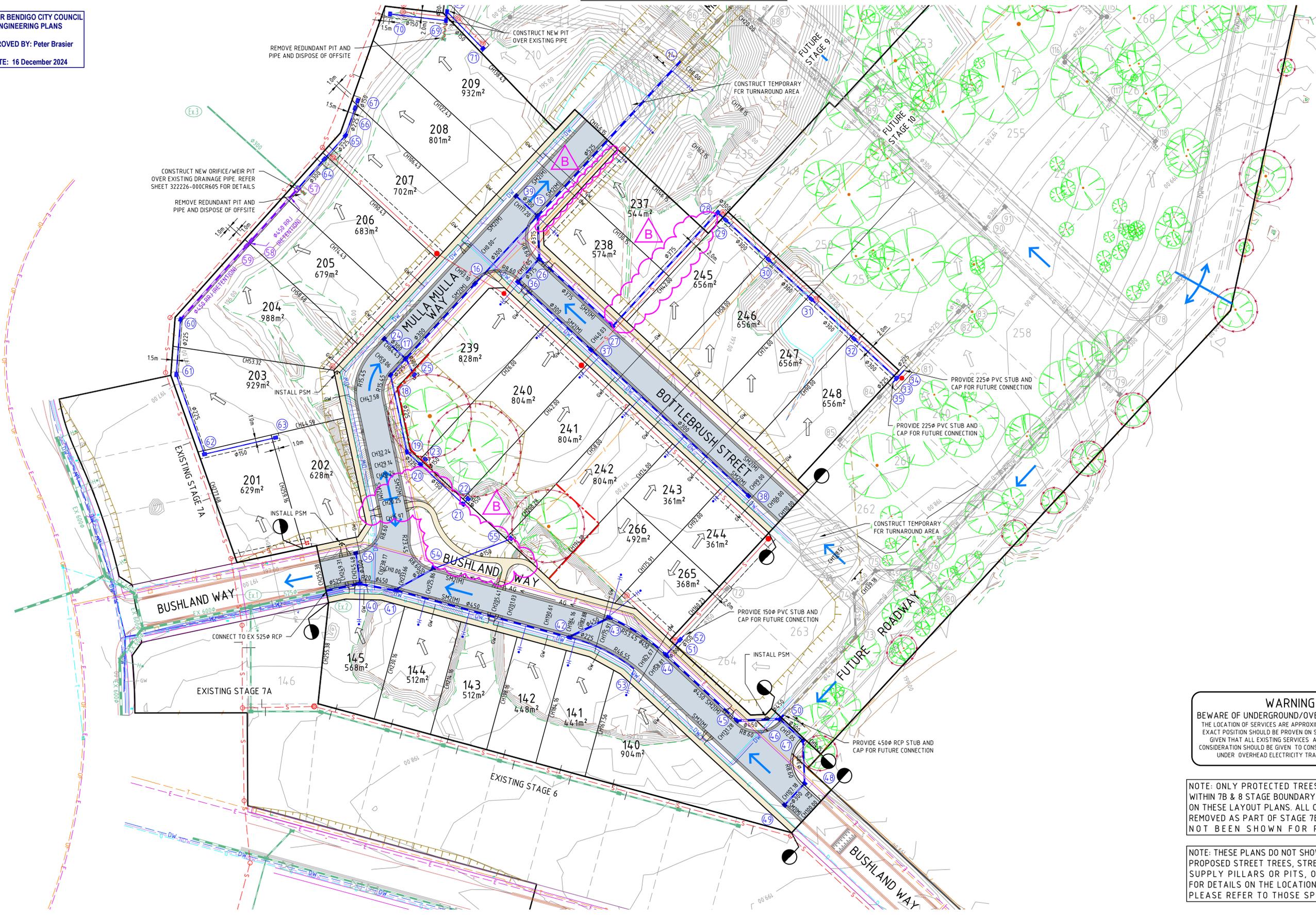




GREATER BENDIGO CITY COUNCIL  
ENGINEERING PLANS  
APPROVED BY: Peter Brasier  
DATE: 16 December 2024

FOR CONTINUATION REFER TO SHEET 322226-000CR201



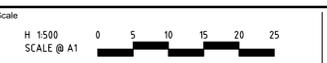
**WARNING**  
BEWARE OF UNDERGROUND/OVERHEAD SERVICES  
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY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

NOTE: ONLY PROTECTED TREES TO BE RETAINED WITHIN 7B & 8 STAGE BOUNDARY HAVE BEEN SHOWN ON THESE LAYOUT PLANS. ALL OTHER TREES TO BE REMOVED AS PART OF STAGE 7B & 8 WORKS HAVE NOT BEEN SHOWN FOR PLAN CLARITY

NOTE: THESE PLANS DO NOT SHOW THE LOCATION OF PROPOSED STREET TREES, STREET LIGHTS, POWER SUPPLY PILLARS OR PITS, OR TELECOM PITS. FOR DETAILS ON THE LOCATIONS OF THESE ITEMS PLEASE REFER TO THOSE SPECIFIC DRAWINGS

file name: 322226\_000CR200.dwg; layout: assem; CGS: 00; plotted by: Matthew Rule; file location: G:\322226\000\322226-000.dwg; plot date: 20/11/2024; 5:06:05 PM; Sheet: 2 of 32; Sheets

Rev	Amendments	Approved	Date
B	UPDATED FOOTPATH, BATTERS, COMMS ALIGNMENT & DRAINAGE PIPE DIAMETRE	B.I	NOV 2024
A	PRELIMINARY ISSUE	B.I	OCT 2024



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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.RULE

Checked  
B.IBBS

Authorised  
B.IBBS

Date  
NOV 2024

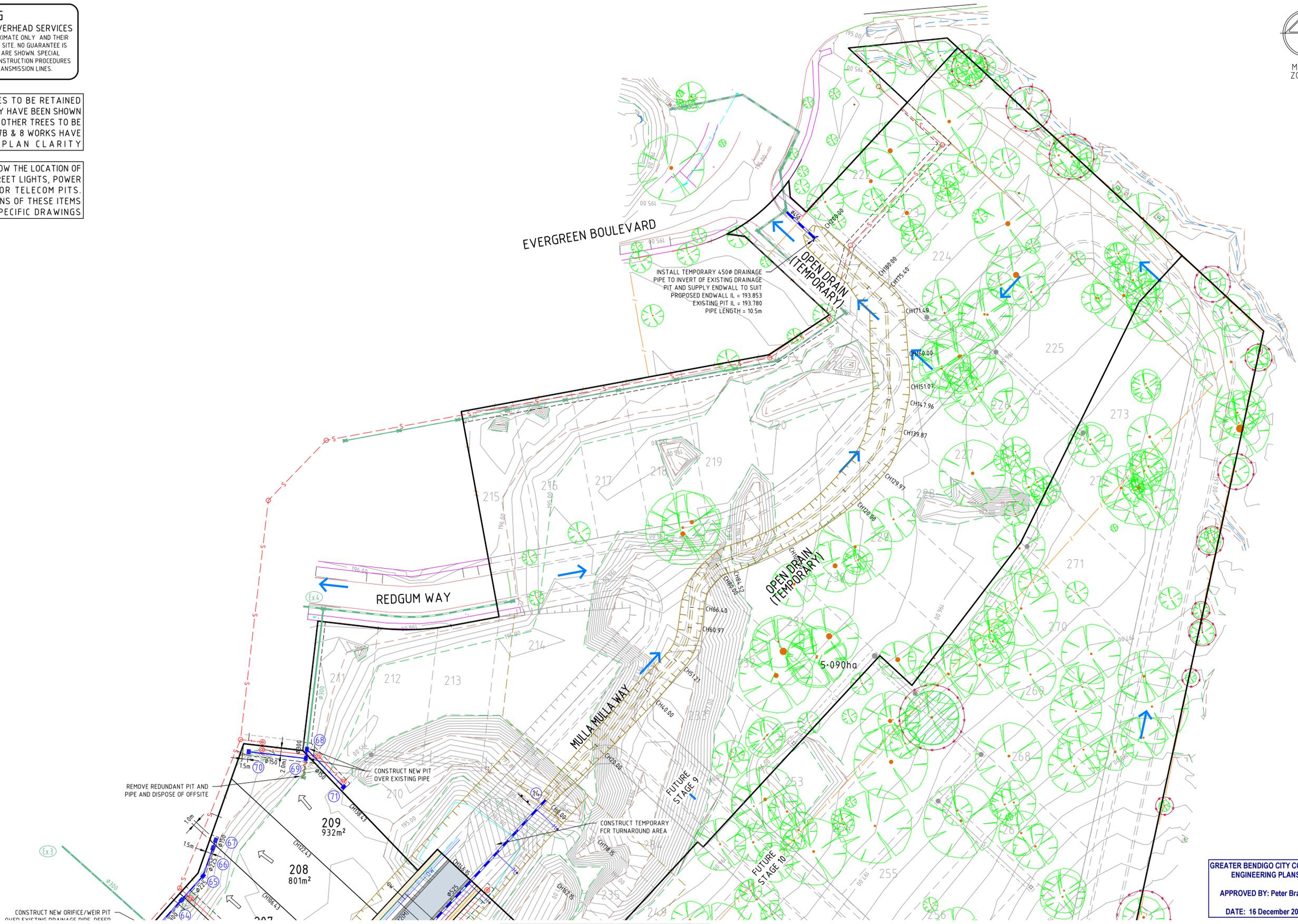
**GOLDEN GROVE STAGE 7B AND 8  
BUSHLAND WAY, JACKASS FLAT  
ROAD AND DRAINAGE  
ROAD LAYOUT PLANS - SHEET 1  
CITY OF GREATER BENDIGO  
WARRINGAL VIEWS P/L**

**PRELIMINARY** Dwg No: 322226-000CR200 Rev: B

**WARNING**  
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NOTE: ONLY PROTECTED TREES TO BE RETAINED WITHIN 7B & 8 STAGE BOUNDARY HAVE BEEN SHOWN ON THESE LAYOUT PLANS. ALL OTHER TREES TO BE REMOVED AS PART OF STAGE 7B & 8 WORKS HAVE NOT BEEN SHOWN FOR PLAN CLARITY

NOTE: THESE PLANS DO NOT SHOW THE LOCATION OF PROPOSED STREET TREES, STREET LIGHTS, POWER SUPPLY PILLARS OR PITS, OR TELECOM PITS. FOR DETAILS ON THE LOCATIONS OF THESE ITEMS PLEASE REFER TO THOSE SPECIFIC DRAWINGS

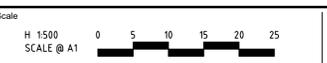


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GREATER BENDIGO CITY COUNCIL  
 ENGINEERING PLANS  
 APPROVED BY: Peter Brasier  
 DATE: 16 December 2024

FOR CONTINUATION REFER TO SHEET 322226-000CR200

Rev	Description	Approved	Date
A	PRELIMINARY ISSUE	B.I	OCT 2024
	Amendments		



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Checked  
 B.IBBS  
 Date  
 OCT 2024

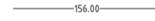
**GOLDEN GROVE STAGE 7B AND 8  
 BUSHLAND WAY, JACKASS FLAT  
 ROAD AND DRAINAGE  
 ROAD LAYOUT PLANS - SHEET 2  
 CITY OF GREATER BENDIGO  
 WARRINGAL VIEWS P/L**

**PRELIMINARY** Drg No 322226-000CR201 Rev A

FOR CONTINUATION REFER TO SHEET 322226-000CR203



**LEGEND**

-  EXCAVATION GREATER THAN 200mm
-  FILLING GREATER THAN 200mm
- TXXX.XX TOP/TOE OF BATTER LEVELS
- FXXX.XX FINISHED SURFACE LEVELS (AT BOUNDARY)
- EXXX.XX EXISTING SURFACE LEVELS (AT BOUNDARY)
-  PROPOSED RETAINING WALL
-  EXISTING SURFACE CONTOUR (MAJOR)
-  EXISTING SURFACE CONTOUR (MINOR)  
(CONTOURS SHOWN AT 250mm INTERVAL)
-  BUILDING ENVELOPES
-  PROTECTED TREE (TO BE RETAINED)

NOTE: EXCAVATION/FILL HATCHING AND EXISTING SURFACE LEVELS SHOWN REFER TO NATURAL SURFACE BELOW STOCKPILES.

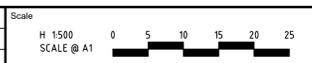


GREATER BENDIGO CITY COUNCIL  
ENGINEERING PLANS  
APPROVED BY: Peter Brasier  
DATE: 16 December 2024

**WARNING**  
BEWARE OF UNDERGROUND/OVERHEAD SERVICES  
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file name: 322226\_000CR203.dwg; layout: assem; CG: 02; plotted by: Matthew Rule; file location: G:\322226\000\322226-000.dwg; plot date: 20/12/2024; 5:06 PM; Sheet: 4 of 32; Sheets

Rev	Amendments	Approved	Date
B	UPDATED EARTHWORKS HATCHING TO INCLUDE ROAD RESERVES	B.I	NOV 2024
A	PRELIMINARY ISSUE	B.I	OCT 2024



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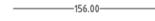
16 BRIDGE STREET BENDIGO  
VICTORIA 3550 AUSTRALIA T 61 3 5448 2500  
spiire.com.au ABN 55 050 029 635

Designed: M.RULE  
Checked: B.IBBS  
Authorised: B.IBBS  
Date: NOV 2024

**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT ROAD AND DRAINAGE ROAD LAYOUT PLANS - EARTHWORKS - SHEET 1**  
CITY OF GREATER BENDIGO  
WARRINGAL VIEWS P/L

**PRELIMINARY** Dwg No: 322226-000CR202 Rev: B

**LEGEND**

-  EXCAVATION GREATER THAN 200mm
-  FILLING GREATER THAN 200mm
- TXXX.XX TOP/TOE OF BATTER LEVELS
- FXXX.XX FINISHED SURFACE LEVELS (AT BOUNDARY)
- EXXX.XX EXISTING SURFACE LEVELS (AT BOUNDARY)
-  PROPOSED RETAINING WALL
-  EXISTING SURFACE CONTOUR (MAJOR)
-  EXISTING SURFACE CONTOUR (MINOR)
-  CONTOURS SHOWN AT 250mm INTERVAL
-  BUILDING ENVELOPES
-  PROTECTED TREE (TO BE RETAINED)

NOTE: EXCAVATION/FILL HATCHING AND EXISTING SURFACE LEVELS SHOWN REFER TO NATURAL SURFACE BELOW STOCKPILES.



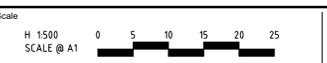
**GREATER BENDIGO CITY COUNCIL  
ENGINEERING PLANS**  
APPROVED BY: Peter Brasier  
DATE: 16 December 2024

**WARNING**  
BEWARE OF UNDERGROUND/OVERHEAD SERVICES  
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FOR CONTINUATION REFER TO SHEET 322226-000CR202

file name: 322226\_000CR200.dwg; layout: asms; CG02; plotted by: Matthew Bule; file location: G:\322226\000\322226\000\322226\000\322226\_000.dwg; plot date: 20/11/2024; 5:06:05 PM; Sheet: 5 of 32; Sheets

Rev	Amendments	Approved	Date
B	UPDATED EARTHWORKS HATCHING TO INCLUDE ROAD RESERVES	B.I	NOV 2024
A	PRELIMINARY ISSUE	B.I	OCT 2024



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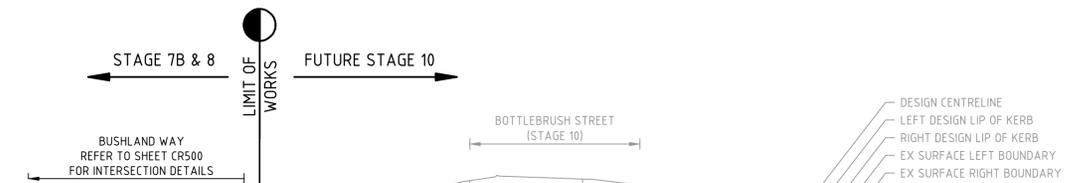
16 BRIDGE STREET BENDIGO  
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spiire.com.au ABN 55 050 029 635

Designed  
M.RULE  
Authorised  
B.IBBS

Checked  
B.IBBS  
Date  
NOV 2024

**GOLDEN GROVE STAGE 7B AND 8  
BUSHLAND WAY, JACKASS FLAT  
ROAD AND DRAINAGE  
ROAD LAYOUT PLANS - EARTHWORKS - SHEET 2**  
CITY OF GREATER BENDIGO  
WARRINGAL VIEWS P/L

**PRELIMINARY** Dwg No: 322226-000CR203 Rev: B

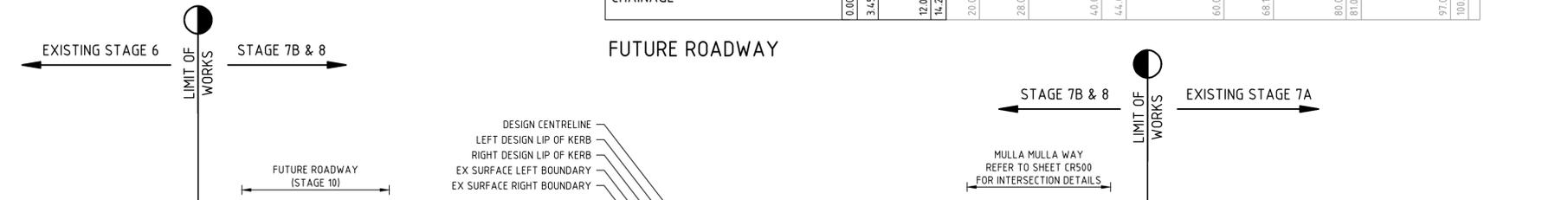


VERTICAL GEOMETRY

DESIGN GRADELINE

DATUM RL 195.5

DESIGN CENTRELINE	198.127	198.012	197.940	198.055	198.066	198.095	198.135	198.154	198.159	198.239	198.254		
LEFT DESIGN LIP OF KERB			197.940	197.940	197.985	197.990	198.020	198.080	198.080	198.124	198.124		
RIGHT DESIGN LIP OF KERB			197.931	197.940	197.985	198.016	198.250	198.310	198.310	198.354	198.354		
EX SURFACE LEFT BOUNDARY			197.931	197.940	197.985	198.016	198.250	198.310	198.310	198.354	198.354		
EX SURFACE RIGHT BOUNDARY			197.931	197.940	197.985	198.016	198.250	198.310	198.310	198.354	198.354		
CHAINAGE	0.000	3.450	12.050	14.250	20.000	28.038	40.000	44.025	60.000	68.125	80.000	97.075	100.000



VERTICAL GEOMETRY

DESIGN GRADELINE

DATUM RL 194.0

DESIGN CENTRELINE	200.473	200.620	200.213	200.358	199.678	199.338	198.883	198.998	198.543	198.543	198.554	198.486	198.405	198.101	198.096	198.091	197.824	197.806	197.704	197.702	197.495	197.610	197.604	197.603	197.566	197.524	197.504	197.490	197.463	197.451	197.451	197.433	197.413	197.404	197.399	197.377	197.362	197.333	197.304	197.275	197.253	197.157	197.127	197.101	197.095	196.971	196.955	196.815	196.777	196.772	196.762	
LEFT DESIGN LIP OF KERB			200.213	200.213	199.563	199.223	198.883	198.883	198.543	198.543	198.554	198.486	198.405	198.101	198.096	198.091	197.824	197.806	197.704	197.702	197.495	197.610	197.604	197.603	197.566	197.524	197.504	197.490	197.463	197.451	197.451	197.433	197.413	197.404	197.399	197.377	197.362	197.333	197.304	197.275	197.253	197.157	197.127	197.101	197.095	196.971	196.955	196.815	196.777	196.772	196.762	
RIGHT DESIGN LIP OF KERB			200.213	200.213	199.563	199.223	198.883	198.883	198.543	198.543	198.554	198.486	198.405	198.101	198.096	198.091	197.824	197.806	197.704	197.702	197.495	197.610	197.604	197.603	197.566	197.524	197.504	197.490	197.463	197.451	197.451	197.433	197.413	197.404	197.399	197.377	197.362	197.333	197.304	197.275	197.253	197.157	197.127	197.101	197.095	196.971	196.955	196.815	196.777	196.772	196.762	
EX SURFACE LEFT BOUNDARY			200.620	200.620	199.903	199.563	199.223	198.883	198.543	198.543	198.554	198.486	198.405	198.101	198.096	198.091	197.824	197.806	197.704	197.702	197.495	197.610	197.604	197.603	197.566	197.524	197.504	197.490	197.463	197.451	197.451	197.433	197.413	197.404	197.399	197.377	197.362	197.333	197.304	197.275	197.253	197.157	197.127	197.101	197.095	196.971	196.955	196.815	196.777	196.772	196.762	
EX SURFACE RIGHT BOUNDARY			200.620	200.620	199.903	199.563	199.223	198.883	198.543	198.543	198.554	198.486	198.405	198.101	198.096	198.091	197.824	197.806	197.704	197.702	197.495	197.610	197.604	197.603	197.566	197.524	197.504	197.490	197.463	197.451	197.451	197.433	197.413	197.404	197.399	197.377	197.362	197.333	197.304	197.275	197.253	197.157	197.127	197.101	197.095	196.971	196.955	196.815	196.777	196.772	196.762	
CHAINAGE	0.000	200.000	201.501	200.104	199.903	199.678	199.338	198.883	198.998	198.543	198.543	198.554	198.486	198.405	198.101	198.096	198.091	197.824	197.806	197.704	197.702	197.495	197.610	197.604	197.603	197.566	197.524	197.504	197.490	197.463	197.451	197.451	197.433	197.413	197.404	197.399	197.377	197.362	197.333	197.304	197.275	197.253	197.157	197.127	197.101	197.095	196.971	196.955	196.815	196.777	196.772	196.762

BUSHLAND WAY

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	Authorised B.IBBS	Date OCT 2024
A PRELIMINARY ISSUE	B.I	OCT 2024
Rev Amendments	Approved	Date

