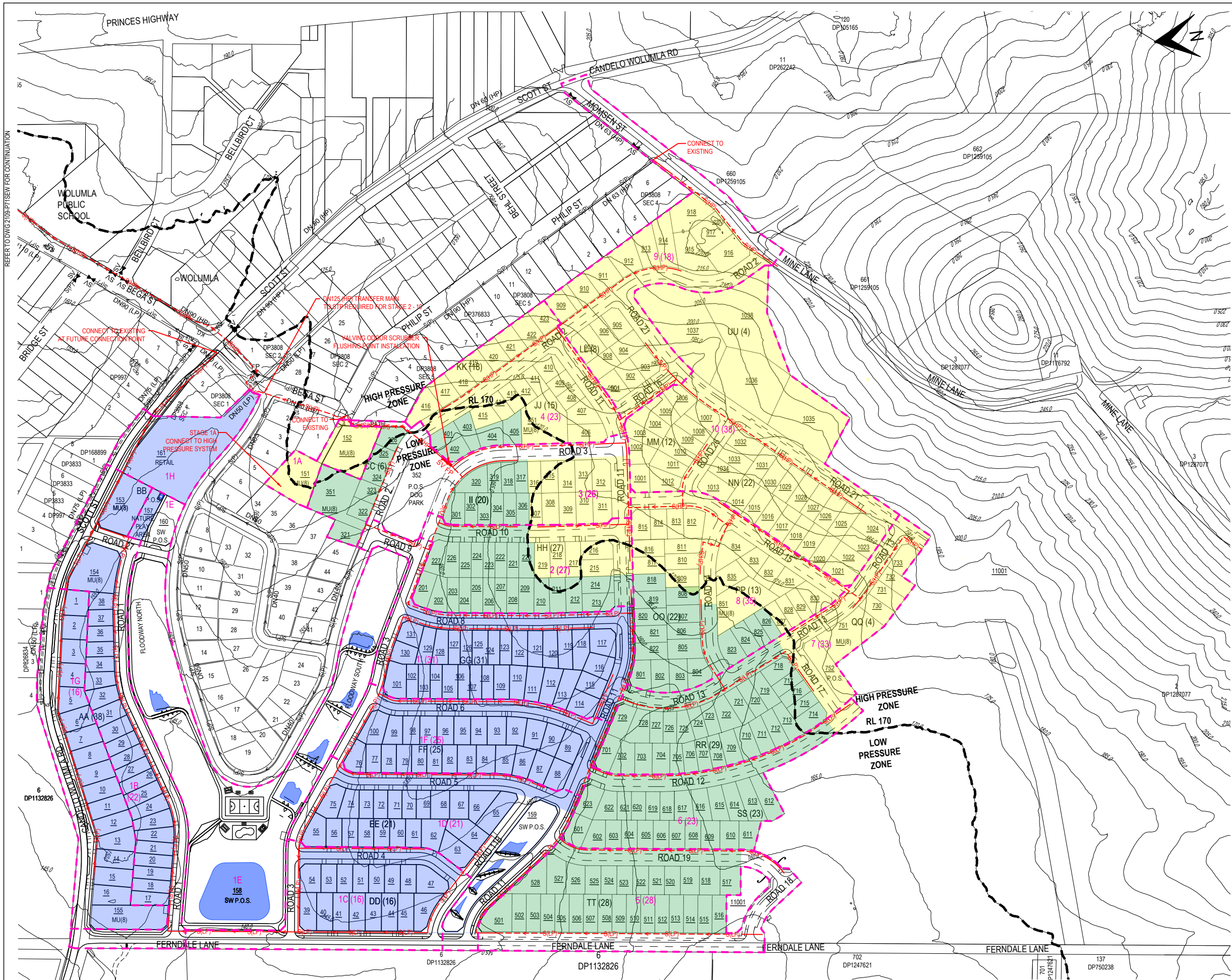
CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	WATER MASTER PLAN - SHEET 3
DRAWING NUMBER	2109-P63WAT
AMENDMENT:	A

