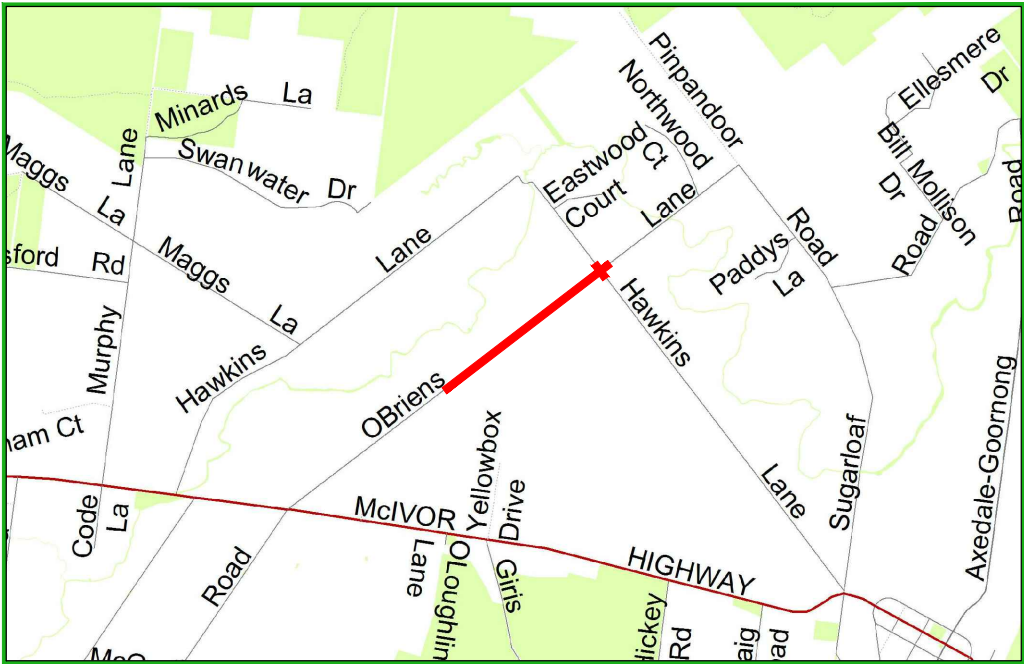


OBRIENS LANE, AXEDALE

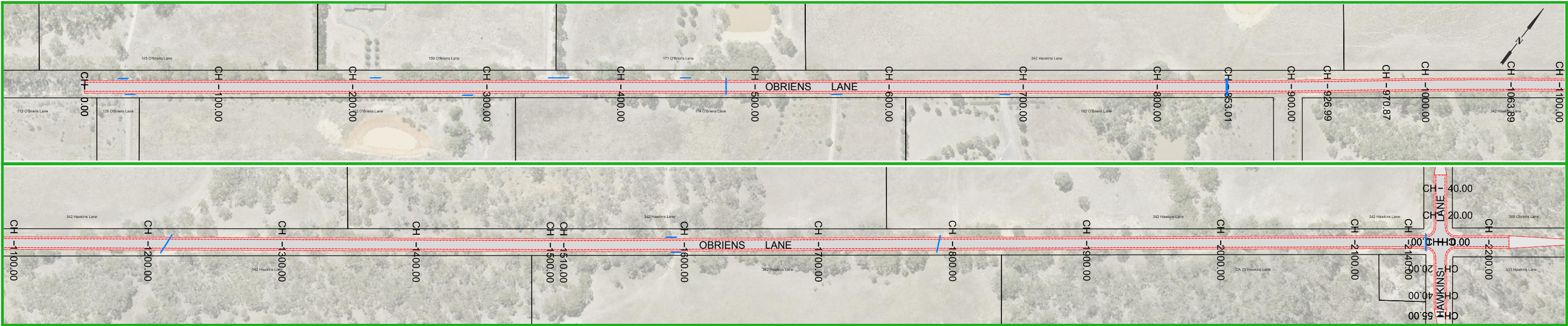
GB4286

ROAD CONSTRUCTION

OCTOBER 2018



LOCALITY MAP



PROJECT EXTENTS

AMENDMENTS			
Revision	Description	Approved by	Date
-	-	-	-



CITY OF GREATER BENDIGO

OBRIENS LANE
AXEDALE
ROAD CONSTRUCTION

COVER SHEET

Survey	TOMKINSON	JUNE 2018
Design	L. OLIVER	OCT. 2018
Checked	A. SMITH	-/-18
Approved by	N. SARTORI	-/-18
Scale: -	Revision : A	
Original sheet size: A3	File : GB4286.dwg	
Sheet: 1 OF 25	Reference: GB4286	

PRELIMINARY DESIGN
DRAFT 2

Plot Date: 17/12/2018
Plotted By: LEIGH OLIVER

TREE REMOVAL NOTES

1.

All trees, shrubs, stumps and roots within the batter limits of the project to be removed from site.
2.

Contractor must abide by any conditions set in the planning permit for removal of vegetation.
3.

Contractor must seek permission from the Superintendent's Representative to remove any trees not within batter extents that will potentially be disturbed with table drain earthworks.
4.

Any approved trees or vegetation removed as part of the works are not to be burnt onsite.
5.

If fencing is required as a condition of the Planning Permit or as a result of the pre-construction meeting, a three strand star picket and wire fence shall be constructed.

FILL NOTES

1.

All earthworks and compaction are to be in accordance with VicRoad's Specification Section 204.
2.

All fill materials are to be approved by the Superintendent's Representative prior to being imported onto the site, and unless noted otherwise, shall be a clean clay based material free of vegetation matter or contaminants.
3.

All filling is to comply with AS3798-1996 Appendix B, level 1 (or 2) as specified
4.

The Contractor is responsible for ensuring that all imported fill material, including topsoil, satisfies the description for clean fill material in EPA bulletin publication No. 448 (Sep 95) and subsequent revisions. The Contractor shall provide verification including test certificates to the Superintendent's Representative.

ROAD CONSTRUCTION NOTES

1.

All Works to be carried out in accordance with CoGB Standard Drawings, Specifications, approved plans and to the satisfaction of the Superintendent's Representative.
2.

These notes also refer to the latest version of the Infrastructure Design Manual (IDM) and latest version of the IDM Standard Drawings.
3.

The Project Manager is to be notified seven days prior to the commencement of Works with a Pre-commencement meeting to be held between CoGB, the Consultant and the Contractor. A site management plan is to be submitted prior to the commencement of Works and prior to the onsite Pre-commencement meeting.
4.

Prior to commencement of the Works, the Contractor shall provide the following:

- Source of quarry material

- N.A.T.A. approved test results for the F.C.R that is to be used

- If the source of the quarry material is changed during the course of the Works, then new test results shall be provided.
5.

Prior to commencement of Works on site, the Contractor must ensure that all matters relating to the Occupational Health and Safety Act 2004, have been and will be complied with.
6.

On the commencement of construction, the Contractor must comply with the recommendation of the Environment Protection Authority publication "Construction Techniques for Sediment Pollution Control". Appropriate siltation control is to be maintained throughout the construction and maintenance period of the Works.
7.

The disposal site for spoil storage, and truck removal route, is to be submitted in writing to, and approved by the Superintendent's Representative prior to the commencement of Works.
8.

Where Works are in the vicinity of existing services, these services are to be located and exposed prior to commencement of the work. Relevant authorities are to be notified 7 days prior to the Works.
9.

All dimensions are in metres unless noted otherwise.
10.

All levels are to Australian Height Datum (AHD) unless noted otherwise.
11.

All co-ordinates are to Map Grid of Australia (MGA) unless noted otherwise.
12.

The Contractor must arrange the inspection of the Works with the Superintendent's Representative as per the hold points in the Specifications, or as directed by the Superintendent's Representative.
13.

All redundant assets are to be removed and disposed off site unless noted otherwise.
14.

All service conduit trenches under road pavements, under footpaths and under swales are to be backfilled as per IDM SD310 unless noted otherwise. Compaction standards noted in SD310 shall be achieved.
15.

Blasting is not generally accepted.
16.

All existing assets affected by the Works (i.e. signs, vehicle crossings, footpaths, kerb and line marking) shall be reinstated by the Contractor before the completion of Works, to the satisfaction of the Superintendent's Representative.
17.

At the completion of all Works, all rubbish, debris and surplus spoil shall be removed and the site shall be cleared to the satisfaction of the Superintendent's Representative.
18.

The Contractor is to obtain a Building Permit for any structures, fences and for any retaining walls over 1.0m in height.
19.

Any Infrastructure failure as a result of Works occurring during the Defects Liability Period noted on the contract is the responsibility of the Contractor and is to be repaired to the satisfaction of the Superintendent's Representative.
20.

All disturbed areas (eg. nature strips, batters, allotments and reserves) are to be reinstated to a clean, tidy condition, top dressed with 75mm min. depth approved top soil, and seeded with a CoGB approved blend or unless otherwise noted. Soil & seeded treated areas must be satisfactorily established prior to the end of the Maintenance Period otherwise further treatment is required by the Contractor.
21.

Any exposed aggregate concrete works are to be achieved by sandblasting only. Washing aggregate off with water is not permitted.
22.

The Contractor shall notify the public of any impending road closures by providing sufficient signage 2 weeks prior to construction commencing.

SUB-BASE CONSTRUCTION NOTES

1.

The existing pavement (including asphalt & seal layers) to be pulverised to a depth of 200mm ensuring that all asphalt is ground to a suitable size for workability.
2.

Pulverised material to be windrowed and mixed to create a consistent mix over the full width of road before spreading, trimming and lightly compacting/shaping to form desired finished road level.
3.

After the completion of excavation to subgrade/sub-base finished level, material shall be inspected by the Superintendent's Representative before any stabilising commences. The nominated stabilising product, blend and spread rate shall then be confirmed at this point once the formed sub-base material has been visually assessed by the Superintendent's Representative.
4.

Prior to spreading stabilising product, sub-base shall be ripped to 200mm depth and moisture conditioned moderately before spreading of 12kg/m2 triple blended cementitious binder product. ie (30/40/30 GP/Slag/Lime).
5.

Selected binder to be spread and mixed evenly through (using mechanical stabiliser machine) at the selected stabilising depth, ensuring optimum moisture content is achieved. Where practically possible it is preferred that moisture is added during the mixing process by connecting a water cart to the mechanical stabiliser machine.
6.

Within 4 hours of binder being added, sub-base material should be graded & trimmed to level and compacted to a minimum density ratio of 98% Modified Maximum Dry Density.
7.

The Superintendent's Representative will require density testing results of the sub-base as well as Unconfined Compressive Strength (UCS) Tests to confirm that the stabilising has achieved a satisfactory result.

PAVEMENT NOTES

1.

Construction of road pavements is to be in accordance with the requirements of VicRoad's Standard Specifications for Roadworks (Section 304). Testing must be carried out by a N.A.T.A. approved laboratory, or by calibrated nuclear densometer test to the relevant Australian Standard.
2.

Compaction tests are to be undertaken in the following locations:

- At ½ depth of the pavement

- At alternating sides of the road

- 1.0m in from the seal edge or lip of kerb

- At even spacings.
3.

The number of compaction tests shall comply with the table below:

Location	Number of Compaction tests
Court bowls	3
Intersections	2
Straights	1 per 500m2 (1/50m for 10.2m wide pvmt.)
4.

Copies of the geotechnical results are to be submitted to the Superintendent's Representative.
5.

Sub-base and base materials are to be at 85% optimum moisture content (OMC) during compaction, and maintained at 85% OMC until proof rolling.
6.

Typical Compaction levels required (unless noted otherwise):

Subgrade: To be compacted to 100% standard dry density ratio.

Subbase: Flexible pavements shall be compacted in accordance with Scale C in VicRoads table 304.082.

Compaction shall be to 98% of the maximum dry density ratio determined by the modified compaction test.

Base: Flexible pavements shall be compacted in accordance with Scale C in VicRoads table 304.082.

Compaction shall be to 100% of the maximum dry density ratio determined by the modified compaction test.
7.

Proof rolling of the Subgrade, Sub base and Base must be undertaken as per Section 12.7.15 of the IDM. Proof rolling will be at the expense of the contractor in accordance with AS3798 and the requirements of section 173 and 204.12 of the VicRoad's Specification. The Superintendent's Representative must be present during the proof rolling. The Subgrade must not deflect more than 2mm vertically within 300mm of the test roller in isolated locations.
8.

Identification and treatment of soft areas during proof rolling shall be dealt with as per Sections 12.7.13 and 12.7.14 of the IDM and as approved by the Superintendent's Representative.

SPRAY SEAL NOTES:

1.

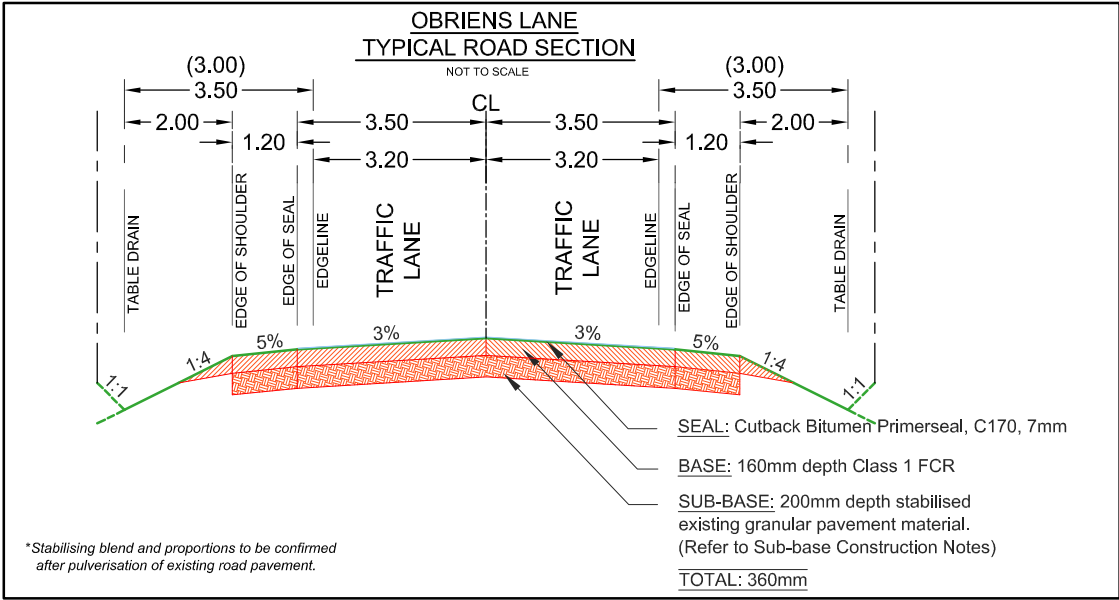
All works relating to the construction of a spray seal shall comply with VicRoad's Specification 408.
2.

