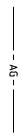


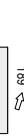


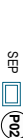
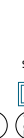
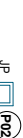




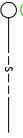


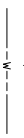
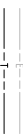









LEGEND



DESIGN SURFACE CONTOURS

PROPOSED STORMWATER DRAINAGE PIPE

EXISTING STORMWATER DRAINAGE PIPE & PIT

PROPOSED TELSTRA

PROPOSED POWER

PROPOSED WATER MAIN

PROPOSED GAS MAIN

EXISTING TELSTRA

EXISTING WATER MAIN

EXISTING GAS MAIN

PROPOSED SEWER MAIN

EXISTING SEWER

PROPOSED TITLE BOUNDARY

PROPOSED ROAD KERB & CHANNEL (ALLURA TYPE BCC2)

EXISTING ROAD KERB & CHANNEL

PROPOSED ROAD CENTERLINE

PROPOSED ROAD JUNCTION PIT

PROPOSED SIDE ENTRY PIT

PROPOSED HOUSE DRAIN CONNECTION & PROPERTY INLET PIT: (P) PIPE (K) KERB

LOT NUMBER & DIRECTION OF NATURAL SURFACE FALL

PROPOSED FOOTPATH

EXTENT OF PROPOSED ROAD PAVEMENT

EXTENT OF PROPOSED ROAD DRAIN

EXTENT OF FILL (300mm+)

PROPOSED TREE

NOTE:
ALL CONDUIT TRENCHES UNDER ROAD PAVEMENT SHALL BE BACKFILLED WITH 20mm NOM SIZE CLASS 3 FOR TO SUBGRADE AND TRENCHING UNDER KERB AND CHANNEL SHALL BE BACKFILLED WITH 20mm NOM SIZE CLASS 3 FOR.

NOTE:
ANY USE OF THE ELECTRONIC DRAWINGS OR DATA PROVIDED BY Cardno TGM SHALL BE USED AT THE USER'S RISK. NO RESPONSIBILITY WILL BE TAKEN BY Cardno TGM AS TO THE ACCURACY OF THE DIGITAL DRAWING OR DATA. ANY SET OUT WORKS UNDERTAKEN USING Cardno TGM DIGITAL DRAWINGS OR DATA SHOULD BE CHECKED AGAINST EXISTING TITLE PEGS, TEMPORARY AND/OR PERMANENT SURVEY MARKS AS NOMINATED BY THE PROJECT'S LICENSED SURVEYOR. THE SET-OUT INFORMATION PROVIDED ON ARCHITECTURAL AND/OR OTHER PROJECT RELATED DRAWINGS AND DOCUMENTS, IN CONJUNCTION WITH THE APPROVED HAND COPY DRAWINGS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

NOTE:
AGRICULTURAL DRAINS ARE TO BE LOCATED AT BACK OF KERB & CHANNEL, WITH THE EXCEPTION OF WHERE A STORMWATER PIPE IS TO BE LOCATED. REFER DIM STANDARD DRAWING SD 145

NOTE:
ALTERNATIVE PIPE MATERIAL CAN BE UTILISED PROVIDING THEY MEET THE REQUIRED LOAD SPECIFICATIONS & AUTHORITY REQUIREMENTS.

NOTE:
THE ORIENTATION OF ALL STORMWATER DRAINAGE ACCESS COVERS & GRATES ARE SHOWN INDICATIVELY AND ARE TO BE MANUFACTURED & INSTALLED IN ACCORDANCE WITH AS3996-2006.

NOTE:
THE CONTRACTOR IS TO CONFIRM INVERT LEVELS OF ALL EXISTING PITS PRIOR TO ANY DRAINAGE WORKS COMMENCING.

NOTE:
ALL KERB & CHANNEL IS CITY OF BALLARAT TYPE BCC2 UNLESS OTHERWISE NOTED.