JUNCTIONS							PID												
Label	Is Active?	Elevation (m)	Demand (L/s)	Hydraulic Grade (m)	Pressure (kPa)	Pressure Head (m)	Label	Is Active?	Length (m)	Start Node	Stop Node	Diameter (mm)	Material	Hazen-Williams C	Flow (L/s)	Velocity (m/s)	Headloss Gradient (m/m)		
BG-1	TRUE	175.5	0.40	230.84	541.60	55.34 MIN	P-227	TRUE	122	RD2/RD9	R-WS-2	100	PVC	150	10.457	1.331	0.016	MAX	
BG-F1	TRUE	169.0	0.40	230.31	600.00	61.31	P-179	TRUE	50	R-WS-1	RD1/RD27	150	PVC	150	20.405	1.155	0.008		
CW/FER	TRUE	144.5	0.32	228.25	819.70	83.75	P-283	TRUE	21	R-BG	BG-1	150	PVC	150	20.040	1.134	0.007		
CW-1	TRUE	155.0	0.56	228.25	716.90	73.25	P-284	TRUE	75	BG-1	BG-F1	150	PVC	150	19.640	1.111	0.007		
CW-2	TRUE	152.0	0.40	228.25	746.20	76.25	P-228(1)	TRUE	18	RD2/RD9	BG-F1	150	PVC	150	-19.240	1.089	0.007		
FER/RD1	TRUE	142.5	0.96	228.25	839.30	85.75	P-224	TRUE	66	RD3/RD10	rd3/rd9	100	PVC	150	-8.384	1.067	0.011		
FER/RD11	TRUE	142.0	0.08	228.24	844.00	86.24	P-223	TRUE	91	RD3/RD8	RD3/RD10	100	PVC	150	-7.824	0.996	0.009		
FER/RD11B	TRUE	142.0	0.32	228.24	844.00	86.24 MAX	P-180	TRUE	57	RD1/RD27	R-SCO-2	150	PVC	150	14.282	0.808	0.004		
FER/RD3	TRUE	142.5	0.32	228.24	839.20	85.74	P-194	TRUE	60	RD1-3	RD1/RD27	100	PVC	150	-5.804	0.739	0.005		
RD1/RD27	TRUE	154.5	0.32	229.72	736.20	75.22	P-193	TRUE	91	RD1-2	RD1-3	100	PVC	150	-5.004	0.637	0.004		
RD1-1	TRUE	147.5	0.96	228.27	793.40	81.07	P-192	TRUE	148	RD1-1	RD1-2	100	PVC	150	-4.364	0.556	0.003		
RD11/RD12	TRUE	148.5	0.48	228.24	780.40	79.74	P-222	TRUE	88	RD3/RD6	RD3/RD8	100	PVC	150	-4.111	0.523	0.003		
RD11/RD13	TRUE	155.5	0.64	228.25	712.00	72.75	P-287	TRUE	61	RD2/RD9	rd3/rd9	150	PVC	150	8.384	0.474	0.001		
RD11/RD19	TRUE	146.0	0.24	228.24	804.90	82.24	P-191	TRUE	158	FER/RD1	RD1-1	100	PVC	150	-3.404	0.433	0.002		
RD1-2	TRUE	150.0	0.64	229.03	773.50	79.03	P-278	TRUE	76	RD8-1	RD3/RD8	100	PVC	150	-3.313	0.422	0.002		
RD1-3	TRUE	154.0	0.80	229.40	737.90	75.40	P-277	TRUE	77	RD8-2	RD8-1	100	PVC	150	-2.833	0.361	0.001		
RD2/RD9	TRUE	169.0	0.40	230.19	588.80	61.19	P-302	TRUE	76	RD8/RD11	RD8-2	100	PVC	150	-1.953	0.249	0.001		
RD3/RD10	TRUE	157.0	0.56	229.40	708.60	72.40	P-221	TRUE	99	RD3/RD5	RD3/RD6	100	PVC	150	-1.841	0.234	0.001		
RD3/RD4	TRUE	144.5	0.32	228.24	819.60	83.74	P-276	TRUE	77	RD8-1	RD3/RD6	100	PVC	150	-1.789	0.228	0.001		
RD3/RD5	TRUE	146.0	0.40	228.25	805.00	82.25	P-275	TRUE	77	RD6-2	RD6-1	100	PVC	150	-1.149	0.146	0.000		
RD3/RD6	TRUE	149.0	0.48	228.31	776.20	79.31	P-254(2)	TRUE	61	RD8/RD11	RD11/RD13	150	PVC	150	1.953	0.111	0.000		
RD3/RD8	TRUE	154.0	0.40	228.56	729.70	74.56	P-270	TRUE	82	RD5-1	RD3/RD5	100	PVC	150	-0.866	0.110	0.000		
rd3/rd9	TRUE	160.0	0.00	230.10	686.00	70.10	P-195	TRUE	152	FER/RD1	FER/RD3	150	PVC	150	1.536	0.087	0.000		
RD4/RD11B	TRUE	145.0	0.56	228.24	814.60	83.24	P-255(2)	TRUE	42	RD8/RD11	RD11/RD12	150	PVC	150	1.502	0.085	0.000		
RD4-1	TRUE	150.5	0.72	228.24	760.80	77.74	P-267	TRUE	36	RD5/RD11	RD5/RD11B	100	PVC	150	0.662	0.084	0.000		
RD5/RD11	TRUE	147.0	0.08	228.24	795.10	81.24	P-255(1)	TRUE	63	RD11/RD13	RD6/RD11	150	PVC	150	1.313	0.074	0.000		
RD5/RD11B	TRUE	151.0	0.08	228.24	755.90	77.24	P-220	TRUE	97	RD3/RD4	RD3/RD5	100	PVC	150	-0.575	0.073	0.000		
RD5/RD7	TRUE	152.0	0.56	228.24	746.10	76.24	P-272	TRUE	89	RD4-1	RD3/RD4	100	PVC	150	-0.563	0.072	0.000		
RD5-1	TRUE	154.0	0.72	228.24	726.50	74.24	P-273	TRUE	62	FER/RD11B	RD4/RD11B	100	PVC	150	0.549	0.070	0.000		
RD6/RD11	TRUE	151.3	0.00	228.24	752.90	76.93	P-256	TRUE	38	RD11/RD12	RD5/RD11	150	PVC	150	1.022	0.058	0.000		
RD6-1	TRUE	158.0	0.64	228.27	687.70	70.27	P-268	TRUE	35	RD5/RD11B	RD5/RD7	100	PVC	150	0.414	0.053	0.000		
RD6-2	TRUE	159.5	0.96	228.24	672.80	68.74	P-190	TRUE	67	CW/FER	FER/RD1	150	PVC	150	-0.907	0.051	0.000		
RD8/RD11	TRUE	160.0	0.00	228.25	667.70	68.22	P-196	TRUE	142	FER/RD3	FER/RD11B	150	PVC	150	0.909	0.051	0.000		
RD8-1	TRUE	160.0	0.48	228.42	669.60	68.42	P-280	TRUE	105	R-WS-1	WS-1	100	PVC	150	0.320	0.041	0.000		
RD8-2	TRUE	167.5	0.88	228.31	595.10	60.81	P-219	TRUE	80	FER/RD3	RD3/RD4	100	PVC	150	0.308	0.039	0.000		
WS-1	TRUE	151.5	0.32	230.10	769.20	78.60	P-189	TRUE	160	CW-2	CW/FER	150	PVC	150	-0.587	0.033	0.000		
							P-301	TRUE	79	RD6/RD11	RD6-2	100	PVC	150	-0.189	0.024	0.000		
							P-181	TRUE	14	R-SCO-1	CW-1	150	PVC	150	0.373	0.021	0.000		
							P-274	TRUE	121	RD4/RD11B	RD5/RD11B	100	PVC	150	-0.168	0.021	0.000		
							P-271	TRUE	89	RD4/RD11B	RD4-1	100	PVC	150	0.157	0.020	0.000		
R-BG	TRUE	231.0	20.04	231.00			P-269	TRUE	93	RD5/RD7	RD5-1	100	PVC	150	-0.146	0.019	0.000		
R-SCO-1	TRUE	228.3	0.37	228.25			P-257	TRUE	40	RD5/RD11	RD11/RD19	150	PVC	150	0.280	0.016	0.000		
R-SCO-2	TRUE	229.5	-14.28	229.50			P-182	TRUE	87	CW-1	CW-2	150	PVC	150	-0.187	0.011	0.000		
R-WS-1	TRUE	230.1	20.73	230.10			P-197	TRUE	33	FER/RD11B	FER/RD11	150	PVC	150	0.040	0.002	0.000		
R-WS-2	TRUE	228.3	-10.46	228.25			P-258	TRUE	134	RD11/RD19	FER/RD11	150	PVC	150	0.040	0.002	0.000		

