

# CONROY'S GREEN STAGE 2 SAN HUBERTO PROPERTIES P/L

## GENERAL NOTES:

### A. GENERAL

1. ALL WORK TO BE CARRIED OUT TO CITY OF BALLARAT & IDM SPECIFICATIONS, STANDARD DRAWINGS AND TO THE SATISFACTION OF COUNCIL'S SENIOR SURVEILLANCE OFFICER OR HIS REPRESENTATIVE.

2. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM AND ALL COORDINATES ARE TO MAP GRID OF AUSTRALIA (MGA) ZONE 54.

3. THE LOCATION OF EXISTING SERVICES SHOULD BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCING ANY EXCAVATION BY CONTACTING ALL SERVICE AUTHORITIES. ANY EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE OFFERED AS A GUIDE ONLY AND ARE NOT GUARANTEED AS CORRECT.

4. FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND ONLY RE-TOPSOILED ON THE DIRECTION OF THE ENGINEER, TO THE FINAL FILL LEVELS SHOWN ON THE DRAWINGS. ALL FILLING IS TO BE:  
- APPROVED BY THE PROJECT GEOTECHNICAL CONSULTANT.  
- PLACED IN LAYERS NOT EXCEEDING 200MM LOOSE THICKNESS.  
- MOISTURE CONDITIONED TO WITHIN 85% TO 115% OF OPTIMUM MOISTURE CONTENT.  
- COMPACTED TO A MINIMUM 95% (STANDARD) DRY DENSITY RATIO.  
- PLACED UNDER "LEVEL 1" SUPERVISION IN ACCORDANCE WITH AS 3798-1996.

5. EXISTING DEPRESSIONS & DRAINS TRAVERSING THE SITE ARE TO BE CLEANED OUT AND DESLUDGED TO FIRM BASE AND FILLED TO FINISHED SURFACE LEVELS TO THE SPECIFIED COMPACTION STANDARDS.

6. TBM'S TO BE RE-ESTABLISHED BY THE LICENSED SURVEYOR IF FOUND TO BE MISSING AT THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR CARE AND MAINTENANCE OF TBM'S THEREAFTER.

7. POSITION CONDUITS SO THAT A MINIMUM DISTANCE BETWEEN TAPPING IS 1.0M. CONDUITS TO BE LOCATED MIDWAY BETWEEN FENCE LINE OF LOT, UNLESS OTHERWISE SHOWN.

8. BEFORE COMMENCING WORK ON EXCAVATIONS IN EXCESS OF 1.5 M DEEP, THE REQUIRED NOTICE IS TO BE SENT TO THE VICTORIAN WORKCOVER AUTHORITY IN ACCORDANCE WITH THE MINES ACT, 1958 NO 6320 SECTION 305 AND THE OCCUPATIONAL HEALTH AND SAFETY ACT 1985. THIS NOTIFICATION MUST BE RECEIVED BY THE AUTHORITY AT LEAST 3 DAYS PRIOR TO COMMENCING EXCAVATIONS, AND A COPY OF THE NOTIFICATION MUST BE PROVIDED TO THE SUPERINTENDENT.

9. COUNCIL'S REPRESENTATIVE IS TO BE NOTIFIED IN WRITING SEVEN (7) DAYS PRIOR TO THE COMMENCEMENT OF WORKS.

10. NO EXCAVATION WITHIN 5M OF ANY EXISTING TREE WITHOUT APPROVAL OF THE ENGINEER.

11. NO BLASTING IS PERMITTED WITHIN THE CITY OF BALLARAT WITHOUT OBTAINING COUNCIL'S SPECIAL DISPENSATION.

12. EXCAVATED MATERIAL SURPLUS TO FILLING REQUIREMENTS OF THE WORKS SHALL BE REMOVED FROM SITE AS SPECIFIED.

13. ALL SURPLUS ROCK, CONCRETE AND BITUMINOUS RUBBLE SHALL BE DISPOSED OFF SITE AS SPECIFIED. THE CONTRACTOR SHALL CHECK WITH SUPERINTENDENT WHETHER ANY LARGE ROCKS ARE REQUIRED FOR LANDSCAPE PURPOSES PRIOR TO DISPOSAL.

14. NATURESTRIPS AND ALL AREAS OF CUT OUTSIDE ROAD RESERVE TO BE SURFACED WITH 100MM MINIMUM COMPACTED LAYER OF TOPSOIL.

15. CULTURAL HERITAGE AREAS TO BE STRIPPED OF TOPSOIL TO A DEPTH OF APPROXIMATELY 350MM AND PLACED ON EXISTING TOPSOIL STOCKPILE FOR RE-SPREADING AT A LATER DATE

### B. ROAD WORKS

1. FOOTPATHS ARE TO BE 1.5M WIDE UNLESS SHOWN OTHERWISE. FOOTPATHS TO BE CONSTRUCTED TO THE CITY OF BALLARAT STANDARDS.

2. CONSTRUCT LAYBACK SECTION AT VEHICLE CROSSING, REVERSING BAYS AND CAR PARKING BAYS AND PRAM CROSSING TO THE CITY OF BALLARAT STANDARDS.

3. ALL CHAINAGES REFER TO ROAD PAVEMENT CENTRELINES EXCEPT IN COURT HEADS AND INTERSECTIONS WHERE CHAINAGES REFER TO BACK OF KERB.

4. THE CONTRACTOR IS REQUIRED TO CONFINE CONSTRUCTION VEHICLES TO THE ROAD RESERVE AND EASEMENTS. ANY DAMAGE CAUSED TO ALLOTMENTS MUST BE MADE GOOD.

5. ALL BATTERS SHALL BE TO THE CITY OF BALLARAT STANDARDS.  
- CUT 1 IN 12 UNLESS OTHERWISE SHOWN.  
- FILL 1 IN 12 UNLESS OTHERWISE SHOWN.

6. ALL SET OUT INFORMATION GIVEN IS TO BACK OF KERB UNLESS OTHERWISE SHOWN.

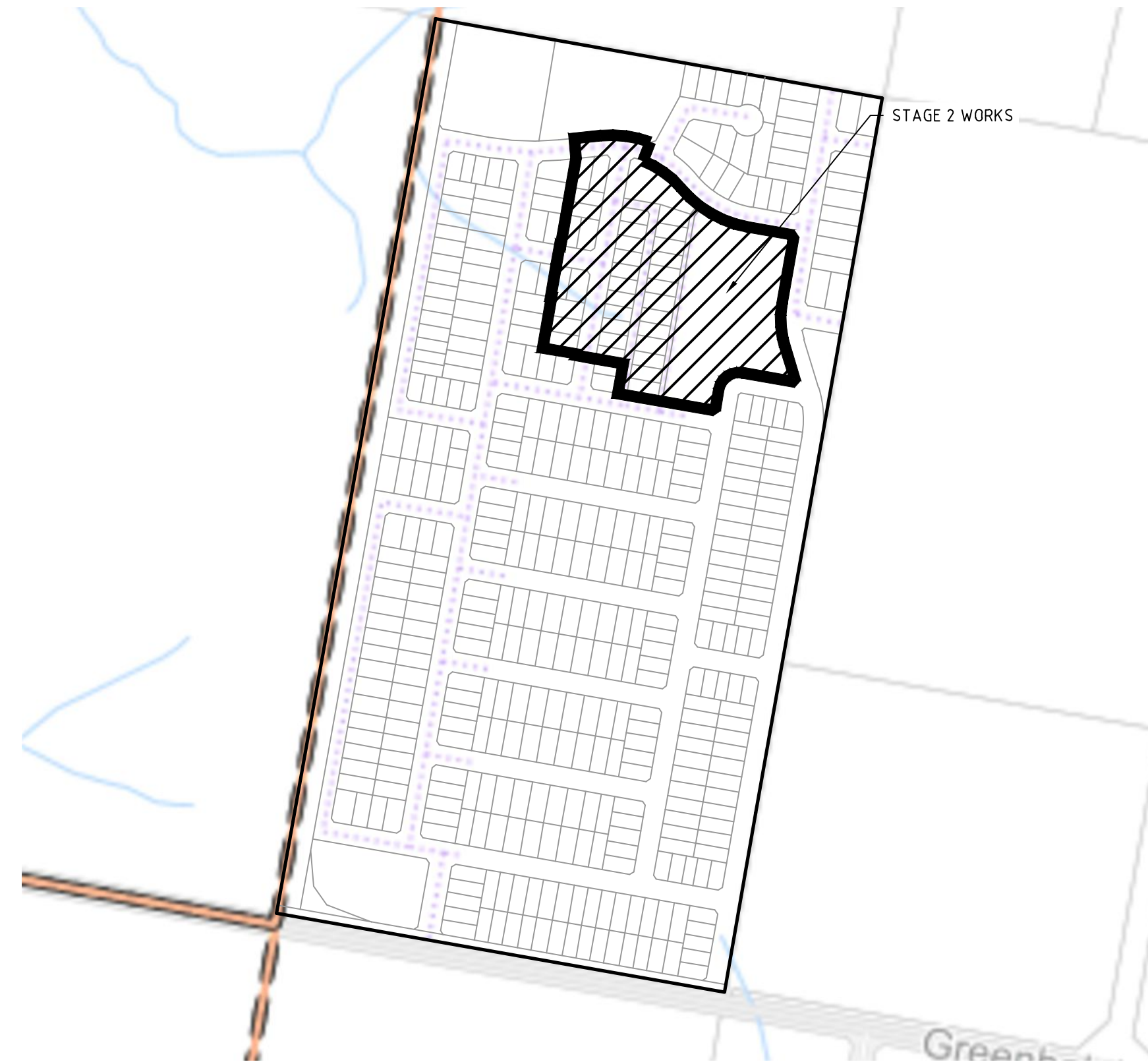
7. WHERE CRUSHED ROCK IS SHOWN UNDER CONCRETE FOOTPATHS CONSTRUCTED ON FILL, THE CRUSHED ROCK IS TO BE 20MM CLASS 3. WHERE CUT BATTERS ARE STEEPER THAN 1:6 THEY MUST BE HYDRO MULCHED.

8. SUBGRADE BE COMPACTED TO A MINIMUM OF 98% STANDARD MAXIMUM DRY DENSITY (AS3798), WITH THE SUBBASE COMPACTED IN ACCORDANCE WITH SCALE C IN VICROADS TABLE 304.071 USING FINE CRUSHED ROCK AND THE BASE COURSE TO AN AVERAGE OF 100% MINIMUM MODIFIED DRY DENSITY. ANY FILLING BENEATH ROAD PAVEMENT AREAS TO BE COMPACTED TO 100% OF MAXIMUM DRY DENSITY. COMPACTION TESTING TO BE AS PER COUNCIL REQUIREMENTS.

9. ANY BACKFILL WITHIN 1.0M OF A COUNCIL ASSET (FOOTPATH OR ROAD) IS TO BE FCR. FILL MATERIAL IS ACCEPTABLE IF COMPACTED TO ENSURE 95% COMPACTION. COMPACTION TESTING TO BE PERFORMED AT ONE PER 60M OF TRENCH.

10. CONCRETE TO HAVE 28DAY STRENGTH OF 25MPA UNLESS NOTED OTHERWISE

11. MATERIALS AND SUPPLIERS CALLED IN THE SPECIFICATION, SCHEDULES OR PLANS SHALL NOT BE SUBSTITUTED WITHOUT PRIOR WRITTEN APPROVAL AS PER 'ENVIRODEVELOPMENT - NATIONAL TECHNICAL STANDARD VERSION 2'. ALL RECEIPTS MUST BE RETAINED AND PROVIDED UPON REQUEST.



LOCALITY PLAN  
NOT TO SCALE

## DRAWING SCHEDULE

DRAWING	DESCRIPTION	SHEET No.	REVISION
CR100	GENERAL NOTES	1	4
CR200	ROAD LAYOUT PLANS - SHEET 1	2	1
CR201	ROAD LAYOUT PLANS - SHEET 2	3	3
CR202	ROAD LAYOUT PLANS - TBM AND CUT & FILL PLAN	4	1
CR300	ROAD LONG SECTIONS - SHEET 1	5	0
CR301	ROAD LONG SECTIONS - SHEET 2	6	1
CR400	ROAD CROSS SECTIONS - SHEET 1	7	1
CR401	ROAD CROSS SECTIONS - SHEET 2	8	1
CR402	ROAD CROSS SECTIONS - SHEET 3	9	1
CR403	ROAD CROSS SECTIONS - SHEET 4	10	1
CR500	INTERSECTION DETAILS - SHEET 1	11	0
CR600	DRAINAGE LONG SECTIONS - SHEET 1	12	1
CR601	DRAINAGE LONG SECTIONS - SHEET 2	13	1
CR602	DRAINAGE LONG SECTIONS - SHEET 3	14	1
CR603	DRAINAGE LONG SECTIONS - SHEET 4	15	1
CR604	DRAINAGE LONG SECTIONS - PIT SCHEDULE	16	0
CR605	DRAINAGE LONG SECTIONS - PIT 202 DETAILS	17	0
CR606	DRAINAGE LONG SECTIONS - OUTFALL DETAILS	18	0
CR700	PAVEMENT AND TYPICAL DETAILS	19	1
CR800	SIGNAGE AND LINEMARKING	20	1

## SERVICE LOCATION TABLE

ROAD NAME	POTABLE WATER		GAS		NBN (TELECOM)		ELECTRICITY			
	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	POLE		U/G CABLE	
							SIDE	OFFSET	SIDE	OFFSET
BROUGA BOULEVARD	N	2.95	N	2.40	S	1.80	S	1.0x	S	2.70
BOWERBIRD GRANGE	E	2.95	E	2.40	W	1.80	W	1.0x	W	2.70
WREN WAY	S	2.95	S	2.40	N	1.80	N	1.0x	N	2.70
RAPTOR LANE (LOT 212)	-	-	-	-	-	-	-	-	N	0.70
RAPTOR LANE (LOT 240 - 260)	-	-	-	-	-	-	-	-	E	0.70
BLUE WREN WALK	W	2.50	W	3.00	W	1.80	-	-	-	-

- TELECOMMUNICATIONS AND ELECTRICITY CABLES TO BE CONSTRUCTED IN A COMMON TRENCH IN ACCORDANCE WITH ELECTRICITY AUTHORITY STANDARD GR6'S.
- GAS AND WATER MAINS TO BE CONSTRUCTED IN A COMMON TRENCH.
- x = OFFSET FROM BACK OF KERB

## LEGEND

DESCRIPTION	EXISTING	PROPOSED
WATER MAIN, VALVE AND HYDRANT	DW	DW
UNDERGROUND ELECTRICITY	E	E
OVERHEAD ELECTRICITY & POLE	OE	OE
TELECOMMUNICATIONS & SERVICE PIT	T	T
OPTIC FIBRE	OF	OF
OVERHEAD TELECOMMUNICATIONS	OT	OT
GAS MAIN	G	G
BRANCH SEWER & MAINTENANCE STRUCTURE	S	S
SEWER & MAINTENANCE STRUCTURE	S	S
SEWER RISING MAIN	SRM	SRM
CENTRAL INVERT	>	>
COUNCIL STORMWATER DRAIN AND PIT	>	>
STORM WATER DRAINAGE PROPERTY INLETS	>	>
COUNCIL STORM WATER PITS	IL428.142	IL428.142
HOUSE DRAIN WITH MAX ALLOWABLE INVERT	*HIP(K)	*HIP(K)
AG DRAIN AND FLUSHER	AG	AG
STORM WATER DRAINAGE PIT TYPE & NUMBER	EX 100EP	202SEP
GAS & WATER CONDUITS	GW	GW
RIDGE / CHANGE OF GRADE LINE	-169.00	169.00
SURFACE CONTOUR MINOR	-168.90	168.90
SURFACE CONTOUR MAJOR	E123.45	F124.68
BATTER LEVEL (TOP / TOE)	T124.80	T124.80
EARTHWORKS GRADE	1 in 150	1 in 150
SIGN AND POST	+	+
LIGHT & POLE (BY OTHERS)	+	+
STREET SIGN	+	+
PERMANENT SURVEY MARK	+	+
TEMPORARY BENCH MARK	+	+
BOLLARD	+	+
ROAD CHAINAGES	CH116.57 IL/RJTP CH116.57	CH116.57 IL/RJTP CH116.57
LOT CHAINAGES	CH20.06	CH20.06
SETOUT POINT	+	+
LIMIT OF WORKS	+	+
BATTER	+	+
ROCK BEACHING	+	+
RETAINING WALL	+	+
FENCE - TREE PROTECTION	+	+
FENCE - VEHICLE EXCLUSION	+	+
FENCES	+	+
GUARD RAIL	+	+
TREE (& SURVEYED CANOPY) TO BE RETAINED	+	+
TREE TO BE PROTECTED	+	+
TREE TO BE REMOVED	+	+
VEGETATION LINE	+	+
FOOTPATH	+	+
TACTILE GROUND SURFACE INDICATOR	+	+
KERB TRANSITION	B2	SM2



**WARNING**  
BEWARE OF UNDERGROUND/OVERHEAD SERVICES  
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.

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Rev	Amendments	Approved	Date
4	AMENDED RAPTOR LANE, BLUE WREN WALK & OPEN DRAIN	A.W	07/09/21
3	AMENDED FOOTPATHS & SIGNAGE	A.W	26/08/21
2	AMENDED DRAINAGE FLOWS AND HGL	A.W	15/07/21
1	AMENDED RAPTOR LANE DRIVEWAY AND HD LOCATIONS	A.W	18/06/21
0	ISSUED FOR CONSTRUCTION	A.W	28/05/21
C	AMENDED SHEETS CR201, 202, 401, 600, 603 - 800	A.W	14/05/21
B	AMENDED SHEETS CR201-301, 500, 603 & 604. ADDED SHEET CR4303	A.W	23/03/21
A	PRELIMINARY ISSUE	A.W	16/03/21



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16 BRIDGE STREET BENDIGO  
VICTORIA 3550 AUSTRALIA T 61 3 5448 2500  
spiire.com.au ABN 55 050 029 635

Designed  
M. WRIGHT  
Authorised  
A. WILKIE

Checked  
B. IBBS  
Date  
14/05/21

**CONROY'S GREEN  
STAGE 2  
ROAD AND DRAINAGE  
GENERAL NOTES - SHEET 1**  
CITY OF BALLARAT  
SAN HUBERTO PROPERTIES P/L

**CONSTRUCTION** Drg No 308457CR100 Rev 4



RB4 SED POND  
REFER TO 308493WD100-WD704

RB4 WETLANDS  
REFER TO 308493WD100-WD704

EXISTING WINTER VALLEY  
RISE ESTATE  
STAGE 7

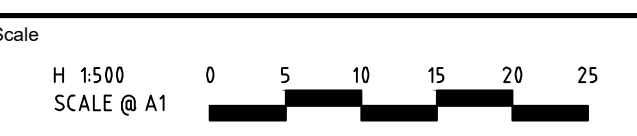
OPEN SPACE

EXISTING STAGE 1

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Rev	Amendments	Approved	Date
1	AMENDED FOOTPATHS	A.W	26/08/21
0	ISSUED FOR CONSTRUCTION	A.W	28/05/21
B	ISSUED FOR APPROVAL	A.W	14/05/21
A	PRELIMINARY ISSUE	A.W	16/03/21



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14/05/21

**CONROY'S GREEN  
STAGE 2  
ROAD AND DRAINAGE  
ROAD LAYOUT PLANS - SHEET 1**  
CITY OF BALLARAT  
SAN HUBERTO PROPERTIES P/L

**CONSTRUCTION** Dwg No **308457CR200** Rev **1**









TBM2  
E 745652.916  
N 5837806.350  
RL 425.980

TBM1  
E 745845.532  
N 5837711.227  
RL 430.630

TBM3  
E 745587.066  
N 5837415.818  
RL 430.531

TBM4  
E 745962.434  
N 5837336.182  
RL 433.589

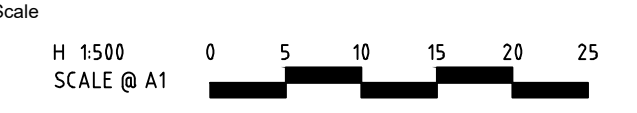
DEPTH RANGES (100mm)		
FROM	TO	COLOUR
-	-0.80	Dark Blue
-0.80	-0.70	Blue
-0.70	-0.60	Light Blue
-0.60	-0.50	Very Light Blue
-0.50	-0.40	White
-0.40	-0.30	Light Yellow
-0.30	-0.20	Yellow
-0.20	-0.10	Orange
-0.10	0.00	Light Orange
0.00	0.10	Light Yellow
0.10	0.20	Yellow
0.20	0.30	Light Orange
0.30	0.40	Orange
0.40	0.50	Light Red
0.50	0.60	Red
0.60	0.70	Dark Red
0.70	0.80	Dark Red
0.80	+	Dark Red

NOTE: DOES NOT INCLUDE FILLING OF EXISTING OPEN DRAINS

**TBM LOCATIONS**

Point Number	Easting	Northing	RL	D
1	745845.532	5837711.227	430.630	STAR PICKET
2	745652.916	5837806.350	425.980	STAR PICKET
3	745587.066	5837415.818	430.531	STAR PICKET
4	745962.434	5837336.182	433.589	STAR PICKET

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Rev	Description	Approved	Date
1	AMENDED RAPTOR LANE, BLUE WREN WALK & OPEN DRAIN	A.W	07/09/21
0	ISSUED FOR CONSTRUCTION	A.W	28/05/21
C	AMENDED BLUE WREN WALK, RAPTOR LANE AND OPEN SPACE LEVELS	A.W	14/05/21
B	AMENDED BLUE WREN WALK AND OPEN SPACE LEVELS	A.W	23/03/21
A	PRELIMINARY ISSUE	A.W	16/03/21
Rev	Amendments	Approved	Date

**CONROY'S GREEN STAGE 2**  
ROAD AND DRAINAGE  
ROAD LAYOUT PLANS - TBM AND CUT & FILL PLAN  
CITY OF BALLARAT  
SAN HUBERTO PROPERTIES P/L

