LEGEND

GENERAL

KERB	'TYPE'
STORMWATER DRAIN PIPE & PIT	300ø
PIT NUMBER	01
TABLE DRAIN	—>—>—
SIGN POSITION AND ORIENTATION	
STREET SIGN	
PERMANENT SURVEY MARK	
TEMPORARY BENCH MARK	△TBM
SAFETY BARRIER	

SERVICES

AG DRAIN	AG
WATER MAIN (POTABLE)	W
WATER RECYCLED (NON DRINKING)	NDW
GAS MAIN	G
ELECTRICAL CABLES	E
TELSTRA CABLES	T
SEWER MAIN	S

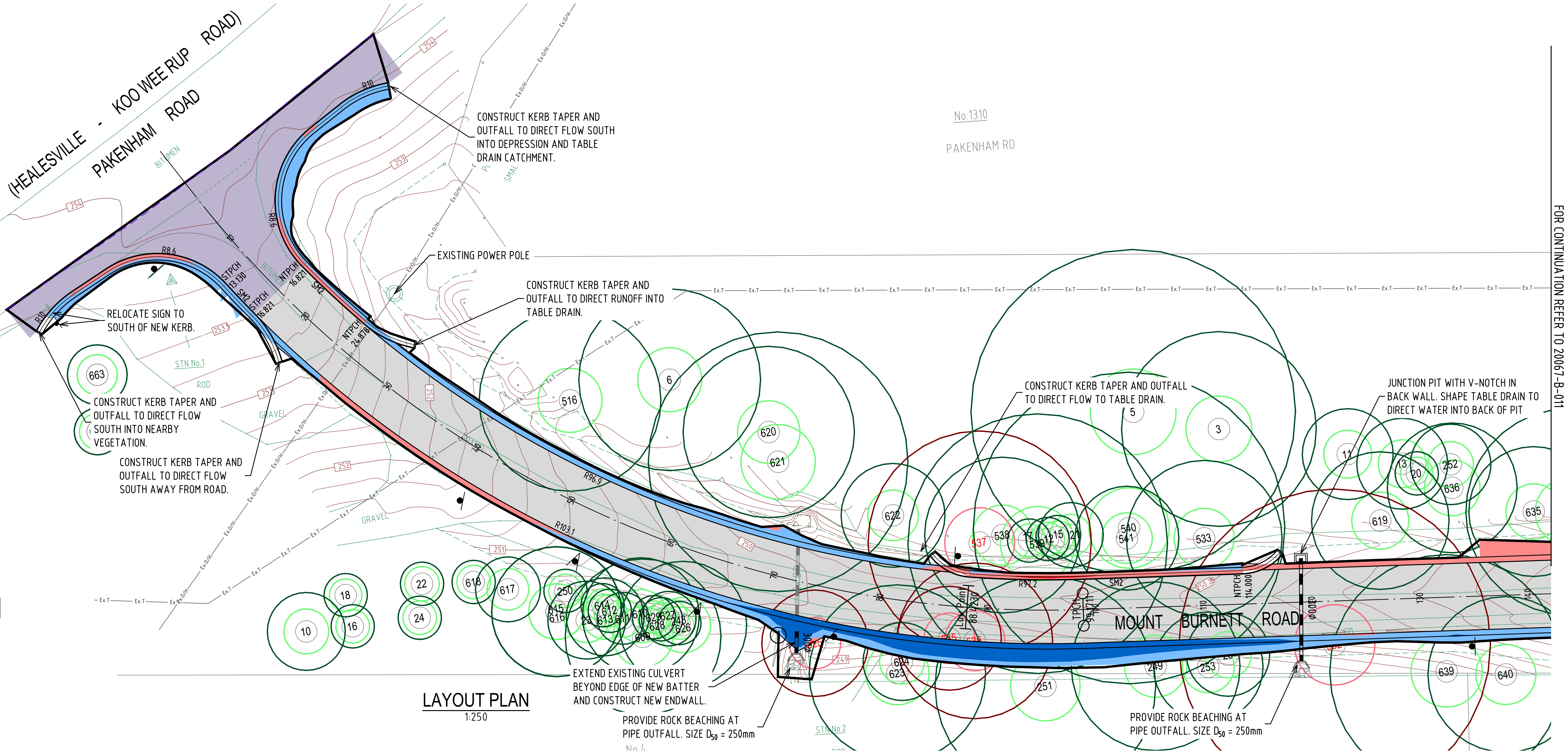
- NOTE EXISTING SERVICES ARE SHOWN GREY AND PREFIXED WITH "Ex"

MISCELLANEOUS

TREE TO BE REMOVED
(REFER TREE PLANS AND TREE TABLES FOR IDs AND DETAILS)

HATCH PATTERN

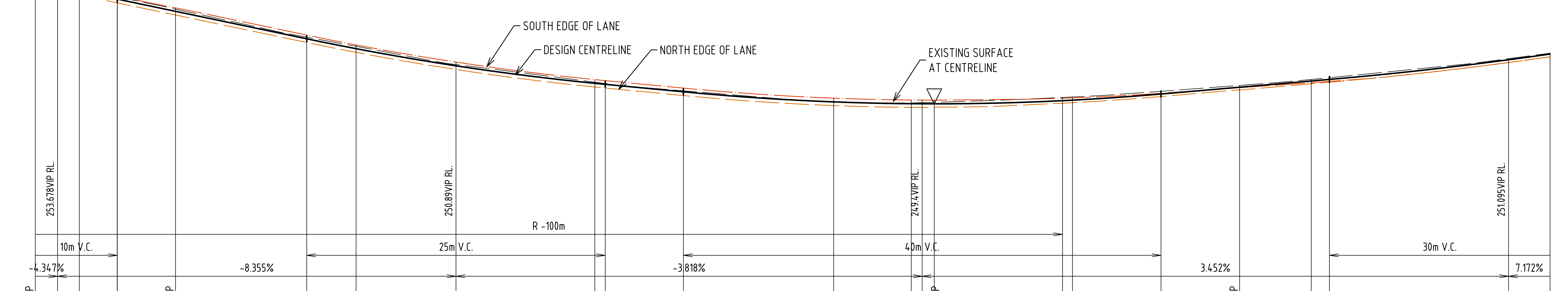
CARRIAGEWAY - BITUMEN SPRAY SEAL	▨
CARRIAGEWAY SHOULDER - BITUMEN SPRAY SEAL	▨
CARRIAGEWAY - ASPHALT LAYER	▨
EARTHWORKS CUT	🟥
EARTHWORKS FILL (SMOOTHING/RE-GRADING)	🟦
CATCH DRAIN	🟩


(HEALESVILLE - KOO WEE RUP ROAD)
PAKENHAM ROAD
CONSTRUCT KERB TAPER AND OUTFALL TO DIRECT FLOW SOUTH INTO DEPRESSION AND TABLE DRAIN CATCHMENT.
EXISTING POWER POLE
CONSTRUCT KERB TAPER AND OUTFALL TO DIRECT RUNOFF INTO TABLE DRAIN.
RELOCATE SIGN TO SOUTH OF NEW KERB.
CONSTRUCT KERB TAPER AND OUTFALL TO DIRECT FLOW SOUTH INTO NEARBY VEGETATION.
CONSTRUCT KERB TAPER AND OUTFALL TO DIRECT FLOW SOUTH AWAY FROM ROAD.
STPCH 13.130
STPCH 16.821
NTPCH 16.821
NTPCH 24.878
R10
R8.6
R96.9
R103.1
SM2
STN No.1
GRAVEL
BITUMEN
No.1310
PAKENHAM RD
CONSTRUCT KERB TAPER AND OUTFALL TO DIRECT FLOW TO TABLE DRAIN.
JUNCTION PIT WITH V-NOTCH IN BACK WALL. SHAPE TABLE DRAIN TO DIRECT WATER INTO BACK OF PIT
MOUNT BURNETT ROAD
EXTEND EXISTING CULVERT BEYOND EDGE OF NEW BATTER AND CONSTRUCT NEW ENDWALL.
PROVIDE ROCK BEACHING AT PIPE OUTFALL. SIZE D_{50} = 250mm
PROVIDE ROCK BEACHING AT PIPE OUTFALL. SIZE D_{50} = 250mm
STN No.2
FOR CONTINUATION REFER TO 20067-B-011

LAYOUT PLAN

1:250

PAKENHAM ROAD
REFER 20067-B-150 FOR INTERSECTION DETAILS



HORIZONTAL GEOMETRY: R -100m

VERTICAL GEOMTERY: 10m V.C.; 25m V.C.; 40m V.C.; 30m V.C.