JUNCTIONS								PID + FIRE @ RD8-2 PIPES															
Label	Is Active?	Elevation (m)	Demand (L/s)	Hydraulic Grade (m)	Pressure (kPa)	Pressure Head (m)		Label	Is Active?	Length		Start Node	Stop Node	Diameter (mm)	Material	Hazen-Williams C	Flow (L/s)	Velocity (m/s)	Headloss Gradient (m/m)				
BG-1	TRUE	175.5	0.72	230.71	540.30	55.21		P-224	TRUE	66	RD3/RD10	rd3/rd9	RD3/RD10	100	PVC	150	-18.006	2.293	0.043	MAX			
BG-F1	TRUE	169.0	0.72	229.75	594.50	60.75		P-223	TRUE	91	RD3/RD8	RD3/RD10	100	PVC	150	-16.956	2.159	0.039					
CW/FER	TRUE	144.5	0.60	226.00	797.70	81.50		P-302	TRUE	76	RD8/RD11	RD8-2	100	PVC	150	14.341	1.826	0.029					
CW-1	TRUE	155.0	1.05	228.11	715.50	73.11		P-278	TRUE	76	RD8-1	RD3/RD8	100	PVC	150	-12.759	1.625	0.023					
CW-2	TRUE	152.0	0.75	227.34	737.30	75.34		P-283	TRUE	21	R-BG	BG-1	150	PVC	150	27.789	1.573	0.013					
FER/RD1	TRUE	142.5	1.77	225.47	812.00	82.97	MAX	P-284	TRUE	75	BG-1	BG-F1	150	PVC	150	27.069	1.532	0.013					
FER/RD11	TRUE	142.0	0.00	222.97	792.40	80.97		P-277	TRUE	77	RD8-2	RD8-1	100	PVC	150	-11.859	1.510	0.020					
FER/RD11B	TRUE	142.0	0.60	223.06	793.40	81.06		P-228(1)	TRUE	18	RD2/RD9	BG-F1	150	PVC	150	-26.349	1.491	0.012					
FER/RD3	TRUE	142.5	0.60	223.79	795.50	81.29		P-195	TRUE	152	FER/RD1	FER/RD3	150	PVC	150	24.994	1.414	0.011					
RD1/RD27	TRUE	154.5	0.01	229.66	735.60	75.16		P-181	TRUE	14	R-SCO-1	CW-1	150	PVC	150	23.284	1.318	0.010					
RD1-1	TRUE	147.5	1.80	226.33	771.50	78.83		P-194	TRUE	60	RD1-3	RD1/RD27	100	PVC	150	-10.320	1.314	0.015					
RD11/RD12	TRUE	148.5	0.90	222.33	722.50	73.83		P-182	TRUE	87	CW-1	CW-2	150	PVC	150	-22.234	1.258	0.009					
RD11/RD13	TRUE	155.5	1.20	221.88	649.60	66.38		P-179	TRUE	50	R-WS-1	RD1/RD27	150	PVC	150	22.208	1.257	0.009					
RD11/RD19	TRUE	146.0	0.45	222.59	749.60	76.59		P-189	TRUE	160	CW-2	CW/FER	150	PVC	150	21.484	1.216	0.008					
RD1-2	TRUE	150.0	1.20	227.66	760.10	77.66		P-190	TRUE	67	CW/FER	FER/RD1	150	PVC	150	20.884	1.182	0.008					
RD1-3	TRUE	154.0	1.44	228.73	731.30	74.73		P-193	TRUE	91	RD1-2	RD1-3	100	PVC	150	-8.880	1.131	0.012					
RD2/RD9	TRUE	169.0	0.00	229.52	592.30	60.52		P-227	TRUE	122	RD2/RD9	R-WS-2	100	PVC	150	8.343	1.062	0.010					
RD3/RD10	TRUE	157.0	1.05	226.30	678.20	69.30		P-287	TRUE	61	RD2/RD9	rd3/rd9	150	PVC	150	18.006	1.019	0.006					
RD3/RD4	TRUE	144.5	0.60	223.03	768.50	78.53		P-219	TRUE	80	FER/RD3	RD3/RD4	100	PVC	150	7.934	1.010	0.010					
RD3/RD5	TRUE	146.0	0.75	222.66	750.20	76.66		P-192	TRUE	148	RD1-1	RD1-2	100	PVC	150	-7.680	0.978	0.009					
RD3/RD6	TRUE	149.0	0.90	222.59	720.20	73.59		P-196	TRUE	142	FER/RD3	FER/RD11B	150	PVC	150	16.459	0.931	0.005					