Designed: M. WRIGHT  
Checked: B. IBBS  
Authorised: A. WILKIE  
Date: 14/05/21

CONSTRUCTION 308457CR202

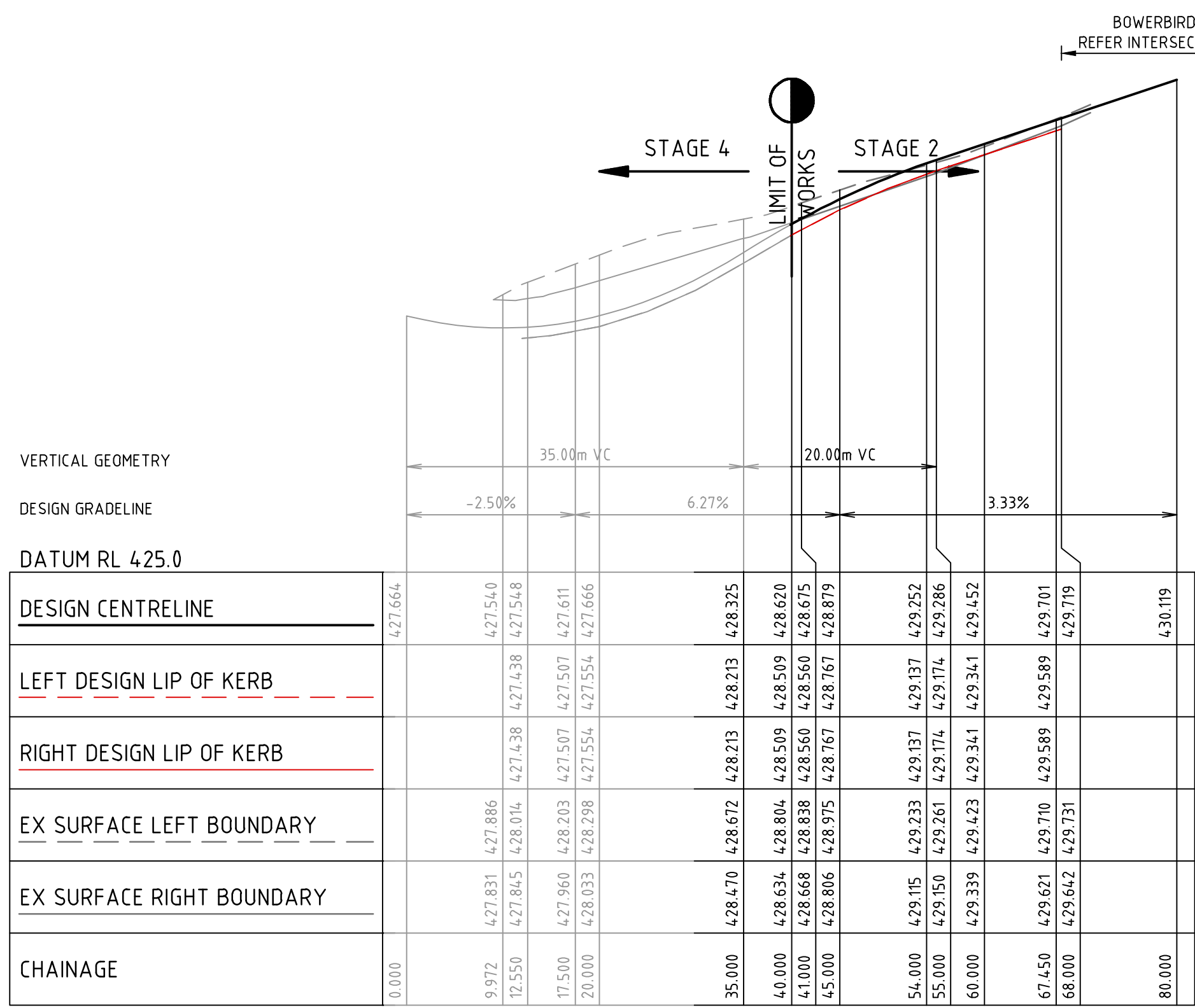
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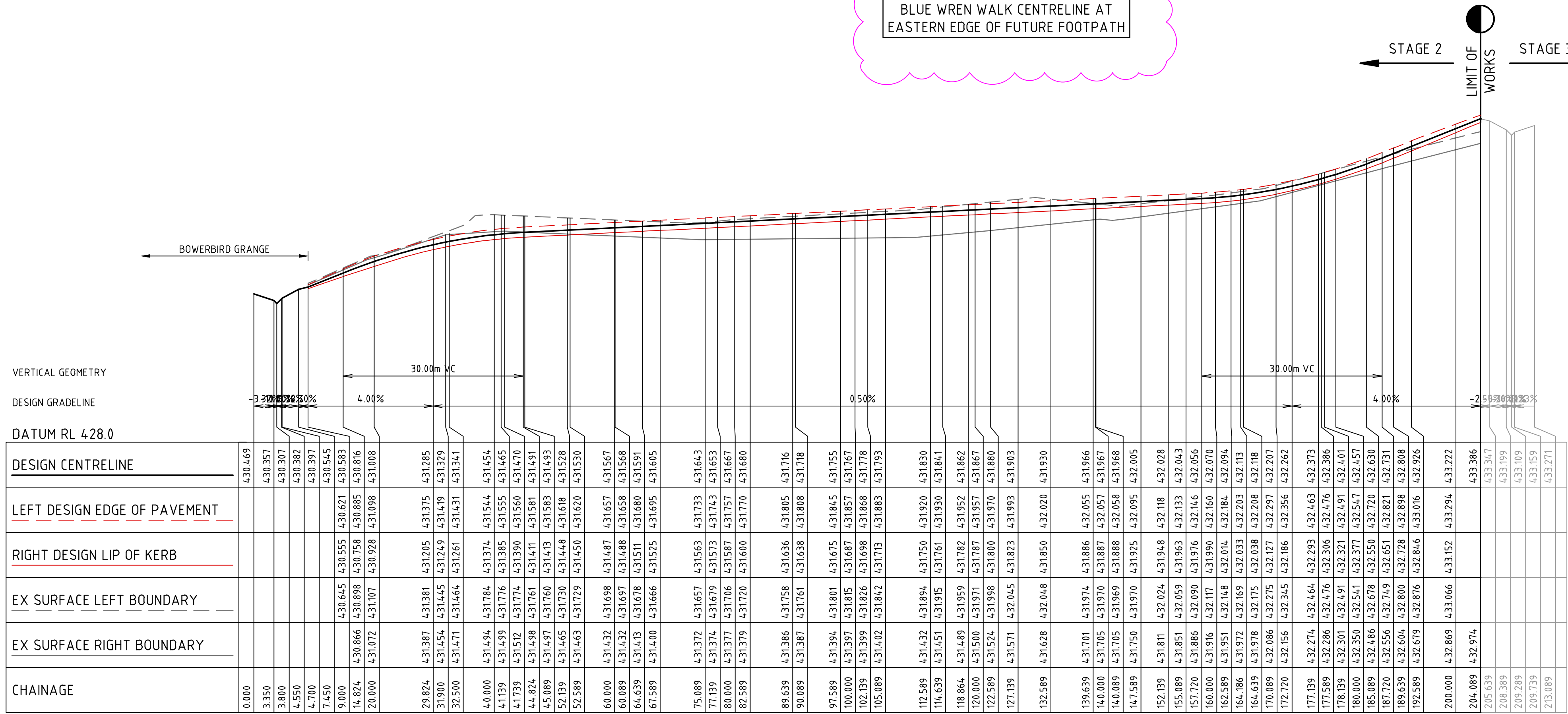




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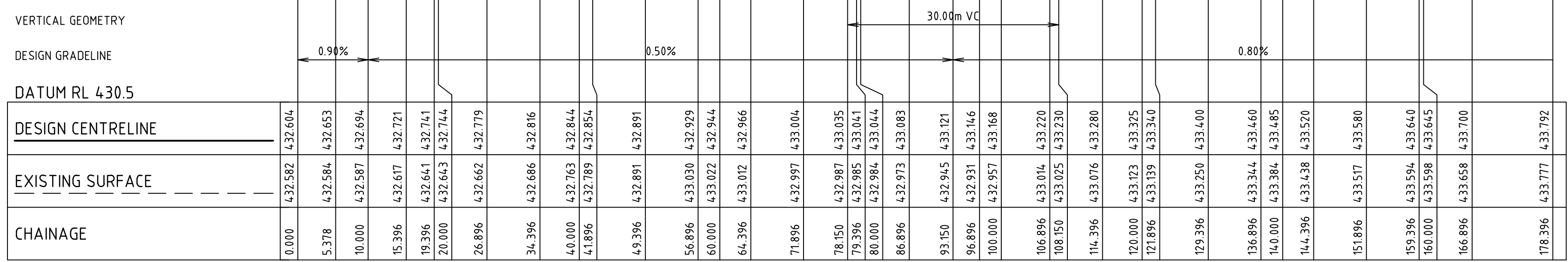


WREN WAY



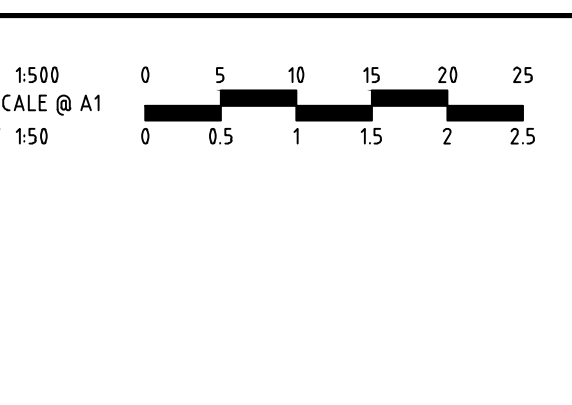
RAPTOR LANE

1



BLUE WREN WALK  
BLUE WREN WALK CENTRELINE AT EASTERN EDGE OF FUTURE FOOTPATH

Rev	Description	Approved	Date
1	AMENDED BLUE WREN WALK	A.W	07/09/21
0	ISSUED FOR CONSTRUCTION	A.W	28/05/21
C	ISSUED FOR APPROVAL	A.W	14/05/21
B	AMENDED RAPTOR LANE, ADDED BLUE WREN WALK	A.W	23/03/21
A	PRELIMINARY ISSUE	A.W	16/03/21



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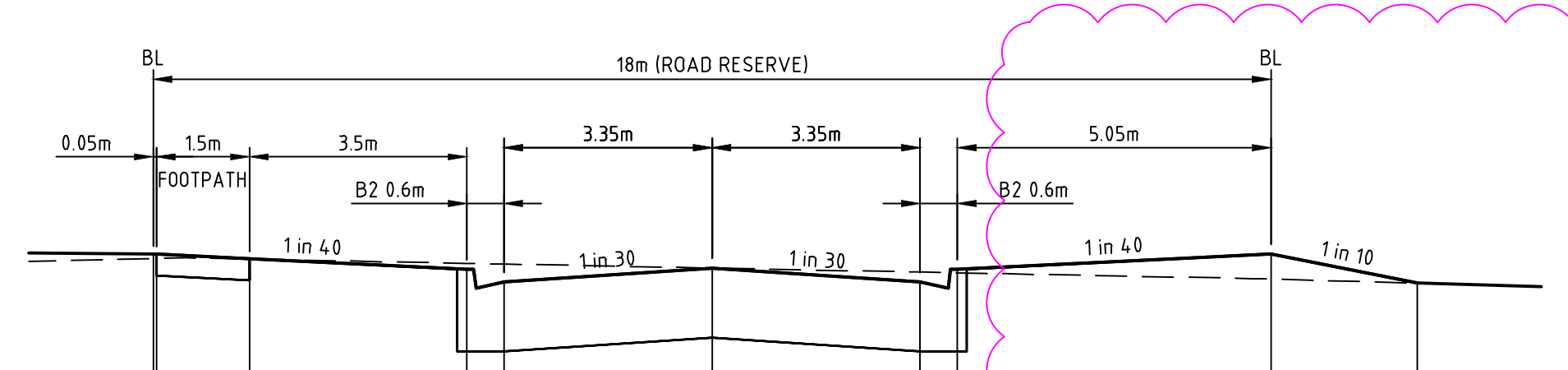
**CONROY'S GREEN**  
**STAGE 2**  
ROAD AND DRAINAGE  
ROAD LONG SECTIONS - SHEET 2  
CITY OF BALLARAT  
SAN HUBERTO PROPERTIES P/L

CONSTRUCTION 308457CR301

1

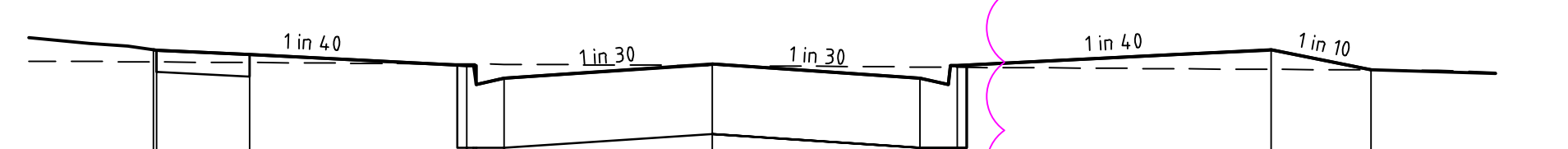


**FILLING NOTE**  
 ALL FILLING WITHIN ROAD RESERVES IS TO BE UNDERTAKEN USING LEVEL 1 SUPERVISION AND BE COMPLETED IN ACCORDANCE WITH AS 3798-2007 AND TO THE SATISFACTION OF COUNCIL AND THE SUPERINTENDENT. FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND REPLACED WITH TOPSOIL (WHERE REQUIRED) TO OBTAIN THE FINAL LEVELS SHOWN ON THE DRAWINGS.



DATUM R.L. 428.0	
DESIGN SURFACE LEVEL	429.539
EXISTING SURFACE LEVEL	429.501
OFFSET	-9.000

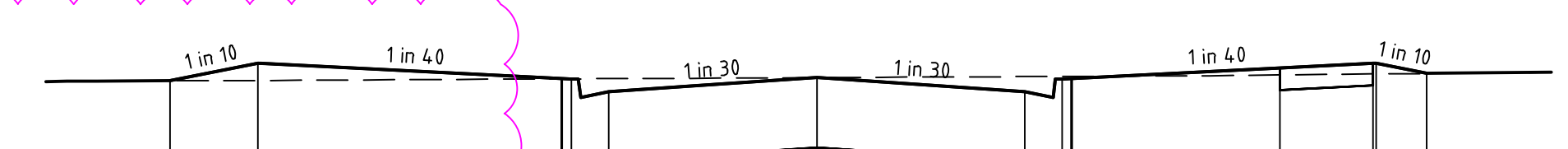
BROLGA BOULEVARD CH 227.01



DATUM R.L. 429.0	
DESIGN SURFACE LEVEL	430.602
EXISTING SURFACE LEVEL	430.505
OFFSET	-9.000

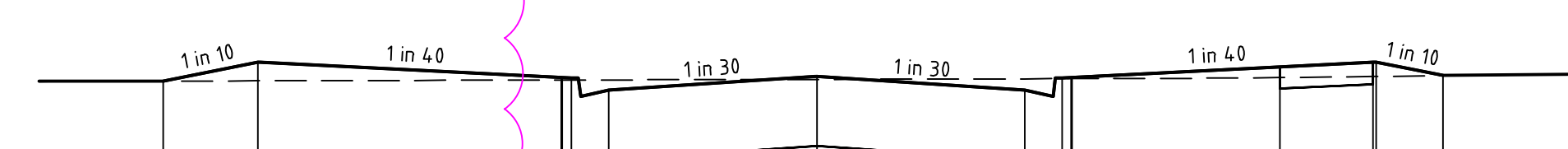
BROLGA BOULEVARD CH 199.22

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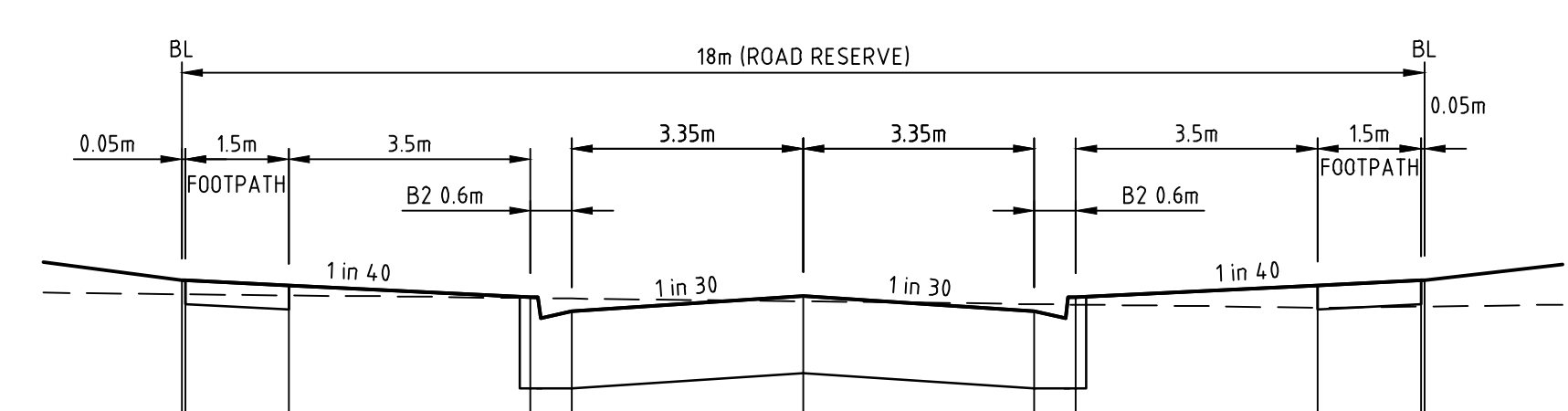
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DESIGN SURFACE LEVEL	430.939
EXISTING SURFACE LEVEL	430.943
OFFSET	-10.410

BROLGA BOULEVARD CH 171.43



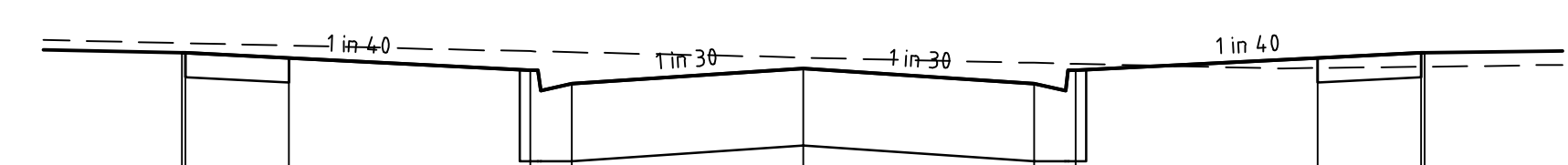
DATUM R.L. 429.0	
DESIGN SURFACE LEVEL	431.061
EXISTING SURFACE LEVEL	431.063
OFFSET	-10.522

BROLGA BOULEVARD CH 162.62



DATUM R.L. 428.0	
DESIGN SURFACE LEVEL	429.834
EXISTING SURFACE LEVEL	429.731
OFFSET	-9.000

WREN WAY CH 68.00

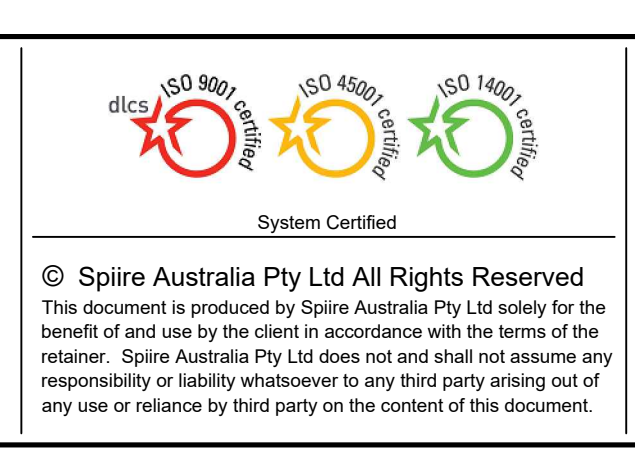
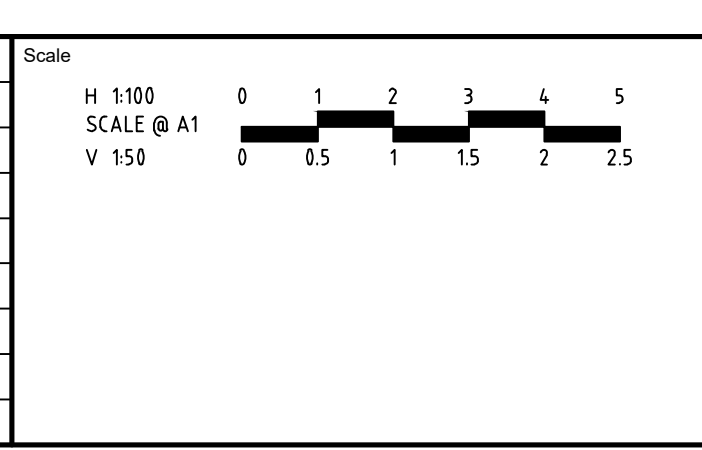


DATUM R.L. 427.0	
DESIGN SURFACE LEVEL	428.735
EXISTING SURFACE LEVEL	428.633
OFFSET	-9.000

WREN WAY CH 40.00

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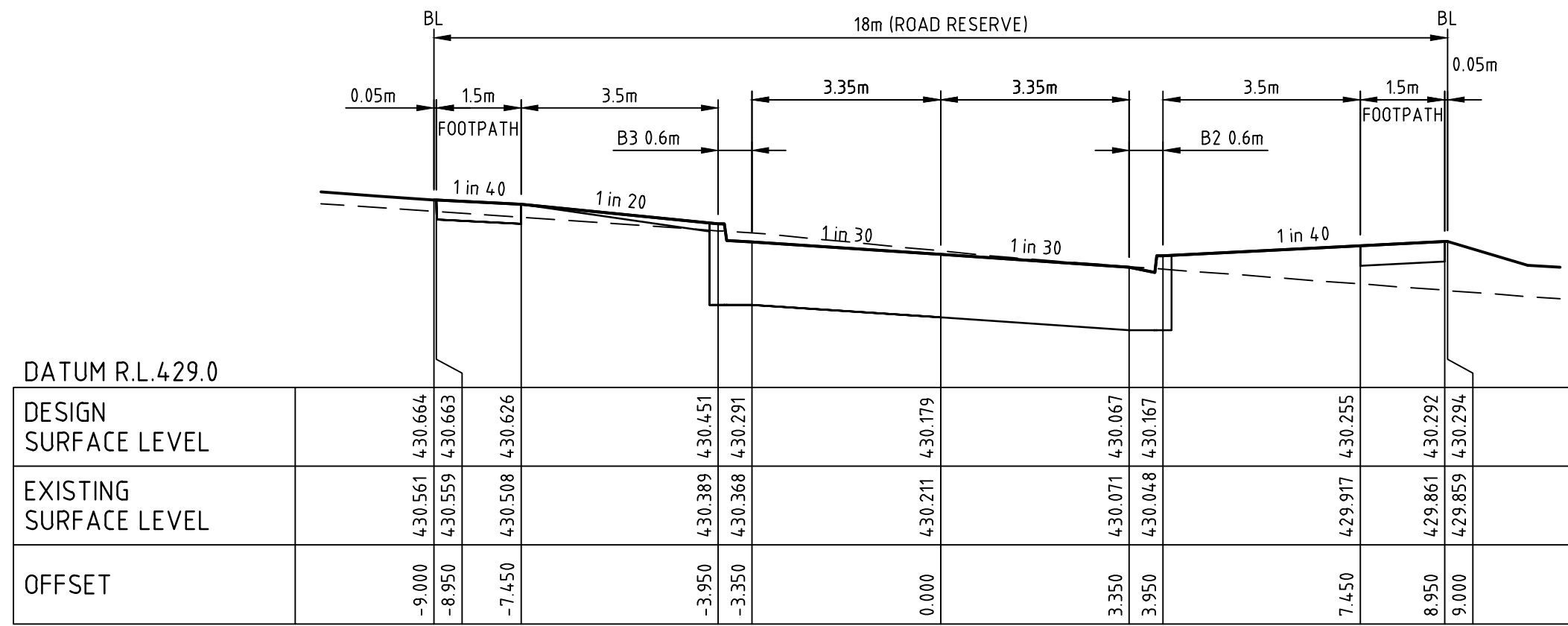
Rev	Amendments	Approved	Date
1	AMENDED FOOTPATHS	A.W	26/08/21
0	ISSUED FOR CONSTRUCTION	A.W	28/05/21
B	ISSUED FOR APPROVAL	A.W	14/05/21
A	PRELIMINARY ISSUE	A.W	16/03/21



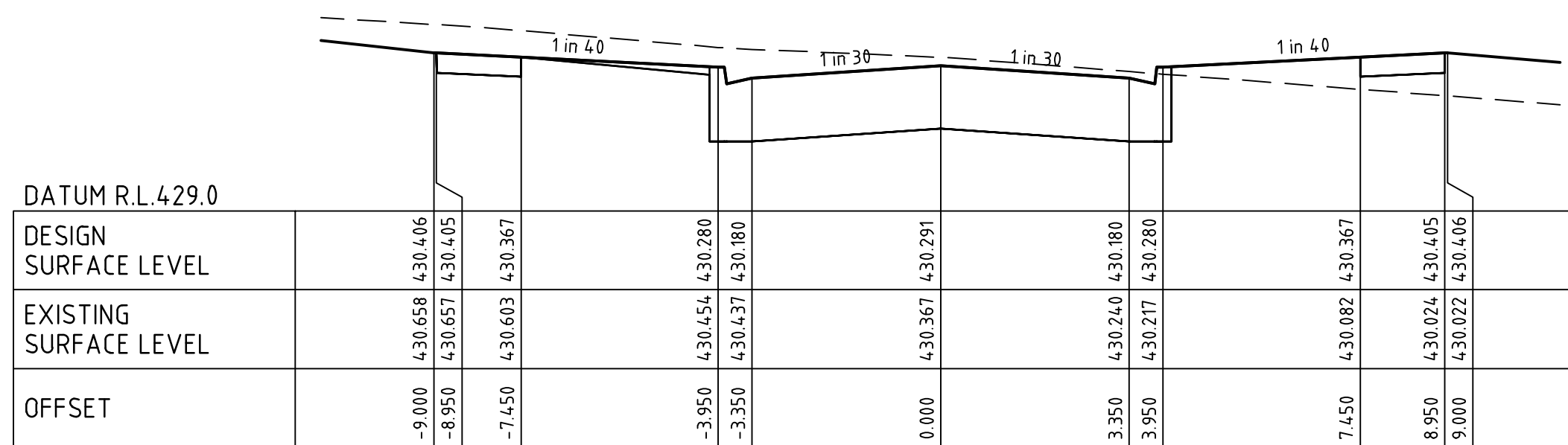
Designed M. WRIGHT	Checked B. IBBS
Authorised A. WILKIE	Date 14/05/21

**CONROY'S GREEN**  
**STAGE 2**  
 ROAD AND DRAINAGE  
 ROAD CROSS SECTIONS - SHEET 1  
 CITY OF BALLARAT  
 SAN HUBERTO PROPERTIES P/L

