

GOOSE GULLY GOLF COURSE

DOYLES ROAD

10m LANDSCAPE BUFFER

BALFOUR ROAD

8
33 Lots

12
21 Lots

7
27 Lots

11
27 Lots

5

6
23 Lots

10
39 Lots

4
43 Lots

5
55 Lots

2
23 Lots

3
50 Lots

9
40 Lots

1
45 Lots

LOCAL ACTIVITY CENTRE (1.3ha)

DIVIDED BOULEVARD (MAIN ENTRANCE 30.0m)

SUPER LOT (8.2ha)

10m LANDSCAPE BUFFER

20m LANDSCAPE BUFFER

10m LANDSCAPE BUFFER

STAGING
The order of development must be in numerical order as Stages 1 to 12 shown on this plan Staging will not be permitted out of sequence
Goose Gully Waterway works to be staged as follows
a - Stage 1
b - Stage 2
c - Stage 3
d - Stage 5

Please Note Public open space is designated with the stage in which it will be completed Earthworks & landscaping may commence within the open space prior to its designated stage This staging is to ensure that landscaped areas are not disturbed by development occurring adjacent to completed open spaces

DEVELOPMENT ANALYSIS		
Subject Site Area	62.9 ha	%SA
Local Activity Centre	1.3 ha	2%
Superlot	8.2 ha	13%
Open Space	14.7 ha	23%
Goose Gully	11.9 ha	
Tree & Artefact Retention	0.8 ha	
Landscape Buffer	2.0 ha	
Road	9.9 ha	16%
Residential	28.7 ha	46%
Standard Density	25.0 ha	
Average Lot Size	636 sqm	
Approx Number of Lots	393 lots	
Lower Density	3.7 ha	
Average Lot Size	1122 sqm	
Approx Number of Lots	33 lots	
Approx Total Number of Lots	426 lots	

- LEGEND**
- Stage Boundary
 - Major Access Street with Indented Parking (24.0m)
 - Major Access Street (18.0m)
 - Minor Access Street (16.0m)
 - 100 Year Flood Boundary
 - Proposed Waterway
 - Potential Location of Retarding Basins (subject to further investigation)
 - Artefact Scatter and 20m Buffer
 - Existing Buildings
 - Local Activity Centre
 - Superlot (Delivered with Stage 1)
 - Standard Density Residential Lots (<1000sqm)
 - Lower Density Residential Lots (1000-2000sqm)
 - Public Open Space - Gully/Drainage/Staging No
 - Public Open Space - Tree & Artefact Retention
 - Public Open Space - Landscape Buffer

DATE	REVISION	DETAILS	AUTHORISED
31/8/21	K	Stage 1, 2 & 3 road names added.	J.T.N
7/9/21	L	Stage 3 Lot Layout updated.	J.T.N
13/9/21	M	Stage 3 Lot Layout updated.	J.T.N
16/9/21	N	Stage 3 Lot Layout updated.	J.T.N
16/9/21	O	Stage 3 Lot Layout updated.	J.T.N
3/11/21	P	Stage 4 Lot Layout updated.	J.T.N
31/3/22	Q	Stage 3 Layout updated.	J.T.N
5/8/22	R	Stages 5 & 6 Layout updated. Stage boundaries amended.	K.J.E

SCALE: 25 0 50 100m 1:2,500 at A1 1:5,000 at A3

SHEET 1 OF 1

LEVEL DATUM: N/A
DATE PLAN CREATED: 5/08/2022 REF: 35753

COPYRIGHT - THESE DOCUMENTS AND THE INTELLECTUAL PROPERTY PRODUCED SHALL REMAIN VESTED WITH MARSHAL MELBOURNE PTY LTD. IN ACCORDANCE WITH AGREED FEES THE CLIENT SHALL HAVE A LICENSE TO USE THIS PRODUCT FOR THE PURPOSE OF COMPLETING THE PROJECT. THIS PLAN IS NOT TO BE MANIPULATED WITHOUT THE PERMISSION OF MARSHAL MELBOURNE PTY LTD.

K:\35753\35753_0\Planning\Plans_Current Masterplan\35753CP_A_R.dgn



MGA2020 ZONE 55
marshal

BROOKFIELD LAKES
135 GREAT ALPINE ROAD
LUCKNOW
EAST GIPPSLAND SHIRE
REF: 35753CP-A, Revision R

OVERALL SUBDIVISION CONCEPT PLAN

PLAN OF SUBDIVISION

EDITION

PS 846223L

Location of Land
Parish: Wy Yung
Township: Lucknow
Section: —
Crown Allotment: 40A1, 40B1, 46 & 47 (Parts)
Crown Portion: —
Title Reference: Vol. Fol.

Last Plan Reference: Lot G PS 846206L

Postal Address: Great Alpine Road
 (at time of subdivision) Lucknow 3875

MGA Co-ordinates: E 557 630 Zone: 55
 (of approx. centre of land in plan) N 5 816 000 GDA 2020

Council Name: East Gippsland Shire Council

Vesting of Roads and/or Reserves

NOTATIONS

Identifier	Council/Body/Person
Road R-1	East Gippsland Shire Council
Reserve No.1	East Gippsland Shire Council
Reserve No.2	East Gippsland Shire Council

Lots 1 to 163 (Both Inclusive) and A to G (Both Inclusive) have been omitted from this plan.

Other Purpose of Plan:

The easement for Drainage purposes within Mahogany Close created in PS 846202U in favour of East Gippsland Shire Council is removed by agreement (Subdivision Act 1988, Section 6(1)(k)) of all interested parties upon registration of this plan.

Other Purpose of Plan:

The easement for Sewerage purposes within Mahogany Close created in PS 846202U in favour of East Gippsland Region Water Authority is removed by agreement (Subdivision Act 1988, Section 6(1)(k)) of all interested parties upon registration of this plan.

NOTATIONS

Depth Limitation: Does not apply.

Survey: This plan is ~~is not~~ based on survey. See BP2580G.
 This survey has been connected to permanent marks No(s) Wy Yung PM12 & PM34 & Sarsfield PM 43.
 This plan is not in a Proclaimed Survey Area.

Other Purpose of Plan:

The easement for Drainage purposes within Reserve No.1 created in PS 846202U in favour of East Gippsland Shire Council is removed by agreement (Subdivision Act 1988, Section 6(1)(k)) of all interested parties upon registration of this plan.

Staging: This ~~is~~ is not a staged subdivision
 Planning Permit No. 547/2009/P/A

Estate: BROOKFIELD LAKES - BAIRNSDALE
Development No.: 5
No. of Lots: 55
Area: 6.680ha

EASEMENT INFORMATION

LEGEND: A - Appurtenant Easement E - Encumbering Easement R - Encumbering Easement (Road)

Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited/In Favour Of
E-1	Drainage	See Diag.	This Plan	East Gippsland Shire Council
E-1 & E-2	Sewerage	See Diag.	This Plan	East Gippsland Region Water Authority
E-3	Drainage	See Diag.	PS 846202U	East Gippsland Shire Council
E-3 & E-4	Sewerage	See Diag.	PS 846202U	East Gippsland Region Water Authority

marshal

Suite 201, Level 2, 448 St Kilda Road Melbourne Victoria 3004
 +61 3 9860 0380 marshal.melbourne
 hello@marshal.melbourne ABN 58 643 224 266

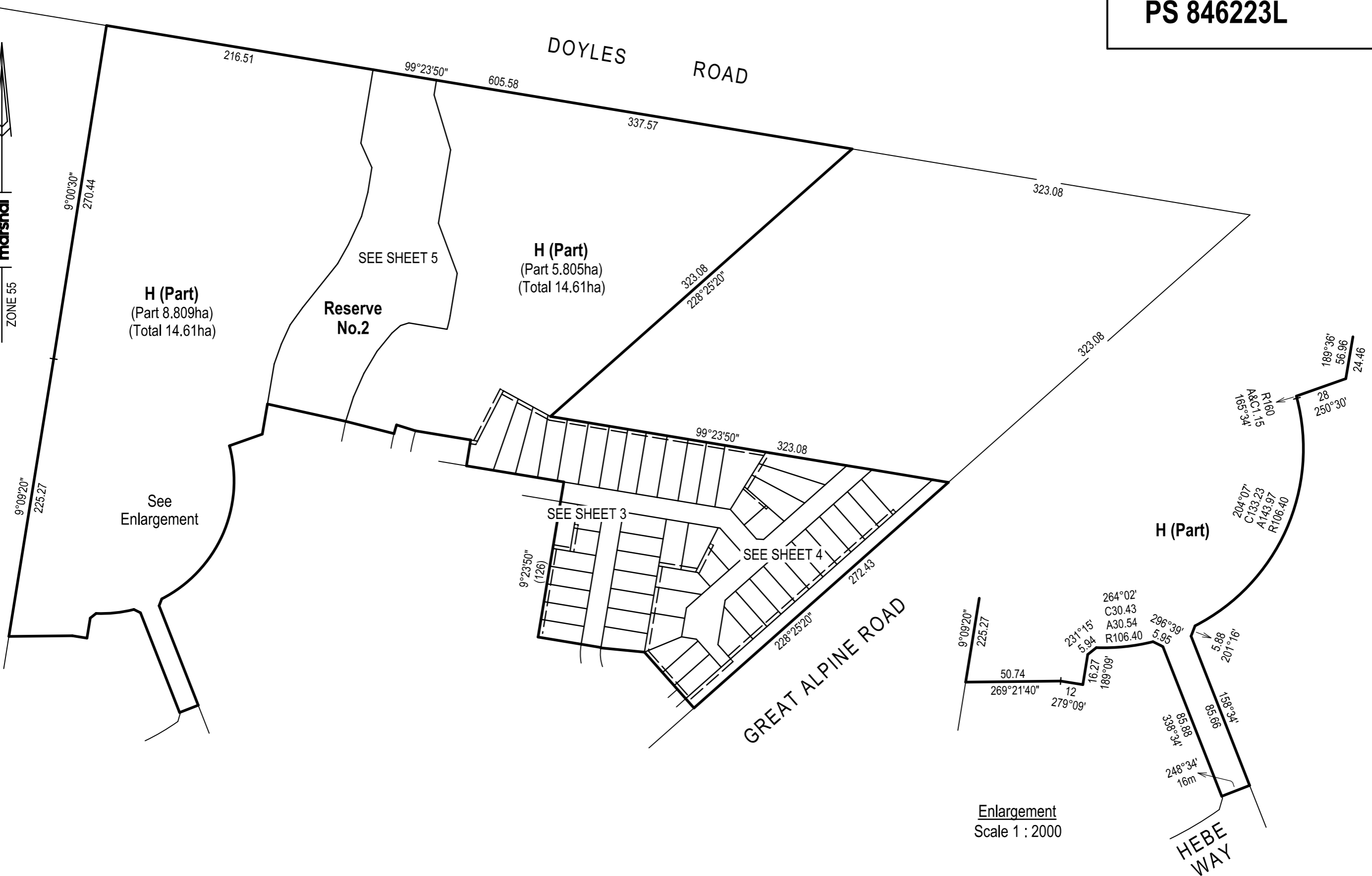
REF 35753/Stg.5

ORIGINAL SHEET
 SIZE A3

SHEET 1 OF 5 SHEETS

JONATHAN TREVOR NEATE, VERSION 4

MGA2020
ZONE 55
marshal

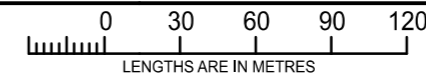


Enlargement
Scale 1 : 2000

marshal

Suite 201, Level 2, 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380 marshal.melbourne
hello@marshal.melbourne ABN 58 643 224 266

SCALE
1 : 3000

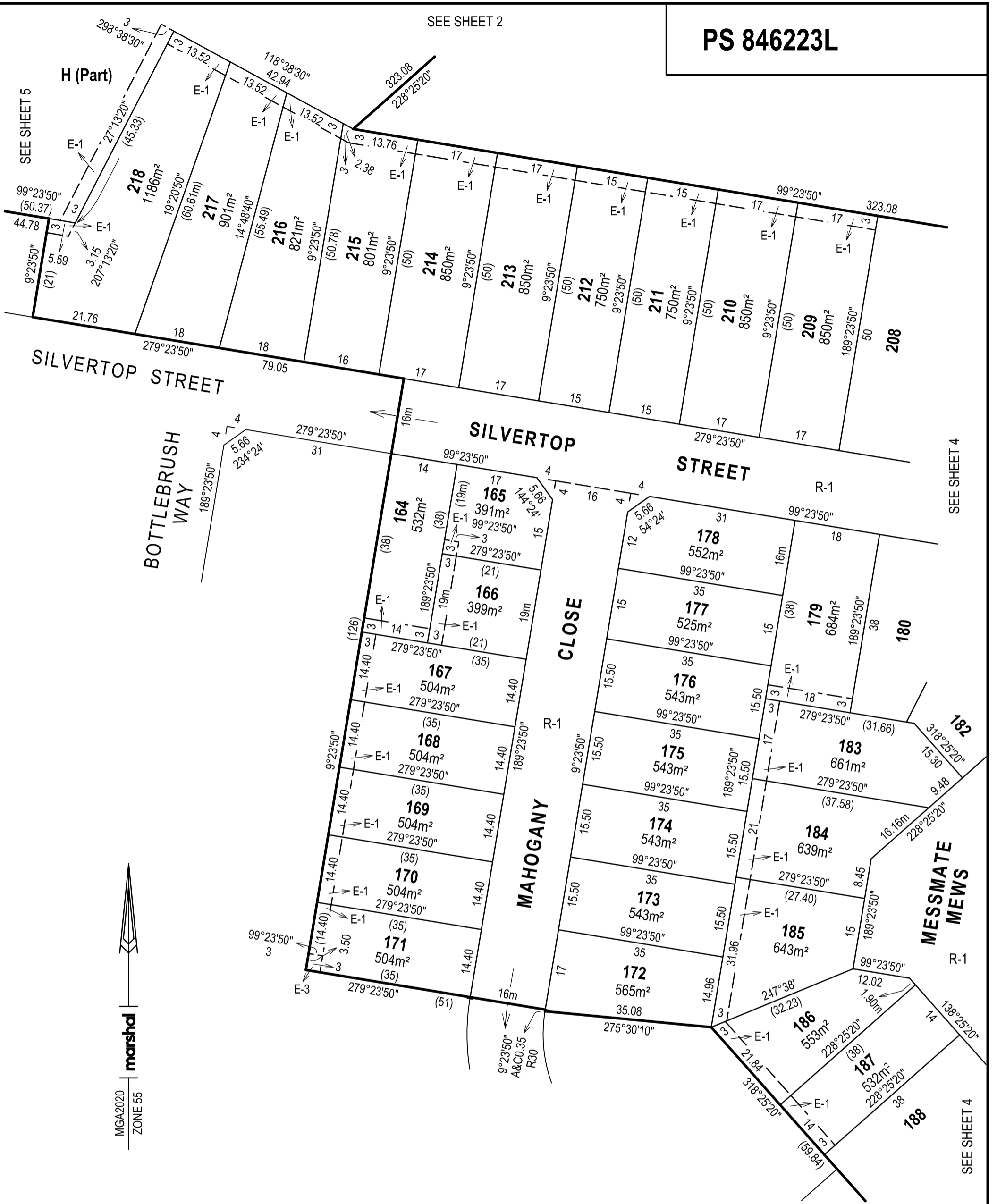


ORIGINAL SHEET
SIZE A3

SHEET 2

JONATHAN TREVOR NEATE, VERSION 4

SEE SHEET 2

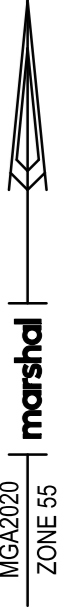
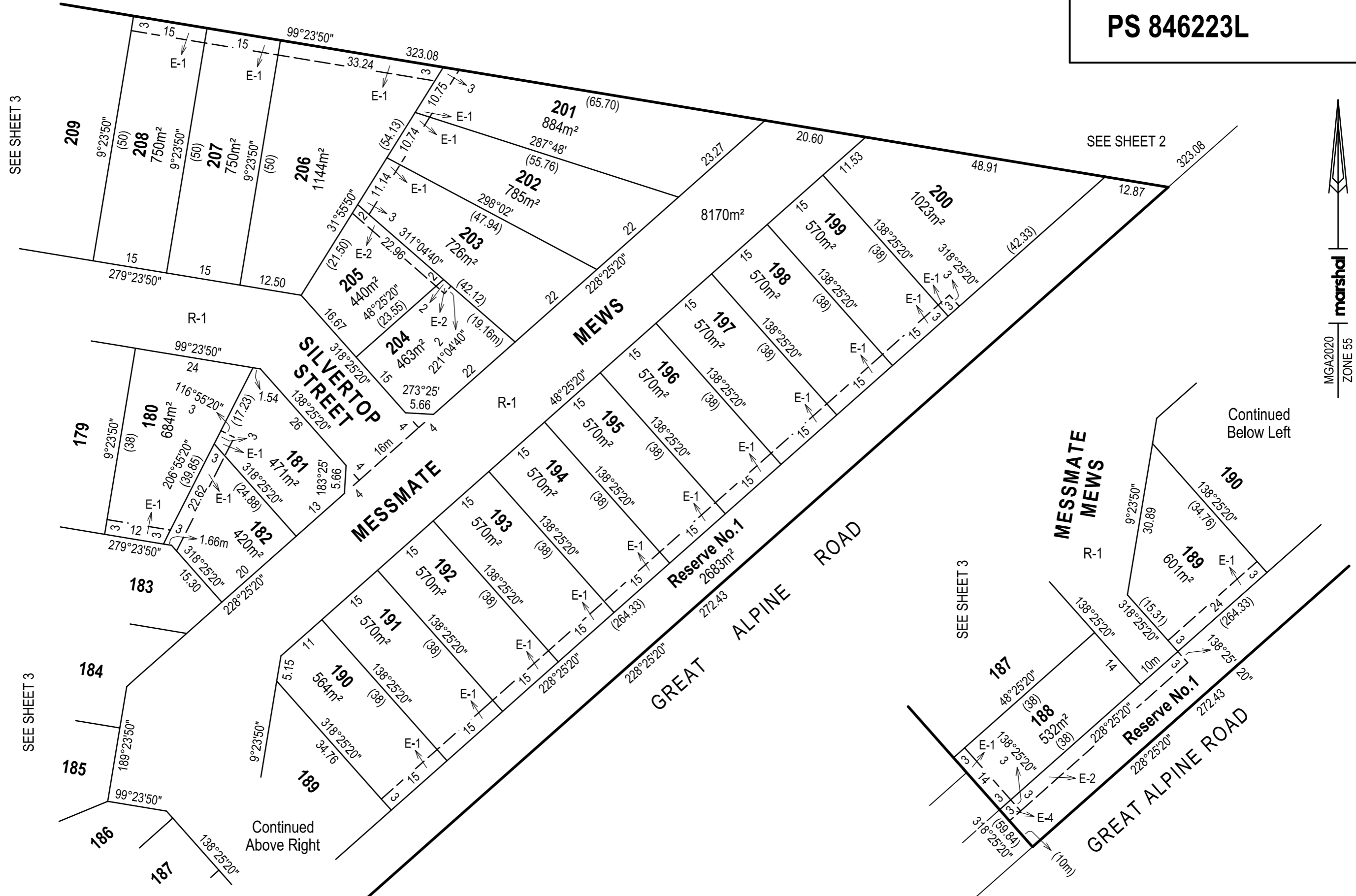


SEE SHEET 5

SEE SHEET 4

SEE SHEET 4





SEE SHEET 3

SEE SHEET 2

Continued Below Left

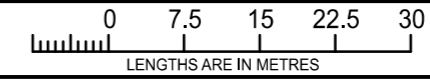
Continued Above Right

SEE SHEET 3

marshal

Suite 201, Level 2, 448 St Kilda Road Melbourne Victoria 3004
 +61 3 9860 0380 marshal.melbourne
 hello@marshal.melbourne ABN 58 643 224 266

SCALE
1 : 750



ORIGINAL SHEET
SIZE A3

SHEET 4

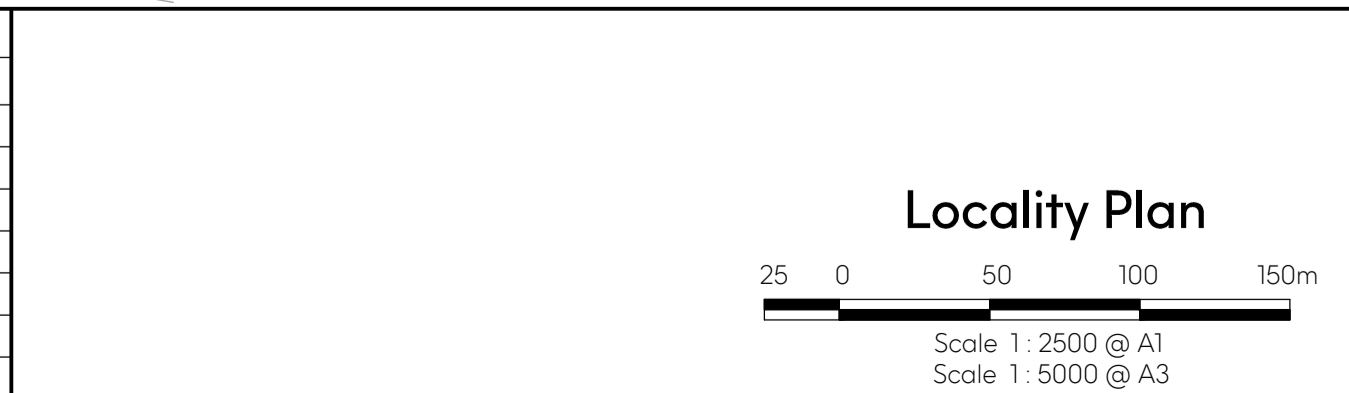
JONATHAN TREVOR NEATE, VERSION 4



BROOKFIELD LAKES STAGE 5

DRAWING INDEX	
SHEET No.	DRAWING TITLE
R01	LOCALITY PLAN & DRAWING INDEX
R02	GENERAL NOTES
R03	LOT LAYOUT PLAN
R04	TYPICAL ROAD CROSS SECTIONS & DETAILS, KERB PROFILE DETAILS
R05	DETAIL PLAN & SERVICES OFFSET TABLE
R06	DESIGN CONTOURS PLAN
R07 - R08	INTERSECTION DETAILS & KERB LONG SECTIONS
R09 - R11	MAHOGANY CLOSE - LONGITUDINAL & CROSS SECTIONS
R12 - R15	MESSMATE MEWS - LONGITUDINAL & CROSS SECTIONS
R16 - R19	SILVERTOP STREET - LONGITUDINAL & CROSS SECTIONS
R20	MESSMATE MEWS - COMMON DRIVEWAY LONGITUDINAL & CROSS SECTIONS
R21 - R25	DRAINAGE LONGITUDINAL SECTIONS SHEETS 1 - 4
R26	DRAINAGE PIT SCHEDULE & TYPICAL DETAILS
R27	LINEMARKING & SIGNAGE PLAN
R28	POST & SLEEPER RETAINING WALL DETAILS