RD3/RD8	TRUE	154.0	0.75	222.77	673.00	68.77		P-255(1)	TRUE	63	RD11/RD13	RD6/RD11	150	PVC	150	-15.541	0.879	0.005					
rd3/rd9	TRUE	160.0	0.00	229.15	676.80	69.15		P-256	TRUE	38	RD11/RD12	RD5/RD11	150	PVC	150	-14.999	0.849	0.004					
RD4/RD11B	TRUE	145.0	1.05	222.90	762.40	77.90		P-254(2)	TRUE	61	RD8/RD11	RD11/RD13	150	PVC	150	-14.341	0.812	0.004					
RD4-1	TRUE	150.5	1.35	222.92	708.80	72.42		P-255(2)	TRUE	42	RD6/RD11	RD11/RD12	150	PVC	150	-14.099	0.798	0.004					
RD5/RD11	TRUE	147.0	0.15	222.49	738.80	75.49		P-191	TRUE	158	FER/RD1	RD1-1	100	PVC	150	-5.880	0.749	0.005					
RD5/RD11B	TRUE	151.0	0.15	222.57	700.50	71.57		P-197	TRUE	33	FER/RD11B	FER/RD11	150	PVC	150	11.922	0.675	0.003					
RD5/RD7	TRUE	152.0	1.05	222.57	690.70	70.57		P-258	TRUE	134	RD11/RD19	FER/RD11	150	PVC	150	-11.922	0.675	0.003					
RD5-1	TRUE	154.0	1.35	222.59	671.20	68.59		P-180	TRUE	57	RD1/RD27	R-SCO-2	150	PVC	150	11.879	0.672	0.003					
RD6/RD11	TRUE	151.3	0.00	222.17	693.50	70.86		P-257	TRUE	40	RD5/RD11	RD11/RD19	150	PVC	150	-11.472	0.649	0.003					
RD6-1	TRUE	158.0	1.20	222.34	629.70	64.34		P-220	TRUE	97	RD3/RD4	RD3/RD5	100	PVC	150	4.830	0.615	0.004					
RD6-2	TRUE	159.5	1.80	222.20	613.60	62.70		P-276	TRUE	77	RD6-1	RD3/RD6	100	PVC	150	-4.442	0.566	0.003					
RD8/RD11	TRUE	160.0	0.00	221.64	602.90	61.61		P-274	TRUE	121	RD4/RD11B	RD5/RD11B	100	PVC	150	4.042	0.515	0.003					
RD8-1	TRUE	160.0	0.90	221.02	597.20	61.02		P-273	TRUE	62	FER/RD11B	RD4/RD11B	100	PVC	150	3.937	0.501	0.003					
RD8-2	TRUE	167.5	26.20	219.47	508.70	51.97	MIN	P-267	TRUE	36	RD5/RD11	RD5/RD11B	100	PVC	150	-3.676	0.468	0.002					
WS-1	TRUE	151.5	0.60	230.09	769.20	78.59		P-222	TRUE	88	RD3/RD6	RD3/RD8	100	PVC	150	-3.447	0.439	0.002					
								P-275	TRUE	77	RD6-2	RD6-1	100	PVC	150	-3.242	0.413	0.002					
								P-272	TRUE	89	RD4-1	RD3/RD4	100	PVC	150	-2.505	0.319	0.001					
								P-270	TRUE	82	RD5-1	RD3/RD5	100	PVC	150	-2.184	0.278	0.001					
CONNECTIONS TO EXISTING																							
Label	Is Active?	Elevation (m)	Flow (Out net) (L/s)	Hydraulic Grade (m)				P-221	TRUE	99	RD3/RD5	RD3/RD6	100	PVC	150	1.895	0.241	0.001					
R-BG	TRUE	231.0	27.79	231.00				P-301	TRUE	79	RD6/RD11	RD6-2	100	PVC	150	-1.442	0.184	0.000					
R-SCO-1	TRUE	228.3	23.28	228.25				P-271	TRUE	89	RD4/RD11B	RD4-1	100	PVC	150	-1.155	0.147	0.000					
R-SCO-2	TRUE	229.5	-11.88	229.50				P-269	TRUE	93	RD5/RD7	RD5-1	100	PVC	150	-0.834	0.106	0.000					
R-WS-1	TRUE	230.1	22.81	230.10				P-280	TRUE	105	R-WS-1	WS-1	100	PVC	150	0.600	0.076	0.000					
R-WS-2	TRUE	228.3	-8.34	228.25				P-268	TRUE	35	RD5/RD11B	RD5/RD7	100	PVC	150	0.216	0.027	0.000					