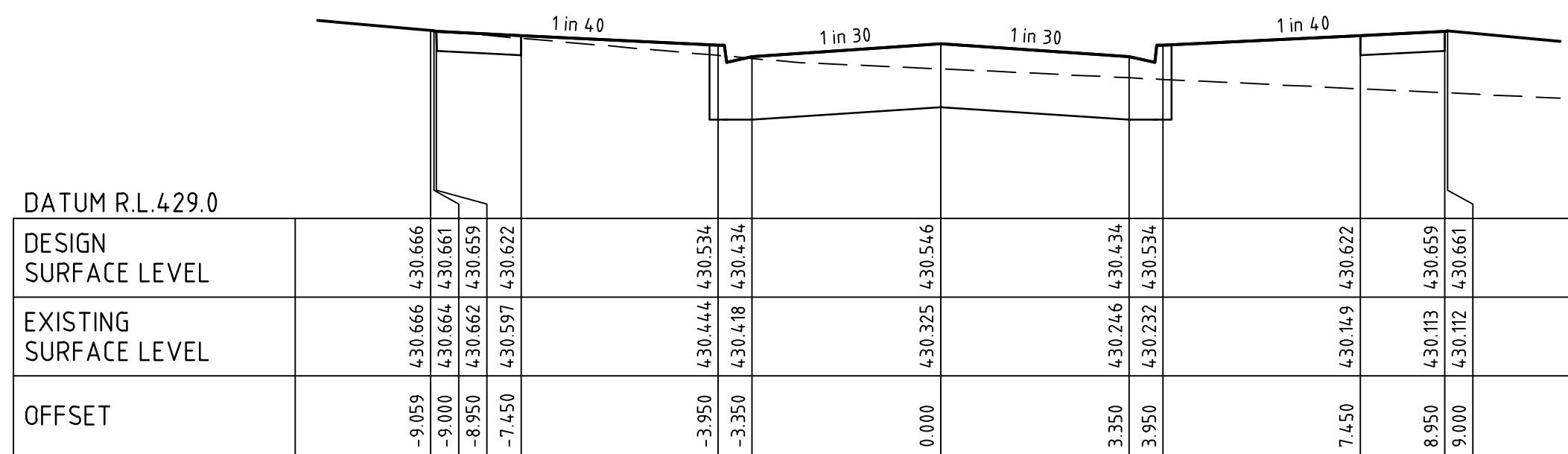
**CONSTRUCTION** Drg No 308457CR400 Rev 1



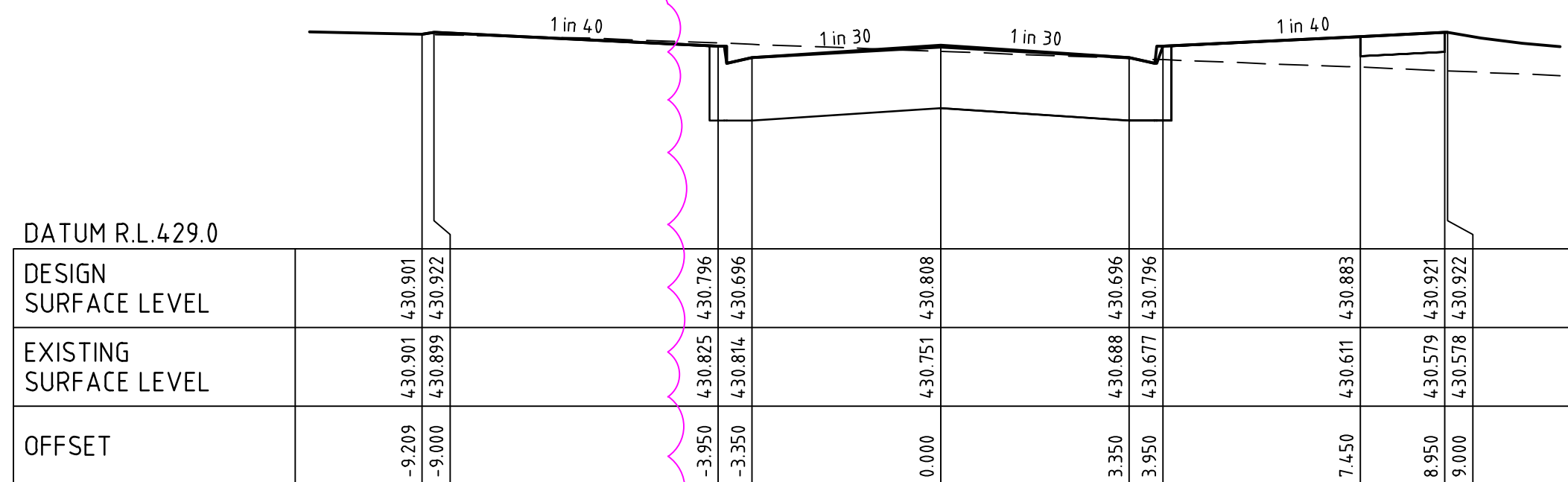
BOWERBIRD GRANGE CH 94.23  
END OF ONE WAY CROSS FALL TRANSITION



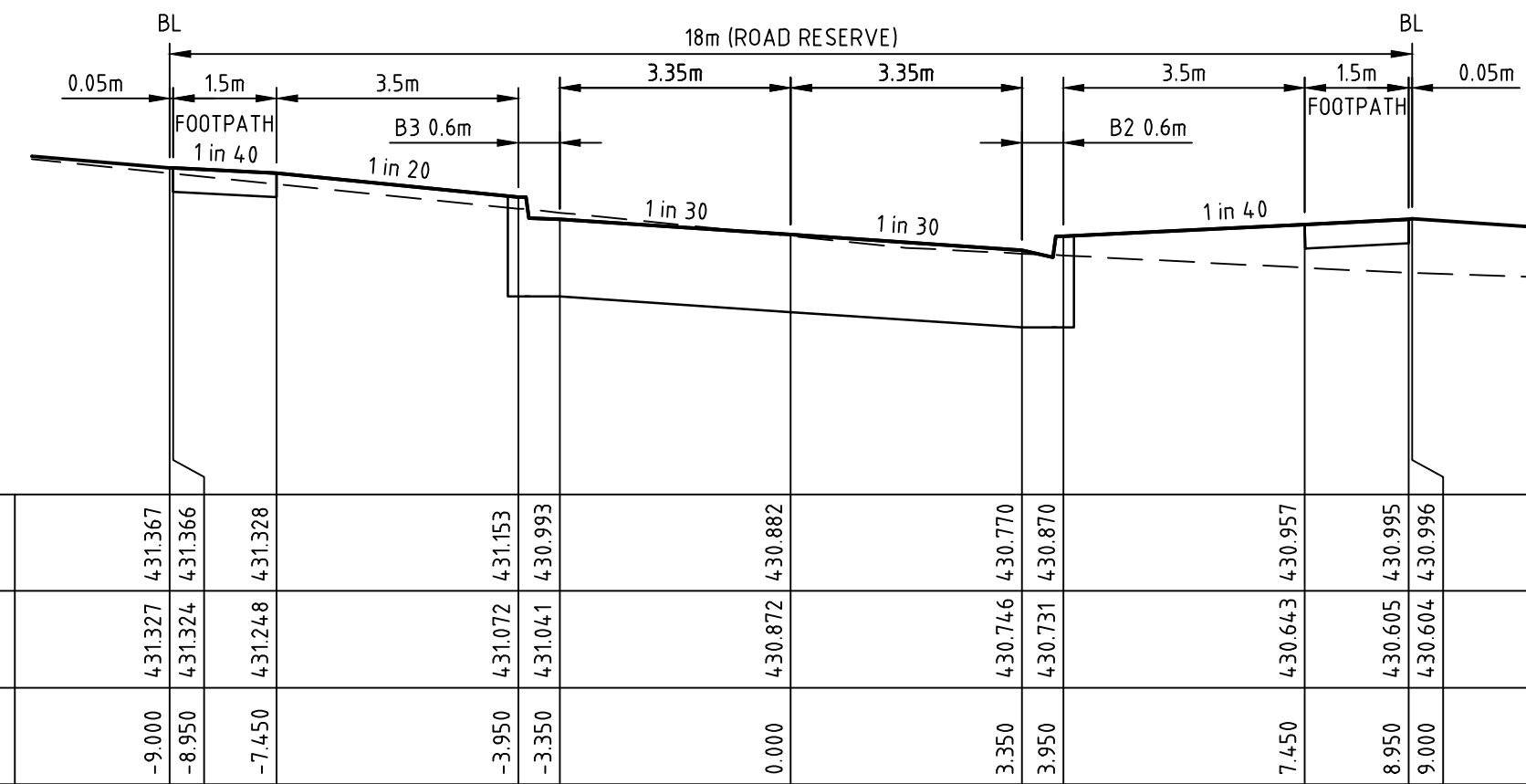
BOWERBIRD GRANGE CH 71.73  
START OF ONE WAY CROSS FALL TRANSITION



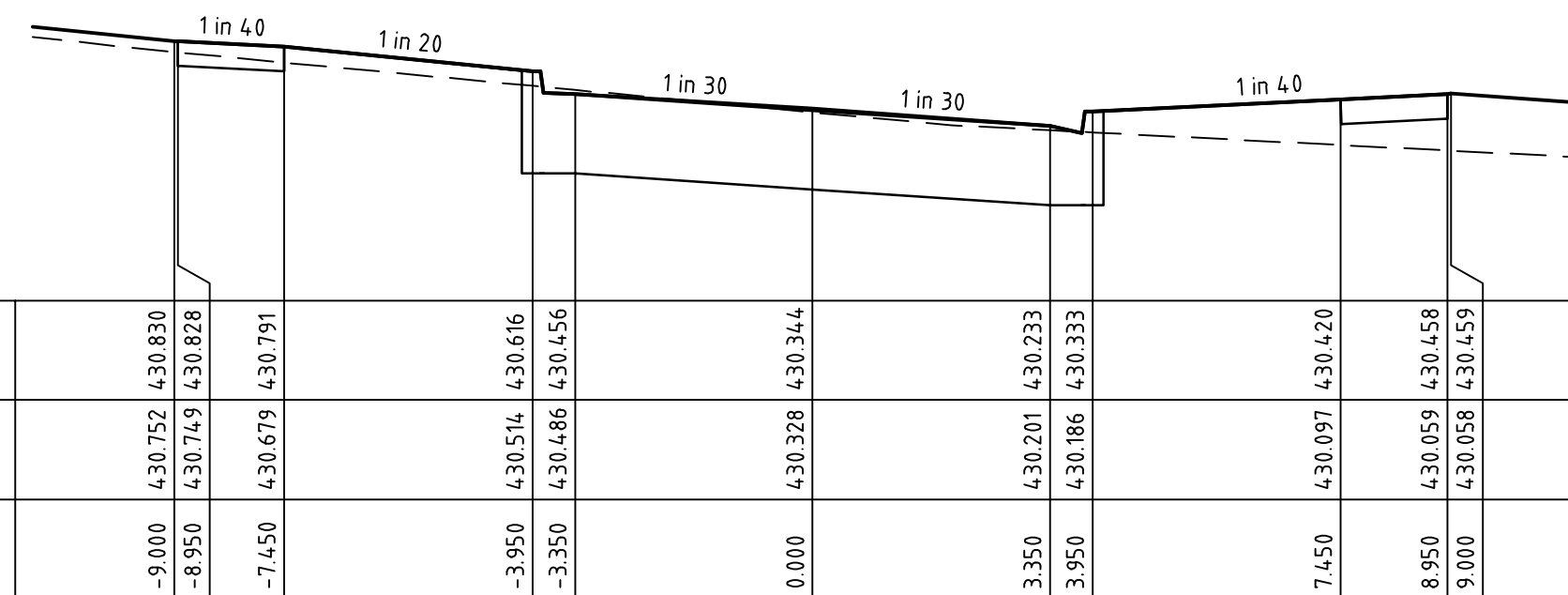
BOWERBIRD GRANGE CH 44.23



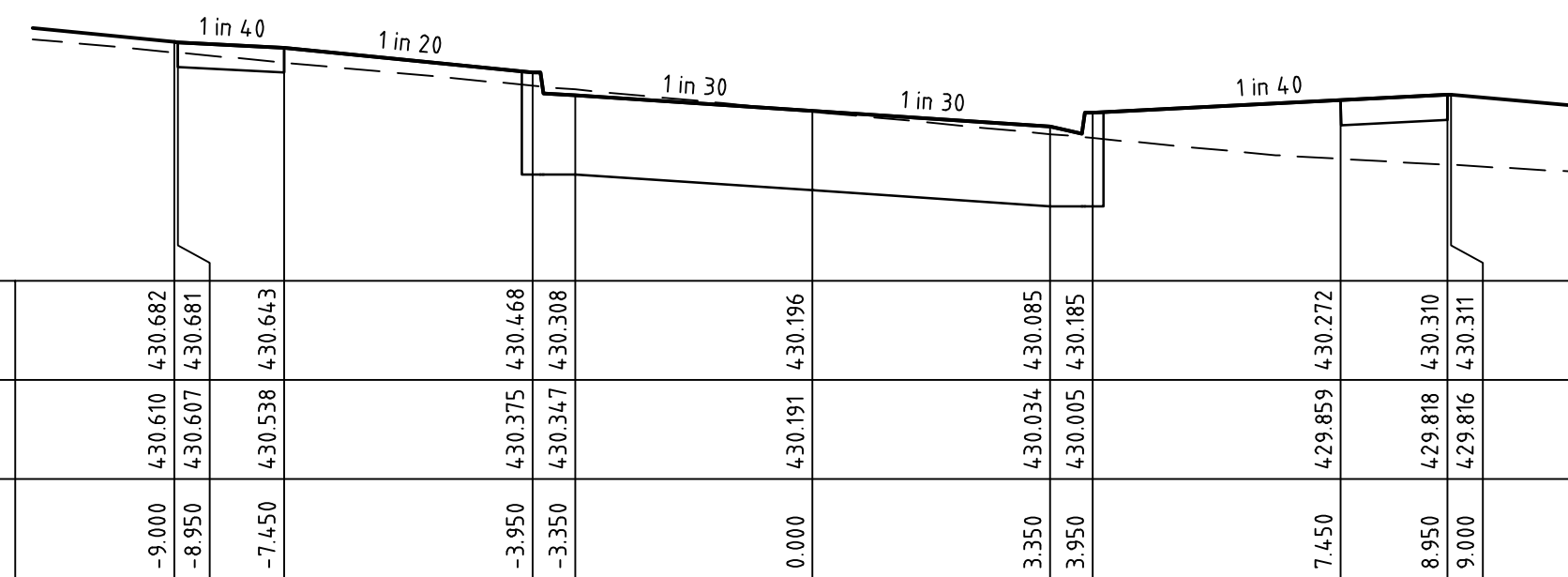
BOWERBIRD GRANGE CH 13.78



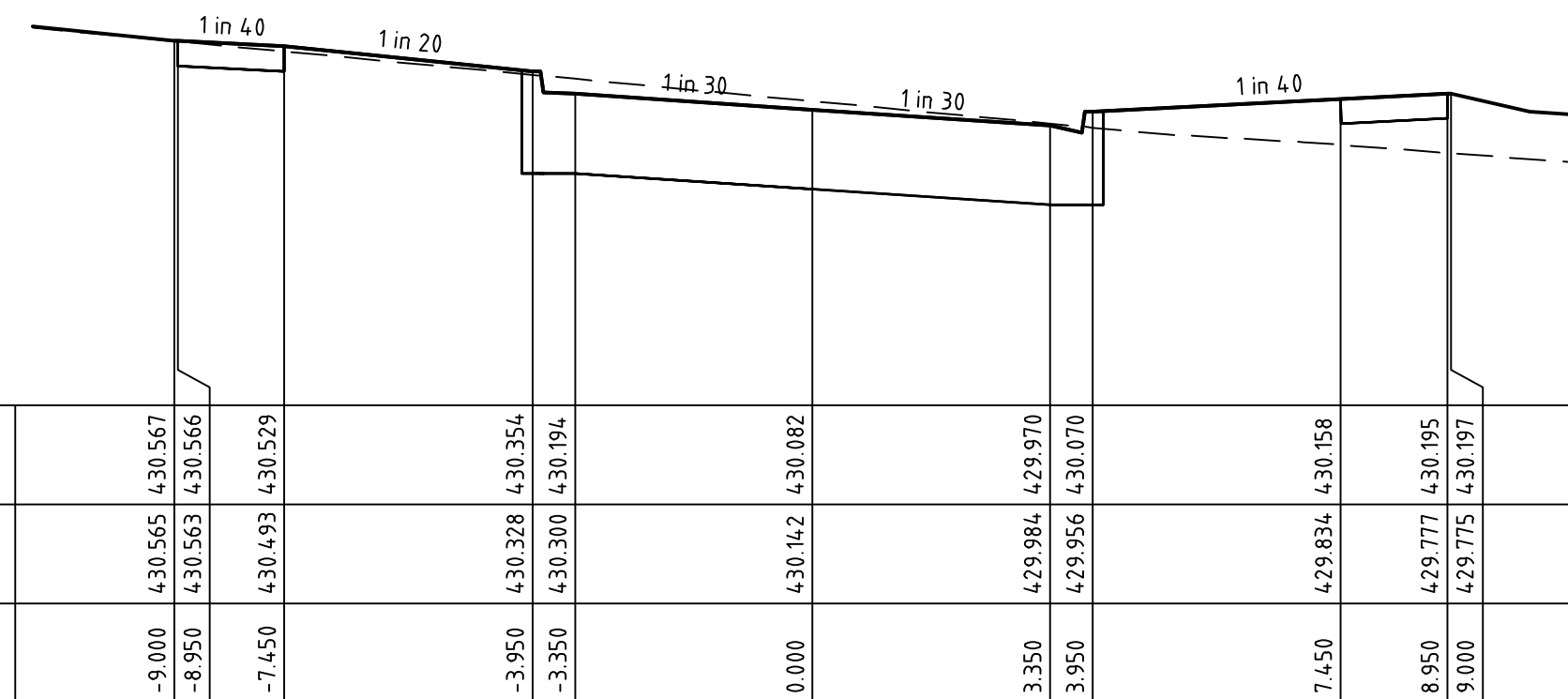
BOWERBIRD GRANGE CH 191.13



BOWERBIRD GRANGE CH 166.13



BOWERBIRD GRANGE CH 141.13

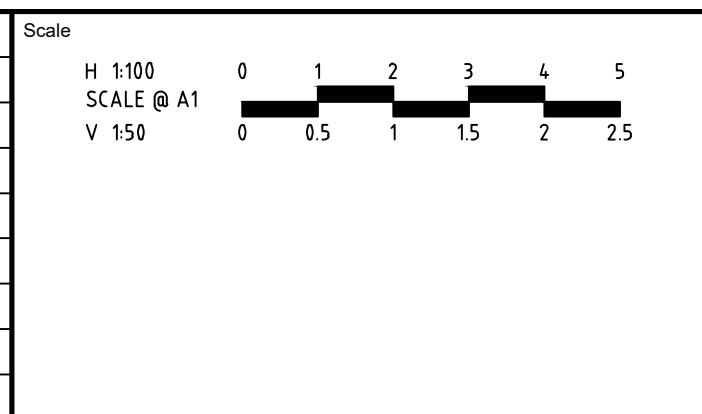


BOWERBIRD GRANGE CH 118.23

**FILLING NOTE**  
ALL FILLING WITHIN ROAD RESERVES IS TO BE UNDERTAKEN USING LEVEL 1 SUPERVISION AND BE COMPLETED IN ACCORDANCE WITH AS 3798-2007 AND TO THE SATISFACTION OF COUNCIL AND THE SUPERINTENDENT. FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND REPLACED WITH TOPSOIL (WHERE REQUIRED) TO OBTAIN THE FINAL LEVELS SHOWN ON THE DRAWINGS.

file name: 308457CR401.dwg, layout name: CR401, plotted by: Mitchell Wright, file location: \\spire\server\projects\308457\plan\A1.dwg, plot date: 07/09/2021 3:03 PM, Sheet 8 of 70 Sheets

Rev	Amendments	Approved	Date
1	AMENDED FOOTPATHS	A.W	26/08/21
0	ISSUED FOR CONSTRUCTION	A.W	28/05/21
B	AMENDED CH 71.73 AND CH 118.24	A.W	14/05/21
A	PRELIMINARY ISSUE	A.W	16/03/21



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16 BRIDGE STREET BENDIGO
   
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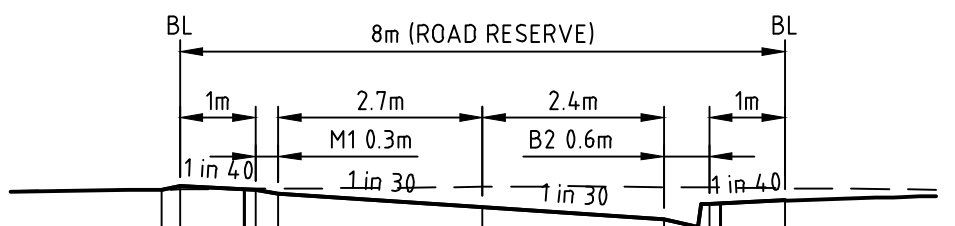
Designed M. WRIGHT	Checked B. IBBS
Authorised A. WILKIE	Date 14/05/21

**CONROY'S GREEN**  
**STAGE 2**  
**ROAD AND DRAINAGE**  
**ROAD CROSS SECTIONS - SHEET 2**  
 CITY OF BALLARAT  
 SAN HUBERTO PROPERTIES P/L

Drg No **308457CR401** Rev **1**

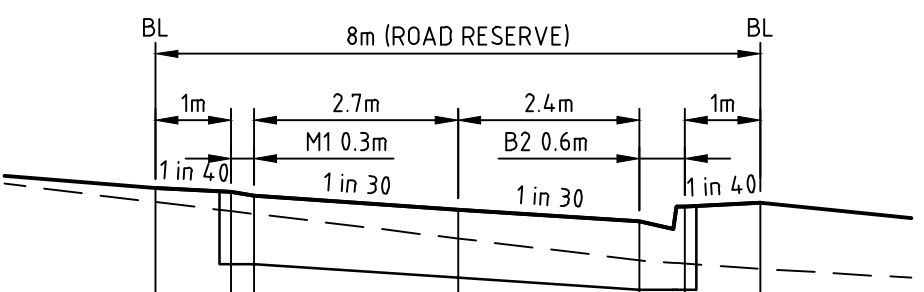


**FILLING NOTE**  
 ALL FILLING WITHIN ROAD RESERVES IS TO BE UNDERTAKEN USING LEVEL 1 SUPERVISION AND BE COMPLETED IN ACCORDANCE WITH AS 3798-2007 AND TO THE SATISFACTION OF COUNCIL AND THE SUPERINTENDENT. FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND REPLACED WITH TOPSOIL (WHERE REQUIRED) TO OBTAIN THE FINAL LEVELS SHOWN ON THE DRAWINGS.