The Contractor in conjunction with the sealing sub-contractor shall determine the standard design rates of application for primer, primerbinder, binder, surface pre-treatments, remedial works and aggregate in accordance with the procedures set out in the current Austroads Sprayed Seal design method as listed in Section 175.
3.

At least 1 week prior to the commencement of sealing works, the contractor shall submit the rates of application for bituminous material, aggregate, and rates for pre treatment for review by the Superintendent's Representative. This should be done via submission in writing of the form: 408.16 'Schedule of details' in VicRoads specification 408.
4.

At the completion of works, a job completion report (JCR) is to be submitted to the Superintendent's Representative for review. The JCR form can be found in VicRoads Specification 408 Attachment A.
5.

Loose aggregate shall be removed within 48 hours of sealing or as directed by the Superintendent's Representative.



SIGNAGE, GUIDE POSTS, DELINEATORS AND GUARD FENCE NOTES

1.

All existing signage within Works site to be removed (where required) & reinstated unless noted otherwise or directed by the Superintendent's Representative.
2.

All signs to be installed shall be Class 1 high intensity type and comply with the requirements of AS1743-2001.
3.

All guideposts are to have delineators satisfying the requirements of AS1906.2 section 3.
4.

Guideposts are to be installed 150mm clear of the edge of shoulder or 600mm behind the face of kerb at the spacings detailed below:

Curve Radii (m)	Outside (m)	Inside (m)
< 100	6	12
100 - 199	10	20
199 - 299	15	30
300 - 399	20	40
400 - 599	30	60
600 - 799	40	60
800 - 1199	60	60
1200 - 2000	90	90
Straights	150	150

NOTE:

- Reduce 90m spacings to 60m, or 150m spacings to 75m, in areas subject to fog.

- On guard fence, adjust increments to suit post spacings.

- Post on inside of curve is to be placed opposite post on the outside of the curve wherever practicable.

Guideposts on crests on a straight alignment are to be spaced such that at least 2 pairs of delineators (the nearest pair being not less than 40m ahead of the vehicle) are visible at all times.

On crests with a horizontal curve, this requirement is to be combined with those in the above table.
- a) At bridges or culverts the following guidepost and delineator conditions shall apply:

No Guard fence, structure >5m in length:

4 guideposts, one pair at each end.

No Guard fence, Structure <5m in length:

2 guideposts, one on each left hand approach adjacent to the headwall or kerb.

Guard fence and bridge rail within 4m of the closest traffic lane edge:

Delineators to be placed on mounting brackets on guard fence/bridge rail, spaced at 12.5m centres. A delineator shall be located 5.0m from the leading end of the fence, discounting any flared sections of fence (unless the flare is within 4m of the traffic lane, in which case the delineator should be installed on the start of the flare).

Guard fence/bridge rail more than 4.0m from closest traffic lane edge:

Delineators are not placed on the barrier, fence or rail, but guideposts are continued along the edge of formation at the required spacing's shown above.

Delineators are to be colored as per the following:

Red	- left side of roadways
White	- right side of roadways
yellow	- right side of one way roadways

DRAINAGE CONSTRUCTION NOTES

1.

The Superintendent's Representative and Design Engineer must be notified if any modifications to drainage culverts and/or table drains are required due to unforeseen circumstances identified during works onsite.
2.

All road crossing pipe culverts to be concrete class 4.
3.

Driveway pipe culverts to be installed with invert 50mm below design table drain invert unless otherwise advised by the Superintendent's Representative
4.

Driveway pipe culverts to be backfilled with class 3 FCR
5.

Road crossing pipe culverts to be backfilled with 3% cement treated FCR
6.

Where concrete box culverts (CBC) or Crown Units are specified, they are to be compliant to AS1597 and designed to the latest revision of the shear design standard.
7.

Pipe extensions are to be constructed by removing the remaining stub of the existing pipe to be extended, and then connecting the new pipe at the socket.
8.

All existing table drains to be cleared of debris, desilted and regraded ensuring the minimum grade is no less than 1:500. Design road cross sections shall be used as an initial guide only for determining table drain alignment and invert levels. Generally on this project only, all existing table drains alignments will remain unchanged however desilting and reforming existing drains will be required throughout.
9.

At the completion of the Works, drainage pipes are to be visually inspected to check for construction debris, including crushed rock over spill. Should a volume of debris be present enough to impede flows, pipe cleaning shall be undertaken at the contractor's expense.
10.

The location of authority service mains and property services are generally not shown in detail on these plans therefore it is the Contractor's responsibility to consider these services when excavating pipe trenches and table drains.

ROADSIDE MANAGEMENT NOTES

Unless otherwise directed by the Superintendent's Representative, the following roadside management conditions will apply:

1.

Confine machinery operations to the existing road formation or a designated construction zone. Identify machinery turn around point in areas that will not result in disturbance to the existing vegetation.
2.

Clearly mark the construction zone prior to the commencement of works. The construction zone is the area where all construction activities take place. (See CoGB 'Roadside Handbook'). The roadside is any area outside the construction zone.
3.

Plant and equipment must not be parked on the roadside in this zone.
4.

Avoid removal of native vegetation when locating drain cut off points.
5.

Spoil from grading and drain construction must not be placed or spread on the roadside. It is to be removed to a recognised dump site or tip, unless approved as fill material for incorporation in the works.
6.

Remove any topsoil (where necessary) prior to works and store in a designated area. Re-use as soon as practical.
7.

Incorporate hygienic procedures to minimise spread of weed. After working in weedy or disease affected areas, clean vehicles and machinery of all soil and plant debris prior working on High or Medium conservation value sites or weed free sites.



(IMPORTANT!)
The location of underground services have been derived from available information, however accuracy cannot be guaranteed. All existing service information should therefore be treated as indicative only, and service locations must be arranged prior to commencement of any excavation. The contractor will be held responsible for any damage caused to underground services.

CITY OF GREATER BENDIGO

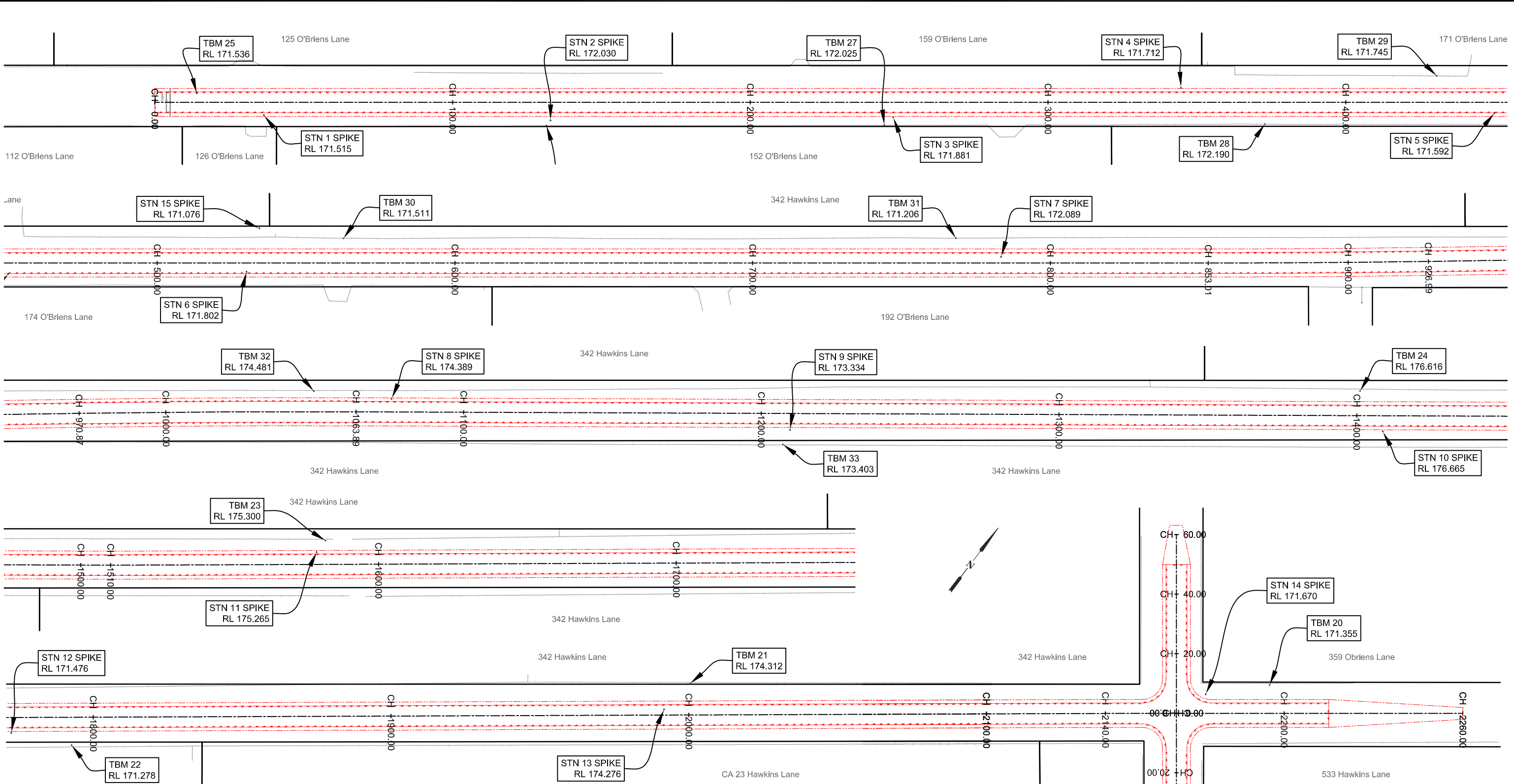


O'BRIENS LANE
AXEDALE
ROAD CONSTRUCTION
GENERAL NOTES & TYPICAL SECTION

Survey	TOMKINSON	JUNE 2018
Design	L. OLIVER	OCT. 2018
Checked	A. SMITH	-/-/18
Approved by	N. SARTORI	-/-/18
Scale: -	Revision : A	
Original sheet size: A3	File : GB4286.dwg	
Sheet: 2 OF 25	Reference:	GB4286

**PRELIMINARY DESIGN
DRAFT 2**

Plot Date: 17/12/2018
Plotted By: LEIGH OLIVER



STATION DATA				
Point #	Description	Eastling	Northling	Level
901	STN 1 SPIKE	272428.714	5927790.136	171.515
902	STN 2 SPIKE	272506.378	5927847.031	172.030
903	STN 3 SPIKE	272597.405	5927917.546	171.881
904	STN 4 SPIKE	272668.242	5927984.011	171.712
905	STN 5 SPIKE	272757.196	5928040.948	171.592
906	STN 6 SPIKE	272820.473	5928090.010	171.802
907	STN 7 SPIKE	273019.115	5928247.514	172.089
908	STN 8 SPIKE	273249.356	5928427.738	174.389
909	STN 9 SPIKE	273362.147	5928500.481	173.334
910	STN 10 SPIKE	273520.928	5928620.639	176.665
911	STN 11 SPIKE	273650.959	5928731.262	175.265
912	STN 12 SPIKE	273809.951	5928841.413	171.476
913	STN 13 SPIKE	273979.630	5928980.450	174.276
914	STN 14 SPIKE	274121.358	5929094.711	171.670
915	STN 15 SPIKE	272815.089	5928104.265	171.076

STATION DATA				
Point #	Description	Eastling	Northling	Level
920	TBM 20	274136.556	5929110.166	171.355
921	TBM 21	273981.298	5928992.627	174.312
922	TBM 22	273828.537	5928850.443	171.278
923	TBM 23	273650.987	5928736.108	175.300
924	TBM 24	273506.619	5928626.799	176.616
925	TBM 25	272406.307	5927782.339	171.536
926	TBM 26	272506.296	5927844.831	172.213
927	TBM 27	272596.527	5927913.697	172.025
928	TBM 28	272698.050	5927991.380	172.190
929	TBM 29	272734.208	5928039.218	171.745
930	TBM 30	272839.599	5928118.654	171.511
931	TBM 31	273003.252	5928243.279	171.206
932	TBM 32	273227.026	5928413.975	174.481
933	TBM 33	273363.171	5928495.150	173.403

AMENDMENTS			
Revision	Description	Approved by	Date
-	-	-	-



CITY OF GREATER BENDIGO

O'BRIENS LANE
AXEDALE
ROAD CONSTRUCTION

GEOMETRIC LAYOUT & CONTROL

Survey	TOMKINSON	JUNE 2018
Design	L. OLIVER	OCT. 2018
Checked	A. SMITH	-/-/18
Approved by	N. SARTORI	-/-/18
Scale: 1:1250	Revision : A	
Original sheet size: A3	File : GB4286.dwg	
Sheet: 3 OF 25	Reference: GB4286	