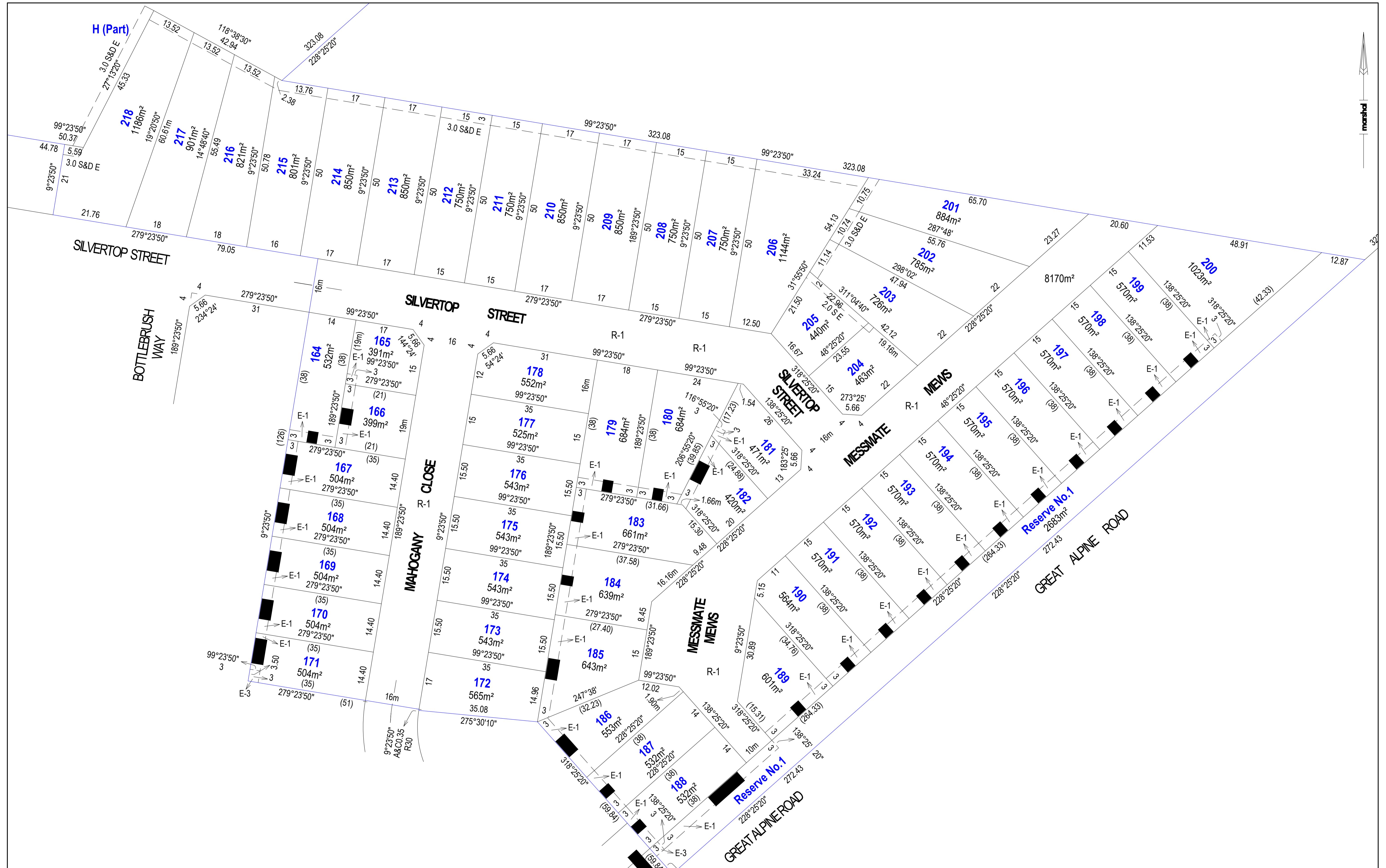
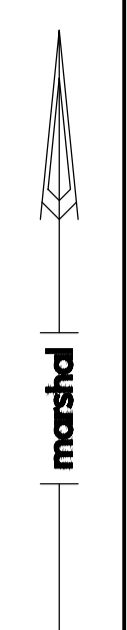
Revision Details				
Revision	Date	Revised Sheets	Descriptions	Authorised
A	02-12-2022	-	Preliminary Issue	G.S.



Preliminary			
ISO 9001	Project No.	35753_5	Scale
AS/NZS 4801	Drawn	S.B.	Date: Aug 2022
Endorsed	Designed	S.B.	Date: Aug 2022
Integrated	Authorised	G.S.	Date: Aug 2022
Management System			
Filename: \$file\$			



East Gippsland Shire Council	Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes - Stage 5 135 Great Alpine Road Lucknow	35753_5 R01
Locality Plan & Drawing Index	Revision A
	Sheet 01 of 28



Revision Details				
Revision	Date	Revised Sheets	Descriptions	Authorised
A	02-12-2022	-	Preliminary Issue	G.S.

Detail Plan

Scale 1:500 @ A1
Scale 1:1000 @ A3

Preliminary

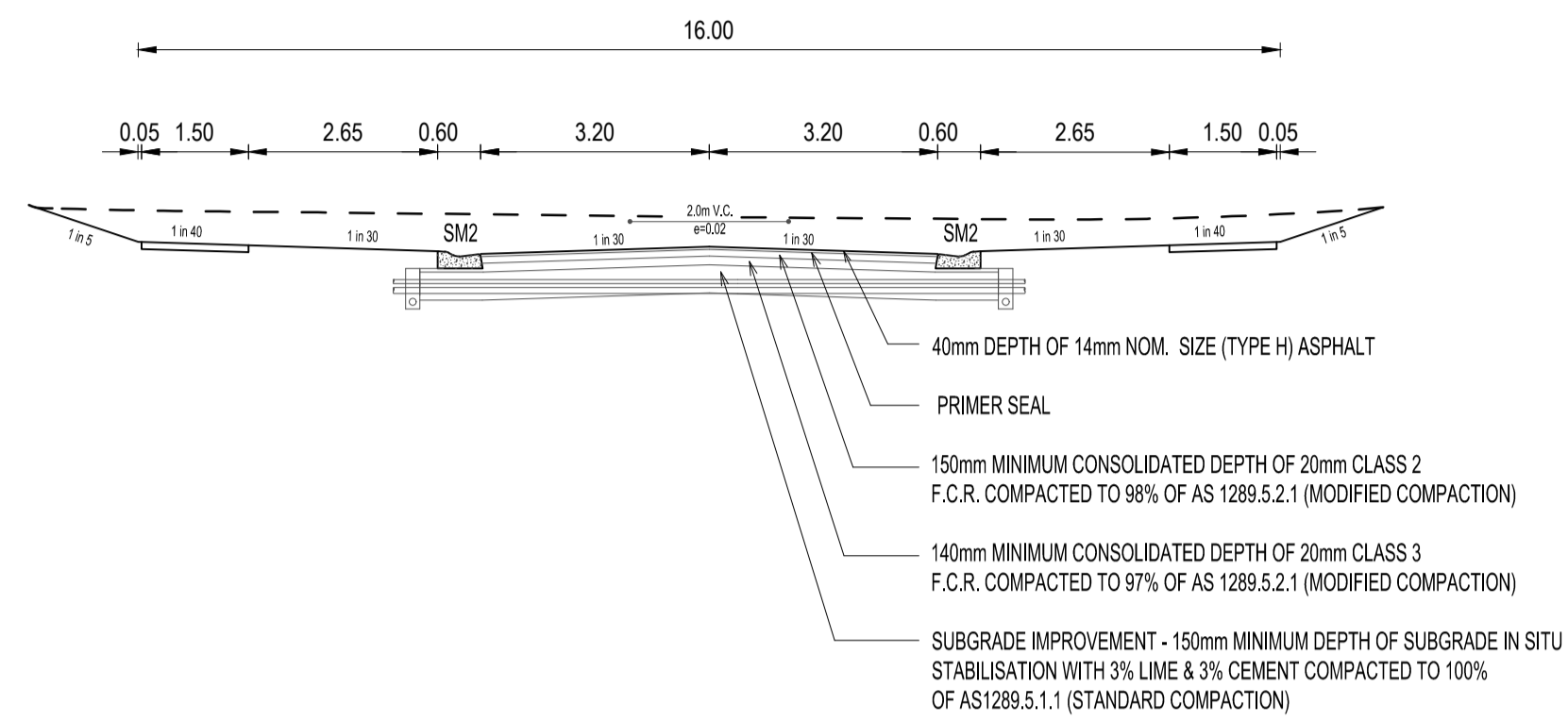
ISO 9001 AS/NZS 4801 Endorsed Integrated Management System	Project No. 35753_5 Drawn: S.B. Date: Aug 2022 Designed: S.B. Date: Aug 2022 Authorised: G.S. Date: Aug 2022	Scale: As Shown Date Printed: \$DATE\$ Level Data: Ltopo.dgn Datum: AHD
---	---	--

Filename: \$FILES\$

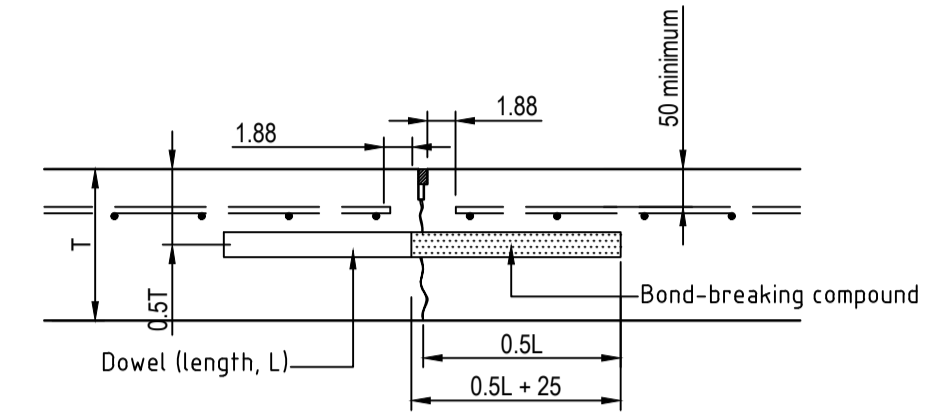


East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lucknow		35753_05 R03
Lot Layout Plan		Revision A
		Sheet 03 of 28

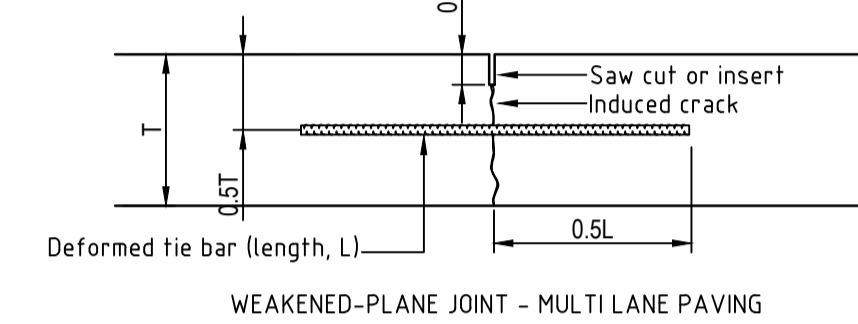
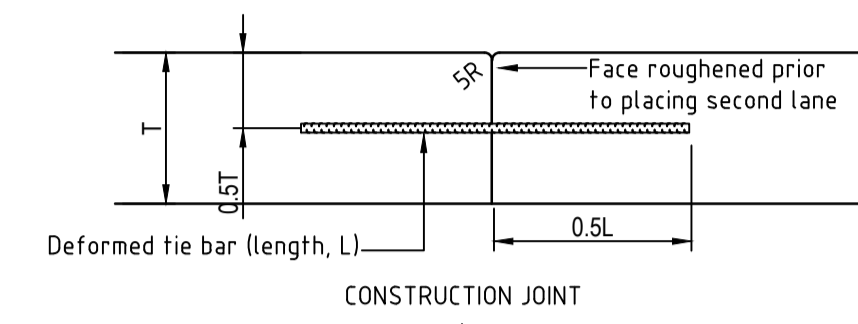
This plan (or the data transmitted herewith) has been prepared to facilitate the construction and should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use. Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether involvement or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.



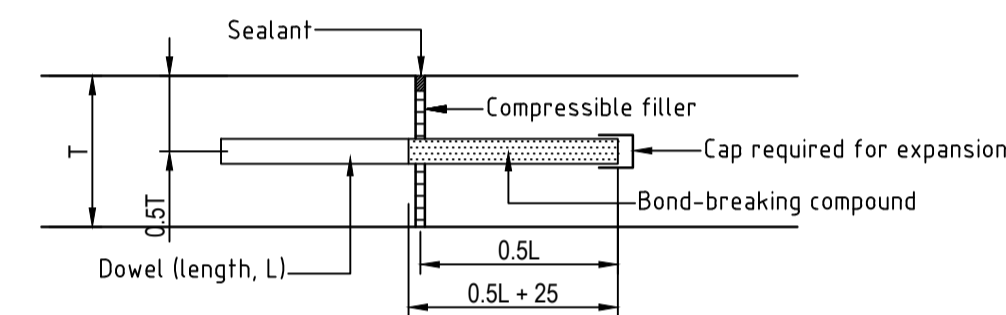
SILVERTOP STREET, MAHOGANY CLOSE, AND MESSMATE MEWS



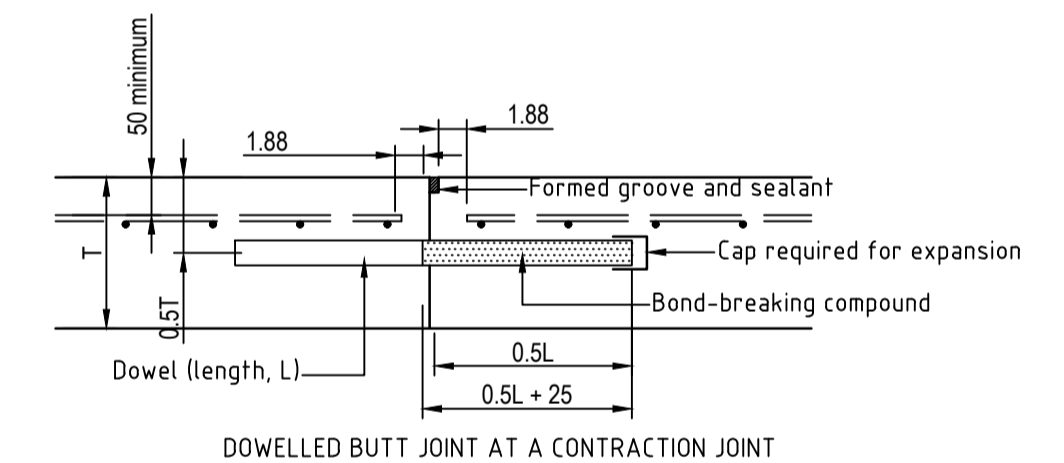
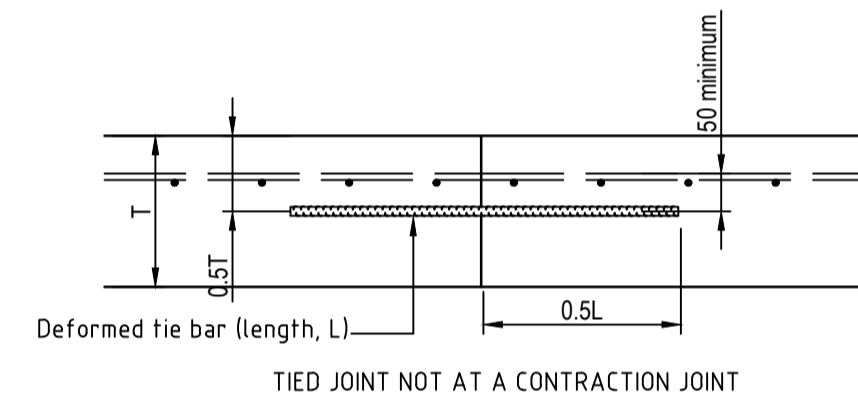
TRANSVERSE CONTRACTION JOINT (TJ)



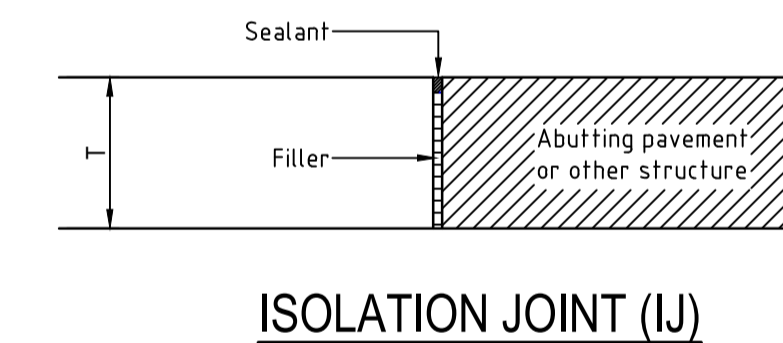
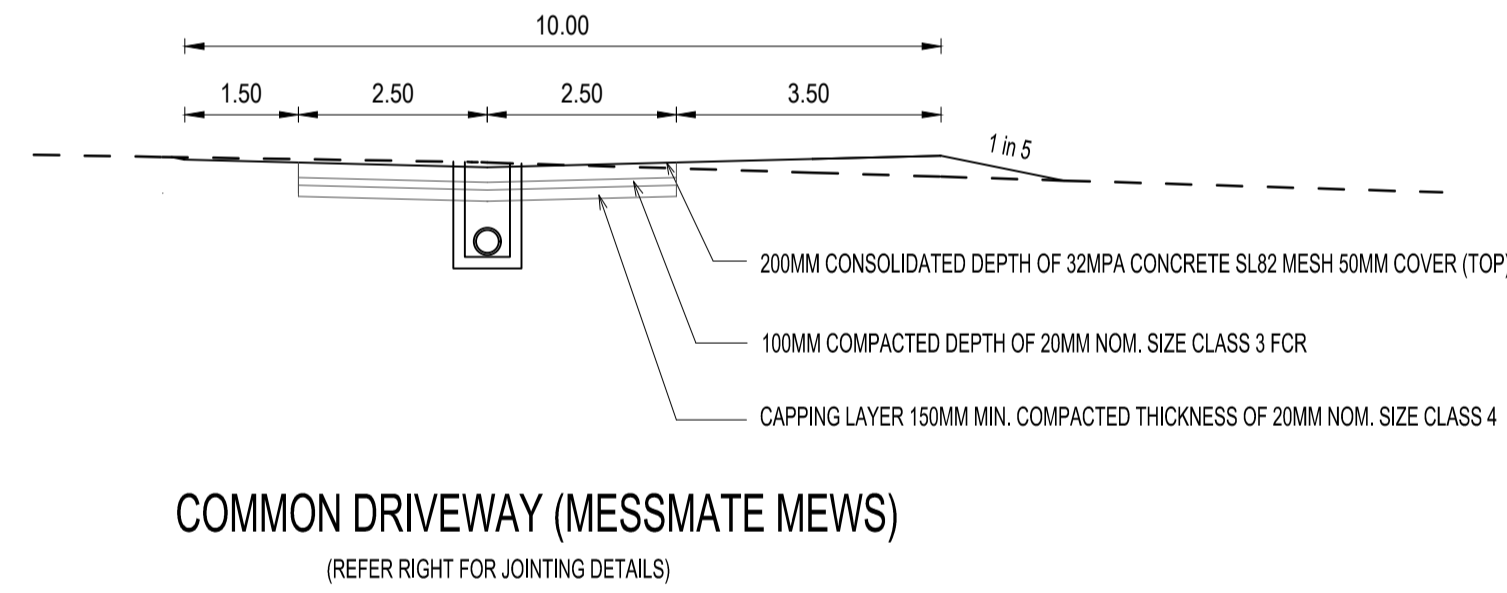
LONGITUDINAL WARPING JOINTS (LJ)



EXPANSION JOINT (EJ)



TRANSVERSE CONSTRUCTION JOINTS



Revision Details				
Revision	Date	Revised Sheets	Descriptions	Authorised
A	02-12-2022	-	Preliminary Issue	D.K.

Status: **Preliminary**

ISO 9001 AS/NZS 4801 Endorsed Integrated Management System

Project No.	35753_S	Scale:	
Drawn:	S.B. Date: Aug 2022	Date Printed:	\$DATE\$
Designed:	S.B. Date: Aug 2022	Level Data:	Ltopo.dgn
Authorised:	G.S. Date: Aug 2022	Datum:	AHD

Filename: \$FILES\$

marshal

Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380 hello@marshalmelbourne marshalmelbourne

East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lucknow		35753_05 R04
Typical Road Cross Sections & Details, Kerb Profile Details		Revision A
		Sheet 04 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

LEGEND

- FOOTPATH
 - KERB & CHANNEL
 - THRESHOLD TREATMENT TO BE CONSTRUCTED AS PER DETAIL SHOWN ON DETAILS DRAWING IF APPLICABLE.
 - PROPOSED DRAINAGE, PIT & PROPERTY INLET & HOUSE DRAIN
 - EXISTING DRAINAGE, PIT & PROPERTY INLET & HOUSE DRAIN
 - KERB SETOUT CURVE NUMBER (TO BOK)
 - DRAINAGE PIT NUMBER
 - DESIGN SURFACE LEVEL - ALLOTMENTS
 - EXISTING SURFACE LEVEL - ALLOTMENTS
 - TOP/TOE OF BATTER LEVEL - ALLOTMENTS (FRONT)
 - LOT PAD LEVEL
 - DESIGN RIDGE LEVEL - ALLOTMENTS
 - LOT PAD
 - DESIGN SURFACE CONTOURS
 - PROPOSED CUT AREAS - ALLOTMENTS
 - PROPOSED FILL AREAS - ALLOTMENTS
 - SERVICE CONDUITS { GAS WATER / RECYCLED WATER ELECTRICITY OPTIC FIBRE
 - GAS MAIN
 - WATER MAIN
 - RECYCLED WATER MAIN
 - OPTIC FIBRE UNDERGROUND CABLE
 - ELECTRICAL UNDERGROUND CABLE & PIT
 - SEWER MAIN, ACCESS CHAMBER & INSPECTION SHAFT
 - OVERLAND FLOW
 - EXISTING POLE (WITH STAY)
 - STREET NAME SIGN
 - EXISTING TREE OR PLANTATION
 - P.S.M. OR SURVEY MARK
 - LOT SLOPE DIRECTION
 - T.B.M. WITH DESCRIPTION
 - TREE PROTECTION ZONE
 - TOP / BOTTOM OF RETAINING WALL LEVEL
 - SLEEPER RETAINING WALL (TYPE A)
 - MASS ROCK RETAINING WALL
 - WORKS CONSTRUCTED BY OTHERS
- NOTE: 1. SYMBOLS ARE PROPOSED CONSTRUCTION (UNO)
2. EXISTING CONSTRUCTION SHOWN GREY

SERVICES OFFSET SCHEDULE						
ROAD NAME	ROAD RESERVE WIDTH	GAS	WATER	NBN	ELECTRICITY	SEWER
MESSMATE MEWS	16.00	2.10 E	2.60 E	2.00 W	2.50 W	-
SILVERTOP STREET	16.00	2.10 N	2.60 N	2.00 S	2.50 S	-
MAHOGANY CLOSE	16.00	2.10 E	2.60 E	2.00 W	2.50 W	-

PROVIDE NO ROAD SIGN EDGE STRIP AG DRAIN AND TEMPORARY TURN AROUND AREA

FOR OVERLAPPING CONTINUATION REFER TOP LEFT

CONTRACTOR TO NOTE

DIAL BEFORE YOU DIG
www.1100.com.au

BEWARE OF UNDERGROUND SERVICES.