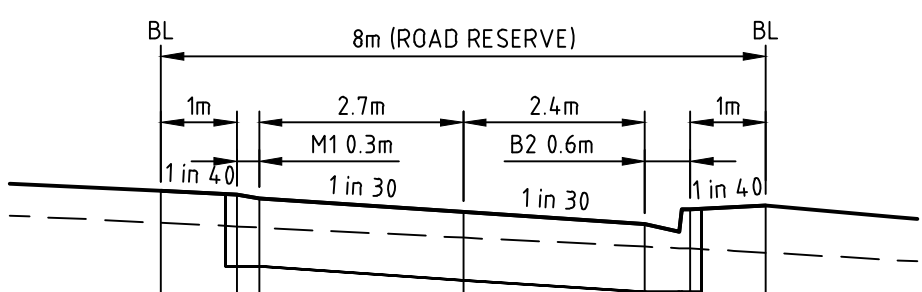
DATUM R.L. 430.0	
DESIGN SURFACE LEVEL	-4.242 431.447 431.447 -4.000 431.448 431.471 -3.000 431.452 431.446 -2.700 431.454 431.421
EXISTING SURFACE LEVEL	0.000 431.465 431.331 2.400 431.464 431.251 3.000 431.462 431.351 4.000 431.457 431.376
OFFSET	

RAPTOR LANE CH 32.00



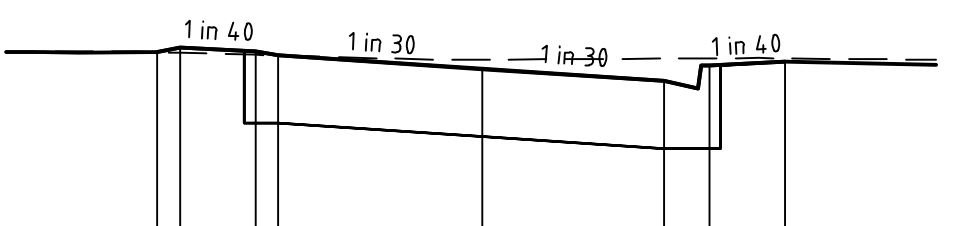
DATUM R.L. 430.0	
DESIGN SURFACE LEVEL	-4.000 431.842 431.933 -3.000 431.782 431.908 -2.700 431.764 431.883
EXISTING SURFACE LEVEL	0.000 431.601 431.793 2.400 431.457 431.713 3.000 431.434 431.813 4.000 431.402 431.838
OFFSET	

RAPTOR LANE CH 105.09



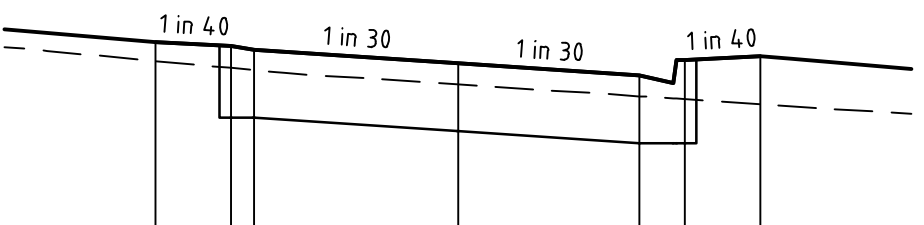
DATUM R.L. 431.0	
DESIGN SURFACE LEVEL	-4.000 432.914 433.126 -3.000 432.890 433.101 -2.700 432.883 433.076
EXISTING SURFACE LEVEL	0.000 432.817 432.986 2.400 432.759 432.906 3.000 432.744 432.806 4.000 432.718 432.831
OFFSET	

RAPTOR LANE CH 194.09



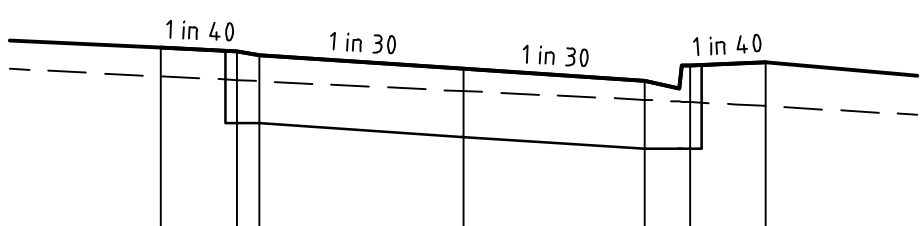
DATUM R.L. 429.0	
DESIGN SURFACE LEVEL	-4.300 431.083 431.083 -4.000 431.079 431.113 -3.000 431.065 431.088 -2.700 431.061 431.063
EXISTING SURFACE LEVEL	0.000 431.033 430.973 2.400 431.040 430.893 3.000 431.042 430.993 4.000 431.042 431.018
OFFSET	

RAPTOR LANE CH 19.00



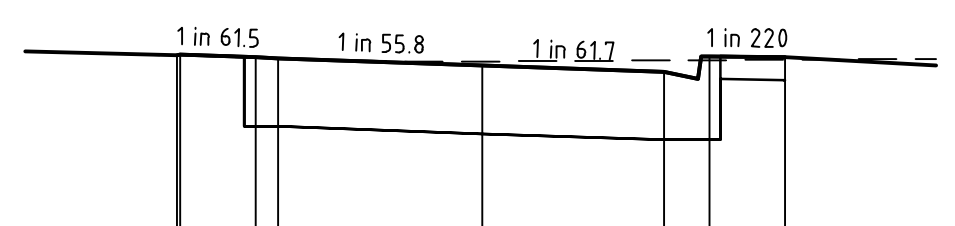
DATUM R.L. 430.0	
DESIGN SURFACE LEVEL	-4.000 431.657 431.783 -3.000 431.611 431.758 -2.700 431.597 431.733
EXISTING SURFACE LEVEL	0.000 431.502 431.643 2.400 431.424 431.563 3.000 431.404 431.663 4.000 431.372 431.688
OFFSET	

RAPTOR LANE CH 75.09



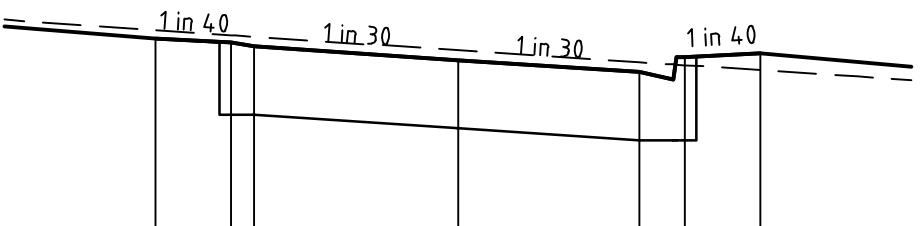
DATUM R.L. 431.0	
DESIGN SURFACE LEVEL	-4.000 432.876 433.066 -3.000 432.852 433.041 -2.700 432.844 433.016
EXISTING SURFACE LEVEL	0.000 432.779 432.926 2.400 432.720 432.846 3.000 432.705 432.846 4.000 432.679 432.971
OFFSET	

RAPTOR LANE CH 192.59



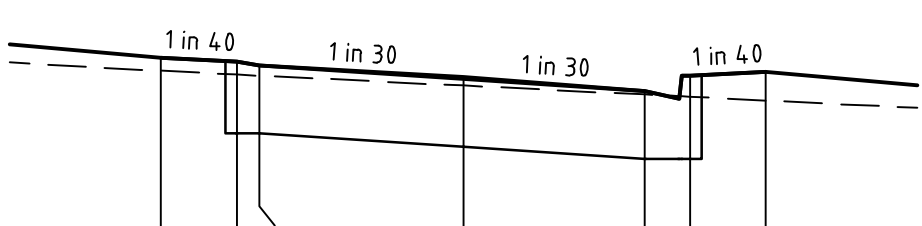
DATUM R.L. 429.0	
DESIGN SURFACE LEVEL	-4.044 430.732 430.732 -4.000 430.731 430.736 -3.000 430.718 430.720 -2.700 430.713 430.712
EXISTING SURFACE LEVEL	0.000 430.692 430.663 2.400 430.699 430.625 3.000 430.700 430.725 4.000 430.703 430.720
OFFSET	

RAPTOR LANE CH 11.00



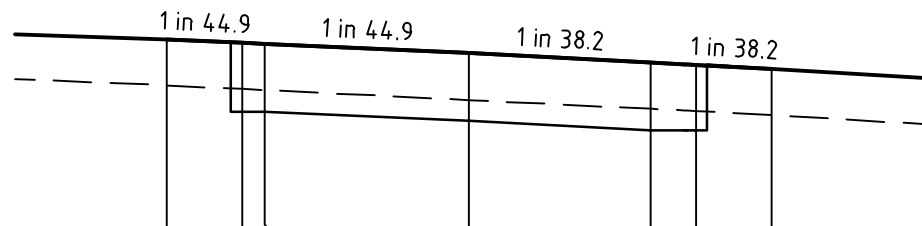
DATUM R.L. 430.0	
DESIGN SURFACE LEVEL	-4.000 431.729 431.670 -3.000 431.694 431.645 -2.700 431.684 431.620
EXISTING SURFACE LEVEL	0.000 431.595 431.530 2.400 431.516 431.450 3.000 431.496 431.550 4.000 431.463 431.575
OFFSET	

RAPTOR LANE CH 52.59



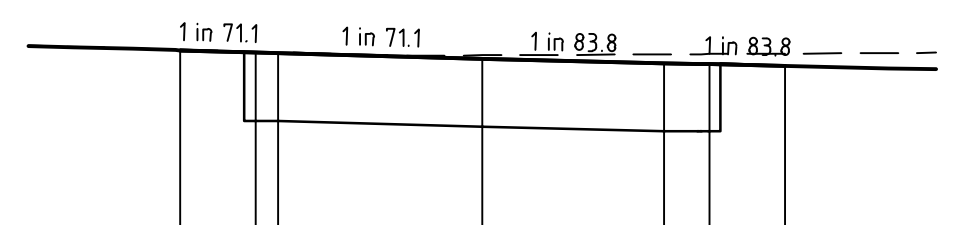
DATUM R.L. 431.0	
DESIGN SURFACE LEVEL	-4.000 432.148 432.234 -3.000 432.123 432.209 -2.700 432.116 432.184
EXISTING SURFACE LEVEL	0.000 432.049 432.094 2.400 431.990 432.014 3.000 431.976 432.114 4.000 431.951 432.139
OFFSET	

RAPTOR LANE CH 162.59



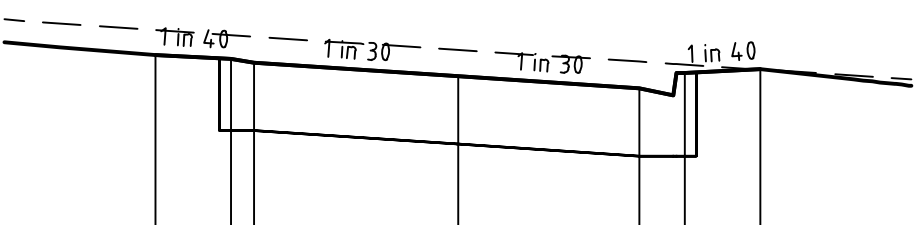
DATUM R.L. 432.0	
DESIGN SURFACE LEVEL	-4.000 433.171 433.475 -3.000 433.147 433.453 -2.700 433.139 433.446
EXISTING SURFACE LEVEL	0.000 433.074 433.386 2.400 433.015 433.323 3.000 433.001 433.307 4.000 432.974 433.281
OFFSET	

RAPTOR LANE CH 204.09



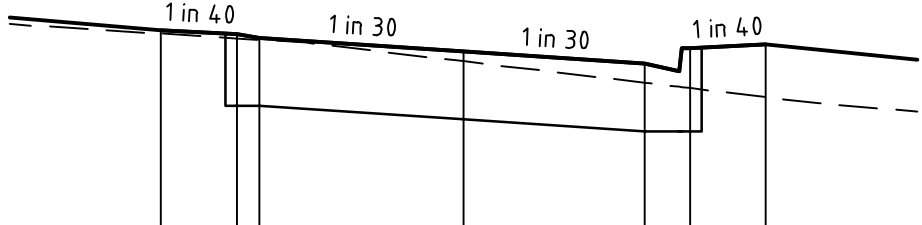
DATUM R.L. 429.0	
DESIGN SURFACE LEVEL	-4.000 430.645 430.640 -3.000 430.631 430.626 -2.700 430.628 430.621
EXISTING SURFACE LEVEL	0.000 430.606 430.583 2.400 430.613 430.555 3.000 430.615 430.548 4.000 430.618 430.536
OFFSET	

RAPTOR LANE CH 9.00



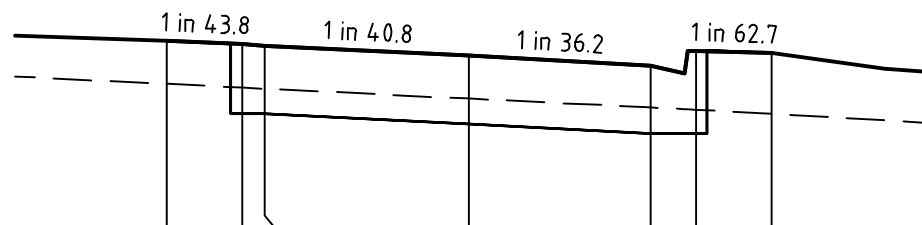
DATUM R.L. 430.0	
DESIGN SURFACE LEVEL	-4.000 431.774 431.610 -3.000 431.740 431.585 -2.700 431.730 431.560
EXISTING SURFACE LEVEL	0.000 431.642 431.470 2.400 431.564 431.390 3.000 431.545 431.490 4.000 431.513 431.515
OFFSET	

RAPTOR LANE CH 41.64



DATUM R.L. 430.0	
DESIGN SURFACE LEVEL	-4.000 432.048 432.070 -3.000 432.016 432.045 -2.700 432.007 432.020
EXISTING SURFACE LEVEL	0.000 431.865 431.930 2.400 431.722 431.850 3.000 431.687 431.950 4.000 431.628 431.975
OFFSET	

RAPTOR LANE CH 132.59

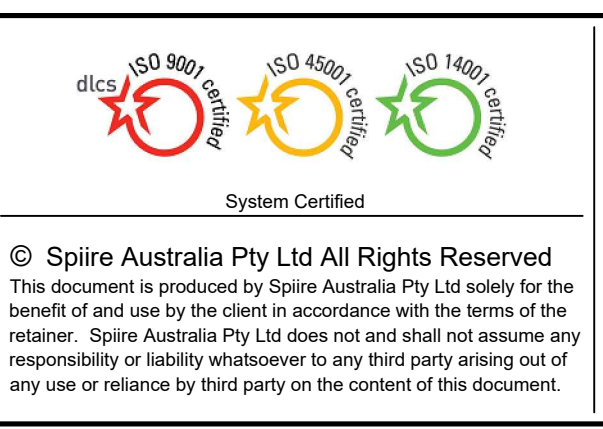
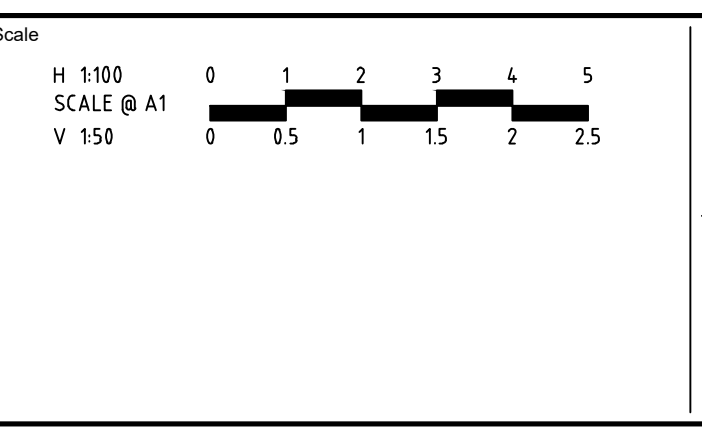


DATUM R.L. 432.0	
DESIGN SURFACE LEVEL	-4.000 433.120 433.405 -3.000 433.095 433.382 -2.700 433.088 433.372
EXISTING SURFACE LEVEL	0.000 433.022 433.306 2.400 432.964 433.239 3.000 432.949 433.339 4.000 432.922 433.323
OFFSET	

RAPTOR LANE CH 202.09

file name: 308457CR402.dwg, layout name: CR402, plotted by: M.Wright, Date: 07/09/2021 3:03 PM Sheet: 9 of 70 Sheets  
 file location: \\spire\server\data\308457\plan\CAD\plot date: 07/09/2021 3:03 PM Sheet: 9 of 70 Sheets

Rev	Amendments	Approved	Date
1	CHANGED ES TO M1 KERB	A.W	07/09/21
0	ISSUED FOR CONSTRUCTION	A.W	28/05/21
B	ISSUED FOR APPROVAL	A.W	14/05/21
A	PRELIMINARY ISSUE	A.W	16/03/21



Designed	M. WRIGHT	Checked	B. IBBS
Authorised	A. WILKIE	Date	14/05/21

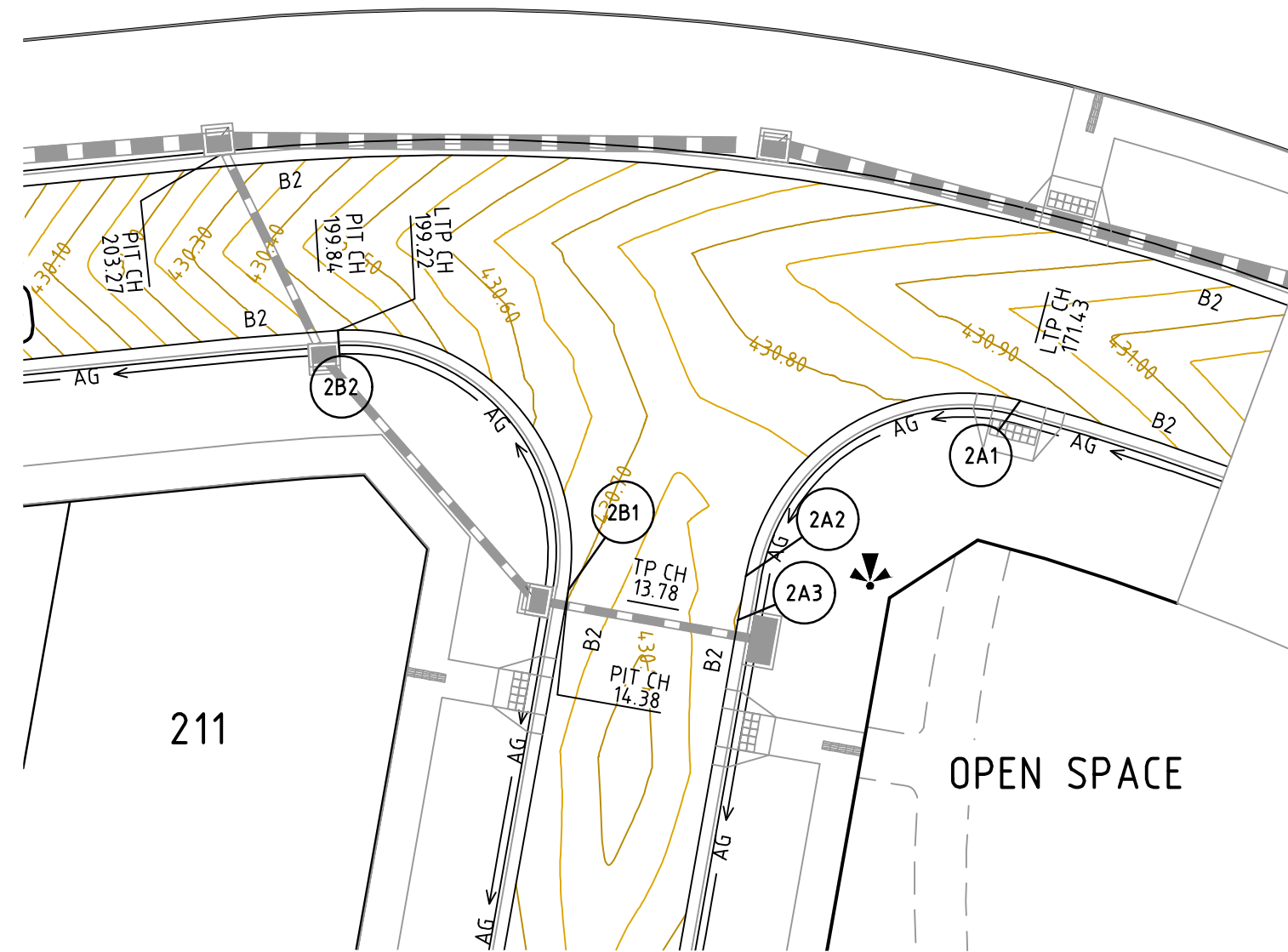
**CONROY'S GREEN**  
**STAGE 2**  
**ROAD AND DRAINAGE**  
**ROAD CROSS SECTIONS - SHEET 3**  
 CITY OF BALLARAT  
 SAN HUBERTO PROPERTIES P/L

Drg No  
**CONSTRUCTION 308457CR402**  
 Rev  
**1**

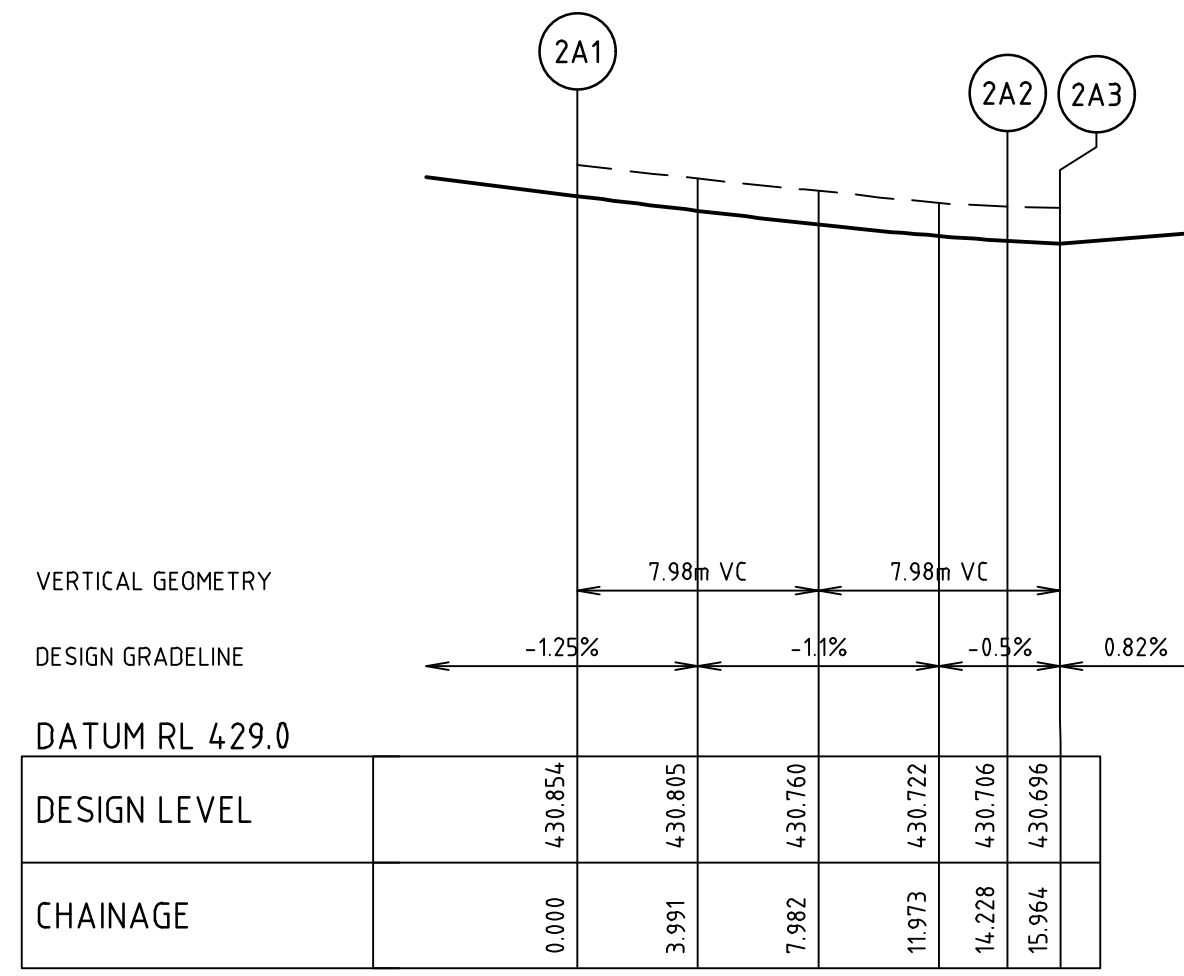








**BROLGA BOULEVARD AND BLACKBIRD GRANGE**  
LIP OF KERB 2A & 2B



VERTICAL GEOMETRY  
DESIGN GRADELINE  
DATUM RL 4.29.0

DESIGN LEVEL	CHAINAGE
4.30.854	0.000
4.30.805	3.991
4.30.760	7.982
4.30.722	11.973
4.30.706	14.228
4.30.696	15.964

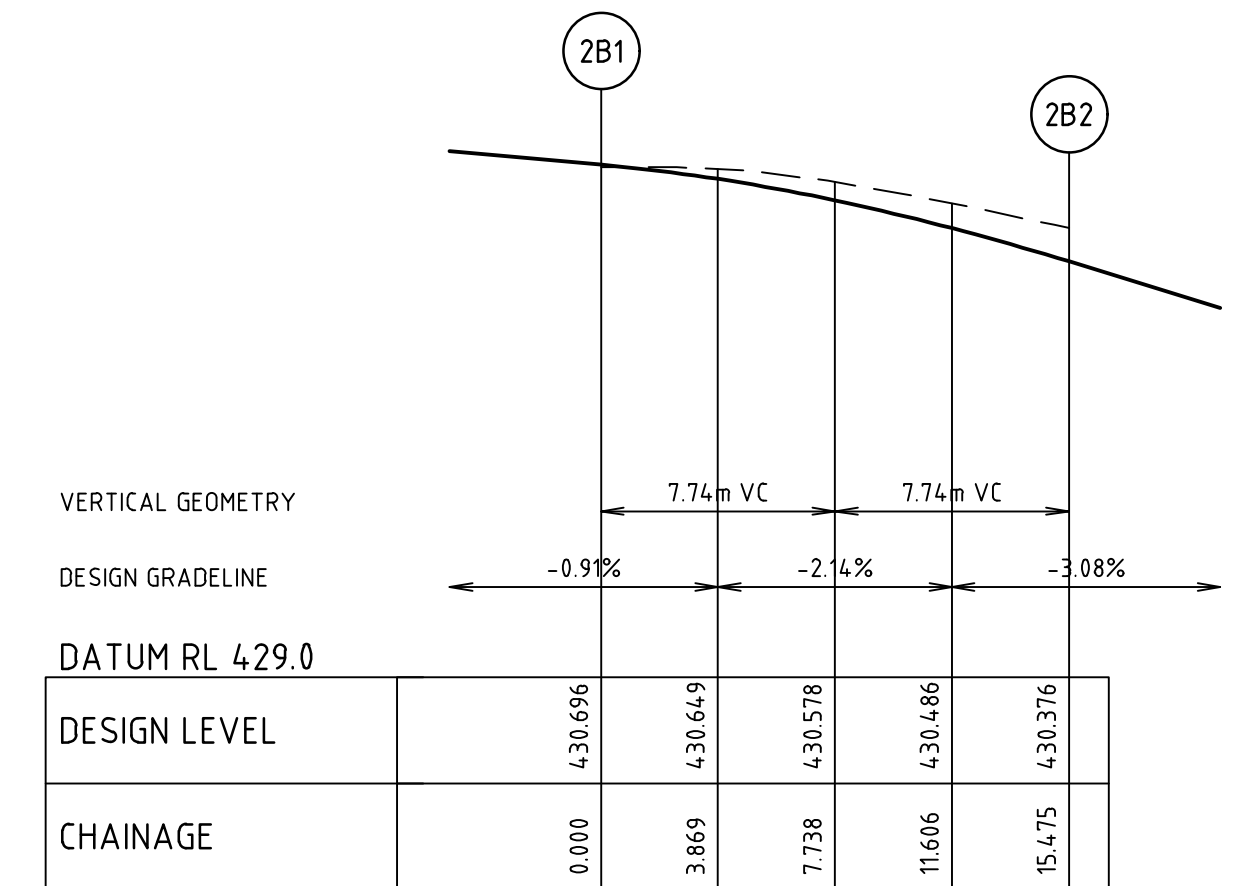
**ALIGNMENT 2A**

ALIGNMENT 2A

POINT NO	EASTING	NORTHING	RL	CHAINAGE
2A1	745827.000	5837692.839	4.30.854	0.000
1/4	745823.473	5837693.022	4.30.810	3.557
1/2	745820.170	5837691.771	4.30.769	7.114
3/4	745817.648	5837689.299	4.30.733	10.671
2A2	745816.333	5837686.022	4.30.706	14.228
2A3	745816.030	5837684.312	4.30.696	15.964