DESIGN GRADELINE: -4.347%; -8.355%; -3.818%; 3.452%; 7.172%

Datum RL 243.000

CHAINAGE		DESIGN LINE LEVEL	DESIGN NORTH LIP OF KERB LEVEL	DESIGN SOUTH LIP OF KERB LEVEL	EXISTING SURFACE LEVEL AT DESIGN LINE
13.130	STP	253.740		253.802	253.777
15.000		253.628		253.697	253.676
16.821	TP	253.506	253.382	253.584	253.555
20.000		253.261	253.137	253.353	253.327
20.000		253.261	253.137	253.353	253.327
24.878	NTP	252.853	252.729	252.967	252.923
35.869		251.935	251.811	252.059	251.991
40.000		251.605	251.481	251.729	251.684
48.369		251.032	250.909	251.157	251.076
60.000		250.447	250.323	250.571	250.485
60.869		250.413	250.289	250.537	250.439
67.416		250.163	250.039	250.287	250.198
80.000		249.827	249.703	249.951	249.832
86.500		249.766	249.642	249.890	249.79
87.416		249.763	249.640	249.888	249.799
88.423	NTP	249.762	249.638	249.886	249.811
99.171	TP	249.867	249.783	249.948	249.976
100.000		249.884	249.800	249.959	249.992
107.416		250.090	250.006	250.116	250.181
114.000	NTP	250.317	250.224	250.300	250.378
120.000		250.524	250.431	250.468	250.577
121.524		250.577	250.484	250.511	250.634
136.524		251.234	251.142	251.142	251.272
140.000		251.426	251.333	251.333	251.454

SUPERELEVATION: RHS 4%; LHS -4%; LHS -3%; BOTH-3%

16.821; 27.247; 92.571; 97.285; 111.428; 125.571; 140.000

LONGITUDINAL SECTION

H 1:250 V 1:100

DRAFT

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DIAL 1100 BEFORE YOU DIG

PRELIMINARY
NOT FOR CONSTRUCTION

REV	DESCRIPTION	CHECKED	APPROVED	DRAFTED	DATE
5	MINOR AMENDMENTS TO INCLUDE SAFETY BARRIER	JW	CS	TL	29.01.2021
4	DETAILED DESIGN SUBMISSION	JW	CS	MD / TL	02.12.2020
3	COUNCIL COMMENTS	JW	CS	TL	03.11.2020
2	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	07.10.2020
1	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	16.09.2020
0	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	-	-	-	-

N

H 0 5 10
V 0 1 2 3 4 5m
SCALE H 1:500 V 1:200 @ A3
H 1:250 V 1:100 @ A1

Cardinia

PGA REF: E20067-B
DESIGN BY: T LOGAN
SURVEY BY: PGA
APPROVED FOR CONSTRUCTION BY:
APPROVED DATE:

PGA
Paroissien Grant & Associates Pty. Ltd.
Consulting Engineers & Surveyors
ABN 53 123 888 326
Suite 10, 131 Bulleen Road, Balwyn North, Victoria 3104
Phone: (03) 9859 6400 Facsimile: (03) 9859 5022
Email: paro@pga.net.au Web: www.pga.net.au

bsi. ISO 9001 Quality Management FS521077

DESIGN PROJECT - PACKAGE 1
MOUNT BURNETT ROAD
CARDINIA SHIRE COUNCIL
LAYOUT PLAN & LONGITUDINAL SECTION -
SHEET 1 OF 11
CARDINIA SHIRE COUNCIL

SCALE @ A1: AS SHOWN
DRAWING No.: 20067-B-010
REV: 5

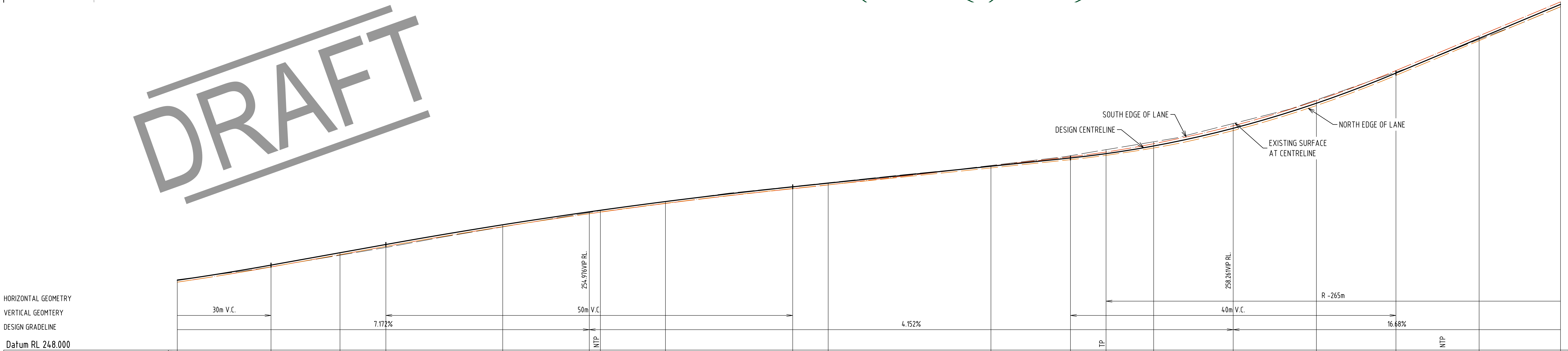
FILE: E:\CARDINIA SHIRE\E20067 - RD PACK 1 - MORRISON RD AND MT BURNETT RD\1.B-MOUNT BURNETT\1.DRAWINGS\2.2D CAD (DWG)\3.CURRENT DWG\20067-B-010.DWG PLOT INFO: THOMAS LOGAN @ 12:16 PM ON December 15, 2021

FOR CONTINUATION REFER TO 20067-B-010

JUNCTION PIT WITH V-NOTCH IN BACK WALL. SHAPE TABLE DRAIN TO DIRECT WATER INTO BACK OF PIT
FCR RESIDENTIAL
254
3.75
NTPCH 192.000
MOUNT BURNETT ROAD
GRAVEL
SM2
TPCH 254.147
R262.2
R268.1
4.70
0.5m WIDE SHOULDER
CONSTRUCT SMALL CHANNEL (APPROX. 75mm DEPTH) BEHIND SHOULDER TO CAPTURE LOW FLOWS OFF ROAD.
No.16
EXISTING POWER POLE
FCR RESIDENTIAL
LIGHTLY RESHEET EXISTING GRAVEL AREA. GRADE EVENLY FROM BACK OF SMALL CHANNEL TO EXISTING EDGE OF GRAVEL AREA. RESHAPE AREAS AROUND PROPERTY ENTRANCES IF NECESSARY TO PREVENT WATER ENTERING.
SHED
LOCATE EXISTING DRAINAGE PIPE AND MAINTAIN DURING CONSTRUCTION.
INSTALL INGAL EZY-GUARD SMART SAFETY BARRIER BETWEEN CH228 AND CH326. REFER DETAILS DRAWING 20067-B-250.
CONSTRUCT 0.8m BERM AT BACK OF SHOULDER TO ALLOW FOR CONSTRUCTION OF SAFETY BARRIER.
CONSTRUCT KERB TAPER AND OUTFALL TO DIRECT FLOW TO TABLE DRAIN.
130
140
150
160
170
180
190
200
210
220
230
240
250
260
270
280
290
300
310
534
518
558
596
67
5
6

