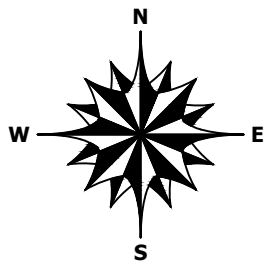


DEVELOPMENT APPLICATION CIVIL DRAWINGS
for a
COMMUNITY TITLE SUBDIVISION
at
31 ALIDENES ROAD, WILSON CREEK NSW 2482



DRAWING TABLE		
DRAWING NUMBER	TITLE	REVISION
C000	Title Page	B
C001	Notes	B
C002	Notes and legend	B
C003	Existing features - Overall	B
C004	Existing features - Sheet 1 of 2	B
C005	Existing features - Sheet 2 of 2	B
C006	Overall layout plan	B
C300	Driveway 1 roadworks plan and longsection	B
C301	Driveway 1 earthworks plan and typical section	B
C302	Driveway 2 roadworks plan and longsection	B
C303	Driveway 2 earthworks plan and typical section	B
C304	Driveway 3 roadworks plan and longsection	B
C305	Driveway 3 earthworks plan and typical section	B
C306	Driveway 4 roadworks plan and longsection	B
C307	Driveway 4 earthworks plan and typical section	B
C308	Existing driveway upgrade roadworks plan and longsection	A
C309	Existing driveway upgrade earthworks plan and typical section	A



LOCALITY MAP
N.T.S.
Source of map: SIX Maps New South Wales



REV: A	DESCRIPTION: Draft For Review	DATE: 27/07/23	DRAWN: JN	REVIEWED: MK	APPROVED: MK	APPROVED BY: Michiel Kamphorst, MSc, BSc, RPEng, RPEQ, NER	 INGEN CONSULTING ENGINEERED WITH PURPOSE	Ingen Consulting Pty Ltd ACN: 623 948 112 a: Alstonville, NSW p: +614 1726 4987 e: michiel@ingenconsulting.com.au w: www.ingenconsulting.com.au	CLIENT: St Saviour Investments Pty Ltd	PROJECT: Community Title Subdivision at 31 Alidenes Road in Wilsons Creek, NSW.	DRAWING TITLE: Title Page	
REV: B	DESCRIPTION: Development Application	DATE: 28/11/23	DRAWN: JN	REVIEWED: MK	APPROVED: MK						Signed: _____ Date: 28/11/23	PROJECT NUMBER: J1201
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GENERAL

1. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE FOLLOWING DOCUMENTS:
 - ARCHITECTURAL DRAWINGS;
 - OTHER PROVIDED ENGINEERING DRAWINGS;
 - GEOTECHNICAL ENGINEERING REPORTS;
 - TECHNICAL SPECIFICATIONS;
 - SUPPLEMENTARY SPECIFICATIONS;
 - WRITTEN INSTRUCTIONS.
2. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT SPECIFICATION FOR THE WORKS TOGETHER WITH THE REQUIREMENTS OF ALL THE RELEVANT CODES OF PRACTICE REFERRED TO THEREIN AND THE REQUIREMENTS OF NRLG STANDARDS AND SPECIFICATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND PROVISION OF ANY TEMPORARY BRACING, PROPPING ETC. TO DRAINAGE PIPES DURING CONSTRUCTION. STRUCTURES SHALL BE MAINTAINED IN A STABLE POSITION AND NO PART SHALL BE OVERSTRESSED.
4. ALL LOCATIONS, ORIENTATION AND LEVELS SHALL BE VERIFIED ON SITE BEFORE COMMENCING ANY WORK. DISCREPANCIES SHALL BE REFERRED TO THE SITE SUPERINTENDENT.
5. DO NOT OBTAIN DIMENSIONS FROM SCALING.
6. NATURAL SURFACE LEVELS ON THE DRAWINGS ARE INDICATIVE ONLY.
7. ANY PERMITS AND APPROVALS REQUIRED FOR CONSTRUCTION OF PERMANENT OR TEMPORARY WORKS SHALL BE OBTAINED BY THE CONTRACTOR.
8. NRLG STANDARD DETAILS ARE TO BE ADOPTED UNLESS STATED OTHERWISE.
9. DESIGN SUBJECT TO GROUND CONDITIONS. PRESENCE OF SHALLOW ROCK MAY REQUIRE DESIGN SURFACE TO BE LIFTED TO MINIMISE ROCK BREAKING.

PAVEMENTS

1. GRANULAR PAVEMENT MATERIAL OF PUBLIC ROADS TO BE IN ACCORDANCE WITH NRLG CONSTRUCTION SPECIFICATIONS AND ALL DOCUMENTS REFERENCED WITHIN THESE SPECIFICATIONS.
2. THE PAVEMENT SEAL IS TO BE IN ACCORDANCE WITH NRLG CONSTRUCTION SPECIFICATIONS AND ALL DOCUMENTS REFERENCED WITHIN THESE SPECIFICATIONS.
3. GEOTECHNICAL TESTING IS TO BE UNDERTAKEN AS DIRECTED BY THE SUPERVISING ENGINEER AT MINIMUM AT COMPLETION OF THE BULK EARTHWORKS.
4. SAMPLING SHALL BE CARRIED OUT IN ACCORDANCE WITH NRLG GUIDELINES.
5. TRAFFIC NUMBERS ARE BASED ON NRLG GUIDELINES.
6. FINAL PAVEMENT DESIGN IS SUBJECT TO SUPERVISING ENGINEER'S DIRECTION AND MAY RESULT IN AN AMENDMENT TO THE PAVEMENT DESIGN SHOWN ON THIS DRAWING.
7. PAVEMENT DESIGN IS BASED ON NRLG GUIDELINES.

ABBREVIATIONS USED ON THE PLANS

SW	STORMWATER	K+C	CONCRETE KERB AND CHANNEL
W	WATER	AC	ASPHALTIC CONCRETE
FH	FIRE HYDRANT	TOB	TOP OF BANK
SV	SLUICE VALVE	BOB	BOTTOM OF BANK
GV	GATE VALVE	CL	CENTRELINE
EB	EDGE OF BITUMEN	B'DY	BOUNDARY
ES	EDGE OF SHOULDER		
	NRLG		NORHERN RIVERS LOCAL GOVERNMENT

DRAINAGE

1. ALL DRAINAGE STRUCTURES ARE TO BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING DOCUMENTS:
 - NRLG DRAWINGS AND SPECIFICATIONS;
 - ANY MANUFACTURER'S STANDARD DRAWINGS AND SPECIFICATIONS.
2. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT SPECIFICATION FOR THE WORKS TOGETHER WITH THE REQUIREMENTS OF ALL THE RELEVANT CODES OF PRACTICE REFERRED TO THEREIN AND THE REQUIREMENTS OF THE STATUTORY AUTHORITIES WHERE APPLICABLE.
3. STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE ASSESSMENT OF CONSTRUCTION LOADS AND PROVISIONS OF ANY TEMPORARY BRACING, PROPPING ETC. REQUIRED DURING CONSTRUCTION. STRUCTURES SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.
4. PRECAST REINFORCEMENT CONCRETE PIPES ARE TO BE MANUFACTURED IN ACCORDANCE WITH AS 4058 AND AS 1992.
5. ALL STORMWATER PIPES SHALL BE CLASS '2' RCP. U.N.O.
6. ALL PIPES UP TO AND INCLUDING Ø600 ARE TO BE RUBBER RING JOINTED. ALL PIPES ABOVE Ø600 ARE TO BE FLUSH JOINTED U.N.O.
7. HEADWALL END STRUCTURES TO BE TYPE A, CAST IN SITU CONCRETE WITH CONCRETE APRONS (INCLUDING CUT OFF WALLS) U.N.O. REFER TO NRLG CONSTRUCTION MANUAL FOR DETAILS.
8. PRECAST END STRUCTURES MAY BE USED ON CULVERTS LESS THAN OR EQUAL TO 15° SKEW, SUBJECT TO THE APPROVAL OF THE SUPERINTENDENT. PRECAST END STRUCTURES SHALL BE CONSTRUCTED WITH A REINFORCED CONCRETE CUT OFF WALL AS DETAILED FOR TYPE 3 APRONS BY NRLG.
9. EXISTING STORMWATER DRAINAGE PIPES AND MANHOLES WITHIN THE LIMIT OF WORK SHALL BE PROTECTED, REMOVED OR MODIFIED AS SPECIFIED.
10. WHERE A CONNECTION IS MADE TO AN EXISTING DRAINAGE PIPE OR PIT, THE LEVEL OF THAT ELEMENT MUST BE SURVEYED PRIOR TO CONSTRUCTION. THE SURVEYED LEVELS SHALL BE PROVIDED TO THE SITE SUPERINTENDENT TO CONFIRM THE CONNECTION AND LEVELS PRIOR TO CONSTRUCTION.
11. BACKFILL AND BEDDING TO PIPE TO BE IN ACCORDANCE WITH TSC STANDARD DRAWINGS AND SPECIFICATIONS.
12. UNSUITABLE FOUNDING MATERIAL FOR PIPES AND STRUCTURES SHALL BE REMOVED OR IMPROVED IN ACCORDANCE WITH TSC SPECIFICATIONS.
13. ALL TRENCH BACK FILL MATERIAL UNDER THE PAVEMENT SHALL BE CBR 15 OR APPROVED EQUIVALENT.
14. STEEL GRATES AND FRAMES ARE TO BE FABRICATED FROM MILD STEEL AND HOT DIP GALVANISED. ALL GRATES ARE TO BE CLASS D U.N.O. AND BICYCLE SAFE IN ACCORDANCE WITH AS 3996 U.N.O.
15. GRATE SUPPORT TO BE CONSTRUCTED LEVEL TO ENSURE THAT THE GRATE DOES NOT ROCK AFTER INSTALLATION.
16. ALL LEVELS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FULL DETAIL SURVEY OF THE EXISTING STRUCTURE.
17. THE THICKNESS OF THE RIP-RAP PROTECTION SHALL BE TWICE THE D50 STONE SIZE SPECIFIED ON THE DRAWINGS.
 - 17.1. THE STONE SHALL BE REASONABLY WELL GRADED THROUGHOUT THE RIP-RAP LAYER. STONE SIZE SHALL BE DEPENDENT ON THE D50 VALUE SPECIFIED ON THE DRAWINGS. D10 SHALL BE xD50 AND D90 SHALL BE 1.35xD50. STONES SMALLER THAN THE SPECIFIED D10 ARE NOT TO EXCEED 20% BY WEIGHT OF EACH LOAD.
 - 17.2. ROCK IS TO BE HARD, DENSE, DURABLE, RESISTANT TO WEATHERING AND ANGULAR IN SHAPE. IT SHALL BE FREE FROM OVERBURDEN, SPOIL SHALE AND ORGANIC MATTER. ROCK THAT IS LAMINATED, FRACTURED, POROUS OF OTHERWISE PHYSICALLY WEAK SHALL NOT BE USED.
 - 17.3. AS AN APPROXIMATE GUIDE TO STONE SHAPE: THE BREADTH OR THICKNESS OF A SINGLE STONE SHOULD NOT BE LESS THAN ONE-THIRD ITS LENGTH. ROUND MATERIAL CAN BE USED AS RIP-RAP, PROVIDED IT IS NOT PLACED ON SLOPES GREATER THAN 1:3.