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
2A02	8.600	14.228	12.660	2.778	0.725



VERTICAL GEOMETRY  
DESIGN GRADELINE  
DATUM RL 4.29.0

DESIGN LEVEL	CHAINAGE
4.30.696	0.000
4.30.649	3.869
4.30.578	7.738
4.30.486	11.606
4.30.376	15.475

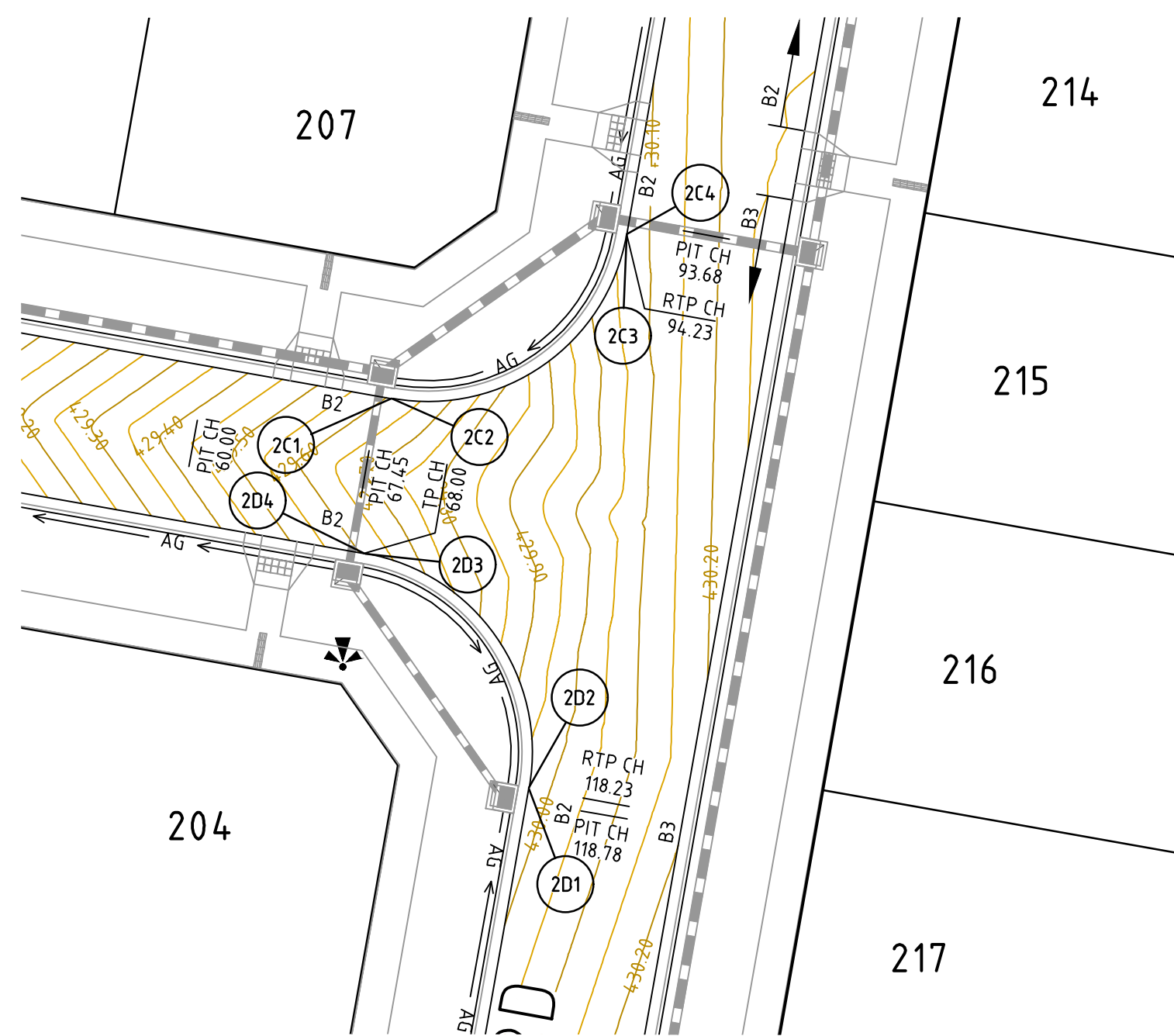
**ALIGNMENT 2B**

ALIGNMENT 2B

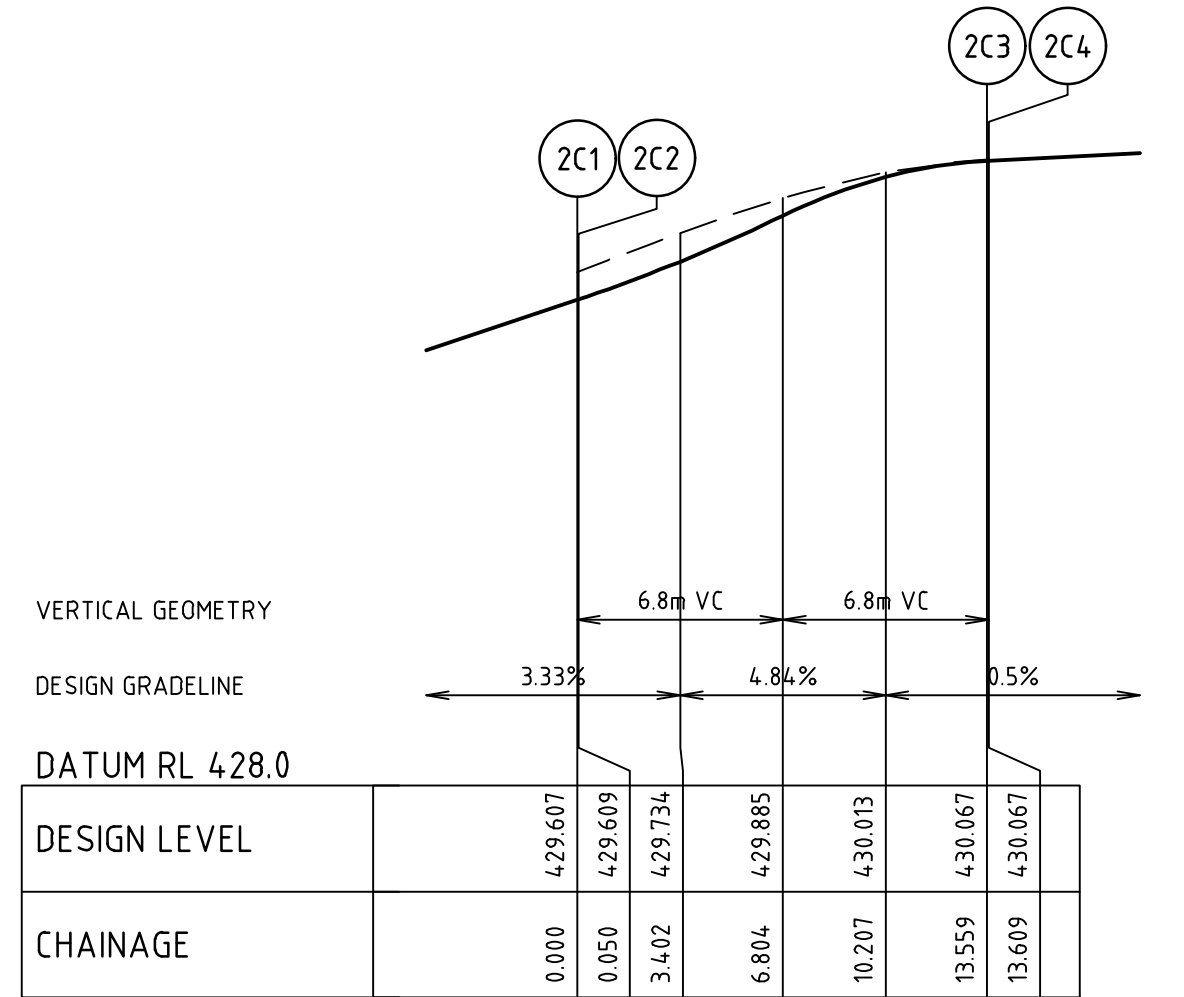
POINT NO	EASTING	NORTHING	RL	CHAINAGE
2B1	745809.433	5837685.478	4.30.696	0.000
1/4	745809.241	5837689.309	4.30.649	3.869
1/2	745807.402	5837692.676	4.30.578	7.738
3/4	745804.282	5837694.908	4.30.486	11.606
2B2	745800.502	5837695.562	4.30.376	15.475

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
2B02	8.600	15.475	13.470	3.252	0.856



**BLACKBIRD GRANGE AND WREN WAY**  
LIP OF KERB 2C & 2D



VERTICAL GEOMETRY  
DESIGN GRADELINE  
DATUM RL 4.28.0

DESIGN LEVEL	CHAINAGE
4.29.607	0.000
4.29.609	0.050
4.29.734	3.402
4.29.885	6.804
4.30.013	10.207
4.30.067	13.559
4.30.067	13.609

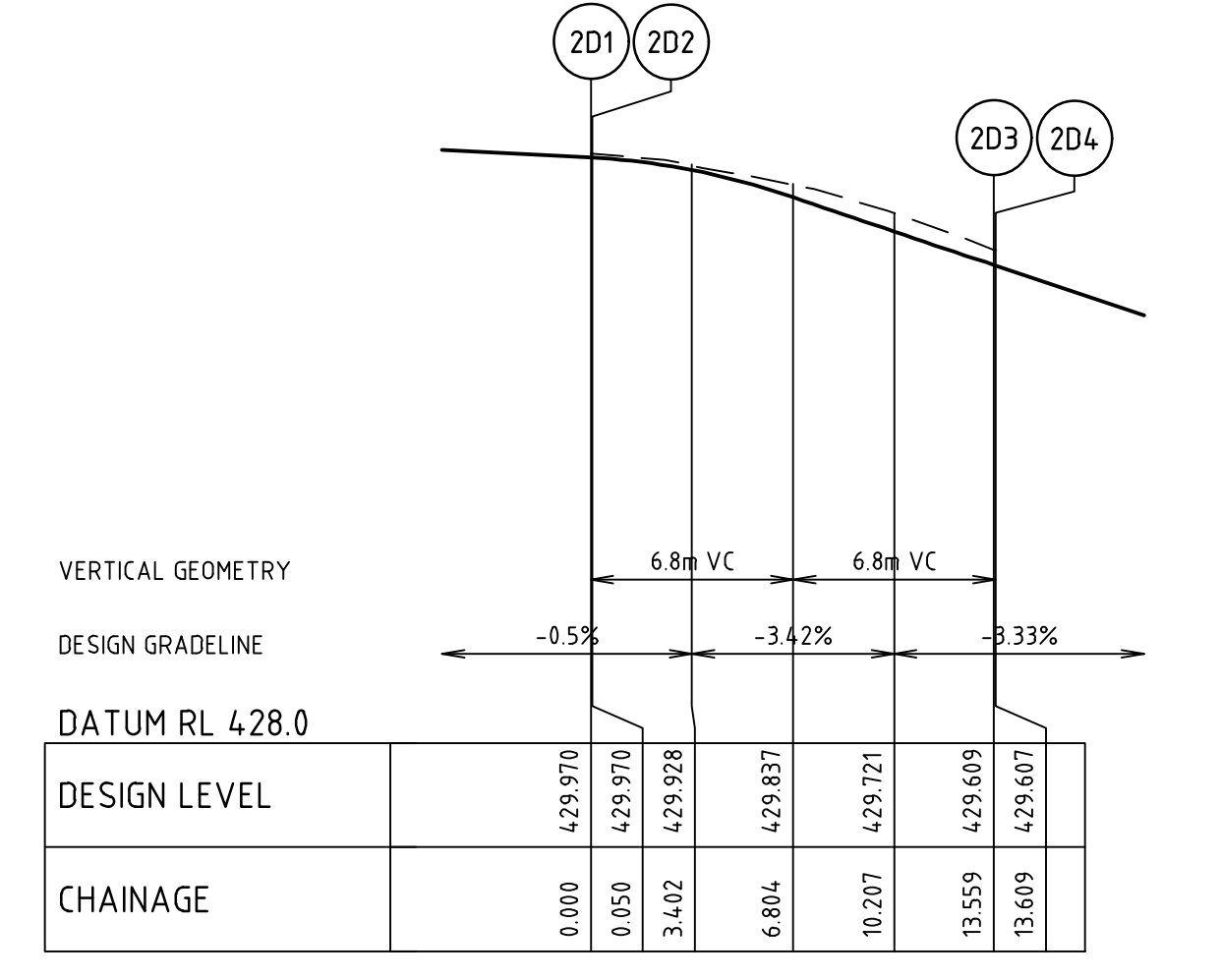
**ALIGNMENT 2C**

ALIGNMENT 2C

POINT NO	EASTING	NORTHING	RL	CHAINAGE
2C1	745785.409	5837599.242	4.29.607	0.000
2C2	745785.458	5837599.233	4.29.609	0.050
1/4	745788.813	5837599.305	4.29.735	3.427
1/2	745791.885	5837600.656	4.29.885	6.804
3/4	745794.206	5837603.079	4.30.013	10.182
2C3	745795.423	5837606.206	4.30.067	13.559
2C4	745795.432	5837606.255	4.30.067	13.609

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
2C2-2C3	8.600	13.509	12.162	2.519	0.655



VERTICAL GEOMETRY  
DESIGN GRADELINE  
DATUM RL 4.28.0

DESIGN LEVEL	CHAINAGE
4.29.970	0.000
4.29.970	0.050
4.29.928	3.402
4.29.837	6.804
4.29.721	10.207
4.29.609	13.559
4.29.607	13.609

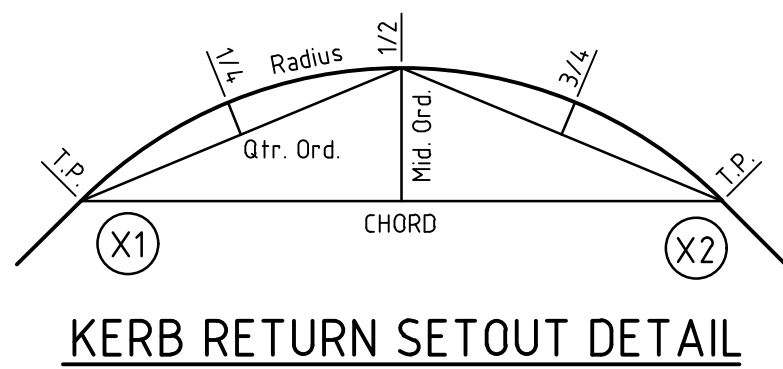
**ALIGNMENT 2D**

ALIGNMENT 2D

POINT NO	EASTING	NORTHING	RL	CHAINAGE
2D1	745791.255	5837582.621	4.29.970	0.000
2D2	745791.264	5837582.670	4.29.970	0.050
1/4	745791.192	5837586.025	4.29.928	3.427
1/2	745789.842	5837589.097	4.29.837	6.804
3/4	745787.419	5837591.418	4.29.722	10.182
2D3	745784.292	5837592.636	4.29.609	13.559
2D4	745784.243	5837592.644	4.29.607	13.609

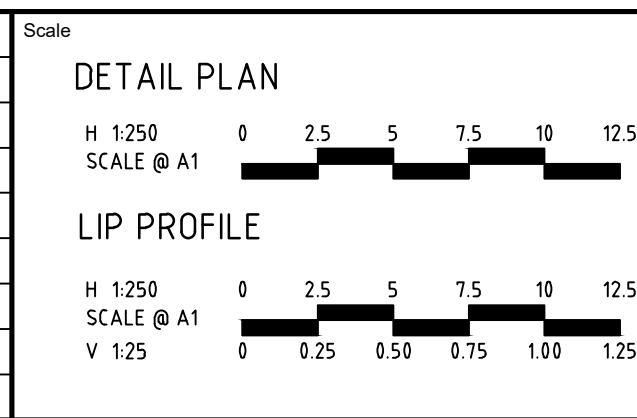
CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
2D2-2D3	8.600	13.509	12.162	2.519	0.655



**KERB RETURN SETOUT DETAIL**

file name: 308457CR500.dwg; layout name: CR500; plotted by: Mitchell Wright; file location: \\spire\projects\308457; plot date: 07/09/2021 3:03 PM Sheet: 11 of 20 Sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	A.W	28/05/21
C	ISSUED FOR APPROVAL	A.W	14/05/21
B	AMENDED KERB 2D	A.W	23/03/21
A	PRELIMINARY ISSUE	A.W	16/03/21



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16 BRIDGE STREET BENDIGO  
VICTORIA 3550 AUSTRALIA T 61 3 5448 2500  
spiire.com.au ABN 55 050 029 635

Designed <b>M. WRIGHT</b>	Checked <b>B. IBBS</b>
Authorised <b>A. WILKIE</b>	Date <b>14/05/21</b>

**CONROY'S GREEN**  
**STAGE 2**  
**ROAD AND DRAINAGE**  
**INTERSECTION DETAILS - SHEET 1**  
CITY OF BALLARAT  
SAN HUBERTO PROPERTIES P/L

**CONSTRUCTION** 308457CR500

Rev **0**

















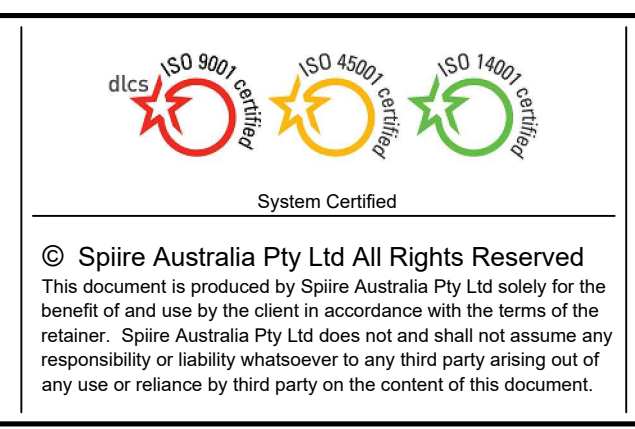
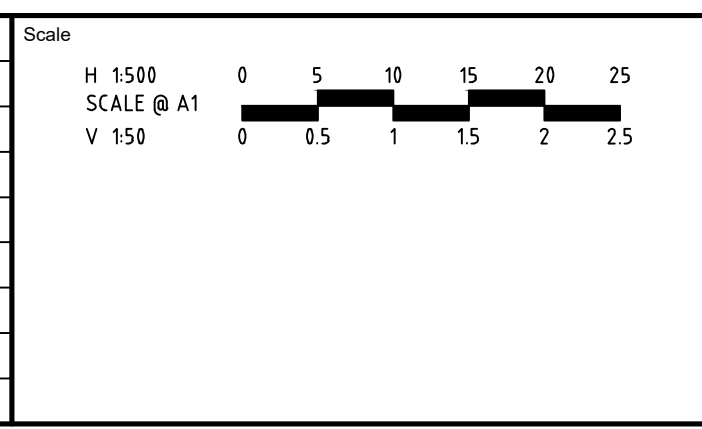




DRAINAGE PIT SCHEDULE												
PIT		INTERNAL DIMENSIONS		INLET		OUTLET		PIT		REMARKS	STEP IRON	LADDER
No.	TYPE	WIDTH	LENGTH	DIA	INV LEVEL	DIA	INV LEVEL	FS LEVEL	DEPTH			
201	ENDPIPE	0	0	1050	424.411			425.461	1.050	OUTFALL TO RB4 WETLANDS		
202	JUNCTION PIT	1800	2250	1200	424.495	1050	424.465	427.987	3.522	REFER TO SHEET CR605 FOR DETAILS		X
203	JUNCTION PIT	900	1500	825	424.745	1200	424.528	427.799	3.271	REFER COB SD-P10-1/2. TO BE CONVERTED TO SEP IN FUTURE		X
				600	425.939							
204	JUNCTION PIT	1200	900	825	424.923	825	424.873	427.322	2.449	REFER COB SD-P10-1/2. TO BE CONVERTED TO SEP IN FUTURE		X
205	JUNCTION PIT	1200	900	825	425.120	825	425.070	427.435	2.365	REFER COB SD-P10-1/2	X	
206	JUNCTION PIT	1200	900	825	425.278	825	425.228	427.516	2.288	REFER COB SD-P10-1/2	X	
				225	425.828							
207	JUNCTION PIT	1500	900	825	425.476	825	425.426	427.627	2.201	REFER COB SD-P10-1/2. TO BE CONVERTED TO SEP IN FUTURE	X	
208	JUNCTION PIT	1500	900	750	425.582	825	425.532	427.557	2.025	REFER COB SD-P10-1/2. TO BE CONVERTED TO SEP IN FUTURE	X	
				375	426.002							
209	JUNCTION PIT	1500	1050	750	425.679	750	425.629	427.557	1.928	REFER COB SD-P10-1/2. TO BE CONVERTED TO SEP IN FUTURE	X	
210	JUNCTION PIT	1500	900	750	425.784	750	425.734	427.772	2.038	REFER COB SD-P10-1/2. TO BE CONVERTED TO SEP IN FUTURE	X	
211	JUNCTION PIT	1050	900			750	425.956	427.993	2.038	REFER COB SD-P10-1/2. TO BE CONVERTED TO SEP IN FUTURE	X	
				225	426.481							
212	SIDE ENTRY PIT	900	900	300	428.571	600	428.271	430.360	2.089	REFER COB SD-P1-1/2	X	
				600	428.321							
213	SIDE ENTRY PIT	900	900	300	428.709	300	428.659	430.469	1.810	REFER COB SD-P1-1/2	X	
214	JUNCTION PIT	900	900	300	429.128	300	429.078	430.816	1.738	REFER COB SD-P10-1/2	X	
215	DOUBLE SIDE ENTRY PIT	900	1800			300	429.309	430.812	1.503	REFER COB SD-P2-1/2	X	
216	SIDE ENTRY PIT	900	900	375	427.933	375	427.883	429.700	1.817	REFER COB SD-P1-1/2	X	
				300	427.958							
217	SIDE ENTRY PIT	900	900	375	428.311	375	428.261	430.181	1.920	REFER COB SD-P1-1/2	X	
218	JUNCTION PIT	900	900	375	428.540	375	428.490	430.476	1.986	REFER COB SD-P10-1/2	X	
				375	428.540							
218a	SIDE ENTRY PIT	900	900	375	428.817	375	428.767	430.304	1.537	REFER COB SD-P1-1/2	X	
219	JUNCTION PIT	900	900	375	428.986	375	428.936	430.431	1.494	REFER COB SD-P10-1/2	X	
220	JUNCTION PIT	600	900	375	430.239	375	430.189	431.361	1.172	REFER COB SD-P10-1/2		
221	SIDE ENTRY PIT	750	900	375	430.388	375	430.338	431.500	1.162	REFER COB SD-P1-1/2		
222	SIDE ENTRY PIT	750	900	300	430.812	375	430.737	431.891	1.154	REFER COB SD-P1-1/2		
223	JUNCTION PIT	600	900	300	431.114	300	431.064	432.144	1.080	REFER COB SD-P10-1/2		
224	JUNCTION PIT	600	900			300	432.178	433.233	1.054			
225	SIDE ENTRY PIT	900	900	300	428.057	300	428.007	429.700	1.693	REFER COB SD-P1-1/2	X	
226	SIDE ENTRY PIT	900	900			300	428.493	430.084	1.591	REFER COB SD-P1-1/2	X	
227	JUNCTION PIT	900	900	300	428.879	375	428.804	430.591	1.787	REFER COB SD-P10-1/2	X	
				300	428.879							
228	ENDPIPE	0	0			300	429.709	431.213	1.504	CAP END OF PIPE WITH MARINE GRADE PLY		
229	SIDE ENTRY PIT	900	900			300	428.929	430.289	1.360	REFER COB SD-P1-1/2	X	
230	JUNCTION PIT	600	900	225	428.291	225	428.241	429.140	0.899	REFER COB SD-P10-1/2		
231	JUNCTION PIT	600	900	225	428.566	225	428.516	429.372	0.856	REFER COB SD-P10-1/2		
232	JUNCTION PIT	600	900			225	429.239	430.085	0.846	REFER COB SD-P10-1/2		
233	JUNCTION PIT	600	900	225	428.073	225	428.023	429.008	0.985	REFER COB SD-P10-1/2		
234	JUNCTION PIT	600	900	225	429.135	225	429.085	430.036	0.951	REFER COB SD-P10-1/2		
235	JUNCTION PIT	600	900			225	429.620	430.460	0.840	REFER COB SD-P10-1/2		
237	ENDPIPE	0	0	675	424.000			424.675	0.675	OUTFALL TO EXISTING RB4 SED POND		
238	GROSS POLLUTANT TRAP	1800	1800	675	424.039	675	424.039	426.970	2.931	ANGLED HUMEGARD HG18 OR APPROVED EQUIVALENT		X
239	JUNCTION PIT	900	1200	675	424.165	675	424.145	427.232	3.086	REFER COB SD-P10-1/2		X
240	JUNCTION PIT	900	1200	675	424.255	675	424.235	427.709	3.474	REFER COB SD-P10-1/2		X
241	JUNCTION PIT	900	900	375	430.582			432.545	2.013	REFER COB SD-P10-1/2. CONSTRUCT PIT OVER EXISTING END PIPE	X	
242	GRADED JUNCTION PIT	900	900			375	430.690	432.543	1.853	REFER COB SD-P10-1/2 WITH GRATED LID	X	
EX100	JUNCTION PIT	900	900			600	428.677	430.838	2.161	EXISTING PIT	X	

file name: 308457CR604.dwg, layout name: CR604, plotted by: Mitchell Wright, file location: \\spire\server\projects\308457\plan\A1.dwg, plot date: 07/05/2021 3:04 PM, sheet: 16 of 20 sheets