FOR CONTINUATION REFER TO 20067-B-012

DRAFT



Datum RL 248.000

DESIGN LINE LEVEL	251.426	252.171	252.779	253.183	254.151	254.787	254.864	255.291	256.014	256.195
DESIGN NORTH LIP OF KERB LEVEL	251.333	252.078	252.686	253.090	254.058	254.694	254.780	255.207	255.930	256.111
DESIGN SOUTH LIP OF KERB LEVEL	251.333	252.078	252.686	253.090	254.058	254.694	254.771	255.198	255.921	256.107
EXISTING SURFACE LEVEL AT DESIGN LINE	251.454	252.088	252.658	253.037	254.045	254.751	254.841	255.288	256.032	256.216
CHAINAGE	140.000	151.524	160.000	165.638	180.000	190.638	192.000	200.000	215.638	220.000
SUPERELEVATION	BOTH-3%									

DESIGN LINE LEVEL	257.025	257.431	257.642	258.019	258.888	260.116	261.597	263.303	264.971
DESIGN NORTH LIP OF KERB LEVEL	256.941	257.347	257.558	257.920	258.776	260.004	261.485	263.191	264.859
DESIGN SOUTH LIP OF KERB LEVEL	257.036	257.490	257.723	258.129	259.012	260.240	261.721	263.427	265.095
EXISTING SURFACE LEVEL AT DESIGN LINE	257.063	257.541	257.838	258.226	259.121	260.279	261.646	263.253	264.85
CHAINAGE	240.000	249.776	254.147	260.000	269.776	280.000	289.776	300.000	310.000
SUPERELEVATION	LHS -3%						RHS 4% LHS -4%		

140.000
218.947
237.804
256.661
262.947
310.000

LONGITUDINAL SECTION
H 1:250 V 1:100

PRELIMINARY
NOT FOR CONSTRUCTION

REV	DESCRIPTION	CHECKED	APPROVED	DRAFTED	DATE
5	MINOR AMENDMENTS TO INCLUDE SAFETY BARRIER	JW	CS	TL	29.01.2021
4	DETAILED DESIGN SUBMISSION	JW	CS	MD / TL	02.12.2020
3	COUNCIL COMMENTS	JW	CS	TL	03.11.2020
2	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	07.10.2020
1	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	16.09.2020
0	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	-	-	-	-

N

H 0 5 10
V 0 1 2 3 4 5m
SCALE H 1:500 V 1:200 @ A3
H 1:250 V 1:100 @ A1

Cardinia

PGA REF: E20067-B
DESIGN BY: T LOGAN
SURVEY BY: PGA
APPROVED FOR CONSTRUCTION BY:
APPROVED DATE:

PGA
Paroissien Grant & Associates Pty. Ltd.
Consulting Engineers & Surveyors
ABN 53 123 888 326
Suite 10, 131 Bulleen Road, Balwyn North, Victoria 3104
Phone: (03) 9859 6400 Facsimile: (03) 9859 5022
Email: paro@pga.net.au Web: www.pga.net.au

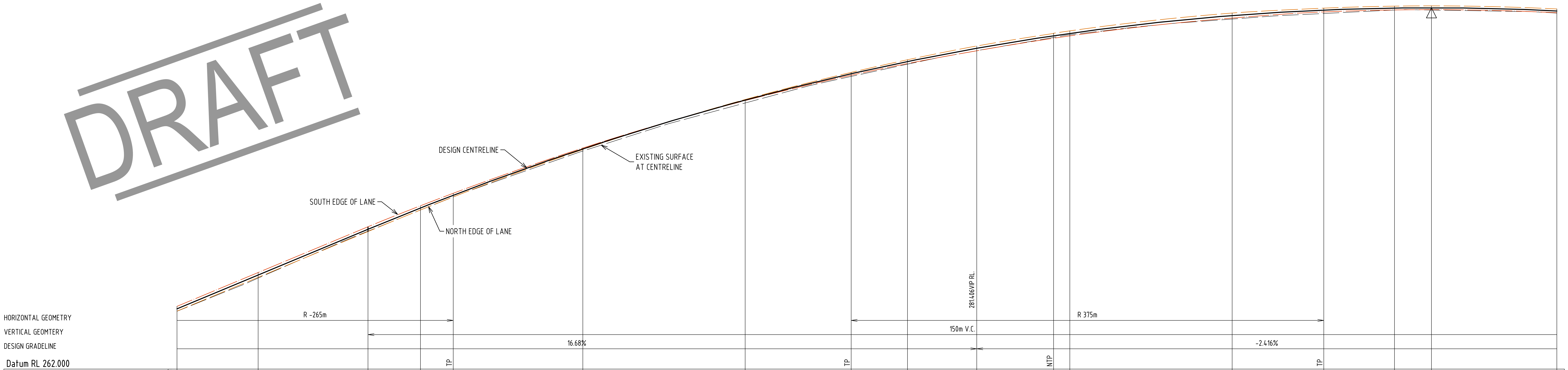
bsi. ISO 9001 Quality Management FS521077

DESIGN PROJECT - PACKAGE 1
MOUNT BURNETT ROAD
CARDINIA SHIRE COUNCIL
LAYOUT PLAN & LONGITUDINAL SECTION -
SHEET 2 OF 11
CARDINIA SHIRE COUNCIL

SCALE @ A1: AS SHOWN
DRAWING No.: 20067-B-011
REV: 5

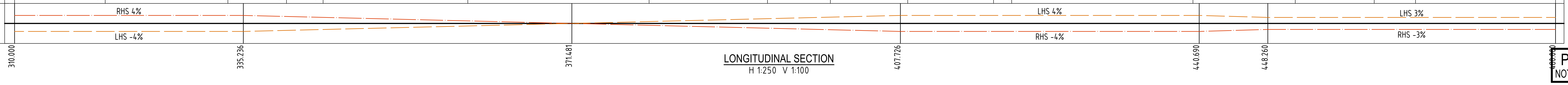
FILE: E:\CARDINIA SHIRE\E20067 - RD PACK 1 - MORRISON RD AND MT BURNETT RD\1.B-MOUNT BURNETT\1.DRAWINGS\2.2D CAD (DWG)\3.CURRENT DWG\20067-B-011.DWG PLOT INFO: THOMAS LOGAN @ 12:16 PM ON December 15, 2021

DRAFT



					TP			TP			NTP			TP			
DESIGN LINE LEVEL	264.971	266.639	268.896	269.948	270.578	272.865	275.273	276.570	277.171	277.826	278.444	278.560	279.440	279.712	279.811	279.824	279.672
DESIGN NORTH LIP OF KERB LEVEL	264.859	266.527	268.784	269.851	270.493	272.830	275.299	276.637	277.259	277.937	278.568	278.684	279.564	279.805	279.904	279.917	279.765
DESIGN SOUTH LIP OF KERB LEVEL	265.095	266.763	269.020	270.056	270.672	272.904	275.243	276.496	277.073	277.701	278.320	278.436	279.316	279.619	279.718	279.731	279.579
EXISTING SURFACE LEVEL AT DESIGN LINE	264.85	266.489	268.807	269.847	270.487	272.756	275.126	276.437	277.041	277.708	278.363	278.492	279.267	279.541	279.712	279.713	279.561
CHAINAGE	310.000	320.000	333.533	340.000	344.036	360.000	380.000	393.062	400.000	408.533	418.000	420.000	440.000	451.290	460.000	464.556	480.000

SUPERELEVATION



LONGITUDINAL SECTION
H 1:250 V 1:100

PRELIMINARY
NOT FOR CONSTRUCTION

REV	DESCRIPTION	CHECKED	APPROVED	DRAFTED	DATE
5	MINOR AMENDMENTS TO INCLUDE SAFETY BARRIER	JW	CS	TL	29.01.2021
4	DETAILED DESIGN SUBMISSION	JW	CS	MD / TL	02.12.2020
3	COUNCIL COMMENTS	JW	CS	TL	03.11.2020
2	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	07.10.2020
1	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	16.09.2020
0	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	-	-	-	-