REV:	DESCRIPTION:	DATE:	DRAWN:	REVIEWED:	APPROVED:	APPROVED BY:	Ingen Consulting Pty Ltd ACN: 623 948 112 a: Alstonville, NSW p: +614 1726 4987 e: michiel@ingenconsulting.com.au w: www.ingenconsulting.com.au	CLIENT: St Saviour Investments Pty Ltd	PROJECT: Community Title Subdivision at 31 Alidenes Road in Wilsons Creek, NSW.	DRAWING TITLE:	
A	Draft For Review	27/07/23	JN	MK	MK	Michiel Kamphorst,				Notes	
B	Development Application	28/11/23	JN	MK	MK	MSc, BSc, RPEng, RPEQ, NER			PROJECT NUMBER:	ORIGINAL SIZE:	
						Signed:	Date: 28/11/23		J1201	A3	
									DRAWING NUMBER:	REVISION:	
									J1201_C001	B	
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SUBGRADE PREPARATION GENERAL

- CLEARING, STRIPPING AND GRUBBING MUST BE CARRIED OUT IN ALL AREA SUBJECTS TO EARTHWORKS (AS TRAFFICABILITY CONDITIONS ALLOW).
- SOILS CONTAINING ORGANIC MATTER MUST BE STRIPPED FROM THE CONSTRUCTION AREA AND MUST NOT BE USED FOR STRUCTURAL FILL.
- DEPRESSIONS FORMED BY THE REMOVAL OF EXISTING STRUCTURES, VEGETATION, UNDERGROUND ELEMENTS ETC. MUST HAVE ALL DISTURBED WEAKENED SOIL CLEANED OUT AND MUST BE BACKFILLED WITH COMPACTED SELECT MATERIAL.
- IN AREAS WHERE WEAK SOILS FORM THE SUBGRADE THE SUPERVISING ENGINEER MAY DIRECT THE INSTALLATION OF A BRIDGING/WORKING LAYER TO SUPPORT CONSTRUCTION EQUIPMENT AND ALLOW FOR THE PLACEMENT OF FILL.
- EXISTING SOILS ARE KNOWN TO LOSE STRENGTH IF THEY BECOME WET AND THE CONTRACTOR MUST MAKE EFFORT TO AVOID WETTING.

SUBGRADE PREPARATION ROADWORKS & DRIVEWAYS

- THE SUBGRADE MUST BE PROOF ROLLED UNDER THE SUPERVISION OF AN NER ENGINEER USING A STATIC VEHICLE WITH A TARES IS TO BE TO THE INSPECTING ENGINEER'S SATISFACTION AND NRLG STANDARD.
- AREA DEMONSTRATING EXCESSIVE MOVEMENT UNDER PROOF ROLLING MUST BE DRIED AND RECOMPACTED OR REMOVED AND REPLACE WITH COMPACTED FILL.
- ANY FILL MATERIAL ENCOUNTERED SHOULD BE CONSIDERED UNCONTROLLED AND REQUIRING TREATMENT.

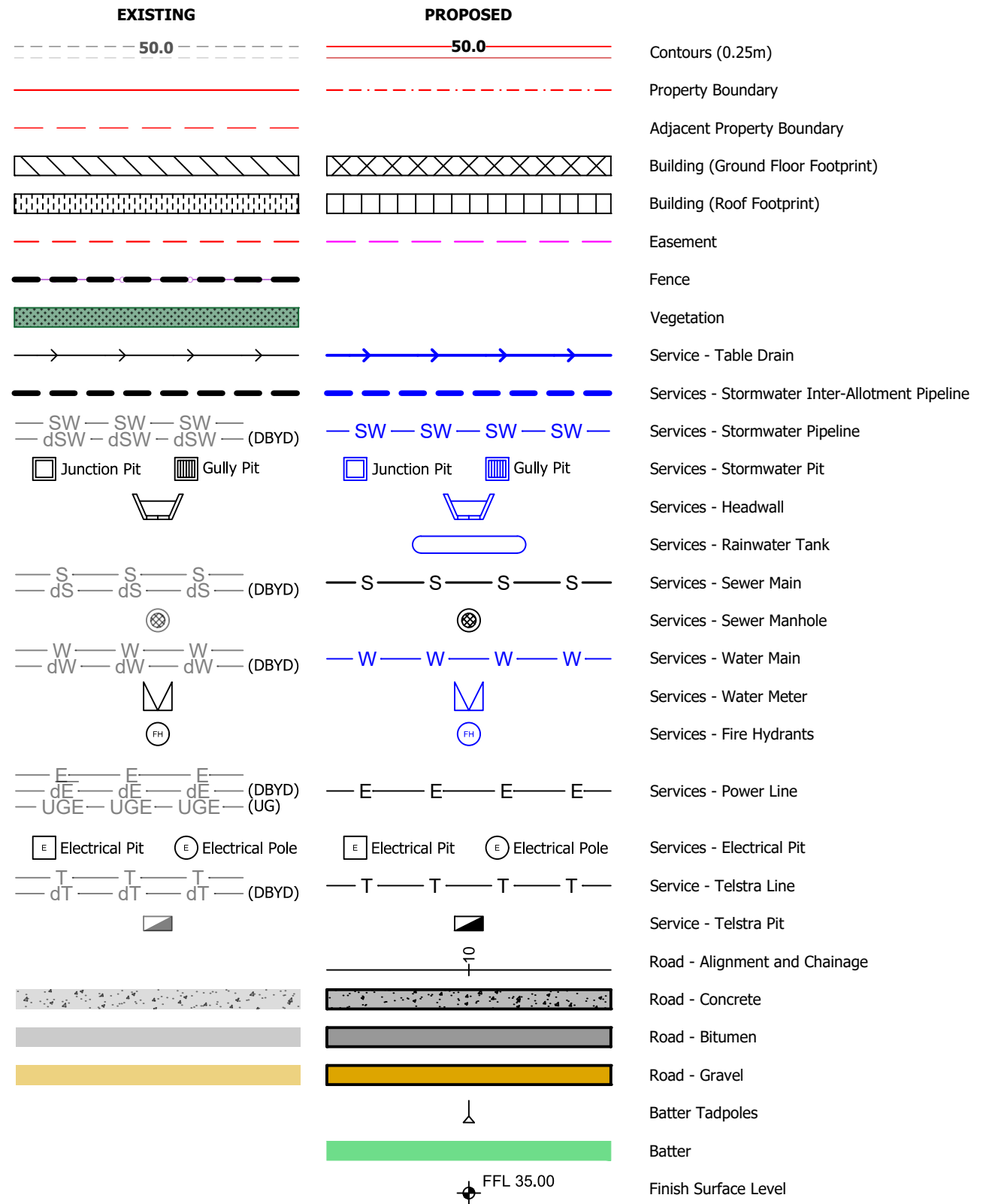
EXCAVATION

- ALL EXCAVATIONS DEEPER THAN 1.5M WILL NEED TO BE TEMPORARILY SUPPORTED OR BATTERED TO UNSURE SAFETY.
- TEMPORARY CUT BATTERS ARE TO BE MAXIMUM SLOPE OF 1:1.

BULK EARTHWORKS

- ALL EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH AS3798, UNDER LEVEL 1 SUPERVISION.
- INSITU SOILS ARE NOT TO BE USED AS STRUCTURAL FILL.
- IMPORTED GENERAL FILL MUST BE COHESIVE IN NATURE AND GOOD QUALITY LOW PLASTICITY WITH:
 - A LIQUID LESS THAN 45%
 - PLASTICITY INDEX OF LESS THAN 15%
 - SOAKED CBR GREATER THAN 10%
 - MAXIMUM PARTICLE SIZE OF 75mm
 - AT LEAST 80% PASSIVE THE 19mm SIEVE.
- FILL MATERIAL MUST BE PLACED IN LAYERS NOT EXCEEDING 150mm AS PER NRLG STANDARDS.
- UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT, MINIMUM RELATIVE STANDARD COMPACTION OF ALL EARTHWORKS IS TO A DENSITY NOT LESS THAN 98%.
- THE SUB-BASE MATERIAL SHOULD BE COMPACTED TO A DENSITY NOT LESS THAN 98% OF MAXIMUM DRY DENSITY.
- UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT, ALL FILL SHALL BE PLACED AT BETWEEN +2% AND -2% OPTIMUM MOISTURE CONTENT.
- FIELD DENSITY TESTING MUST BE CARRIED OUT TO CHECK THE STANDARD OF COMPACTION ACHIEVED AND THE MOISTURE CONTENT IN ACCORDANCE WITH AS3798-2007.
- BACKFILLING OF SERVICE TRENCHES MUST USE GOOD QUALITY MATERIAL PLACED IN UNIFORM LAYERS NOT EXCEEDING 200mm OVER THE WIDTH OF THE EXCAVATION.
- BATTER SLOPES IN THE EXISTING FILLING CUT TO BE NO DEEPER THAN 2m, MAY BE DESIGN FOR TEMPORARY CONDITION OF 1:1.5 AND PERMANENT SLOPES OF 1:2.5.
- ALL OF THE SITE SHALL BE KEPT FREE DRAINING DURING ALL PHASES OF THE PROJECT.
- NOTWITHSTANDING THE LIMITS AND FILLING SHOWN ON THE CROSS SECTION THE ACTUAL LIMITS SHALL BE DETERMINED ON SITE BY THE SUPERINTENDENT DURING CONSTRUCTION AND SIMILARLY THE FINISHED SURFACE CONTOURS MAY BE ADJUSTED BY WRITTEN DIRECTION OF THE SUPERINTENDENT DURING CONSTRUCTION.
- ALL LEVELS PROVIDED ARE TO FINISHED FLOOR & FINISHED SURFACE LEVEL UNLESS SPECIFIED OTHERWISE.
- WHERE A RISK OF SOME FUTURE DIFFERENT SETTLEMENT CAN BE ACCEPTED EXCAVATE SORT AND RE COMPACT THE TOP 0.5m.
- ALL LOTS AND VERGES ARE TO BE STABILIZED/LANDSCAPED AS PER THE APPROVED LANDSCAPING PLANS AND NRLG STANDARDS.