THE LOCATIONS 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. EXTREME CARE TO BE TAKEN AT ALL TIMES WHEN BORING NEAR OR ACROSS EXISTING SERVICES.

NO DIGGING

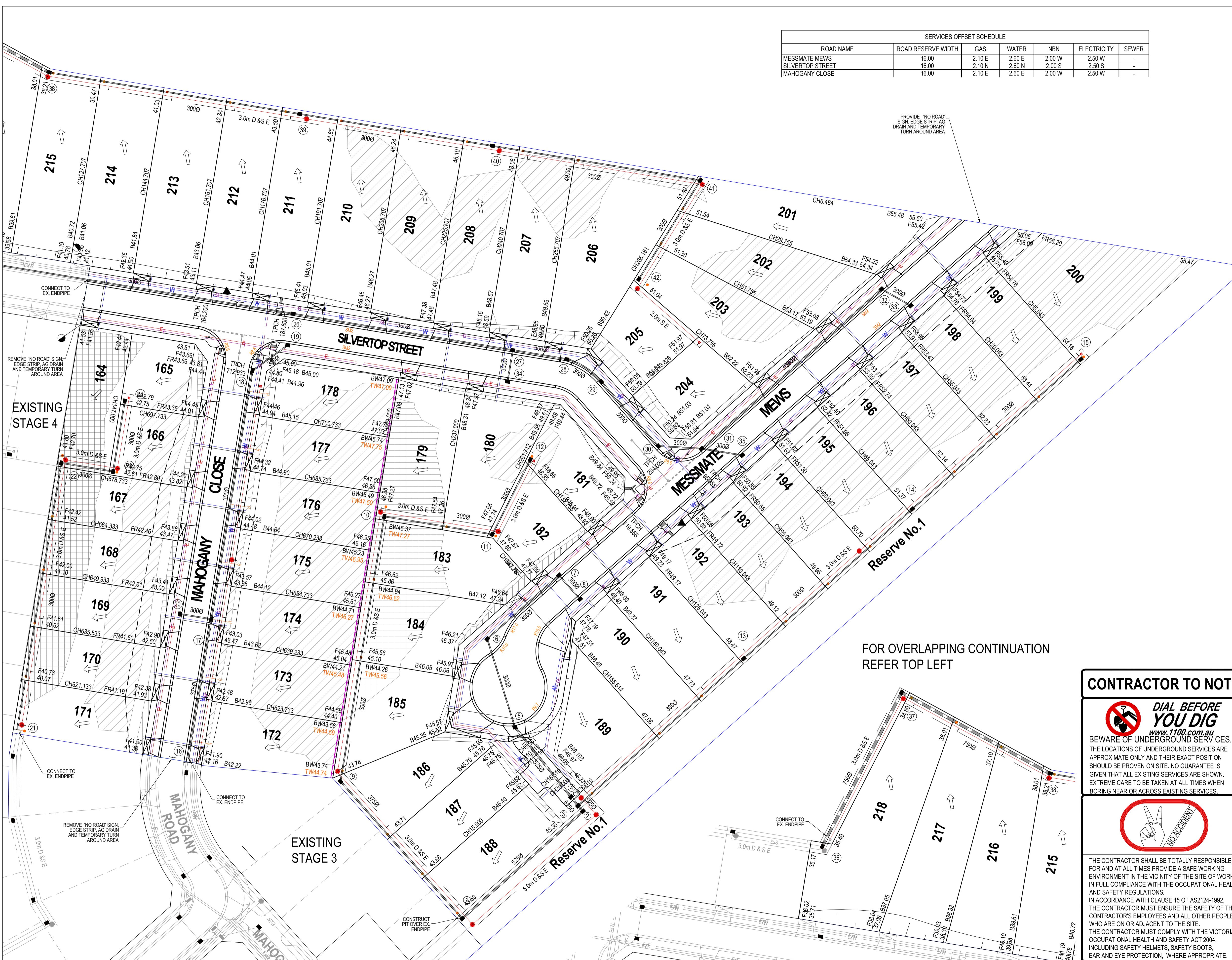
THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR AND AT ALL TIMES PROVIDE A SAFE WORKING ENVIRONMENT IN THE VICINITY OF THE SITE OF WORKS IN FULL COMPLIANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY REGULATIONS. IN ACCORDANCE WITH CLAUSE 15 OF AS2124-1992. THE CONTRACTOR MUST ENSURE THE SAFETY OF THE CONTRACTOR'S EMPLOYEES AND ALL OTHER PEOPLE WHO ARE ON OR ADJACENT TO THE SITE. THE CONTRACTOR MUST COMPLY WITH THE VICTORIAN OCCUPATIONAL HEALTH AND SAFETY ACT 2004, INCLUDING SAFETY HELMETS, SAFETY BOOTS, EAR AND EYE PROTECTION, WHERE APPROPRIATE.

STOP

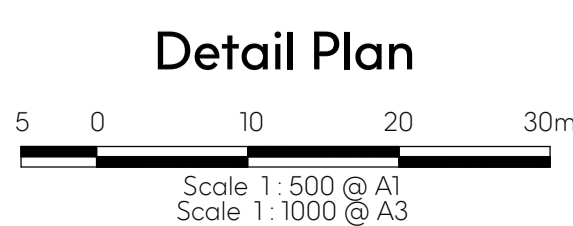
Major Cables exist in the area, if your activities are within Telstra encroachment distances (see duty of care) contact 03 9632 9961 at least 2 business days before starting activity.

FOR OVERLAPPING CONTINUATION REFER BOTTOM RIGHT

FOR OVERLAPPING CONTINUATION REFER TOP RIGHT



Revision Details				
Revision	Date	Revised Sheets	Descriptions	Authorised
A	02-12-2022	-	Preliminary Issue	G.S.



Status: **Preliminary**

ISO 9001	Project No. 35753_S	Scale: As Shown
AS/NZS 4801	Drawn: S.B. Date: Aug 2022	Date Printed: 2-Dec-22
Endorsed	Designed: S.B. Date: Aug 2022	Level Data: Ltopo.dgn
Integrated Management System	Authorised: G.S. Date: Aug 2022	Datum: AHD

Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_S\35753_5_R05.dwg



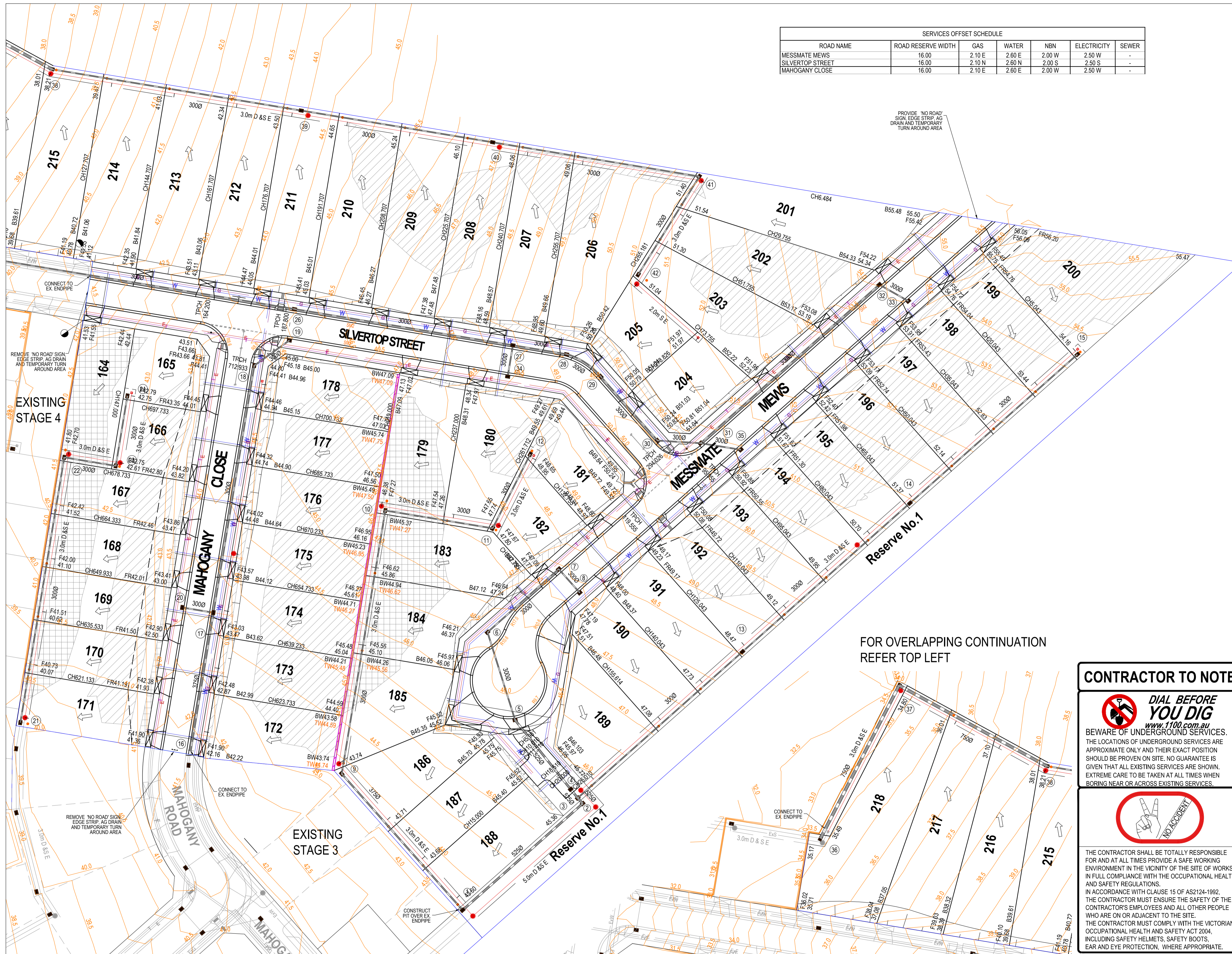
Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380 hello@marshalmelbourne marshalmelbourne

East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes - Stage 5 135 Great Alpine Road Lucknow		35753_05 R05
Detail Plan & Services Offset Table		Revision A
		Sheet R05 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

FOR OVERLAPPING CONTINUATION REFER BOTTOM RIGHT



SERVICES OFFSET SCHEDULE						
ROAD NAME	ROAD RESERVE WIDTH	GAS	WATER	NBN	ELECTRICITY	SEWER
MESSMATE MEWS	16.00	2.10 E	2.60 E	2.00 W	2.50 W	-
SILVERTOP STREET	16.00	2.10 N	2.60 N	2.00 S	2.50 S	-
MAHOGANY CLOSE	16.00	2.10 E	2.60 E	2.00 W	2.50 W	-

LEGEND

- FOOTPATH VEHICULAR CROSSING LAYBACK KERB & CHANNEL
- THRESHOLD TREATMENT TO BE CONSTRUCTED AS PER DETAIL SHOWN ON DETAILS DRAWING IF APPLICABLE.
- PROPOSED DRAINAGE, PIT & PROPERTY INLET & HOUSE DRAIN
- EXISTING DRAINAGE, PIT & PROPERTY INLET & HOUSE DRAIN
- KERB SETOUT CURVE NUMBER (TO BOK)
- DRAINAGE PIT NUMBER
- DESIGN SURFACE LEVEL - ALLOTMENTS
- EXISTING SURFACE LEVEL - ALLOTMENTS
- TOP/TOE OF BATTER LEVEL - ALLOTMENTS (FRONT)
- LOT PAD LEVEL
- DESIGN RIDGE LEVEL - ALLOTMENTS
- LOT PAD
- DESIGN SURFACE CONTOURS
- PROPOSED CUT AREAS - ALLOTMENTS
- PROPOSED FILL AREAS - ALLOTMENTS
- SERVICE CONDUITS
 - GAS WATER / RECYCLED WATER
 - ELECTRICITY OPTIC FIBRE
- GAS MAIN
- WATER MAIN
- RECYCLED WATER MAIN
- OPTIC FIBRE UNDERGROUND CABLE
- ELECTRICAL UNDERGROUND CABLE & PIT
- SEWER MAIN, ACCESS CHAMBER & INSPECTION SHAFT
- OVERLAND FLOW
- EXISTING POLE (WITH STAY)
- STREET NAME SIGN
- EXISTING TREE OR PLANTATION
- P.S.M. OR SURVEY MARK
- LOT SLOPE DIRECTION
- T.B.M WITH DESCRIPTION
- TREE PROTECTION ZONE
- TOP / BOTTOM OF RETAINING WALL LEVEL
- SLEEPER RETAINING WALL (TYPE A)
- MASS ROCK RETAINING WALL
- WORKS CONSTRUCTED BY OTHERS

NOTE: 1. SYMBOLS ARE PROPOSED CONSTRUCTION (UNO)
2. EXISTING CONSTRUCTION SHOWN GREY

FOR OVERLAPPING CONTINUATION REFER TOP LEFT

CONTRACTOR TO NOTE

DIAL BEFORE YOU DIG
www.1100.com.au

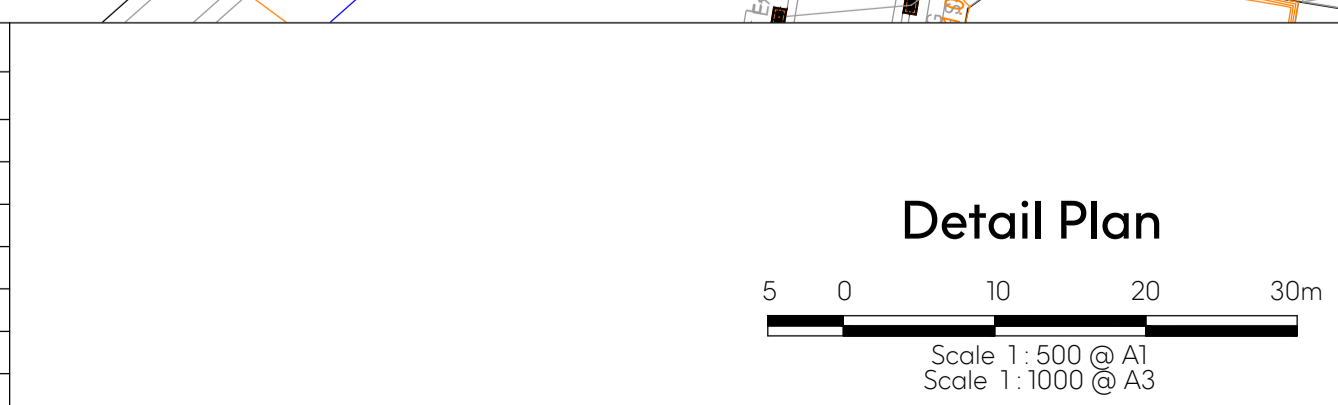
BWARE OF UNDERGROUND SERVICES.
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. EXTREME CARE TO BE TAKEN AT ALL TIMES WHEN BORING NEAR OR ACROSS EXISTING SERVICES.

NO ACCIDENT

THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR AND AT ALL TIMES PROVIDE A SAFE WORKING ENVIRONMENT IN THE VICINITY OF THE SITE OF WORKS IN FULL COMPLIANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY REGULATIONS. IN ACCORDANCE WITH CLAUSE 15 OF AS2124-1992, THE CONTRACTOR MUST ENSURE THE SAFETY OF THE CONTRACTOR'S EMPLOYEES AND ALL OTHER PEOPLE WHO ARE ON OR ADJACENT TO THE SITE. THE CONTRACTOR MUST COMPLY WITH THE VICTORIAN OCCUPATIONAL HEALTH AND SAFETY ACT 2004, INCLUDING SAFETY HELMETS, SAFETY BOOTS, EAR AND EYE PROTECTION, WHERE APPROPRIATE.

Major Cables exist in the area, if your activities are within Telstra encroachment distances (see duty of care) contact 03 9832 9961 at least 2 business days before starting activity.

Revision Details				
Revision	Date	Revised Sheets	Descriptions	Authorised
A	02-12-2022	-	Preliminary Issue	G.S.



Status: Preliminary

ISO 9001	Project No.	35753_5	Scale	As Shown
AS/NZS 4801	Drawn:	S.B.	Date:	Aug 2022
Designed:	S.B.	Date:	Aug 2022	Level Data: Ltopo.dgn
Authorised:	G.S.	Date:	Aug 2022	Datum: AHD

Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_5\35753_5_R06.dwg

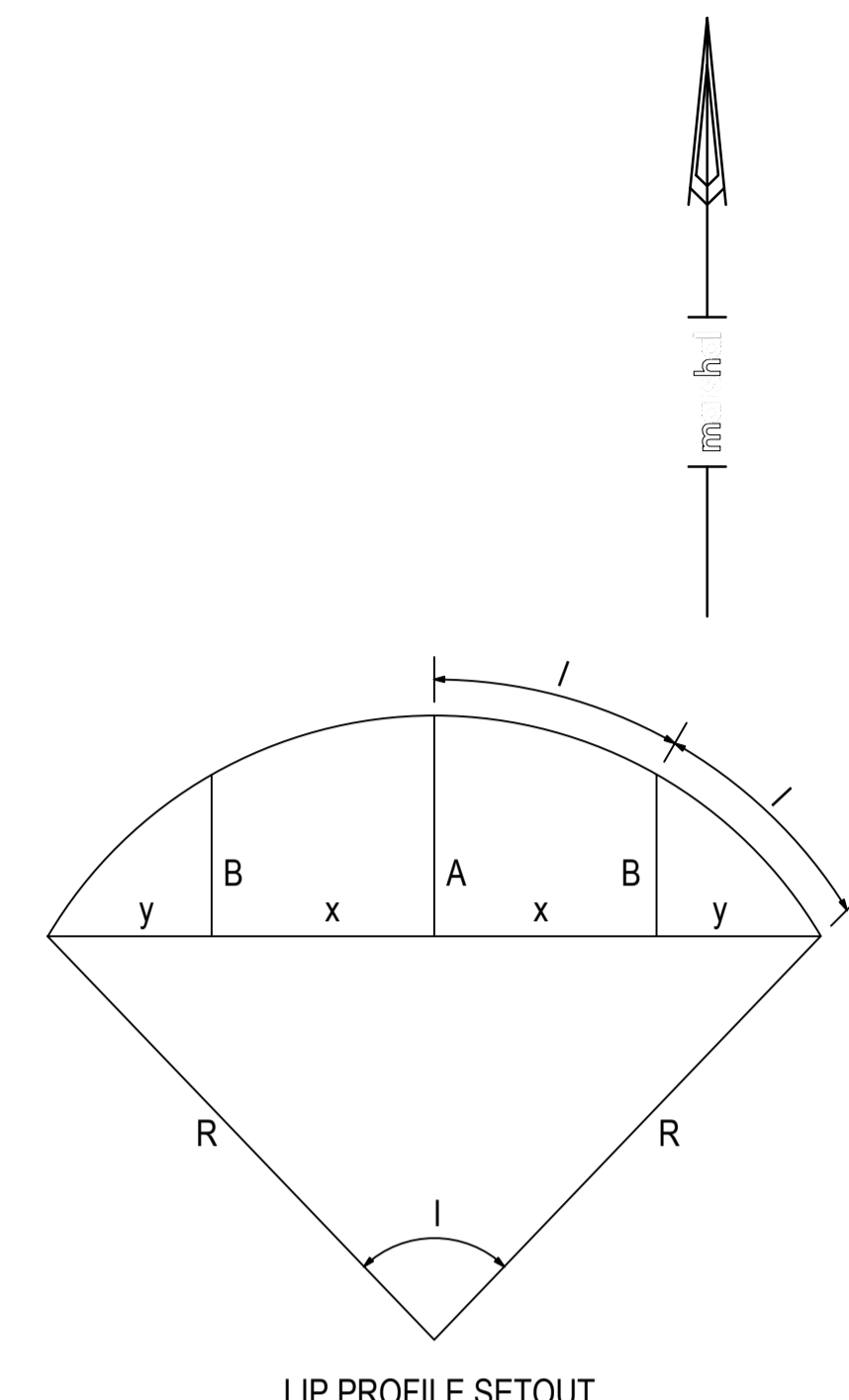
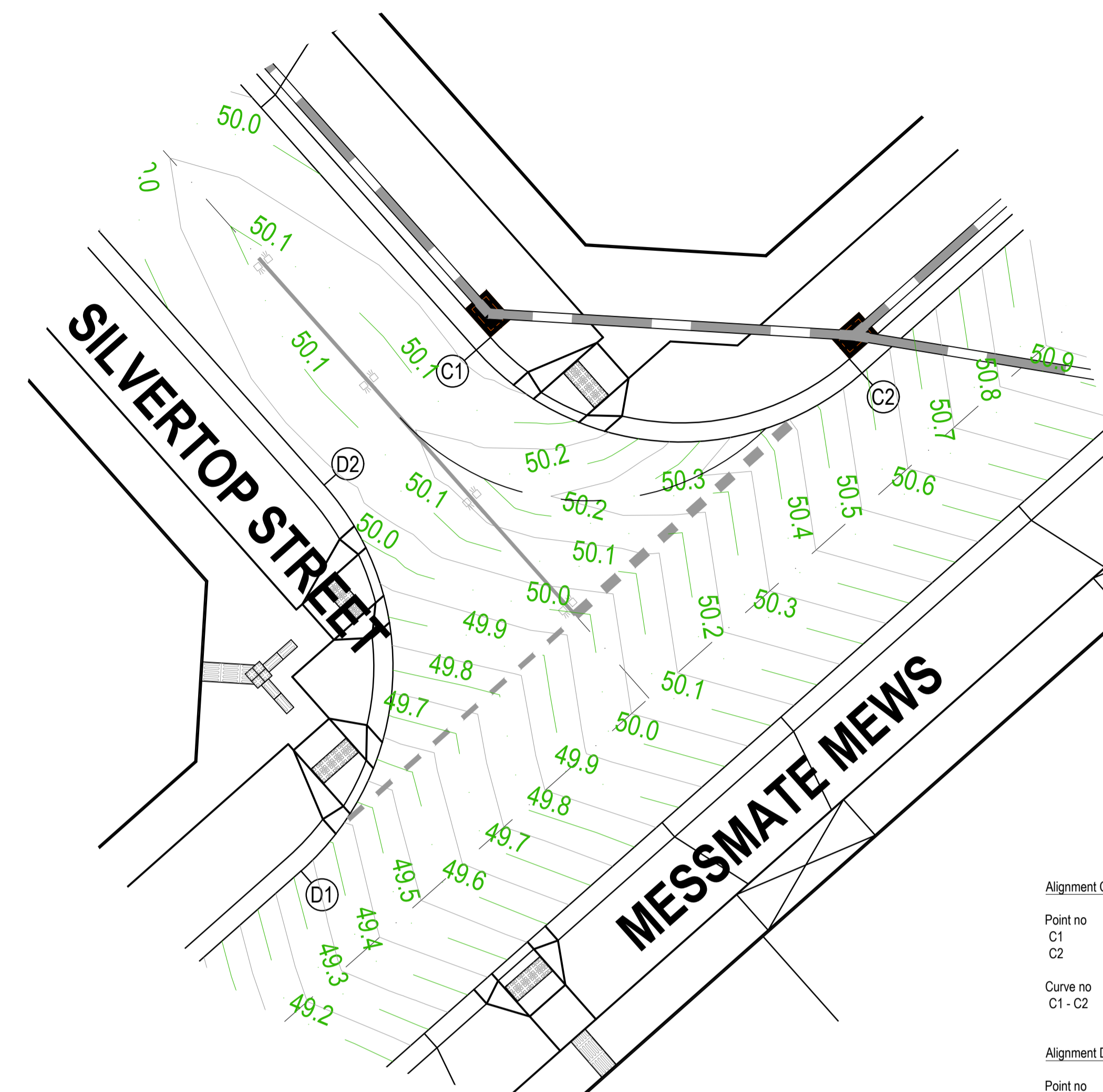
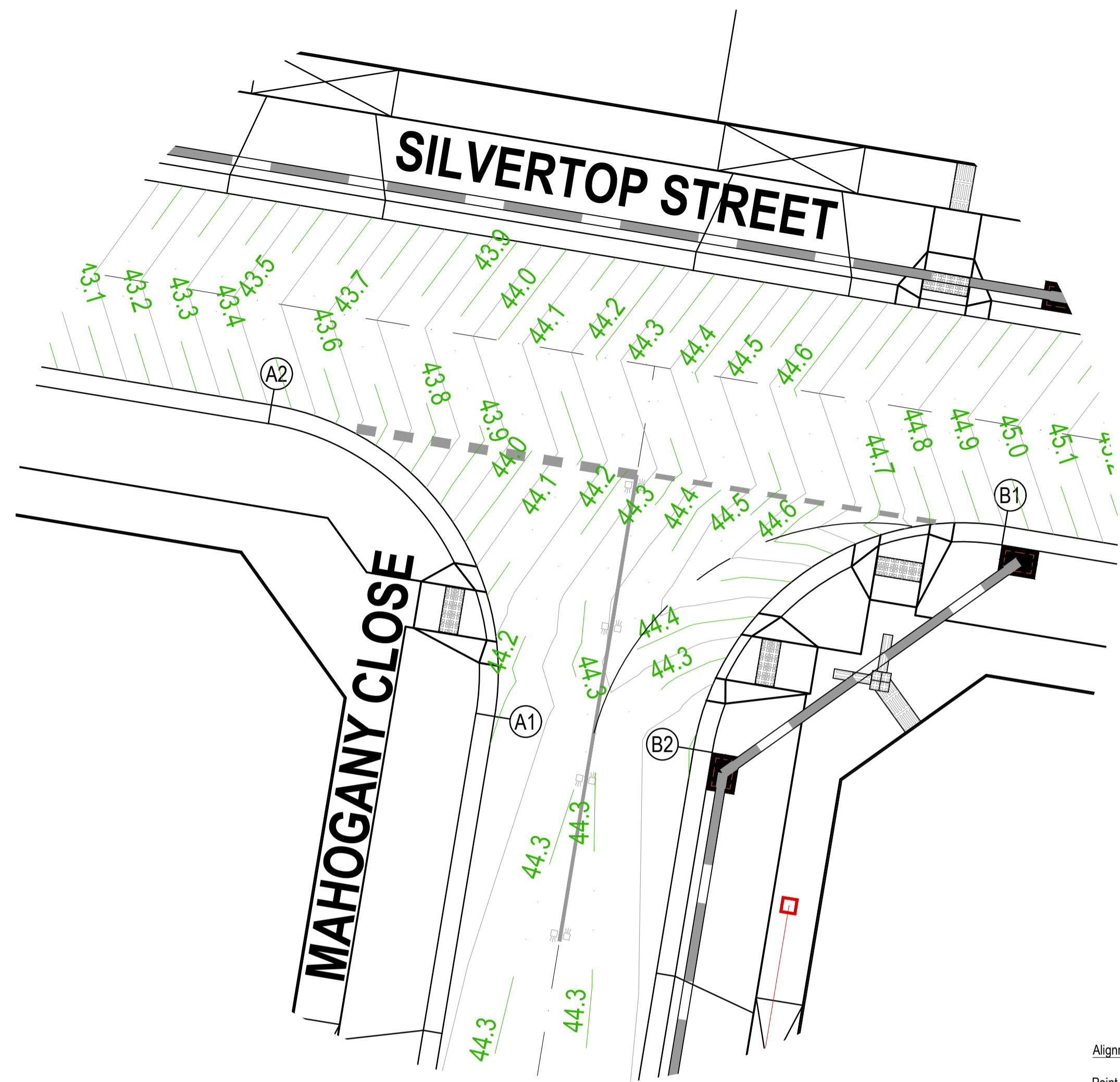


Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380 hello@marshal.melbourne marshal.melbourne

East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lucknow		35753_05 R06
Design Contours Plan		Revision A
		Sheet R06 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction and should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.



Alignment A

Point no	Easting	Northing	RL
A1	7559.648	6024.710	44.195
A2	7552.568	6034.599	43.458

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
A1 - A2	90.000	8.600	13.509	2.519	1.864	3.291	2.790	3.377	43.929

Alignment B

Point no	Easting	Northing	RL
B1	7575.851	6030.746	44.952
B2	7565.962	6023.665	44.195

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
B1 - B2	90.000	8.600	13.509	2.519	1.864	3.291	2.790	3.377	44.528

Alignment C

Point no	Easting	Northing	RL
C1	7674.567	6001.640	50.031
C2	7686.707	6000.914	50.590

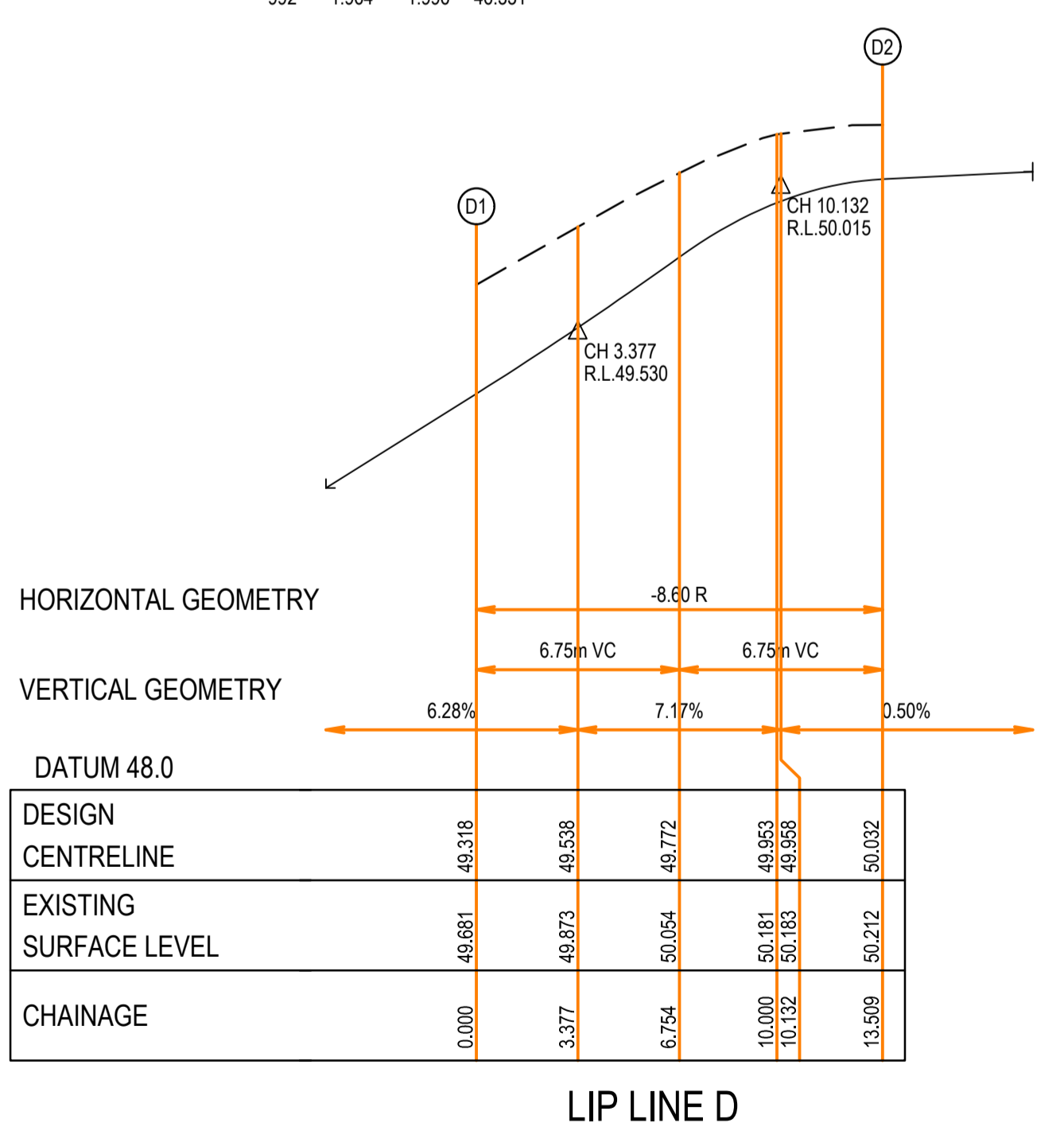
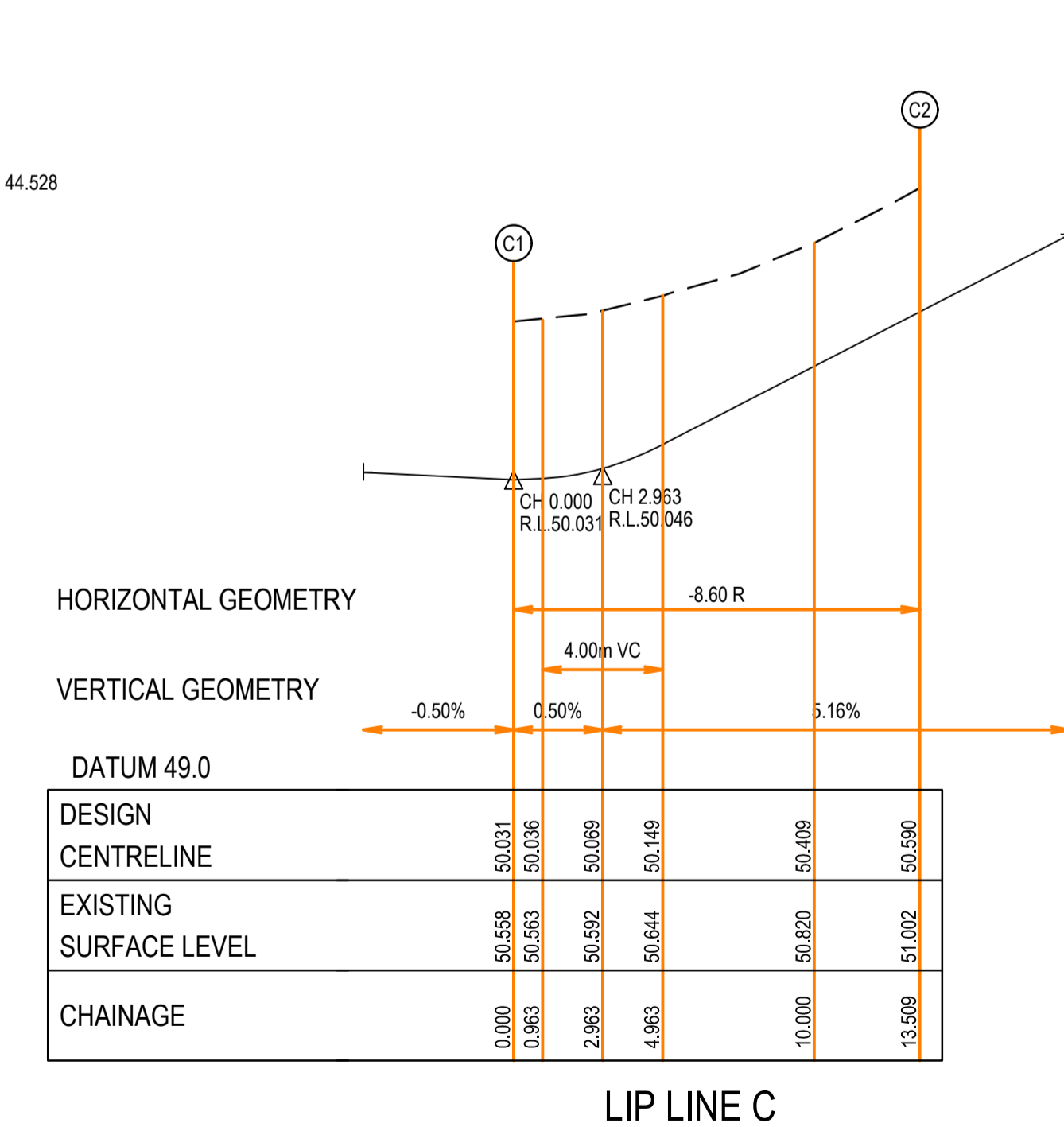
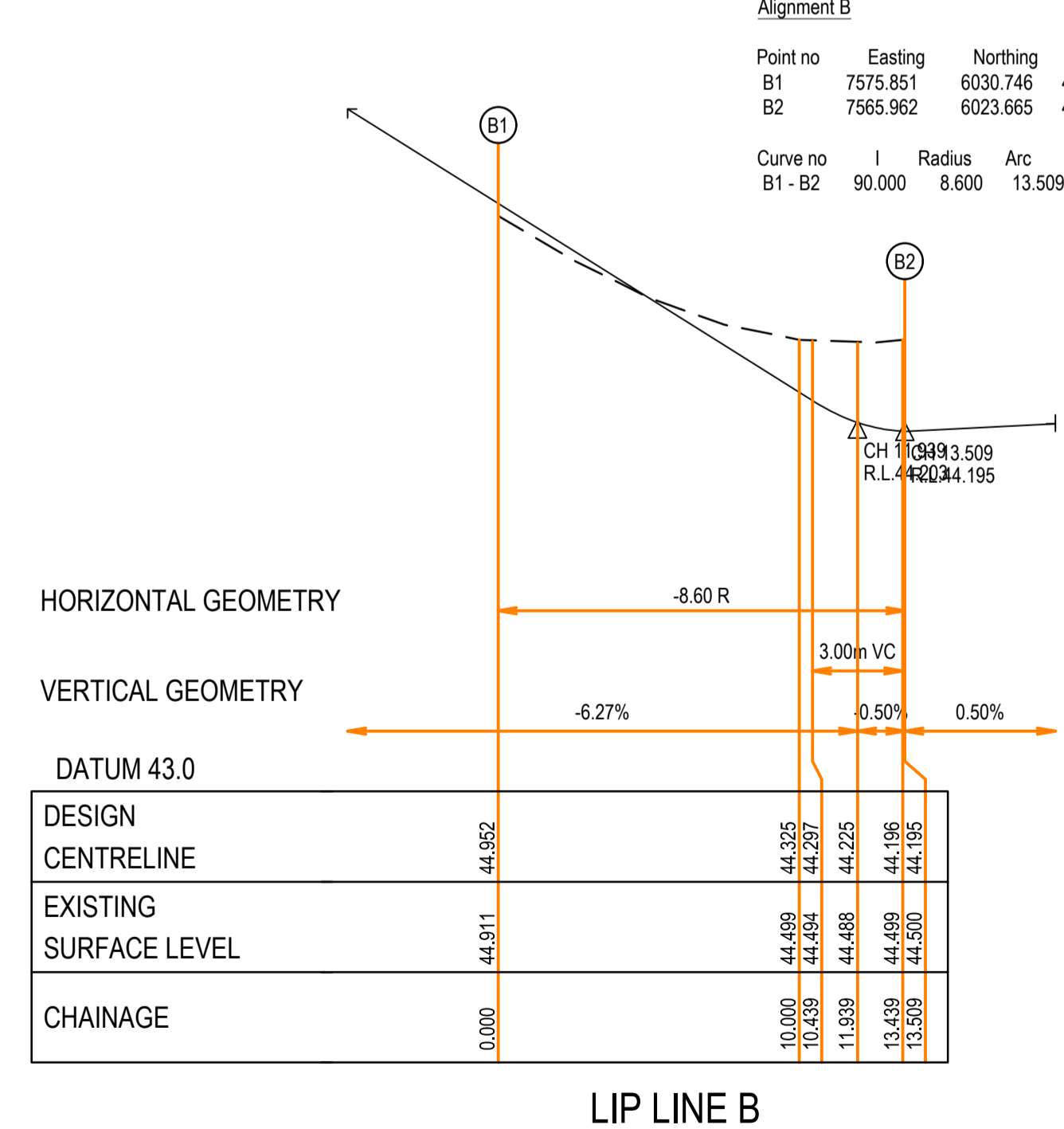
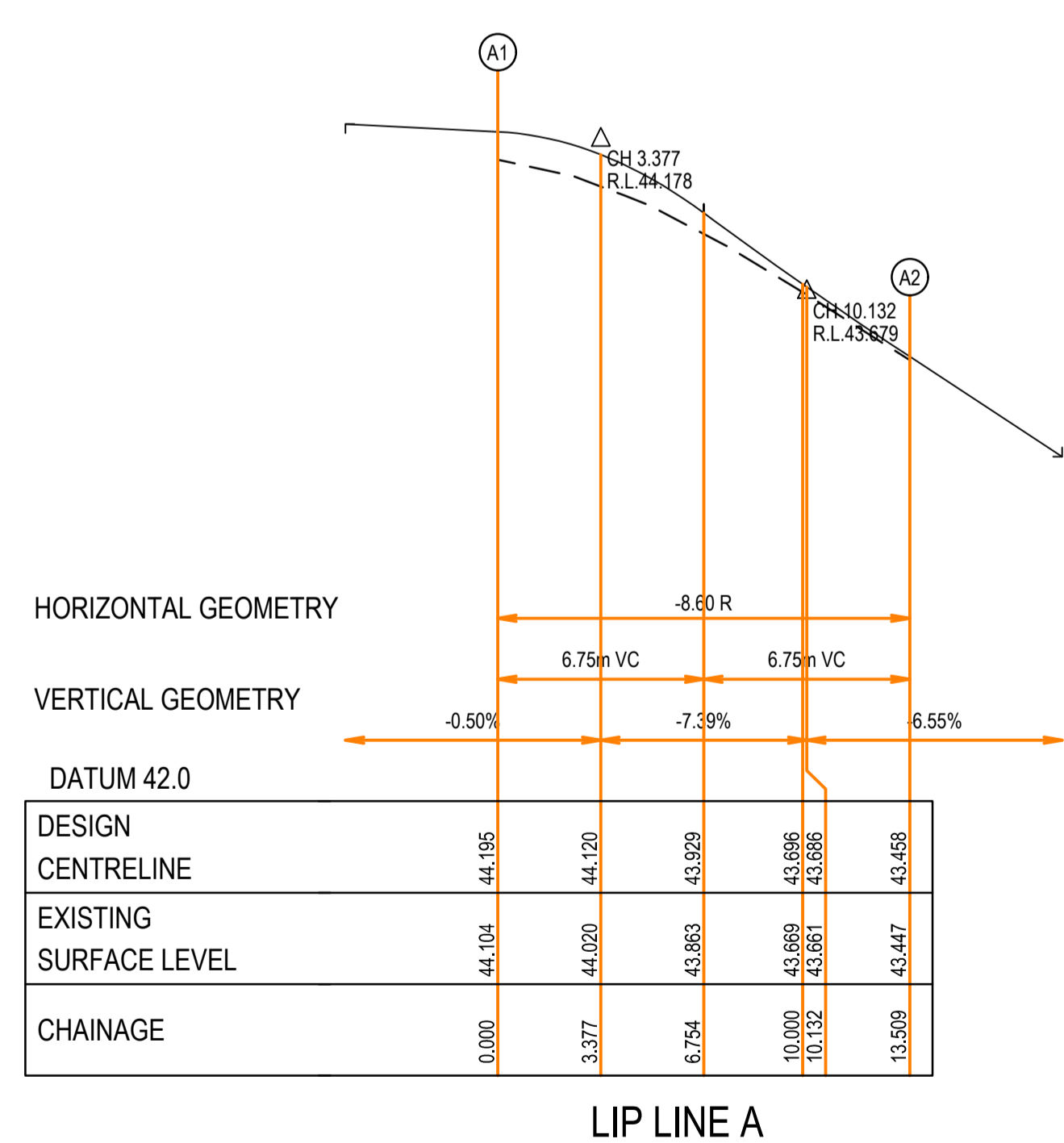
Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
C1 - C2	90.000	8.600	13.509	2.519	1.864	3.291	2.790	3.377	50.242

Alignment D

Point no	Easting	Northing	RL
D1	7669.053	5985.253	49.318
D2	7669.779	5997.393	50.032

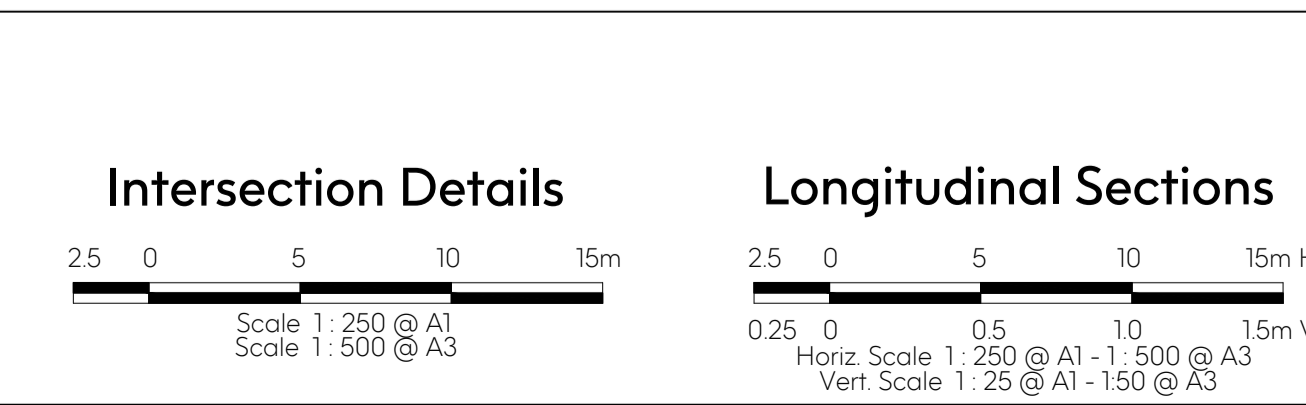
Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
D1 - D2	90.000	8.600	13.509	2.519	1.864	3.291	2.790	3.377	49.772

992 1.964 1.996 46.331



Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue

Authorised
G.S.