N

H 0 5 10
V 0 1 2 3 4 5m
SCALE H 1:500 V 1:200 @ A3
H 1:250 V 1:100 @ A1

Cardinia

PGA REF: E20067-B
DESIGN BY: T LOGAN
SURVEY BY: PGA
APPROVED FOR CONSTRUCTION BY:
APPROVED DATE:

PGA Paroissien Grant & Associates Pty. Ltd.
Consulting Engineers & Surveyors
ABN 53 123 888 326

Suite 10, 131 Bulleen Road, Balwyn North, Victoria 3104
Phone: (03) 9859 6400 Facsimile: (03) 9859 5022
Email: paro@pga.net.au Web: www.pga.net.au

bsi. ISO 9001 Quality Management FS521077

DESIGN PROJECT - PACKAGE 1
MOUNT BURNETT ROAD
CARDINIA SHIRE COUNCIL
LAYOUT PLAN & LONGITUDINAL SECTION -
SHEET 3 OF 11
CARDINIA SHIRE COUNCIL

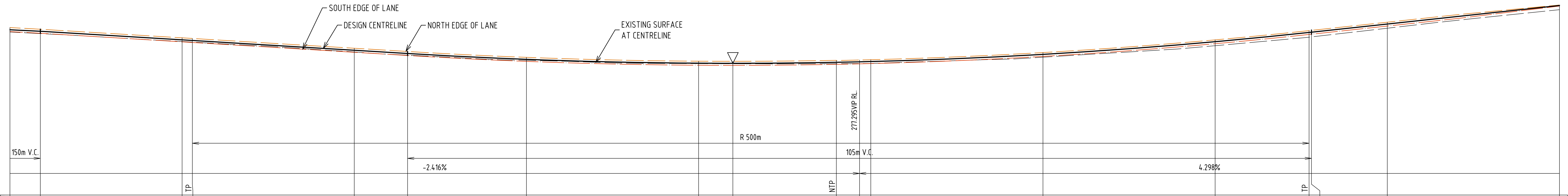
SCALE @ A1: AS SHOWN
DRAWING No.: 20067-B-012
REV: 5

FILE: E:\CARDINIA SHIRE\E20067 - RD PACK 1 - MORRISON RD AND MT BURNETT RD\1.B-MOUNT BURNETT\1.DRAWINGS\2.2D CAD (DWG)\3.CURRENT DWG\20067-B-012.DWG PLOT INFO: THOMAS LOGAN @ 12:18 PM ON December 15, 2021

FOR CONTINUATION REFER TO 20067-B-012
FOR CONTINUATION REFER TO 20067-B-014
SEALED RESIDENTIAL
MAINTAIN EXISTING CULVERT
FILL AROUND EXISTING UNKNOWN PIT. DO NOT DISTURB.
FCR RESIDENTIAL
CONSTRUCT V-SHAPED GRATED PIT IN INVERT OF TABLE DRAIN.
CONSTRUCT KERB TAPER AND OUTFALL TO DIRECT FLOWS INTO TABLE DRAIN.
FCR RESIDENTIAL
4.10
4.20
4.80
3.07
2.63
3.64
150Φ
300Φ
300Φ
R503.1
R496.9
R502.8
Low Point 563.9780
MOUNT BURNETT ROAD
0.5m WIDE SHOULDER
REMOVE AND DISPOSE OFFSITE EXISTING CULVERT AND HEADWALLS
PROVIDE ROCK BEACHING AT PIPE OUTFALL. SIZE D_{50} = 250mm
DESLUDGE AND BACKFILL EXISTING CULVERT OUTFALL.
⑦
⑧
⑩
No.65
STN No.6
ROD
SMZ
TPCH 630.9106
NTPCH 576.000
TPCH 501.0190
604
605
606
607
608
42
519
520
521
522
523
524
525
526
514
515
647
95
662
648
268
489
279
278
277
276
273
282
280
520
530
540
550
560
570
580
590
600
610
620
630
640
650
660
670
Ex.T
Ex.O/H

LAYOUT PLAN
1:250

DRAFT



HORIZONTAL GEOMETRY				R 500m														
VERTICAL GEOMETRY	150m V.C.										105m V.C.							
DESIGN GRADELINE						-2.416%								4.298%				
Datum RL 272.000				TP						NTP					TP			
DESIGN LINE LEVEL	279.672	279.594	279.197	279.168	278.713	278.564	278.291	278.112	278.107	278.154	278.177	278.189	278.522	279.111	279.540	279.552	279.930	280.790
DESIGN NORTH LIP OF KERB LEVEL	279.765	279.687	279.290	279.261	278.806	278.657	278.384	278.205	278.200	278.238	278.261	278.273	278.606	279.195	279.624	279.636	280.014	280.813
DESIGN SOUTH LIP OF KERB LEVEL	279.579	279.501	279.104	279.075	278.620	278.471	278.198	278.019	278.014	278.061	278.084	278.096	278.429	279.018	279.447	279.459	279.837	280.764
EXISTING SURFACE LEVEL AT DESIGN LINE	279.561	279.487	279.12	279.094	278.636	278.49	278.248	278.093	278.086	278.091	278.096	278.104	278.391	278.924	279.321	279.333	279.736	280.596
CHAINAGE	480.000	483.533	500.000	501.191	520.000	526.193	540.000	560.000	563.978	576.000	578.693	580.000	600.000	620.000	630.911	631.193	640.000	660.000

SUPERELEVATION
LHS 3%
RHS -3%
480.000
648.251

LONGITUDINAL SECTION
H 1:250 V 1:100

PRELIMINARY
NOT FOR CONSTRUCTION

REV	DESCRIPTION	CHECKED	APPROVED	DRAFTED	DATE
4	DETAILED DESIGN SUBMISSION	JW	CS	MD / TL	02.12.2020
3	COUNCIL COMMENTS	JW	CS	TL	03.11.2020
2	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	07.10.2020
1	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	16.09.2020
0	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	-	-	-	-

H 0 5 10
V 0 1 2 3 4 5m
SCALE H 1:500 V 1:200 @ A3
H 1:250 V 1:100 @ A1

Cardinia

PGA REF: E20067-B
DESIGN BY: T LOGAN
SURVEY BY: PGA
APPROVED FOR CONSTRUCTION BY:
APPROVED DATE:

PGA Paroissien Grant & Associates Pty. Ltd.
Consulting Engineers & Surveyors
ABN 53 123 888 326
Suite 10, 131 Bulleen Road, Balwyn North, Victoria 3104
Phone: (03) 9859 6400 Facsimile: (03) 9859 5022
Email: paro@pga.net.au Web: www.pga.net.au
bsi. ISO 9001 Quality Management FS521077

DESIGN PROJECT - PACKAGE 1
MOUNT BURNETT ROAD
CARDINIA SHIRE COUNCIL
LAYOUT PLAN & LONGITUDINAL SECTION -
SHEET 4 OF 11
CARDINIA SHIRE COUNCIL

SCALE @ A1: AS SHOWN
DRAWING No.: 20067-B-013
REV: 4

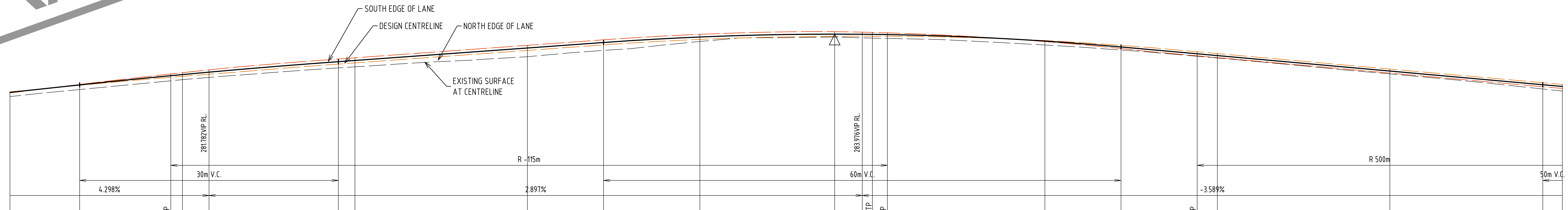
FILE: E:\CARDINIA SHIRE\E20067 - RD PACK 1 - MORRISON RD AND MT BURNETT RD\1.B-MOUNT BURNETT\1.DRAWINGS\2.2D CAD (DWG)\3.CURRENT DWG\20067-B-013.DWG PLOT INFO: THOMAS LOGAN @ 12:19 PM ON December 15, 2021

FOR CONTINUATION REFER TO 20067-B-013

FOR CONTINUATION REFER TO 20067-B-015

LAYOUT PLAN
1:250

DRAFT



HORIZONTAL GEOMETRY: R -115m; R 500m

VERTICAL GEOMTERY: 30m V.C.; 60m V.C.; 50m V.C.