LEGEND



REV:	DESCRIPTION:	DATE:	DRAWN:	REVIEWED:	APPROVED:
A	Draft For Review	27/07/23	JN	MK	MK
B	Development Application	28/11/23	JN	MK	MK

APPROVED BY:
Michiel Kamphorst,
MSc, BSc, RPEng, RPEQ, NER

Signed: _____ Date: **28/11/23**

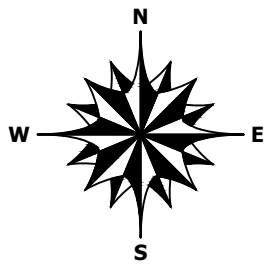
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CLIENT:
St Saviour Investments Pty Ltd

PROJECT:
Community Title Subdivision at 31 Alidenes Road in Wilsons Creek, NSW.

DRAWING TITLE: Notes and legend	
PROJECT NUMBER: J1201	ORIGINAL SIZE: A3
DRAWING NUMBER: J1201_C002	REVISION: B

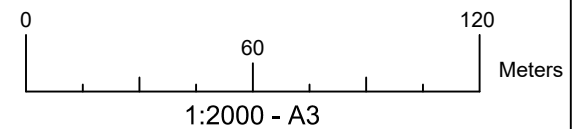
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Sheet C004

Sheet C005

21
DP113421



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B	Development Application	28/11/23	JN	MK	MK

APPROVED BY:
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MSc, BSc, RPEng, RPEQ, NER

Signed: _____ Date: **28/11/23**



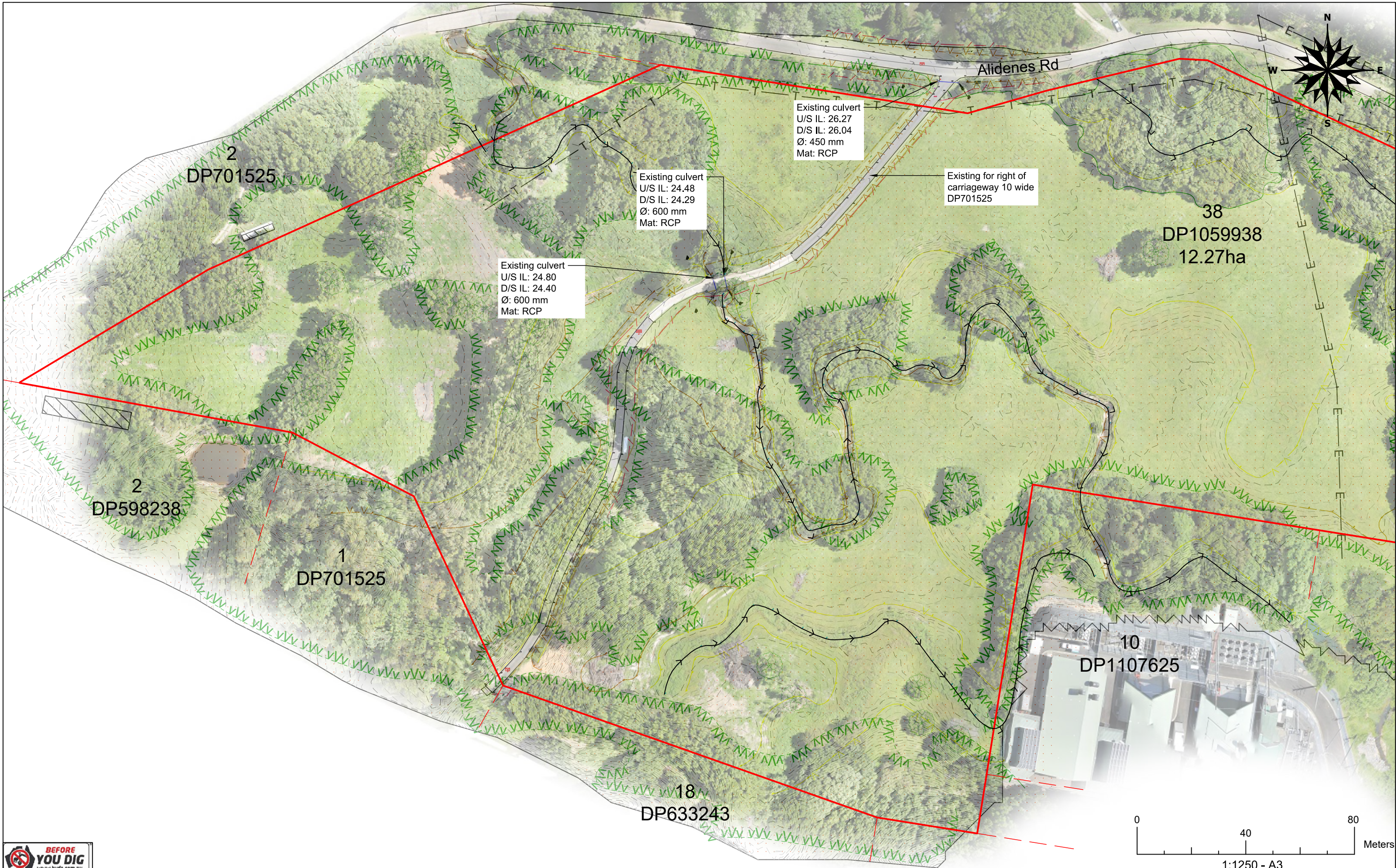
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CLIENT:
St Saviour Investments Pty Ltd

PROJECT:
**Community Title Subdivision at
31 Alidenes Road in Wilsons
Creek, NSW.**

DRAWING TITLE: Existing features - Overall	
PROJECT NUMBER: J1201	ORIGINAL SIZE: A3
DRAWING NUMBER: J1201_C003	REVISION: B

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B	Development Application	28/11/23	JN	MK	MK

APPROVED BY:
Michiel Kamphorst,
MSc, BSc, RPEng, RPEQ, NER

Signed: _____ Date: **28/11/23**



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CLIENT:
St Saviour Investments Pty Ltd

PROJECT:
**Community Title Subdivision at
31 Alidenes Road in Wilsons
Creek, NSW.**

DRAWING TITLE: Existing features - Sheet 1 of 2	
PROJECT NUMBER: J1201	ORIGINAL SIZE: A3
DRAWING NUMBER: J1201_C004	REVISION: B

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A	Draft For Review	27/07/23	JN	MK	MK
B	Development Application	28/11/23	JN	MK	MK

APPROVED BY:
Michiel Kamphorst,
 MSc, BSc, RPEng, RPEQ, NER

Signed: _____ Date: **28/11/23**



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St Saviour Investments Pty Ltd

PROJECT:
**Community Title Subdivision at
 31 Alidenes Road in Wilsons
 Creek, NSW.**

DRAWING TITLE: Existing features - Sheet 2 of 2	
PROJECT NUMBER: J1201	ORIGINAL SIZE: A3
DRAWING NUMBER: J1201_C005	REVISION: B

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APPROVED BY:
Michiel Kamphorst,
 MSc, BSc, RPEng, RPEQ, NER

Signed: _____ Date: **28/11/23**



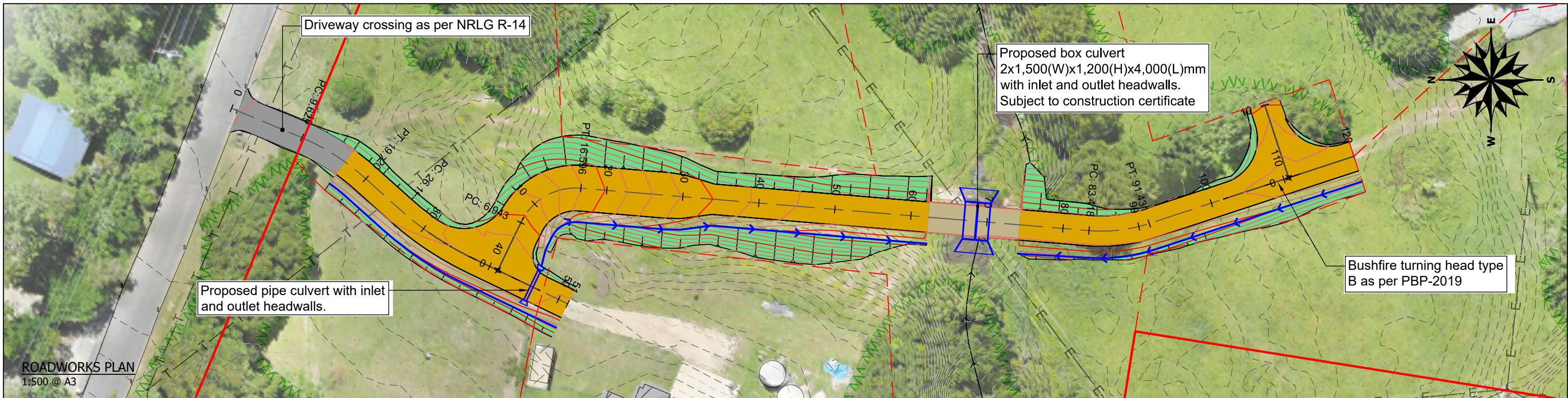
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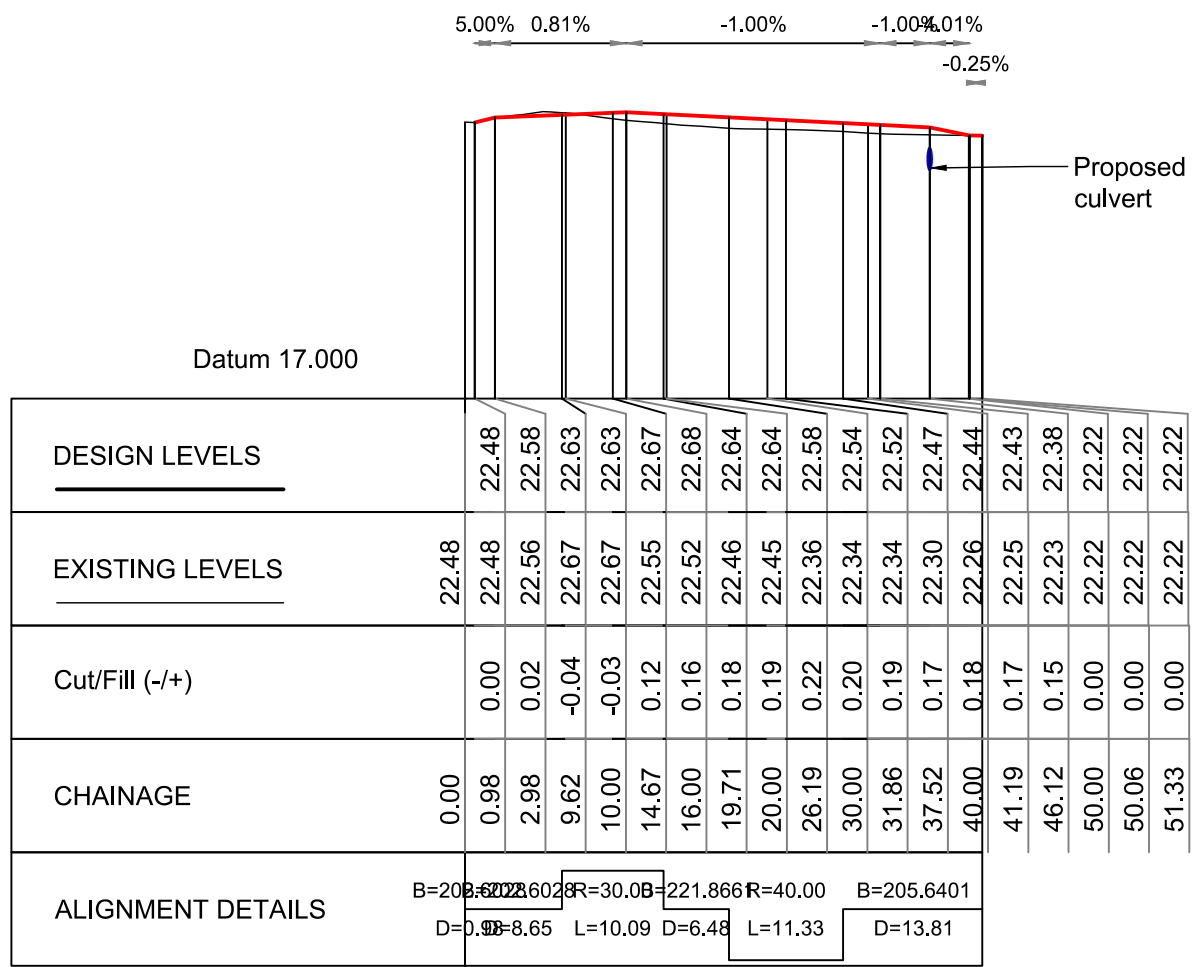
PROJECT:
**Community Title Subdivision at
 31 Alidenes Road in Wilsons
 Creek, NSW.**