Status: **Preliminary**

ISO 9001 AS/NZS 4801 Endorsed Integrated Management System

Project No: 35753_S	Scale: As Shown
Drawn: S.B. Date: Aug 2022	Date Printed: 2-Dec-22
Designed: S.B. Date: Aug 2022	Level Data: Lttopo.dgn
Authorised: G.S. Date: Aug 2022	Datum: AHD

Filename: \$FILES

East Gippsland Shire Council

Brookfield Land Co Pty Ltd
Brookfield Lakes- Stage 5
135 Great Alpine Road
Lucknow

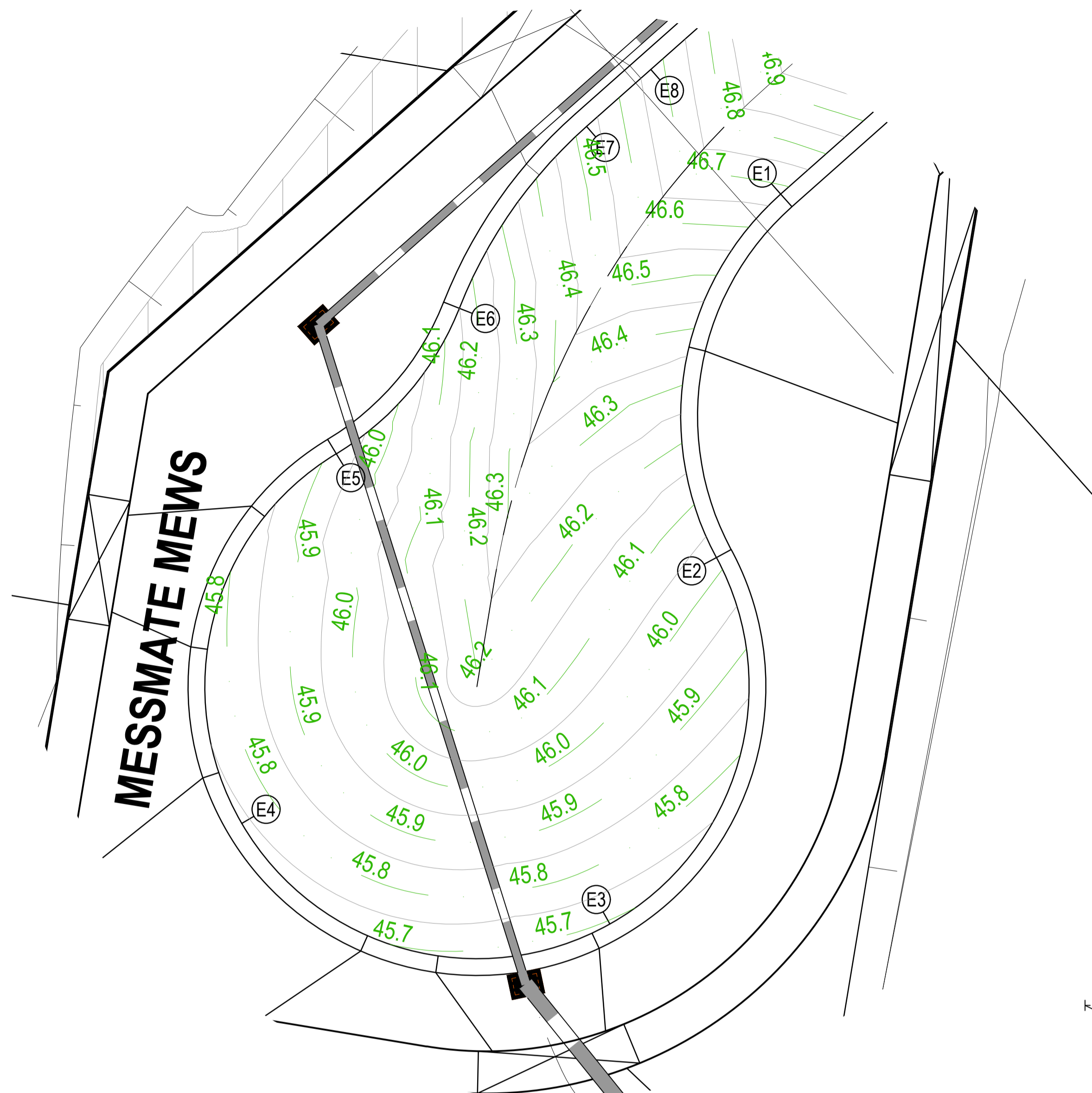
Intersection Details & Kerb Long Sections - 1

Revision **A**

Sheet 07 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work.

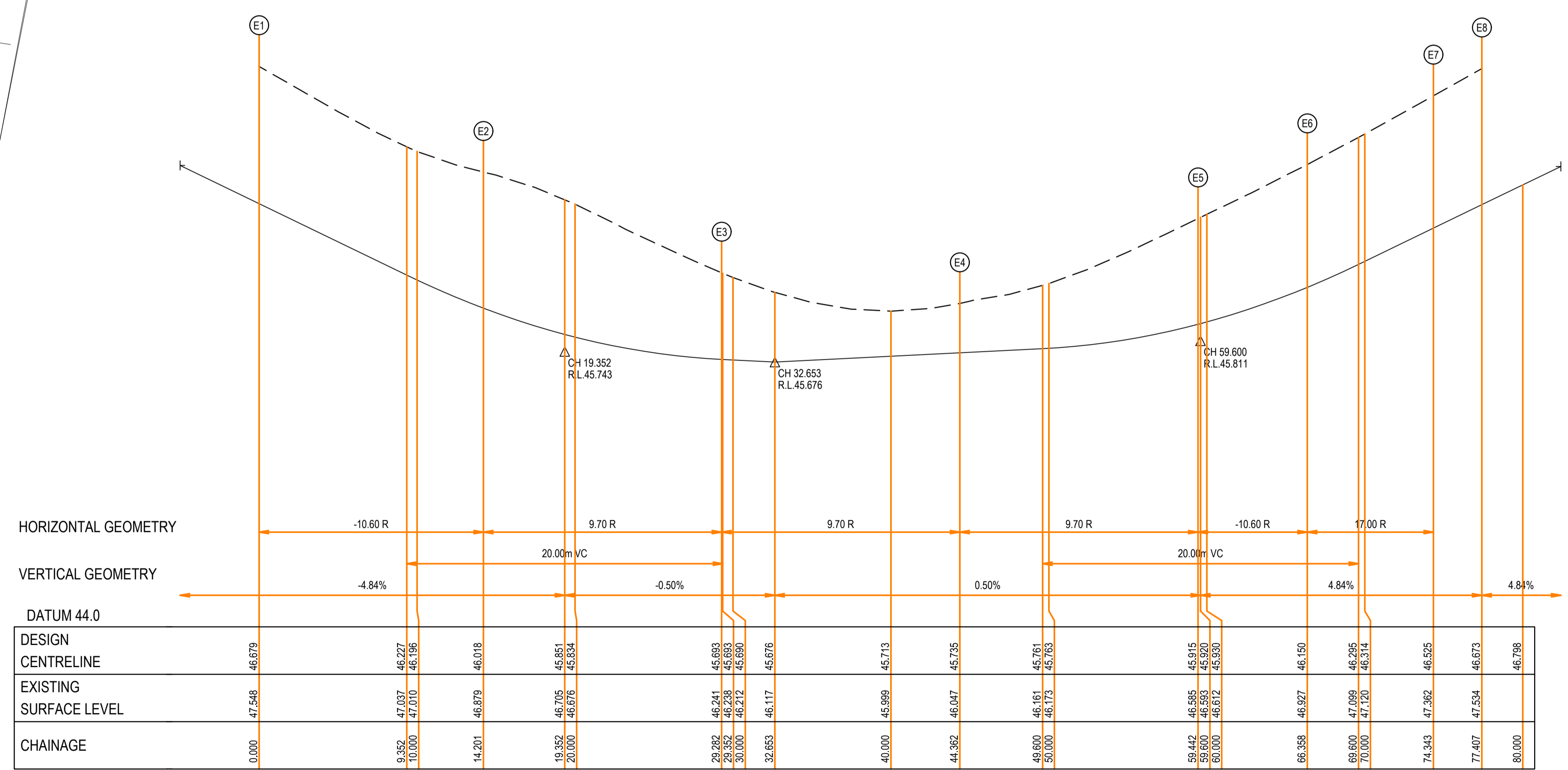
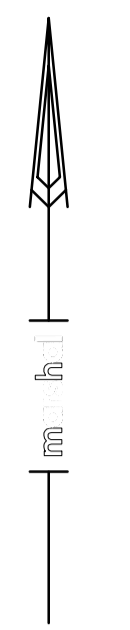
Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.



Alignment E

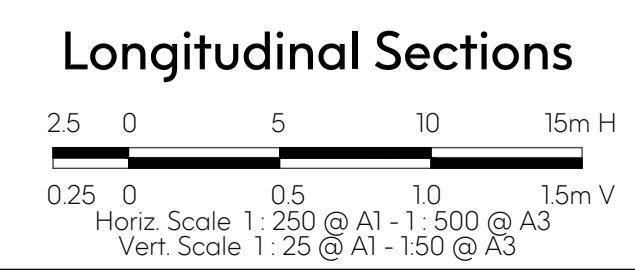
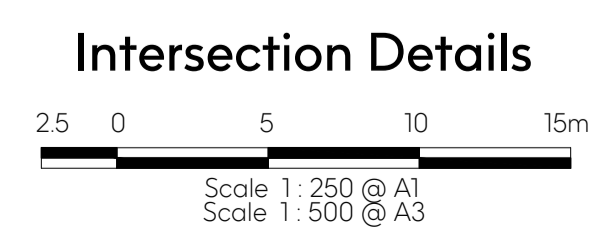
Point no	Easting	Northing	RL
E1	7645.850	5956.113	46.679
E2	7643.555	5943.152	46.018
E3	7639.759	5930.085	45.693
E4	7626.633	5933.670	45.735
E5	7630.006	5946.852	45.915
E6	7634.391	5952.041	46.150
E7	7638.925	5958.525	46.525
E8	7641.217	5960.558	46.673

Curve no	L	Radius	Arc	A	B	X	Y	I	Mid point RL
E1 - E2	76.761	10.600	14.201	2.291	1.702	3.484	3.097	3.550	46.336
E2 - E3	89.077	9.700	15.080	2.786	2.063	3.676	3.128	3.770	45.794
E3 - E4	89.077	9.700	15.080	2.786	2.063	3.676	3.128	3.770	45.697
E4 - E5	89.077	9.700	15.080	2.786	2.063	3.676	3.128	3.770	45.778
E5 - E6	37.381	10.600	6.916	0.559	0.418	1.721	1.676	1.729	46.019
E6 - E7	26.912	17.000	7.985	0.467	0.350	1.992	1.964	1.996	46.331



LIP LINE E

Revision Details				
Revision	Date	Revised Sheets	Descriptions	Authorised
A	02-12-2022	-	Preliminary Issue	G.S.



Status: **Preliminary**

ISO 9001 AS/NZS 4801 Endorsed Integrated Management System

Project No:	35753_S	Scale:	As Shown
Drawn:	S.B. Date: Aug 2022	Date Printed:	2-Dec-22
Designed:	S.B. Date: Aug 2022	Level Data:	Ltopo.dgn
Authorised:	G.S. Date: Aug 2022	Datum:	AHD

File name: \$FILES



Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
 +61 3 9860 0380 hello@marshalmelbourne marshalmelbourne

East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lucknow		35753_05 R08
Intersection Details & Kerb Long Sections - 2		Revision A
		Sheet 08 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use.

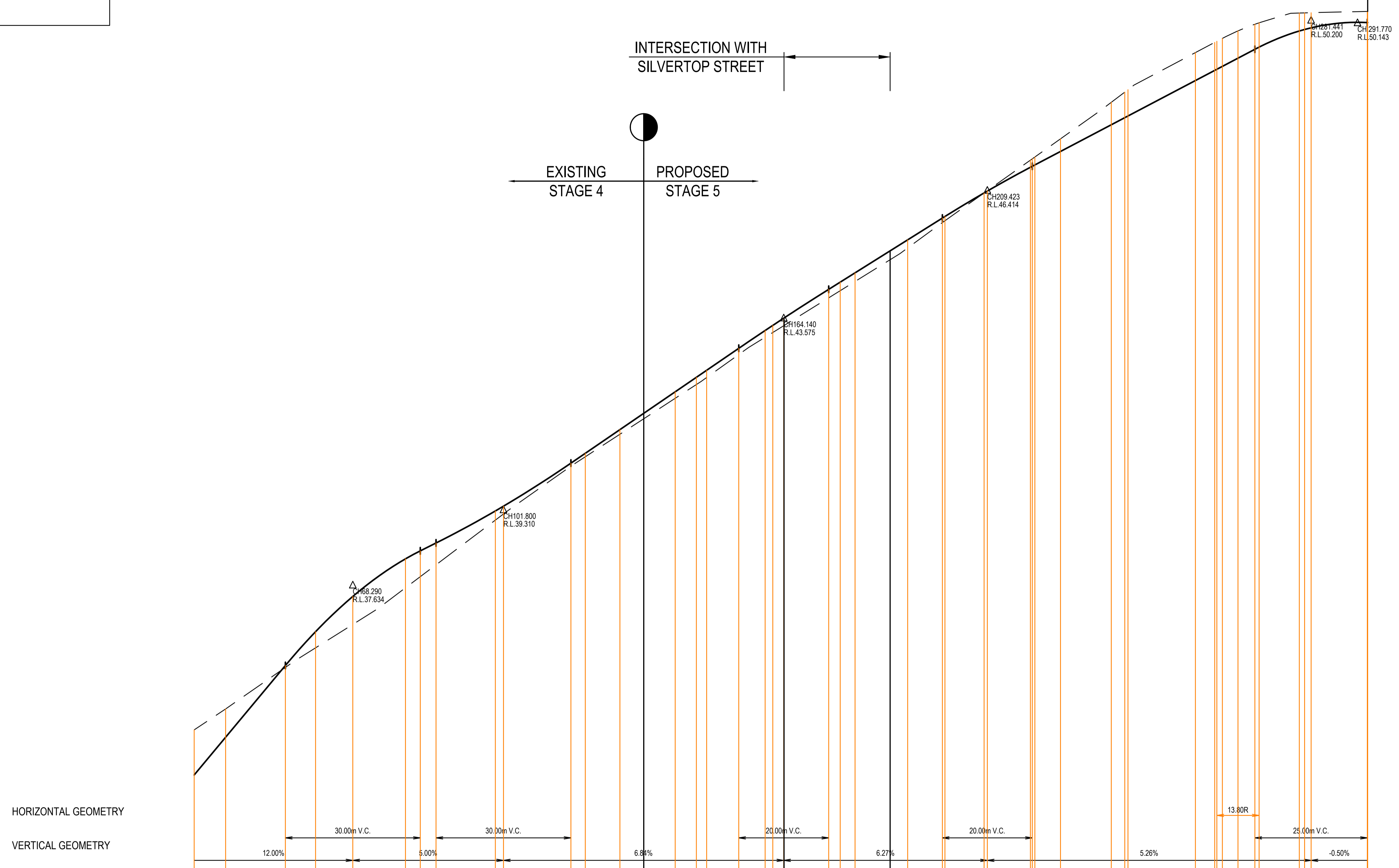
Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

LEGEND	
	EXISTING SURFACE
	DESIGN LINE

MESSMATE MEWS INTERSECTION

INTERSECTION WITH SILVERTOP STREET

EXISTING STAGE 4
PROPOSED STAGE 5



HORIZONTAL GEOMETRY

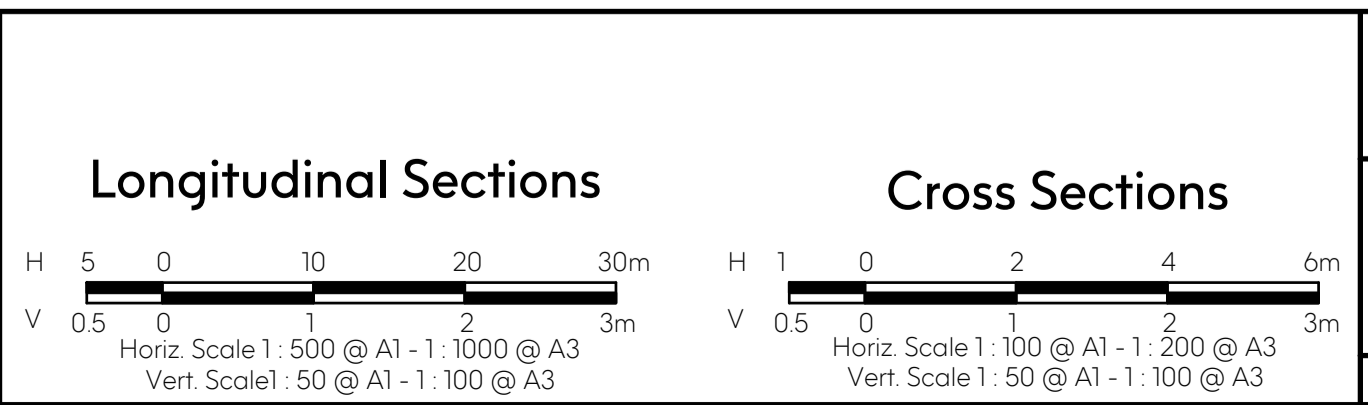
VERTICAL GEOMETRY

DATUM 31.0

	33.000	40.000	53.200	60.000	68.200	80.000	88.200	100.000	107.800	116.800	120.000	127.707	133.000	140.000	144.707	147.000	154.140	160.000	161.707	164.140	164.200	174.140	176.707	180.000	187.800	191.707	198.423	200.000	208.707	209.423	216.000	219.423	220.000	225.707	237.000	240.000	240.707	257.707	260.000	261.707	265.181	265.941	268.881	278.826	280.000	281.441	293.941	294.026		
DESIGN CENTRELINE	33.389	34.239	35.834	36.587	37.372	38.207	38.984	39.273	39.379	40.336	40.585	41.082	41.444	41.923	42.245	42.402	42.891	43.287	43.400	43.561	43.565	44.202	44.363	44.569	45.058	45.303	45.787	45.823	46.347	46.389	46.916	46.940	46.970	47.270	47.864	48.022	48.059	48.647	48.773	48.803	49.183	49.345	49.543	49.551	49.950	49.984	50.020	50.138	50.138	
EXISTING SURFACE LEVEL	34.402	34.869	35.792	36.228	36.749	37.562	37.810	38.075	38.205	40.269	40.478	40.979	41.323	41.779	42.085	42.242	42.752	43.137	43.243	43.393	43.561	44.014	44.173	44.377	44.861	45.123	45.688	45.729	46.346	46.397	47.075	47.105	47.148	47.551	48.363	48.522	48.645	49.469	49.695	49.762	49.953	49.981	50.101	50.132	49.954	50.349	50.352	49.984	50.365	50.365
CHAINAGE	33.000	40.000	53.200	60.000	68.200	80.000	88.200	100.000	107.800	116.800	120.000	127.707	133.000	140.000	144.707	147.000	154.140	160.000	161.707	164.140	164.200	174.140	176.707	180.000	187.800	191.707	198.423	200.000	208.707	209.423	216.000	219.423	220.000	225.707	237.000	240.000	240.707	257.707	260.000	261.707	265.181	265.941	268.881	278.826	280.000	281.441	293.941	294.026		

SILVERTOP STREET LONGITUDINAL SECTION
SCALE HORIZONTAL 1:500
VERTICAL 1:50

Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue



Status: **Preliminary**

ISO 9001 AS/NZS 4801 Endorsed Integrated Management System

Project No: 35753_S
Drawn: S.B. Date: Aug 2022
Designed: S.B. Date: Aug 2022
Authorised: G.S. Date: Aug 2022