DESIGN GRADELINE: 4.298%; 2.897%; -3.589%

Datum RL 275.000

			TP										NTP	TP			TP				
DESIGN LINE LEVEL	280.790	281.137	281.565	281.616	281.729	282.216	282.272	282.851	283.107	283.363	283.495	283.490	283.485	283.475	283.174	282.899	282.583	282.498	281.781	281.145	281.066
DESIGN NORTH LIP OF KERB LEVEL	280.813	281.119	281.493	281.536	281.633	282.104	282.160	282.739	282.995	283.251	283.391	283.401	283.394	283.394	283.198	282.974	282.676	282.591	281.874	281.238	281.159
DESIGN SOUTH LIP OF KERB LEVEL	280.764	281.157	281.646	281.705	281.835	282.340	282.396	282.975	283.231	283.487	283.611	283.586	283.575	283.556	283.150	282.825	282.490	282.405	281.688	281.052	280.973
EXISTING SURFACE LEVEL AT DESIGN LINE	280.596	280.921	281.329	281.38	281.486	281.929	281.977	282.448	282.742	283.156	283.356	283.321	283.31	283.297	282.99	282.757	282.466	282.388	281.648	280.949	280.851
CHAINAGE	660.000	668.083	678.651	680.000	683.083	698.083	700.000	720.000	728.827	740.000	755.627	758.827	760.000	761.740	780.000	788.827	797.657	800.000	820.000	837.729	840.000

SUPERELEVATION: RHS 4%; LHS -4%; LHS 3%; RHS -3%

664.537 686.251 754.140 775.854 792.140

LONGITUDINAL SECTION
H 1:250 V 1:100

PRELIMINARY
NOT FOR CONSTRUCTION

REV	DESCRIPTION	CHECKED	APPROVED	DRAFTED	DATE
4	DETAILED DESIGN SUBMISSION	JW	CS	MD / TL	02.12.2020
3	COUNCIL COMMENTS	JW	CS	TL	03.11.2020
2	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	07.10.2020
1	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	16.09.2020
0	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	-	-	-	-

N

H 0 5 10
V 0 1 2 3 4 5m
SCALE H 1:500 V 1:200 @ A3
H 1:250 V 1:100 @ A1

Cardinia

PGA REF: E20067-B
DESIGN BY: T LOGAN
SURVEY BY: PGA
APPROVED FOR CONSTRUCTION BY:
APPROVED DATE:

PGA
Paroissien Grant & Associates Pty. Ltd.
Consulting Engineers & Surveyors
ABN 53 123 888 326
Suite 10, 131 Bulleen Road, Balwyn North, Victoria 3104
Phone: (03) 9859 6400 Facsimile: (03) 9859 5022
Email: paro@pga.net.au Web: www.pga.net.au

bsi. ISO 9001 Quality Management FS521077

DESIGN PROJECT - PACKAGE 1
MOUNT BURNETT ROAD
CARDINIA SHIRE COUNCIL
LAYOUT PLAN & LONGITUDINAL SECTION - SHEET 5 OF 11
CARDINIA SHIRE COUNCIL

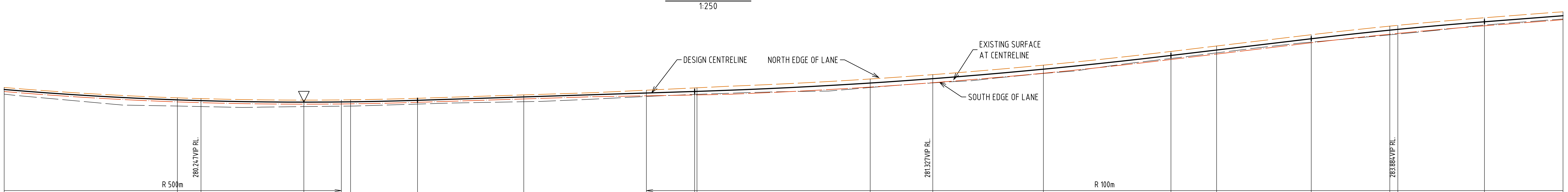
SCALE @ A1: AS SHOWN
DRAWING No.: 20067-B-014
REV: 4

FOR CONTINUATION REFER TO 20067-B-014

MAINTAIN EXISTING CULVERT
9.50
SEALED RESIDENTIAL
MINOR EARTHWORKS SHAPING IN THIS AREA TO DIRECT FLOWS APPROACHING DRIVEWAY INTO DRIVEWAY CULVERT
STN No.10
R103.1
R96.9
MOUNT BURNETT ROAD
TPCH 914.1564
TPCH 878.9324
Low Point 874.6046
300Ø
REMOVE AND DISPOSE OFFSITE EXISTING CULVERT
REMOVE AND DISPOSE OFFSITE EXISTING CULVERT
0.5m WIDE SHOULDER
PROVIDE ROCK BEACHING AT PIPE OUTFALL. SIZE D50 = 250mm
WIDEN OUT TABLE DRAIN AND PROVIDE ROCK BEACHING TO REDUCE CONCENTRATION OF WATER FLOW AT OUTFALL. SIZE D50 = 250mm
150Ø PVC PIPE UNDER NEW FCR DRIVEWAY. MIN COVER TO BE 150mm
EXISTING POWER POLE
4.60
150Ø
FCR RESIDENTIAL
FCR RESIDENTIAL
3.07
5.00
GRAVEL
MATCH
No.101
R103.1
R96.9
830
840
850
860
870
880
890
900
910
920
930
940
950
960
970
980
990
1000
1010
1020
1030
TPCH 1020.952
DRAFT
11
12

FOR CONTINUATION REFER TO 20067-B-016

LAYOUT PLAN
1:250



HORIZONTAL GEOMETRY: R 500m; R 100m

VERTICAL GEOMTERY: 50m V.C.; 55m V.C.; 20m V.C.