DRAWING TITLE: Overall layout plan	
PROJECT NUMBER: J1201	ORIGINAL SIZE: A3
DRAWING NUMBER: J1201_C006	REVISION: B

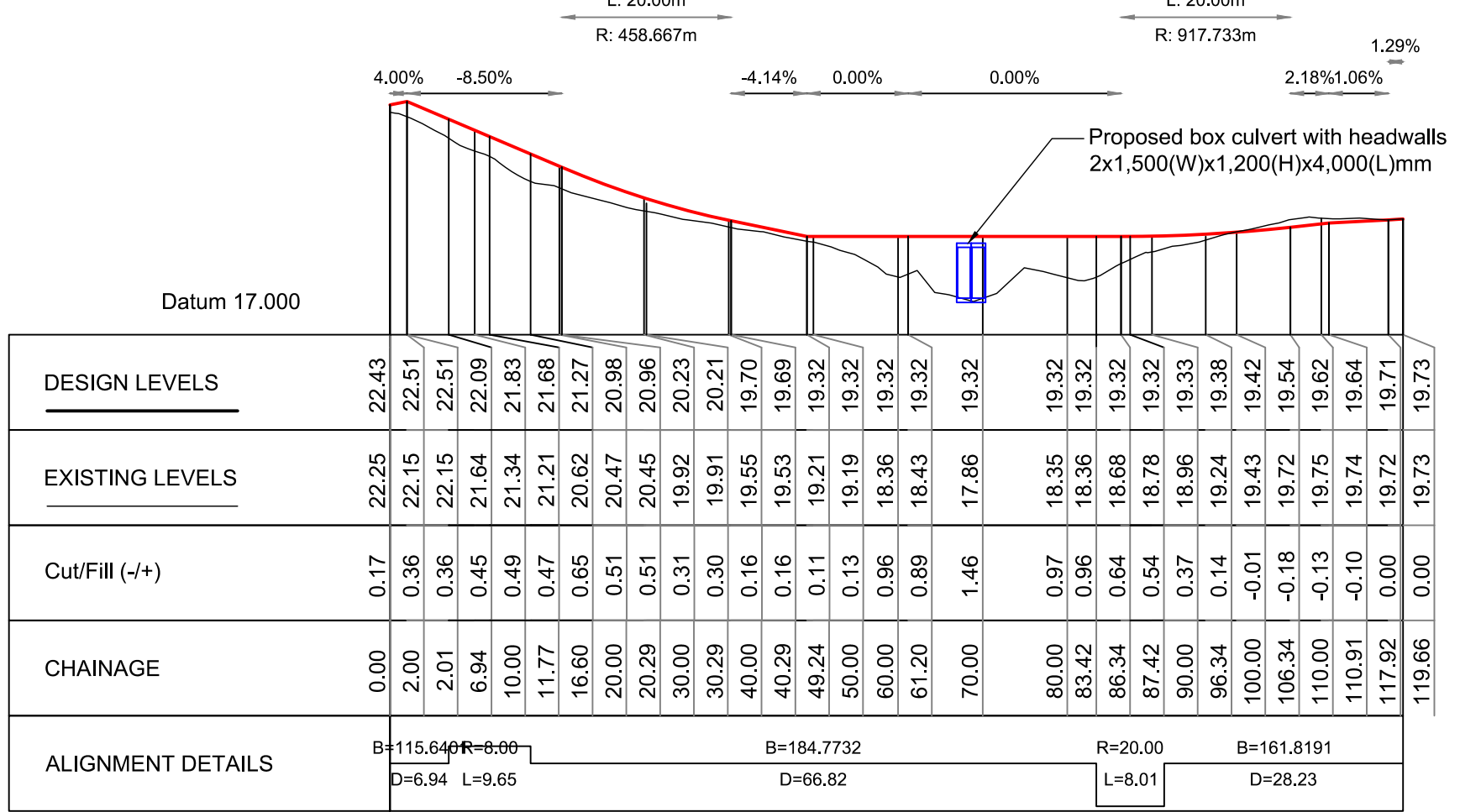
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ROADWORKS PLAN
1:500 @ A3



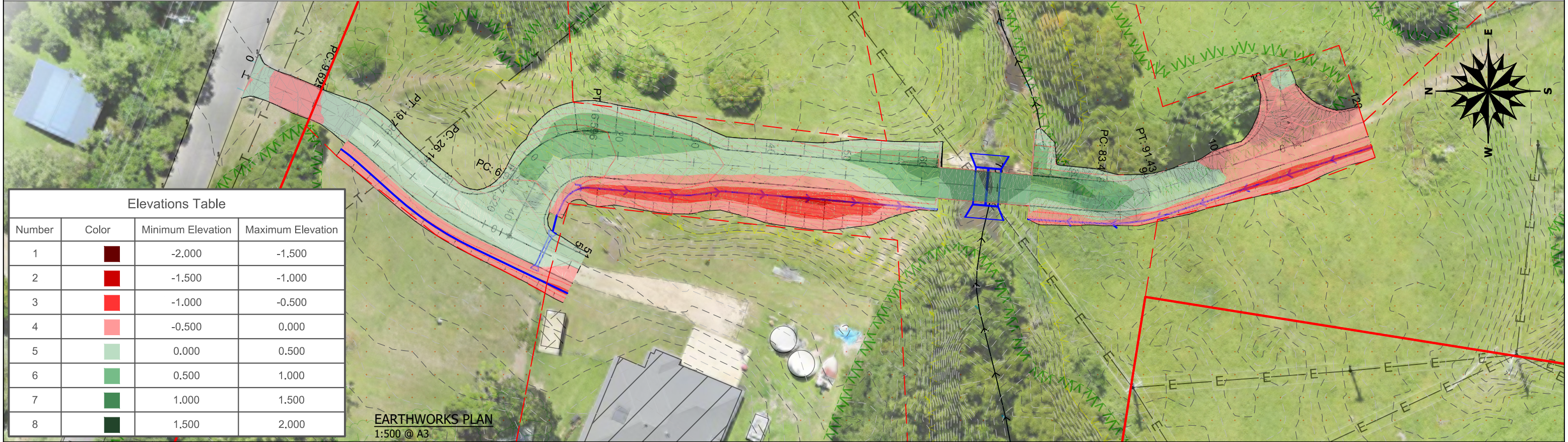
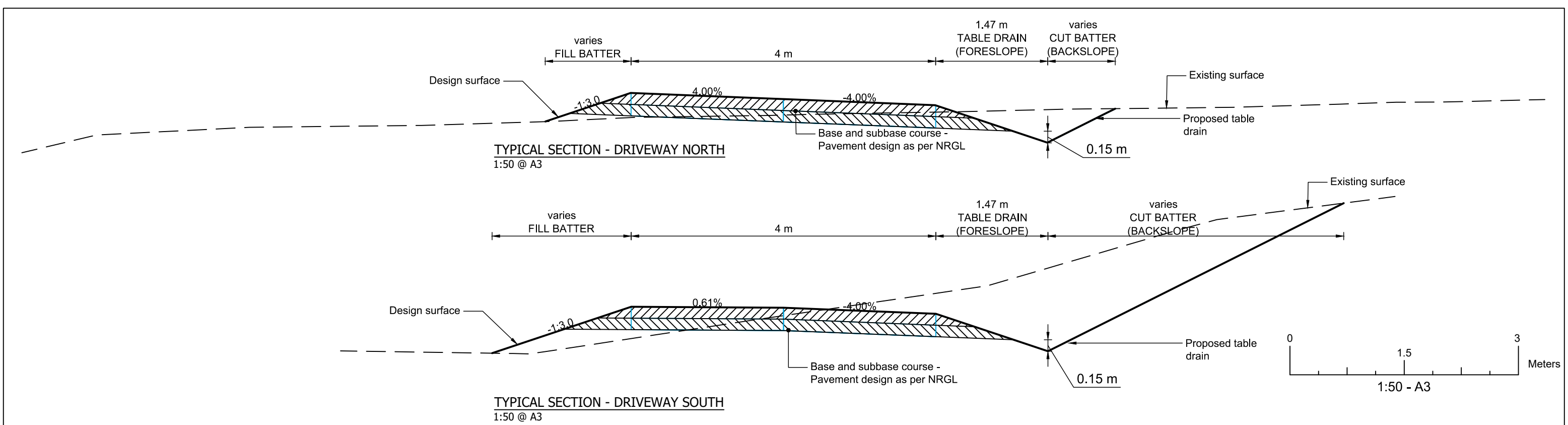
Scale Horizontal 1:2500 Vertical 1:500
DRIVEWAY 1 - A LONGITUDINAL SECTION