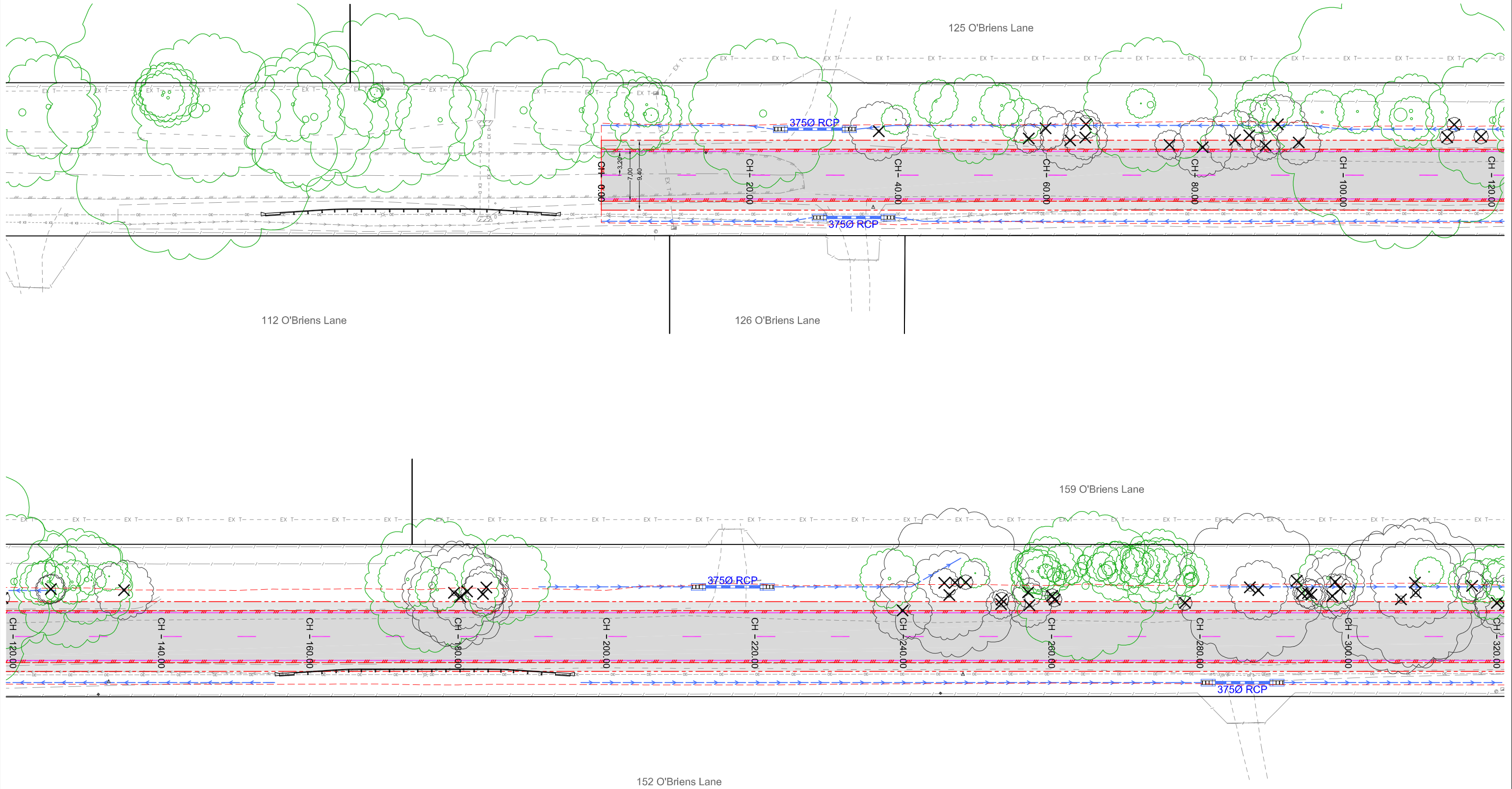
PRELIMINARY DESIGN
DRAFT 2

Plot Date: 17/12/2018
Plotted By: LEIGH OLIVER



DIAL 1100
BEFORE YOU DIG

IMPORTANT!
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LEGEND	
	DESIGN EDGE OF SEAL
	DESIGN SHOULDER
	DESIGN INVERT
	DESIGN BATTER
	DESIGN LINEMARKING
	DESIGN PAVEMENT: (Refer: Typical road pavement detail.)
	TREE REMOVALS
	TREE RETAINED

AMENDMENTS			
Revision	Description	Approved by	Date
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CITY OF GREATER BENDIGO

OBRIENS LANE AXEDALE ROAD CONSTRUCTION

LAYOUT PLAN

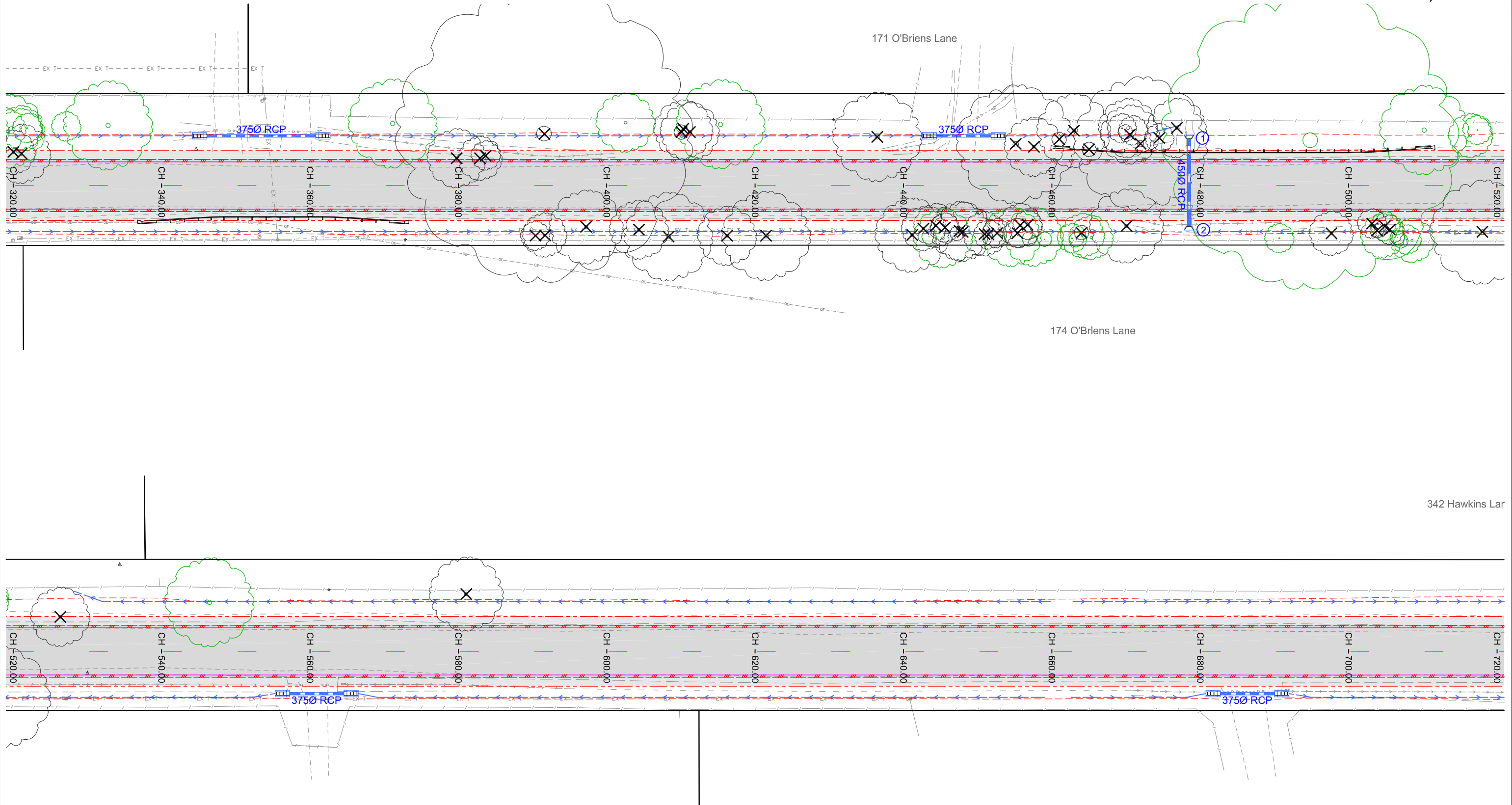
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Design	L. OLIVER	OCT. 2018
Checked	A. SMITH	-/4/18
Approved by	N. SARTORI	-/4/18
Scale: 1:500	Revision: A	
Original sheet size: A3	File: GB4286.dwg	
Sheet: 4 OF 25	Reference: GB4286	

**PRELIMINARY DESIGN
DRAFT 2**

Plot Date: 17/12/2018
Plotted By: LEIGH OLIVER



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AMENDMENTS			
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CITY OF GREATER BENDIGO

O'BRIENS LANE
AXEDALE
ROAD CONSTRUCTION

LAYOUT PLAN

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PRELIMINARY DESIGN
DRAFT 2

Plot Date: 17/12/2018
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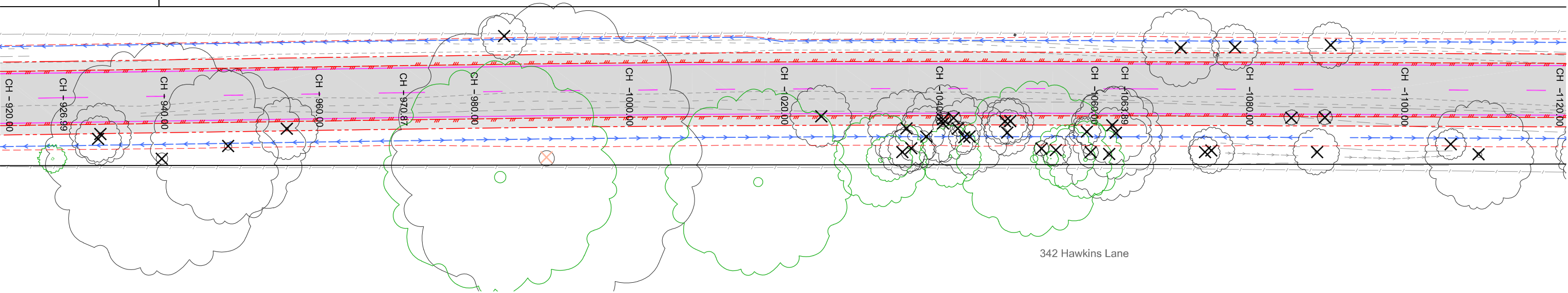
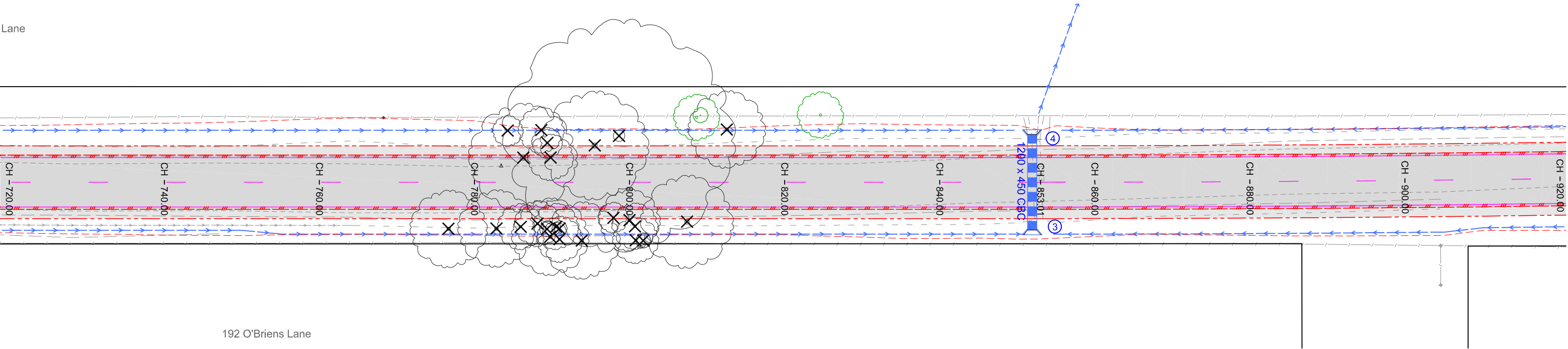
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Lane