REFER X-TAB P65WAT WaterCAD Results 20250326.xlsx

D						DO NOT SCALE Conditions of Use OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE. This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.	Survey source: NEAR MAPS Survey datum: ???	Date: 5/08/2021 Coordinate system: GDA2020 MGA55		osgood civil resource engineering	 po box 181 bermagui nsw 2546 p 02 6494 0239 m 0408 361 612	CLIENT	JUNOR INVESTMENTS PTY LTD		
C					PROJECT							LOT 2 DP1287077 WOLUMBLA - RESIDENTIAL SUBDIVISION			
B					TITLE							WATER MASTER PLAN - STAGE 1			
A												HYDRAULIC ANALYSIS RESULTS			
-	INITIAL ISSUE	VAO	AG	VAO	VAO							21/03/2025			
No	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE									



- NOTES:
1. PRESSURE SEWER NETWORK DESIGN TO:
D-12 SEWERAGE SYSTEM AUSSPEC AS AMENDED BY B.V.S.C.
WSA02-2002.2.3 2ND ED SEWERAGE CODE OF AUSTRALIA.
WSA07-2007.1.1 1ST ED PRESSURE SEWERAGE CODE OF AUSTRALIA.
 2. MAINS ARE DN50 (40MM ID) PE100 PN16 (SDR11) CREAM LINE U.N.O. HAZEN WILLIAMS
FRICTION COEFFICIENT = 155
 3. NETWORK ANALYSED UNDER DYNAMIC CONDITIONS USING WATERGAD
 4. MODELLING CRITERIA
MAX DESIRABLE VELOCITY 2.5M/S, MAX ABSOLUTE VELOCITY 3.5 M/S, MIN VELOCITY 0.6M/S
 5. VALVE CRITERIA
MAX 30 LOTS PER SHUTDOWN
MAXIMUM 500M SPACING
 6. PRESSURE SEWER UNIT - ONE PER PROPERTY
PUMP - SINGLE E-ONE SPD GRINDER 1HP 1450RPM, 50HZ.
TANK - E-ONE GP 2010L-AS/NZ, 710MM X 2000MM, DWG PA1778P01.
PUMP OFF @ 0.33M, PUMP ON @ 0.432M, ALARM @ 0.838M.
 7. FLOWS
ASSUMED DAILY FLOW - 550L/DIET

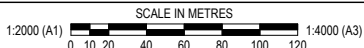
- LEGEND:
- SEWER CATCHMENT BOUNDARY
 - NODE
 - PROPOSED PRESSURE SEWER MAIN
 - FUTURE PRESSURE SEWER MAIN
 - SERVICE TIE, SEWER BOUNDARY KIT
 - CHECK VALVE, STOP VALVE, FLUSHING POINT, AIR VALVE
 - ZONE BOUNDARY, ZONE LABEL
 - LOW PRESSURE ZONE STAGE 1B-11
 - LOW PRESSURE ZONE STAGE 2-10
 - HIGH PRESSURE ZONE STAGE 2-10 & 1A

D					
C					
B	LAYOUT UPDATED	VAO	AG	VAO	21/03/2025
A	LAYOUT ADJUSTMENTS	VAO	AG	VAO	08/12/2023
-	INITIAL ISSUE	VAO	AG	VAO	12/10/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
					DATE

Date: Wednesday, 2 April 2025 12:31:26 PM User: AG File: H:\2021\2109_Wolumla\099_2109Sync\061_dwgSync\2109-P70SEW.dwg

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS Date: 5/08/2021
Survey datum: ??? Coordinate system: GDA2020 MGAS5