Scale: As Shown
Date Printed: 2-Dec-22
Level Data: Ltopodgn
Datum: AHD

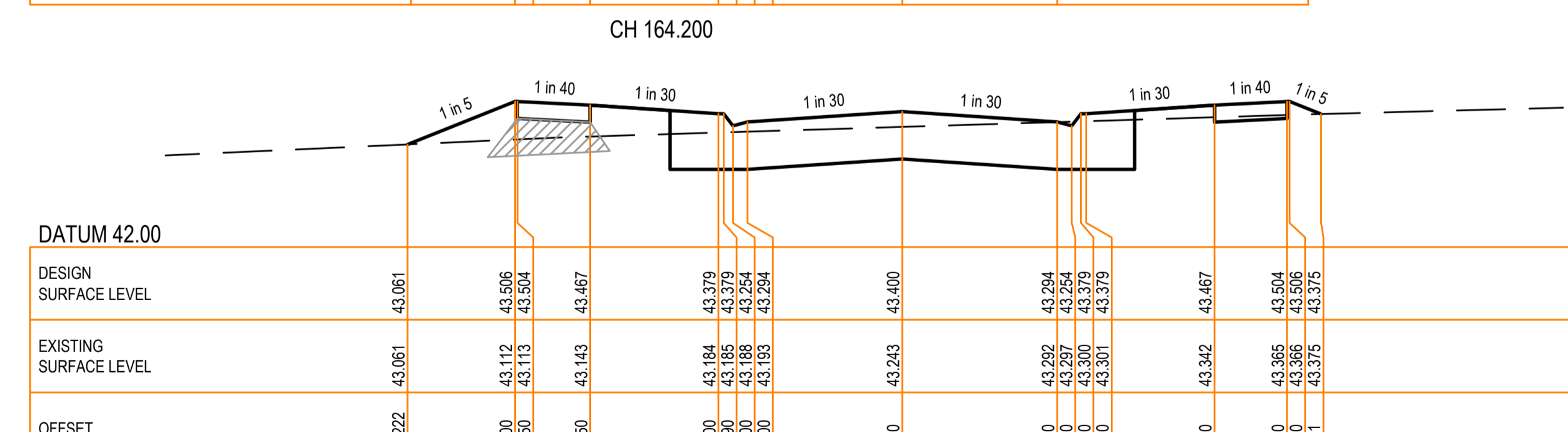
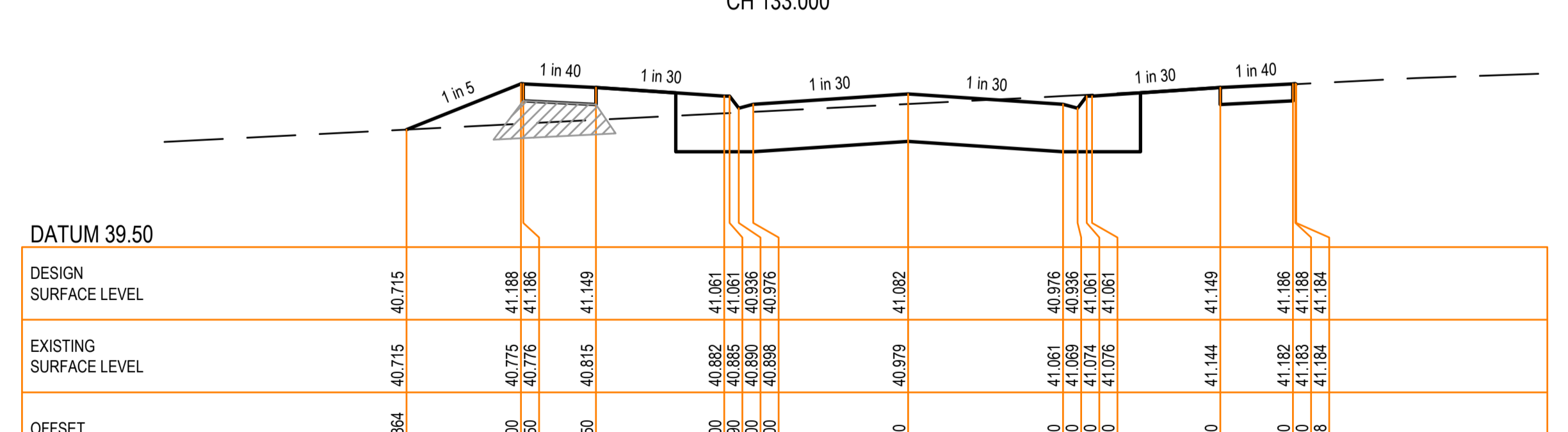
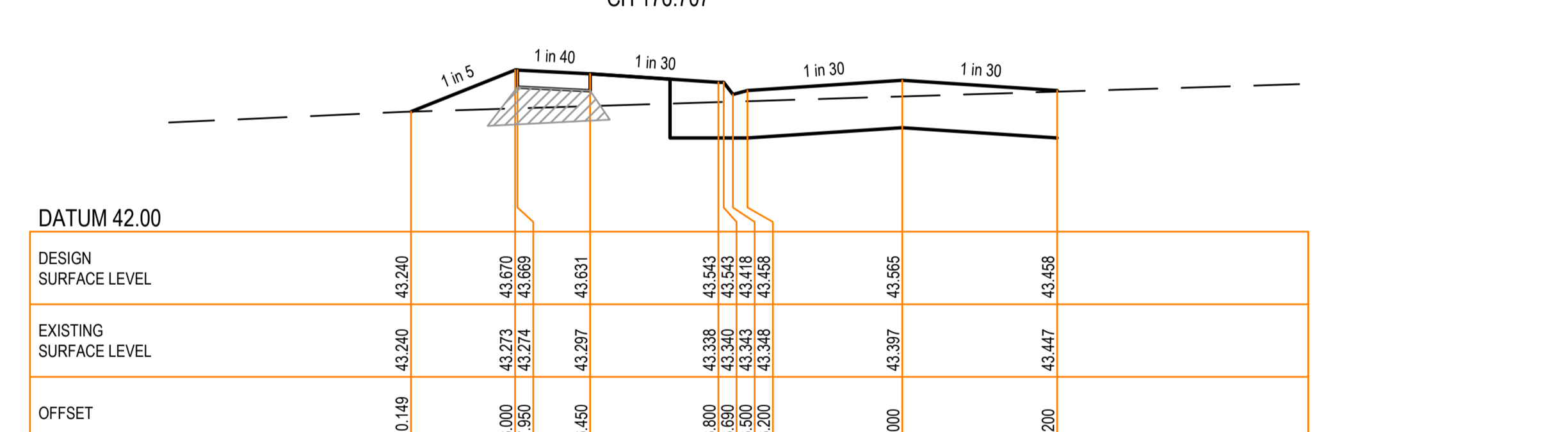
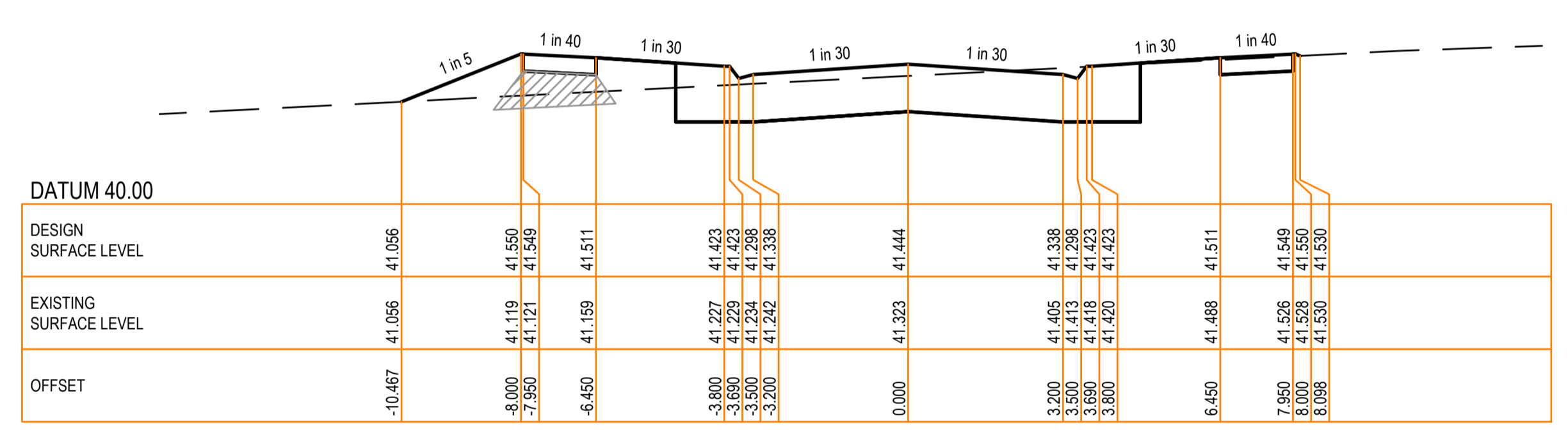
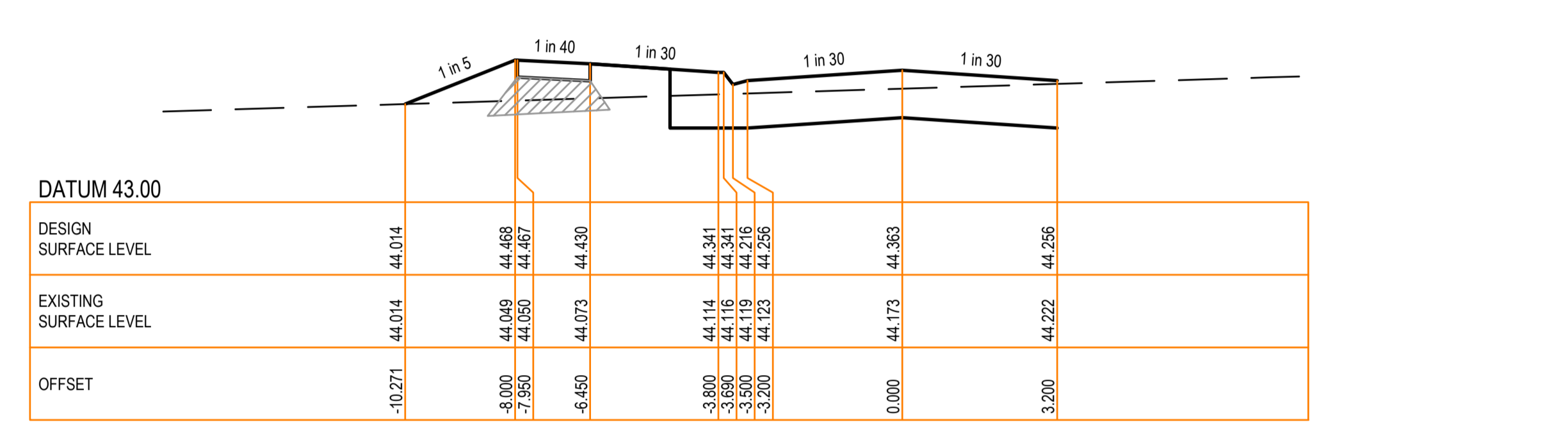
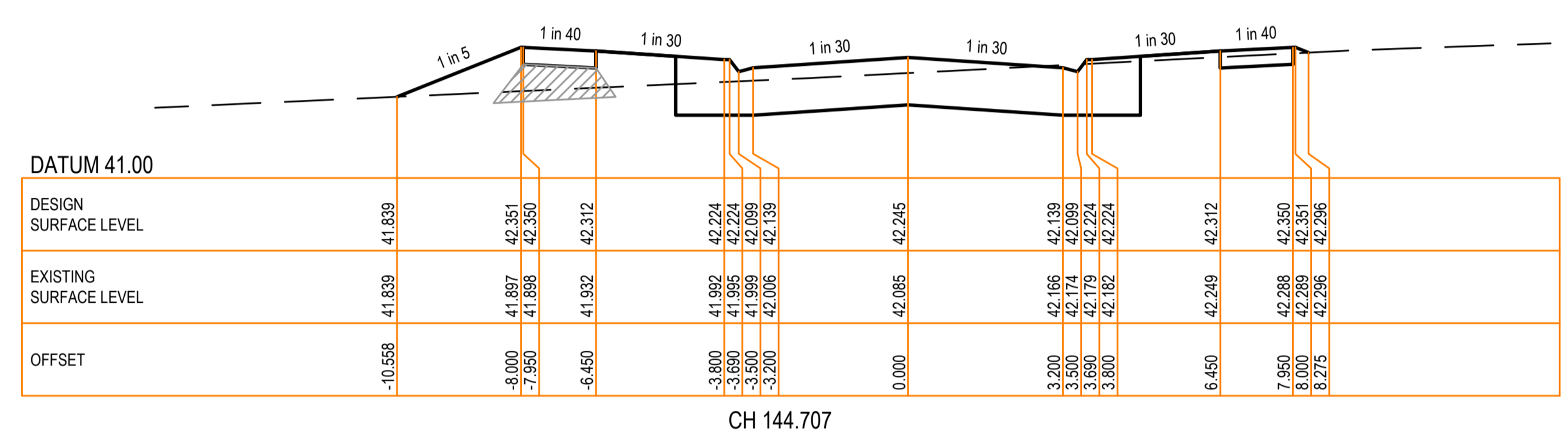
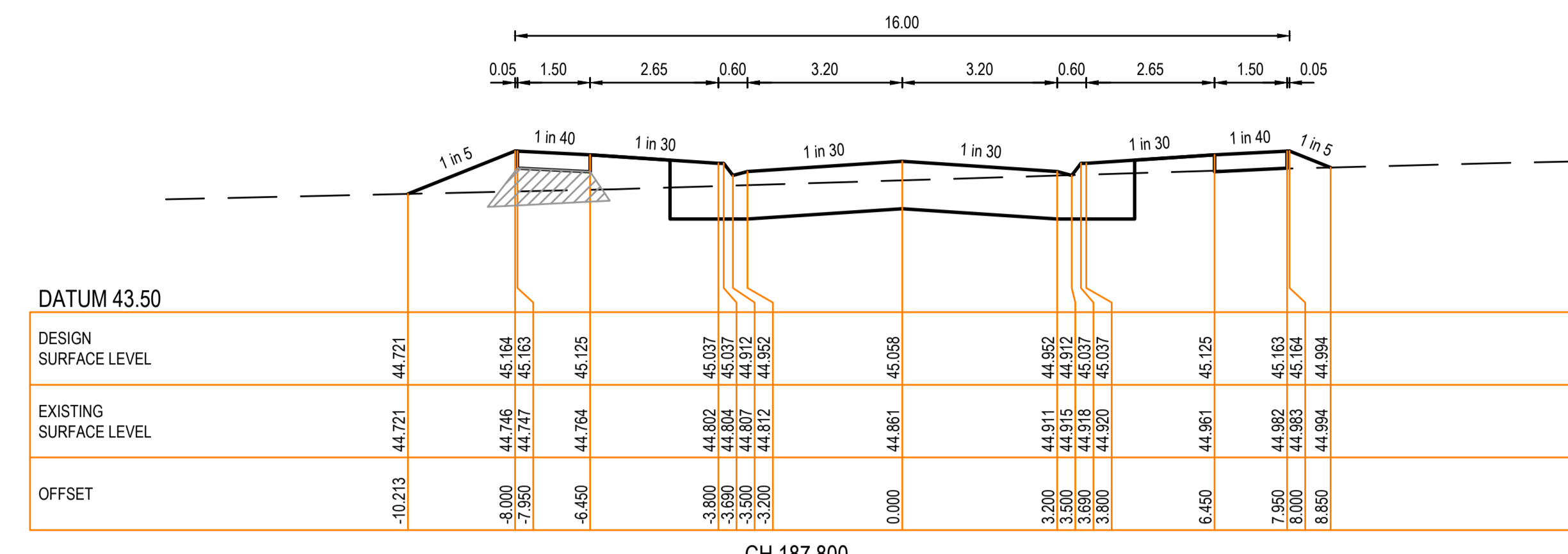
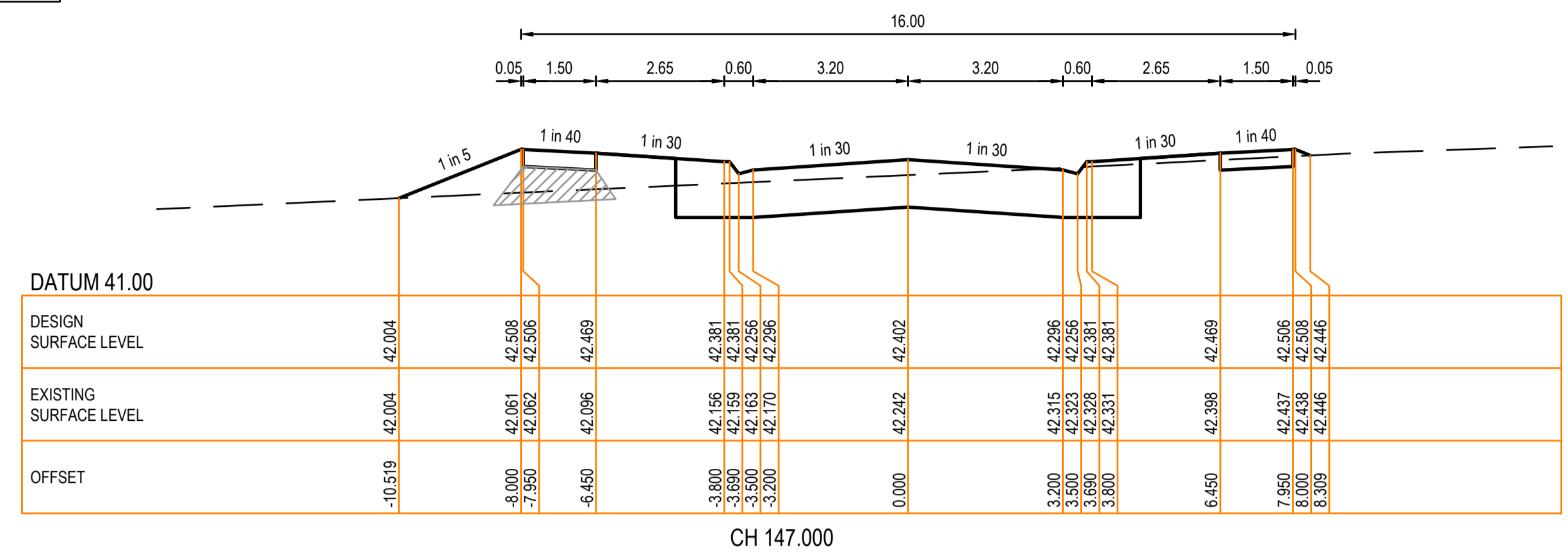
Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_5\35753_S_R09-20.dwg

Suite 201, Level 2, 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380
hello@marshalmelbourne marshalmelbourne

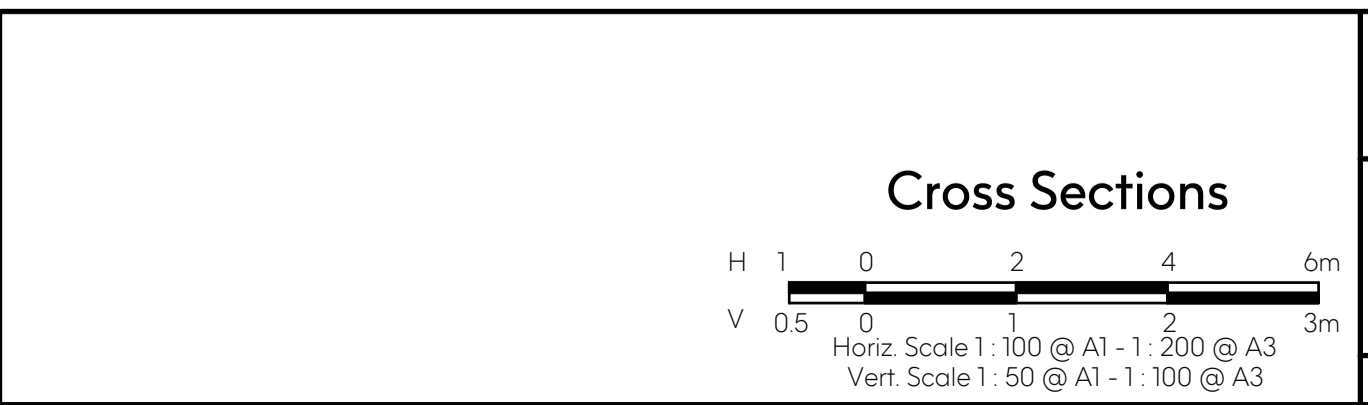
East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lacknow		35753_05 R09
Silvertop Street Longitudinal Section		Revision A
		Sheet 09 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use. Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

LEGEND	
	EXISTING SURFACE
	DESIGN LINE
	FCR BACKFILL



Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue



Status: **Preliminary**

ISO 9001 AS/NZS 4801 Endorsed Integrated Management System



Project No: 35753_S Scale: As Shown
Drawn: S.B. Date: Aug 2022 Date Printed: 2-Dec-22
Designed: S.B. Date: Aug 2022 Level Data: Ltopo.dgn
Authorised: G.S. Date: Aug 2022 Datum: AHD

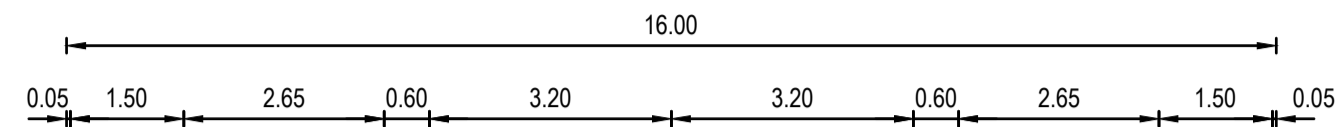
Filename: G:\COMPANY\MARSHAL\MELBOURNE\Brookfield Lakes\35753_S\35753_S_R09-20.dwg

Suite 201, Level 2, 448 St Kilda Road, Melbourne, Victoria 3004
+61 3 9860 0380 hello@marshal.melbourne marshal.melbourne

East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes - Stage 5 135 Great Alpine Road Lacknow		35753_05 R10
Silvertop Street Cross Section - 1		Revision A
		Sheet 10 of 28

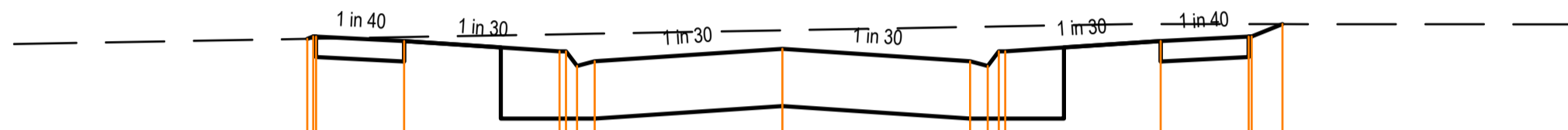
This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Self-cut dimensions of all design lines, grid lines, contour lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use. Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

LEGEND	
	EXISTING SURFACE
	DESIGN LINE



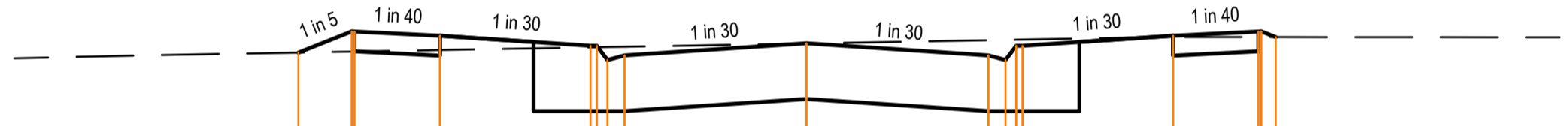
DATUM 46.00											
DESIGN SURFACE LEVEL	-8.495	47.475	47.475	47.376	47.376	47.249	47.249	47.164	47.164	47.601	47.601
EXISTING SURFACE LEVEL	-8.000	47.479	47.376	47.374	47.249	47.249	47.124	47.124	47.376	47.601	47.601
OFFSET	-0.495	0.000	0.100	0.002	0.000	0.000	0.120	0.040	0.235	0.000	0.000

CH 225.707



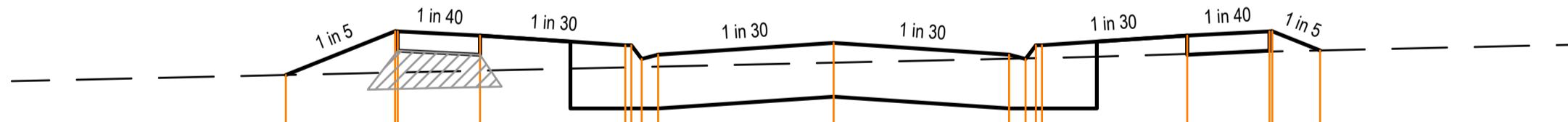
DATUM 45.50											
DESIGN SURFACE LEVEL	-8.101	47.003	47.003	47.023	47.022	46.896	46.896	46.811	46.811	47.128	47.128
EXISTING SURFACE LEVEL	-8.000	47.004	47.023	47.022	46.896	46.896	46.771	46.771	47.022	47.128	47.128
OFFSET	-0.101	0.000	0.000	0.000	0.000	0.000	0.125	0.140	0.100	0.000	0.000

CH 219.000



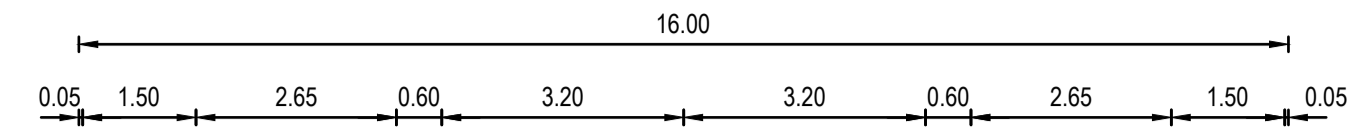
DATUM 45.00											
DESIGN SURFACE LEVEL	-8.936	46.266	46.266	46.452	46.452	46.326	46.326	46.241	46.241	46.402	46.402
EXISTING SURFACE LEVEL	-8.000	46.274	46.452	46.452	46.326	46.326	46.201	46.201	46.402	46.402	46.402
OFFSET	-0.936	0.000	0.000	0.000	0.000	0.000	0.125	0.040	0.000	0.000	0.000

CH 208.707



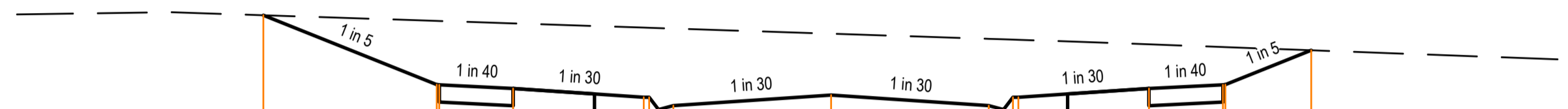
DATUM 44.00											
DESIGN SURFACE LEVEL	-9.990	45.011	45.011	45.408	45.408	45.282	45.282	45.408	45.408	45.234	45.234
EXISTING SURFACE LEVEL	-8.000	45.033	45.408	45.408	45.282	45.282	45.157	45.157	45.408	45.234	45.234
OFFSET	-1.990	0.000	0.000	0.000	0.000	0.000	0.125	0.251	0.000	0.000	0.000

CH 191.707



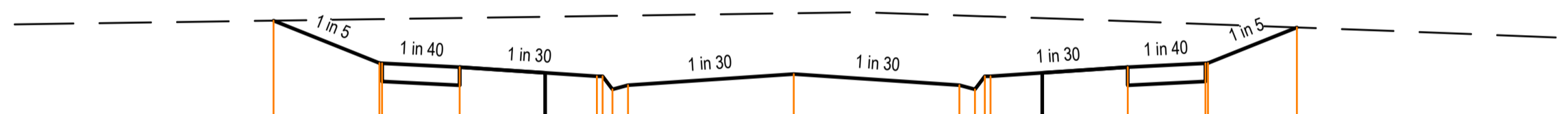
DATUM 48.00											
DESIGN SURFACE LEVEL	-11.904	50.035	50.035	49.271	49.270	49.232	49.141	49.141	49.056	49.229	49.229
EXISTING SURFACE LEVEL	-8.087	49.985	49.271	49.270	49.232	49.141	49.141	49.056	49.141	49.229	49.229
OFFSET	-3.817	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CH 261.712