Rev	Description	Approved	Date
0	ISSUED FOR CONSTRUCTION	A.W	28/05/21
C	AMENDED PIT SCHEDULE	A.W	14/05/21
B	AMENDED PIT SCHEDULE	A.W	23/03/21
A	PRELIMINARY ISSUE	A.W	16/03/21



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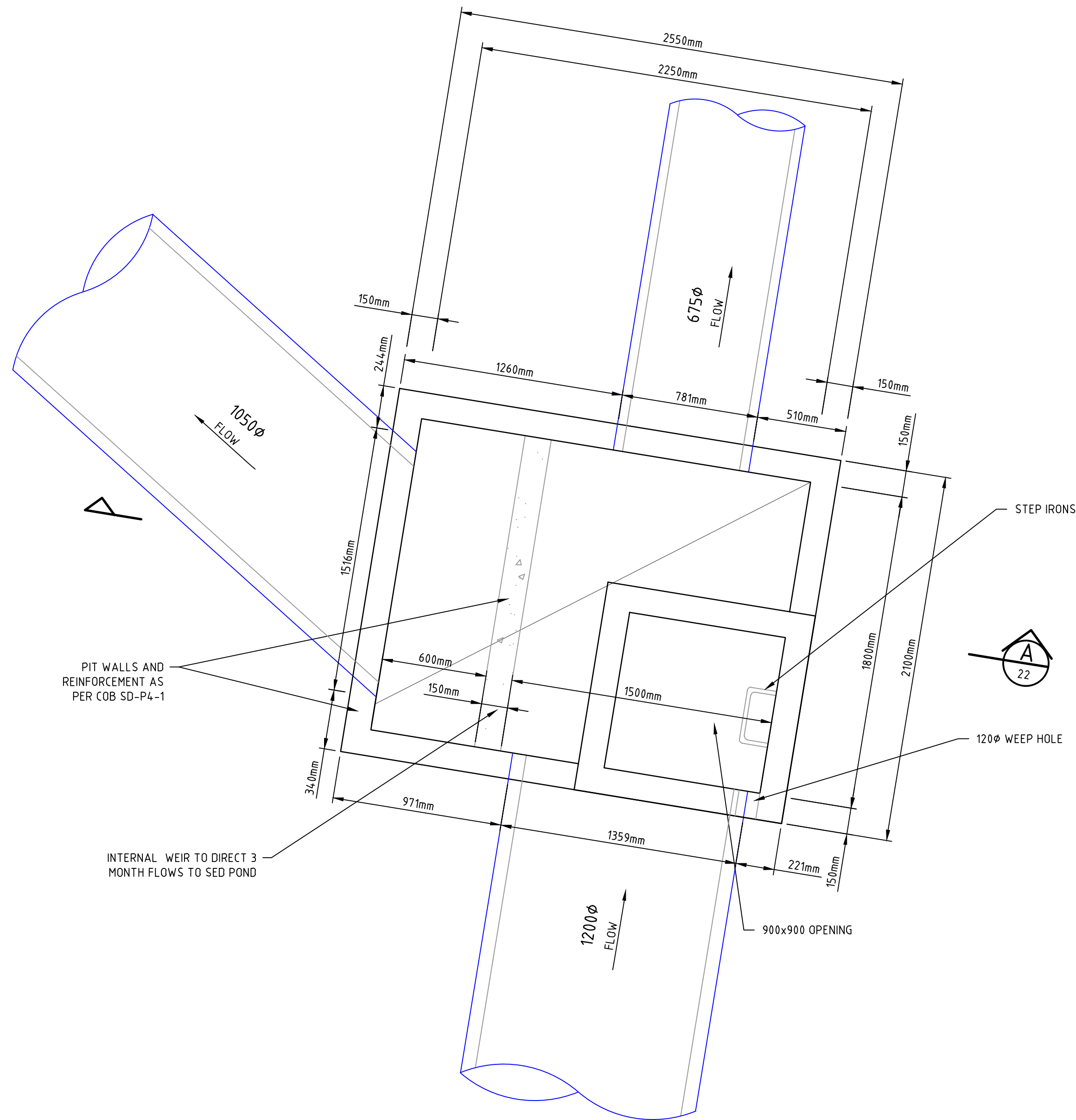
**spiire**  
 16 BRIDGE STREET BENDIGO  
 VICTORIA 3550 AUSTRALIA T 61 3 5448 2500  
 spiire.com.au ABN 55 050 029 635

Designed <b>M. WRIGHT</b>	Checked <b>B. IBBS</b>
Authorised <b>A. WILKIE</b>	Date <b>14/05/21</b>

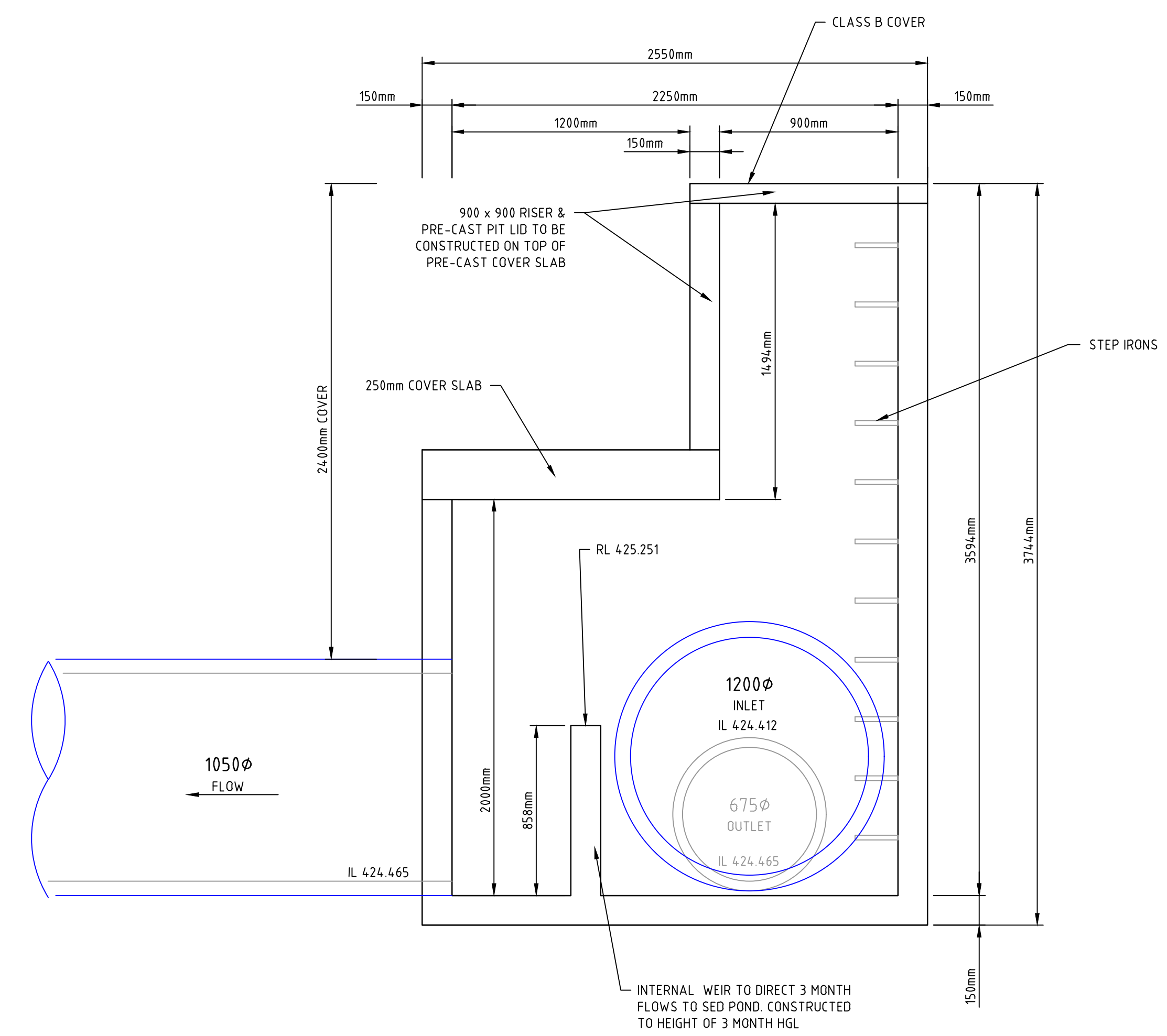
**CONROY'S GREEN**  
**STAGE 2**  
**ROAD AND DRAINAGE**  
**DRAINAGE LONG SECTIONS - PIT SCHEDULE**  
 CITY OF BALLARAT  
 SAN HUBERTO PROPERTIES P/L

**CONSTRUCTION** Drg No **308457CR604** Rev **0**





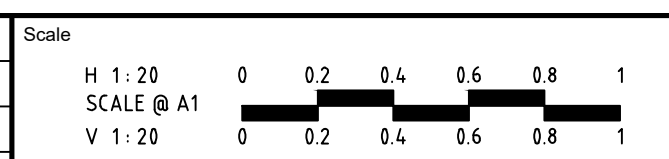
**DIVERSION PIT (PIT 202)**  
**PLAN VIEW**  
SCALE 1:20



**DIVERSION PIT (PIT 202)**  
**SECTION A**  
SCALE 1:20

file name: 308457CR605.dwg, layout name: CR605, plotted by: Mitchell Wright, plot date: 07/05/2021 3:04 PM, Sheet: 17 of 20 Sheets, file location: \\spire\server\projects\308457 - Ballarat\A1.dwg

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	A.W	28/05/21
B	AMENDED SECTION A LEVELS	A.W	14/05/21
A	PRELIMINARY ISSUE	A.W	16/03/21



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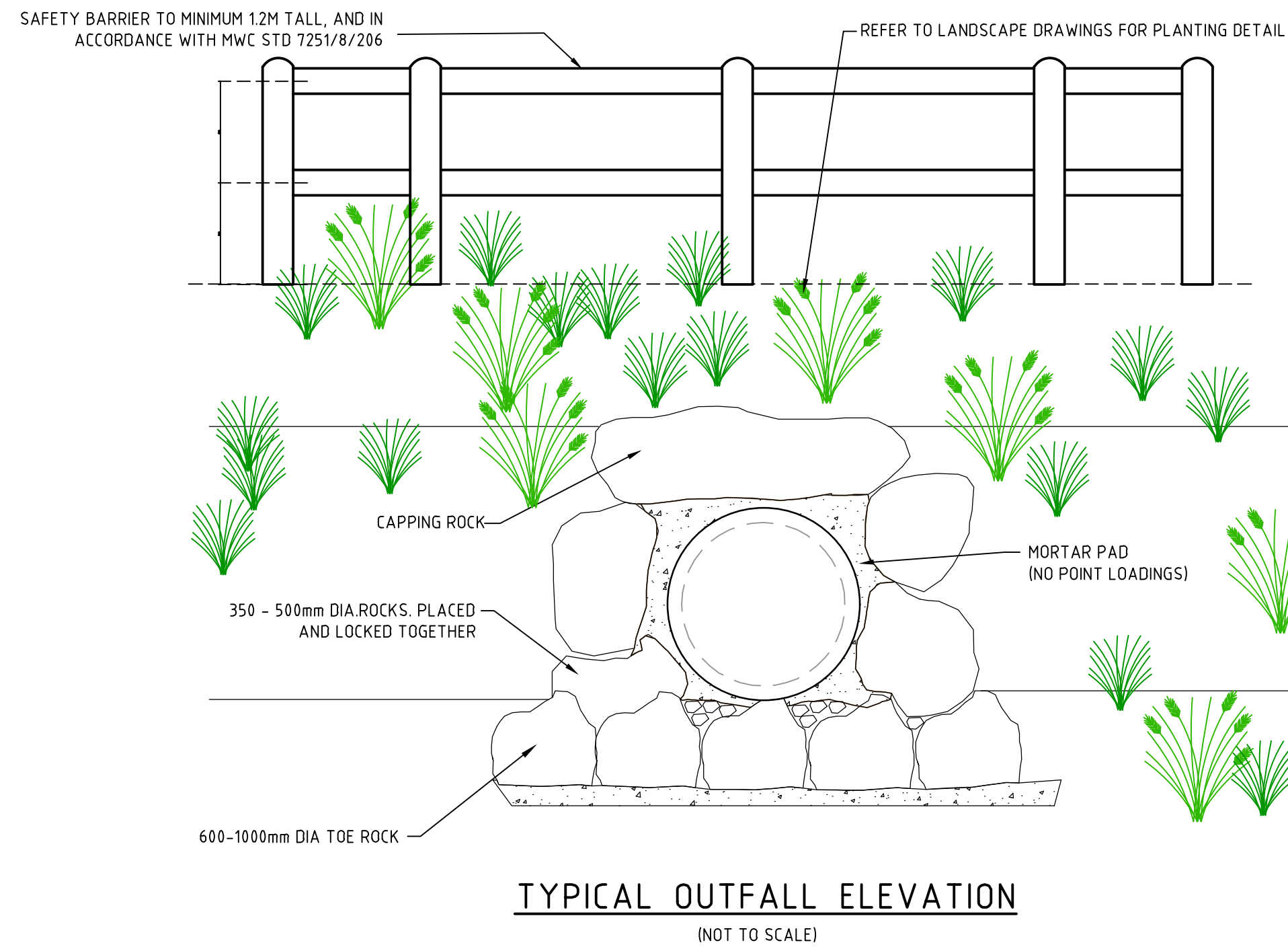
Designed  
**M. WRIGHT**  
 Authorised  
**A. WILKIE**

Checked  
**B. IBBS**  
 Date  
 14/05/21

**CONROY'S GREEN**  
**STAGE 2**  
 ROAD AND DRAINAGE  
 DRAINAGE LONG SECTIONS - PIT 202 DETAILS  
 CITY OF BALLARAT  
 SAN HUBERTO PROPERTIES P/L

**CONSTRUCTION** Dwg No **308457CR605** Rev **0**



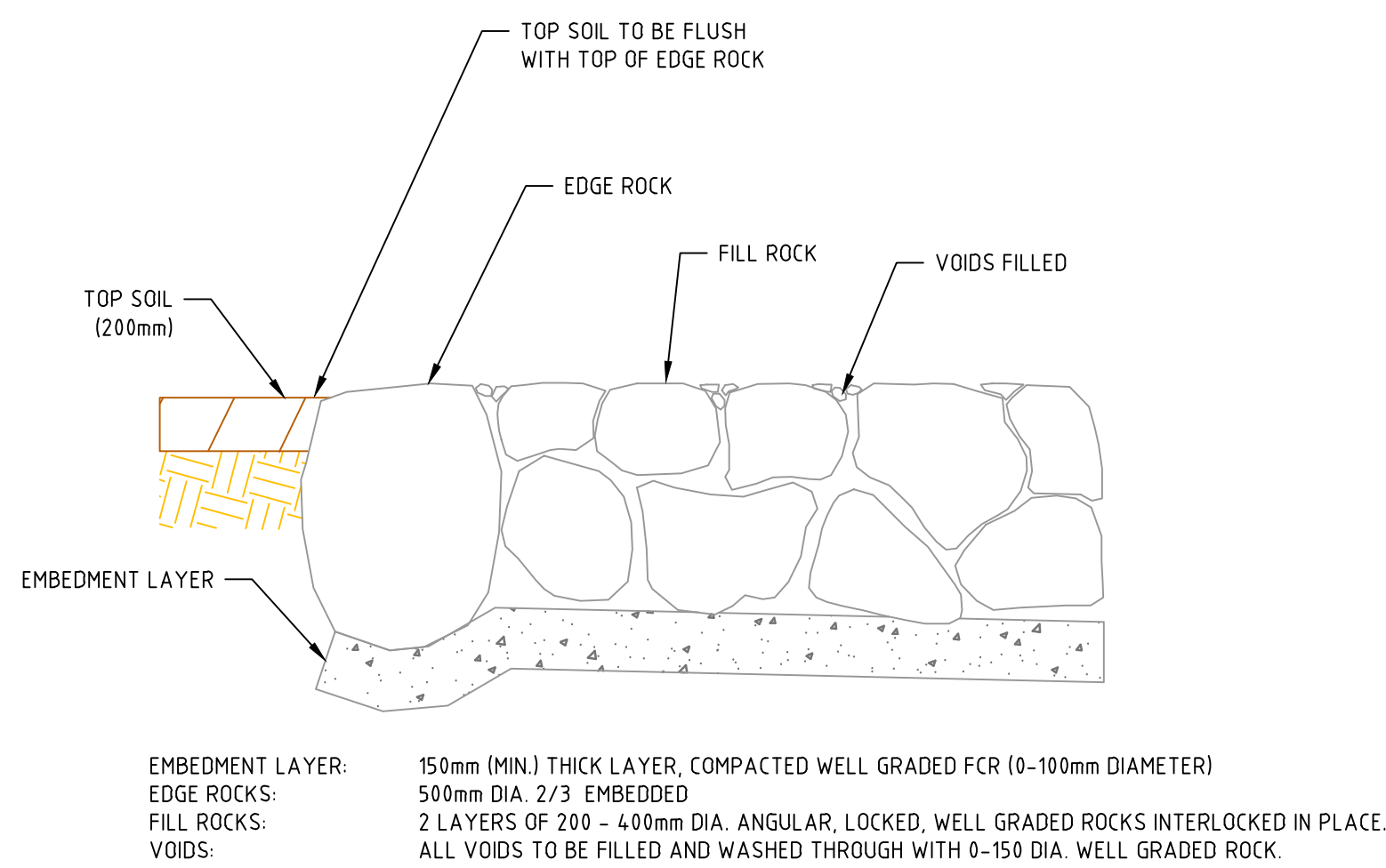
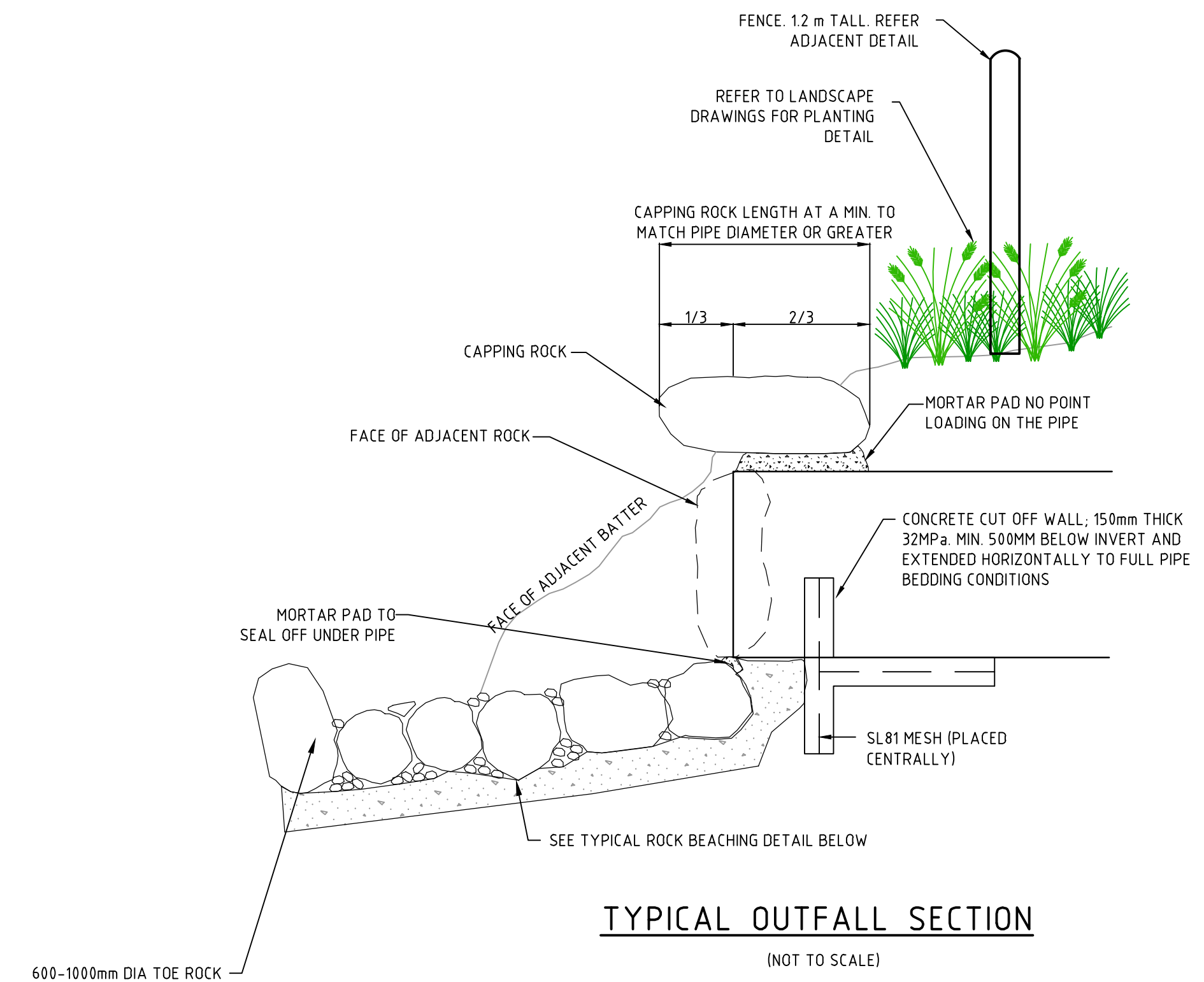


**NOTES:**

- REFER TO MWC STANDARD OUTFALL DRAWINGS 7251/8/104 & 7251/8/105
- OUTLET PIPE TO BE SET BACK INTO THE FINISHED BATTER SLOPE
- ROCKS ABUTTING THE PIPE TO HAVE A MORTAR PAD BETWEEN THE ROCK AND THE OUTSIDE EDGE OF THE PIPE (NO POINT LOADINGS).
- ROCKS WITHIN THE BASE TO BE PLACED ON A FCR BEDDING TO ENSURE THE STORMWATER DISCHARGE IS FLOWING OVER AND AROUND THE ROCKS, AND NOT UNDERNEATH. THE REMAINING EXPOSED DIMENSION OF THE ROCKWORK IS TO BE A MINIMUM OF 150 MM;
- THE OUTLET MUST BE INTEGRATED INTO THE BANK AND SURROUNDING LANDSCAPE TO MAXIMISE AESTHETICS.
- TOE AND SIDE ROCKS ARE TO ADEQUATELY KEYED INTO THE BED OF THE CREEK.
- ALL VOIDS SHALL BE FILLED WITH 0-150 WELL GRADED CRUSHED ROCK.
- APPROPRIATE SILT/DEBRIS CONTROL MEASURES MUST BE INSTALLED.