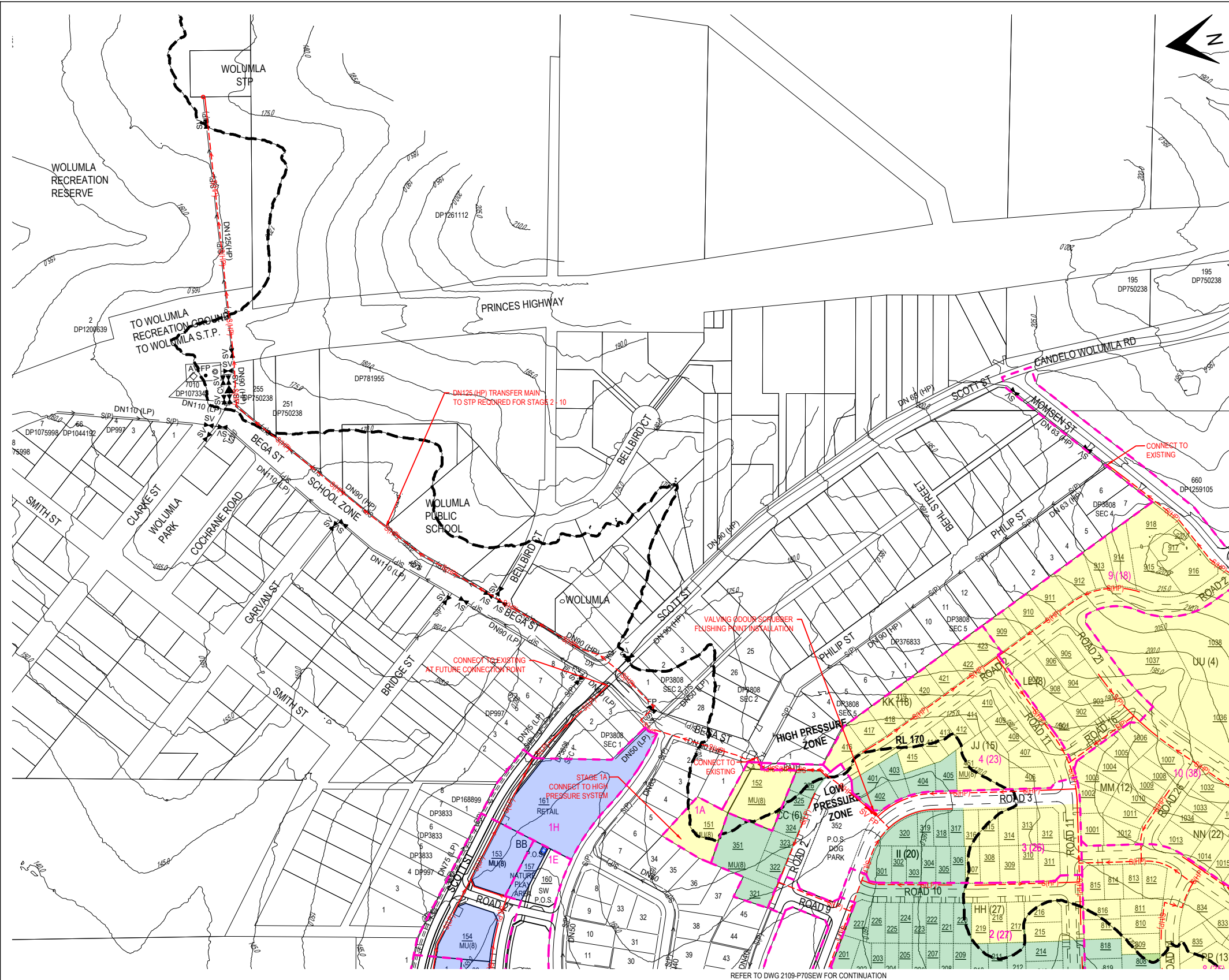


po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT JUNOR INVESTMENTS PTY LTD
PROJECT LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE SEWER MASTER PLAN

DRAWING NUMBER 2109-P70SEW

AMENDMENT: B

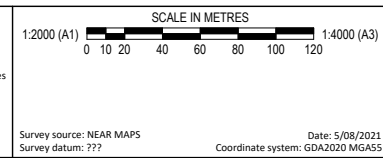


- NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.
 2. REFER TO DWG 2109-P70SEW FOR DETAIL NOTES & LEGEND.
 3. EXISTING WOLUMLA
- S.T.P. CAPACITY - 800EP, (BVSC - SEPT 2022).
- S.T.P. LOAD - APPROX 400EP, (BVSC - SEPT 2022).
- S.T.P. AVAILABLE - APPROX 200ET, (BVSC - SEPT 2022).

D						
C						
B	LAYOUT UPDATED	VAO	AG	VAO	VAO	21/03/2025
A	LAYOUT ADJUSTMENTS	VAO	AG	VAO	VAO	08/12/2023
-	INITIAL ISSUE	VAO	AG	VAO	VAO	12/10/2022
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

DO NOT SCALE

Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



Survey source: NEAR MAPS
Survey datum: ???

Date: 5/08/2021
Coordinate system: GDA2020 MGAS5

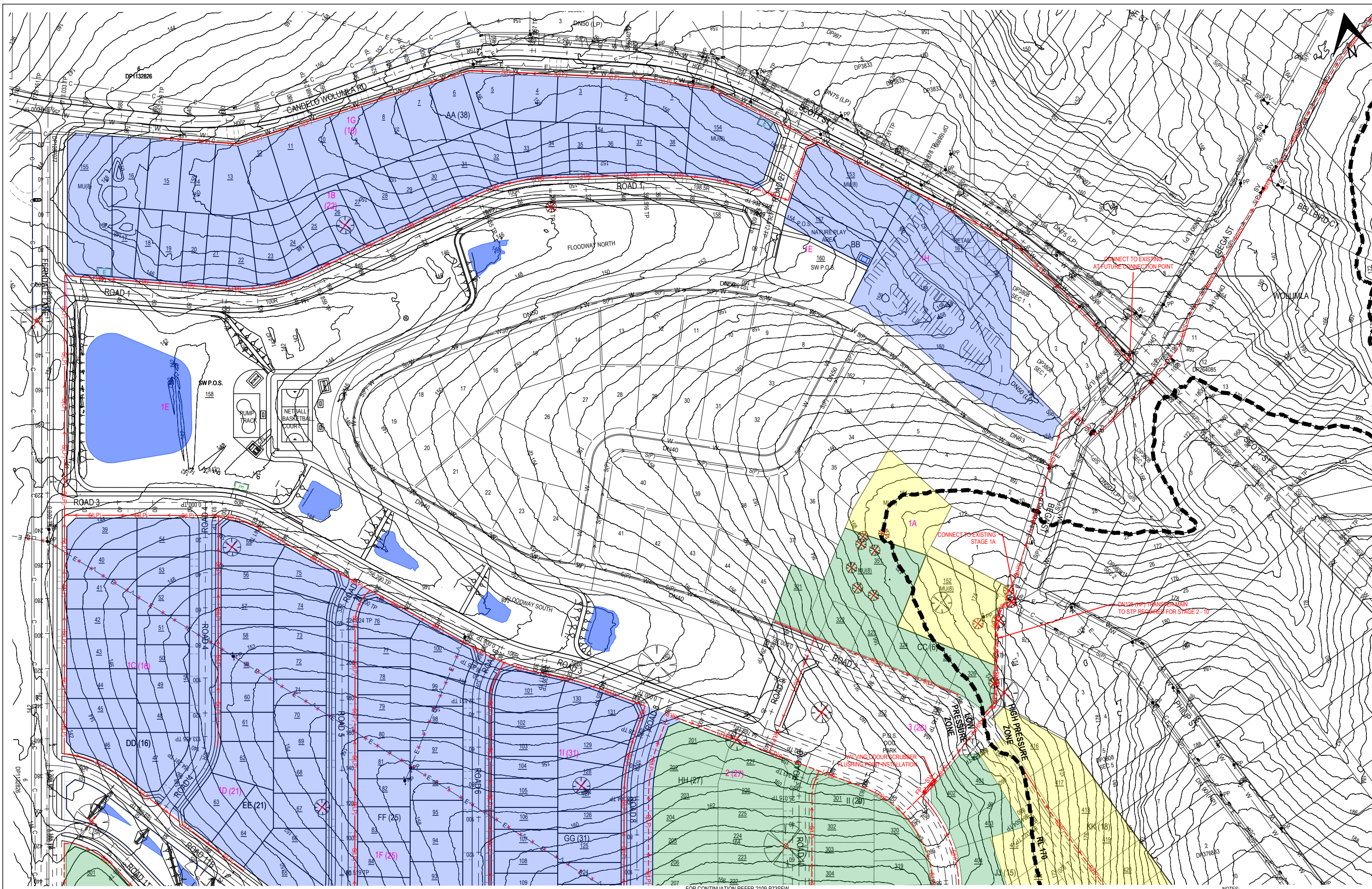
Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???