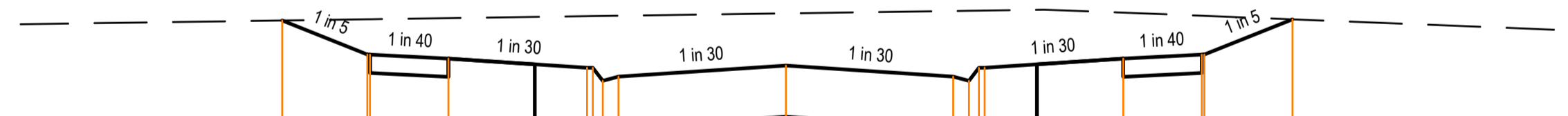
DATUM 47.50											
DESIGN SURFACE LEVEL	-11.517	49.656	49.656	48.953	48.952	48.914	48.825	48.825	48.741	48.914	48.914
EXISTING SURFACE LEVEL	-8.000	49.599	48.953	48.952	48.914	48.825	48.741	48.741	48.825	48.914	48.914
OFFSET	-3.517	0.057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CH 255.707



DATUM 46.50											
DESIGN SURFACE LEVEL	-10.045	46.573	46.573	46.164	46.163	46.125	46.037	46.037	45.952	46.125	46.125
EXISTING SURFACE LEVEL	-8.000	46.588	46.164	46.163	46.125	46.037	46.037	45.952	46.037	46.125	46.125
OFFSET	-2.045	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

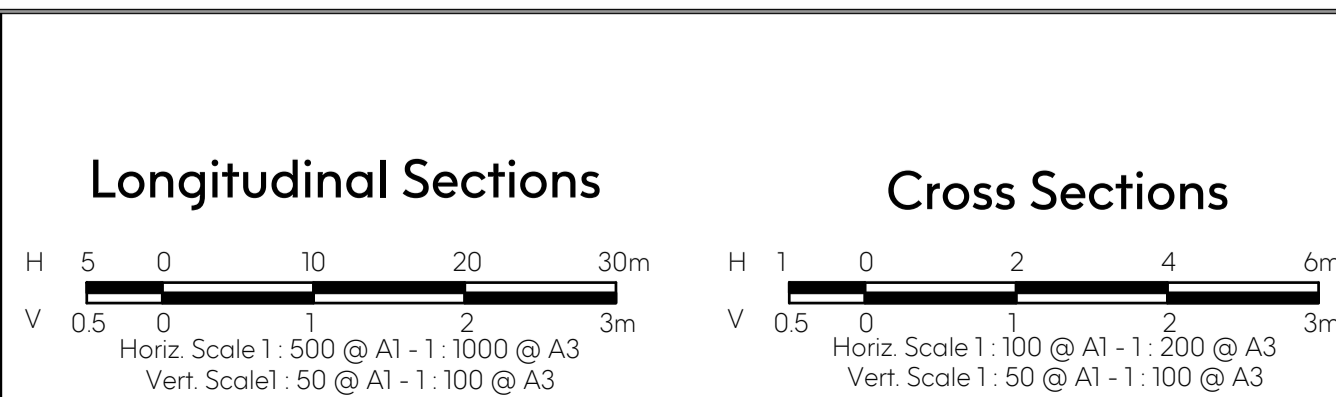
CH 240.707



DATUM 46.50											
DESIGN SURFACE LEVEL	-9.629	48.295	48.295	47.969	47.968	47.931	47.842	47.842	47.757	47.931	47.931
EXISTING SURFACE LEVEL	-8.000	48.307	47.969	47.968	47.931	47.842	47.757	47.757	47.842	47.931	47.931
OFFSET	-1.629	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CH 237.000

Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue



Status: **Preliminary**

Project No: 35753_S
 Drawn: S.B. Date: Aug 2022
 Designed: S.B. Date: Aug 2022
 Authorised: G.S. Date: Aug 2022

Scale: As Shown
 Date Printed: 2-Dec-22
 Level Data: Ltopo.dgn
 Datum: AHD

ISO 9001 AS/NZS 4801 Endorsed Integrated Management System

Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_S\35753_S_R09-20.dwg

Suite 201 Level 2 448 St Kilda Road Melbourne Victoria 3004
 +61 3 9860 0380
 hello@marshalmelbourne marshalmelbourne

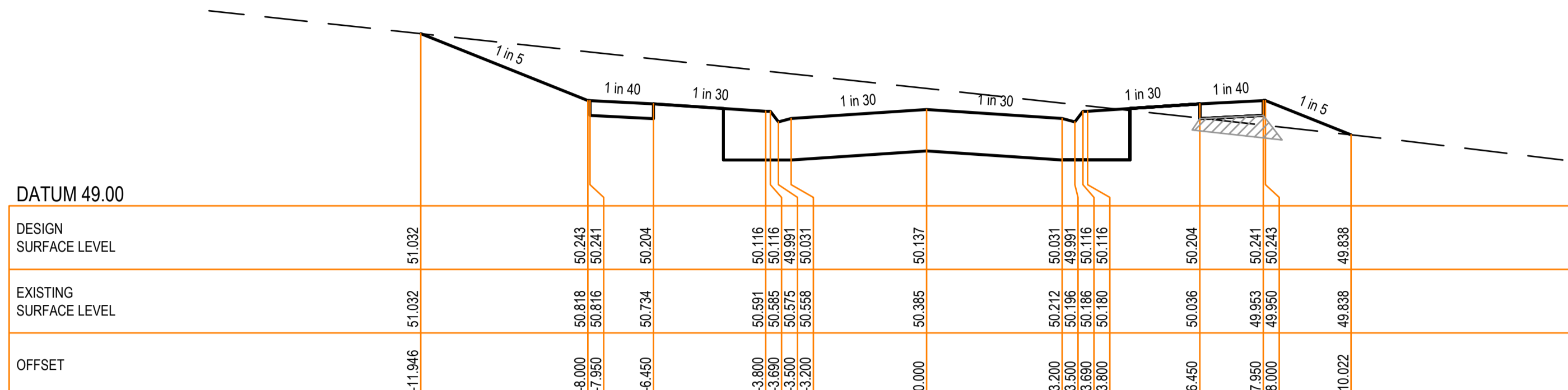
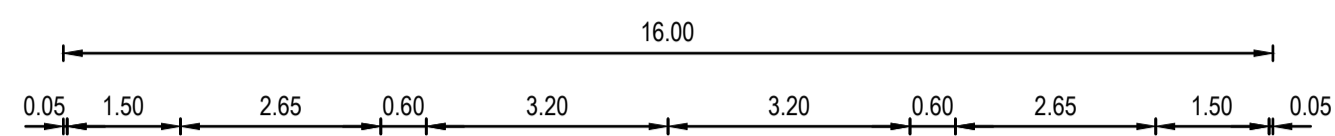
East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lacknow		35753_05 R11
Silvertop Street Cross Section - 2		Revision A
		Sheet 11 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshals accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshals is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use.

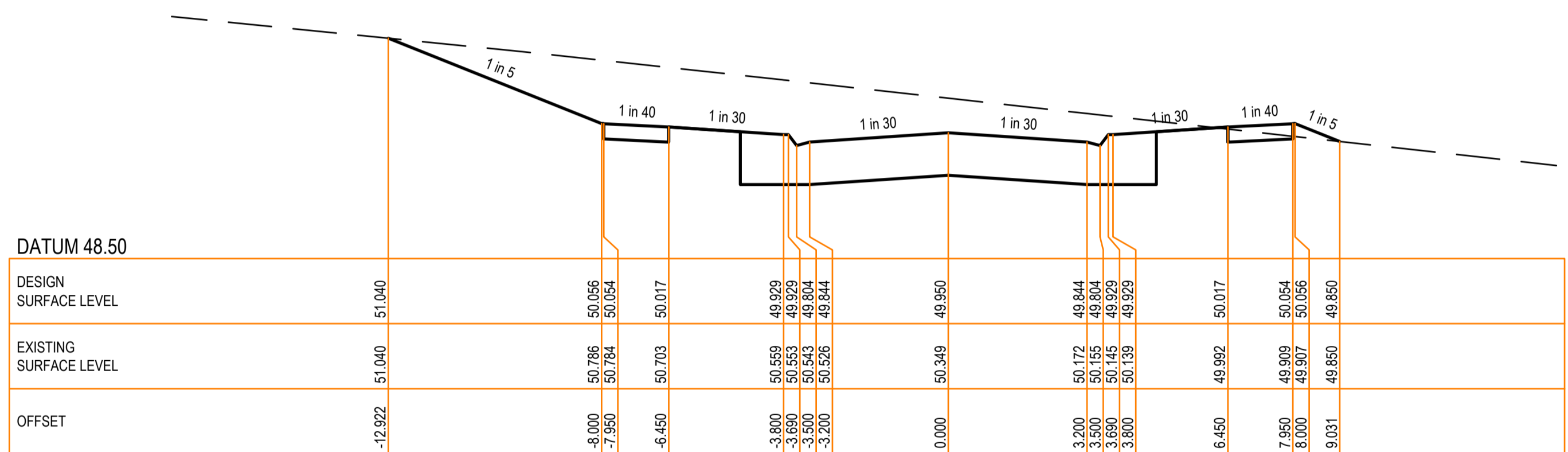
Disclaimer - Marshals therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

LEGEND

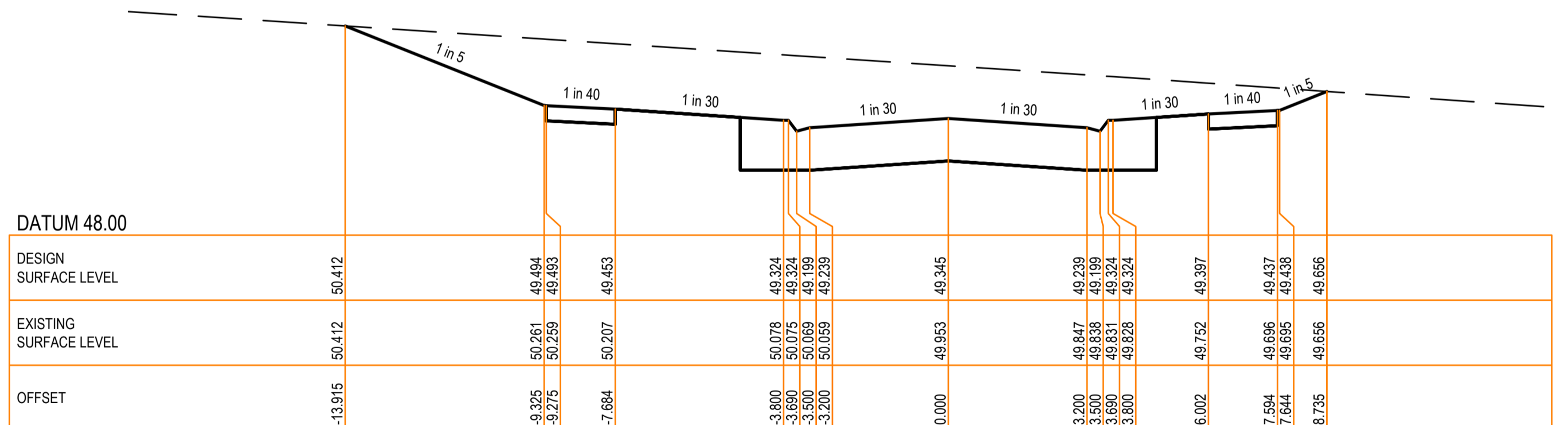
- EXISTING SURFACE
- DESIGN LINE
- FCR BACKFILL



CH 294.026



CH 278.826



CH 265.181

Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue

Longitudinal Sections

Cross Sections

Status: **Preliminary**

ISO 9001 AS/NZS 4801 Endorsed Integrated Management System

Project No: 35753_S	Scale: As Shown
Drawn: S.B. Date: Aug 2022	Date Printed: 2-Dec-22
Designed: S.B. Date: Aug 2022	Level Data: Ltopodgn
Authorised: G.S. Date: Aug 2022	Datum: AHD

Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_5\35753_5_R09-20.dwg

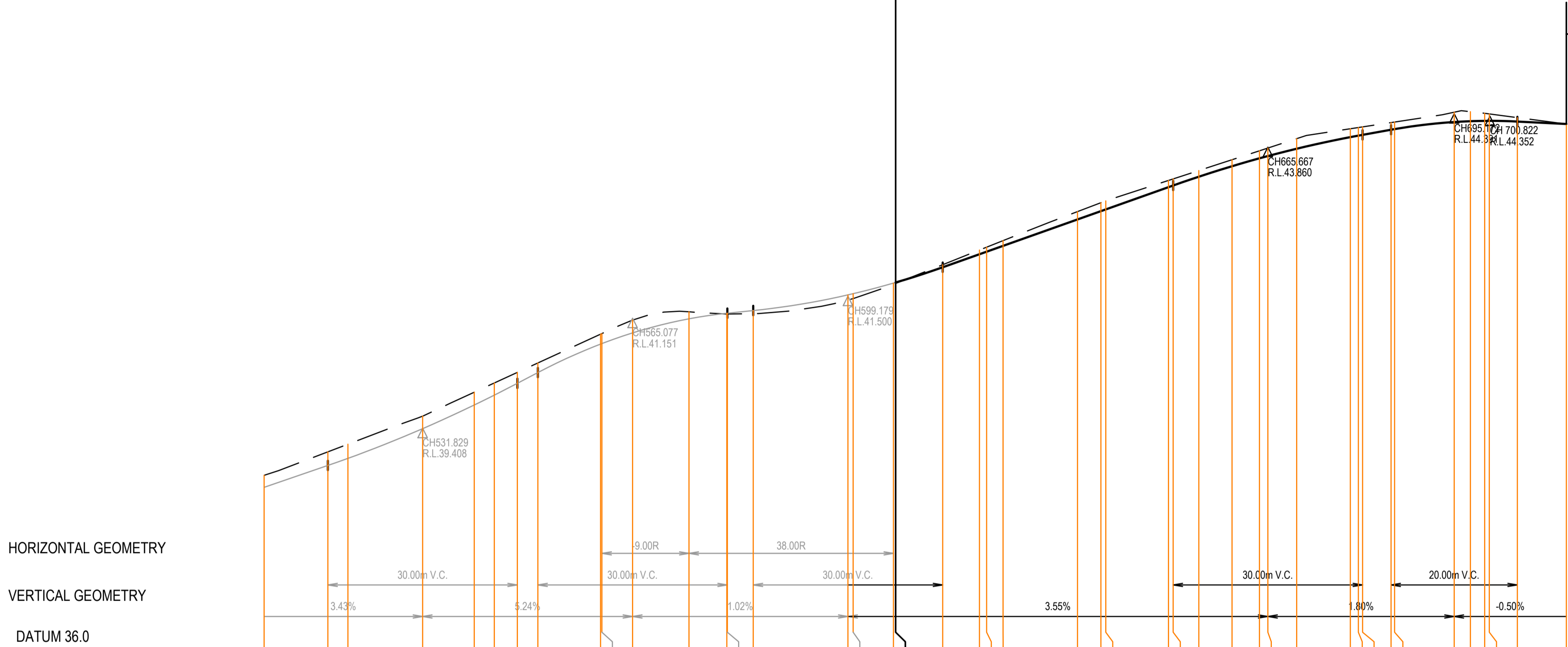
Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380 hello@marshal.melbourne marshal.melbourne

East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lucknow		35753_05 R12
Silvertop Street Cross Section - 3		Revision A
		Sheet 12 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use.

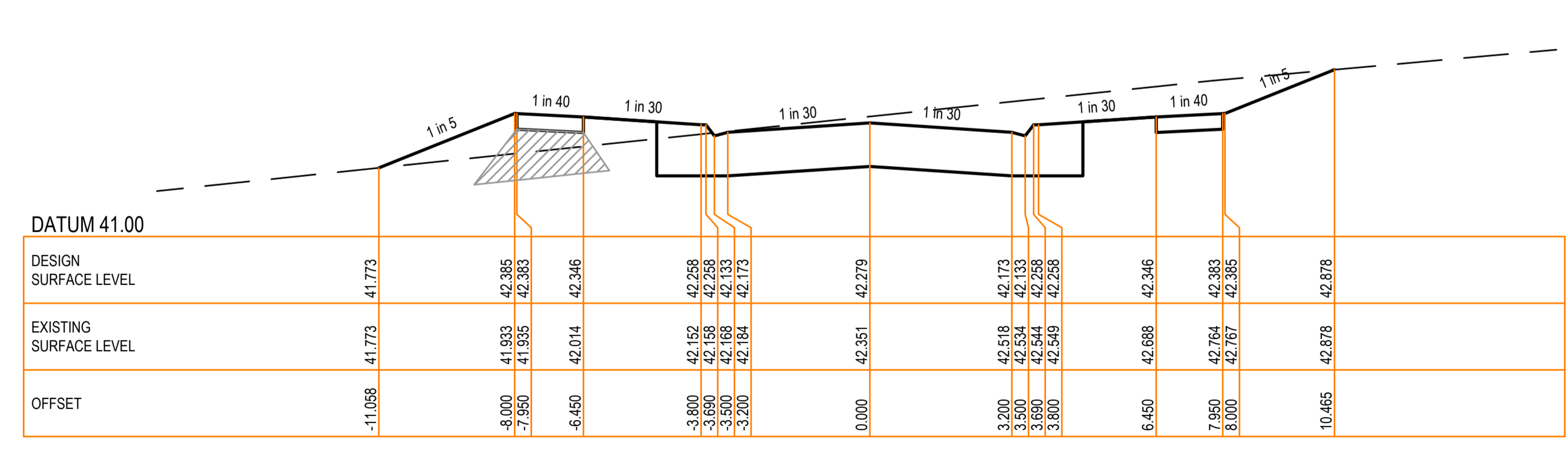
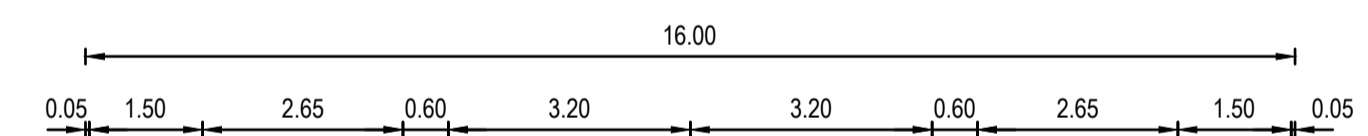
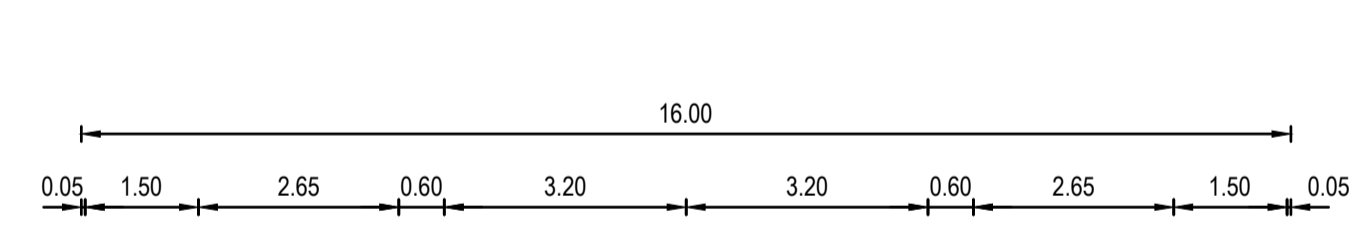
Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

LEGEND	
	EXISTING SURFACE
	DESIGN LINE
	FCR BACKFILL



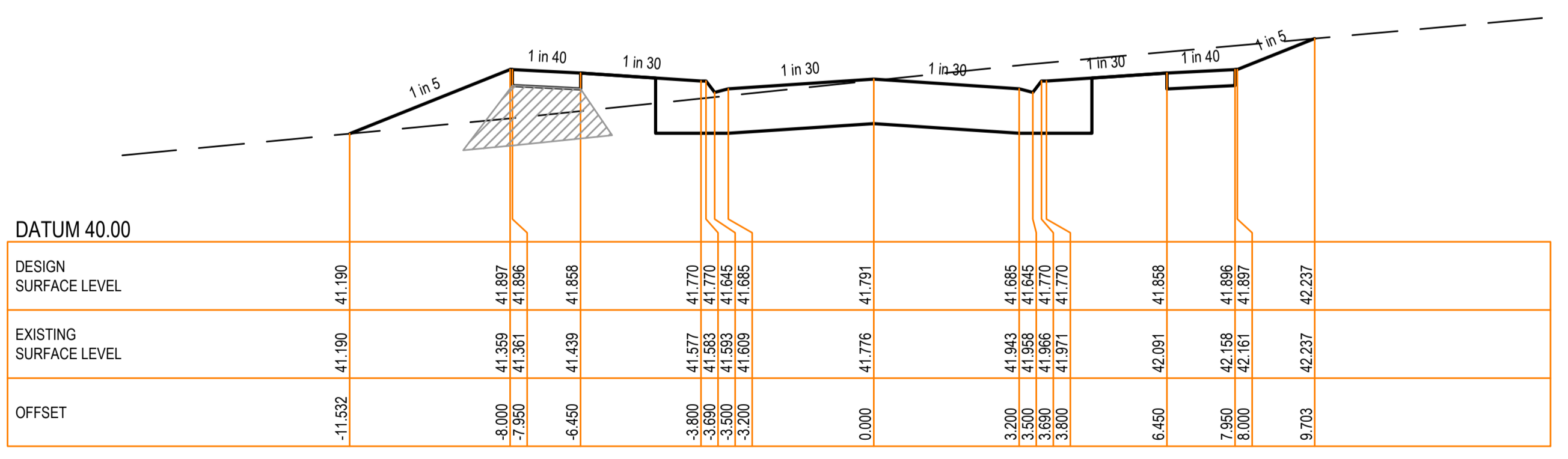
DATUM 36.0	
DESIGN CENTRELINE	506.733 39.736 38.546
EXISTING SURFACE LEVEL	516.829 39.108 38.893
CHAINAGE	520.000 39.229 39.095
	551.829 39.674 39.476
	540.000 40.053 39.650
	543.181 40.189 40.007
	546.829 40.367 40.194
	550.077 40.516 40.364
	560.000 40.972 40.815
	560.216 40.982 40.824
	565.077 41.196 40.992
	574.012 41.327 41.216
	590.000 41.291 41.303
	590.077 41.281 41.304
	594.179 41.295 41.346
	599.179 41.511 41.595
	600.000 41.536 41.614
	606.385 41.762 41.781
	606.153 41.776 41.791
	614.179 42.073 42.032
	620.000 42.305 42.239
	623.733 42.455 42.371
	635.533 42.914 42.790
	639.233 43.055 42.922
	640.000 43.084 42.949
	649.933 43.408 43.302
	650.667 43.432 43.328
	654.733 43.564 43.467
	660.000 43.736 43.633
	664.333 43.877 43.758
	665.667 43.921 43.784
	670.233 44.070 43.910
	678.733 44.276 44.084
	680.667 44.296 44.130
	685.172 44.324 44.211
	685.733 44.333 44.221
	695.172 44.469 44.333
	697.733 44.497 44.346
	700.000 44.471 44.351
	700.733 44.461 44.352
	705.172 44.403 44.341
	712.933 44.302 44.302