Scale Horizontal 1:2500 Vertical 1:500
DRIVEWAY 1 - B LONGITUDINAL SECTION

REV: A	DESCRIPTION: Draft For Review	DATE: 27/07/23	DRAWN: JN	REVIEWED: MK	APPROVED: MK	APPROVED BY: Michiel Kamphorst, MSc, BSc, RPEng, RPEQ, NER	INGEN CONSULTING ENGINEERED WITH PURPOSE	Ingen Consulting Pty Ltd ACN: 623 948 112 a: Alstonville, NSW p: +614 1726 4987 e: michiel@ingenconsulting.com.au w: www.ingenconsulting.com.au	CLIENT: St Saviour Investments Pty Ltd	PROJECT: Community Title Subdivision at 31 Alidenes Road in Wilsons Creek, NSW.	DRAWING TITLE: Driveway 1 roadworks plan and longsection	
REV: B	DESCRIPTION: Development Application	DATE: 28/11/23	DRAWN: JN	REVIEWED: MK	APPROVED: MK						PROJECT NUMBER: J1201	ORIGINAL SIZE: A3
						Signed:	Date: 21/11/23				DRAWING NUMBER: J1201_C300	REVISION: B

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Elevations Table			
Number	Color	Minimum Elevation	Maximum Elevation
1	Dark Red	-2.000	-1.500
2	Red	-1.500	-1.000
3	Light Red	-1.000	-0.500
4	Very Light Red	-0.500	0.000
5	Light Green	0.000	0.500
6	Medium Green	0.500	1.000
7	Dark Green	1.000	1.500
8	Very Dark Green	1.500	2.000

Cut/Fill Summary						
Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
DW1 - C&F	1.000	1.000	1432.22sq.m	179.45 Cu. M.	328.50 Cu. M.	149.04 Cu. M.<Fill>
Totals			1432.22sq.m	179.45 Cu. M.	328.50 Cu. M.	149.04 Cu. M.<Fill>

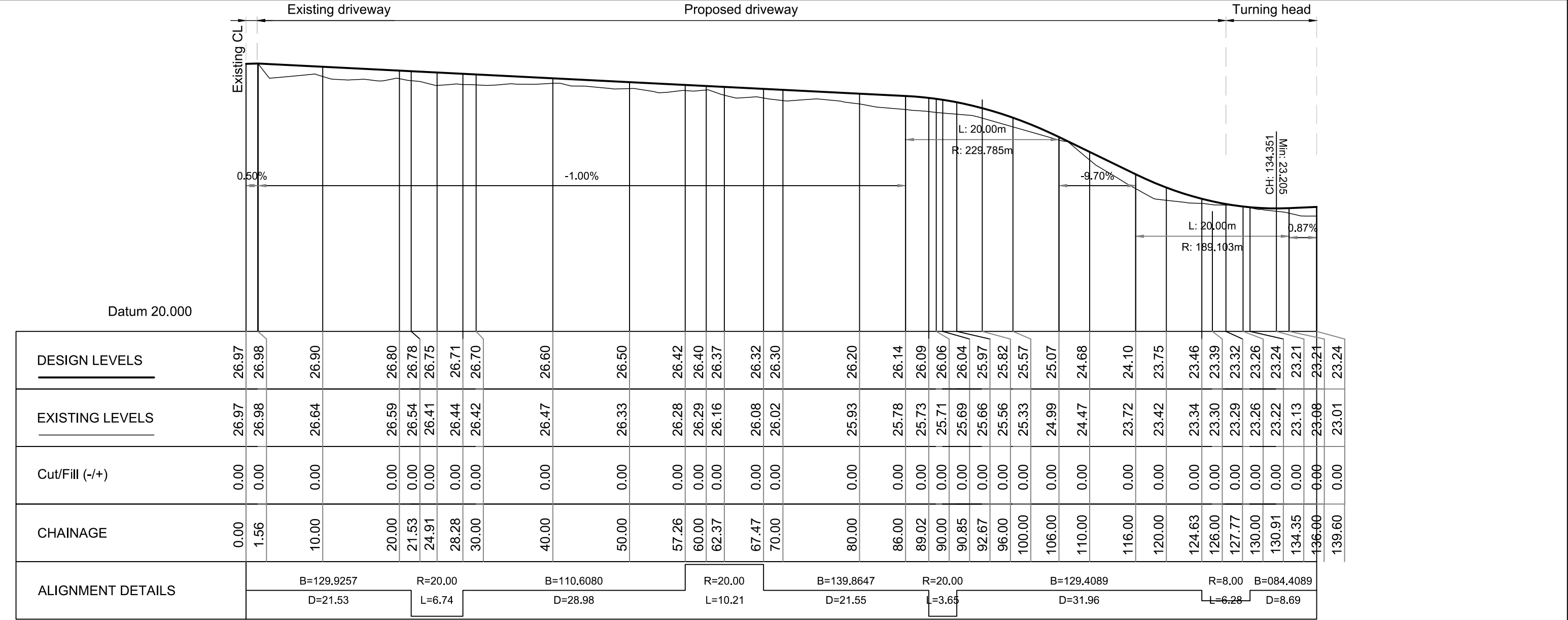
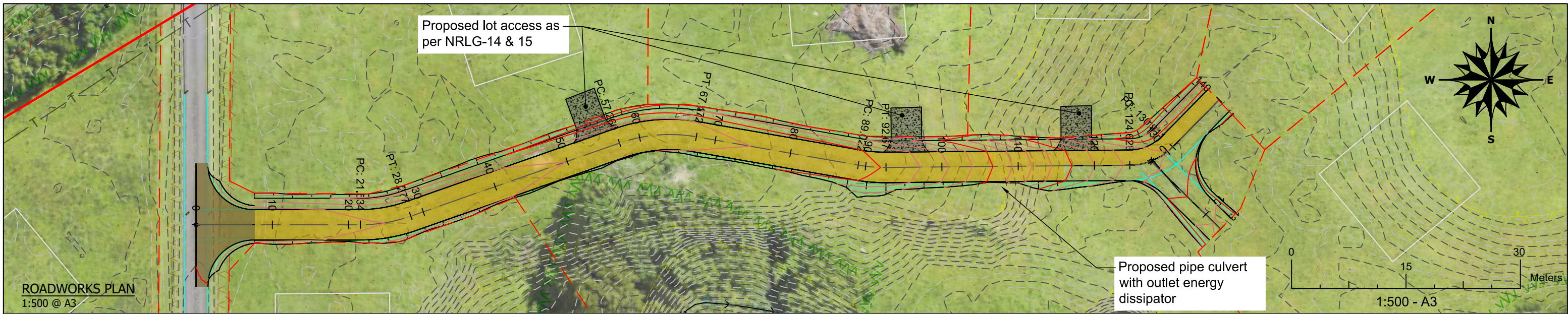
NOTE

1) The cut and fill depths and volumes shown on this plan have been calculated by comparing the proposed finished surface levels to the existing natural surface.

0 15 30 Meters
1:500 - A3

REV: A	DESCRIPTION: Draft For Review	DATE: 27/07/23	DRAWN: JN	REVIEWED: MK	APPROVED: MK	APPROVED BY: Michiel Kamphorst, MSc, BSc, RPEng, RPEQ, NER		Ingen Consulting Pty Ltd ACN: 623 948 112 a: Alstonville, NSW p: +614 1726 4987 e: michiel@ingenconsulting.com.au w: www.ingenconsulting.com.au	CLIENT: St Saviour Investments Pty Ltd	PROJECT: Community Title Subdivision at 31 Alidenes Road in Wilsons Creek, NSW.	DRAWING TITLE: Driveway 1 earthworks plan and typical section	
B	Development Application	28/11/23	JN	MK	MK						Signed: _____ Date: 21/11/23	PROJECT NUMBER: J1201
											DRAWING NUMBER: J1201_C301	REVISION: B

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Scale Horizontal 1:500 Vertical 1:100

DRIVEWAY 2 - A LONGITUDINAL SECTION



REV:	DESCRIPTION:	DATE:	DRAWN:	REVIEWED:	APPROVED:
A	Draft For Review	27/07/23	JN	MK	MK
B	Development Application	28/11/23	JN	MK	MK

APPROVED BY:
Michiel Kamphorst,
MSc, BSc, RPEng, RPEQ, NER

Signed: _____ Date: **28/11/23**

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CLIENT:
St Saviour Investments Pty Ltd

PROJECT:
Community Title Subdivision at 31 Alidenes Road in Wilsons Creek, NSW.

DRAWING TITLE: Driveway 2 roadworks plan and longsection	
PROJECT NUMBER: J1201	ORIGINAL SIZE: A3
DRAWING NUMBER: J1201_C302	REVISION: B