DESIGN GRADELINE: -3.589%; 1.277%; 4.763%; 3.076%

Datum RL 274.000

CHAINAGE	DESIGN LINE LEVEL	DESIGN NORTH LIP OF KERB LEVEL	DESIGN SOUTH LIP OF KERB LEVEL	EXISTING SURFACE LEVEL AT DESIGN LINE	
840.000	281.066	281.159	280.973	280.851	
860.000	280.587	280.680	280.494	280.303	
862.729	280.552	280.645	280.459	280.281	280.247VIP RL.
874.605	280.483	280.576	280.390	280.278	
878.932	280.492	280.585	280.399	280.297	TP
880.000	280.497	280.590	280.404	280.301	
887.729	280.567	280.660	280.474	280.393	
900.000	280.723	280.816	280.630	280.502	
914.156	280.904	281.034	280.774	280.744	TP
919.728	280.975	281.139	280.812	280.84	
920.000	280.979	281.144	280.814	280.844	
940.000	281.365	281.551	281.179	281.16	
947.228	281.566	281.753	281.381	281.374	281.327VIP RL.
960.000	282.004	282.190	281.818	281.807	
974.728	282.636	282.822	282.450	282.5	
980.000	282.887	283.073	282.701	282.758	
990.927	283.408	283.594	283.222	283.252	
1000.000	283.805	283.991	283.619	283.589	
1000.927	283.842	284.028	283.656	283.627	283.884VIP RL.
1010.927	284.192	284.378	284.006	284.041	
1020.000	284.471	284.651	284.291	284.32	

SUPERELEVATION: LHS 3% / RHS -3%; LHS 6% / RHS -6%

840.000
907.886
923.556

LONGITUDINAL SECTION
H 1:250 V 1:100

PRELIMINARY
NOT FOR CONSTRUCTION

REV	DESCRIPTION	CHECKED	APPROVED	DRAFTED	DATE
4	DETAILED DESIGN SUBMISSION	JW	CS	MD / TL	02.12.2020
3	COUNCIL COMMENTS	JW	CS	TL	03.11.2020
2	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	07.10.2020
1	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	16.09.2020
0	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	-	-	-	-

N

H 0 5 10
V 0 1 2 3 4 5m
SCALE H 1:500 V 1:200 @ A3
H 1:250 V 1:100 @ A1

Cardinia

PGA REF: E20067-B
DESIGN BY: T LOGAN
SURVEY BY: PGA
APPROVED FOR CONSTRUCTION BY:
APPROVED DATE:

Paroissien Grant & Associates Pty. Ltd.
Consulting Engineers & Surveyors
ABN 53 123 888 326
Suite 10, 131 Bulleen Road, Balwyn North, Victoria 3104
Phone: (03) 9859 6400 Facsimile: (03) 9859 5022
Email: paro@pga.net.au Web: www.pga.net.au

bsi. ISO 9001 Quality Management FS521077

DESIGN PROJECT - PACKAGE 1
MOUNT BURNETT ROAD
CARDINIA SHIRE COUNCIL
LAYOUT PLAN & LONGITUDINAL SECTION -
SHEET 6 OF 11
CARDINIA SHIRE COUNCIL

SCALE @ A1: AS SHOWN
DRAWING No.: 20067-B-015
REV: 4

FILE: E:\CARDINIA SHIRE\E20067 - RD PACK 1 - MORRISON RD AND MT BURNETT RD\1.B-MOUNT BURNETT\1.DRAWINGS\2.2D CAD (DWG)\3.CURRENT DWG\20067-B-015.DWG PLOT INFO: THOMAS LOGAN @ 12:25 PM ON December 15, 2021

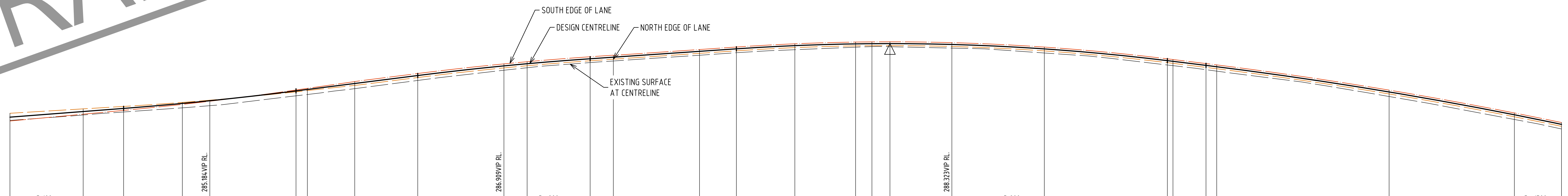
FOR CONTINUATION REFER TO 20067-B-015

FOR CONTINUATION REFER TO 20067-B-017

LAYOUT PLAN

1:250

DRAFT



HORIZONTAL GEOMETRY: R 100m; R -200m; R 800m; R -1500m

VERTICAL GEOMETRY: 20m V.C.; 20m V.C.; 50m V.C.; 90m V.C.

DESIGN GRADELINE: 3.076%; 5.056%; 2.72%; -4.914%

Datum RL 278.000		TP					TP						STP	
DESIGN LINE LEVEL	284.471	284.732	284.876	285.109	285.234	285.690	285.756	286.034	286.404	286.851	286.951	287.181	287.254	287.526
DESIGN NORTH LIP OF KERB LEVEL	284.651	284.855	284.968	285.155	285.258	285.647	285.705	285.946	286.311	286.757	286.858	287.088	287.161	287.433
DESIGN SOUTH LIP OF KERB LEVEL	284.291	284.609	284.785	285.063	285.210	285.732	285.808	286.122	286.497	286.943	287.044	287.274	287.338	287.610
EXISTING SURFACE LEVEL AT DESIGN LINE	284.32	284.571	284.71	284.903	285.003	285.461	285.523	285.794	286.173	286.648	286.765	287.004	287.077	287.344
CHAINAGE	1020.000	1028.495	1033.187	1040.000	1043.187	1053.187	1054.504	1060.000	1067.310	1077.310	1080.000	1087.310	1090.000	1100.000

Datum RL 278.000		TP	TP						TP				TP	
DESIGN LINE LEVEL	287.643	287.792	287.873	287.882	287.885	287.846	287.640	287.094	287.062	286.874	286.812	285.642	284.582	284.137
DESIGN NORTH LIP OF KERB LEVEL	287.550	287.699	287.780	287.789	287.792	287.752	287.547	287.001	286.969	286.781	286.719	285.549	284.489	284.044
DESIGN SOUTH LIP OF KERB LEVEL	287.727	287.876	287.957	287.966	287.969	287.929	287.724	287.178	287.146	286.958	286.896	285.726	284.666	284.221
EXISTING SURFACE LEVEL AT DESIGN LINE	287.459	287.601	287.719	287.745	287.739	287.677	287.449	286.892	286.862	286.674	286.607	285.429	284.363	283.921
CHAINAGE	1104.276	1111.058	1118.107	1120.000	1122.091	1129.276	1140.000	1154.276	1154.922	1158.756	1160.000	1180.000	1194.531	1200.000

SUPERELEVATION: RHS 3%; LHS -3%

1046.834

1060.704

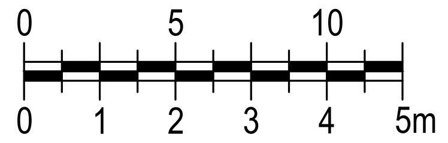
LONGITUDINAL SECTION

H 1:250 V 1:100

PRELIMINARY
NOT FOR CONSTRUCTION

REV	DESCRIPTION	CHECKED	APPROVED	DRAFTED	DATE
4	DETAILED DESIGN SUBMISSION	JW	CS	MD / TL	02.12.2020
3	COUNCIL COMMENTS	JW	CS	TL	03.11.2020
2	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	07.10.2020
1	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	16.09.2020
0	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	-	-	-	-

N



SCALE H 1:500 V 1:200 @ A3
H 1:250 V 1:100 @ A1

Cardinia

PGA REF: E20067-B
DESIGN BY: T LOGAN
SURVEY BY: PGA
APPROVED FOR CONSTRUCTION BY:
APPROVED DATE:

PGA
Paroissien Grant & Associates Pty. Ltd.
Consulting Engineers & Surveyors
ABN 53 123 888 326
Suite 10, 131 Bulleen Road, Balwyn North, Victoria 3104
Phone: (03) 9859 6400 Facsimile: (03) 9859 5022
Email: paro@pga.net.au Web: www.pga.net.au

bsi. ISO 9001 Quality Management FS521077

DESIGN PROJECT - PACKAGE 1
MOUNT BURNETT ROAD
CARDINIA SHIRE COUNCIL
LAYOUT PLAN & LONGITUDINAL SECTION -
SHEET 7 OF 11
CARDINIA SHIRE COUNCIL

SCALE @ A1: AS SHOWN
DRAWING No.: 20067-B-016
REV: 4

DRAFT

284.663VIP RL.
276.507VIP RL.
265.055VIP RL.