Date: 10/08/2021
Coordinate system: GDA2020 MGAS5

osgood civil resource engineering

po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	SEWER MASTER PLAN
DRAWING NUMBER	2109-P71SEW
AMENDMENT:	B



FOR CONTINUATION REFER 2109-P73SEW

NOTES:

1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.
2. REFER TO DWG 2109-P70SEW FOR DETAILED NOTES.

D						
C						
B						
A	LAYOUT AMENDED	VAO	AG	VAO	VAO	21/03/2025
-	INITIAL ISSUE	VAO	AG	VAO	VAO	08/12/2023
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE

DO NOT SCALE

Conditions of Use

OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.

This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.

SCALE IN METRES

1:1000 (A1) 0 5 10 20 30 40 60 1:2000 (A3)

Survey source: NEAR MAPS
Survey datum: ???

Date: 5/08/2023
Coordinate system: GDA2020 MGA5

Survey source: SPATIAL COLLABORATION PORTALNSW GOVT Date: 10/08/2021
Survey datum: 2022 Coordinate system: GDA2020 MGA55

Date: 10/08/2021
 nm: GDA2020 MGA55



osgood civil resource engineering



po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

CLIENT	JUNOR INVESTMENTS PTY LTD
PROJECT	LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
TITLE	

SEWER MASTER PLAN - SHEET 1