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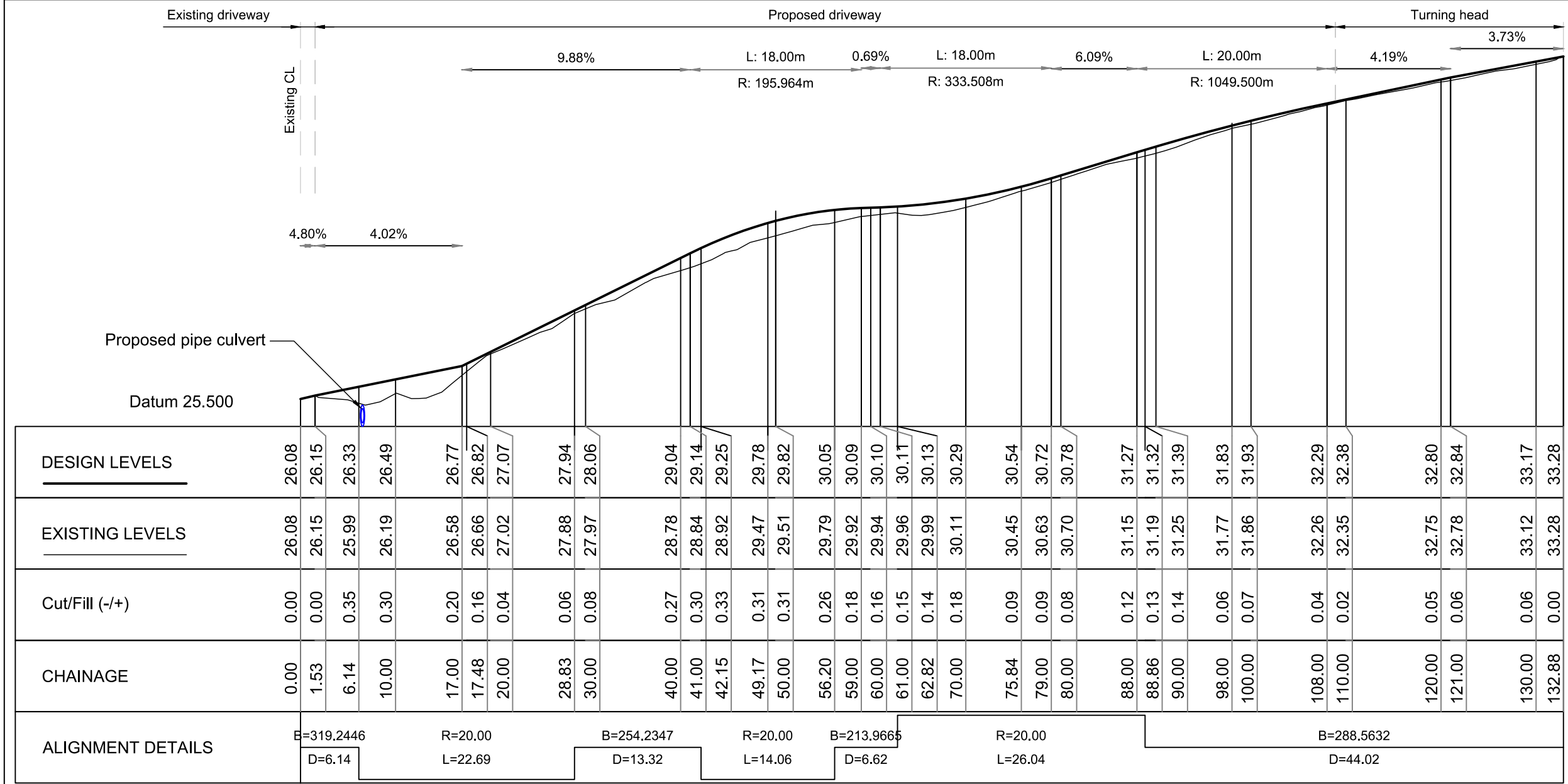


ROADWORKS PLAN
1:500 @ A3

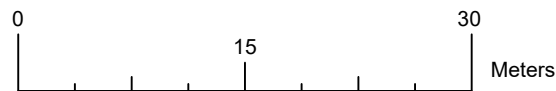
Bushfire turning head
type B as per
PBP-2019

Proposed pipe culvert
with inlet and outlet
headwalls. Grade
downstream till
daylight with existing
levels

Upgrade existing box
culvert - Refer to
details on sheet C308
and C309



Scale Horizontal 1:1500 Vertical 1:300



DRIVEWAY 3 LONGITUDINAL SECTION

REV:	DESCRIPTION:	DATE:	DRAWN:	REVIEWED:	APPROVED:
A	Draft For Review	27/07/23	JN	MK	MK
B	Development Application	28/11/23	JN	MK	MK

APPROVED BY:
Michiel Kamphorst,
MSc, BSc, RPEng, RPEQ, NER

Signed: _____ Date: **28/11/23**

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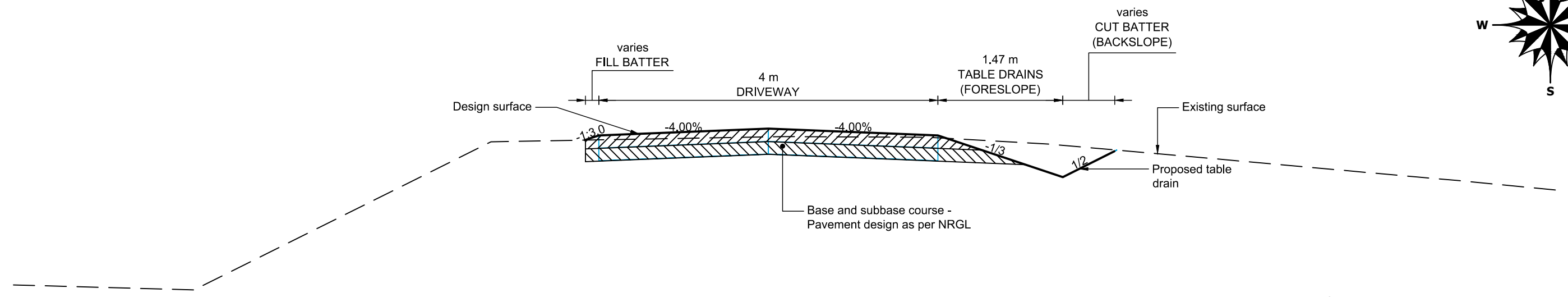
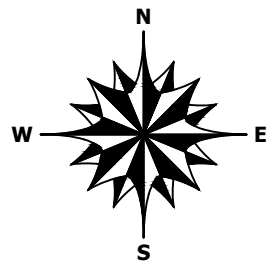
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CLIENT:
St Saviour Investments Pty Ltd

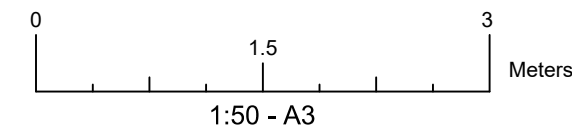
PROJECT:
**Community Title Subdivision at
31 Alidenes Road in Wilsons
Creek, NSW.**

DRAWING TITLE: Driveway 3 roadworks plan and longsection	
PROJECT NUMBER: J1201	ORIGINAL SIZE: A3
DRAWING NUMBER: J1201_C304	REVISION: B

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TYPICAL SECTION
1:50 @ A3

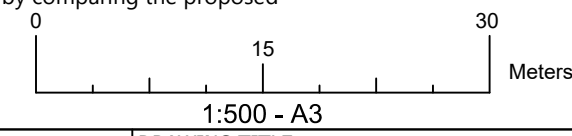


Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
DWY 3 - C&F	1.000	1.000	929.37sq.m	46.60 Cu. M.	80.25 Cu. M.	33.65 Cu. M.<Fill>
Totals			929.37sq.m	46.60 Cu. M.	80.25 Cu. M.	33.65 Cu. M.<Fill>

NOTE

1) The cut and fill depths and volumes shown on this plan have been calculated by comparing the proposed finished surface levels to the existing natural surface.



REV:	DESCRIPTION:	DATE:	DRAWN:	REVIEWED:	APPROVED:	APPROVED BY:
A	Draft For Review	27/07/23	JN	MK	MK	Michiel Kamphorst, MSc, BSc, RPEng, RPEQ, NER
B	Development Application	28/11/23	JN	MK	MK	
						Signed: _____ Date: 28/11/23



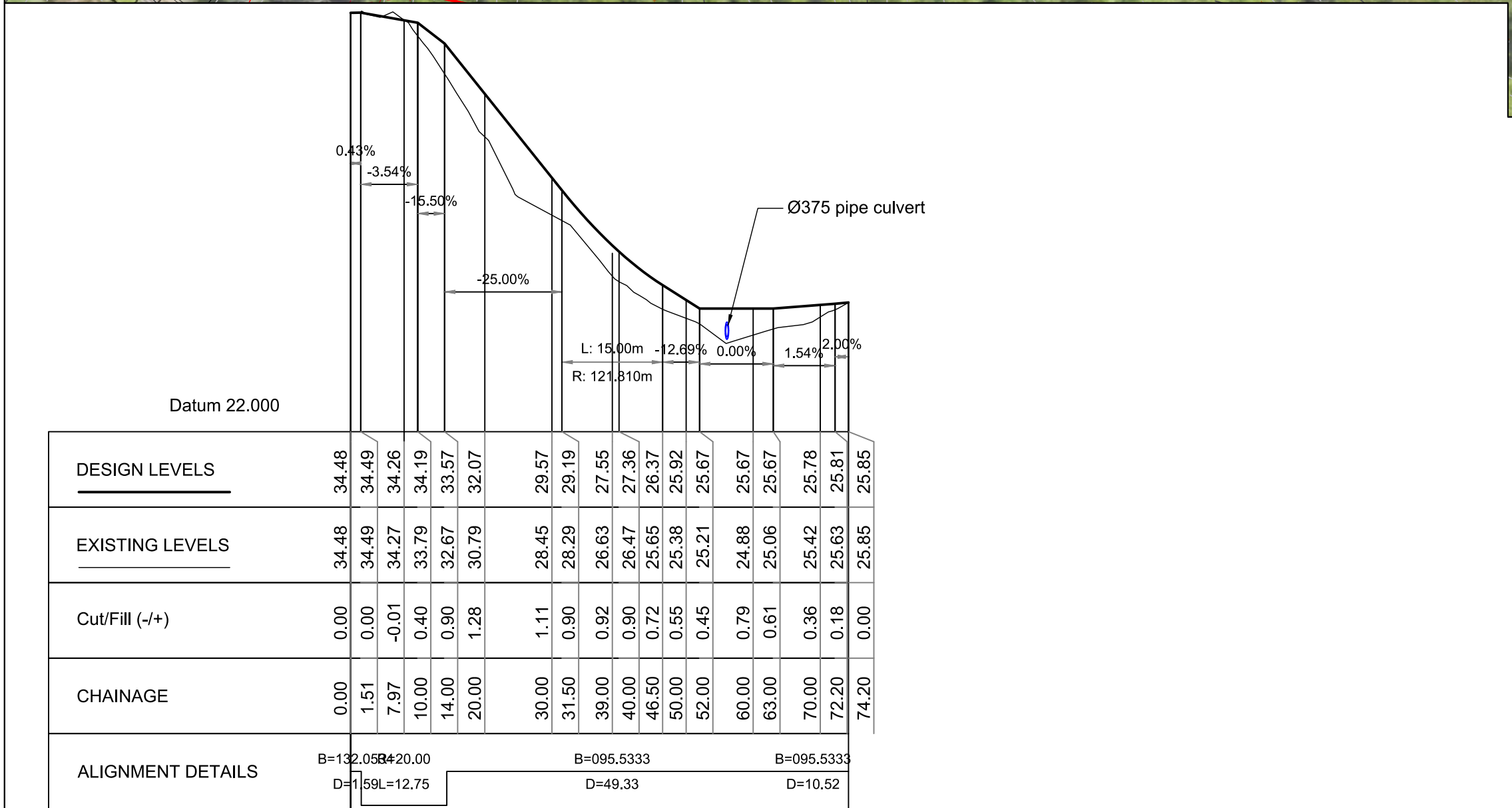
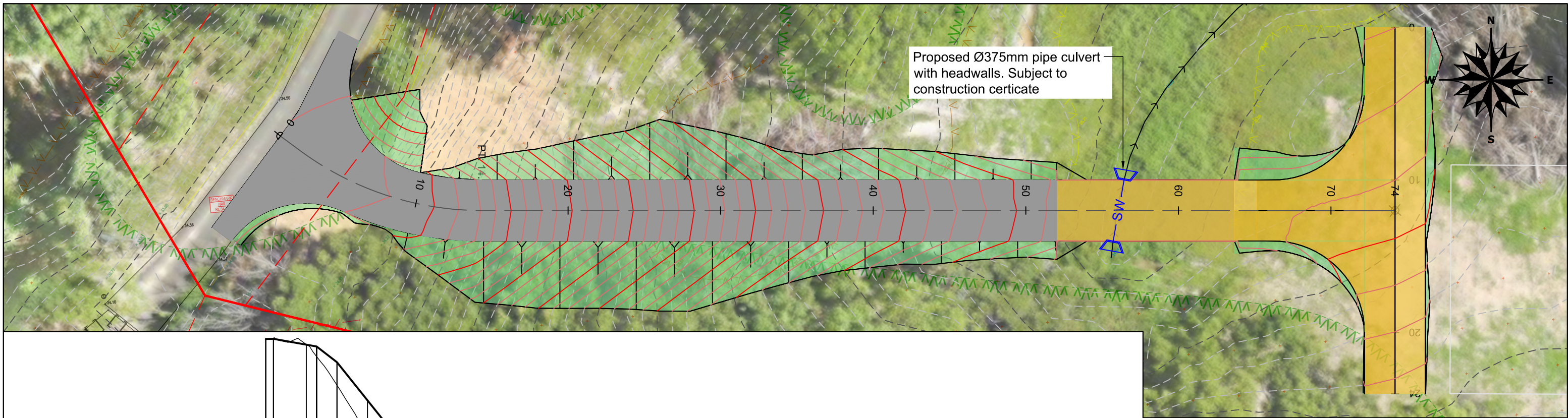
Ingen Consulting Pty Ltd
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CLIENT:
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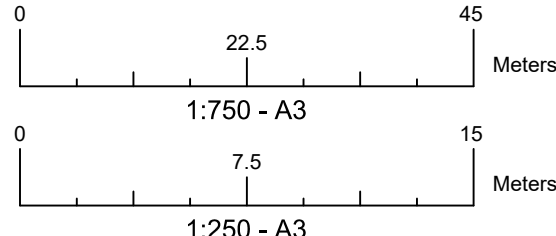
PROJECT:
Community Title Subdivision at 31 Alidenes Road in Wilsons Creek, NSW.