HORIZONTAL GEOMETRY: R -1500m; R 400m

VERTICAL GEOMTERY: 90m V.C.; 40m V.C.; 80m V.C.

DESIGN GRADELINE: -4.914%; -12.429%; -10.922%; -5.758%

TP
TP

Datum RL 261.000

DESIGN LINE LEVEL	284.137	283.817	282.298	280.126	279.070	278.996	278.993	277.693	276.583	275.363	274.323	274.089	273.162	270.977	269.424	268.804	266.823	265.572	265.100
DESIGN NORTH LIP OF KERB LEVEL	284.044	283.724	282.205	280.048	279.022	278.951	278.948	277.685	276.608	275.425	274.418	274.191	273.286	271.101	269.548	268.928	266.947	265.667	265.172
DESIGN SOUTH LIP OF KERB LEVEL	284.221	283.901	282.382	280.196	279.112	279.037	279.034	277.700	276.560	275.307	274.237	273.996	273.050	270.865	269.312	268.692	266.711	265.486	265.035
EXISTING SURFACE LEVEL AT DESIGN LINE	283.921	283.593	282.079	279.904	278.839	278.768	278.764	277.524	276.449	275.246	274.155	273.902	272.927	270.734	269.221	268.646	266.744	265.514	265.057
CHAINAGE	1200.000	1203.756	1220.000	1240.000	1248.756	1249.344	1249.371	1260.000	1269.371	1280.000	1289.371	1291.513	1300.000	1320.000	1334.221	1340.000	1360.000	1374.221	1380.000

SUPERELEVATION
RHS 3%
LHS -3%
LHS 4%
RHS -4%

1200.000
1235.713
1262.285
1297.713
1367.025

LONGITUDINAL SECTION
H 1:250 V 1:100

PRELIMINARY
NOT FOR CONSTRUCTION

REV	DESCRIPTION	CHECKED	APPROVED	DRAFTED	DATE
4	DETAILED DESIGN SUBMISSION	JW	CS	MD / TL	02.12.2020
3	COUNCIL COMMENTS	JW	CS	TL	03.11.2020
2	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	07.10.2020
1	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	16.09.2020
0	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	-	-	-	-

N

H 0 5 10
V 0 1 2 3 4 5m
SCALE H 1:500 V 1:200 @ A3
H 1:250 V 1:100 @ A1

Cardinia

PGA REF: E20067-B
DESIGN BY: T LOGAN
SURVEY BY: PGA
APPROVED FOR CONSTRUCTION BY:
APPROVED DATE:

PGA
Paroissien Grant & Associates Pty. Ltd.
Consulting Engineers & Surveyors
ABN 53 123 888 326
Suite 10, 131 Bulleen Road, Balwyn North, Victoria 3104
Phone: (03) 9859 6400 Facsimile: (03) 9859 5022
Email: paro@pga.net.au Web: www.pga.net.au

bsi. ISO 9001 Quality Management FS521077

DESIGN PROJECT - PACKAGE 1
MOUNT BURNETT ROAD
CARDINIA SHIRE COUNCIL
LAYOUT PLAN & LONGITUDINAL SECTION -
SHEET 8 OF 11
CARDINIA SHIRE COUNCIL

SCALE @ A1: AS SHOWN
DRAWING No.: 20067-B-017
REV: 4

FILE: E:\CARDINIA SHIRE\E20067 - RD PACK 1 - MORRISON RD AND MT BURNETT RD\1.B-MOUNT BURNETT\1.DRAWINGS\2.2D CAD (DWG)\3.CURRENT DWG\20067-B-017.DWG PLOT INFO: THOMAS LOGAN @ 12:28 PM ON December 15, 2021

FOR CONTINUATION REFER TO 20067-B-017

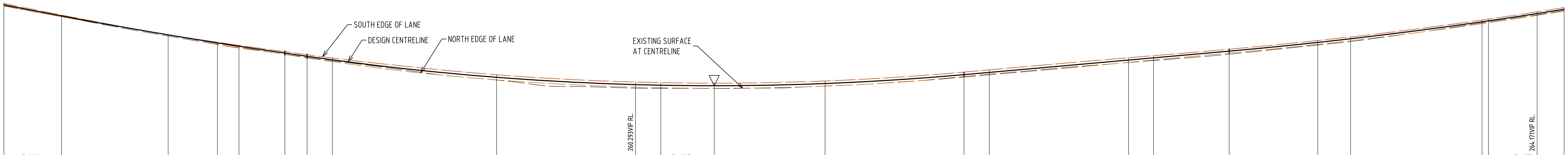
FCR INDUSTRIAL
18.50
FCR INDUSTRIAL
6.60
FCR INDUSTRIAL
8.00
3.42
MOUNT BURNETT ROAD
CONSTRUCT GRATED PIT AT BACK OF SHOULDER
R201.9
R208.1
450Ø
Low Point 1466.5058
FCR RURAL
4.00
ENSURE KERB TAPER AND OUTFALL DIRECTS WATER INTO VEGETATION AND AWAY FROM THE ROAD.
REMOVE AND DISPOSE OFFSITE EXISTING DRAINAGE PIT AND CROSSING.
PROVIDE ROCK BEACHING AT PIPE OUTFALL. SIZE D_{50} = 250mm
EXCAVATE EARTH DOWNSTREAM OF CULVERT OUTLET TO ENSURE A FREE DRAINING OUTFALL.
ENSURE KERB TAPER AND OUTFALL DIRECTS WATER INTO VEGETATION AND AWAY FROM THE ROAD. EXTENT AND PLACEMENT OF ROCK BEACHING TO BE CONFIRMED WITH ARBORIST ONSITE
0.5m WIDE SHOULDER
STPCH 1406.000
TPCH 1408.6283
TPCH 1516.9599
STPCH 1544.000
TPCH 1560.7806

FOR CONTINUATION REFER TO 20067-B-019

DRAFT

LAYOUT PLAN

1:250



HORIZONTAL GEOMETRY: R 400m; R -205m; R -250m
VERTICAL GEOMTERY: 80m V.C.; 80m V.C.; 75m V.C.
DESIGN GRADELINE: -5.758%; 3.532%; 8.833%

Datum RL 255.000		TP		STP	TP							
DESIGN LINE LEVEL	265.100	264.557	263.636	263.247	263.084	262.752	262.596	262.425	261.577	261.222	261.193	261.169
DESIGN NORTH LIP OF KERB LEVEL	265.172	264.600	263.627	263.214	263.040	262.686	262.519	262.335	261.453	261.099	261.069	261.045
DESIGN SOUTH LIP OF KERB LEVEL	265.035	264.517	263.644	263.280	263.127	262.818	262.673	262.514	261.701	261.347	261.317	261.293
EX SURFACE LEVEL AT DESIGN LINE	265.057	264.517	263.576	263.167	263.002	262.697	262.546	262.376	261.444	261.066	261.045	261.04
CHAINAGE	1380.000	1387.025	1400.000	1406.000	1408.628	1414.221	1416.921	1420.000	1440.000	1456.921	1460.000	1466.506

Datum RL 255.000				TP				STP		TP		
DESIGN LINE LEVEL	261.275	261.706	261.815	262.414	262.521	262.846	263.269	263.446	264.269	264.314	264.668	264.875
DESIGN NORTH LIP OF KERB LEVEL	261.151	261.582	261.691	262.302	262.416	262.753	263.176	263.353	264.176	264.221	264.575	264.782
DESIGN SOUTH LIP OF KERB LEVEL	261.399	261.830	261.939	262.525	262.626	262.939	263.362	263.530	264.353	264.398	264.752	264.959
EX SURFACE LEVEL AT DESIGN LINE	261.159	261.616	261.728	262.294	262.39	262.698	263.145	263.31	264.217	264.264	264.609	264.825
CHAINAGE	1480.000	1496.921	1500.000	1516.960	1520.000	1529.212	1540.000	1544.000	1560.000	1560.781	1566.712	1570.000