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CITY OF GREATER BENDIGO

O'BRIENS LANE
AXEDALE
ROAD CONSTRUCTION

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PRELIMINARY DESIGN
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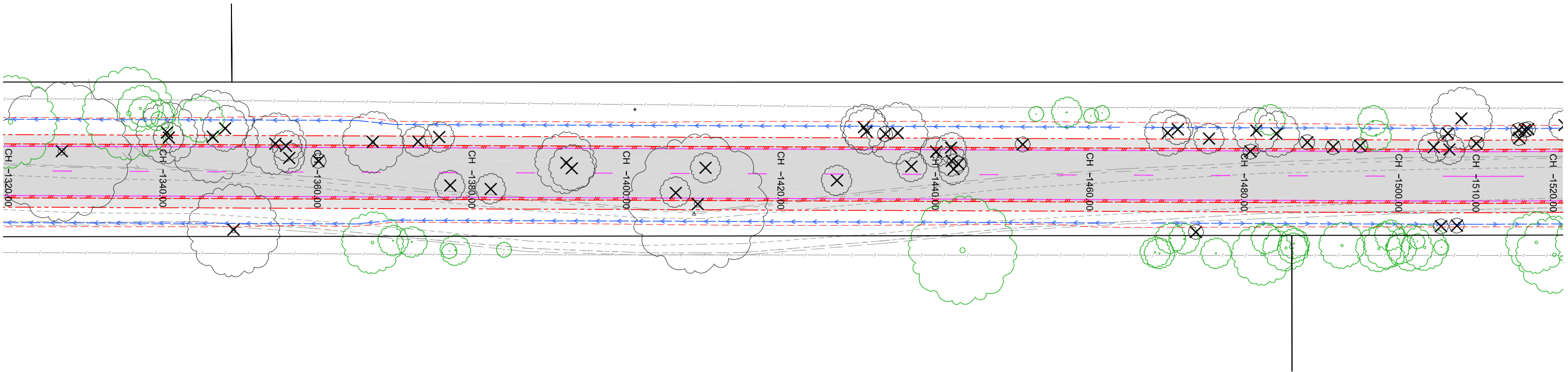
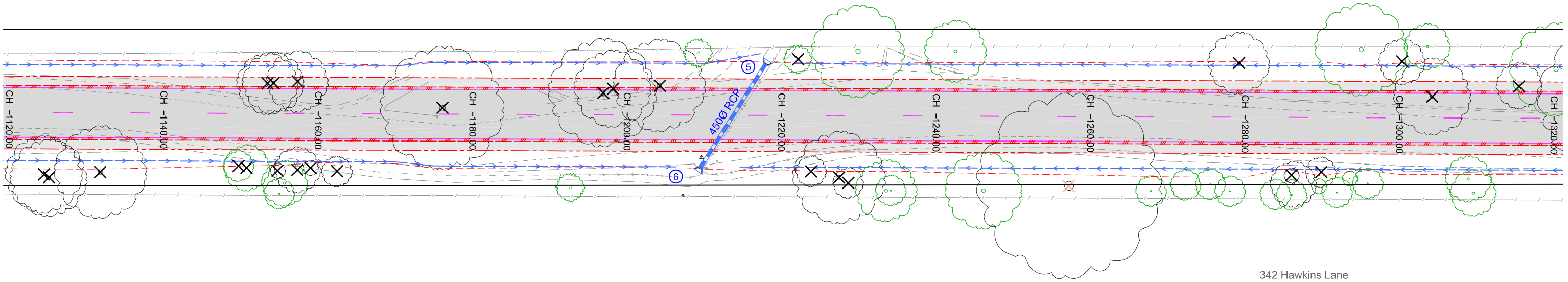
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342 Hawkins Lane



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CITY OF GREATER BENDIGO

OBRIENS LANE
AXEDALE
ROAD CONSTRUCTION

LAYOUT PLAN

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PRELIMINARY DESIGN
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Plot Date: 17/12/2018
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DIAL1100

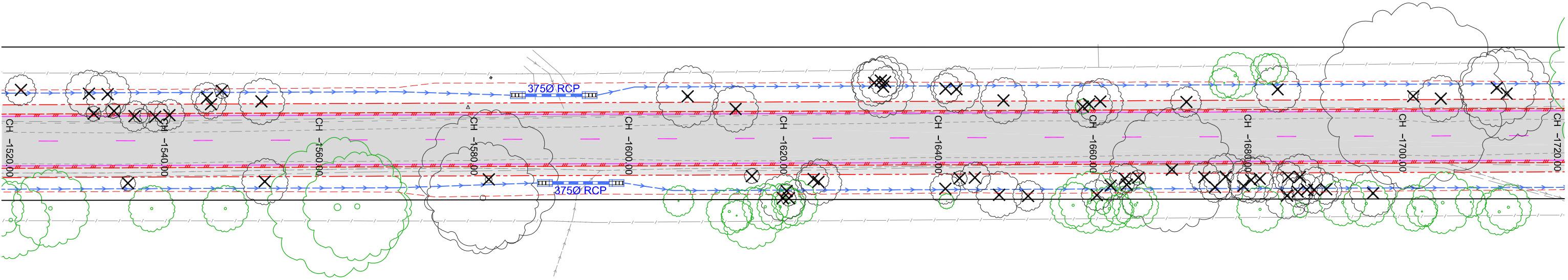
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IMPORTANT!

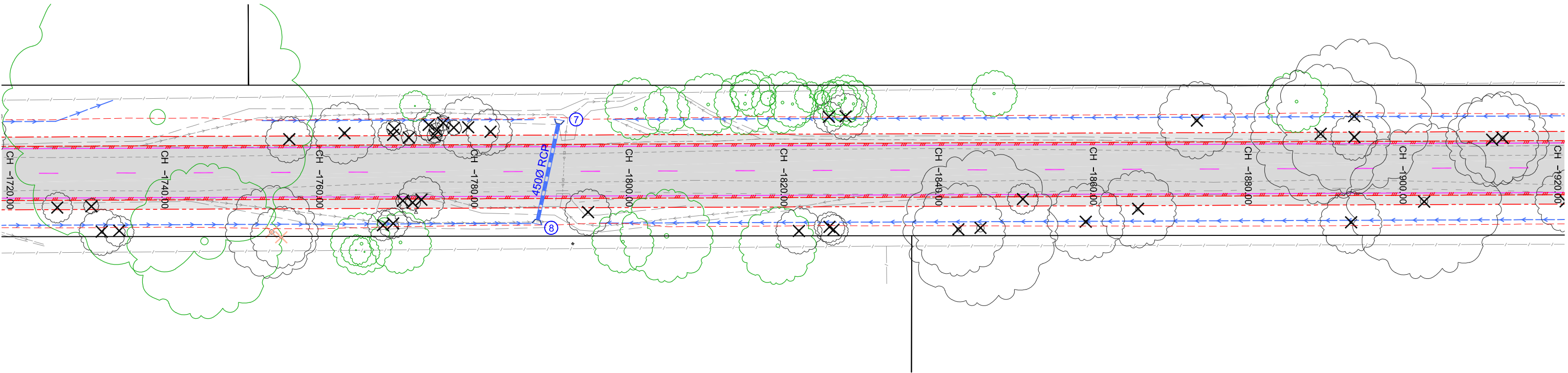
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342 Hawkins Lane



342 Hawkins Lane



LEGEND	
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	DESIGN SHOULDER
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CITY OF GREATER BENDIGO

O BRIENS LANE
AXEDALE
ROAD CONSTRUCTION

LAYOUT PLAN

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PRELIMINARY DESIGN
DRAFT 2

Plot Date: 17/12/2018
Plotted By: LEIGH OLIVER



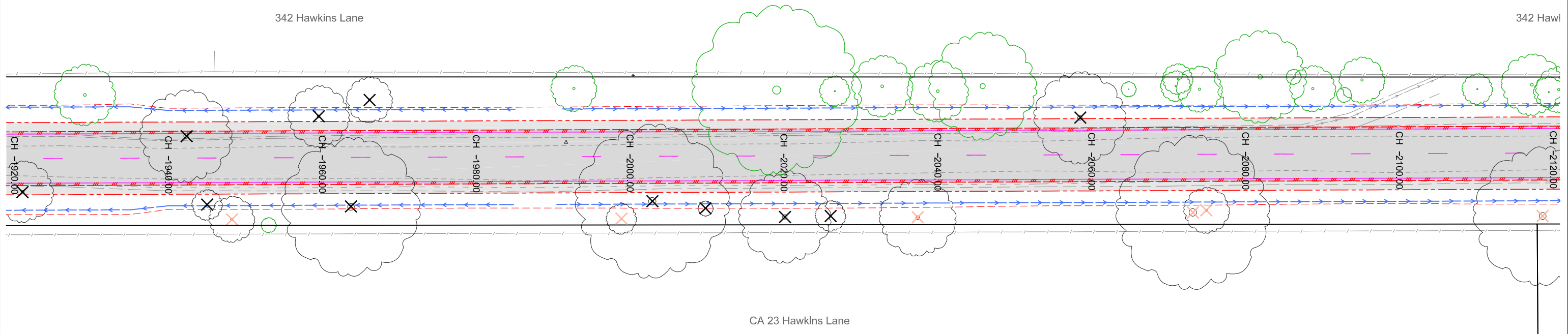
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342 Hawkins Lane

342 Hawl



CA 23 Hawkins Lane

LEGEND

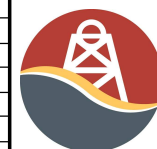
- DESIGN EDGE OF SEAL
- DESIGN SHOULDER
- DESIGN INVERT
- DESIGN BATTER
- DESIGN LINEMARKING

- DESIGN PAVEMENT:
(Refer: Typical road pavement detail.)
- TREE REMOVALS
- TREE RETAINED

AMENDMENTS

Revision	Description	Approved by	Date
-	-	-	-

CITY OF GREATER BENDIGO



O Briens Lane
Axedale
Road Construction
Layout Plan

Survey	TOMKINSON	JUNE 2018
Design	L. OLIVER	OCT. 2018
Checked	A. SMITH	-/-/18
Approved by	N. SARTORI	-/-/18
Scale: 1:500	Revision : A	
Original sheet size: A3	File : GB4286.dwg	
Sheet: 9 OF 25	Reference: GB4286	

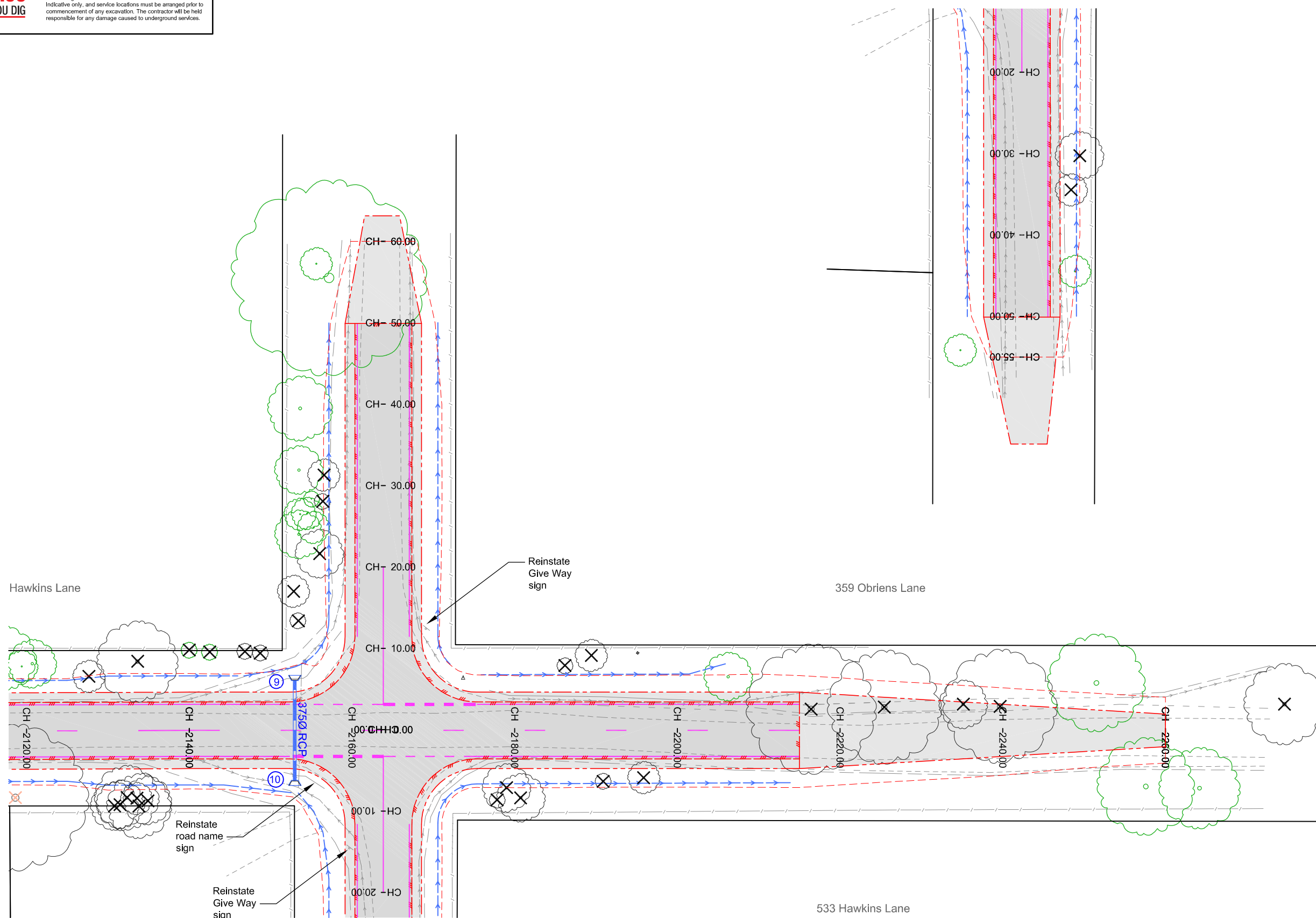
PRELIMINARY DESIGN
DRAFT 2

Plot Date: 17/12/2018
Plotted By: LEIGH OLIVER

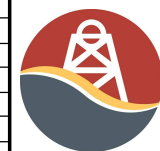


IMPORTANT!

The location of underground services have been derived from available information, however accuracy cannot be guaranteed. All existing service information should therefore be treated as indicative only, and service locations must be arranged prior to commencement of any excavation. The contractor will be held responsible for any damage caused to underground services.