DRAWING TITLE:	
Driveway 3 earthworks plan and typical section	
PROJECT NUMBER: J1201	ORIGINAL SIZE: A3
DRAWING NUMBER: J1201_C305	REVISION: B

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	0.00	1.51	7.97	10.00	14.00	20.00	30.00	31.50	39.00	40.00	46.50	50.00	52.00	60.00	63.00	70.00	72.20	74.20
DESIGN LEVELS	34.48	34.49	34.26	34.19	33.57	32.07	29.57	29.19	27.55	27.36	26.37	25.92	25.67	25.67	25.67	25.78	25.81	25.85
EXISTING LEVELS	34.48	34.49	34.27	33.79	32.67	30.79	28.45	28.29	26.63	26.47	25.65	25.38	25.21	24.88	25.06	25.42	25.63	25.85
Cut/Fill (-/+)	0.00	0.00	-0.01	0.40	0.90	1.28	1.11	0.90	0.92	0.90	0.72	0.55	0.45	0.79	0.61	0.36	0.18	0.00
CHAINAGE	0.00	1.51	7.97	10.00	14.00	20.00	30.00	31.50	39.00	40.00	46.50	50.00	52.00	60.00	63.00	70.00	72.20	74.20
ALIGNMENT DETAILS	B=132.058 D=11.59L=12.75			B=095.5333 D=49.33									B=095.5333 D=10.52					



DRIVEWAY 4 LONGITUDINAL SECTION

REV:	DESCRIPTION:	DATE:	DRAWN:	REVIEWED:	APPROVED:
A	Draft For Review	27/07/23	JN	MK	MK
B	Development Application	28/11/23	JN	MK	MK

APPROVED BY:
Michiel Kamphorst,
MSc, BSc, RPEng, RPEQ, NER

Signed: _____ Date: **28/11/23**

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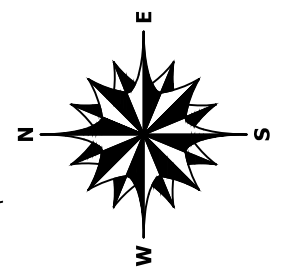
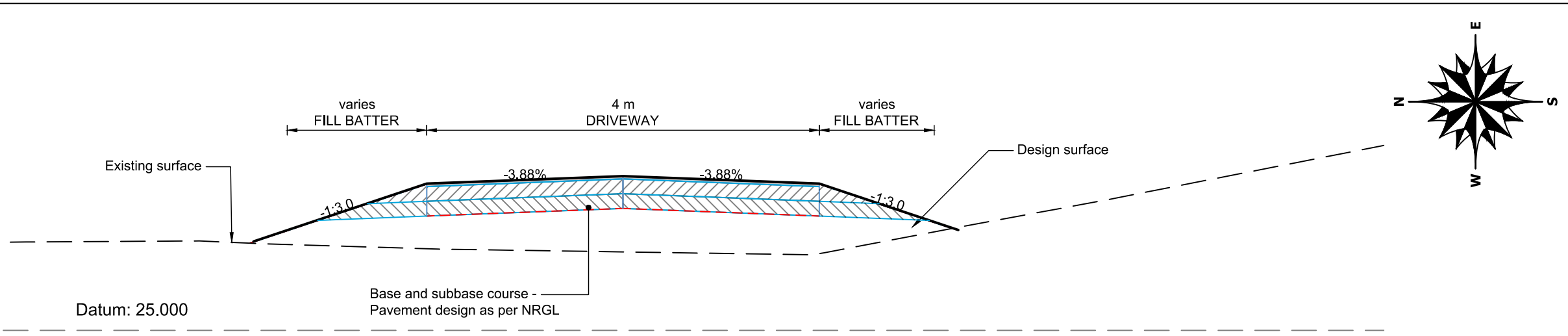
CLIENT:
St Saviour Investments Pty Ltd

PROJECT:
Community Title Subdivision at 31 Alidenes Road in Wilsons Creek, NSW.

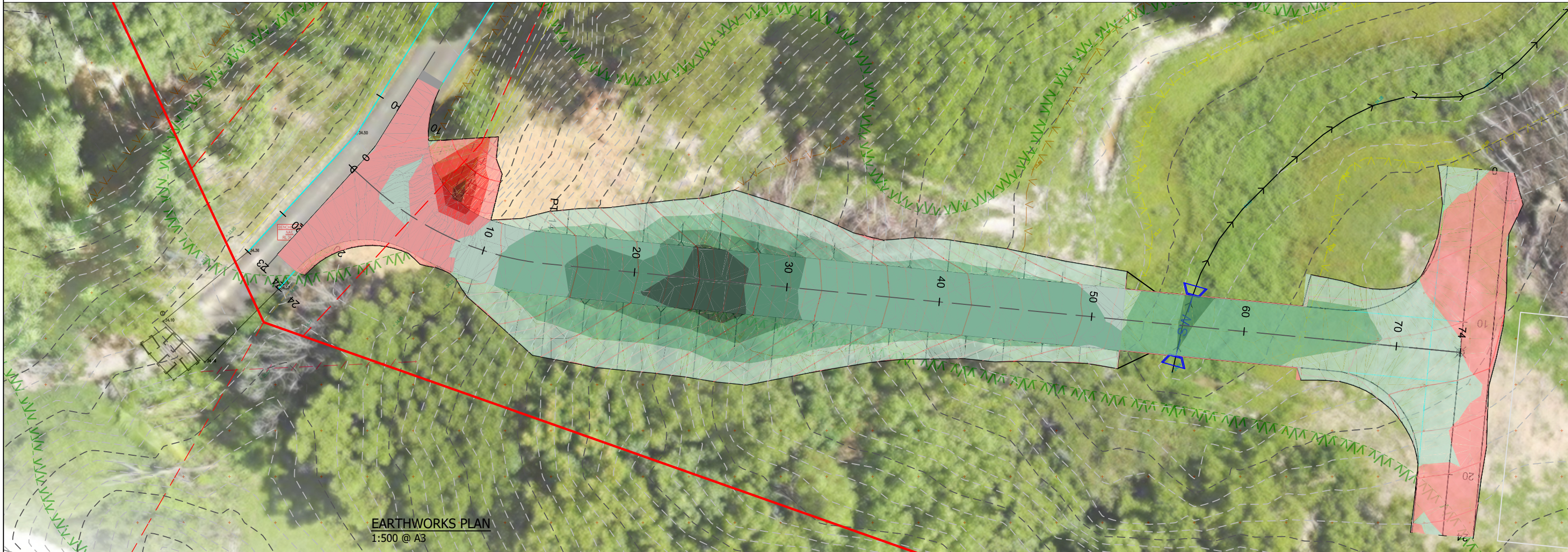
DRAWING TITLE: Driveway 4 roadworks plan and longsection	
PROJECT NUMBER: J1201	ORIGINAL SIZE: A3
DRAWING NUMBER: J1201_C306	REVISION: B

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Elevations Table			
Number	Color	Minimum Elevation	Maximum Elevation
1	Dark Red	-2.000	-1.500
2	Red	-1.500	-1.000
3	Light Red	-1.000	-0.500
4	Very Light Red	-0.500	0.000
5	Light Green	0.000	0.500
6	Medium Green	0.500	1.000
7	Dark Green	1.000	1.500
8	Very Dark Green	1.500	2.000



TYPICAL SECTION
1:50 @ A3



Cut/Fill Summary						
Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
DW4 - C&F	1.000	1.000	695.33sq.m	25.64 Cu. M.	325.60 Cu. M.	299.96 Cu. M.<Fill>
Totals			695.33sq.m	25.64 Cu. M.	325.60 Cu. M.	299.96 Cu. M.<Fill>