**PROCEDURE:**

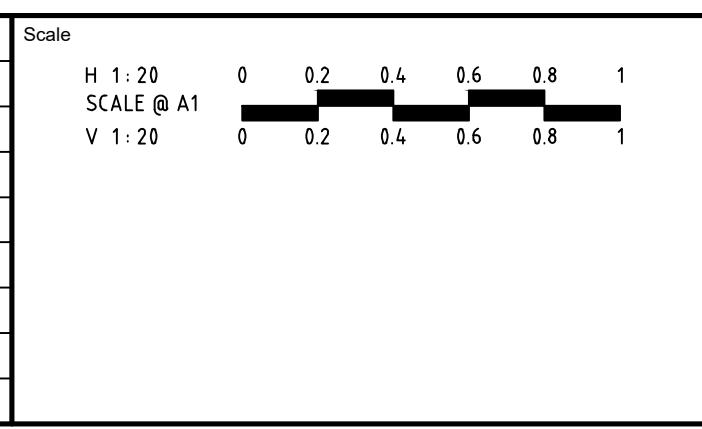
- EXCAVATE/BOX OUT TO ENABLE TOE AND PERIMETER ROCKS TO BE PLACED FIRST.
- KEY TOE ROCKS TO TWO THIRDS DIAMETER INTO UNDISTURBED MATERIAL.
- INFILL THE CHUTE WITH ROCK SPALLS. THE CONTRACTOR SHALL USE METHODS FOR HANDLING AND PLACEMENT OF ROCK THAT WILL AVOID SEGREGATION OF ROCK SIZE FRACTIONS.
- ROCK SHALL BE CAREFULLY PLACED INTO POSITION. ROCK SHALL NOT BE DUMPED DIRECTLY.
- IT IS IMPERATIVE THAT ROCK SPALLS USED TO FORM THE ROCK CHUTE ARE WELL GRADED WITH MINIMAL VOIDS TO PRODUCE A BLANKET OF INTERLOCKING ROCK.



**EXAMPLE OF WELL INTERLOCKED ROCKWORK WITH SEALED VOIDS**

file name: 308457CR606.dwg, layout name: CR606, plotted by: Mitchell Wright, file location: \\spire\server\projects\308457, plot date: 07/09/2021 3:04 PM, sheet: 18 of 20 sheets

Rev	Amendments	Approved	Date
0	ISSUED FOR CONSTRUCTION	A.W	28/05/21
B	ADDED ROCK BEACHING DETAILS	A.W	14/05/21
A	PRELIMINARY ISSUE	A.W	16/03/21



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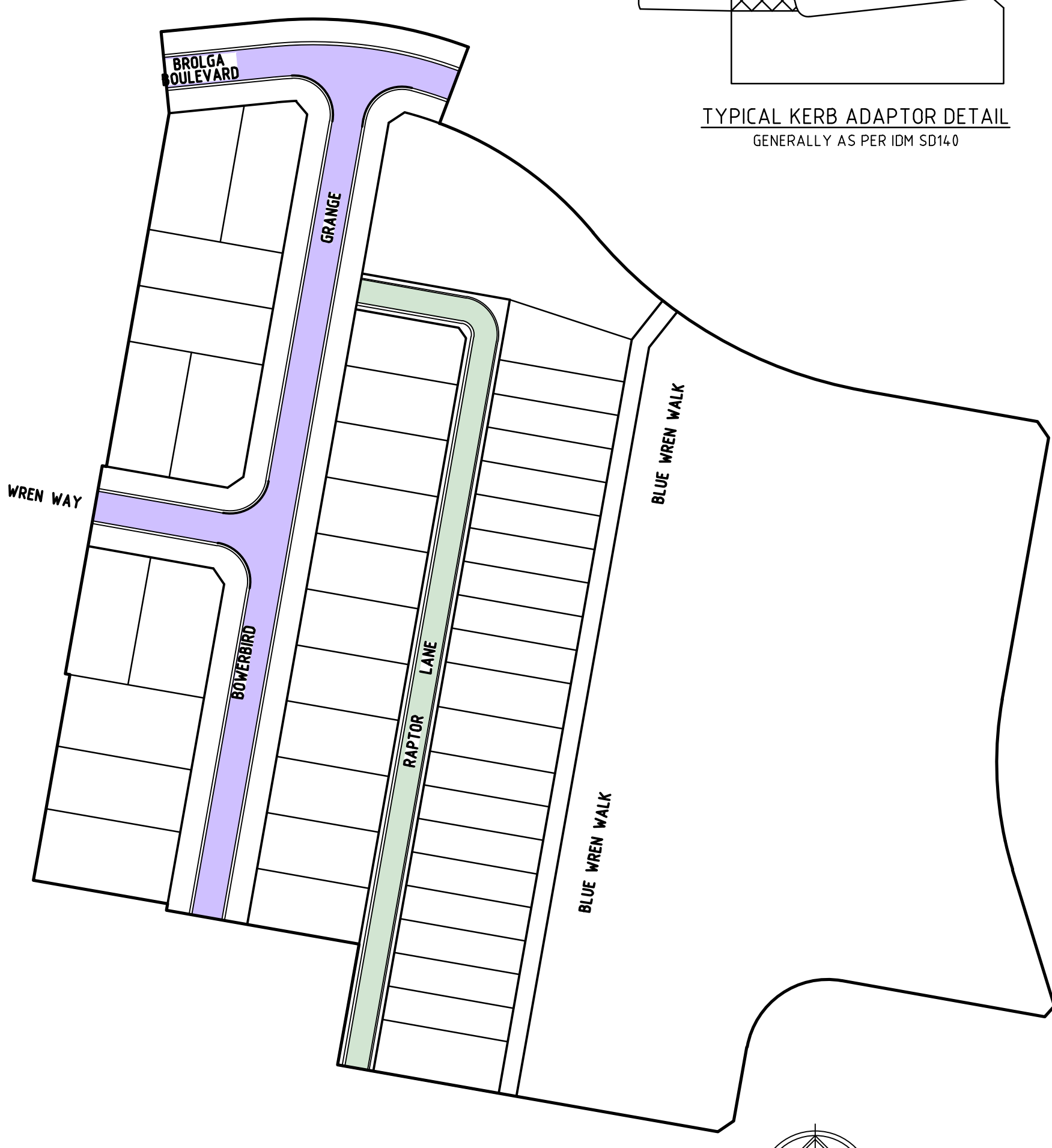
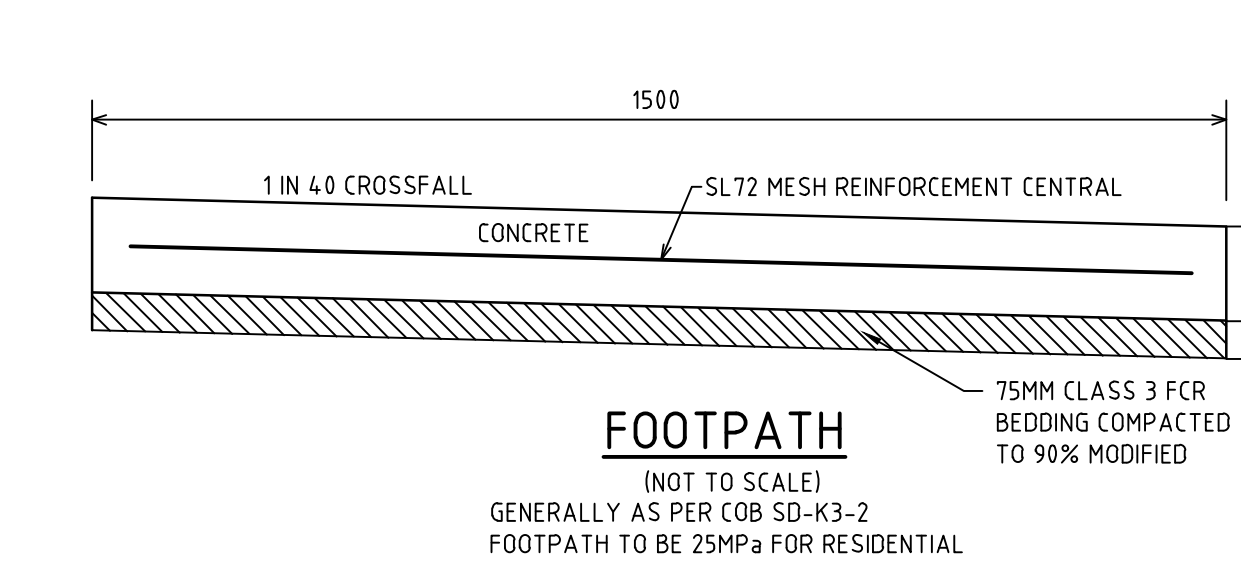
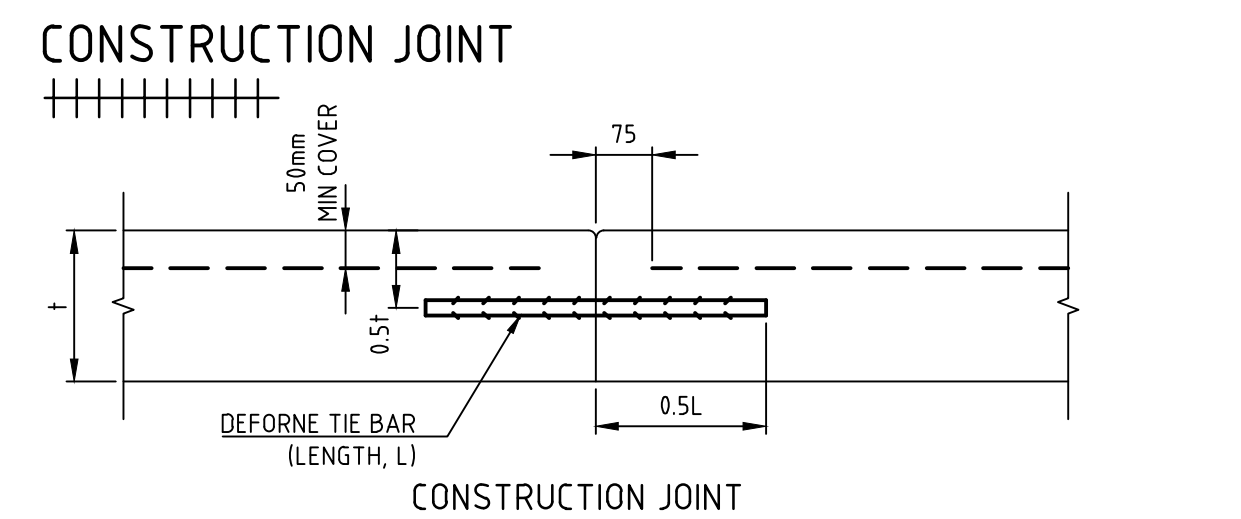
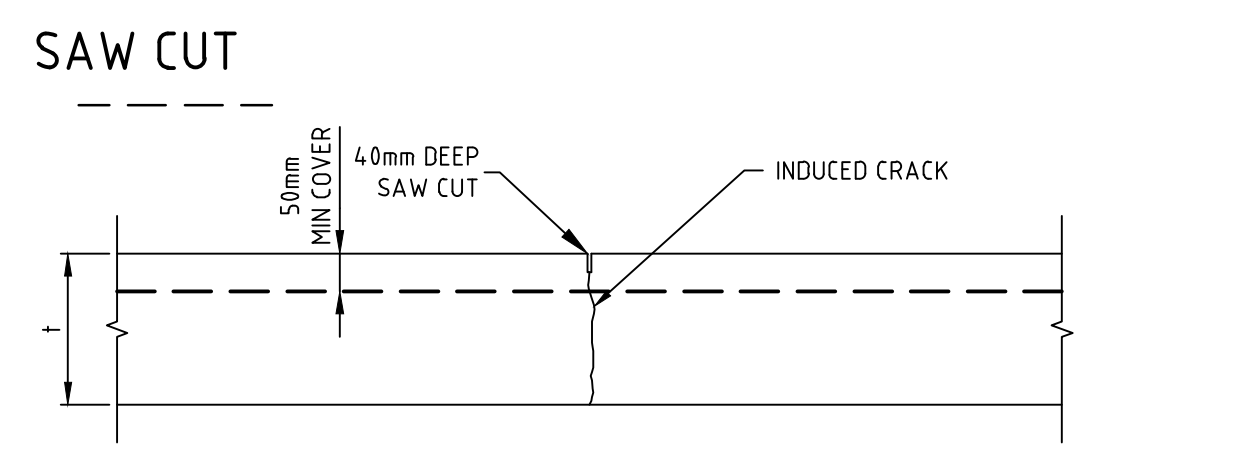
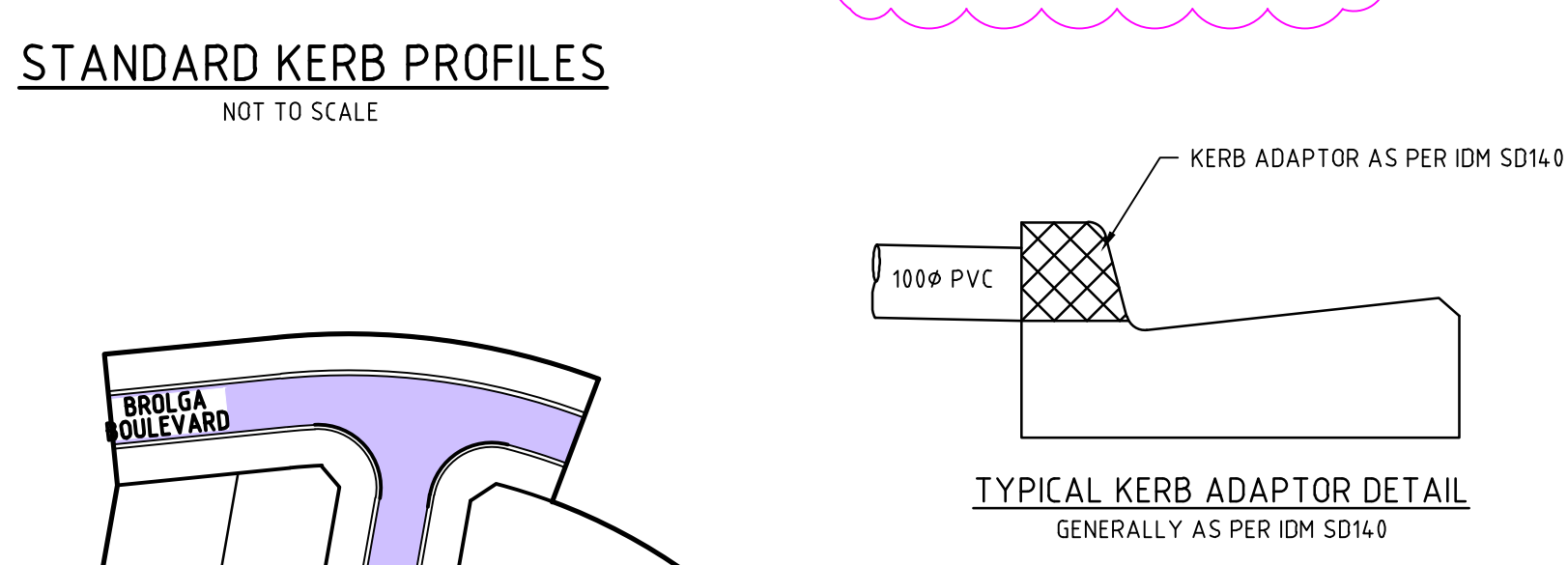
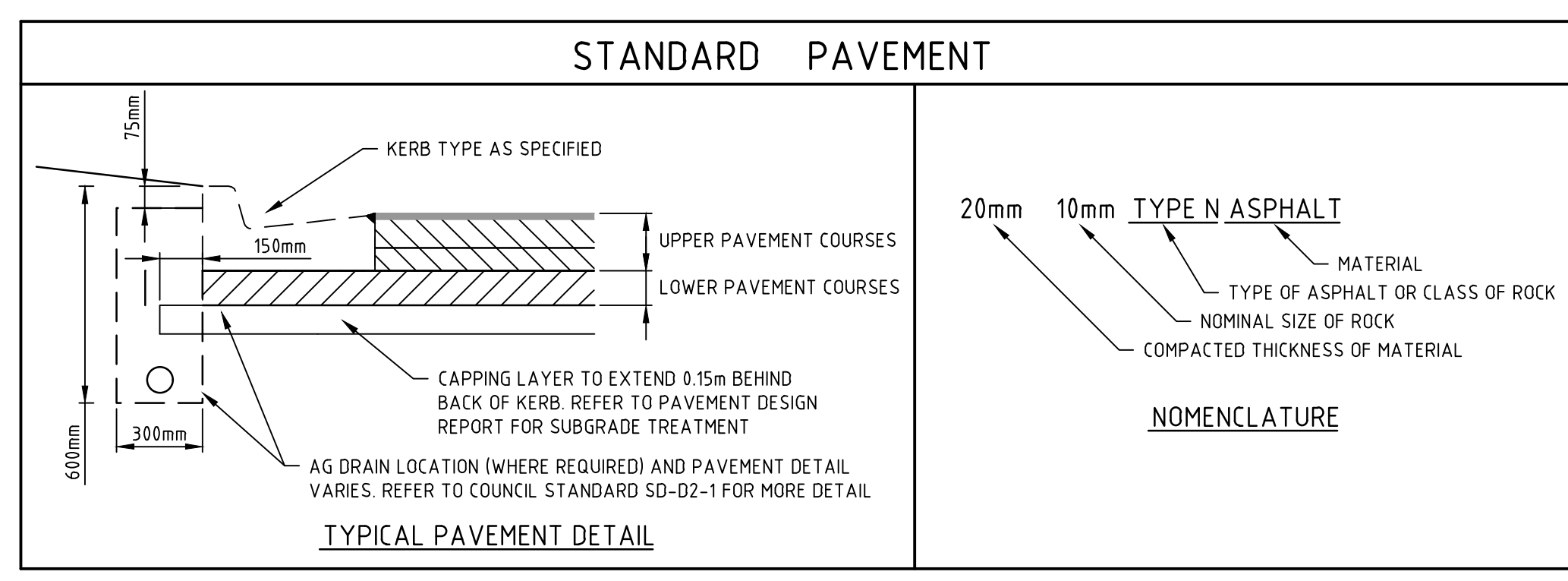
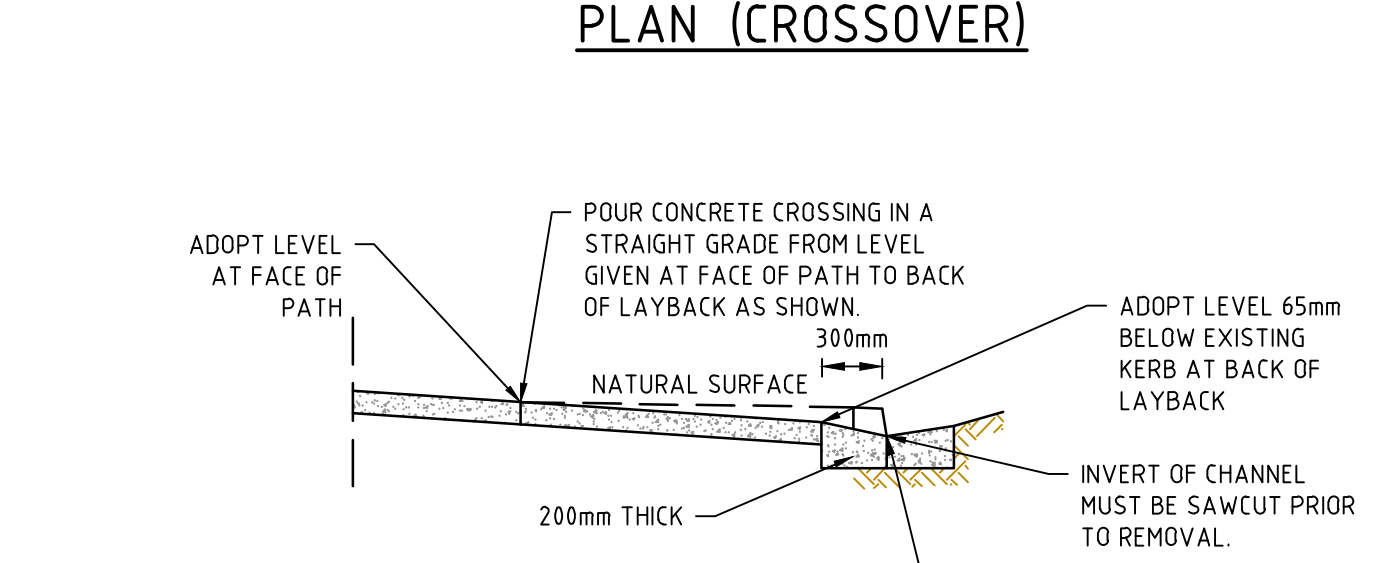
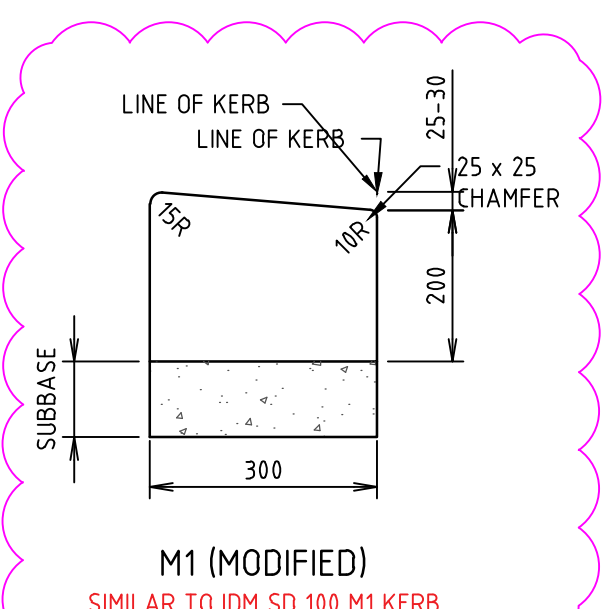
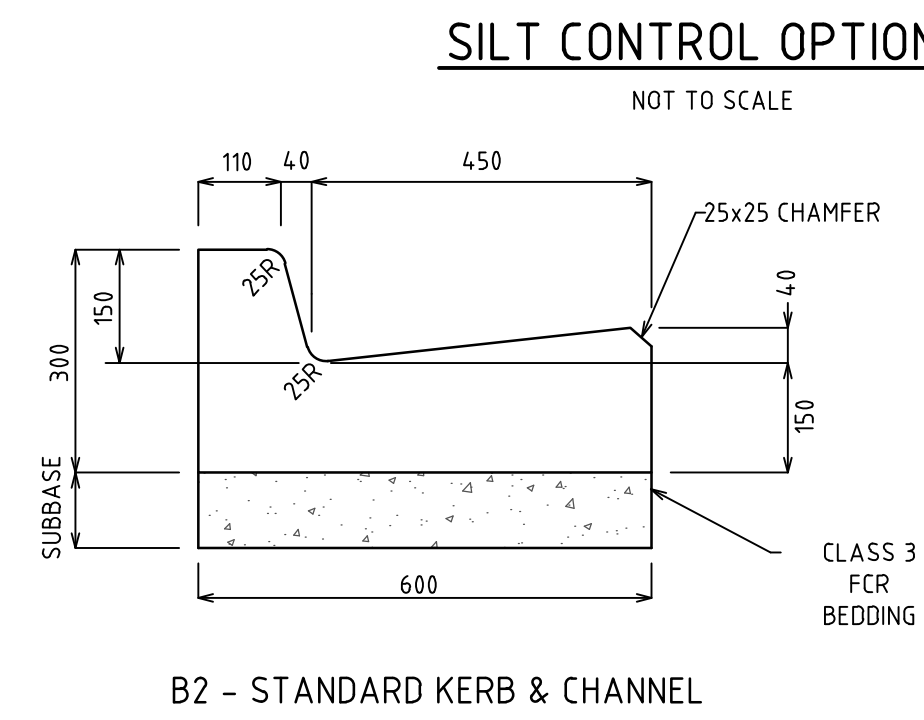
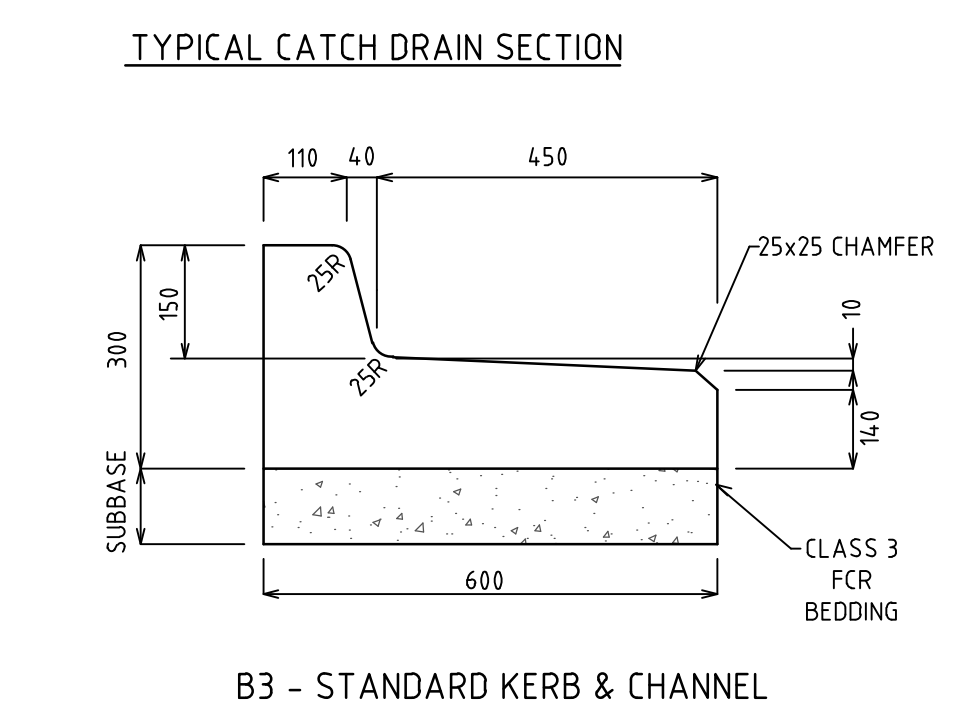
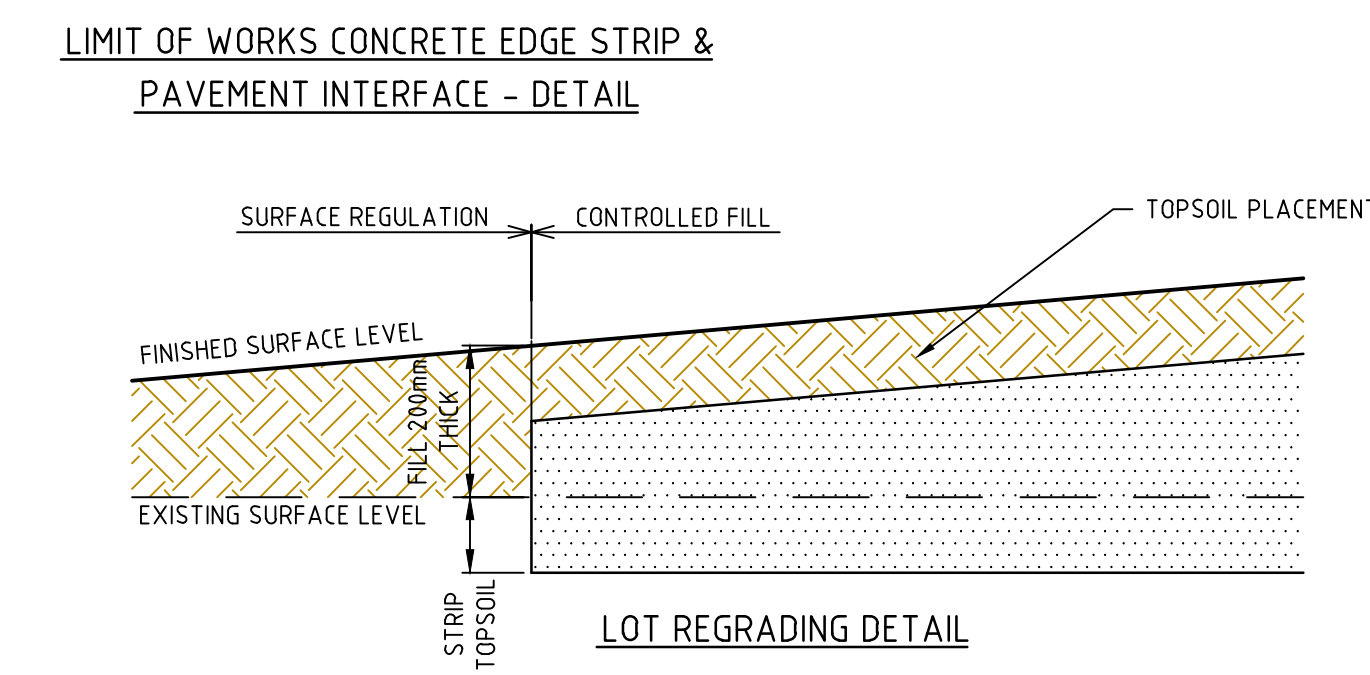
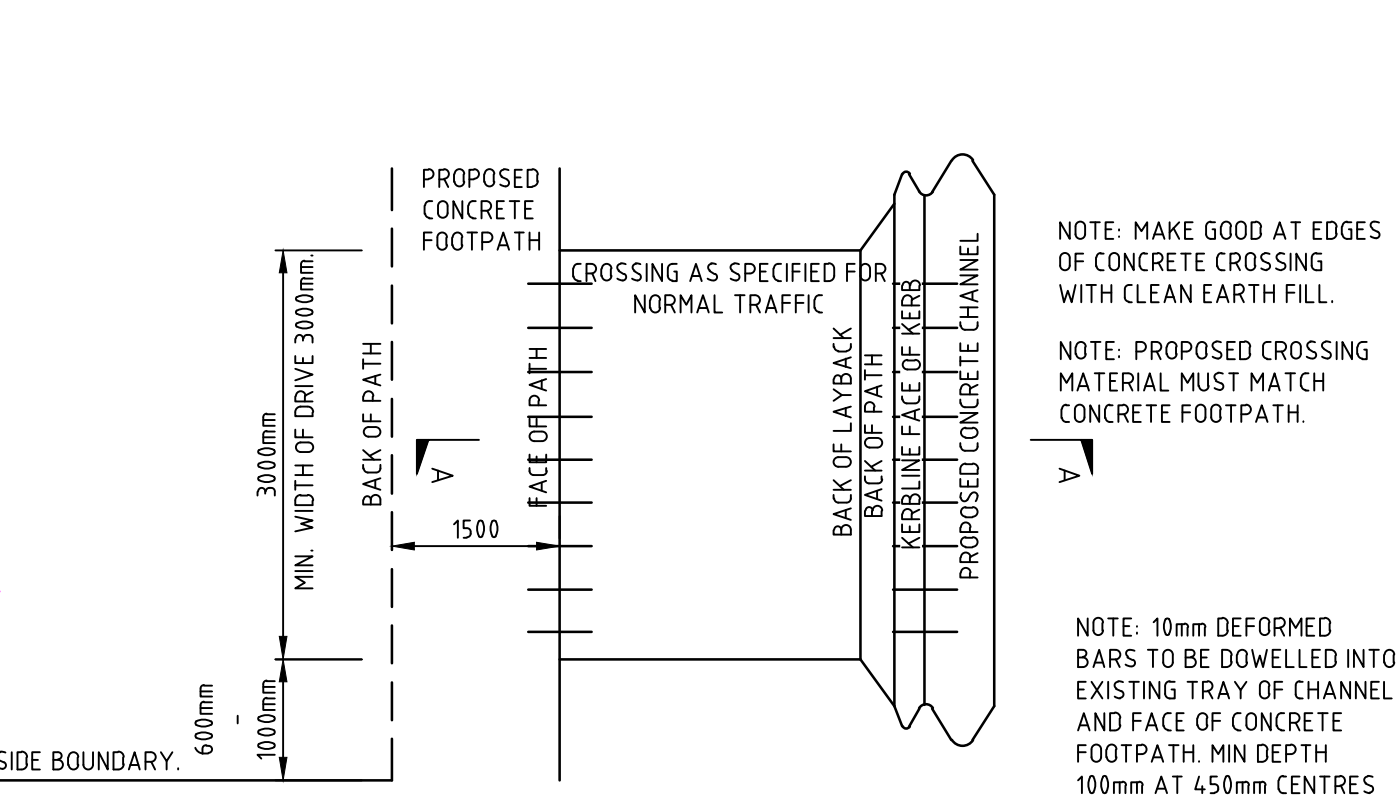
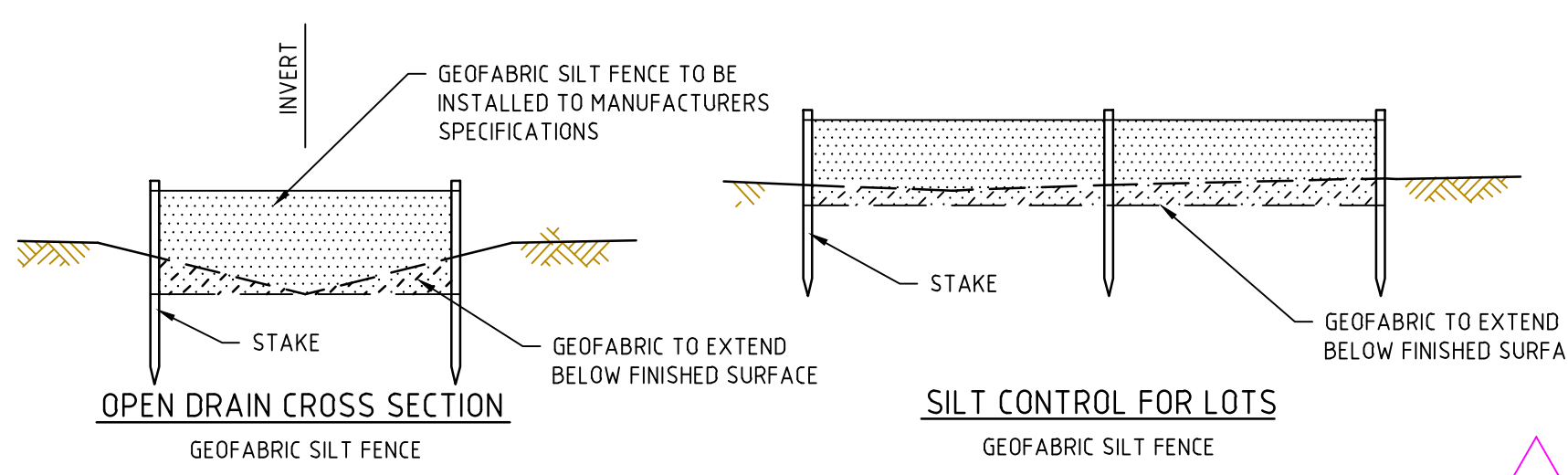
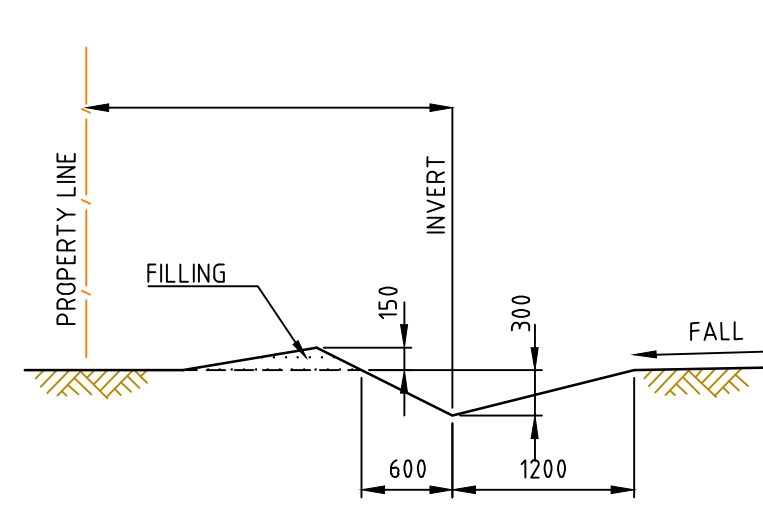
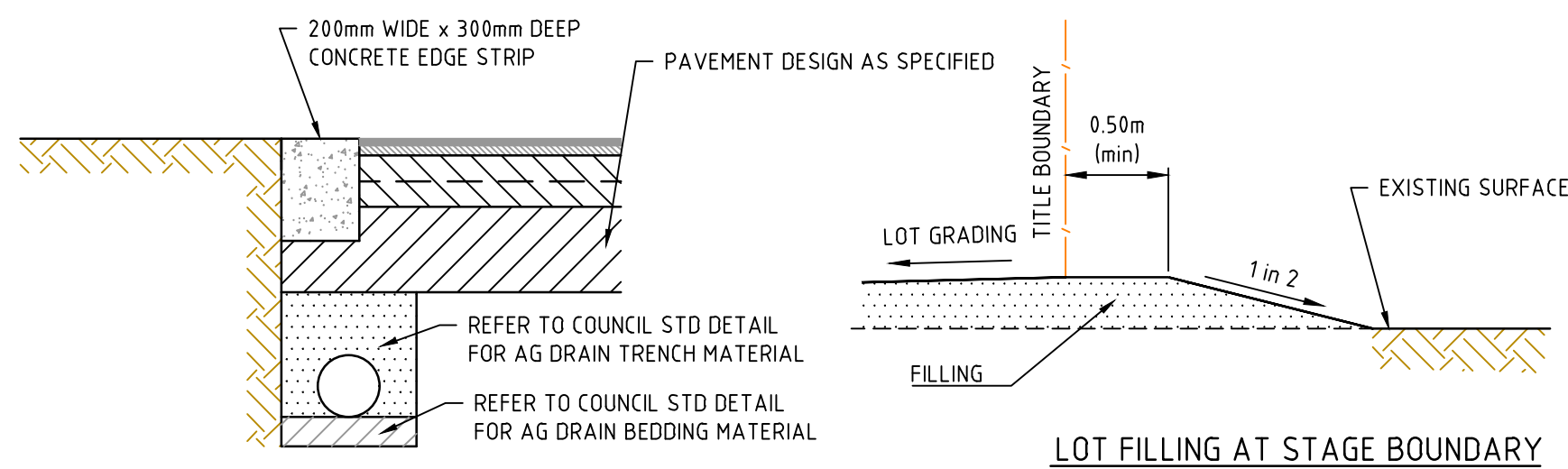
16 BRIDGE STREET BENDIGO  
 VICTORIA 3550 AUSTRALIA T 61 3 5448 2500  
 spiire.com.au ABN 55 050 029 635