LEGEND											
	DESIGN EDGE OF SEAL		DESIGN SHOULDER		DESIGN INVERT		DESIGN BATTER		DESIGN LINEMARKING		DESIGN PAVEMENT: (Refer: Typical road pavement detail.)
											DESIGN SHOULDER
											DESIGN INVERT
											DESIGN BATTER
											DESIGN LINEMARKING
											DESIGN PAVEMENT: (Refer: Typical road pavement detail.)
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											DESIGN INVERT

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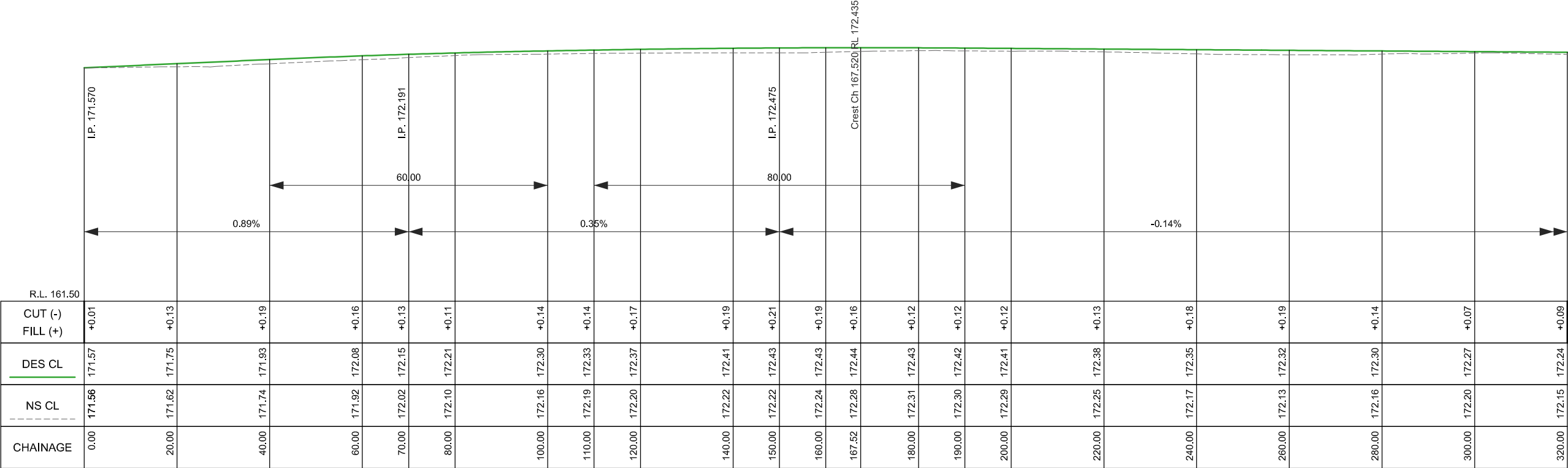
CITY OF GREATER BENDIGO

OBRIENS LANE AXEDALE ROAD CONSTRUCTION LAYOUT PLAN

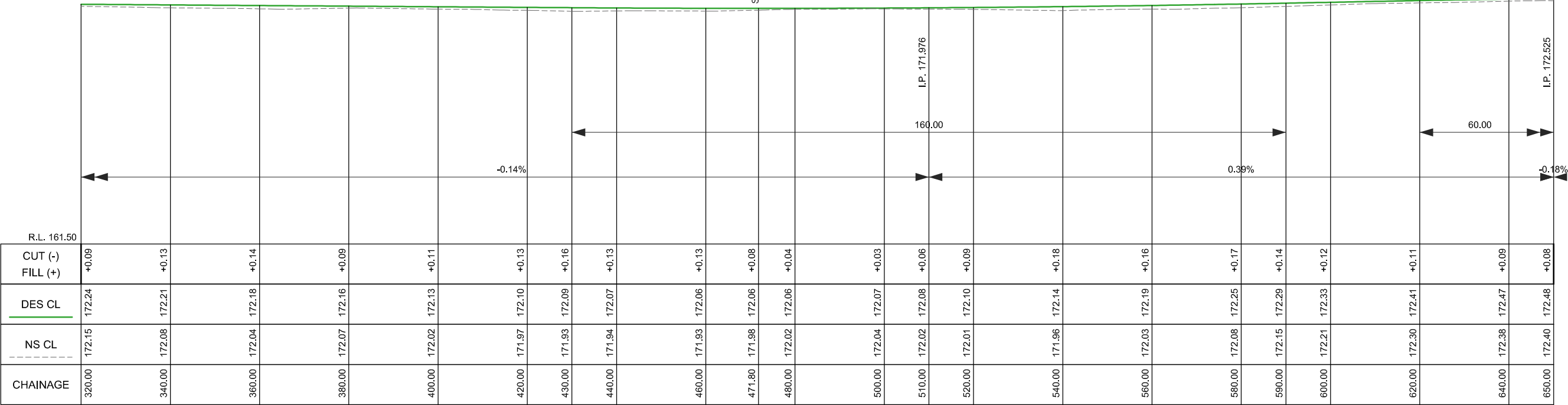
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Design	L. OLIVER		OCT. 2018
Checked	A. SMITH		~/18
Approved by	N. SARTORI		~/18
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Sheet:	Reference:		
10 OF 25	GB4286		

**PRELIMINARY DESIGN
DRAFT 2**

Plot Date:	17/12/2018
Plotted By:	LEIGH OLIVER



OBRIENS LANE LONGITUDINAL SECTION CH 0.000 To 320.000
SCALES: H 1:1000 V 1:200 (A3)



OBRIENS LANE LONGITUDINAL SECTION CH 320.000 To 650.000
SCALES: H 1:1000 V 1:200 (A3)

AMENDMENTS			
Revision	Description	Approved by	Date
-	-	-	-



CITY OF GREATER BENDIGO

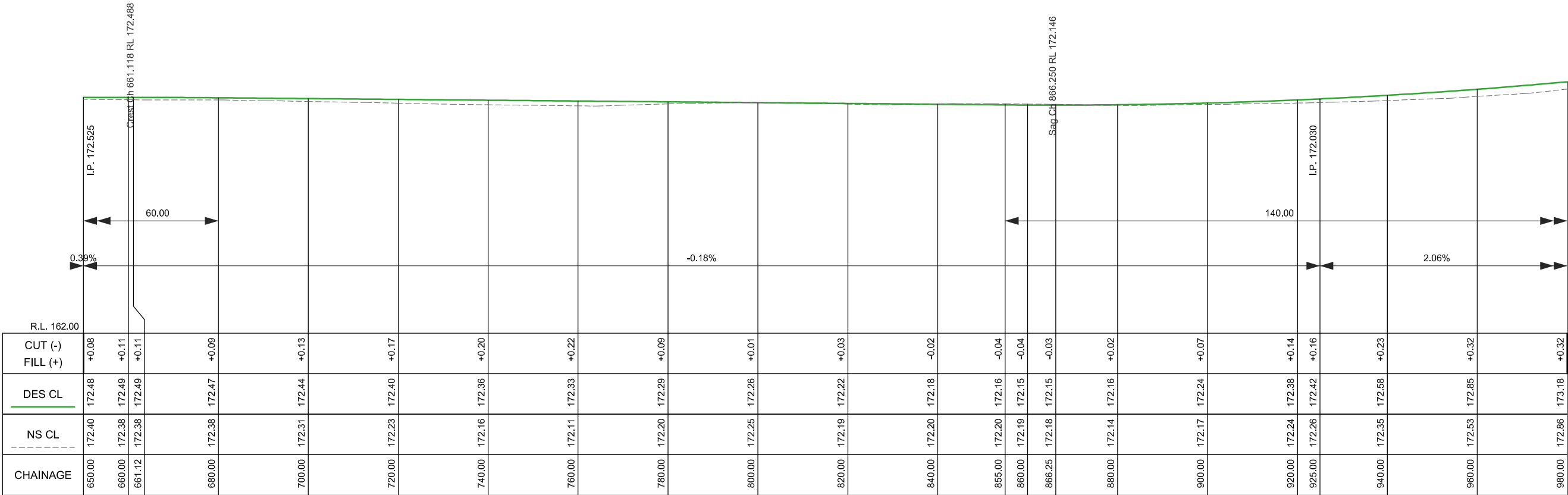
OBRIENS LANE
AXEDALE
ROAD CONSTRUCTION

ROAD LONGITUDINAL SECTION

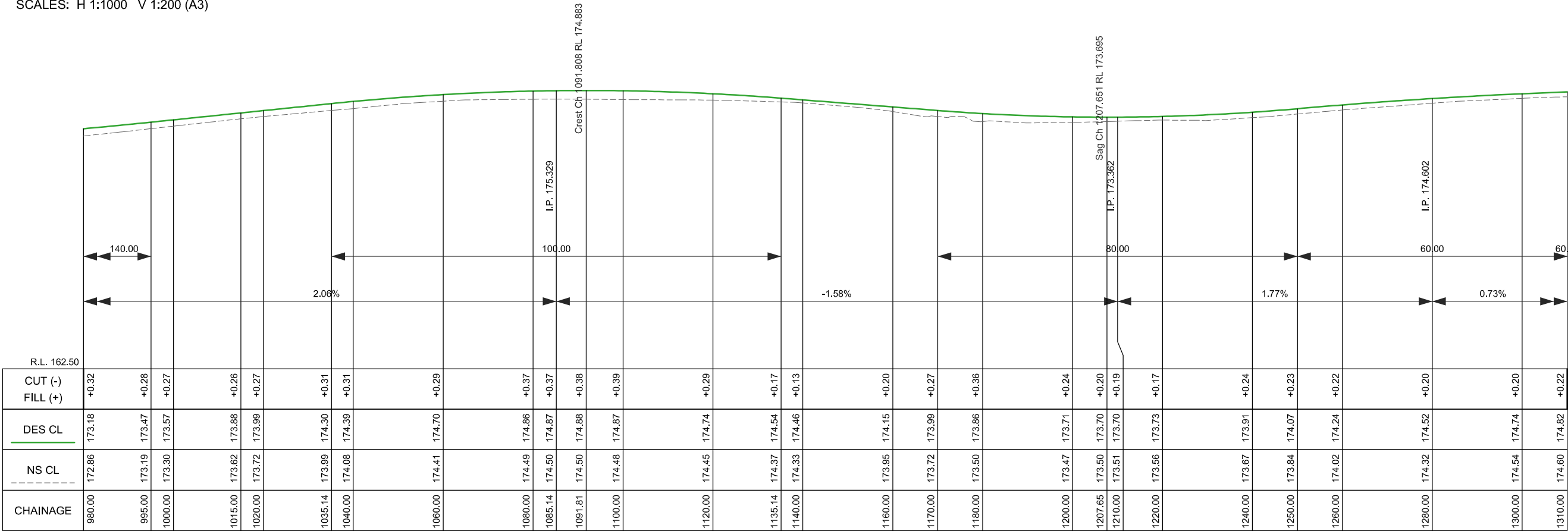
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Design	L. OLIVER		OCT. 2018
Checked	A. SMITH		-/-/18
Approved by	N. SARTORI		-/-/18
Scale: 1:1000	Revision : A		
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Sheet: 11 OF 25	Reference: GB4286		

PRELIMINARY DESIGN
DRAFT 2

Plot Date: 17/12/2018
Plotted By: LEIGH OLIVER



OBRIENS LANE LONGITUDINAL SECTION CH 650.000 To 980.000
SCALES: H 1:1000 V 1:200 (A3)



OBRIENS LANE LONGITUDINAL SECTION CH 980.000 To 1310.000
SCALES: H 1:1000 V 1:200 (A3)

AMENDMENTS			
Revision	Description	Approved by	Date
-	-	-	-



CITY OF GREATER BENDIGO

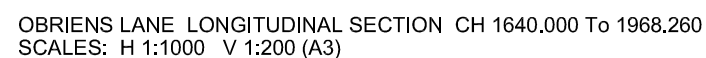
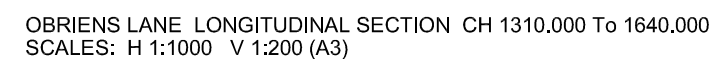
OBRIENS LANE
AXEDALE
ROAD CONSTRUCTION

ROAD LONGITUDINAL SECTION

Survey	TOMKINSON		JUNE 2018
Design	L. OLIVER		OCT. 2018
Checked	A. SMITH		-/-/18
Approved by	N. SARTORI		-/-/18
Scale: 1:1000	Revision : A		
Original sheet size: A3	File : GB4286.dwg		
Sheet: 12 OF 25	Reference: GB4286		

PRELIMINARY DESIGN
DRAFT 2

Plot Date: 17/12/2018
Plotted By: LEIGH OLIVER

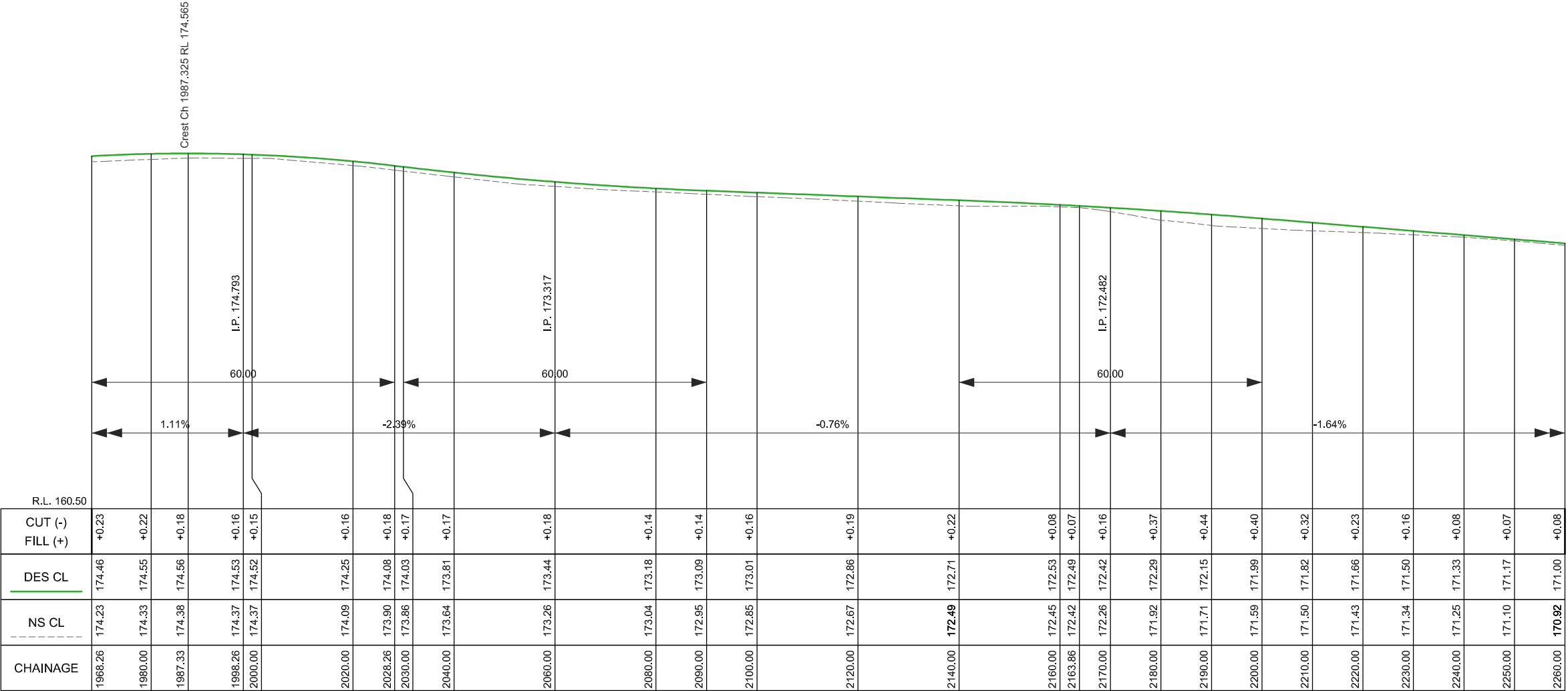


	CITY OF GREATER BENDIGO
	O'BRIENS LANE AXEDALE ROAD CONSTRUCTION

**PRELIMINARY DESIGN
DRAFT 2**

Plot Date: 17/12/2018

Plotted By: LEIGH OLIVER



OBRIENS LANE LONGITUDINAL SECTION CH 1968.260 To 2260.000
SCALES: H 1:1000 V 1:200 (A3)