**spiire**

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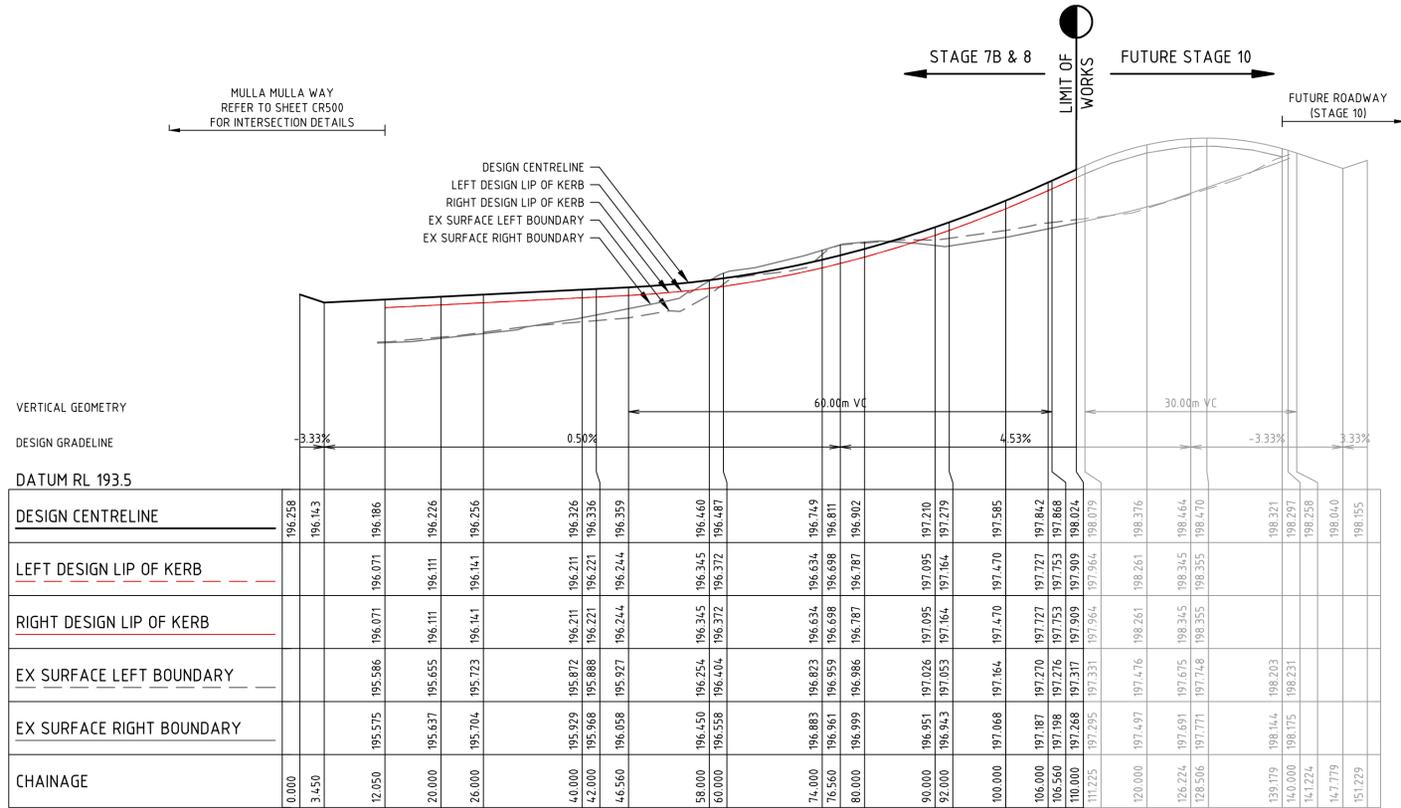
Designed  
M.RULE

Checked  
B.IBBS

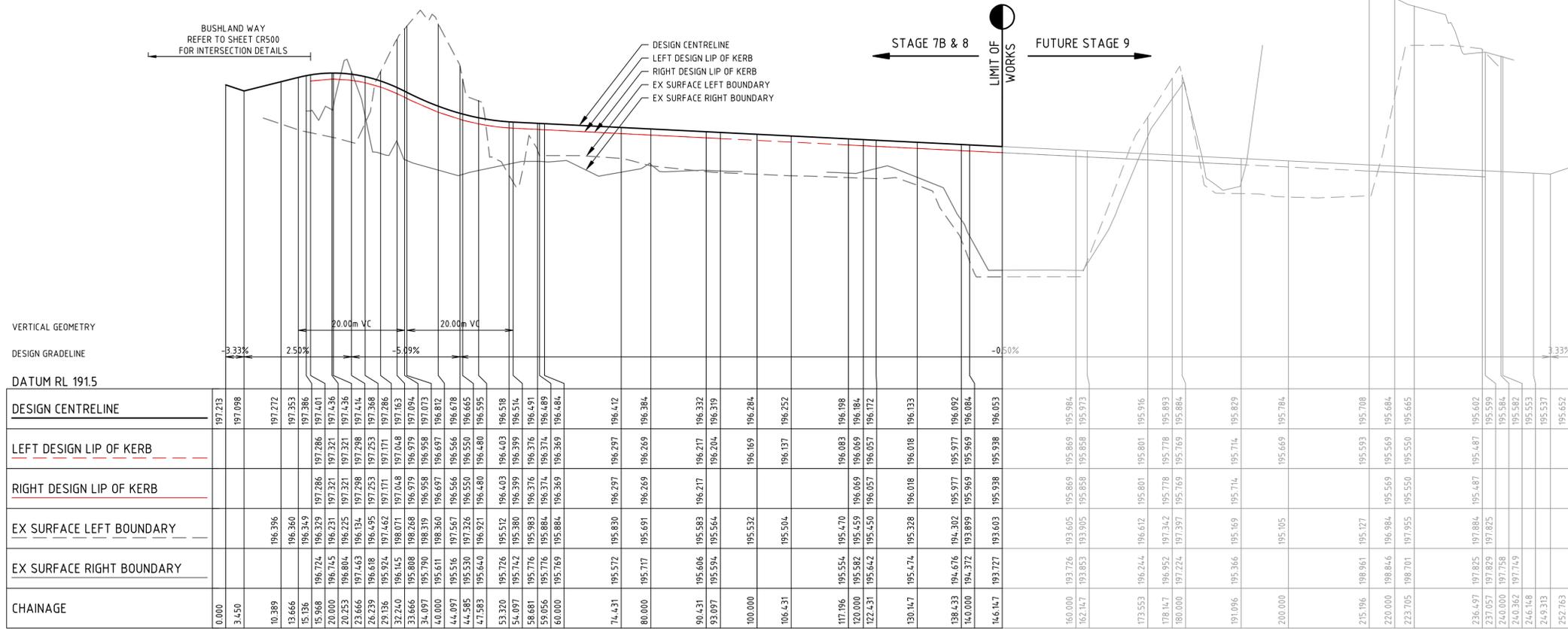
Date  
OCT 2024

**GOLDEN GROVE STAGE 7B AND 8  
BUSHLAND WAY, JACKASS FLAT  
ROAD AND DRAINAGE  
ROAD LONG SECTIONS - SHEET 1  
CITY OF GREATER BENDIGO  
WARRINGAL VIEWS P/L**

**PRELIMINARY** Dwg No 322226-000CR300 Rev A



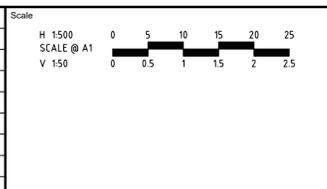
BOTTLEBRUSH STREET



MULLA MULLA WAY

file: 322226\_000CR300.dwg, layout: asps, CS301, plotted by: Matthew Gills, file location: G:\322226\000\CR301\ACAD\plot.dwg, 28/12/2024, 5:07 PM, Sheet: 11 of 32, Sheets

Rev	Description	By	Date
A	PRELIMINARY ISSUE	B.I	OCT 2024
Rev	Amendments	Approved	Date



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spiire.com.au ABN 55 050 029 635

Designed M.RULE	Checked B.IBBS
Authorised B.IBBS	Date OCT 2024

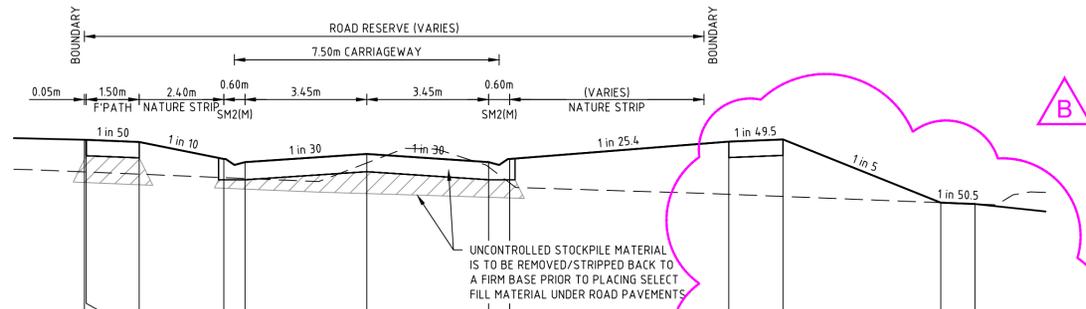
**GOLDEN GROVE STAGE 7B AND 8  
BUSHLAND WAY, JACKASS FLAT  
ROAD AND DRAINAGE  
ROAD LONG SECTIONS - SHEET 2  
CITY OF GREATER BENDIGO  
WARRINGAL VIEWS P/L**

**PRELIMINARY** Drg No 322226-000CR301 Rev A





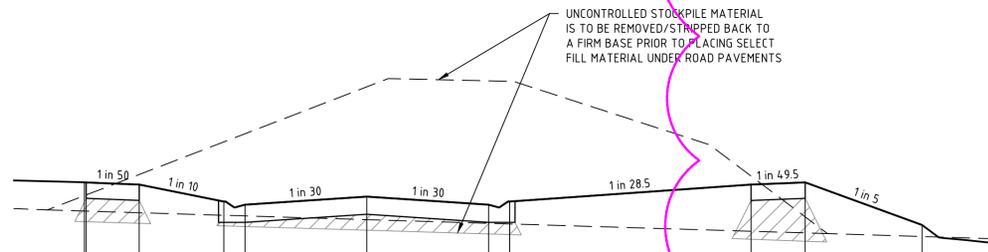
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(WHERE >200mm FILLING)



DATUM R.L. 195.0	
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EXISTING SURFACE LEVEL	197.109, 197.108, 197.077, 197.028, 197.016, 197.235, 197.180, 196.954, 196.674, 196.655
OFFSET	-8.000, -7.950, -6.450, -4.050, -3.450, 0.000, 3.450, 4.050, 10.258, 11.794, 16.264, 17.233

BUSHLAND WAY

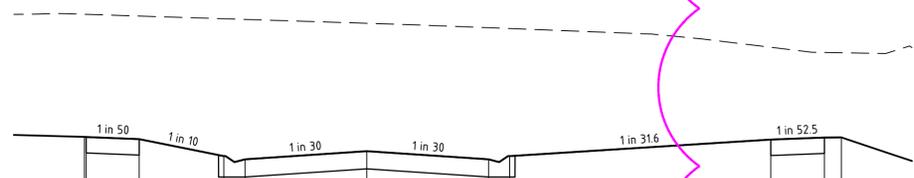
CH 208.28



DATUM R.L. 196.0	
DESIGN SURFACE LEVEL	197.579, 197.577, 197.547, 197.307, 197.262, 197.377, 197.546, 197.577, 196.976
EXISTING SURFACE LEVEL	197.390, 197.400, 197.688, 198.150, 198.266, 198.929, 199.014, 199.007, 197.667, 197.090, 196.812
OFFSET	-8.000, -7.950, -6.450, -4.050, -3.450, 0.000, 3.450, 4.050, 10.888, 12.423, 15.733

BUSHLAND WAY

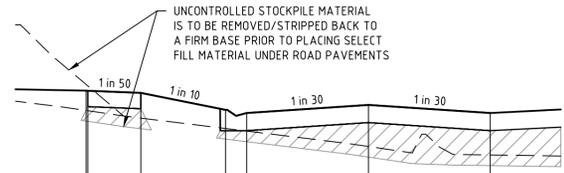
CH 205.41



DATUM R.L. 196.0	
DESIGN SURFACE LEVEL	197.600, 197.599, 197.569, 197.329, 197.284, 197.399, 197.563, 197.592, 197.594
EXISTING SURFACE LEVEL	199.335, 199.334, 199.310, 199.272, 199.262, 199.208, 199.145, 198.795, 198.731
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BUSHLAND WAY

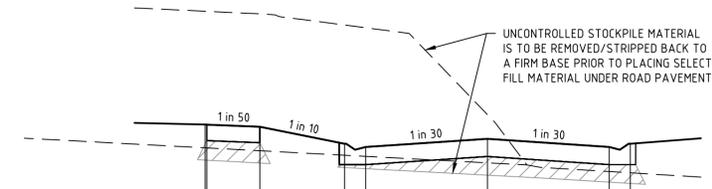
CH 201.03



DATUM R.L. 195.0	
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OFFSET	-8.000, -7.950, -6.450, -4.050, -3.450, 0.000, 3.450, 0.000, 0.000, 3.450, 3.450

BUSHLAND WAY

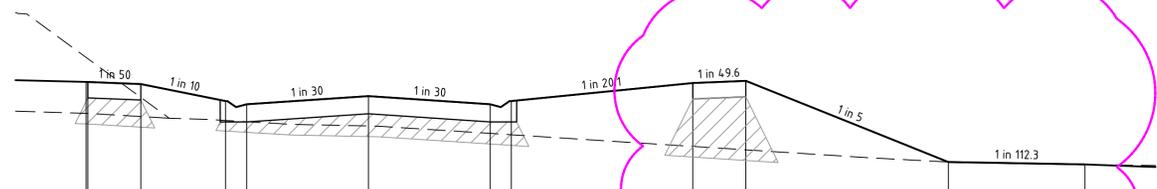
CH 238.17



DATUM R.L. 196.0	
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EXISTING SURFACE LEVEL	199.079, 199.077, 199.042, 198.884, 198.845, 197.617, 197.617, 196.812, 196.794, 196.794
OFFSET	-8.000, -7.950, -6.450, -4.050, -3.450, 0.000, 3.450, 4.050, 10.888, 12.423, 15.733

BUSHLAND WAY

CH 225.85



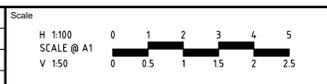
DATUM R.L. 195.0	
DESIGN SURFACE LEVEL	197.535, 197.533, 197.503, 197.263, 197.218, 197.333, 197.218, 197.263, 197.549, 196.401, 196.366
EXISTING SURFACE LEVEL	197.881, 197.863, 197.315, 196.989, 196.971, 196.911, 196.806, 196.786, 196.573, 196.401, 196.365
OFFSET	-8.000, -7.950, -6.450, -4.050, -3.450, 0.000, 3.450, 4.050, 9.190, 10.692, 16.431, 20.303

BUSHLAND WAY

CH 214.16

file name: 322226\_000CR400.dwg; layout: asms; GS:01; file location: G:\322226\000\CR400\plot\_data\20241216\_1507\_PM\_Sheet\_13\_of\_32\_Sheets

Rev	Amendments	Approved	Date
B	UPDATED FOOTPATH AND BATTERS	B.I	NOV 2024
A	PRELIMINARY ISSUE	B.I	OCT 2024



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VICTORIA 3550 AUSTRALIA T 61 3 5448 2500  
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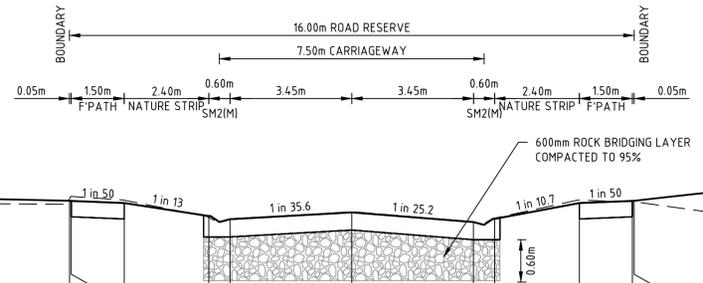
Designed M.RULE	Checked B.IBBS
Authorised B.IBBS	Date NOV 2024

**GOLDEN GROVE STAGE 7B AND 8  
BUSHLAND WAY, JACKASS FLAT  
ROAD AND DRAINAGE  
ROAD CROSS SECTIONS - SHEET 2  
CITY OF GREATER BENDIGO  
WARRINGAL VIEWS P/L**

**PRELIMINARY** Drg No 322226-000CR401 Rev B



SELECT FILL MATERIAL  
(WHERE >200mm FILLING)

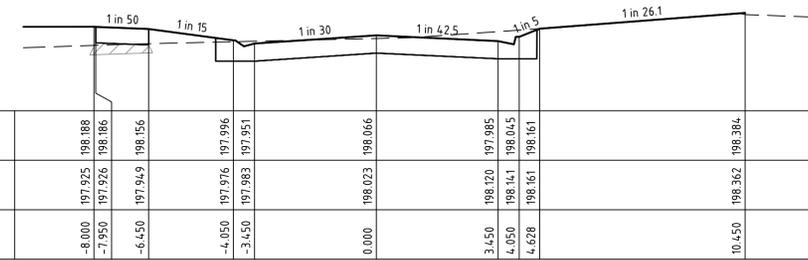


DATUM R.L.196.0

DESIGN SURFACE LEVEL	197.291	197.289	197.259	197.075	197.030	197.127	196.990	197.035	197.259	197.289	197.291
EXISTING SURFACE LEVEL	197.319	197.352	197.298	197.054	197.025	197.136	196.991	197.045	197.301	197.282	197.291
OFFSET	-7.997	-7.947	-6.447	-4.050	-3.450	0.000	3.447	4.047	6.450	7.950	8.000

BUSHLAND WAY

CH 255.38 (MATCH EXISTING ROADWAY)

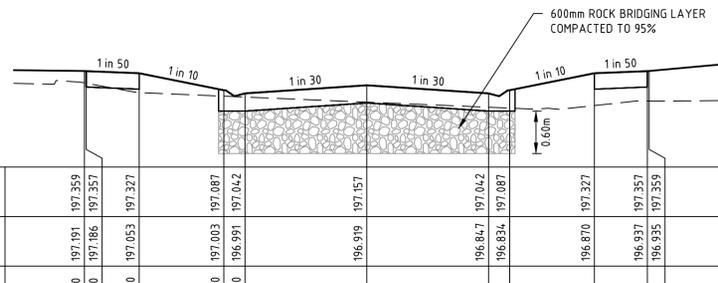


DATUM R.L.197.0

DESIGN SURFACE LEVEL	198.188	198.186	198.156	197.996	197.951	198.066	197.985	198.045	198.161	198.384
EXISTING SURFACE LEVEL	197.925	197.926	197.949	197.976	197.983	198.023	198.120	198.141	198.161	198.362
OFFSET	-8.000	-7.950	-6.450	-4.050	-3.450	0.000	3.450	4.050	4.628	10.450

FUTURE ROADWAY

CH 14.25

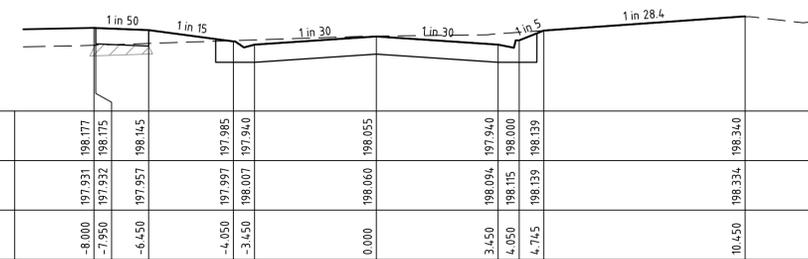


DATUM R.L.196.0

DESIGN SURFACE LEVEL	197.359	197.357	197.327	197.087	197.042	197.157	197.327	197.357	197.359
EXISTING SURFACE LEVEL	197.191	197.186	197.053	197.003	196.991	196.919	196.847	196.937	196.935
OFFSET	-8.000	-7.950	-6.450	-4.050	-3.450	0.000	3.450	7.950	8.000

BUSHLAND WAY

CH 24.9.31



DATUM R.L.197.0

DESIGN SURFACE LEVEL	198.177	198.175	198.145	197.985	197.940	198.055	197.940	198.000	198.139	198.340
EXISTING SURFACE LEVEL	197.931	197.932	197.957	197.997	198.007	198.060	198.094	198.115	198.139	198.334
OFFSET	-8.000	-7.950	-6.450	-4.050	-3.450	0.000	3.450	4.050	4.745	10.450

FUTURE ROADWAY

CH 12.05

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Scale	H 1:100	V 1:50
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Rev	Description	Approved	Date
A	PRELIMINARY ISSUE	B.I	OCT 2024
	Amendments		

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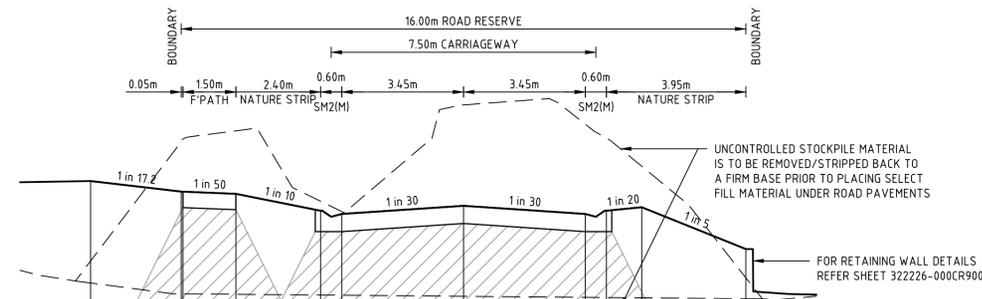
16 BRIDGE STREET BENDIGO  
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Designed M.RULE	Checked B.IBBS
Authorised B.IBBS	Date OCT 2024

**GOLDEN GROVE STAGE 7B AND 8  
BUSHLAND WAY, JACKASS FLAT  
ROAD AND DRAINAGE  
ROAD CROSS SECTIONS - SHEET 3  
CITY OF GREATER BENDIGO  
WARRINGAL VIEWS P/L**

**PRELIMINARY** Dwg No 322226-000CR402 Rev A

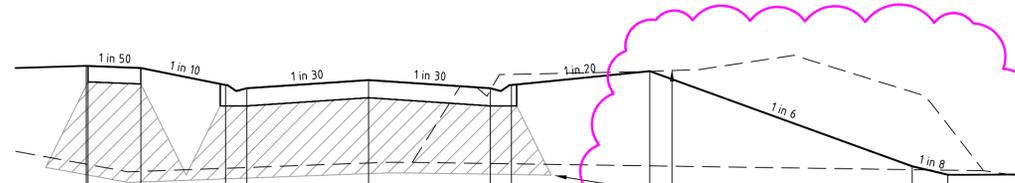
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(WHERE >200mm FILLING)