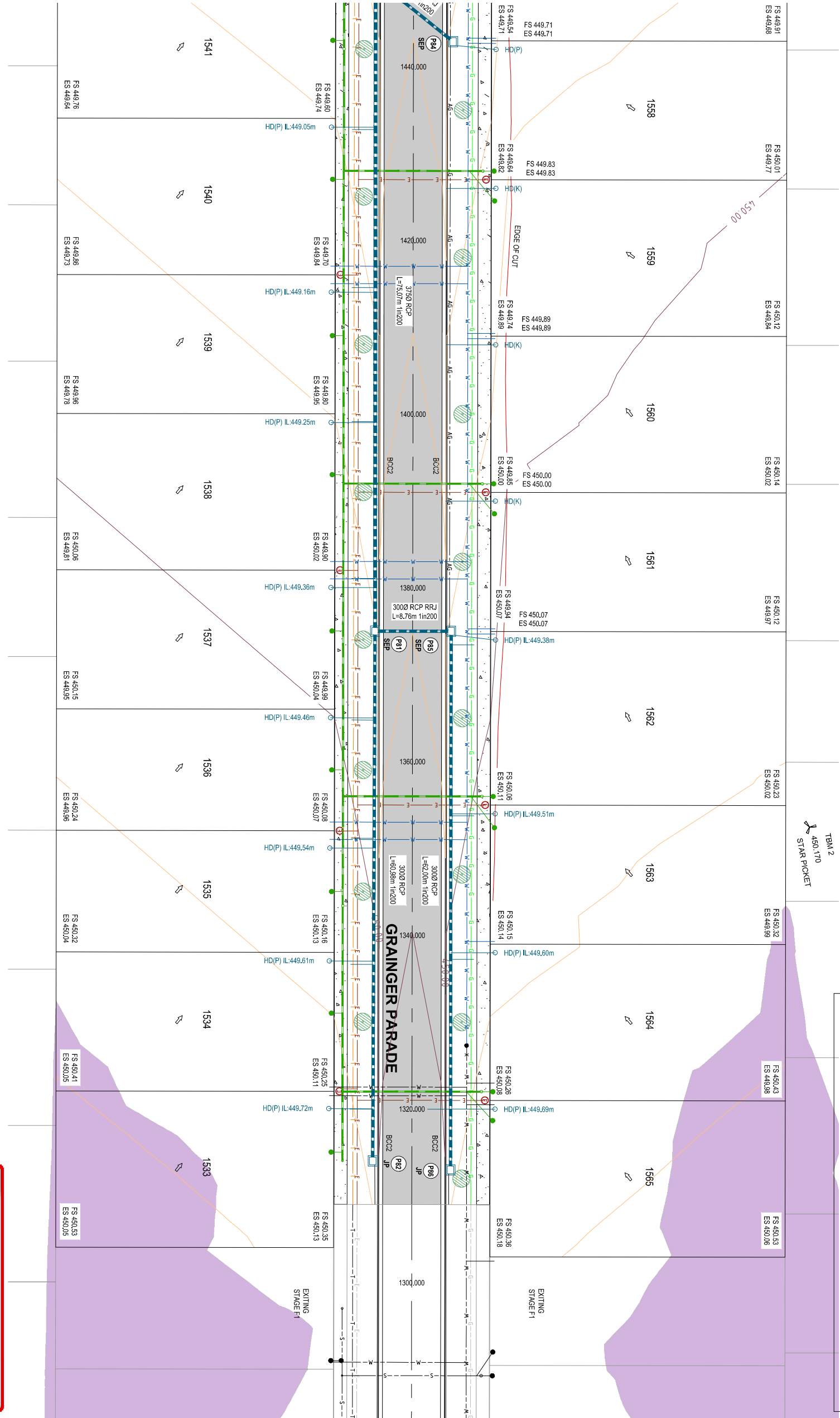
NOTE:
CONTRACTOR TO CONFIRM EXISTING PAVEMENT LEVELS PRIOR TO COMMENCEMENT OF WORKS. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER. ALL KERB SET-OUT TO BE INSPECTED AND APPROVED BY THE COUNCIL OFFICER PRIOR TO PLACEMENT OF KERB & CHANNEL.




NOTE:
THE LOCATION OF EXISTING UNDERGROUND SERVICES ARE SHOWN INDICATIVELY ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL AUTHORITIES TO DETERMINE THE LOCATION OF UNDERGROUND SERVICES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORK. ANY CLASH OF WORKS WITH A SERVICE IS TO BE REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR SHALL ENSURE THAT ALL SERVICES ARE FULLY PROTECTED DURING CONSTRUCTION. ANY SERVICES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

NOTE:
HOUSE DRAINS TO BE CONNECTED TO KERB IN ACCORDANCE WITH I.D.M. SD 505 OR CONNECTED TO PIPE IN ACCORDANCE WITH I.D.M. SD 515.

PLAN VIEW
SCALE 1:250

NOTE:
ALL POWER/ELECTRICAL CONDUITS TO CROSS UNDER DRAINAGE PIPES MAINTAINING ADEQUATE CLEARANCE BETWEEN SERVICES.



BENCHMARK LOCATIONS					
	TBM-2	E: 745460.633	N: 5941436.232	RL: 450.464	"STAR-PICKET"
	TBM-3	E: 754268.907	N: 5941467.974	RL: 440.170	"STAR-PICKET"
	TBM-4	E: 745054.678	N: 5941468.514	RL: 448.479	"STAR-PICKET"
SUGGESTED SERVICES OFFSET TABLE					
STREET NAME	TELECOMMS	ELEC	GAS	WATER	SEWER
GRAINGER PARADE	2.20 (S)	2.70 (S)	2.20 (N)	2.70 (N)	1.00 (S)
SNEEDON WAY	2.20 (SW)	2.70 (SW)	2.20 (NE)	2.70 (NE)	1.00 (NE)
THE CONTRACTOR IS TO CONFIRM ALL EXISTING & PROPOSED SERVICE OFFSETS, DEPTHS & CLEARANCES TO ANY EXISTING & PROPOSED INFRASTRUCTURE WITH THE RESPONSIBLE AUTHORITY PRIOR TO CONSTRUCTION.					

PRELIMINARY DRAWING
NOT TO BE USED FOR CONSTRUCTION

ISSUE

ISSUED FOR

DATE

DRAWN

APPROVED

ISSUE

01

PRELIMINARY

06/06/19

J.H.