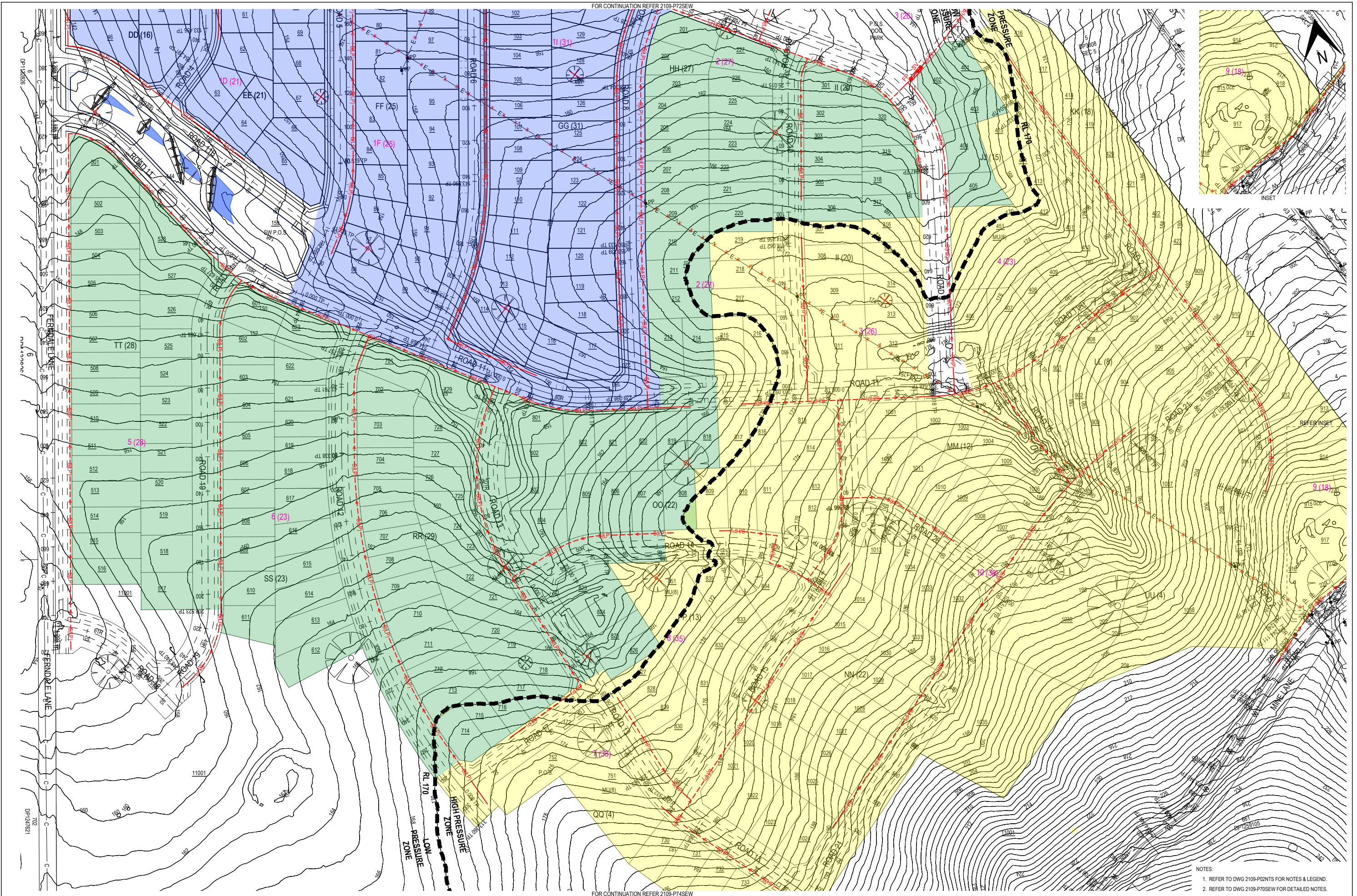
DRAWING NUMBER 2109-P72SEW

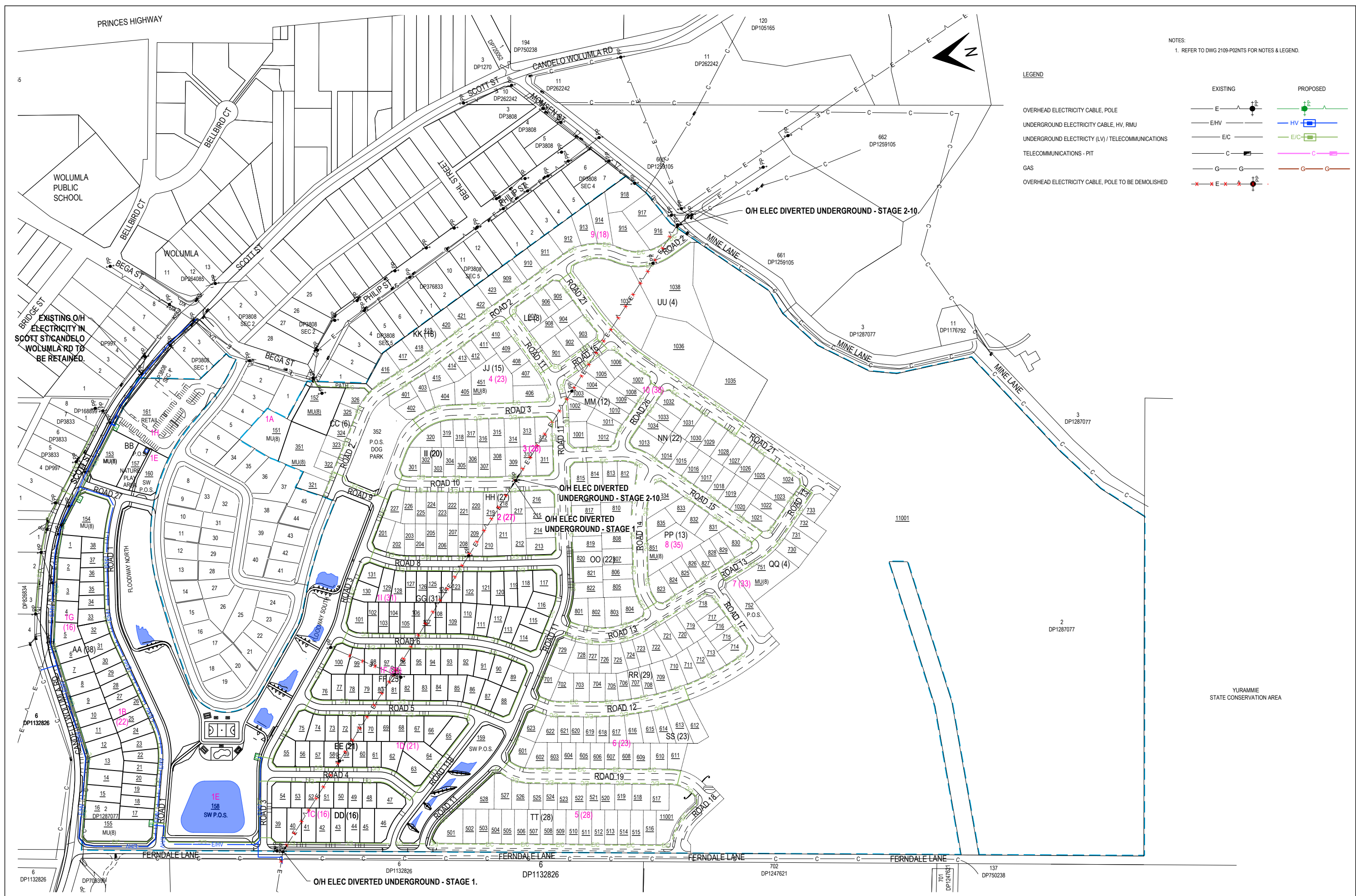
AMENDMENT: A

Date: Wednesday, 2 April 2025 12:30:39 PM

User: AC

File: H:\2021\2100_Welcome\000_2100S\001061_4\000S\0012100_D736FW_4\...



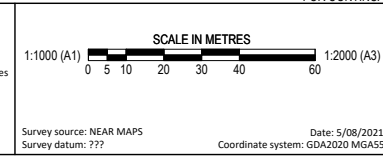
[illegible]



NOTES:
1. REFER TO DWG 2109-P02NTS FOR NOTES & LEGEND.

D					
C					
B					
A	LAYOUT UPDATED, COMMS REMOVED	VAO	AG	VAO	VAO
-	INITIAL ISSUE	VAO	AG	VAO	VAO
No.	REVISION	DESIGNED	DRAWN	CHECKED	APPROVED
					DATE

DO NOT SCALE
Conditions of Use
OCRE does not give consent for the use of this document by the Client until payment of all fees charged have been received by OCRE.
This document may only be used by the Client (and any Authority who the Client has agreed can use this document) for the purposes for which it was prepared.



osgood civil resource engineering

OCRE

po box 181
bermagui nsw 2546
p 02 6494 0239
m 0408 361 612

Survey source: SPATIAL COLLABORATION PORTALNSW GOVT
Survey datum: ???

Date: 10/08/2021
Coordinate system: GDA2020 MGAS5

CLIENT
PROJECT
TITLE
DRAWING NUMBER
AMENDMENT:

JUNOR INVESTMENTS PTY LTD
LOT 2 DP1287077 WOLUMLA - RESIDENTIAL SUBDIVISION
UTILITIES CONCEPT PLAN - SHEET 2
2109-P82UTY
A