DATUM R.L.195.0	
DESIGN SURFACE LEVEL	197.514
EXISTING SURFACE LEVEL	198.071 197.965 198.10 197.363 198.224 197.333 197.228 197.093 197.082 197.048 198.591 197.163 198.318 197.048 198.20 197.093 197.723 197.143 196.45 196.552
OFFSET	-10.567 -8.000 -7.950 -6.450 -4.050 -3.450 0.000 3.450 4.050 5.050 8.000

MULLA MULLA WAY

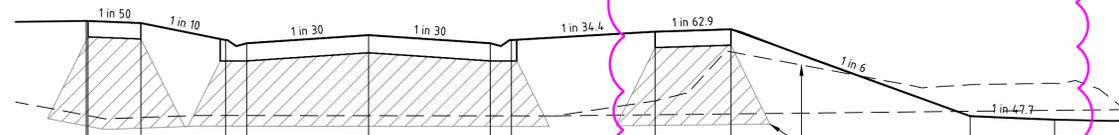
CH 32.24



DATUM R.L.195.0	
DESIGN SURFACE LEVEL	197.637 197.636 197.606 197.366 197.321 197.36 197.562 196.218 196.097
EXISTING SURFACE LEVEL	196.247 196.242 196.144 196.188 196.199 196.199 196.263 197.290 197.321 197.517 197.366 197.558 197.269 196.804 196.097
OFFSET	-8.000 -7.950 -6.450 -4.050 -3.450 0.000 3.450 4.050 7.971 15.405 16.415

MULLA MULLA WAY

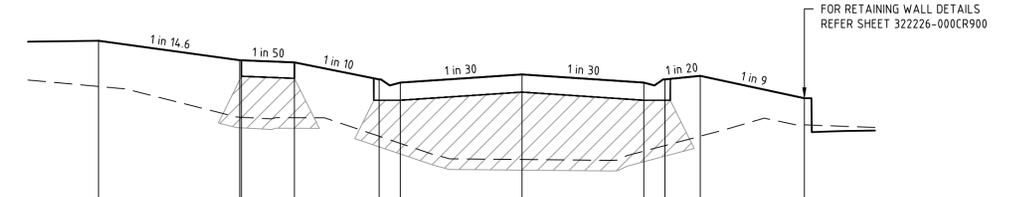
CH 20.25



DATUM R.L.195.0	
DESIGN SURFACE LEVEL	197.603 197.601 197.571 197.331 197.286 197.401 197.449 197.484 196.255 196.205
EXISTING SURFACE LEVEL	196.267 196.262 196.235 196.263 196.263 196.261 196.471 197.164 197.164 196.699 196.718
OFFSET	-8.000 -7.950 -6.450 -4.050 -3.450 0.000 8.120 10.271 17.048 19.440

MULLA MULLA WAY

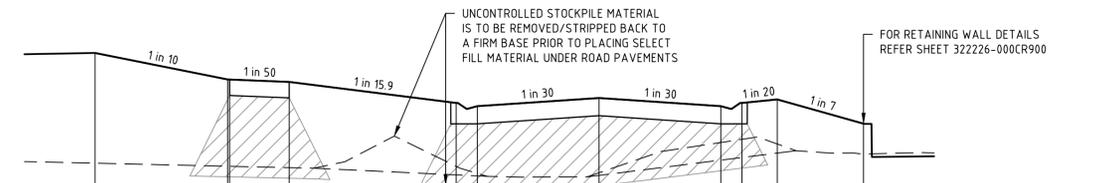
CH 15.97



DATUM R.L.194.0	
DESIGN SURFACE LEVEL	196.965 196.690 196.689 196.659 196.419 196.374 196.489 196.374 196.419 196.469 196.652
EXISTING SURFACE LEVEL	196.319 195.884 195.883 195.877 195.615 195.514 195.285 195.404 195.483 195.615 195.716
OFFSET	-12.000 -8.000 -7.950 -6.450 -4.050 -3.450 0.000 3.450 4.050 5.050 8.000

MULLA MULLA WAY

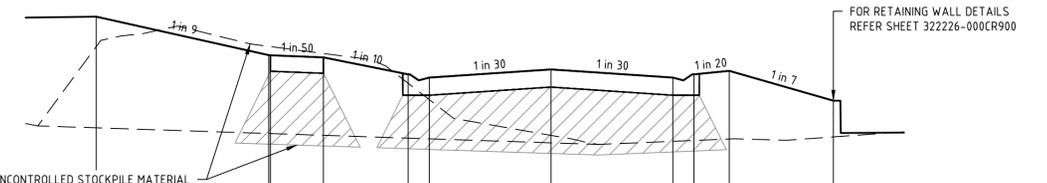
CH 59.06



DATUM R.L.194.0	
DESIGN SURFACE LEVEL	197.156 196.781 196.779 196.746 196.448 196.403 196.518 196.403 196.448 196.498 196.156
EXISTING SURFACE LEVEL	195.596 195.554 195.553 195.534 195.553 195.453 195.461 195.889 195.934 195.868 195.726
OFFSET	-14.281 -10.525 -10.469 -8.779 -4.050 -3.450 0.000 3.450 4.050 5.050 7.495

MULLA MULLA WAY

CH 53.32



DATUM R.L.194.0	
DESIGN SURFACE LEVEL	197.344 196.796 196.795 196.765 196.525 196.480 196.595 196.480 196.525 196.575 196.640
EXISTING SURFACE LEVEL	196.916 196.921 196.918 196.820 196.399 196.168 195.662 195.578 195.590 195.611 195.640
OFFSET	-12.890 -8.000 -7.950 -6.450 -4.050 -3.450 0.000 3.450 4.050 5.050 8.000

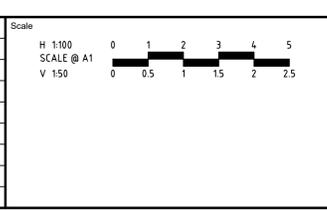
MULLA MULLA WAY

CH 47.58

GREATER BENDIGO CITY COUNCIL  
ENGINEERING PLANS  
APPROVED BY: Peter Brasier  
DATE: 16 December 2024

file name: 322226\_000CR403.dwg | layout: asms\_C6103 | plotted by: Matthew Rule | file location: G:\322226\1000\322226\1000\322226\_000CR403.dwg | plot date: 20/11/2024 5:07 PM | Sheet: 15 of 32 Sheets

Rev	Amendments	Approved	Date
B	UPDATED FOOTPATH AND BATTERS	B.I	NOV 2024
A	PRELIMINARY ISSUE	B.I	OCT 2024



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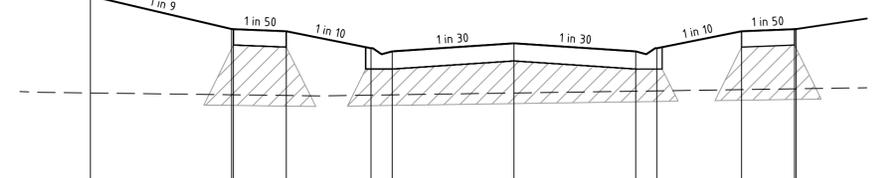
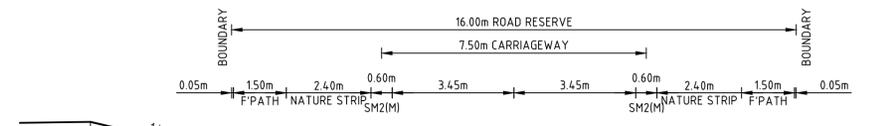
16 BRIDGE STREET BENDIGO  
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Designed M.RULE	Checked B.IBBS
Authorised B.IBBS	Date NOV 2024

**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT ROAD AND DRAINAGE ROAD CROSS SECTIONS - SHEET 4**  
CITY OF GREATER BENDIGO WARRINGAL VIEWS P/L

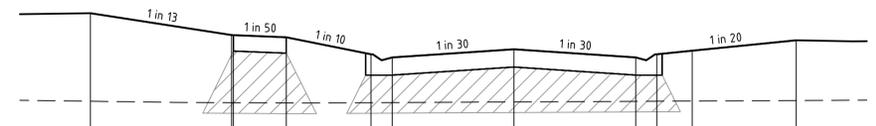
**PRELIMINARY** Drg No 322226-000CR403 Rev B

SELECT FILL MATERIAL  
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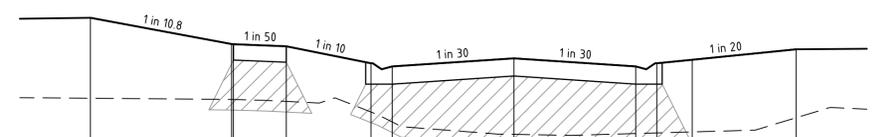
DATUM R.L. 194.0	
DESIGN SURFACE LEVEL	196.868
EXISTING SURFACE LEVEL	195.495
OFFSET	-12.000

MULLA MULLA WAY CH 117.20



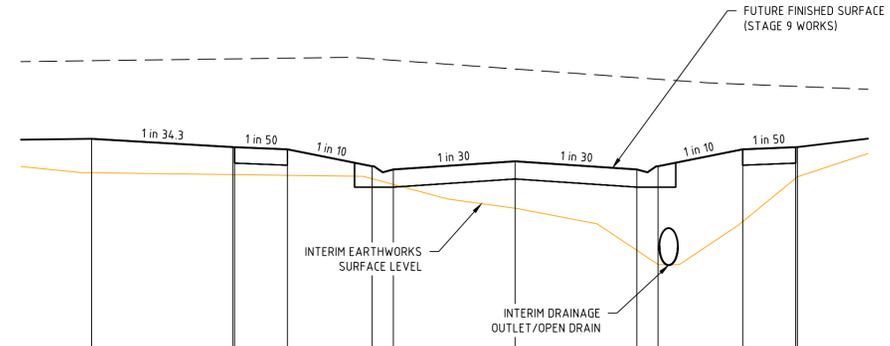
DATUM R.L. 194.0	
DESIGN SURFACE LEVEL	196.829
EXISTING SURFACE LEVEL	195.584
OFFSET	-12.000

MULLA MULLA WAY CH 93.10



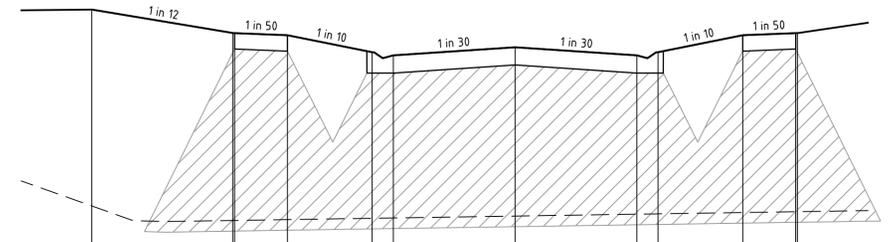
DATUM R.L. 194.0	
DESIGN SURFACE LEVEL	196.985
EXISTING SURFACE LEVEL	195.847
OFFSET	-12.000

MULLA MULLA WAY CH 74.43



DATUM R.L. 193.0	
DESIGN SURFACE LEVEL	196.212
INTERIM EARTHWORKS SURFACE LEVEL	195.731
EXISTING SURFACE LEVEL	197.316
OFFSET	-12.000

MULLA MULLA WAY CH 178.15 (FUTURE STAGE 9 ROAD LEVELS)



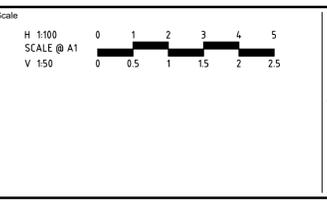
DATUM R.L. 192.0	
DESIGN SURFACE LEVEL	196.587
EXISTING SURFACE LEVEL	193.808
OFFSET	-11.995

MULLA MULLA WAY CH 146.15 (LIMIT OF STAGE 7B & 8 ROAD WORKS)

GREATER BENDIGO CITY COUNCIL  
ENGINEERING PLANS  
APPROVED BY: Peter Brasier  
DATE: 16 December 2024

file: s:\p\322226\_000CR400.dwg | layout: asms\_C616.dwg | checked by: Matthew Rule | file location: G:\322226\000\CR400\plot\_data\_20/11/2024\_5:07 PM\_Sheet\_16 of 32\_Sheets

Rev	Description	Approved	Date
A	PRELIMINARY ISSUE	B.I	OCT 2024
	Amendments		



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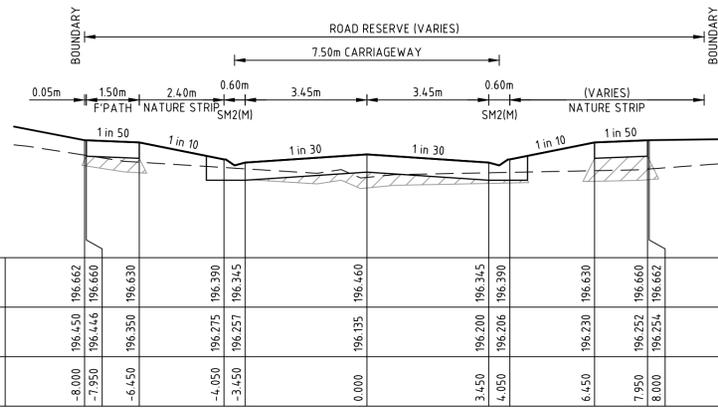
16 BRIDGE STREET BENDIGO  
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Designed M.RULE	Checked B.IBBS
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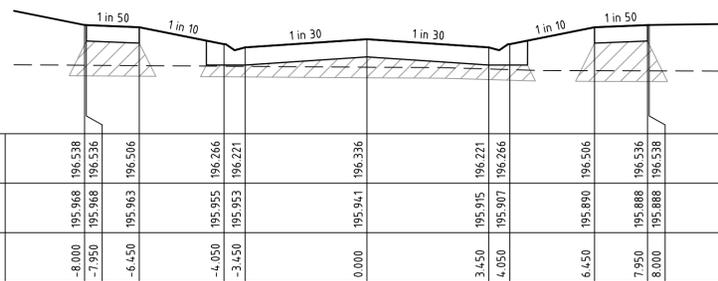
**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT ROAD AND DRAINAGE ROAD CROSS SECTIONS - SHEET 5**  
CITY OF GREATER BENDIGO  
WARRINGAL VIEWS P/L

**PRELIMINARY** Drg No 322226-000CR404 Rev A

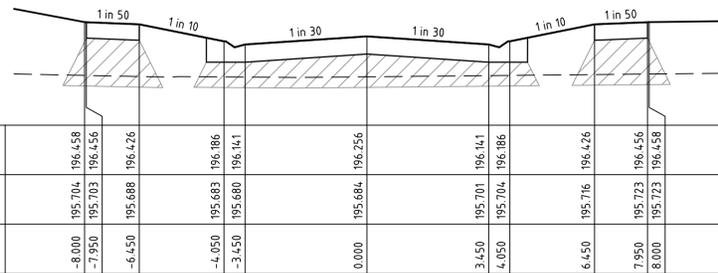
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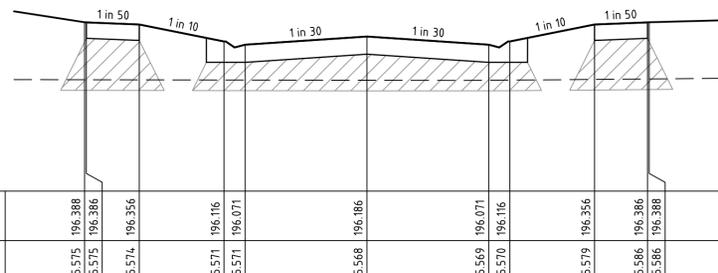
BOTTLEBRUSH STREET CH 58.00



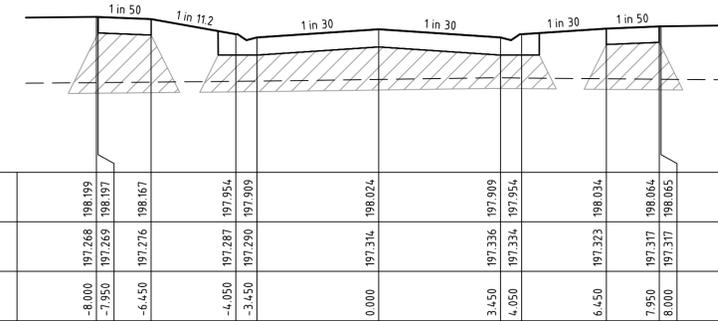
BOTTLEBRUSH STREET CH 42.00



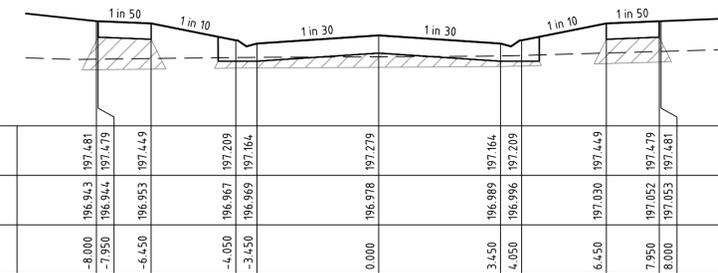
BOTTLEBRUSH STREET CH 26.00



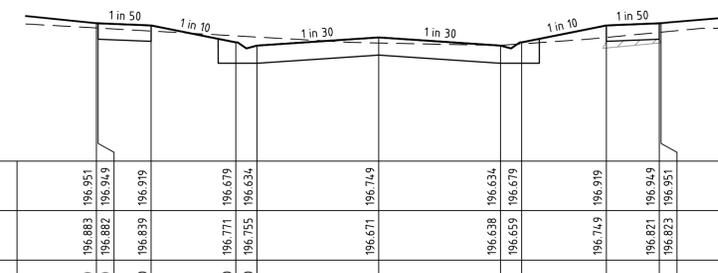
BOTTLEBRUSH STREET CH 12.05



BOTTLEBRUSH STREET CH 110.00



BOTTLEBRUSH STREET CH 92.00

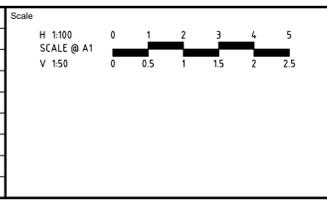


BOTTLEBRUSH STREET CH 74.00

GREATER BENDIGO CITY COUNCIL  
ENGINEERING PLANS  
APPROVED BY: Peter Brasier  
DATE: 16 December 2024

file name: 322226\_000CR405.dwg | layout: asms\_C6105 | plot date: 20/11/2024 5:07 PM | Sheet: 17 of 32 Sheets

Rev	Description	Approved	Date
A	PRELIMINARY ISSUE	B.I	OCT 2024
	Amendments		

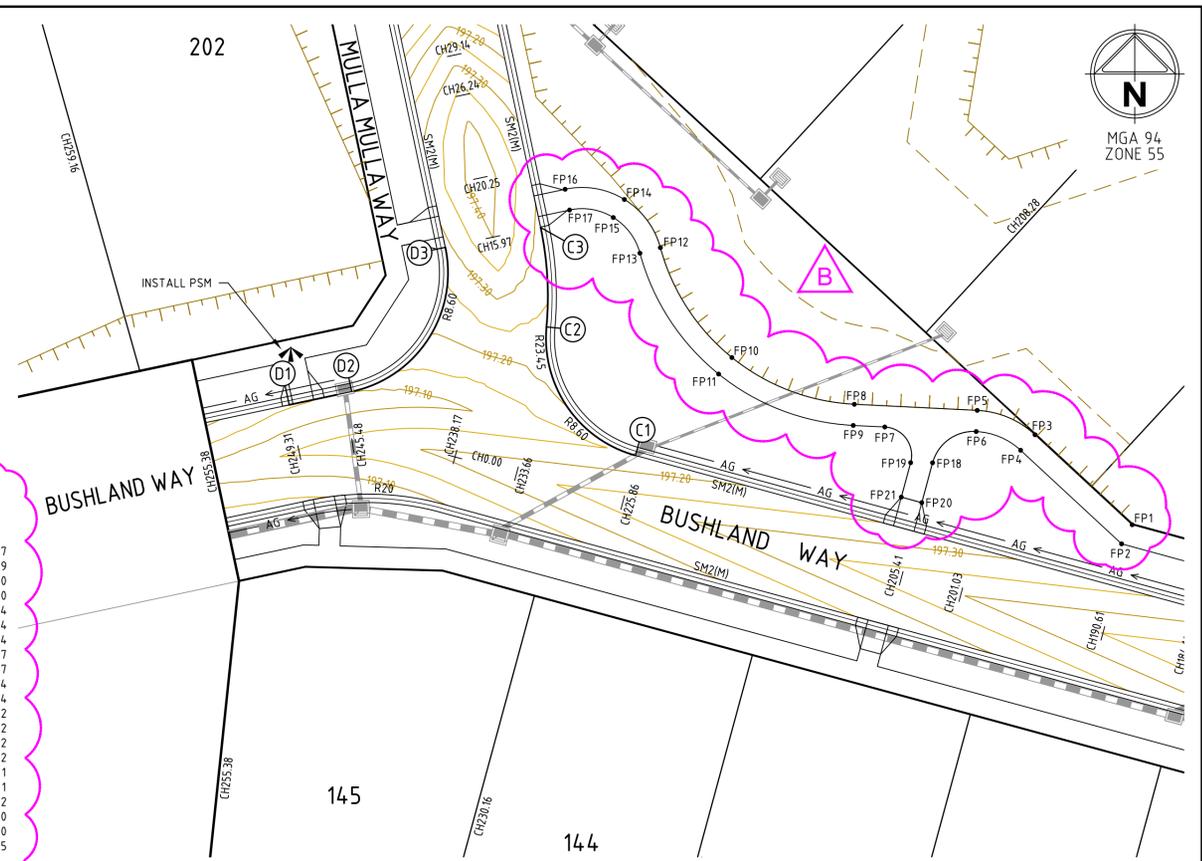
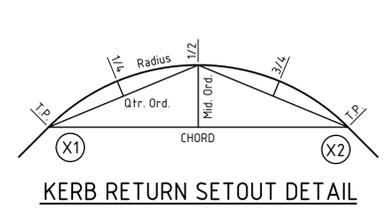
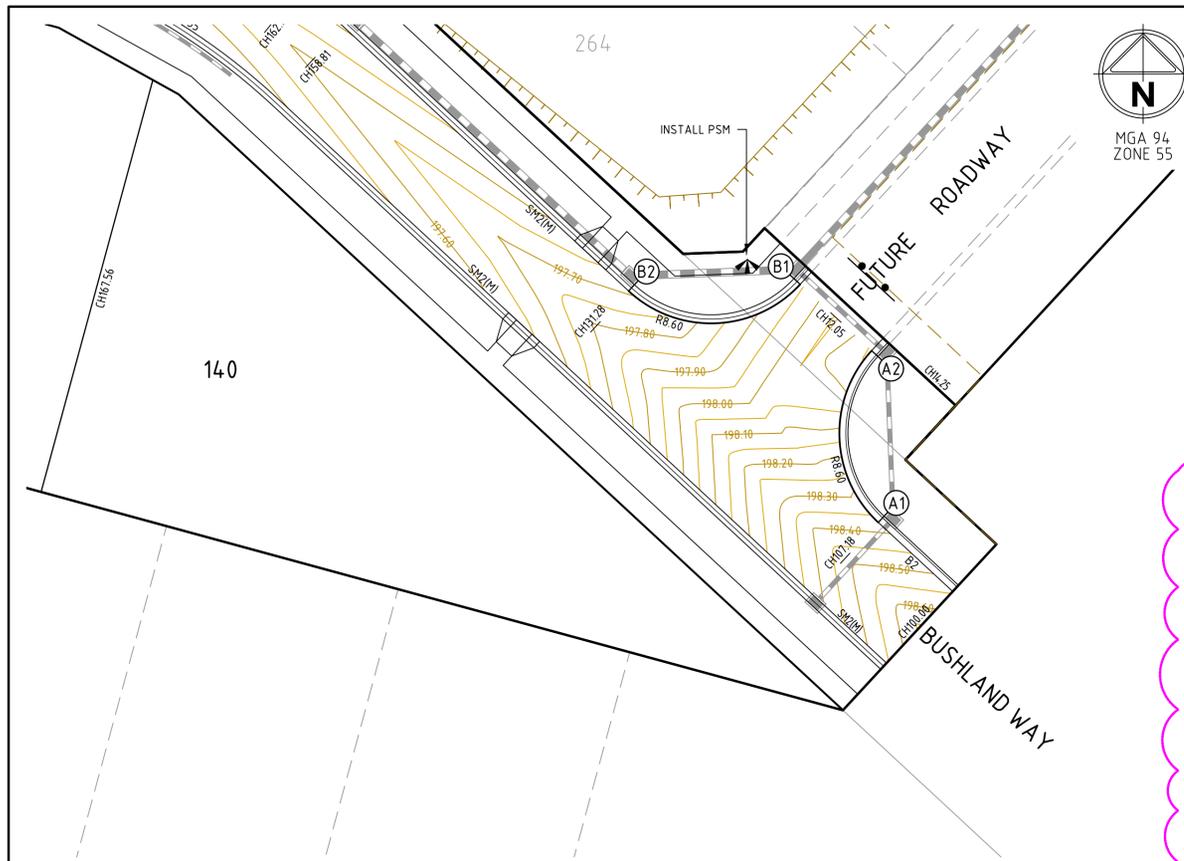