AMENDMENTS			
Revision	Description	Approved by	Date
-	-	-	-

CITY OF GREATER BENDIGO

OBRIENS LANE
AXEDALE
ROAD CONSTRUCTION
ROAD LONGITUDINAL SECTION

Survey

TOMKINSON

JUNE 2018

Design

L. OLIVER

OCT. 2018

Checked

A. SMITH

-/-/18

Approved by

N. SARTORI

-/-/18

Scale: 1:1000

Revision : A

Original sheet size: A3

File : GB4286.dwg

Sheet:

14 OF 25

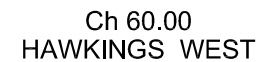
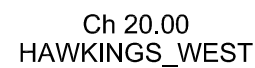
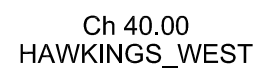
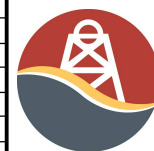
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GB4286

Plot Date: 17/12/2018

Plotted By: LEIGH OLIVER

PRELIMINARY DESIGN
DRAFT 2

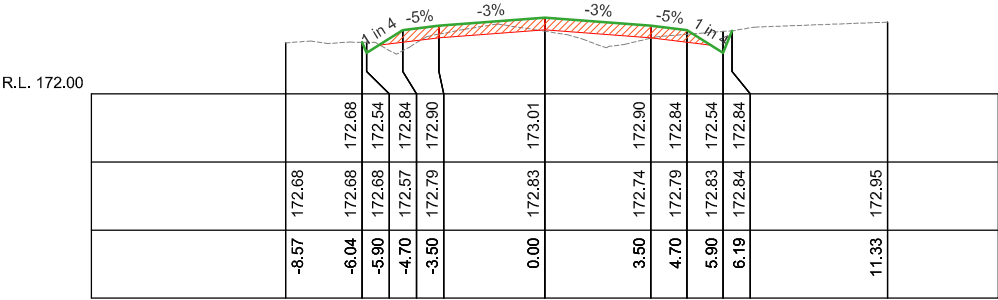
CITY OF GREATER BENDIGO

OBRIENS LANE
AXEDALE
ROAD CONSTRUCTION

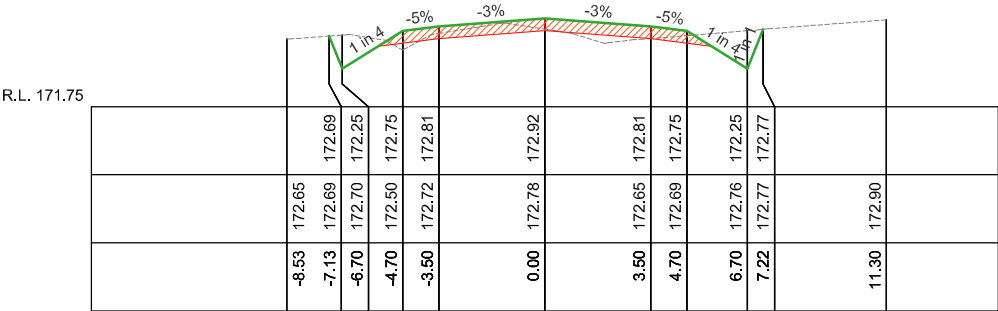
HAWKINS LANE LONG & CROSS SECTIONS

**PRELIMINARY DESIGN
DRAFT 2**

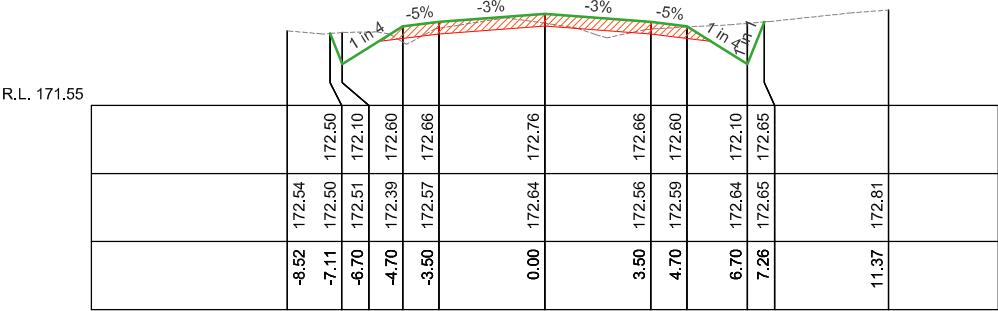
Plot Date: 17/12/2018
Plotted By: LEIGH OLIVER



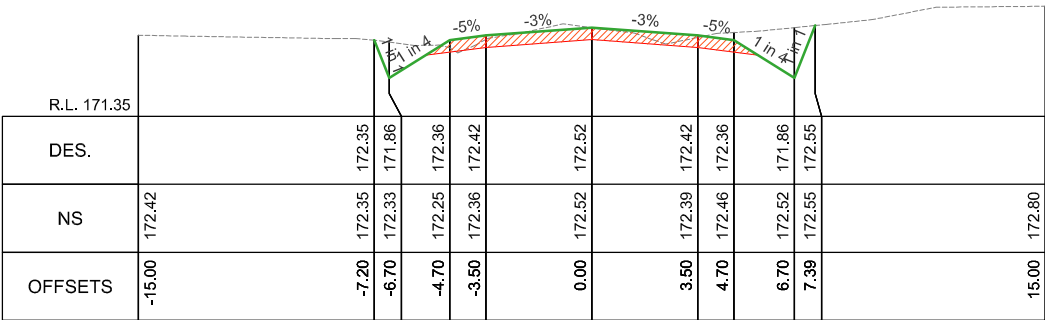
Ch 50.00
HAWKINGS_EAST



Ch 40.00
HAWKINGS_EAST

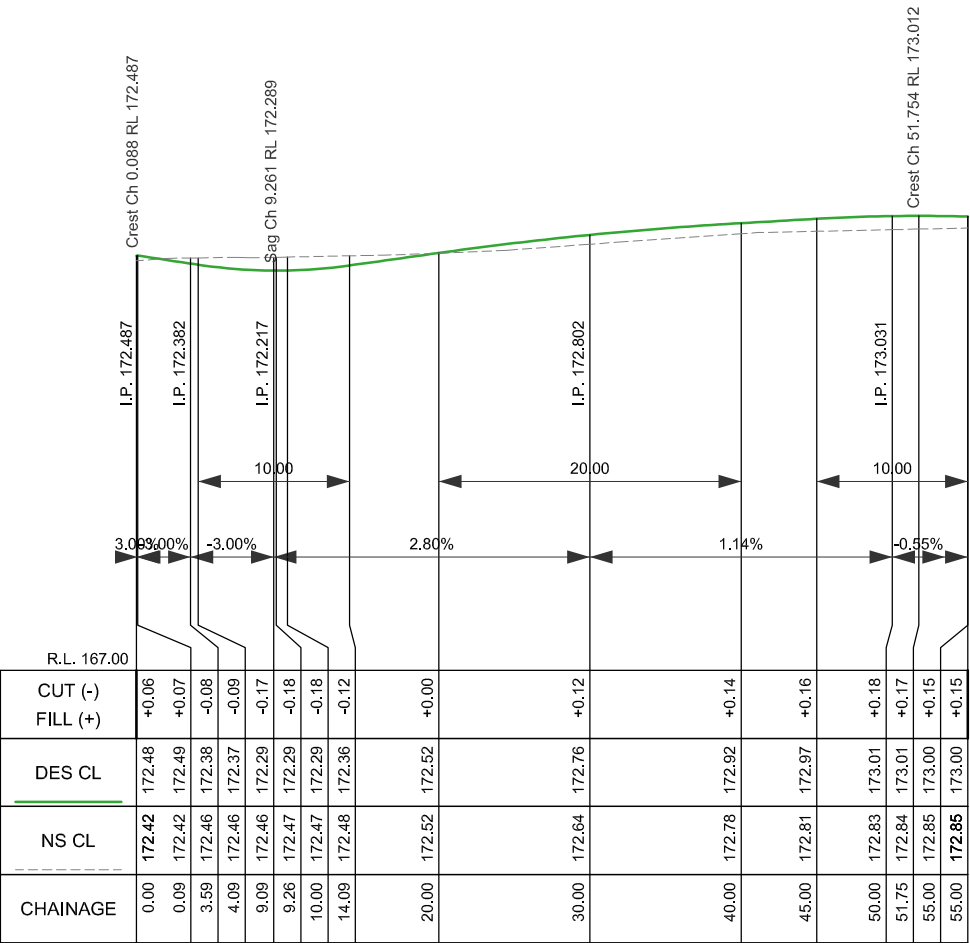


Ch 30.00
HAWKINGS_EAST

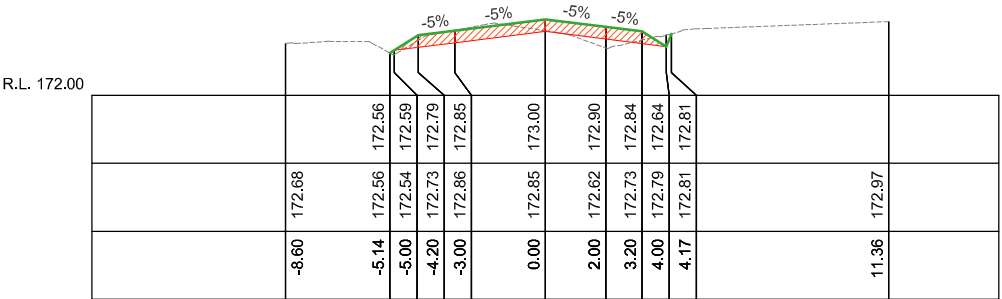


HAWKINGS_EAST APPROACH CROSS SECTIONS Ch 20.00
SCALES: H 1:250 V 1:100 (A3)

HAWKINGS_EAST



HAWKINGS_EAST APPROACH LONGITUDINAL SECTION CH 0.000 To 55.000
SCALES: H 1:500 V 1:100 (A3)



Ch 55.00
HAWKINGS_EAST

AMENDMENTS			
Revision	Description	Approved by	Date
-	-	-	-



CITY OF GREATER BENDIGO

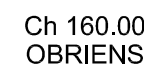
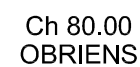
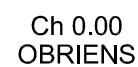
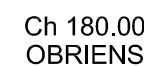
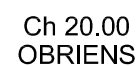
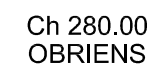
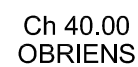
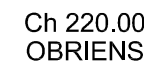
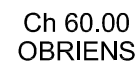
O Briens Lane
Axedale
Road Construction

Hawkins Lane Long & Cross Sections

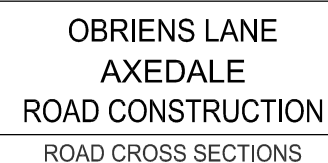
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Design	L. OLIVER		OCT. 2018
Checked	A. SMITH		-/-/18
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16 OF 25		GB4286	

PRELIMINARY DESIGN
DRAFT 2

Plot Date: 17/12/2018
Plotted By: LEIGH OLIVER

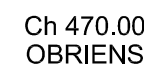
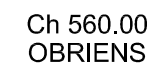
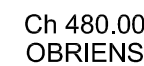
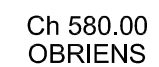
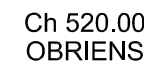