Designed M. WRIGHT	Checked B. IBBS
Authorised A. WILKIE	Date 14/05/21

**CONROY'S GREEN**  
**STAGE 2**  
**ROAD AND DRAINAGE**  
**DRAINAGE LONG SECTIONS - OUTFALL DETAILS**  
 CITY OF BALLARAT  
 SAN HUBERTO PROPERTIES P/L

Drg No: **308457CR606** Rev: **0**





- GENERAL NOTES:**
- ALL WORKS TO BE COMPLETED IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS AND CCA LITERATURE; OR VIC ROADS STANDARDS FOR NON RESIDENTIAL STREETS.
  - ALL CONCRETE TO BE MINIMUM 32MPa COMPRESSIVE STRENGTH
  - CONCRETE TO BE THOROUGHLY COMPACTED USING EITHER SURFACE AND/OR IMMERSION VIBRATORS, PARTICULARLY AROUND REINFORCEMENT AND IN CORNERS OF FORMS.
  - PRIOR TO CASTING, THE UNBOUND GRANULAR SUBBASE MUST BE DAMP TO ENSURE NO EARLY "DRYING OUT" OF THE CONCRETE.
  - CURING OF CONCRETE IS ESSENTIAL - IDEALLY BY MAINTAINING WET HESSIAN OR SEALING WITH PLASTIC SHEETING.
  - SAW CUTTING OF CONCRETE SHOULD BE COMMENCED AS SOON AS CONCRETE PERMITS BY EXPERIENCED CONTRACTORS, BUT NO LATER THAN 12 HOURS AFTER POUR.
  - ALL DOWELS TO BE GRADE 250R STEEL BARS, 450mm LONG AND PLACED AT 300mm CENTRES. REFER CCAA- "CONCRETE PAVEMENT DESIGN FOR RESIDENTIAL STREETS" FOR DOWEL DIAMETERS. DOWELS MUST BE ACCURATELY PLACED TO ENSURE THE JOINT DOES NOT "LOCK". INSERTION OF DOWELS DURING THE PLACING OF CONCRETE IS NOT ACCEPTABLE. DOWELS MUST BE SAWN AND NOT CROPPED.
  - ALL JOINTS TO BE APPROPRIATELY SEALED TO RESIST THE INTRUSION OF SAND AND GRAVEL AND TO MINIMISE THE INGRESS OF WATER.
  - VARIATION TO JOINT LAYOUT BY CONTRACTOR WILL NOT BE ACCEPTED WITHOUT SPECIFIC WRITTEN APPROVAL OF SUPERINTENDENT & COUNCIL.

**DESIGN PAVEMENT PROFILE**

PAVEMENT LAYER	DESCRIPTION	DEPTH (mm)	
		TYPE A* (ACCESS STREET 1)	TYPE B* (ACCESS LANE)
ASPHALT WEARING COURSE (mm)	SIZE 10mm TYPE N ASPHALT CLASS 320 BITUMEN	40	40
SAMI LAYER		YES	YES
BASE COURSE (mm)	CLASS 1 or 2 20mm FCR, COMPACTED TO 98% (MMD)	150	130
SUBBASE COURSE (mm)	CLASS 3 20mm or 40mm FCR, COMPACTED TO 97% (MMD)	220	130
CAPPING LAYER (mm)	INSITU CLAY STABILISED WITH 3% LIME TO ACHIEVE THE FOLLOWING PROPERTIES: CBR<10, SWELLS<15% COMPACTED TO 98% (MMD)	150	150
TOTAL PAVEMENT DEPTH		560	450

ROAD NAME	TYPE
BROLGA BOULEVARD	A
BLACKBIRD GRANGE	A
WREN WAY	A
SWALLOW LANE	B

\* REFER PAVEMENT PLAN FOR LOCATION OF PAVEMENT TYPES

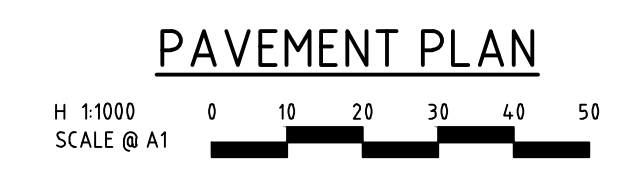
**PAVEMENT DETAILS**

THE PAVEMENT DESIGNS SHOWN HERE HAVE BEEN DESIGNED/PROVIDED BY GTS WHO ARE RESPONSIBLE FOR THE GEOTECHNICAL WORK ON THIS PROJECT. SPIIRE IS NOT RESPONSIBLE FOR THE WORK OF GTS.

THE DESIGN HAS BEEN EXTRACTED FROM THE GTS REPORT ON "520 GREENHALGH ROAD, WINTER VALLEY" THIS DOCUMENT SHOULD BE REVIEWED TO ENSURE THAT THE DESIGN HAS BEEN ACCURATELY REPRODUCED.

A COPY OF THE DOCUMENT WILL BE PROVIDED TO YOU ON REQUEST.

SPIIRE DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE ACCURACY, ADEQUACY OR APPROPRIATENESS OF THE GEOTECHNICAL WORK AND PAVEMENT DESIGNS. ANY QUERIES IN RESPECT TO THE GEOTECHNICAL WORK AND PAVEMENT DESIGNS SHOULD BE ADDRESSED TO GTS AND SENT TO SPIIRE.



file name: 308457CR700.dwg, layout name: CR700, plot date: 07/09/2021 3:04 PM, sheet: 19 of 20, sheets: 20, location: \\spire\server\projects\308457\308457.dwg

Rev	Amendments	Approved	Date
1	ADDED M1 (MODIFIED) KERB PROFILE	A.W	07/09/21
0	ISSUED FOR CONSTRUCTION	A.W	28/05/21
B	ADDED DRIVEWAY DETAILS	A.W	14/05/21
A	PRELIMINARY ISSUE	A.W	16/03/21

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16 BRIDGE STREET BENDIGO  
VICTORIA 3550 AUSTRALIA T 61 3 5448 2500  
spiire.com.au ABN 55 050 029 635

Designed  
**M. WRIGHT**

Checked  
**B. IBBS**

Authorised  
**A. WILKIE**

Date  
**14/05/21**

**CONROY'S GREEN**  
**STAGE 2**  
**ROAD AND DRAINAGE**  
**PAVEMENT AND TYPICAL DETAILS**  
CITY OF BALLARAT  
SAN HUBERTO PROPERTIES P/L

Rev No  
**308457CR700**

Rev  
**1**



**LEGEND**

#1 STREET NAME PLATES TO BE IN ACCORDANCE WITH CITY OF BALLARAT STANDARDS, INCLUDING "NO THROUGH ROAD" NOMINATION WHERE APPLICABLE

#2 G9-20  
 D4-5

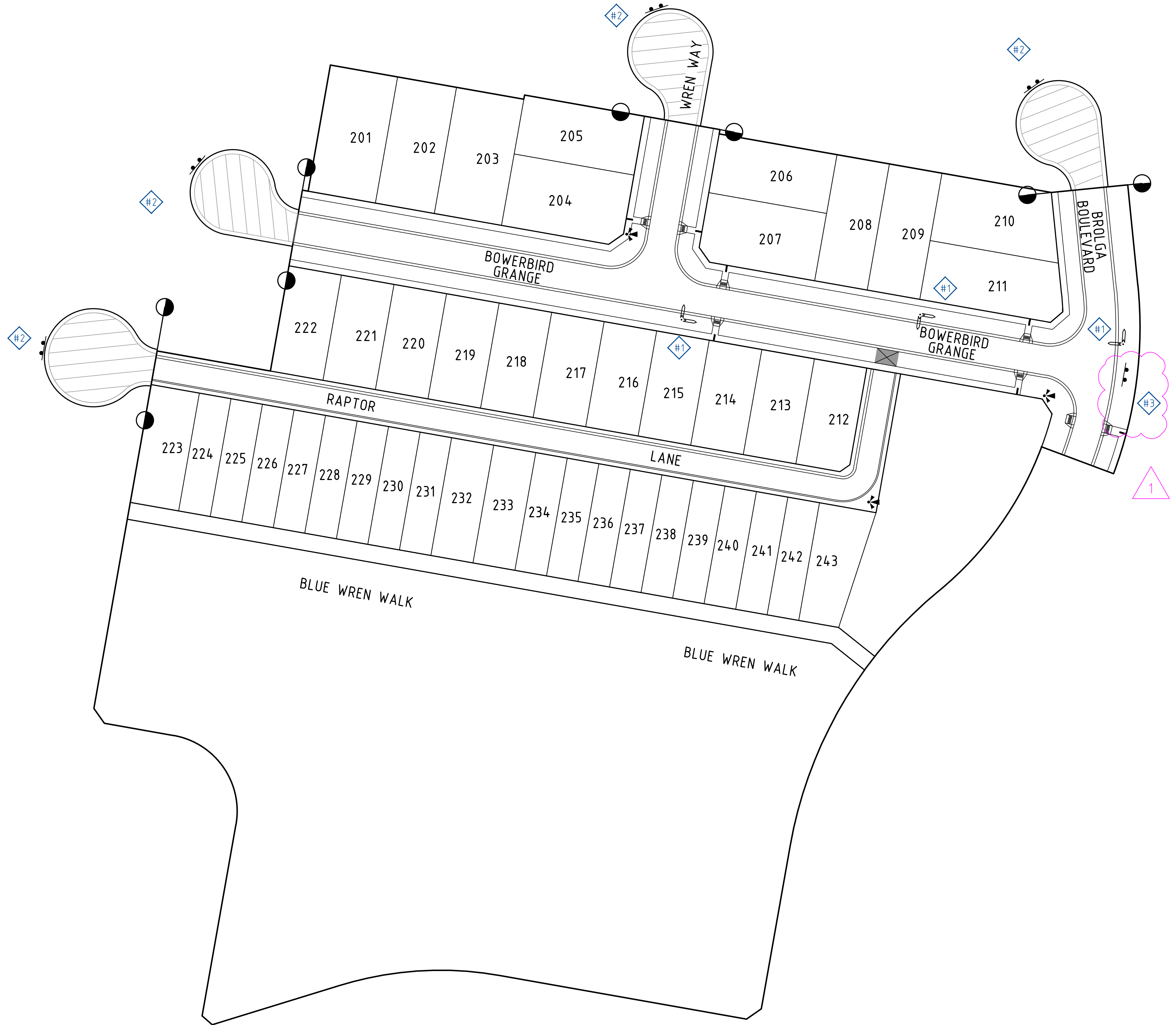
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TACTILE GROUND SURFACE INDICATORS (TGSI's)

**NOTE:**

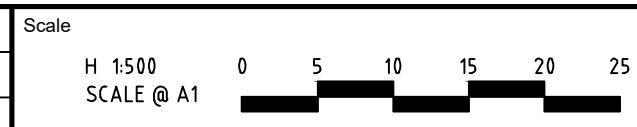
1. STREET SIGNS ARE TO BE MOUNTED ON LIGHT POLES, WITH A COUNCIL APPROVED BRACKET, IN LIEU OF SIGN POLES WHERE THE TWO POLES ARE IN CLOSE PROXIMITY AND WHERE THE STREET SIGN WOULD NOT BE COMPROMISED IN ITS PURPOSE BY THE RELOCATION.

2. LINEMARKING TO BE IN ACCORDANCE WITH AS1742.2 - 2009



file name: 308457CR800.dwg, layout name: CR800, plotted by: Mitchell Wright, file location: \\spire\server\projects\308457, plot date: 07/09/2021 3:04 PM Sheet 20 of 20 Sheets

Rev	Amendments	Approved	Date
1	AMENDED SIGN #3 LOCATION	A.W	26/08/21
0	ISSUED FOR CONSTRUCTION	A.W	28/05/21
B	ADDED SIGN #3	A.W	14/05/21
A	PRELIMINARY ISSUE	A.W	16/03/21



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 spiire.com.au ABN 55 050 029 635

Designed M. WRIGHT	Checked B. IBBS
Authorised A. WILKIE	Date 14/05/21

**CONROY'S GREEN**  
**STAGE 2**  
 ROAD AND DRAINAGE  
 SIGNAGE AND LINEMARKING  
 CITY OF BALLARAT  
 SAN HUBERTO PROPERTIES P/L

**CONSTRUCTION** Dwg No 308457CR800 Rev 1