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**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT ROAD AND DRAINAGE ROAD CROSS SECTIONS - SHEET 6**  
CITY OF GREATER BENDIGO WARRINGAL VIEWS P/L  
**PRELIMINARY** Drg No 322226-000CR405 Rev **A**



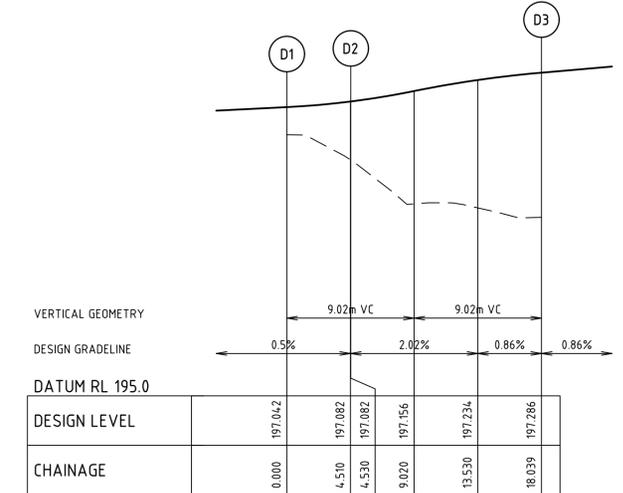
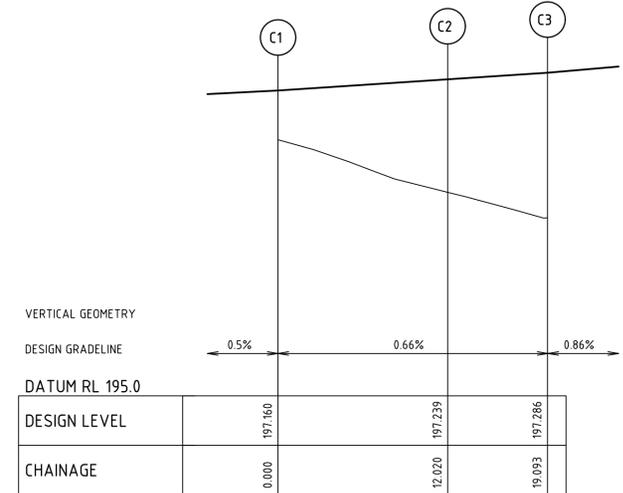
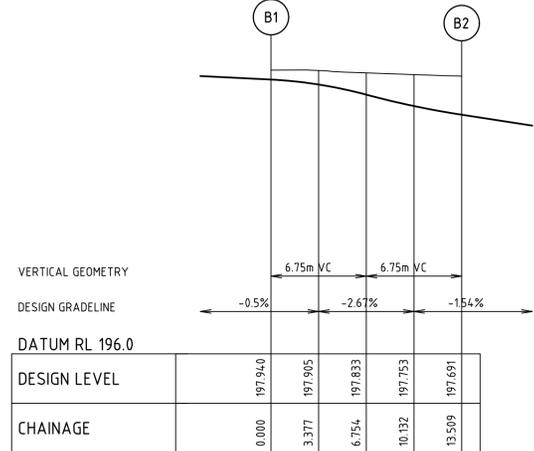
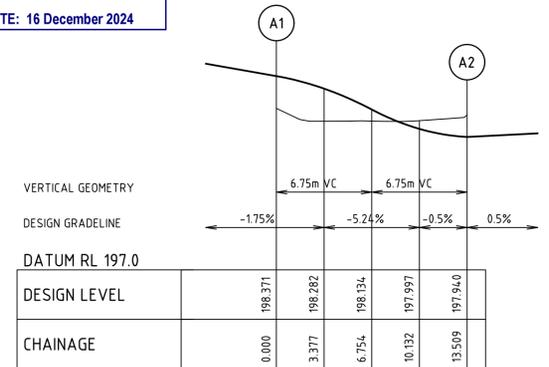
**FOOTPATH SETOUT POINTS (FP)**

POINT NO	EASTING	NORTHING	RL
FP1	257406.356	5934119.792	197.647
FP2	257405.608	5934118.441	197.619
FP3	257399.475	5934126.161	197.600
FP4	257398.456	5934125.060	197.570
FP5	257395.382	5934127.882	197.584
FP6	257395.308	5934126.384	197.554
FP7	257388.836	5934126.706	197.534
FP8	257386.675	5934128.315	197.557
FP9	257386.600	5934126.817	197.527
FP10	257378.005	5934131.619	197.524
FP11	257377.063	5934130.451	197.494
FP12	257372.937	5934139.390	197.492
FP13	257371.489	5934139.000	197.462
FP14	257370.386	5934142.798	197.482
FP15	257369.603	5934141.519	197.452
FP16	257366.190	5934143.518	197.471
FP17	257366.502	5934142.050	197.441
FP18	257392.219	5934124.177	197.462
FP19	257390.667	5934124.184	197.450
FP20	257391.453	5934121.355	197.360
FP21	257390.005	5934121.749	197.355

SETOUT DETAIL PLAN  
INTERSECTION OF BUSHLAND WAY & FUTURE ROADWAY

SETOUT DETAIL PLAN  
INTERSECTION OF BUSHLAND WAY & MULLA MULLA WAY

GREATER BENDIGO CITY COUNCIL  
ENGINEERING PLANS  
APPROVED BY: Peter Brasier  
DATE: 16 December 2024



**ALIGNMENT A**

POINT NO	EASTING	NORTHING	RL	CHAINAGE
A1	257472.829	5934065.998	198.371	0.000
¼	257470.858	5934068.714	198.282	3.377
½	257470.077	5934071.977	198.134	6.754
¾	257470.604	5934075.291	197.997	10.132
A2	257472.359	5934078.151	197.940	13.509

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
A1-A2	8.600	13.509	12.162	2.519	0.655

**ALIGNMENT B**

POINT NO	EASTING	NORTHING	RL	CHAINAGE
B1	257467.295	5934082.838	197.940	0.000
¼	257464.579	5934080.867	197.905	3.377
½	257461.315	5934080.086	197.833	6.754
¾	257458.001	5934080.613	197.753	10.132
B2	257455.141	5934082.368	197.691	13.509

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
B1-B2	8.600	13.509	12.162	2.519	0.655

**ALIGNMENT C**

POINT NO	EASTING	NORTHING	RL	CHAINAGE
C1	257371.174	5934124.691	197.160	0.000
¼	257368.469	5934125.964	197.179	3.005
½	257366.364	5934128.087	197.199	6.010
¾	257365.113	5934130.803	197.219	9.015
C2	257364.867	5934133.782	197.239	12.020
¼	257364.963	5934135.547	197.251	13.789
½	257364.756	5934139.075	197.274	17.325
C3	257364.454	5934140.816	197.286	19.093

CURVE	RADIUS	ARC L	CHORD	MID ORD	QTR ORD
C1-C2	8.600	12.020	11.065	2.016	0.520
C2-C3	23.450	7.073	7.046	0.266	0.067

**ALIGNMENT D**

POINT NO	EASTING	NORTHING	RL	CHAINAGE
D1	257346.642	5934128.272	197.042	0.000
D2	257351.073	5934129.214	197.104	4.530
¼	257354.157	5934130.538	197.149	7.908
½	257356.498	5934132.941	197.195	11.285
¾	257357.742	5934136.058	197.240	14.662
D3	257357.698	5934139.413	197.286	18.039

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

file name: 322226\_000CR500.dwg; layout name: C5000; plotted by: Matthew Dule; file location: G:\322226\000\CR5000\plot\_data\2011\2024\507\PM\_Sheet\_18\_of\_32\_Sheets

Rev	Description	Approved	Date
B	UPDATED FOOTPATH ALIGNMENT AND SETOUT DATA	B.I	NOV 2024
A	PRELIMINARY ISSUE	B.I	OCT 2024
	Amendments		

Scale  
**DETAIL PLAN**  
 H 1:250  
 SCALE @ A1

**LIP PROFILE**  
 H 1:250  
 SCALE @ A1  
 V 1:25

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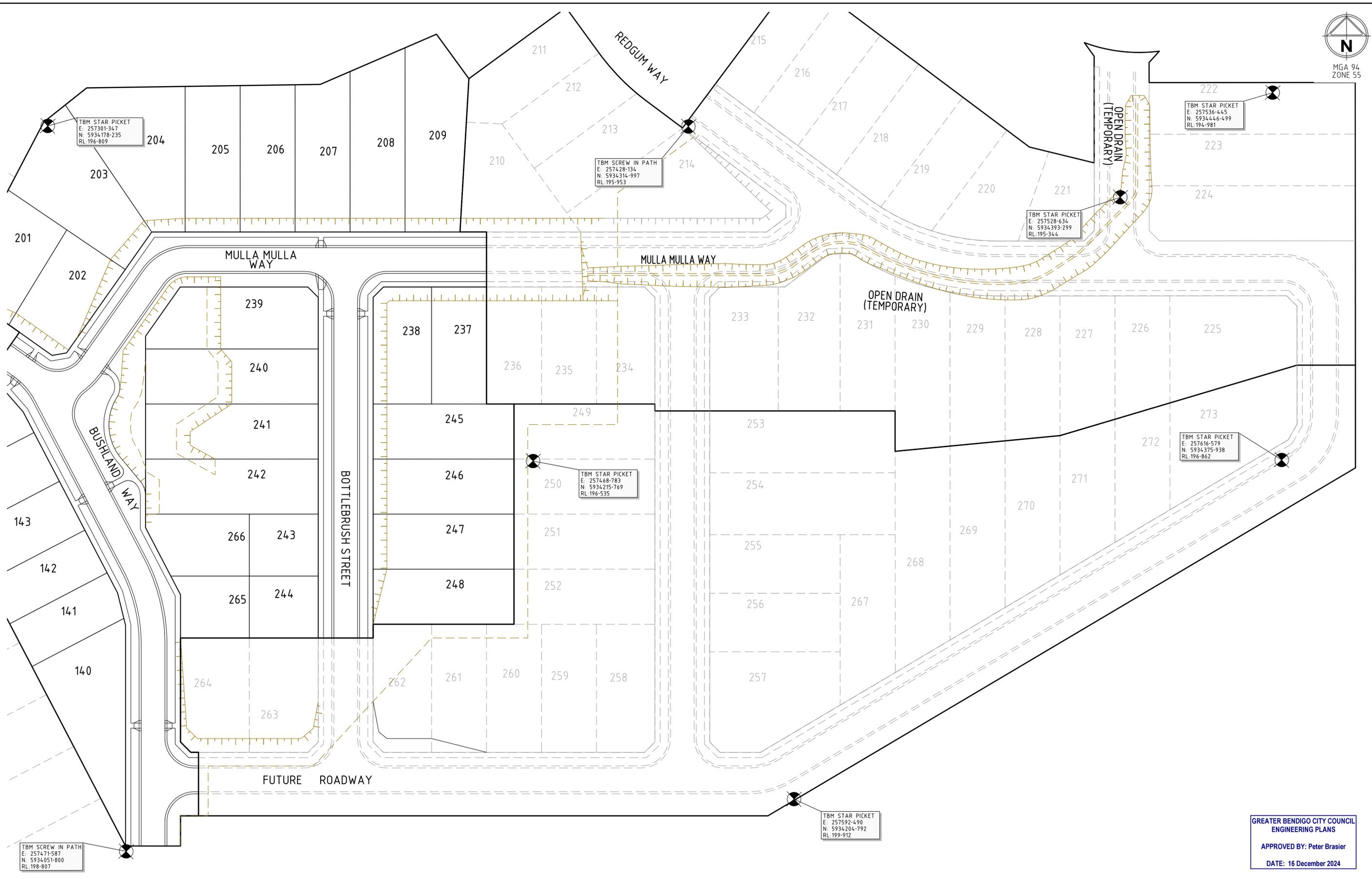
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Authorised <b>B.IBBS</b>	Date <b>NOV 2024</b>

**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT ROAD AND DRAINAGE INTERSECTION DETAILS - SHEET 1**  
 CITY OF GREATER BENDIGO  
 WARRINGAL VIEWS P/L

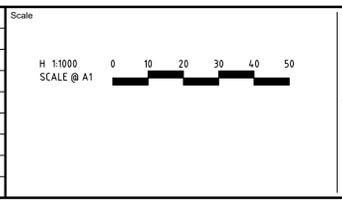
**PRELIMINARY** Drg No **322226-000CR500** Rev **B**





file name: 322226\_000CR500.dwg; layout name: C5002; plotted by: Matthew Rids; file location: G:\322226\000CR500.dwg; plot date: 20/10/2024 5:07 PM; Sheet: 20 of 32 Sheets

Rev	Description	Approved	Date
A	PRELIMINARY ISSUE	B.I	OCT 2024
	Amendments		



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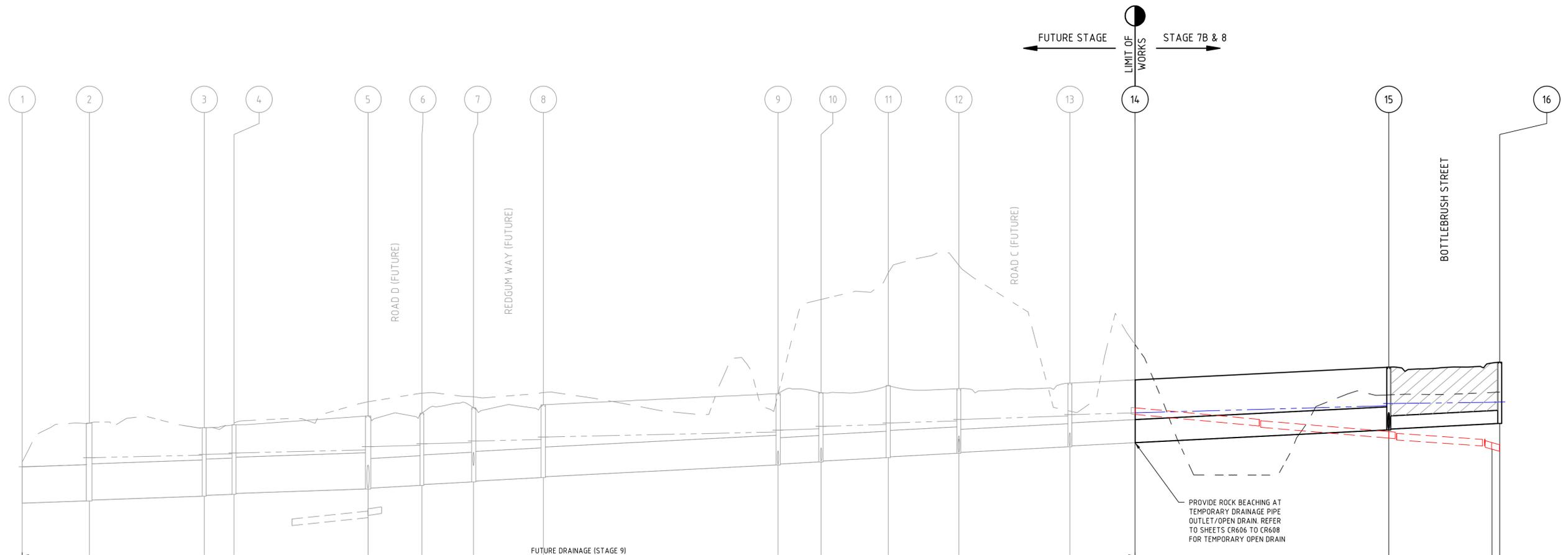
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Authorised B.IBBS	Date OCT 2024

**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT ROAD AND DRAINAGE INTERSECTION DETAILS - CONTROL DATA - SHEET 1**  
CITY OF GREATER BENDIGO  
WARRINGAL VIEWS P/L

**PRELIMINARY** Dwg No: 322226-000CR502 Rev: A

GREATER BENDIGO CITY COUNCIL  
ENGINEERING PLANS  
APPROVED BY: Peter Brasier  
DATE: 16 December 2024



PIPE DIAMETER	PIPE CLASS	PIPE GRADE	VELOCITY (M/S)	PIPE FLOW (M <sup>3</sup> /S)	PIPE CAPACITY (M <sup>3</sup> /S)	DATUM RL
825φ	Class 2	1 in 300	Vf=1.551	Qa=0.669	Qcap=0.829	187.00
825φ	Class 2	1 in 300	Vf=1.551	Qa=0.677	Qcap=0.829	
825φ	Class 2	1 in 300	Vf=1.551	Qa=0.680	Qcap=0.829	
825φ	Class 2	1 in 300	Vf=1.551	Qa=0.686	Qcap=0.829	
675φ	Class 2	1 in 200	Vf=1.662	Qa=0.414	Qcap=0.595	
675φ	Class 2	1 in 200	Vf=1.662	Qa=0.414	Qcap=0.595	
675φ	Class 2	1 in 200	Vf=1.662	Qa=0.395	Qcap=0.595	
675φ	Class 2	1 in 200	Vf=1.662	Qa=0.390	Qcap=0.595	
600φ	Class 2	1 in 200	Vf=1.536	Qa=0.349	Qcap=0.434	
600φ	Class 2	1 in 200	Vf=1.536	Qa=0.326	Qcap=0.434	
600φ	Class 2	1 in 200	Vf=1.536	Qa=0.328	Qcap=0.434	
525φ	Class 2	1 in 200	Vf=1.405	Qa=0.240	Qcap=0.304	
525φ	Class 2	1 in 200	Vf=1.405	Qa=0.221	Qcap=0.304	
525φ	Class 2	1 in 200	Vf=1.405	Qa=0.227	Qcap=0.304	
300φ	Class 2	1 in 200	Vf=0.968	Qa=0.034	Qcap=0.068	

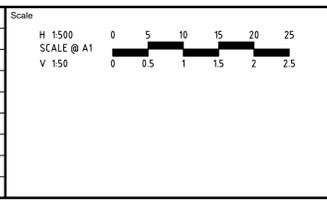
  

DEPTH TO INVERT	DESIGN INVERT LEVEL	HYDRAULIC GRADE LEVEL	FINISHED SURFACE LEVEL	EXISTING SURFACE LEVEL	CHAINAGE
0.940	193.060		194.000	193.999	0.000
1.771	193.131		194.882	194.882	L=15.331m
1.560	193.238		194.096	194.091	L=26.177m
1.540	193.238		194.170	194.085	4.1588
1.584	193.281		194.186	194.091	L=6.794m
1.663	193.403		194.272	194.081	4.83302
1.643	193.403		194.347	194.081	L=30.540m
1.644	193.464		194.046	195.267	7.8842
1.624	193.484		194.272	195.267	L=12.304m
1.689	193.663		194.377	195.563	9.1146
1.669	193.663		194.411	195.563	L=11.738m
1.689	193.663		194.440	195.481	10.2881
1.656	193.663		194.474	195.232	L=15.935m
1.636	193.663		194.509	195.577	11.8819
1.624	193.930		194.554	195.577	L=53.497m
1.604	193.950		194.680	195.539	172.316
1.573	193.999		194.722	195.554	L=9.818m
1.553	194.019		194.754	197.697	182.033
1.640	194.116		194.808	197.697	L=15.299m
1.620	194.116		194.851	198.005	197.433
1.449	194.216		194.885	198.305	L=16.107m
1.469	194.216		194.966	198.473	213.539
1.429	194.321		195.044	198.819	L=25.300m
1.429	194.321		195.076	199.192	238.839
1.429	194.321		195.076	199.192	L=14.866m
1.429	194.321		195.076	199.192	253.705
1.429	194.321		195.076	199.192	L=57.835m
1.429	194.321		195.076	199.192	311.540
1.394	194.866		196.555	199.276	L=25.300m
1.394	194.866		196.555	199.276	335.066
1.394	194.866		196.555	199.276	L=25.300m
1.394	194.866		196.555	199.276	335.066