Ch 0.00
OBRIENS

CITY OF GREATER BENDIGO

**PRELIMINARY DESIGN
DRAFT 2**

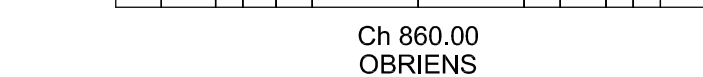
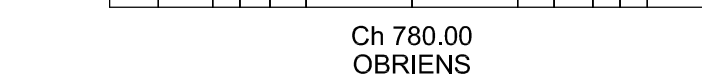
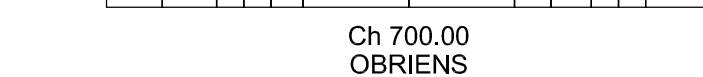
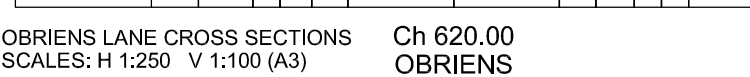
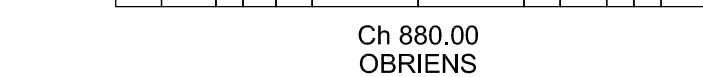
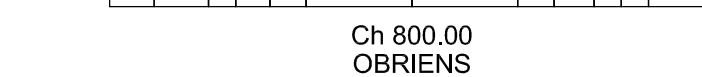
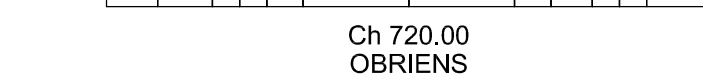
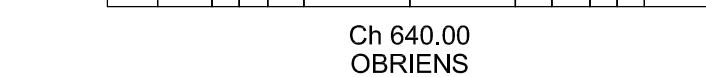
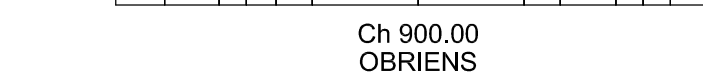
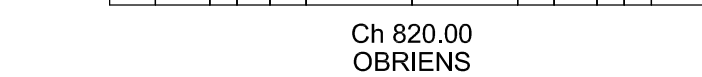
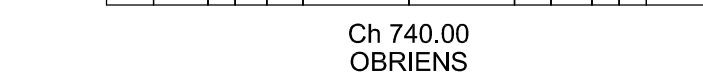
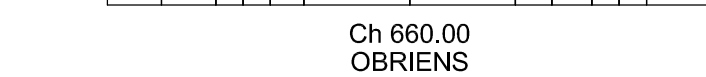
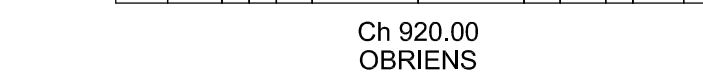
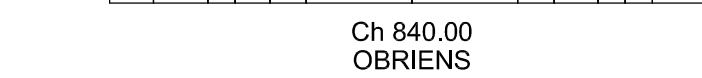
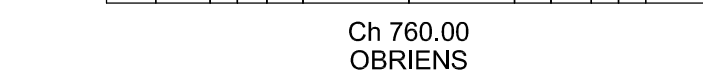
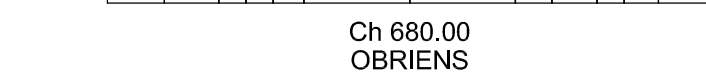
Plot Date:	17/12/2018
Plotted By:	LEIGH OLIVER



Ch 320.00
OBRIENS

CITY OF GREATER BENDIGO	
	OBRIENS LANE AXEDALE ROAD CONSTRUCTION
	ROAD CROSS SECTIONS

**PRELIMINARY DESIGN
DRAFT 2**

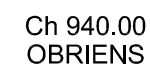
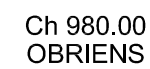
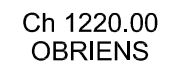
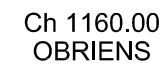
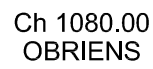


Ch 620.00
OBRIENS

CITY OF GREATER BENDIGO	
	OBRIENS LANE AXEDALE ROAD CONSTRUCTION
	ROAD CROSS SECTIONS

**PRELIMINARY DESIGN
DRAFT 2**

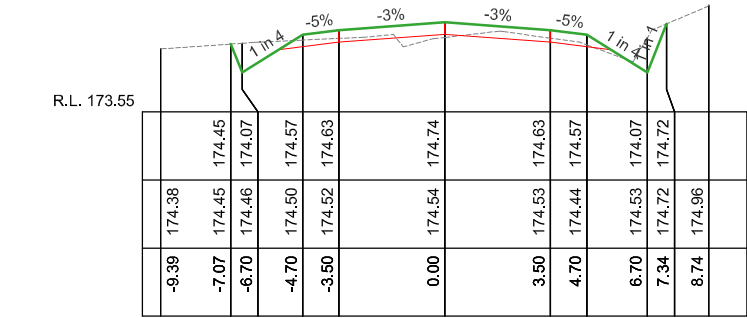
Plot Date:	17/12/2018
Plotted By:	LEIGH OLIVER



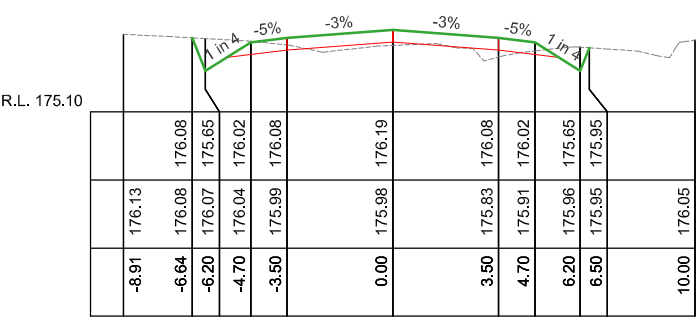
Ch 940.00
OBRIENS

CITY OF GREATER BENDIGO	
	OBRIENS LANE AXEDALE ROAD CONSTRUCTION
	ROAD CROSS SECTIONS

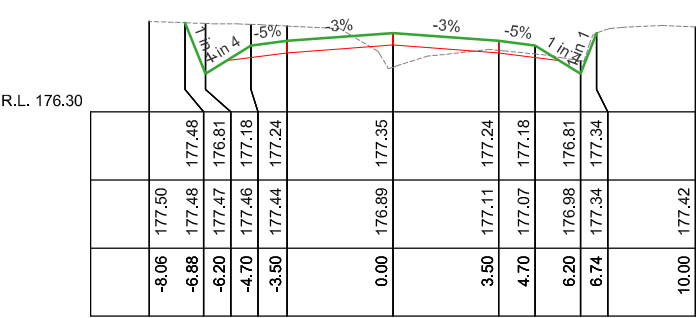
**PRELIMINARY DESIGN
DRAFT 2**



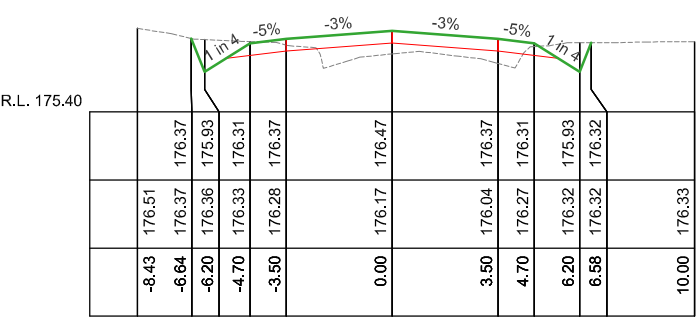
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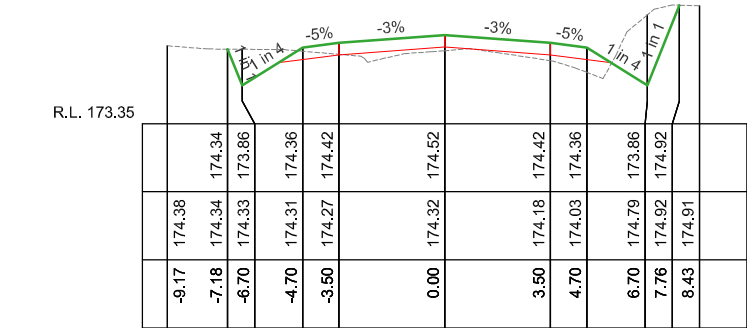
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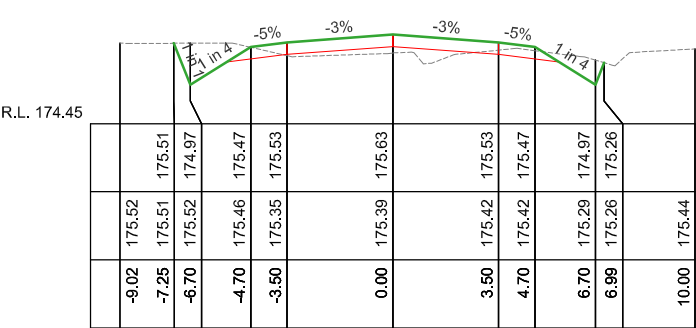
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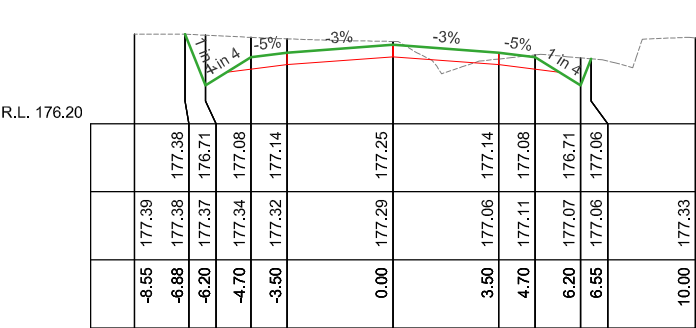
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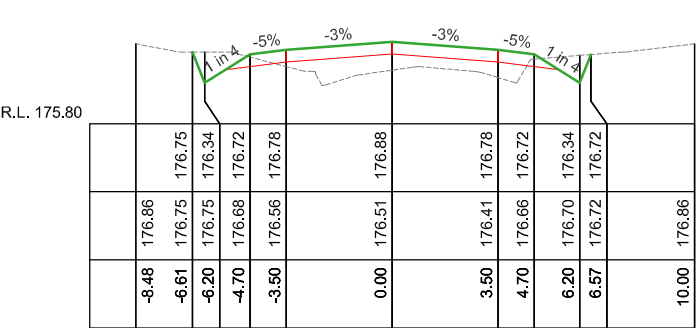
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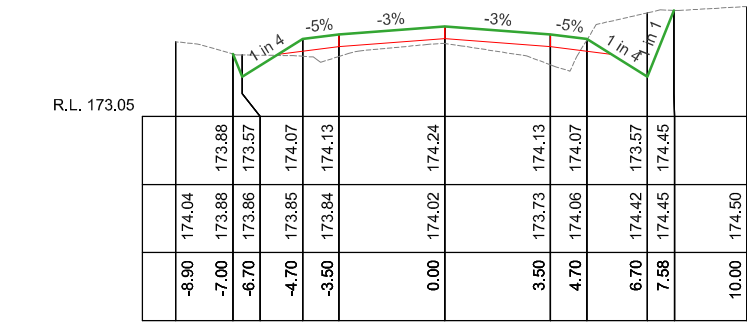
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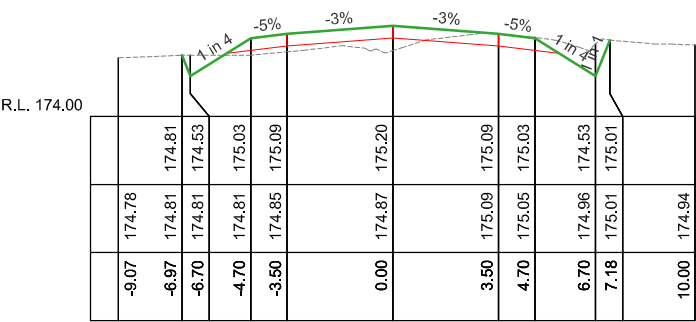
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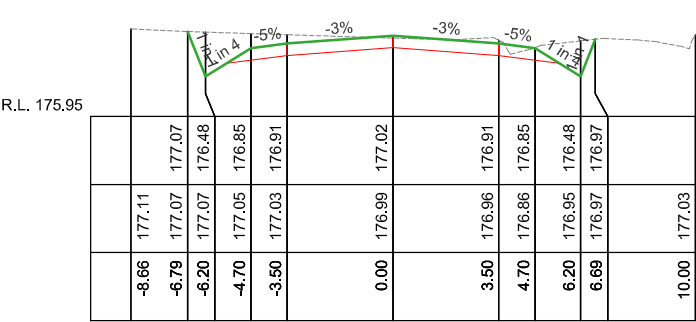
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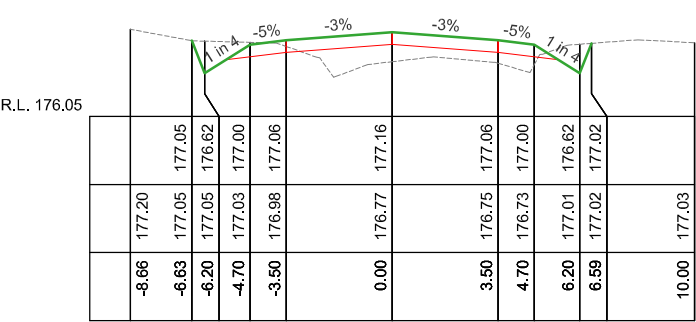
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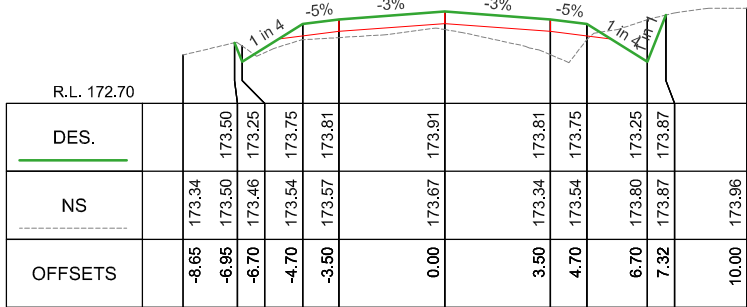
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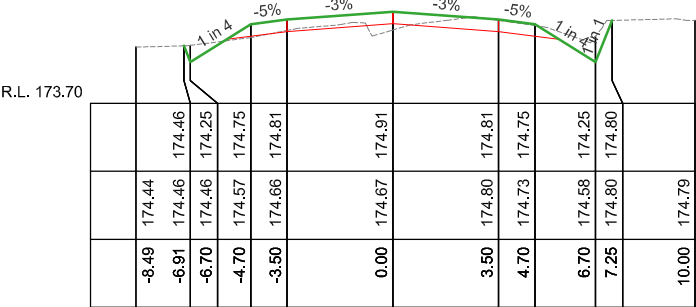
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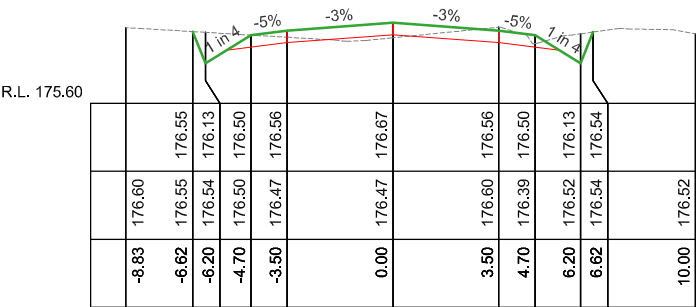
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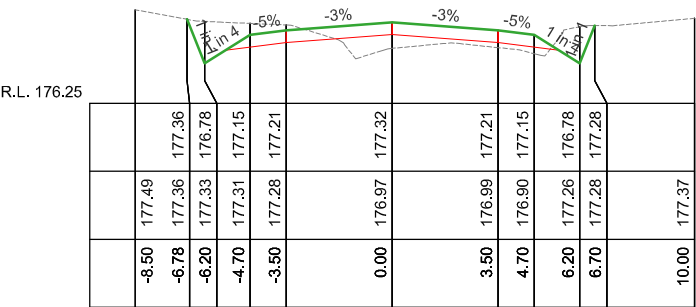
Ch 1240.00
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Ch 1320.00
OBRIENS