SUPERELEVATION: RHS 4%, LHS -4%; RHS 3%, LHS -3%

1397.826
1428.628
1510.960
1525.960
1570.000

LONGITUDINAL SECTION

H 1:250 V 1:100

PRELIMINARY
NOT FOR CONSTRUCTION

REV	DESCRIPTION	CHECKED	APPROVED	DRAFTED	DATE
4	DETAILED DESIGN SUBMISSION	JW	CS	MD / TL	02.12.2020
3	COUNCIL COMMENTS	JW	CS	TL	03.11.2020
2	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	07.10.2020
1	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	16.09.2020
0	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	-	-	-	-

N

H 0 5 10
V 0 1 2 3 4 5m
SCALE H 1:500 V 1:200 @ A3
H 1:250 V 1:100 @ A1

Cardinia

PGA REF: E20067-B
DESIGN BY: T LOGAN
SURVEY BY: PGA
APPROVED FOR CONSTRUCTION BY:
APPROVED DATE:

PGA Paroissien Grant & Associates Pty. Ltd.
Consulting Engineers & Surveyors
ABN 53 123 888 326
Suite 10, 131 Bulleen Road, Balwyn North, Victoria 3104
Phone: (03) 9859 6400 Facsimile: (03) 9859 5022
Email: paro@pga.net.au Web: www.pga.net.au

bsi. ISO 9001 Quality Management FS521077

DESIGN PROJECT - PACKAGE 1
MOUNT BURNETT ROAD
CARDINIA SHIRE COUNCIL
LAYOUT PLAN & LONGITUDINAL SECTION -
SHEET 9 OF 11
CARDINIA SHIRE COUNCIL

SCALE @ A1: AS SHOWN
DRAWING No.: 20067-B- 018
REV: 4

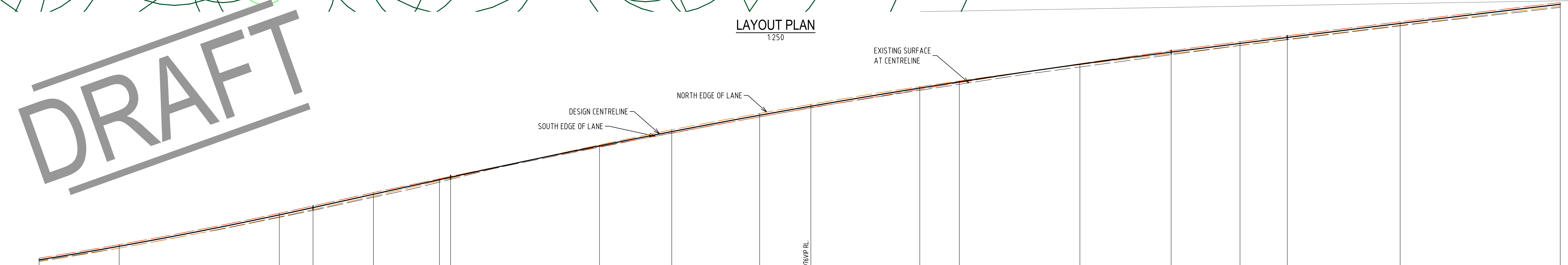
FILE: E:\CARDINIA SHIRE\E20067 - RD PACK 1 - MORRISON RD AND MT BURNETT RD\1.B-MOUNT BURNETT\1.DRAWINGS\2.2D CAD (DWG)\3.CURRENT DWG\20067-B-018.DWG PLOT INFO: THOMAS LOGAN @ 12:29 PM ON December 15, 2021

FOR CONTINUATION REFER TO 20067-B-018

FOR CONTINUATION REFER TO 20067-B-020

LAYOUT PLAN
1:250

DRAFT



HORIZONTAL GEOMETRY: R -250m (1570.000 – 1611.758); R 250m (1649.021 – 1684.942)

VERTICAL GEOMTERY: 75m V.C. (to 1604.212); 90m V.C. (1621.396 – 1711.396); 75m V.C. (1725.900 – 1760.000)

DESIGN GRADELINE: 8.833%; 5.052%

Datum RL 261.000

CHAINAGE	1570.000	1580.000	1600.000	1604.212	1611.758	1620.000	1621.396	1640.000	1649.021	1660.000
					TP				TP	
DESIGN LINE LEVEL	264.875	265.552	267.118	267.483	268.150	268.878	269.001	270.572	271.281	272.098
DESIGN NORTH LIP OF KERB LEVEL	264.782	265.459	267.025	267.390	268.057	268.826	268.956	270.620	271.374	272.191
DESIGN SOUTH LIP OF KERB LEVEL	264.959	265.636	267.202	267.567	268.234	268.925	269.042	270.528	271.197	272.014
EX SURFACE LEVEL AT DESIGN LINE	264.825	265.458	267	267.349	268	268.756	268.895	270.501	271.209	272.011

CHAINAGE	1666.396	1680.000	1684.942	1700.000	1711.396	1720.000	1725.900	1740.000	1760.000
			TP						
DESIGN LINE LEVEL	272.551	273.456	273.766	274.646	275.249	275.684	275.982	276.684	277.641
DESIGN NORTH LIP OF KERB LEVEL	272.643	273.526	273.812	274.623	275.173	275.591	275.889	276.591	277.548
DESIGN SOUTH LIP OF KERB LEVEL	272.466	273.393	273.724	274.668	275.319	275.768	276.066	276.768	277.725
EX SURFACE LEVEL AT DESIGN LINE	272.479	273.341	273.641	274.507	275.122	275.578	275.869	276.564	277.488

SUPERELEVATION
RHS 3% / LHS -3% (1570.000 – 1611.758)
LHS 3% / RHS -3% (1649.021 – 1674.942)
RHS 3% / LHS -3% (1714.942 – 1760.000)

1570.000
1611.758
1630.389
1649.021
1674.942
1694.942
1714.942
1760.000

LONGITUDINAL SECTION
H 1:250 V 1:100

PRELIMINARY
NOT FOR CONSTRUCTION

REV	DESCRIPTION	CHECKED	APPROVED	DRAFTED	DATE
4	DETAILED DESIGN SUBMISSION	JW	CS	MD / TL	02.12.2020
3	COUNCIL COMMENTS	JW	CS	TL	03.11.2020
2	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	07.10.2020
1	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	JW	CS	TL	16.09.2020
0	PRELIMINARY ISSUE - NOT FOR CONSTRUCTION	-	-	-	-

H 0 5 10
V 0 1 2 3 4 5m
SCALE H 1:500 V 1:200 @ A3
H 1:250 V 1:100 @ A1

Cardinia

PGA REF: E20067-B
DESIGN BY: T LOGAN
SURVEY BY: PGA
APPROVED FOR CONSTRUCTION BY:
APPROVED DATE:

PGA
Paroissien Grant & Associates Pty. Ltd.
Consulting Engineers & Surveyors
ABN 53 123 888 326

Suite 10, 131 Bulleen Road, Balwyn North, Victoria 3104
Phone: (03) 9859 6400 Facsimile: (03) 9859 5022
Email: paro@pga.net.au Web: www.pga.net.au

bsi. ISO 9001 Quality Management FS521077

DESIGN PROJECT - PACKAGE 1
MOUNT BURNETT ROAD
CARDINIA SHIRE COUNCIL
LAYOUT PLAN & LONGITUDINAL SECTION -
SHEET 10 OF 11
CARDINIA SHIRE COUNCIL

SCALE @ A1: AS SHOWN
DRAWING No.: 20067-B-019
REV: 4

FILE: E:\CARDINIA SHIRE\E20067 - RD PACK 1 - MORRISON RD AND MT BURNETT RD\1.B-MOUNT BURNETT\1.DRAWINGS\2.2D CAD (DWG)\3.CURRENT DWG\20067-B-019.DWG PLOT INFO: THOMAS LOGAN @ 12:31 PM ON December 15, 2021