PROVIDE ROCK BEACHING AT TEMPORARY DRAINAGE PIPE OUTLET/OPEN DRAIN. REFER TO SHEETS CR606 TO CR608 FOR TEMPORARY OPEN DRAIN

file: p:\322226\_000CR600.dwg, layout: asms\_C6000, plotted by: Matthew Rule, file location: G:\322226\000\CR600.dwg, plot date: 20/12/24, 5:07 PM, Sheet 21 of 32, Sheets

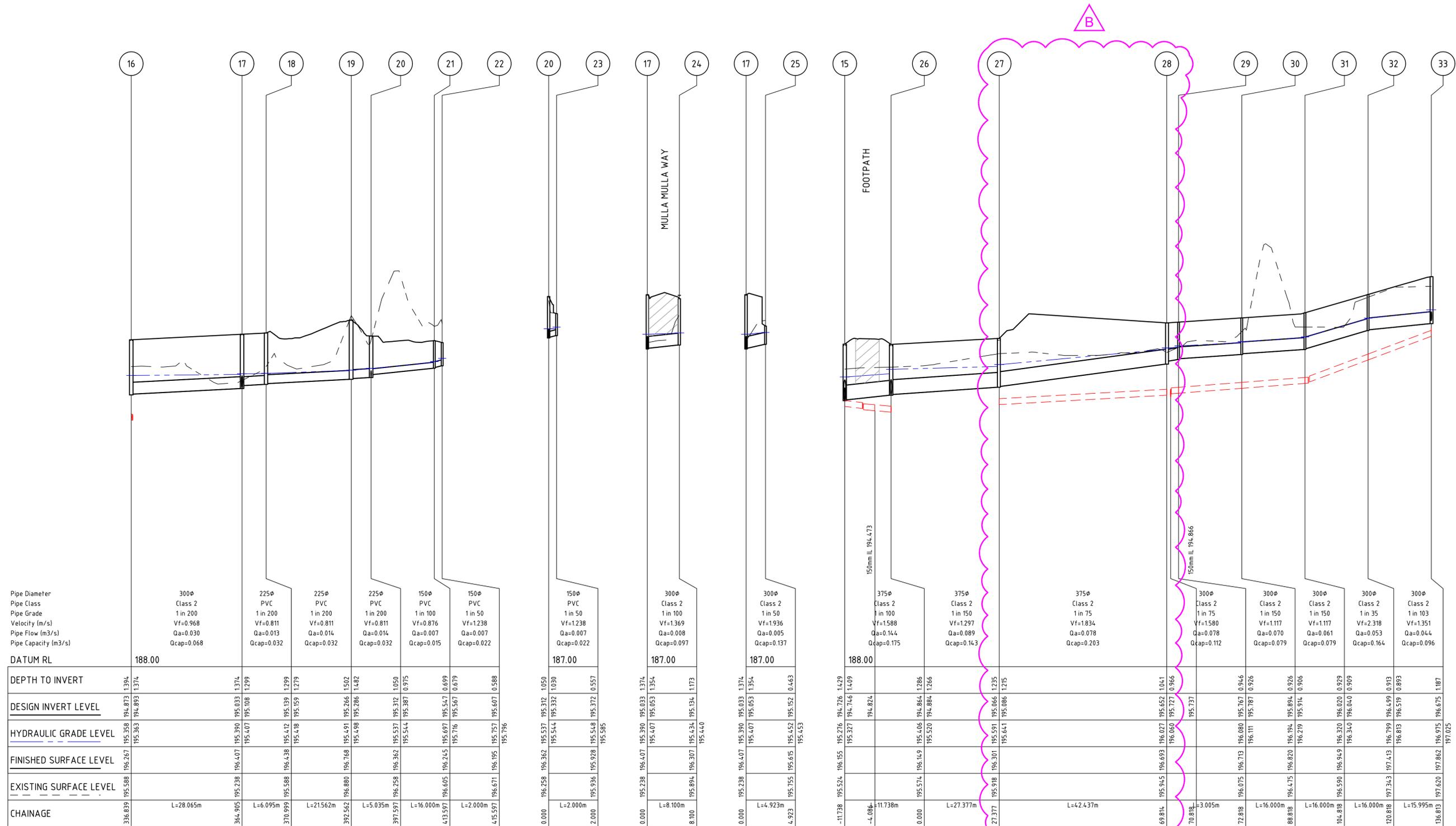
Rev	Description	By	Date
A	PRELIMINARY ISSUE	B.I	OCT 2024
	Amendments	Approved	Date



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Authorised <b>B.IBBS</b>	Date <b>OCT 2024</b>

**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT ROAD AND DRAINAGE DRAINAGE LONG SECTIONS - SHEET 1**  
CITY OF GREATER BENDIGO  
WARRINGAL VIEWS P/L

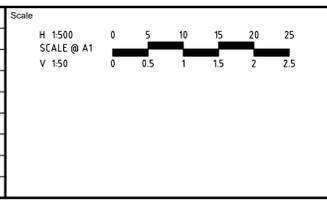
**PRELIMINARY** Drg No **322226-000CR600** Rev **A**



Station	Pipe Diameter	Pipe Class	Pipe Grade	Velocity (m/s)	Pipe Flow (m3/s)	Pipe Capacity (m3/s)	DATUM RL	DEPTH TO INVERT	DESIGN INVERT LEVEL	HYDRAULIC GRADE LEVEL	FINISHED SURFACE LEVEL	EXISTING SURFACE LEVEL	CHAINAGE
16	300φ	Class 2	1 in 200	Vf=0.968	Qa=0.030	Qcap=0.068	188.00	1394	194.873	195.568	196.267	195.588	L=28.065m
17	225φ	PVC	1 in 200	Vf=0.811	Qa=0.013	Qcap=0.032	188.00	1374	195.033	195.390	196.407	195.238	L=6.095m
18	225φ	PVC	1 in 200	Vf=0.811	Qa=0.014	Qcap=0.032	188.00	1502	195.266	195.491	196.768	196.880	L=21.562m
19	225φ	PVC	1 in 200	Vf=0.811	Qa=0.014	Qcap=0.032	188.00	1482	195.286	195.498	196.768	196.880	L=5.035m
20	150φ	PVC	1 in 100	Vf=0.876	Qa=0.007	Qcap=0.015	188.00	1050	195.312	195.537	196.362	196.258	L=16.000m
21	150φ	PVC	1 in 50	Vf=1.238	Qa=0.007	Qcap=0.022	188.00	699	195.547	195.716	196.605	196.605	L=2.000m
22	150φ	PVC	1 in 50	Vf=1.238	Qa=0.007	Qcap=0.022	188.00	588	195.607	195.751	196.611	196.611	
23	150φ	PVC	1 in 50	Vf=1.238	Qa=0.007	Qcap=0.022	187.00	1030	195.322	195.544	196.362	196.258	L=2.000m
24	300φ	Class 2	1 in 100	Vf=1.369	Qa=0.008	Qcap=0.097	187.00	1354	195.053	195.407	196.407	195.238	L=8.100m
25	300φ	Class 2	1 in 50	Vf=1.936	Qa=0.005	Qcap=0.137	187.00	1374	195.033	195.290	196.407	195.238	L=4.923m
26	375φ	Class 2	1 in 100	Vf=1.588	Qa=0.144	Qcap=0.175	188.00	1286	194.874	195.327	196.155	195.524	L=27.377m
27	375φ	Class 2	1 in 150	Vf=1.297	Qa=0.089	Qcap=0.143	188.00	1215	195.066	195.591	196.301	195.918	L=42.437m
28	375φ	Class 2	1 in 75	Vf=1.834	Qa=0.078	Qcap=0.203	188.00	1041	195.652	196.027	196.545	195.945	L=3.005m
29	300φ	Class 2	1 in 75	Vf=1.580	Qa=0.078	Qcap=0.112	188.00	966	195.721	196.000	196.521	195.918	L=16.000m
30	300φ	Class 2	1 in 150	Vf=1.117	Qa=0.061	Qcap=0.079	188.00	926	195.914	196.219	196.475	196.475	L=16.000m
31	300φ	Class 2	1 in 150	Vf=1.117	Qa=0.061	Qcap=0.079	188.00	929	195.914	196.219	196.475	196.475	L=16.000m
32	300φ	Class 2	1 in 35	Vf=2.318	Qa=0.053	Qcap=0.164	188.00	893	196.519	196.813	197.343	197.343	L=16.000m
33	300φ	Class 2	1 in 103	Vf=1.351	Qa=0.044	Qcap=0.096	188.00	1187	196.275	196.675	197.187	197.187	L=15.995m

file name: 322226\_000CR601.dwg, layout: asms\_C601, plotted by: Matthew Gills  
 file location: G:\322226\000\CR601\322226\_000.dwg, plot date: 26/11/2024, 5:07 PM, Sheet: 22 of 32 Sheets

Rev	Description	Approved	Date
B	PIPE 27 TO 28 UPSIZED TO 375φ TO CONVEY 1% AEP FLOW	B.I	NOC 2024
A	PRELIMINARY ISSUE	B.I	OCT 2024
	Amendments		



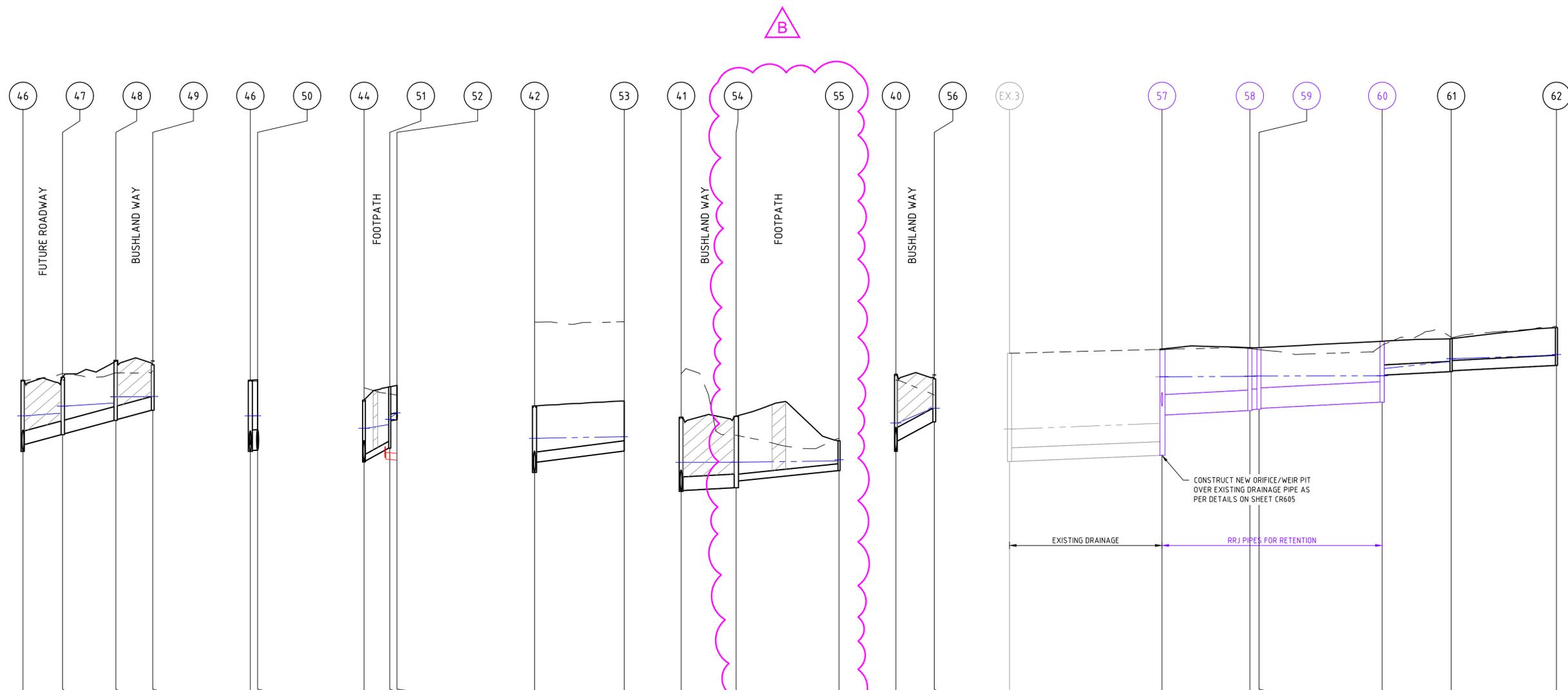
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Authorised B.IBBS	Date NOV 2024

**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT ROAD AND DRAINAGE DRAINAGE LONG SECTIONS - SHEET 2**  
 CITY OF GREATER BENDIGO  
 WARRINGAL VIEWS P/L  
**PRELIMINARY** Drg No **322226-000CR601** Rev **B**

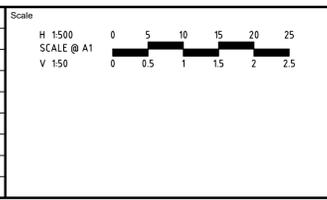




Station	Pipe Diameter	Pipe Class	Pipe Grade	Velocity (m/s)	Pipe Flow (m3/s)	Pipe Capacity (m3/s)	DATUM RL	DEPTH TO INVERT	DESIGN INVERT LEVEL	HYDRAULIC GRADE LEVEL	FINISHED SURFACE LEVEL	EXISTING SURFACE LEVEL	CHAINAGE
46	300φ	Class 2	1 in 40	Vf=2.164	Qa=0.078	Qcap=0.153	189.00	159.428	159.428	159.428	159.428	159.428	L=8.700m
47	300φ	Class 2	1 in 40	Vf=2.164	Qa=0.073	Qcap=0.153	189.00	168.328	168.328	168.328	168.328	168.328	L=11.738m
48	300φ	Class 2	1 in 40	Vf=2.164	Qa=0.008	Qcap=0.153	189.00	180.066	180.066	180.066	180.066	180.066	L=8.100m
49	300φ	Class 2	1 in 40	Vf=2.164	Qa=0.008	Qcap=0.153	189.00	188.166	188.166	188.166	188.166	188.166	L=8.100m
50	450φ	Class 2	1 in 200	Vf=1.268	Qa=0.081	Qcap=0.202	189.00	0.000	0.000	0.000	0.000	0.000	L=1.600m
51	150φ	PVC	1 in 20	Vf=1.928	Qa=0.018	Qcap=0.034	189.00	5.650	5.650	5.650	5.650	5.650	L=5.650m
52	150φ	PVC	1 in 67	Vf=1.056	Qa=0.009	Qcap=0.019	189.00	7.250	7.250	7.250	7.250	7.250	L=1.600m
53	225φ	PVC	1 in 80	Vf=1.283	Qa=0.019	Qcap=0.051	189.00	0.000	0.000	0.000	0.000	0.000	L=19.738m
54	300φ	Class 2	1 in 200	Vf=0.966	Qa=0.016	Qcap=0.068	189.00	12.093	12.093	12.093	12.093	12.093	L=12.093m
55	150φ	PVC	1 in 100	Vf=0.876	Qa=0.005	Qcap=0.015	189.00	34.736	34.736	34.736	34.736	34.736	L=22.642m
56	300φ	Class 2	1 in 20	Vf=3.060	Qa=0.005	Qcap=0.216	188.00	0.000	0.000	0.000	0.000	0.000	L=8.438m
57	300φ	Class 2	1 in 250	Vf=0.866	Qa=0.059	Qcap=0.061	187.00	33.574	33.574	33.574	33.574	33.574	L=33.524m
58	450φ	Class 2	1 in 200	Vf=1.268	Qa=0.052	Qcap=0.202	187.00	52.852	52.852	52.852	52.852	52.852	L=19.328m
59	450φ	Class 2	1 in 200	Vf=1.268	Qa=0.043	Qcap=0.202	187.00	54.852	54.852	54.852	54.852	54.852	L=2.000m
60	450φ	Class 2	1 in 200	Vf=1.268	Qa=0.030	Qcap=0.202	187.00	81.945	81.945	81.945	81.945	81.945	L=27.093m
61	225φ	PVC	1 in 200	Vf=0.811	Qa=0.030	Qcap=0.032	187.00	97.123	97.123	97.123	97.123	97.123	L=15.178m
62	225φ	PVC	1 in 200	Vf=0.811	Qa=0.017	Qcap=0.032	187.00	120.289	120.289	120.289	120.289	120.289	L=23.167m

file name: 322226\_000CR603.dwg; layout: assem; CG603; plotted by: Matthew Rids; file location: G:\322226\000\322226-000\322226-000.dwg; plot date: 20/11/2024 5:07 PM; Sheet: 24 of 32 Sheets

Rev	Description	Approved	Date
B	UPDATED FOOTPATH BETWEEN PITS 54 TO 55. ADDED CRB	B.I	NOV 2024
A	PRELIMINARY ISSUE	B.I	OCT 2024



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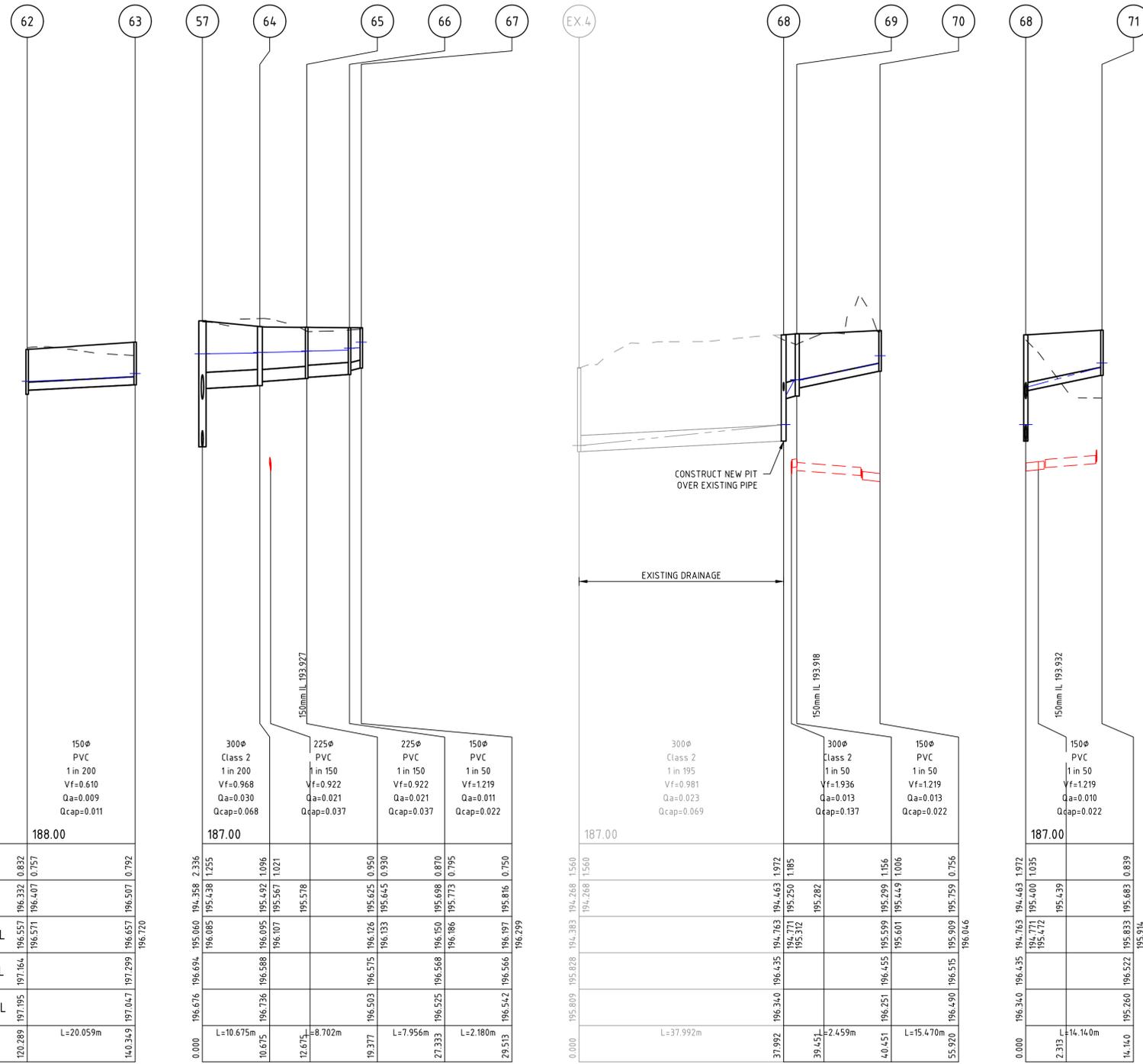
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**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT ROAD AND DRAINAGE DRAINAGE LONG SECTIONS - SHEET 4**  
 CITY OF GREATER BENDIGO  
 WARRINGAL VIEWS P/L

**PRELIMINARY**

 Dwg No 322226-000CR603 Rev B



Pipe Diameter	150φ
Pipe Class	PVC
Pipe Grade	1 in 200
Velocity (m/s)	Vf=0.610
Pipe Flow (m3/s)	Qa=0.009
Pipe Capacity (m3/s)	Qcap=0.011
DATUM RL	188.00
DEPTH TO INVERT	0.832
DESIGN INVERT LEVEL	187.168
HYDRAULIC GRADE LEVEL	187.168
FINISHED SURFACE LEVEL	187.168
EXISTING SURFACE LEVEL	187.168
CHAINAGE	L=20.059m