Ch 1400.00
OBRIENS



Ch 1480.00
OBRIENS

OBRIENS LANE CROSS SECTIONS
SCALES: H 1:250 V 1:100 (A3)

AMENDMENTS			
Revision	Description	Approved by	Date
-	-	-	-

CITY OF GREATER BENDIGO

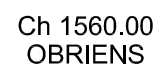
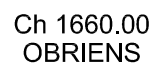
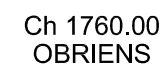
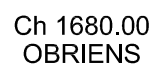


OBRIENS LANE
AXEDALE
ROAD CONSTRUCTION
ROAD CROSS SECTIONS

Survey	TOMKINSON	JUNE 2018
Design	L. OLIVER	OCT. 2018
Checked	A. SMITH	-/-/18
Approved by	N. SARTORI	-/-/18
Scale: AS SHOWN	Revision : A	
Original sheet size: A3	File : GB4286.dwg	
Sheet: 21 OF 25	Reference: GB4286	

PRELIMINARY DESIGN
DRAFT 2

Plot Date: 17/12/2018
Plotted By: LEIGH OLIVER

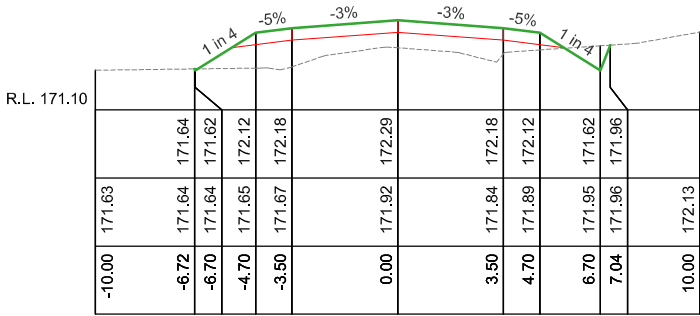


Ch 1560.00
OBRIENS

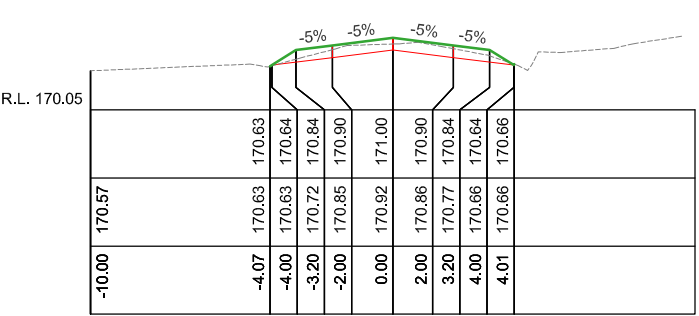
CITY OF GREATER BENDIGO	
	OBRIENS LANE AXEDALE ROAD CONSTRUCTION
	ROAD CROSS SECTIONS

**PRELIMINARY DESIGN
DRAFT 2**

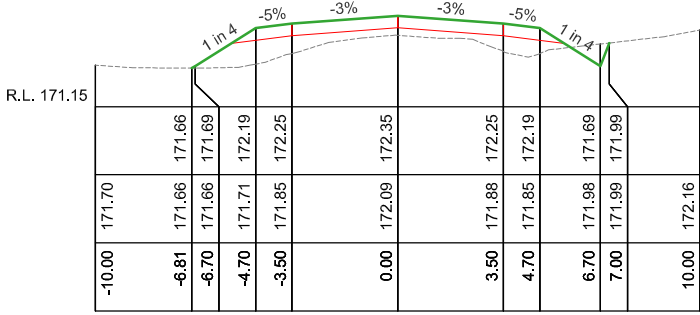
Plot Date: 17/12/2018



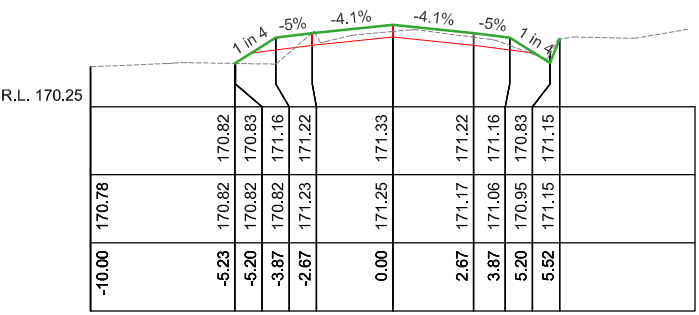
Ch 2180.00
OBRIENS



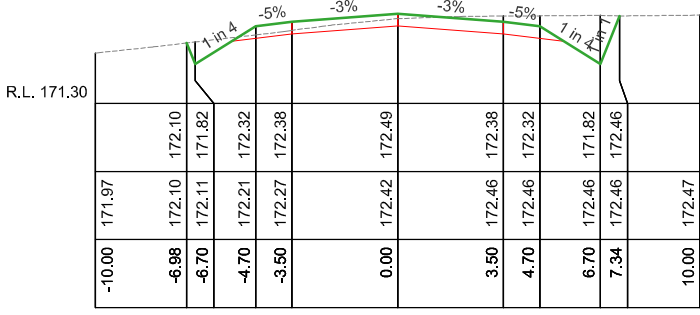
Ch 2260.00
OBRIENS



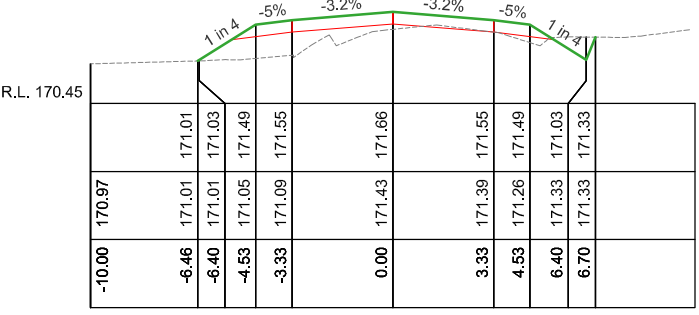
Ch 2175.00
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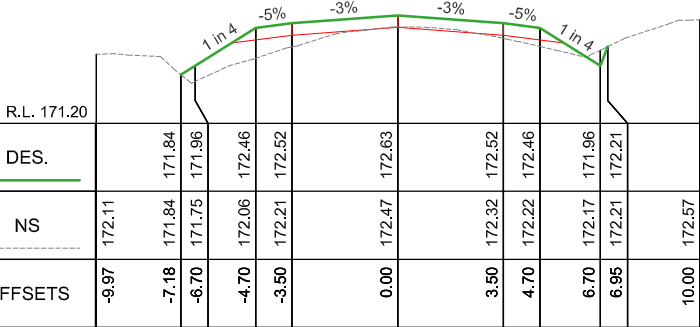
Ch 2240.00
OBRIENS



Ch 2163.86
OBRIENS



Ch 2220.00
OBRIENS



Ch 2200.00
OBRIENS

OBRIENS LANE CROSS SECTIONS
Ch 2150.00
OBRIENS
SCALES: H 1:250 V 1:100 (A3)

AMENDMENTS			
Revision	Description	Approved by	Date
-	-	-	-



CITY OF GREATER BENDIGO

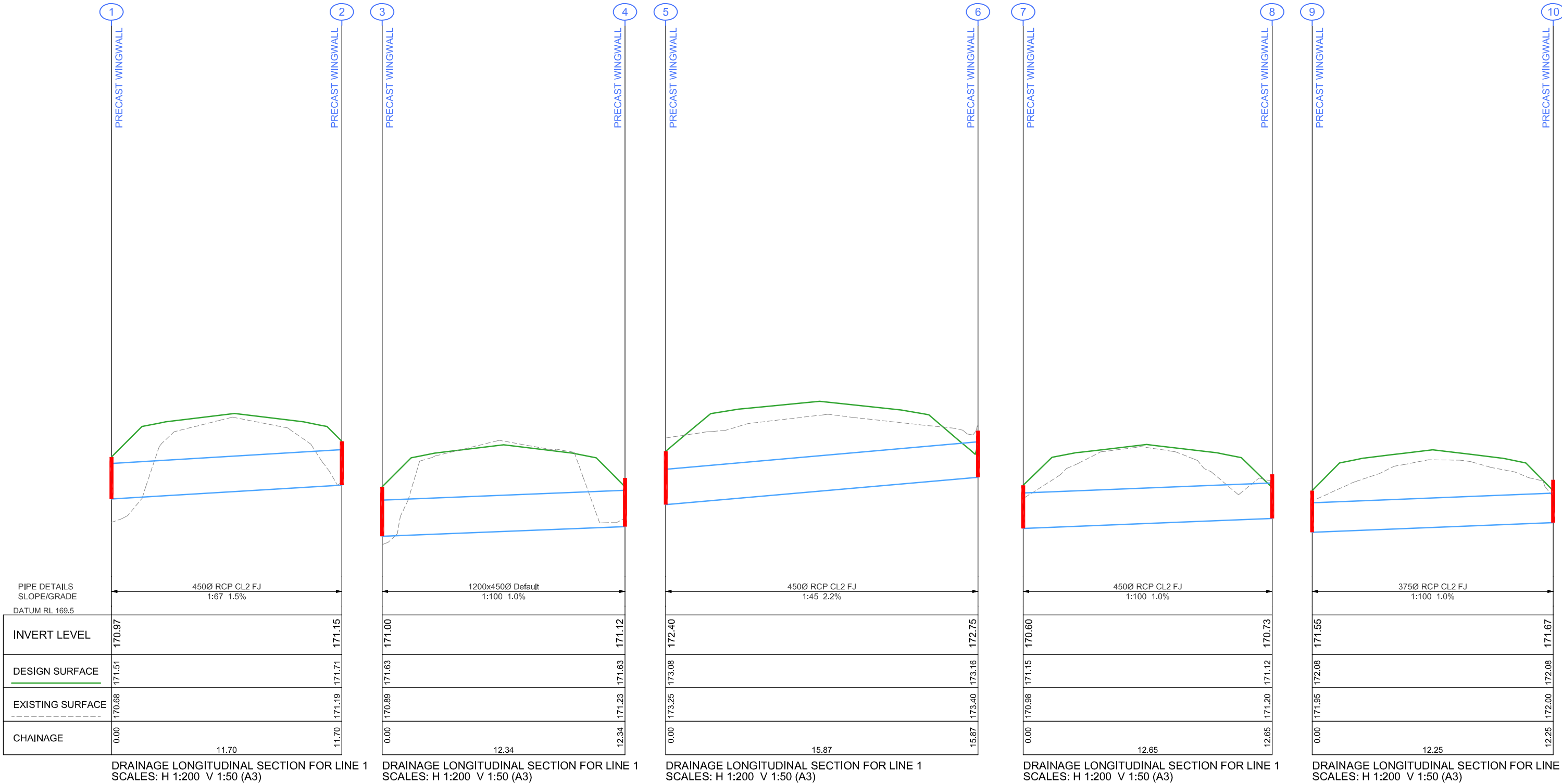
OBRIENS LANE
AXEDALE
ROAD CONSTRUCTION

ROAD CROSS SECTIONS

Survey	TOMKINSON	JUNE 2018
Design	L. OLIVER	OCT. 2018
Checked	A. SMITH	-/-18
Approved by	N. SARTORI	-/-18
Scale:	AS SHOWN	Revision : A
Original sheet size:	A3	File : GB4286.dwg
Sheet:	24 OF 25	Reference: GB4286

PRELIMINARY DESIGN
DRAFT 2

Plot Date: 17/12/2018
Plotted By: LEIGH OLIVER



AMENDMENTS			
Revision	Description	Approved by	Date
-	-	-	-



CITY OF GREATER BENDIGO

O Briens Lane
Axedale
Road Construction

Road Culvert Long Sections

Survey	TOMKINSON	JUNE 2018
Design	L. OLIVER	OCT. 2018
Checked	A. SMITH	-/-/18
Approved by	N. SARTORI	-/-/18
Scale: AS SHOWN	Revision :	A
Original sheet size: A3	File :	GB4286.dwg
Sheet: 25 OF 25	Reference:	GB4286

PRELIMINARY DESIGN
DRAFT 2

Plot Date: 17/12/2018
Plotted By: LEIGH OLIVER