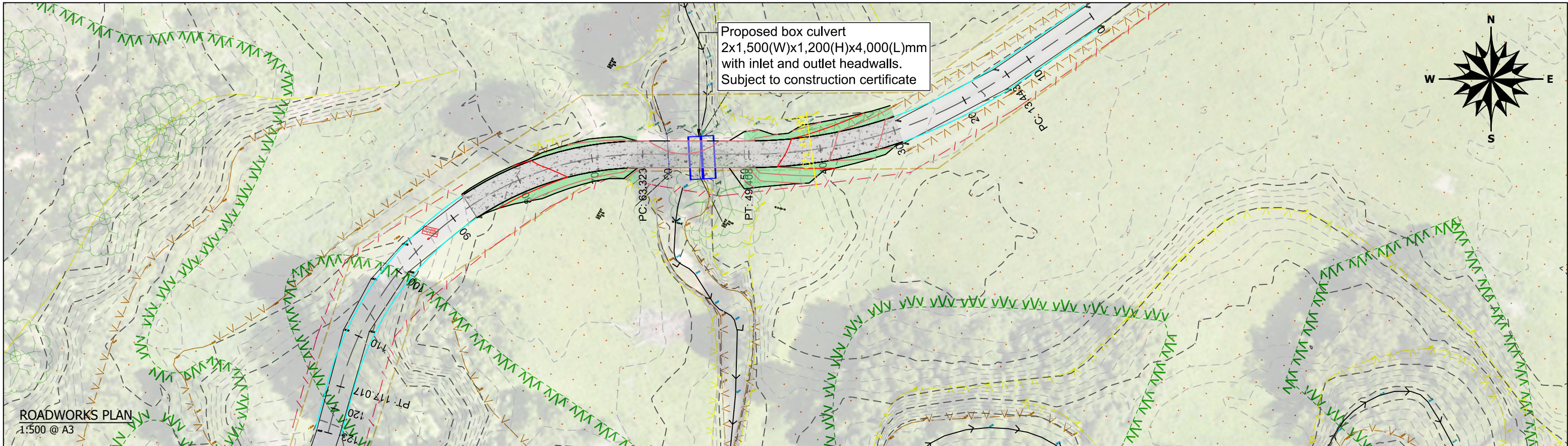
NOTE

1) The cut and fill depths and volumes shown on this plan have been calculated by comparing the proposed finished surface levels to the existing natural surface.

1:500 - A3

REV: A	DESCRIPTION: Draft For Review	DATE: 27/07/23	DRAWN: JN	REVIEWED: MK	APPROVED: MK	APPROVED BY: Michiel Kamphorst, MSc, BSc, RPEng, RPEQ, NER		Ingen Consulting Pty Ltd ACN: 623 948 112 a: Alstonville, NSW p: +614 1726 4987 e: michiel@ingenconsulting.com.au w: www.ingenconsulting.com.au	CLIENT: St Saviour Investments Pty Ltd	PROJECT: Community Title Subdivision at 31 Alidenes Road in Wilsons Creek, NSW.	DRAWING TITLE: Driveway 4 earthworks plan and typical section	
B	Development Application	28/11/23	JN	MK	MK						Signed: _____ Date: 28/11/23	PROJECT NUMBER: J1201
											DRAWING NUMBER: J1201_C307	REVISION: B

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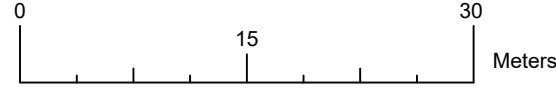


ROADWORKS PLAN
1:500 @ A3

Proposed box culvert
2x1,500(W)x1,200(H)x4,000(L)mm
with inlet and outlet headwalls.
Subject to construction certificate

-3.91% L: 20.00m 1.67%
R: 358.374m

	0.00	10.00	13.44	20.00	29.44	30.00	31.43	40.00	43.85	49.41	50.00	53.85	57.87	60.00	63.32	63.85	70.00	80.00	87.33	90.00	90.17	100.00	110.00	117.02	120.00	123.28
Datum 24.000																										
DESIGN LEVELS					26.59	26.57	26.51	26.18	26.02	25.85	25.84	25.77	25.75	25.76	25.79	25.80	25.90	26.07	26.19	26.42	26.44	27.32	28.27	28.73	28.89	29.06
EXISTING LEVELS	27.03	27.09	27.11	26.90	26.59	26.57	26.47	25.89	25.72	25.56	25.55	25.49	25.43	25.44	25.55	25.56	25.71	25.97	26.19	26.42	26.44	27.32	28.27	28.73	28.89	29.06
Cut/Fill (-/+)					0.00	0.00	0.04	0.29	0.30	0.29	0.28	0.28	0.32	0.31	0.24	0.24	0.19	0.10	0.00							
CHAINAGE	0.00	10.00	13.44	20.00	29.44	30.00	31.43	40.00	43.85	49.41	50.00	53.85	57.87	60.00	63.32	63.85	70.00	80.00	87.33	90.00	90.17	100.00	110.00	117.02	120.00	123.28
ALIGNMENT DETAILS	B=221.8606 D=13.44		R=60.00 L=35.97		B=256.2049 D=13.91				R=41.00 L=53.69				B=181.1693 D=6.26													



Horizontal 1:500 Vertical 1:100

EX. DW LONGITUDINAL SECTION

REV:	DESCRIPTION:	DATE:	DRAWN:	REVIEWED:	APPROVED:
A	Draft For Review	27/07/23	MC	MK	MK

APPROVED BY:
Michiel Kamphorst,
MSc, BSc, RPeng, RPEQ, NER

Signed: _____ Date: **28/11/23**

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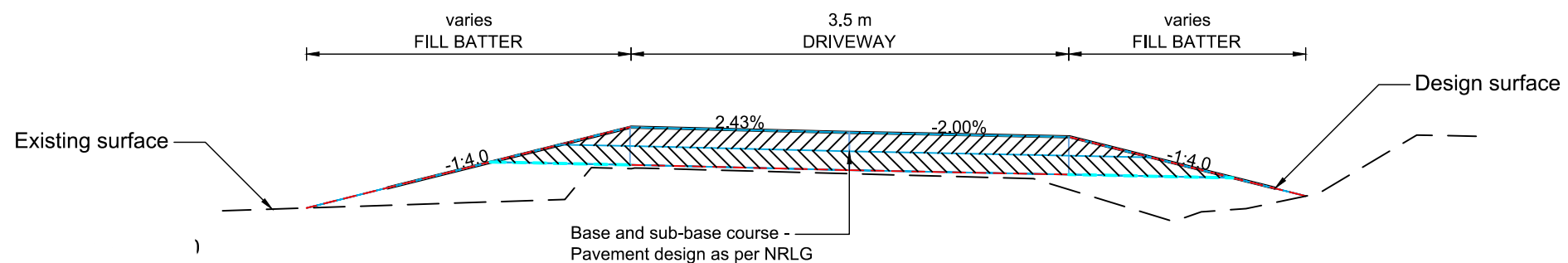
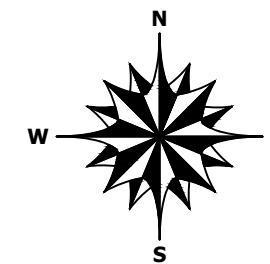
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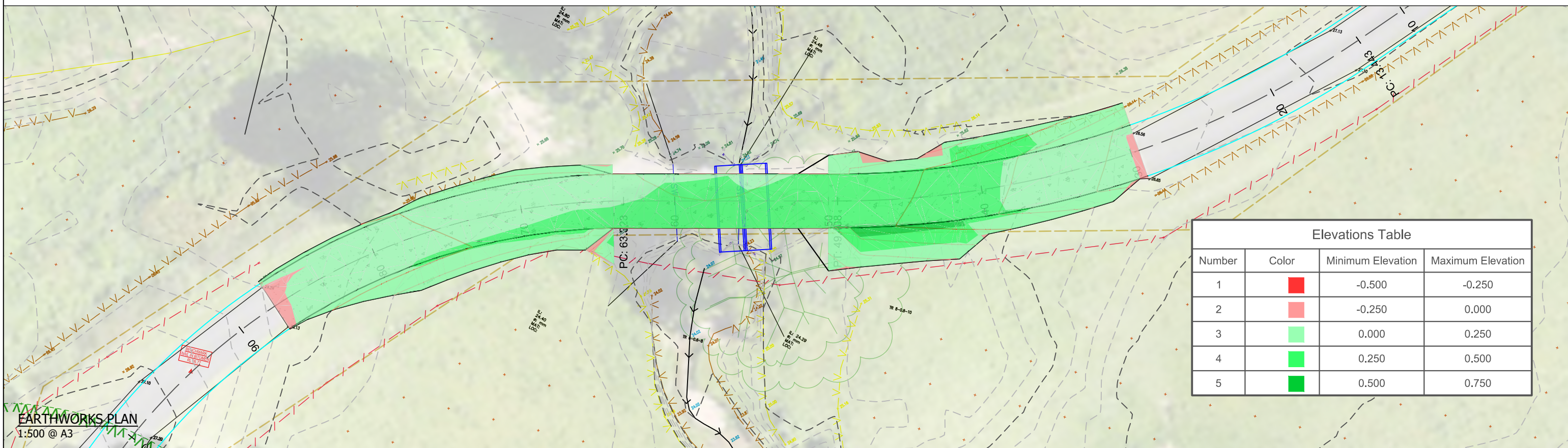
PROJECT:
Community Title Subdivision at 31 Alidenes Road in Wilsons Creek, NSW.

DRAWING TITLE: Existing driveway upgrade roadworks plan and longsection	
PROJECT NUMBER: J1201	ORIGINAL SIZE: A3
DRAWING NUMBER: J1201_C308	REVISION: A

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TYPICAL SECTION
1:50 @ A3

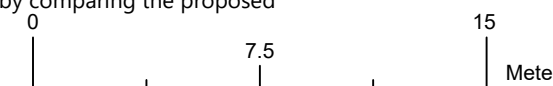


Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
Ex. DWY - C&F	1.000	1.000	301.92sq.m	0.13 Cu. M.	58.49 Cu. M.	58.36 Cu. M.<Fill>
Totals			301.92sq.m	0.13 Cu. M.	58.49 Cu. M.	58.36 Cu. M.<Fill>

NOTE

1) The cut and fill depths and volumes shown on this plan have been calculated by comparing the proposed finished surface levels to the existing natural surface.



1:250 - A3

REV:	DESCRIPTION:	DATE:	DRAWN:	REVIEWED:	APPROVED:
A	Draft For Review	27/07/23	MC	MK	MK

APPROVED BY:
Michiel Kamphorst,
MSc, BSc, RPEng, RPEQ, NER

Signed: _____ Date: **28/11/23**

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w: www.ingenconsulting.com.au

CLIENT:
St Saviour Investments Pty Ltd

PROJECT:
Community Title Subdivision at 31 Alidenes Road in Wilsons Creek, NSW.

DRAWING TITLE:	
Existing driveway upgrade earthworks plan and typical section	
PROJECT NUMBER: J1201	ORIGINAL SIZE: A3
DRAWING NUMBER: J1201_C309	REVISION: A

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