Pipe Diameter	300φ	225φ	225φ	150φ
Pipe Class	Class 2	PVC	PVC	PVC
Pipe Grade	1 in 200	1 in 150	1 in 150	1 in 50
Velocity (m/s)	Vf=0.968	Vf=0.922	Vf=0.922	Vf=1.219
Pipe Flow (m3/s)	Qa=0.030	Qa=0.021	Qa=0.021	Qa=0.011
Pipe Capacity (m3/s)	Qcap=0.068	Qcap=0.037	Qcap=0.037	Qcap=0.022
DATUM RL	187.00			
DEPTH TO INVERT	2.336			
DESIGN INVERT LEVEL	184.664			
HYDRAULIC GRADE LEVEL	184.664			
FINISHED SURFACE LEVEL	184.664			
EXISTING SURFACE LEVEL	184.664			
CHAINAGE	L=10.675m	L=8.702m	L=7.956m	L=2.180m

Pipe Diameter	300φ	300φ	150φ
Pipe Class	Class 2	Class 2	PVC
Pipe Grade	1 in 195	1 in 50	1 in 50
Velocity (m/s)	Vf=0.981	Vf=1.936	Vf=1.219
Pipe Flow (m3/s)	Qa=0.023	Qa=0.013	Qa=0.013
Pipe Capacity (m3/s)	Qcap=0.069	Qcap=0.137	Qcap=0.022
DATUM RL	187.00		
DEPTH TO INVERT	1.560		
DESIGN INVERT LEVEL	185.440		
HYDRAULIC GRADE LEVEL	185.440		
FINISHED SURFACE LEVEL	185.440		
EXISTING SURFACE LEVEL	185.440		
CHAINAGE	L=37.992m	L=2.459m	L=15.470m

Pipe Diameter	150φ
Pipe Class	PVC
Pipe Grade	1 in 50
Velocity (m/s)	Vf=1.219
Pipe Flow (m3/s)	Qa=0.010
Pipe Capacity (m3/s)	Qcap=0.022
DATUM RL	187.00
DEPTH TO INVERT	0.839
DESIGN INVERT LEVEL	186.161
HYDRAULIC GRADE LEVEL	186.161
FINISHED SURFACE LEVEL	186.161
EXISTING SURFACE LEVEL	186.161
CHAINAGE	L=14.140m

file: n:\p\322226\_000CR604.dwg, layout: asms\_C6604, plotted by: Matthew Rule, 25 of 32 Sheets, file location: G:\322226\000\CR604\p\322226\_000.dwg, plot date: 20/11/2024, 5:07 PM

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Designed M.RULE	Checked B.IBBS
Authorised B.IBBS	Date OCT 2024

Rev	A	PRELIMINARY ISSUE	B.I	OCT 2024
Rev		Amendments	Approved	Date

16 BRIDGE STREET BENDIGO  
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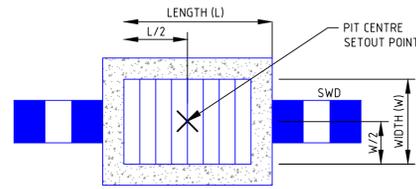
**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT**  
 ROAD AND DRAINAGE  
 DRAINAGE LONG SECTIONS - SHEET 5  
 CITY OF GREATER BENDIGO  
 WARRINGAL VIEWS P/L

**PRELIMINARY**

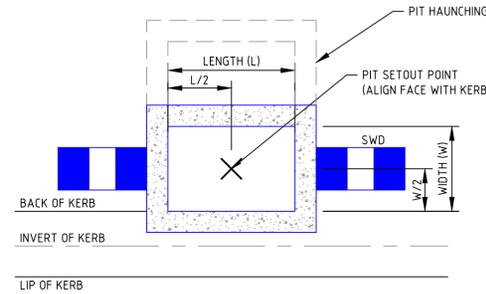
Drg No 322226-000CR604 Rev A

DRAINAGE PIT SCHEDULE

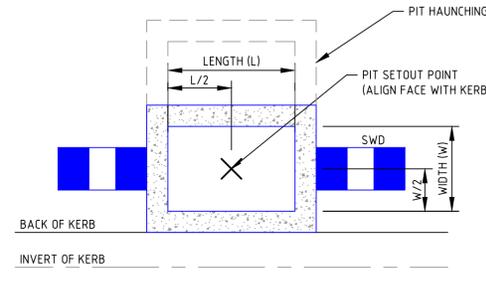
No.	PIT TYPE	INTERNAL DIMENSIONS		INLET		OUTLET		PIT		REMARKS
		WIDTH	LENGTH	DIA	INV LEVEL	DIA	INV LEVEL	FS LEVEL	DEPTH	
14	ENDPIPE	-	-	525	194.437	525	194.437	195.866	1.429	ENDPIPE. PROVIDE ROCK BEACHING AT OUTLET
15	SIDE ENTRY PIT	600	900	300	194.746	525	194.726	196.155	1.429	REFER TO IDM STANDARD DRAWING SD440
				375	194.746					
				300	194.746					
16	SIDE ENTRY PIT	600	900	300	194.893	300	194.873	196.267	1.394	REFER TO IDM STANDARD DRAWING SD440
17	SIDE ENTRY PIT	600	900	225	195.108	300	195.033	196.407	1.374	REFER TO IDM STANDARD DRAWING SD480
				300	195.053					
				300	195.053					
18	JUNCTION PIT	600	900	225	195.159	225	195.139	196.438	1.299	REFER TO IDM STANDARD DRAWING SD420
19	JUNCTION PIT	600	900	225	195.286	225	195.266	196.768	1.502	REFER TO IDM STANDARD DRAWING SD420
20	JUNCTION PIT	600	900	150	195.387	225	195.312	196.362	1.050	REFER TO IDM STANDARD DRAWING SD420
				150	195.332					
21	JUNCTION PIT	450	450	150	195.567	150	195.547	196.245	0.699	REFER TO COGB STANDARD DRAWING SD24
22	GRATED JUNCTION PIT	450	450			150	195.607	196.195	0.588	REFER TO COGB STANDARD DRAWING SD24
23	GRATED JUNCTION PIT	450	450			150	195.372	195.928	0.557	REFER TO COGB STANDARD DRAWING SD24
24	GRATED ENTRY PIT	600	900			300	195.134	196.307	1.173	REFER TO IDM STANDARD DRAWING SD481
25	GRATED JUNCTION PIT	450	450			300	195.152	195.615	0.463	REFER TO COGB STANDARD DRAWING SD24
26	SIDE ENTRY PIT	600	900	375	194.884	375	194.864	196.149	1.286	REFER TO IDM STANDARD DRAWING SD440
				375	194.884					
27	SIDE ENTRY PIT	600	900	375	195.086	375	195.066	196.301	1.235	REFER TO IDM STANDARD DRAWING SD480
28	JUNCTION PIT	600	900	300	195.727	375	195.652	196.693	1.041	REFER TO IDM STANDARD DRAWING SD420
29	GRATED JUNCTION PIT	450	450	300	195.787	300	195.767	196.713	0.946	REFER TO COGB STANDARD DRAWING SD24
30	GRATED JUNCTION PIT	450	450	300	195.914	300	195.894	196.820	0.926	REFER TO COGB STANDARD DRAWING SD24
31	GRATED JUNCTION PIT	450	450	300	196.040	300	196.020	196.949	0.929	REFER TO COGB STANDARD DRAWING SD24
32	GRATED JUNCTION PIT	450	450	300	196.519	300	196.499	197.413	0.913	REFER TO COGB STANDARD DRAWING SD24
33	GRATED JUNCTION PIT	600	900	225	196.750	300	196.675	197.862	1.187	REFER TO COGB STANDARD DRAWING SD27
				225	196.750					
34	ENDPIPE	-	-			225	196.765	197.851	1.086	PROVIDE STUB FOR FUTURE CONNECTION
35	ENDPIPE	-	-			225	196.803	197.870	1.067	PROVIDE STUB FOR FUTURE CONNECTION
36	SIDE ENTRY PIT	600	900	300	195.002	375	194.927	196.149	1.222	REFER TO IDM STANDARD DRAWING SD440
37	SIDE ENTRY PIT	600	900	300	195.159	300	195.139	196.286	1.147	REFER TO IDM STANDARD DRAWING SD480
38	SIDE ENTRY PIT	600	900	300	195.749	300	195.749	197.502	1.754	REFER TO IDM STANDARD DRAWING SD480
39	GRATED ENTRY PIT	600	900			300	194.827	196.040	1.213	REFER TO IDM STANDARD DRAWING SD481
Ex.2	ENDPIPE	-	-	525	195.398	525	195.398	197.098	1.700	CONNECT TO EXISTING PIPE
40	SIDE ENTRY PIT	600	900	300	195.671	525	195.446	197.139	1.693	REFER TO IDM STANDARD DRAWING SD480
				450	195.466					
41	SIDE ENTRY PIT	600	900	300	195.586	450	195.566	197.196	1.629	REFER TO IDM STANDARD DRAWING SD480
				450	195.586					
42	SIDE ENTRY PIT	600	900	450	196.002	450	195.982	197.443	1.461	REFER TO IDM STANDARD DRAWING SD480
				225	196.207					
43	SIDE ENTRY PIT	600	900	450	196.118	450	196.098	197.478	1.380	REFER TO IDM STANDARD DRAWING SD480
44	SIDE ENTRY PIT	600	900	450	196.233	450	196.213	197.572	1.358	REFER TO IDM STANDARD DRAWING SD480
				150	196.233					
45	SIDE ENTRY PIT	600	900	450	196.386	450	196.366	197.757	1.391	REFER TO IDM STANDARD DRAWING SD440
46	SIDE ENTRY PIT	600	900	300	196.595	450	196.445	198.008	1.564	REFER TO IDM STANDARD DRAWING SD440
				450	196.465					
47	SIDE ENTRY PIT	600	900	300	196.832	300	196.812	198.072	1.260	REFER TO IDM STANDARD DRAWING SD430
48	SIDE ENTRY PIT	600	900	300	197.146	300	197.126	198.428	1.302	REFER TO IDM STANDARD DRAWING SD430
49	GRATED ENTRY PIT	600	900			300	197.348	198.346	0.998	REFER TO IDM STANDARD DRAWING SD481
50	ENDPIPE	-	-			450	196.473	198.016	1.544	PROVIDE STUB FOR FUTURE CONNECTION
51	GRATED JUNCTION PIT	450	450	150	197.118	150	196.516	197.863	1.347	REFER TO COGB STANDARD DRAWING SD24
52	ENDPIPE	-	-	150	197.142	150	197.142	197.894	0.752	PROVIDE STUB FOR FUTURE CONNECTION
53	ENDPIPE	-	-			225	196.454	197.550	1.096	ENDPIPE - CONNECT HOUSE DRAIN
54	SIDE ENTRY PIT	600	900	150	195.797	300	195.647	197.218	1.572	REFER TO IDM STANDARD DRAWING SD480
55	GRATED JUNCTION PIT	450	450			150	196.023	196.678	0.655	REFER TO COGB STANDARD DRAWING SD24
56	GRATED ENTRY PIT	600	900			300	196.093	197.038	0.946	REFER TO IDM STANDARD DRAWING SD481
57	GRATED JUNCTION PIT	900	1350	450	195.243	300	194.358	196.694	2.336	CONSTRUCT WEIR/ORIFICE PIT OVER EXISTING PIPE
				300	195.438					
58	GRATED JUNCTION PIT	600	900	450	195.360	450	195.340	196.723	1.383	REFER TO COGB STANDARD DRAWING SD27
59	GRATED JUNCTION PIT	600	900	450	195.390	450	195.370	196.724	1.354	REFER TO COGB STANDARD DRAWING SD27
60	GRATED JUNCTION PIT	600	900	225	196.120	450	195.526	196.862	1.337	REFER TO COGB STANDARD DRAWING SD27
61	GRATED JUNCTION PIT	450	450	225	196.216	225	196.196	196.920	0.724	REFER TO COGB STANDARD DRAWING SD24
62	GRATED JUNCTION PIT	450	450	150	196.407	225	196.332	197.164	0.832	REFER TO COGB STANDARD DRAWING SD24
63	GRATED JUNCTION PIT	450	450			150	196.507	197.299	0.792	REFER TO COGB STANDARD DRAWING SD24
64	GRATED JUNCTION PIT	600	900	225	195.567	300	195.492	196.588	1.096	REFER TO COGB STANDARD DRAWING SD27
65	GRATED JUNCTION PIT	450	450	225	195.645	225	195.625	196.575	0.950	REFER TO COGB STANDARD DRAWING SD24
66	GRATED JUNCTION PIT	450	450	150	195.773	225	195.698	196.568	0.870	REFER TO COGB STANDARD DRAWING SD24
67	GRATED JUNCTION PIT	450	450			150	195.816	196.566	0.750	REFER TO COGB STANDARD DRAWING SD24
68	GRATED JUNCTION PIT	600	900	300	195.250	300	194.463	196.435	1.972	CONSTRUCT NEW PIT OVER EXISTING PIPE AS PER COGB STANDARD DRAWING SD27
				150	195.400					
69	GRATED JUNCTION PIT	600	900	150	195.449	300	195.299	196.455	1.156	CONSTRUCT NEW PIT OVER EXISTING PIPE AS PER COGB STANDARD DRAWING SD27
70	GRATED JUNCTION PIT	450	450			150	195.759	196.515	0.756	REFER TO COGB STANDARD DRAWING SD24
71	GRATED JUNCTION PIT	450	450			150	195.683	196.522	0.839	REFER TO COGB STANDARD DRAWING SD24



TYPICAL DRAINAGE PIT SETOUT POINT 'A'  
(COGB SD24, COGB SD27, IDM SD420, IDM SD481)  
(NOT TO SCALE)

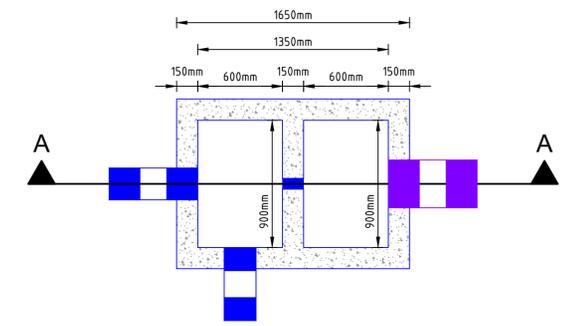


TYPICAL DRAINAGE PIT SETOUT POINT 'B'  
(IDM SD430, IDM SD440)  
(NOT TO SCALE)

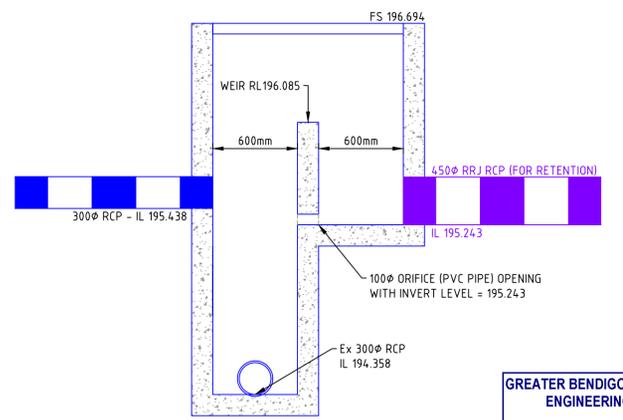


TYPICAL DRAINAGE PIT SETOUT POINT 'C'  
(IDM SD480)  
(NOT TO SCALE)

- DRAINAGE NOTES**
- ALL DRAINAGE PIPES & PITS ARE TO BE AT 1m OFFSET TO PROPERTY BOUNDARIES UNLESS SHOWN OTHERWISE
  - THE CONTRACTOR MUST CONTACT SERVICING AUTHORITIES TO ARRANGE SERVICE LOCATIONS PRIOR TO COMMENCEMENT OF EXCAVATION FOR THIS PROJECT
  - PITS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE MUNICIPALITY AND/OR IDM. STEEL GRATES ARE TO BE HOT DIP GALVANISED AFTER MANUFACTURE. THE TOP OF ALL GRATES MUST BE APPROXIMATELY 150mm BELOW THE SURROUNDING SURFACE LEVEL. PROPERTY DRAINAGE CONNECTIONS ARE TO BE PROVIDED AS NECESSARY. ALL PITS IN ROAD RESERVE TO BE A MINIMUM OF CLASS C.
  - ALL SIDE ENTRY PITS IN ROLLOVER KERB & CHANNEL ARE TO BE CONSTRUCTED USING AN APPROVED ROLLOVER TYPE LINTEL OR A REINFORCED ROLLOVER PROFILE PIT LID. STANDARD SQUARE PROFILE PIT LIDS WITHOUT LINTEL ARE NOT ACCEPTABLE.
  - TRENCHES WITHIN PAVEMENT OR FOOTPATH AREAS ARE TO BE BACKFILLED WITH 3% CEMENT STABILISED CLASS 1 FCR. THE TRENCH IS TO BE BACKFILLED IN 150MM LAYERS AND CONSOLIDATED.
  - ALL PIPE STUBS ARE TO CONSIST OF ONE FULL PIPE LENGTH UNLESS SHOWN OTHERWISE.
  - FINISHED LEVELS FOR SIDE ENTRY PITS MUST BE DETERMINED FROM KERB LEVELS AND SHOULD BE SLOPED TO SUIT NATURESTRIPS ETC. THE FSL'S INDICATED IN THE PIT SCHEDULE ARE NOT KERB LEVELS.
  - STEP IRONS ARE NOT REQUIRED IN DRAINAGE PITS.
  - CONCRETE PIPES ARE TO BE CLASS 2 RCP FJ RCP AND PVC PIPES ARE TO BE CLASS SN8 UNLESS OTHERWISE NOTED.
  - ALL EXCAVATIONS FOR DRAINAGE WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE VICTORIAN WORK COVER AUTHORITY.
  - REINFORCEMENT BARS SHALL COMPLY WITH AS1302/1991, GRADE 400Y. LAPS IN REINFORCEMENT BARS SHALL BE 300 MIN. AND CLEAR COVER 50 MIN.
  - CONCRETE SHALL BE NORMAL CLASS N32 STANDARD STRENGTH GRADE OR HIGHER. COMPLYING WITH THE REQUIREMENTS OF AS1379.
  - ENDWALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT PROVISIONS OF AS3600.
  - DIRECT CONNECTION OF PVC HOUSE DRAIN TO RCP DRAINAGE TO BE CONSTRUCTED WITH "CONCONNECT" OR APPROVED EQUIVALENT FITTING. 150mmØ PVC PIPES ARE NOT TO BE DIRECTLY CONNECTED TO CONCRETE PIPES LESS THAN 450mmØ IN DIAMETER. WHERE FURTHER SUBDIVISION OF THE LOT CONCERNED IS NOT PRACTICAL A 100mmØ HOUSE CONNECTION PIPE MAY BE USED.
  - WHERE PVC HOUSE CONNECTIONS ARE MADE DIRECTLY TO PIPES, THE HOUSE CONNECTION IS TO BE RAISED TO SURFACE LEVEL WITHIN THE PROPERTY AND CAPPED AS PER SD520.
  - COMPACTION REQUIREMENTS - ANY BACKFILL WITHIN 1m OF A COUNCIL ASSET (EG FOOTPATH OR ROAD) IS REQUIRED TO BE FCR. ALTERNATIVELY OTHER FILL MATERIAL CAN BE USED PROVIDED COMPACTION TESTS ARE CARRIED OUT TO ENSURE 95% COMPACTION IS ACHIEVED. TESTS TO BE CARRIED OUT AT A MINIMUM OF 1 PER 60m OF TRENCH.
  - ALL PITS IN ROAD RESERVES ARE TO HAVE FIBERGLASS COVERS, PER C.O.G.B REQUIREMENTS



ORIFICE/WEIR PIT PLAN VIEW  
PIT 57  
(NOT TO SCALE)



ORIFICE/WEIR PIT SECTION A-A  
PIT 57  
(NOT TO SCALE)

GREATER BENDIGO CITY COUNCIL  
ENGINEERING PLANS  
APPROVED BY: Peter Brasier  
DATE: 16 December 2024

file name: 322226\_000CR605.dwg, layout: assem\_C605, plotted by: Matthew Rule, file location: G:\322226\000CR605\322226\000CR605\322226\000CR605\322226\_000CR605.dwg, sheet: 26 of 32 Sheets

Rev	Amendments	Approved	Date
B	PIPE 27 TO 28 UPSIZED TO 375Ø TO CONVEY 1% AEP FLOW	B.I	NOV 2024
A	PRELIMINARY ISSUE	B.I	OCT 2024