02

PRELIMINARY

22/06/19

J.H.

03

PRELIMINARY

25/06/19

J.H.

04

PRELIMINARY

24/07/2020

J.H.

05

PRELIMINARY

7/7

J.H.

ISSUED FOR

DATE

DRAWN

APPROVED

ISSUE

DESIGNED

S. LOTAY

DATE

AUGUST 2019

DRAWN

J. HADFIELD

SCALE

AS SHOWN

SURVEY

TGM GROUP

SHEET SIZE

A1 / A3

CHECKED

R. DUINN

APPROVED

DATE

08/08/19

DATE

CLIENT

1315 Shute Street, Ballarat, VIC Australia PO Box 5933W, Ballarat (West) 3350
Email: volterra@cardno.com.au Web: www.cardno.com

PROJECT

LUCAS ESTATE
RESIDENTIAL SUBDIVISION
STAGE F5 (33 LOTS)

DRAWING TITLE

CIVIL DRAWING

DRAWING TITLE

ROAD & DRAINAGE LAYOUT PLAN

SHEET NO.


SHEET 1 OF 3

DATE


REV

This plan is provided for marketing and information purposes only, it shows design levels only which may change during construction. Builders should check all information prior to the building process. Where discrepancies exist between the plan of subdivision and this plan, the plan of subdivision shall be taken as correct. It is the responsibility of the prospective purchaser to confirm prior to purchase, all lot levels, fill depth and all service locations are correct.


LEGEND




DESIGN SURFACE CONTOURS




PROPOSED STORMWATER DRAINAGE PIPE & PIT



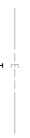
EXISTING STORMWATER DRAINAGE PIPE & PIT



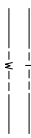
PROPOSED TELSTRA




PROPOSED POWER




PROPOSED WATER MAIN



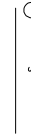
PROPOSED GAS MAIN




EXISTING POWER




EXISTING TELSTRA




EXISTING WATER MAIN




EXISTING GAS MAIN




PROPOSED SEWER MAIN




EXISTING SEWER



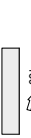
PROPOSED TITLE BOUNDARY




PROPOSED ROAD KERB & CHANNEL (BALLAARAT TYPE BCC2)



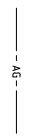
FUTURE ROAD KERB & CHANNEL




PROPOSED ROAD CENTERLINE




PROPOSED JUNCTION PIT




PROPOSED SIDE ENTRY PIT




PROPOSED HOUSE DRAIN CONNECTION & PROPERTY INLET PIT: (P) PIPE (K) KERB




LOT NUMBER & DIRECTION OF NATURAL SURFACE FALL



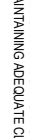
PROPOSED FOOTPATH




EXTENT OF PROPOSED ROAD PAVEMENT



PROPOSED AGI PIPE DRAIN



EXTENT OF FILL (300mm)



PROPOSED TREE

NOTE

ALL POWER/ELECTRICAL CONDUITS TO CROSS UNDER DRAINAGE PIPES MAINTAINING ADEQUATE CLEARANCE BETWEEN SERVICES.

NOTE

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NOTE

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NOTE

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NOTE

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NOTE

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NOTE

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NOTE

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NOTE

HOUSE DRAINS TO BE CONNECTED TO KERB IN ACCORDANCE WITH I.D.M. SD 505 OR CONNECTED TO PIPE IN ACCORDANCE WITH I.D.M. SD 515.

BENCHMARK LOCATIONS

TBM-2	E. 745460.633	N. 5941436.232	RL. 450.464	"STAR-PICKET"
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SUGGESTED SERVICES OFFSET TABLE

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SNEEDON WAY	2.20 (SW)	2.70 (SW)	2.20 (NE)	2.70 (NE)	1.00 (NE)


THE CONTRACTOR IS TO CONFIRM ALL EXISTING & PROPOSED SERVICE OFFSETS, DEPTHS & CLEARANCES TO ANY EXISTING & PROPOSED INFRASTRUCTURE WITH THE RESPONSIBLE AUTHORITY PRIOR TO CONSTRUCTION.

PRELIMINARY DRAWING
NOT TO BE USED FOR CONSTRUCTION

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	DESIGNED	DATE	SCALE	AS SHOWN	CLIENT	PROJECT	DRAWING TITLE	SHEET NO.
01	PRELIMINARY	06/08/19	J.H.		S. LOTAY	AUGUST 2019				LUCAS ESTATE RESIDENTIAL SUBDIVISION STAGE F5 (33 LOTS)	ROAD & DRAINAGE LAYOUT PLAN SHEET 2 OF 3	1
02	PRELIMINARY	22/08/19	J.H.		J. HADFIELD							2
03	PRELIMINARY	25/08/19	J.H.		TGM GROUP							3
04	PRELIMINARY	26/10/2020	J.H.		CHECKED: R. DUINN							4
05	PRELIMINARY	7/7	J.H.		DATE: 08/08/19							5



1315 Stuart Street, Ballarat, VIC Australia PO Box 593W, Ballarat (Vern) 3350
Email: Sales@cardno.com.au Web: www.cardno.com



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