NOT TO SCALE

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ISO 45001  
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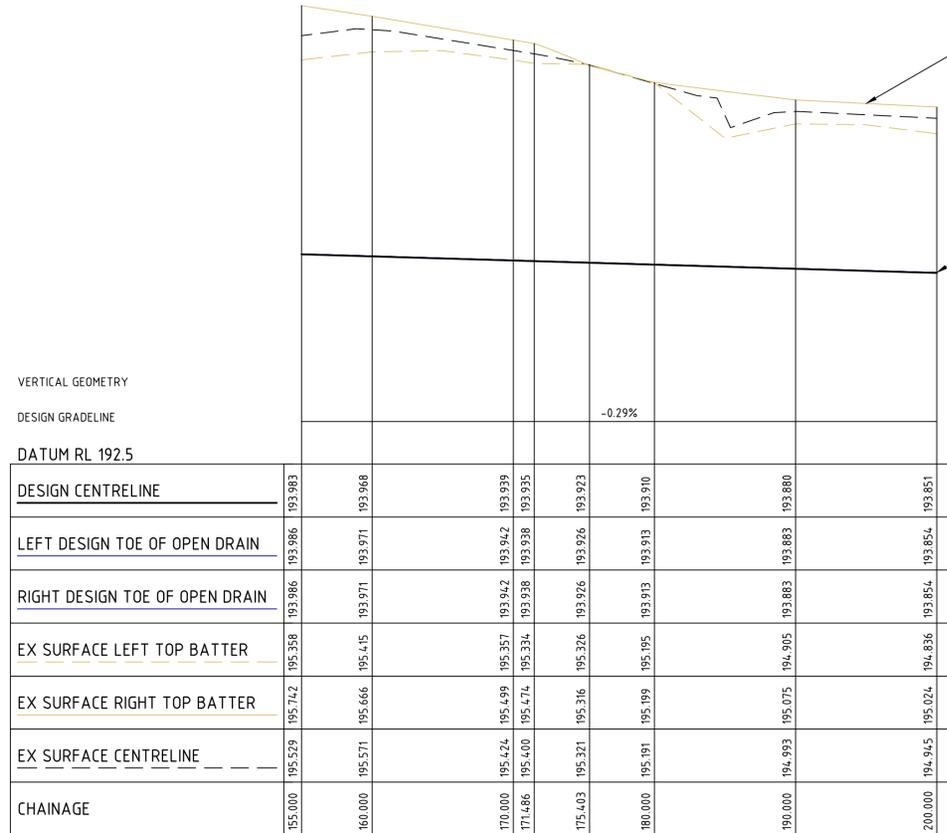
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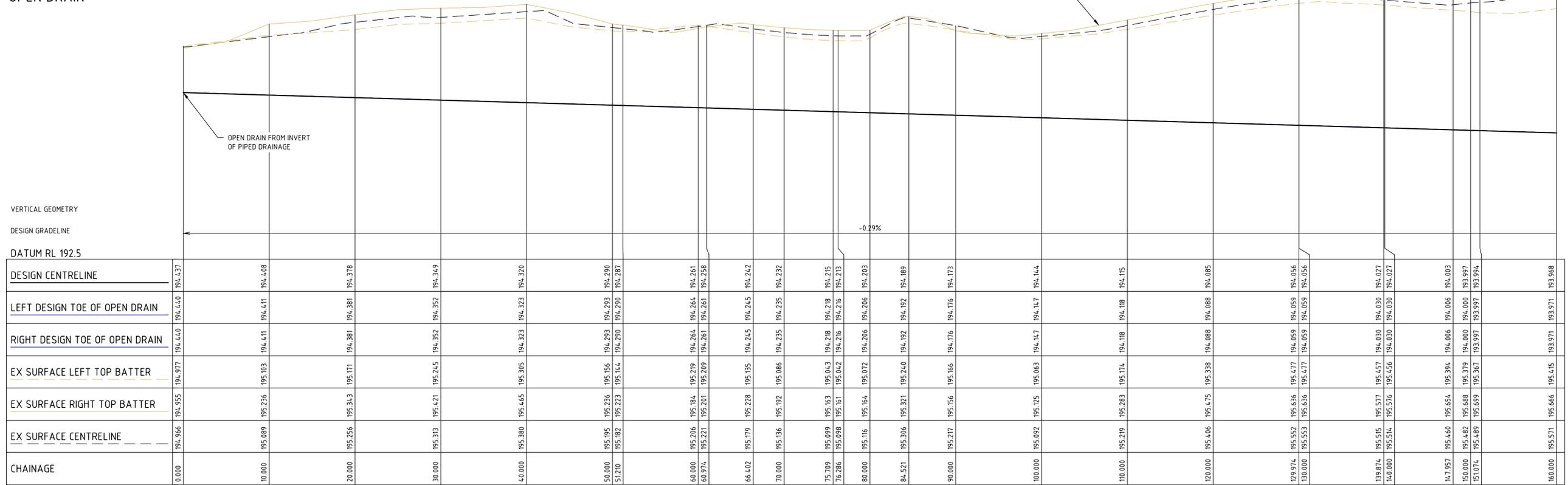
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Authorised B.IBBS	Date NOV 2024

**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT ROAD AND DRAINAGE DRAINAGE PIT SCHEDULE & TYPICAL DETAILS - SHEET 1**  
CITY OF GREATER BENDIGO  
WARRINGAL VIEWS P/L

**PRELIMINARY** Drg No: 322226-000CR605 Rev: B



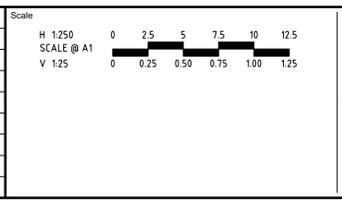
OPEN DRAIN



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Rev	Description	Approved	Date
A	PRELIMINARY ISSUE	B.I	OCT 2024
	Amendments		



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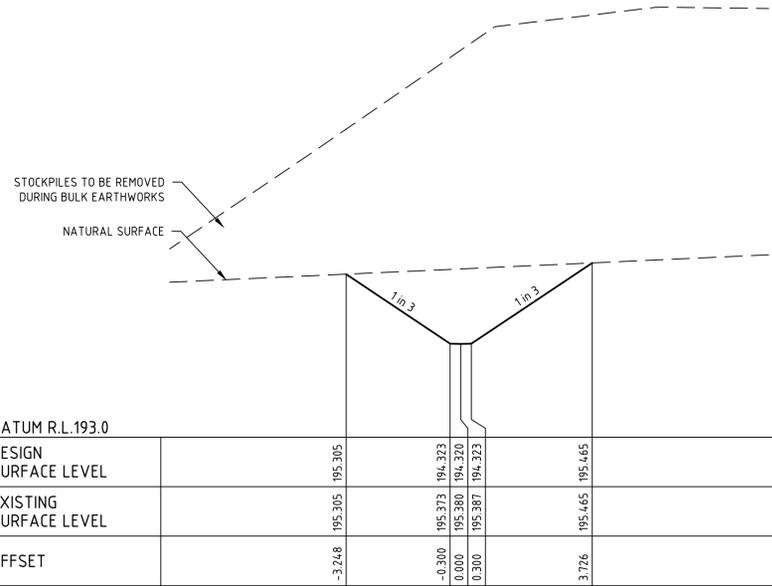
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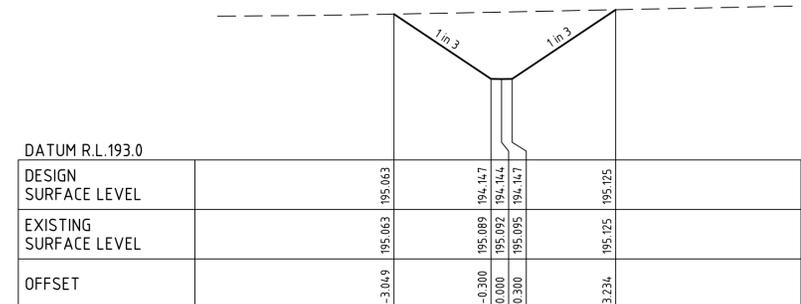
**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT ROAD AND DRAINAGE OPEN DRAIN LONG SECTIONS - SHEET 1**  
 CITY OF GREATER BENDIGO WARRINGAL VIEWS P/L

**PRELIMINARY**

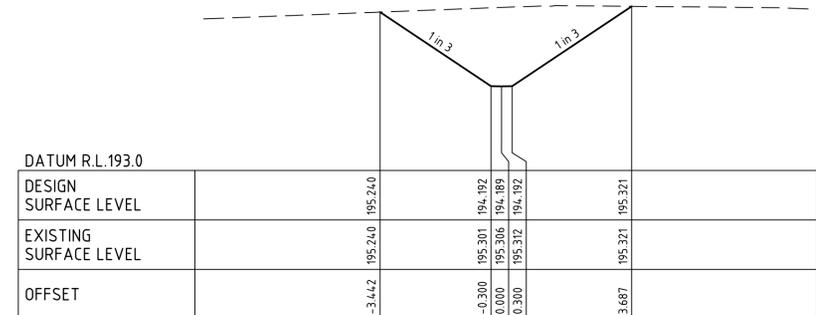
Dwg No 322226-000CR606 Rev A



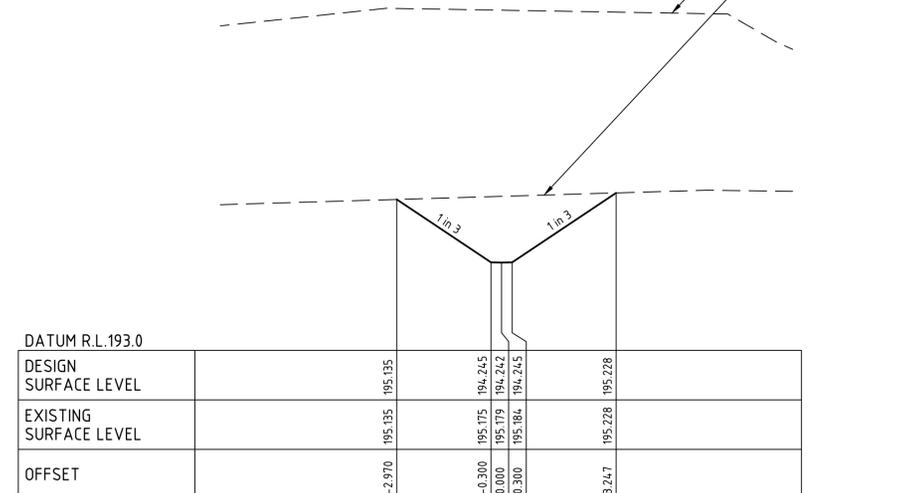
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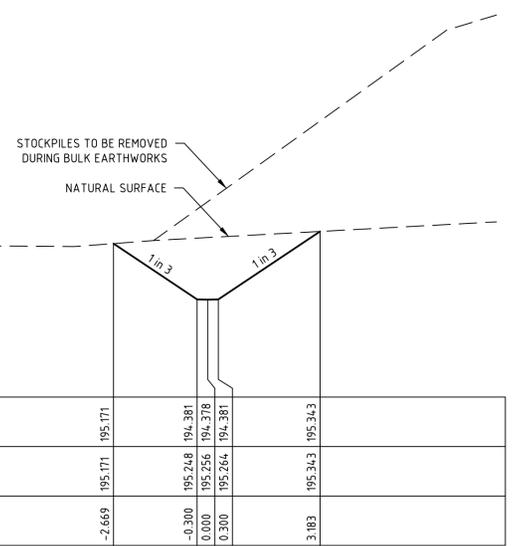
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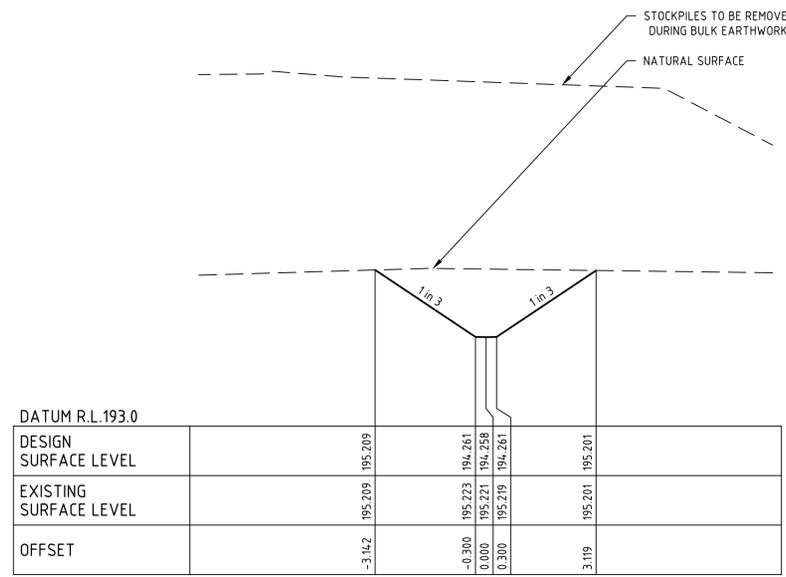
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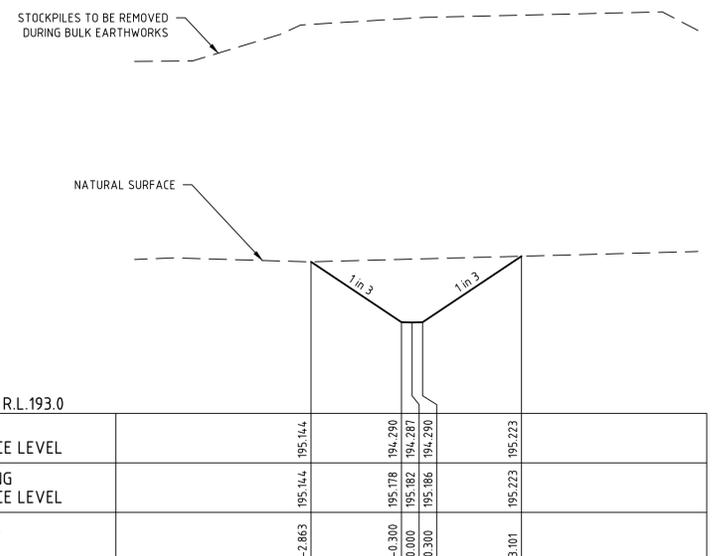
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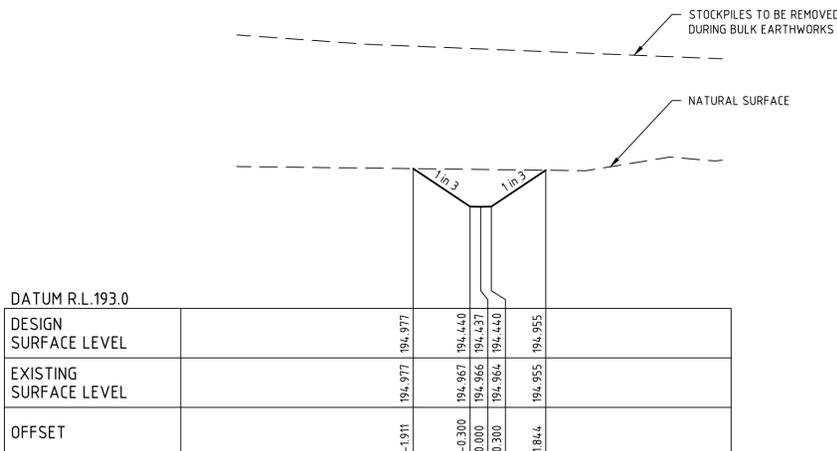
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OPEN DRAIN CH 60.97



OPEN DRAIN CH 51.21



OPEN DRAIN CH 0.00

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Rev	Description	Approved	Date
A	PRELIMINARY ISSUE	B.I	OCT 2024
	Amendments		



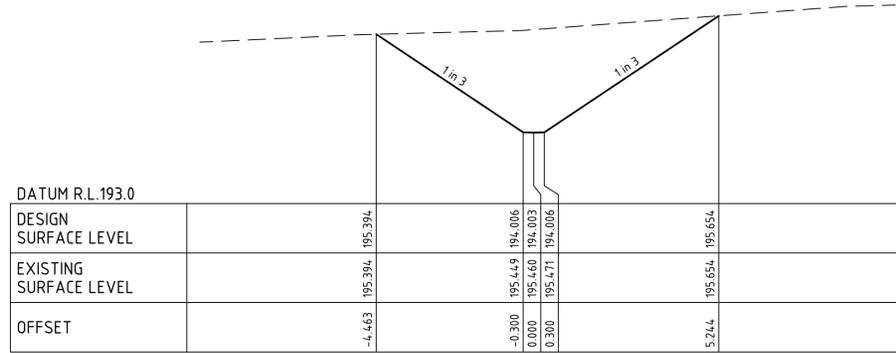
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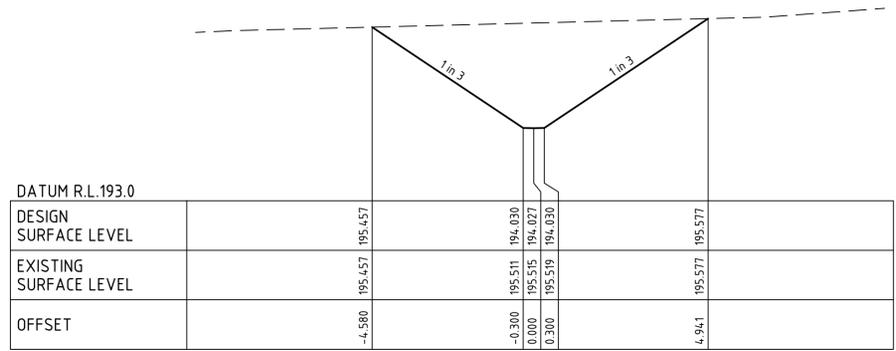
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**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT ROAD AND DRAINAGE OPEN DRAIN CROSS SECTIONS - SHEET 1**
  
 CITY OF GREATER BENDIGO WARRINGAL VIEWS P/L
   
**PRELIMINARY**

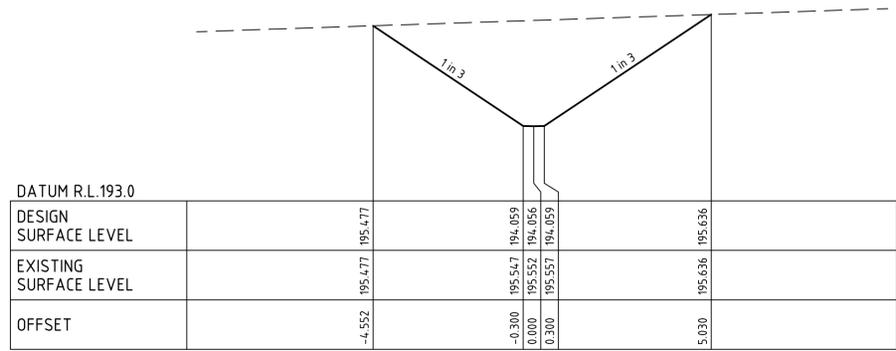
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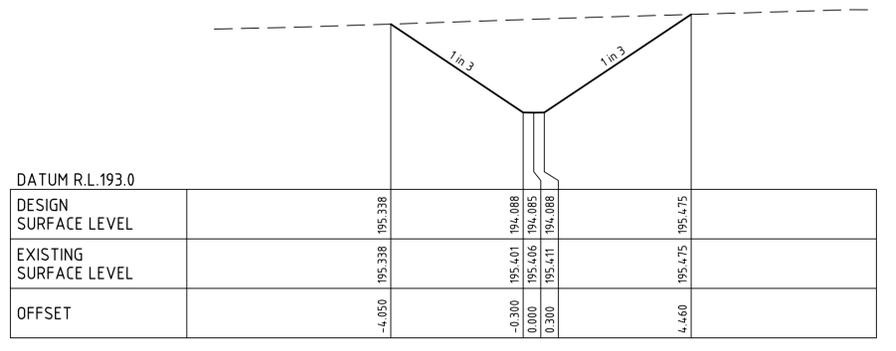
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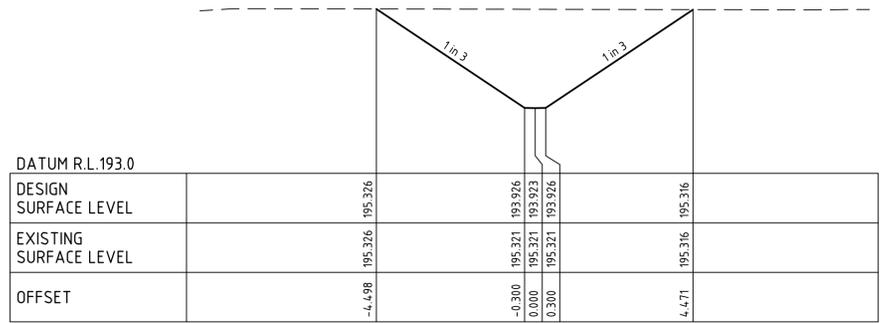
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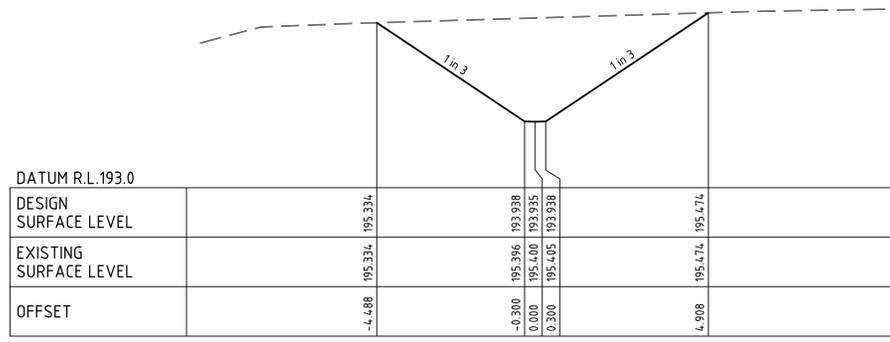
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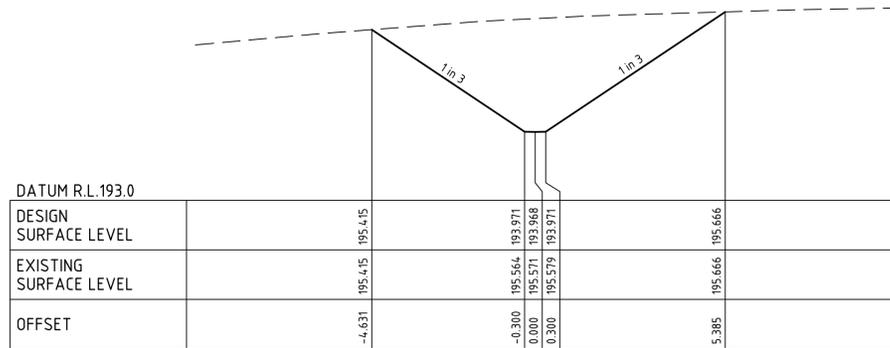
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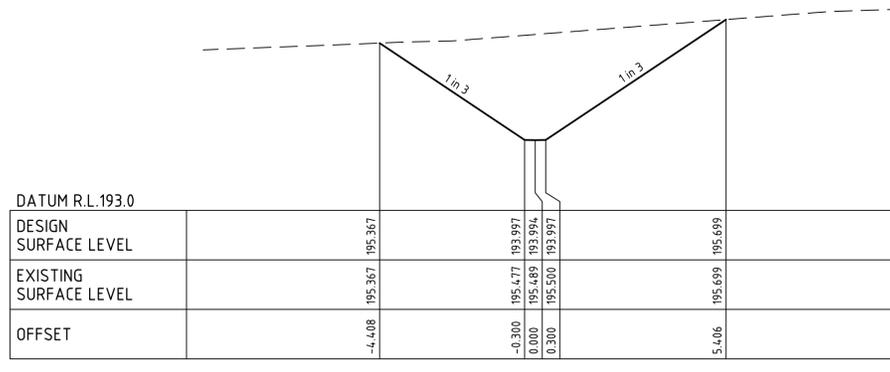
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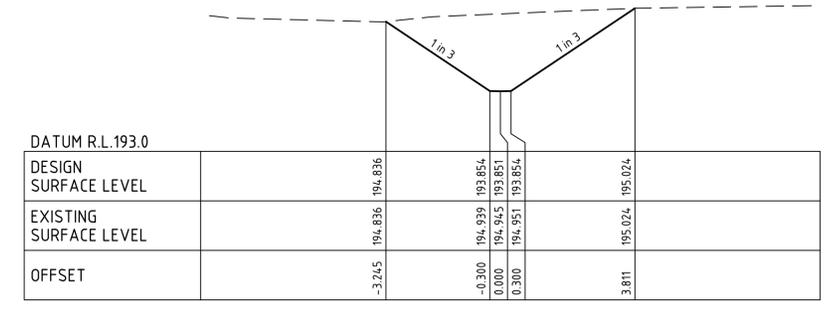
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OPEN DRAIN CH 160.00



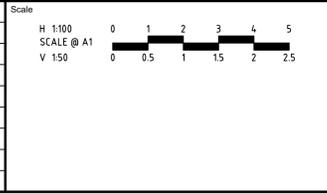
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Rev	A	PRELIMINARY ISSUE
Rev		Amendments
	B.I	OCT 2024
	Approved	Date

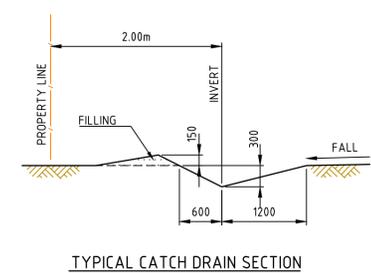
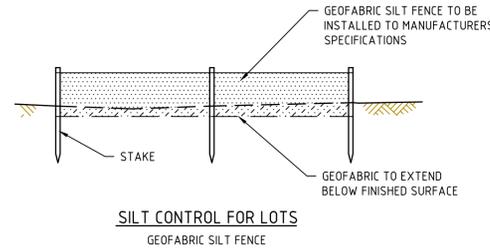
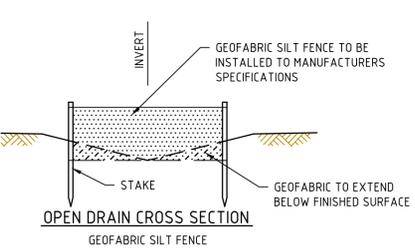
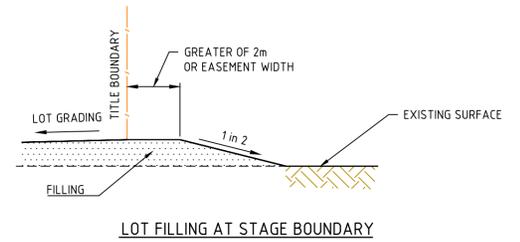
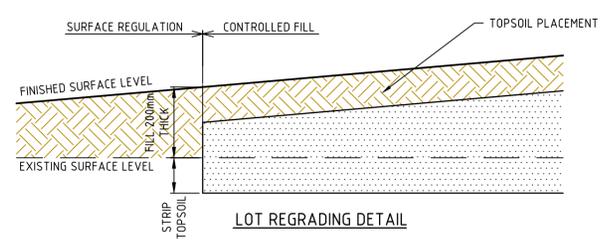


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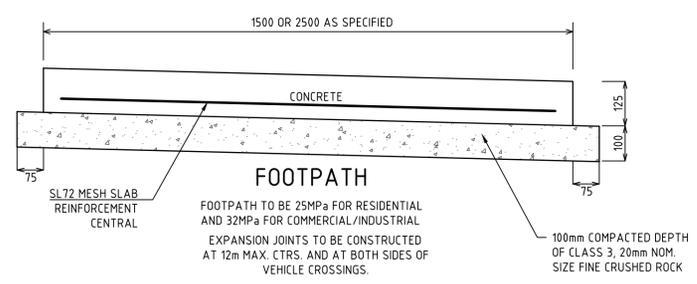
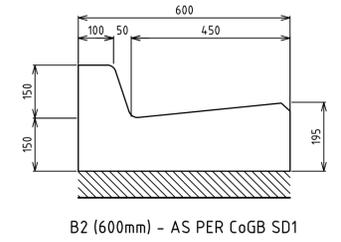
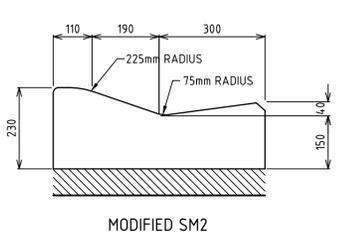


Designed	M.RULE	Checked	B.IBBS
Authorised	B.IBBS	Date	OCT 2024

**GOLDEN GROVE STAGE 7B AND 8 BUSHLAND WAY, JACKASS FLAT ROAD AND DRAINAGE OPEN DRAIN CROSS SECTIONS - SHEET 2**  
 CITY OF GREATER BENDIGO WARRINGAL VIEWS P/L  
**PRELIMINARY** Drg No 322226-000CR608 Rev A



**SILT CONTROL OPTIONS**  
NOT TO SCALE



- NOTES:**
- ALL KERBS AND KERB & CHANNEL TO BE REINFORCED IN ACCORDANCE WITH MUNICIPALITY STD DRAWINGS.
  - ALL KERBS AND KERB & CHANNEL TO HAVE 150mm DEPTH OF CONCRETE BELOW TOP OF PAVEMENT LEVEL.

**STANDARD KERB PROFILES**  
NOT TO SCALE



**PAVEMENT PLAN**  
H 1:1000  
SCALE @ A1

**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 10C 581 REPORT ON "EVERGREEN WATERS - STAGE 1, JACKASS FLAT" AND 17C 04/95 REPORT ON "GOLDEN PARK ESTATE STAGE 1". THESE DOCUMENTS SHOULD BE REVIEWED TO ENSURE THAT THE DESIGN HAS BEEN ACCURATELY REPRODUCED.

A COPY OF THE DOCUMENTS WILL BE PROVIDED ON REQUEST.

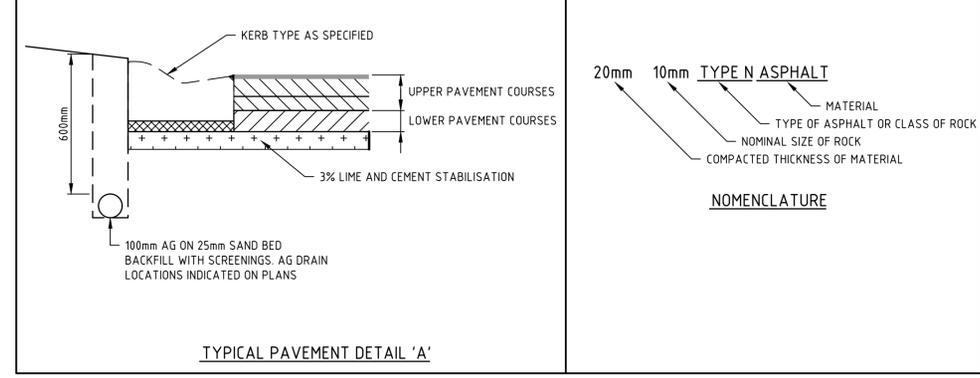
SPIIRE DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE ACCURACY, ADEQUACY OR APPROPRIATENESS OF THE GEOTECHNICAL WORK AND PAVEMENT DESIGNS.

ANY QUERIES IN RESPECT TO THE GEOTECHNICAL WORK AND PAVEMENT DESIGNS SHOULD BE ADDRESSED TO GTS AND COPIED TO SPIIRE.

PAVEMENT LAYER	DESCRIPTION	DEPTH (mm)	DEPTH (mm)
		A	B
ASPHALT WEARING COURSE	ASPHALT TYPE N, SIZE 10 WITH PRIME	30	30
BASE COURSE	CLASS 1 OR 2, 20mm NOMINAL SIZE COMPACTED FCR TO A MINIMUM DENSITY OF 98% MMDD, MIN CBR 80	110	110
UPPER PAVEMENT TOTAL		140	140
SUBBASE	CLASS 3, 20mm OR 40mm COMPACTED FCR TO A MINIMUM DENSITY OF 97% MMDD, MIN CBR 30	110	120
STABILISATION	3% LIME AND CEMENT STABILISATION	(200)	
	ROCK BRIDGING LAYER COMPACTED TO 95%		(600)
TOTAL PAVEMENT DEPTH		250	260

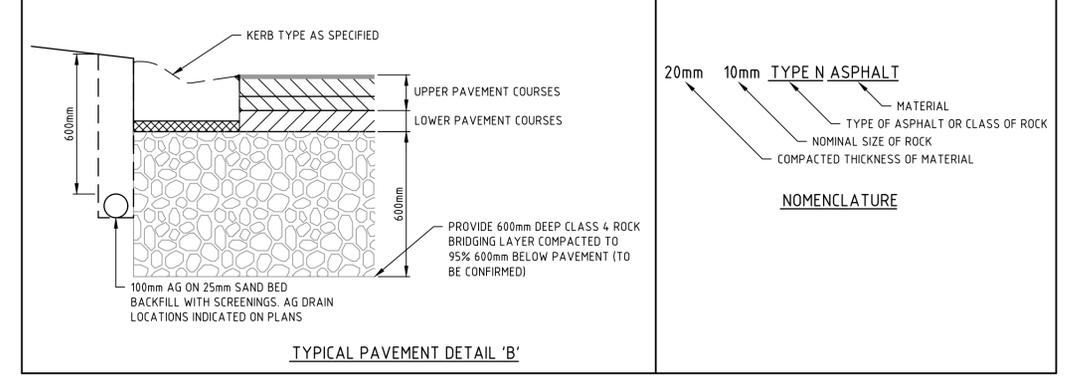
- GENERAL NOTES:**
- NATURE STRIPS ARE TO BE TOPSOILED WITH MATERIAL STOCKPILED FROM STRIPPING TO A DEPTH OF 100mm. IMPORTED TOPSOIL AND/OR SEEDING MAY BE REQUIRED TO PROVIDE GOOD GRASS COVER
  - LOCATION OF ALL SERVICE CONDUITS IS TO BE MARKED ON THE FACE OF BOTH KERBS WITH A UNIFORM 50mm DIAMETER MARK, 5mm DEEP. WATER & GAS CONDUITS TO BE 50mm DIAMETER CLASS 12uPVC PIPE. POWER & TELSTRA CONDUIT ARE AS SPECIFIED ON THE POWER PLAN.

**STANDARD PAVEMENT**



ROAD NAME	TYPE
MULLA MULLA WAY	A
BUSHLAND WAY (CH100.00-CH245.48)	A
BOTTLEBRUSH STREET	A
FUTURE ROADWAY	A
BUSHLAND WAY (CH245.48-CH255.38)	B

**STANDARD PAVEMENT**



**GREATER BENDIGO CITY COUNCIL  
ENGINEERING PLANS**

APPROVED BY: Peter Brasier

DATE: 16 December 2024

file name: 322226\_000CR700.dwg, layout: assem\_GS700, plotted by: Matthew Rule, file location: G:\322226\000\CR700\plot\_data\20/11/2024\_5:07 PM\_Sheet\_30 of 32\_Sheets

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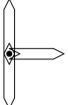
Designed: M.RULE  
 Authorised: B.IBBS  
 Checked: B.IBBS  
 Date: OCT 2024

**GOLDEN GROVE STAGE 7B AND 8  
 BUSHLAND WAY, JACKASS FLAT  
 ROAD AND DRAINAGE  
 PAVEMENT AND TYPICAL DETAILS - SHEET 1**  
 CITY OF GREATER BENDIGO  
 WARRINGAL VIEWS P/L

**PRELIMINARY**

Drg No: 322226-000CR700 Rev: A

**LEGEND**

- S1  CoGB STREET NAME PLATES INCLUDING "NO THROUGH ROAD" NOMINATION WHERE APPLICABLE
- S2  D4-5
- S3  G9-20

**NOTES:**

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. TGS1's MUST BE PROVIDED IN ACCORDANCE WITH THE AUSTRALIAN STANDARD 1428.4.1



GREATER BENDIGO CITY COUNCIL  
ENGINEERING PLANS  
APPROVED BY: Peter Brasier  
DATE: 16 December 2024

file name: 322226\_000CR800.dwg, layout: assem\_C8000, plotted by: Matthew Dule, file location: G:\322226\000\322226\000\CAD\plot\_data\_20/11/2024\_5:07 PM\_Sheet\_31 of 32\_Sheets

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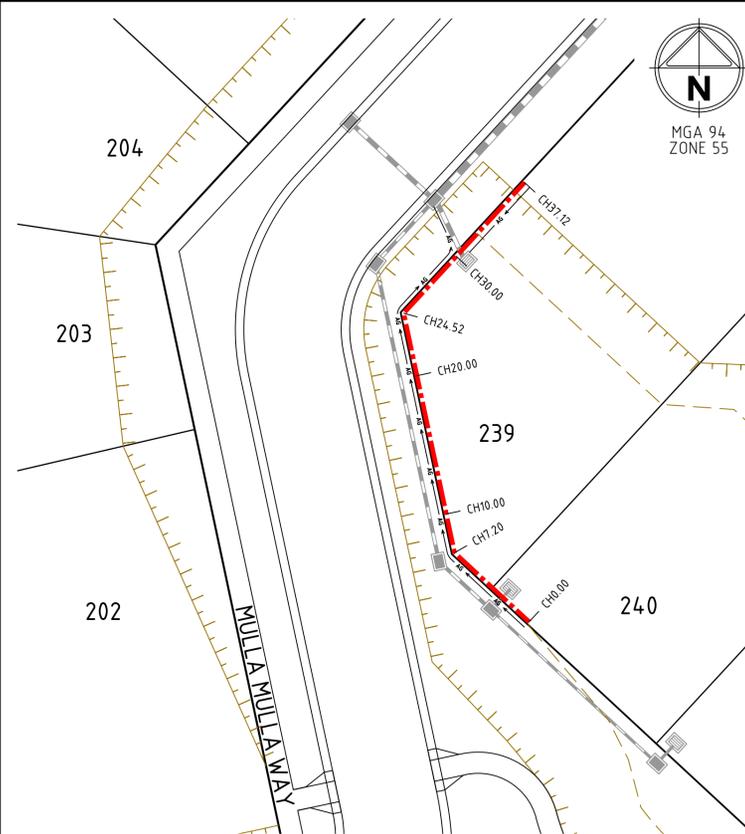
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Authorised B.IBBS	Date OCT 2024

**GOLDEN GROVE STAGE 7B AND 8  
BUSHLAND WAY, JACKASS FLAT  
ROAD AND DRAINAGE  
SIGNAGE AND LINEMARKING - SHEET 1  
CITY OF GREATER BENDIGO  
WARRINGAL VIEWS P/L**

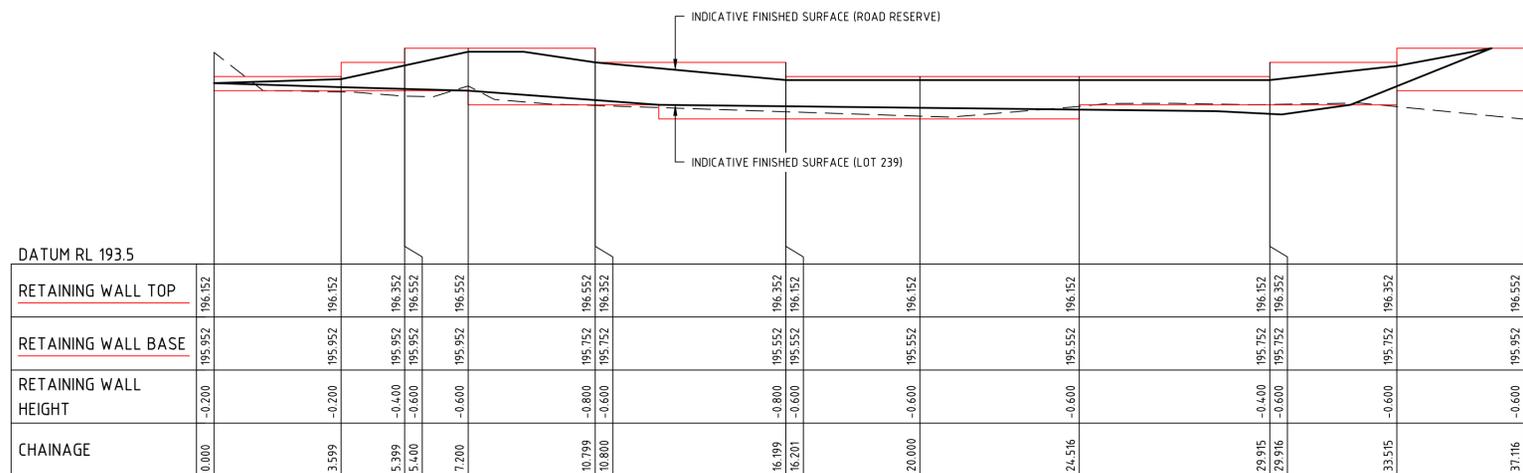
**PRELIMINARY** Drig No 322226-000CR800 Rev A

NOTE: RETAINING WALL CONSTRUCTION TO CONSIST OF STEEL POST AND CONCRETE SLEEPER MAKEUP



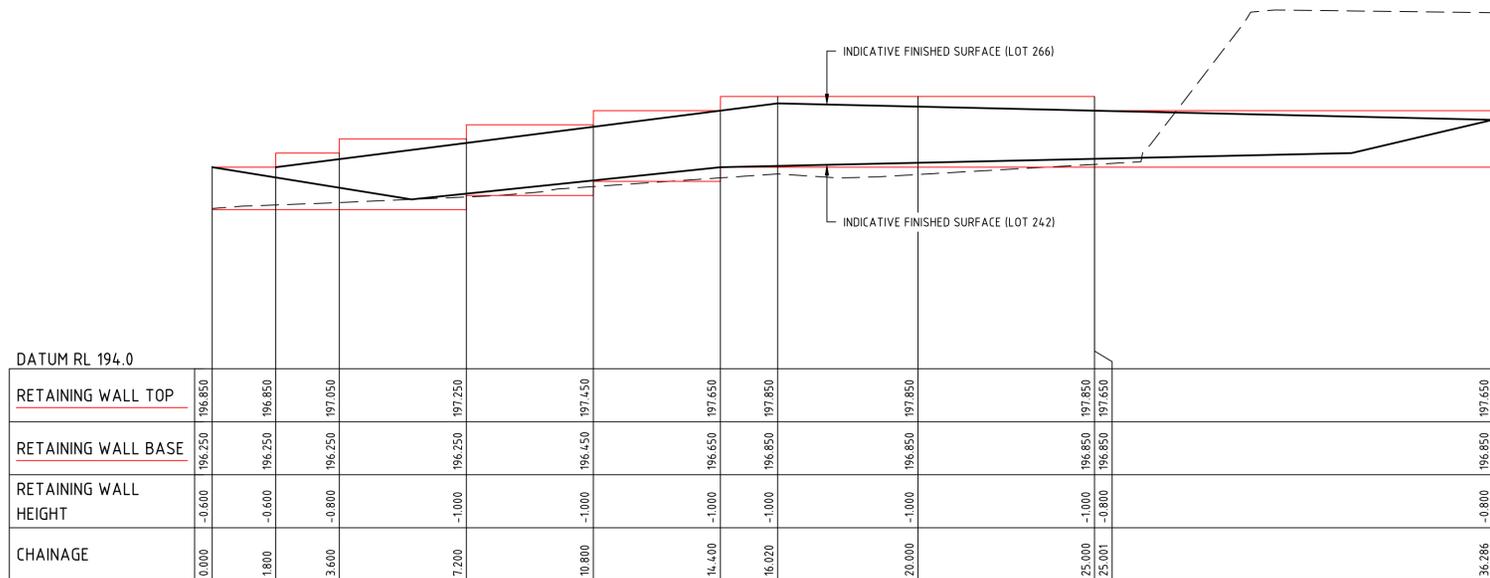
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RETAINING WALL A

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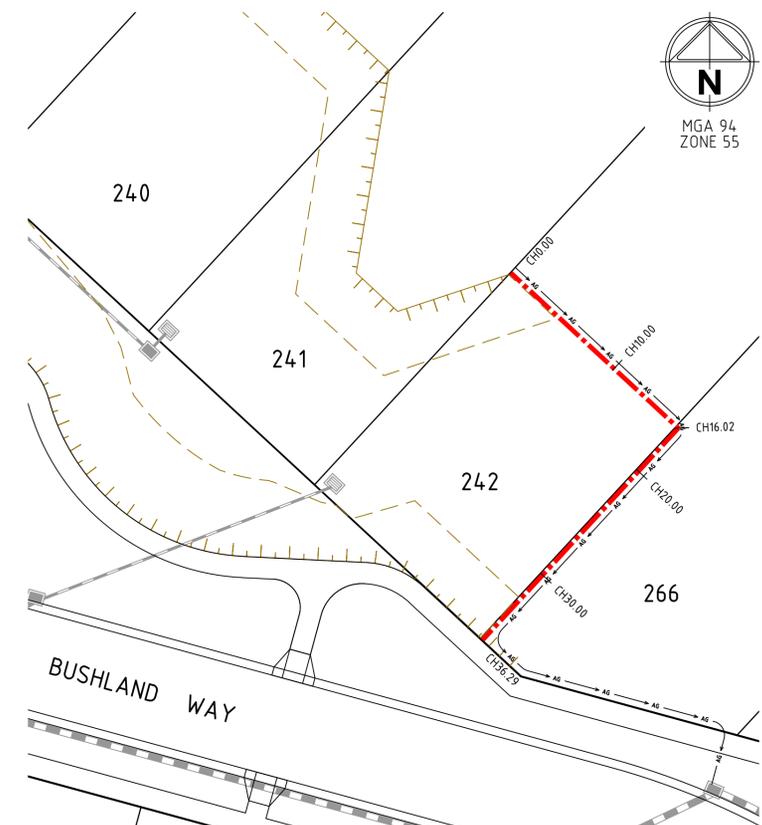
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RETAINING WALL B

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SCALE @ A1  
V 1:50  
0 0.5 1 1.5 2 2.5



RETAINING WALL LAYOUT PLAN  
RETAINING WALL B

H 1:250  
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GREATER BENDIGO CITY COUNCIL  
ENGINEERING PLANS  
APPROVED BY: Peter Brasier  
DATE: 16 December 2024

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Scale  
AS SHOWN

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**GOLDEN GROVE STAGE 7B AND 8  
BUSHLAND WAY, JACKASS FLAT  
ROAD AND DRAINAGE  
MISCELLANEOUS - SHEET 1  
CITY OF GREATER BENDIGO  
WARRINGAL VIEWS P/L**

**PRELIMINARY** Drg No 322226-000CR900 Rev A