MAHOGANY CLOSE LONGITUDINAL SECTION
SCALE HORIZONTAL 1:500
VERTICAL 1:50



DATUM 41.00	
DESIGN SURFACE LEVEL	41.773 41.773 42.385 42.383 42.346 42.258 42.133 42.133 42.133 42.133 42.279
EXISTING SURFACE LEVEL	41.773 41.773 41.833 41.835 42.014 42.346 42.152 42.133 42.133 42.133 42.279
OFFSET	-11.088 0.000 -7.950 -7.950 -6.450 -3.800 -3.800 -3.800 -3.200 0.000 -7.950 8.000 10.465

CH 621.133



DATUM 40.00	
DESIGN SURFACE LEVEL	41.190 41.190 41.897 41.896 41.858 41.770 41.770 41.645 41.645 41.645 41.791
EXISTING SURFACE LEVEL	41.190 41.190 41.359 41.361 41.658 41.577 41.583 41.770 41.770 41.645 41.645
OFFSET	-11.532 0.000 -8.000 -7.950 -6.450 -3.800 -3.500 -3.200 0.000 3.200 3.500 3.690 3.800 6.450 7.950 8.000 9.703

CH 606.733

Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue

Longitudinal Sections
H 5 0 10 20 30m
V 0.5
Horiz. Scale 1:500 @ A1 - 1:1000 @ A3
Vert. Scale 1:50 @ A1 - 1:100 @ A3

Cross Sections
H 1 0 2 4 6m
V 0.5
Horiz. Scale 1:100 @ A1 - 1:200 @ A3
Vert. Scale 1:50 @ A1 - 1:100 @ A3

Status: **Preliminary**

Project No. 35753_S
Drawn: S.B. Date: Aug 2022
Designed: S.B. Date: Aug 2022
Authorised: G.S. Date: Aug 2022

Scale: As Shown
Date Printed: 2-Dec-22
Level Data: Ltopodgn
Datum: AHD

Files: G:\COMPANY\MARSHAL\MELBOURNE\Brookfield Lakes\35753_S\35753_S_R09-20.dwg

Suite 201, Level 2, 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380
hello@marshal.melbourne marshal.melbourne

East Gippsland Shire Council
Brookfield Land Co Pty Ltd
Brookfield Lakes - Stage 5
135 Great Alpine Road
Lucknow

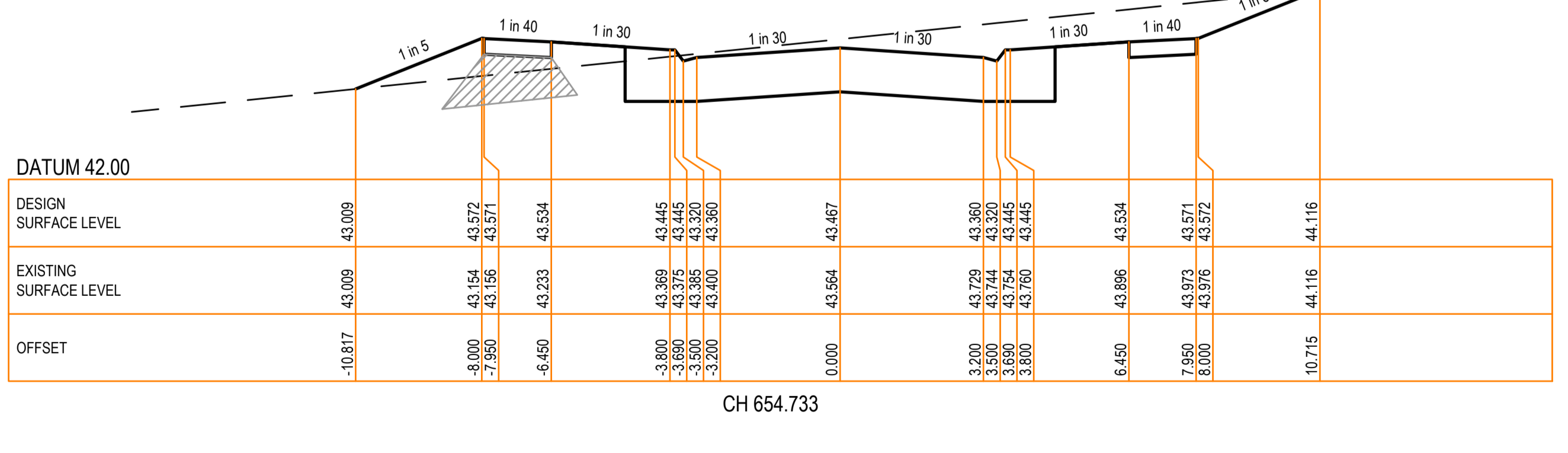
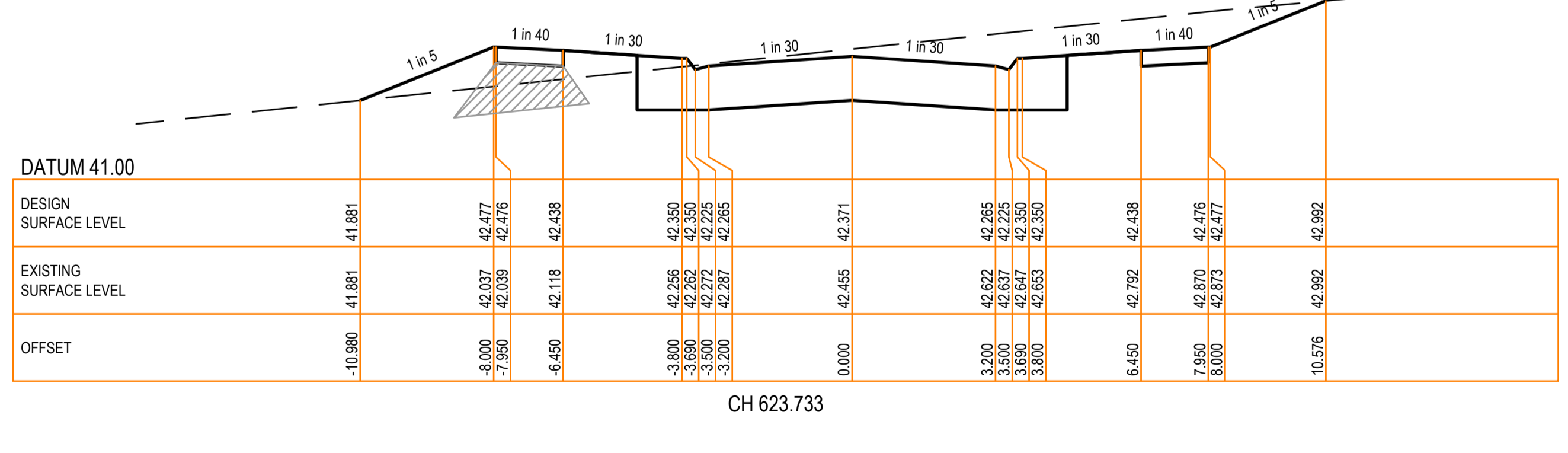
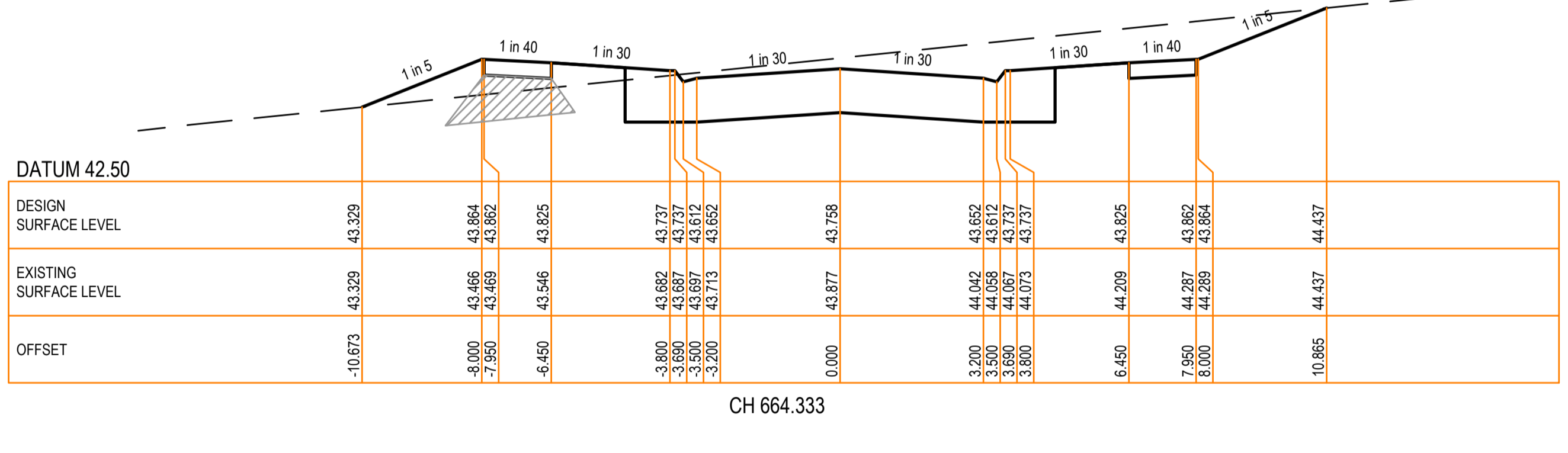
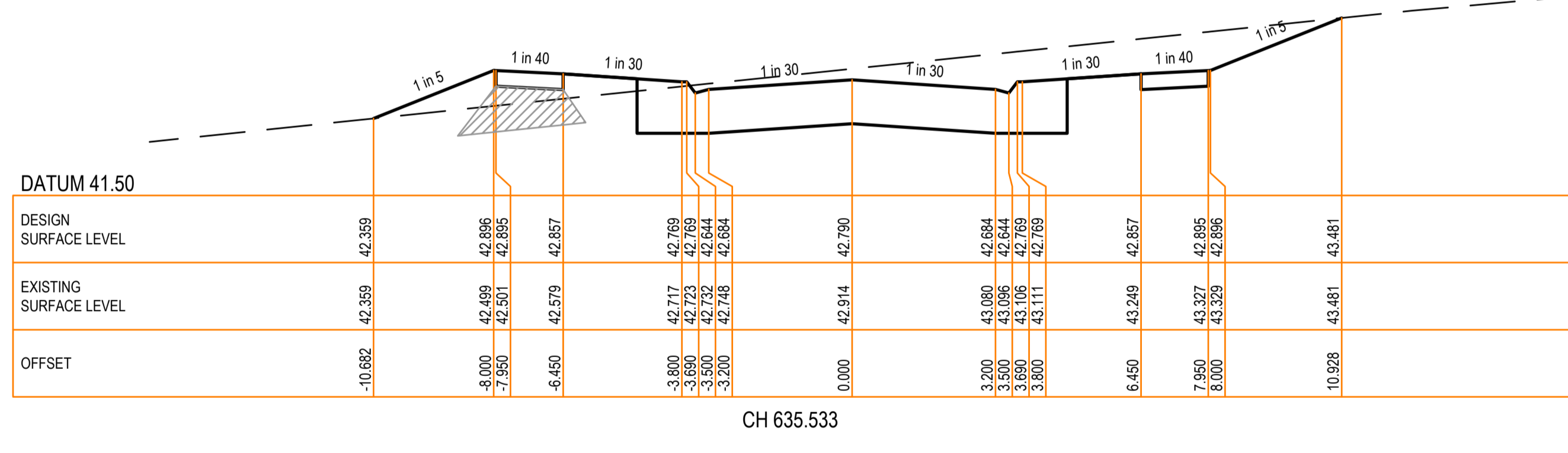
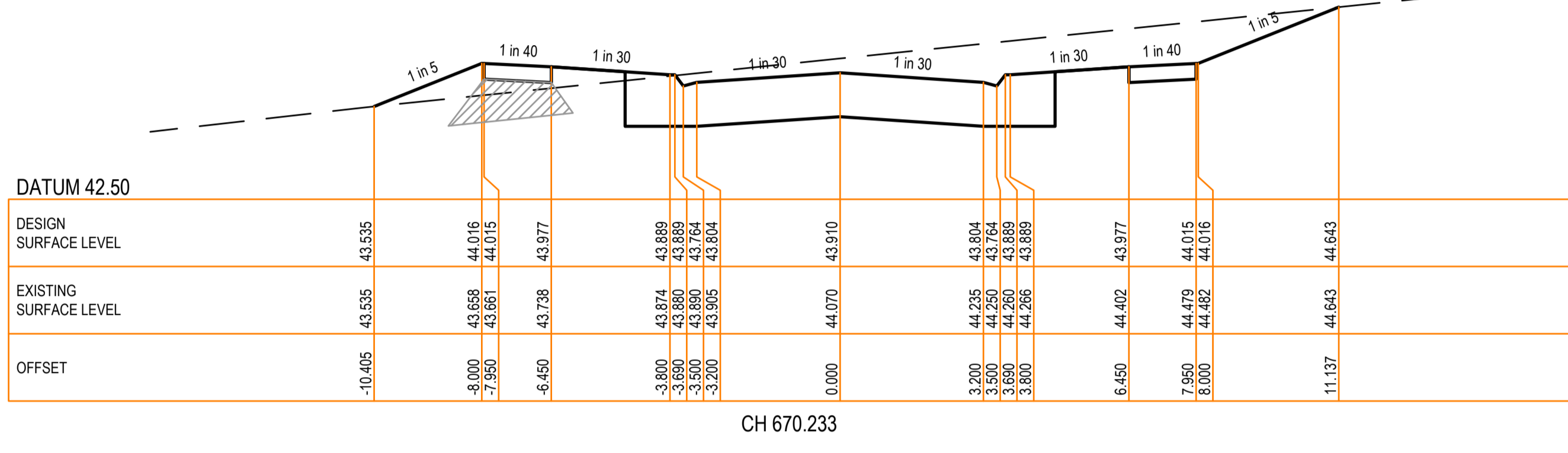
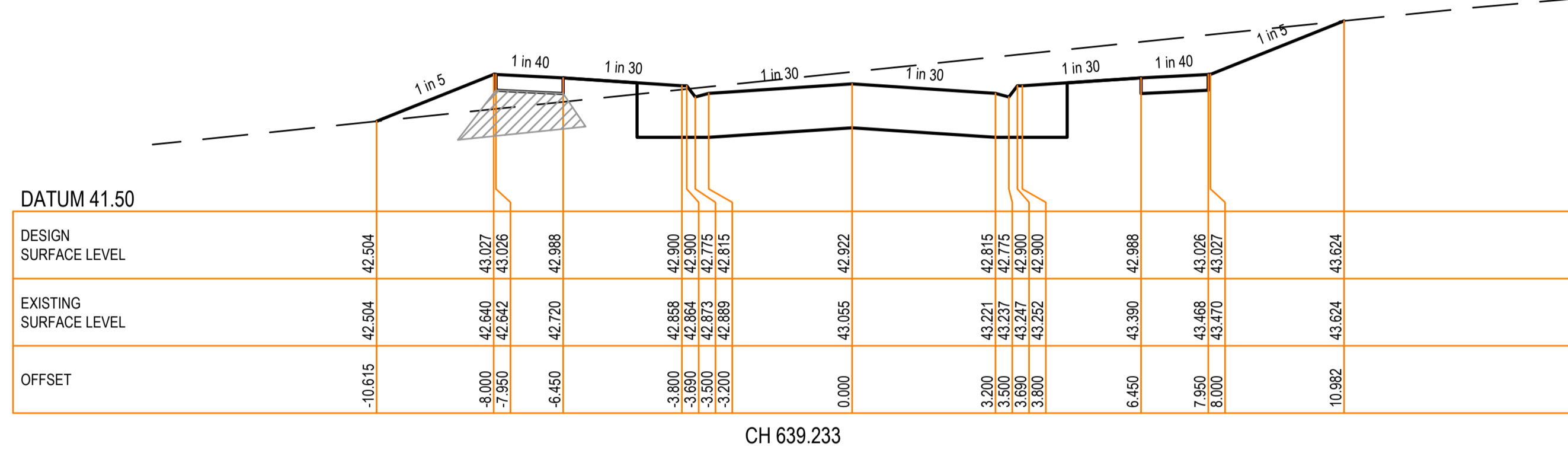
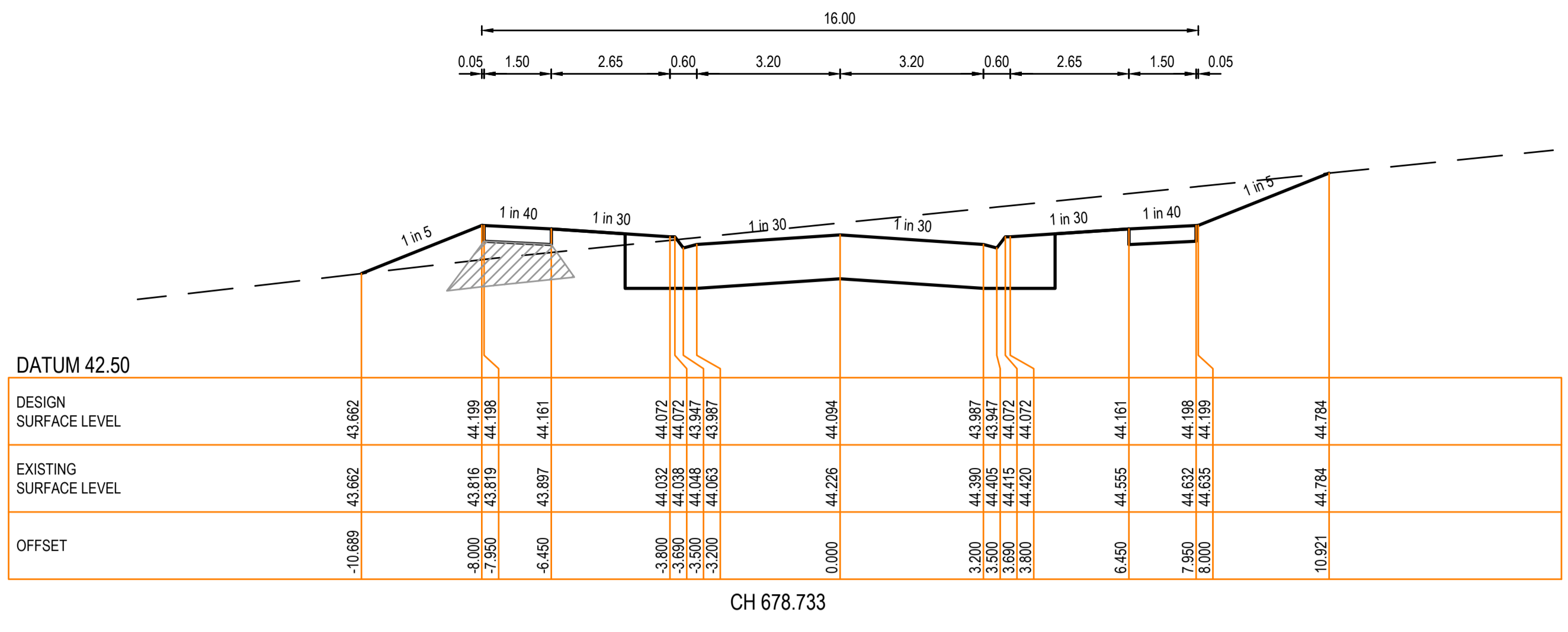
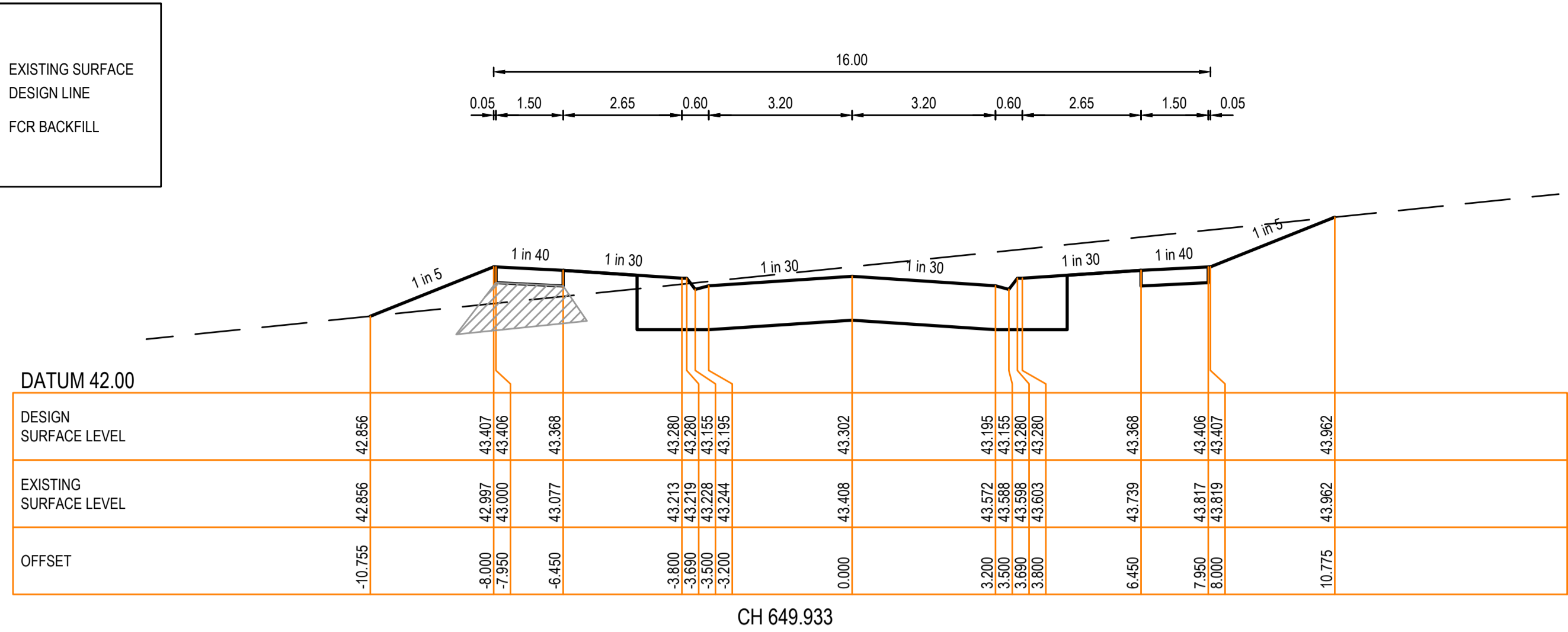
Mahogany Close
Longitudinal Section & Cross Section - 1

Plan Number: 35753_05 R13
Revision: A
Sheet: 13 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use. Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

LEGEND

EXISTING SURFACE
DESIGN LINE
FCR BACKFILL



Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue

Longitudinal Sections

Scale: Horiz. Scale 1: 500 @ A1 - 1: 1000 @ A3, Vert. Scale 1: 50 @ A1 - 1: 100 @ A3

Cross Sections

Scale: Horiz. Scale 1: 100 @ A1 - 1: 200 @ A3, Vert. Scale 1: 50 @ A1 - 1: 100 @ A3

Status: **Preliminary**

Project No: 35753_S, Scale: As Shown

Drawn: S.B. Date: Aug 2022, Date Printed: 2-Dec-22

Designed: S.B. Date: Aug 2022, Level Data: Ltspadgn

Authorised: G.S. Date: Aug 2022, Datum: AHD

Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_S\35753_S_R09-20.dwg

Suite 201 Level 2 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380 hello@marshalmelbourne marshalmelbourne

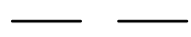


East Gippsland Shire Council

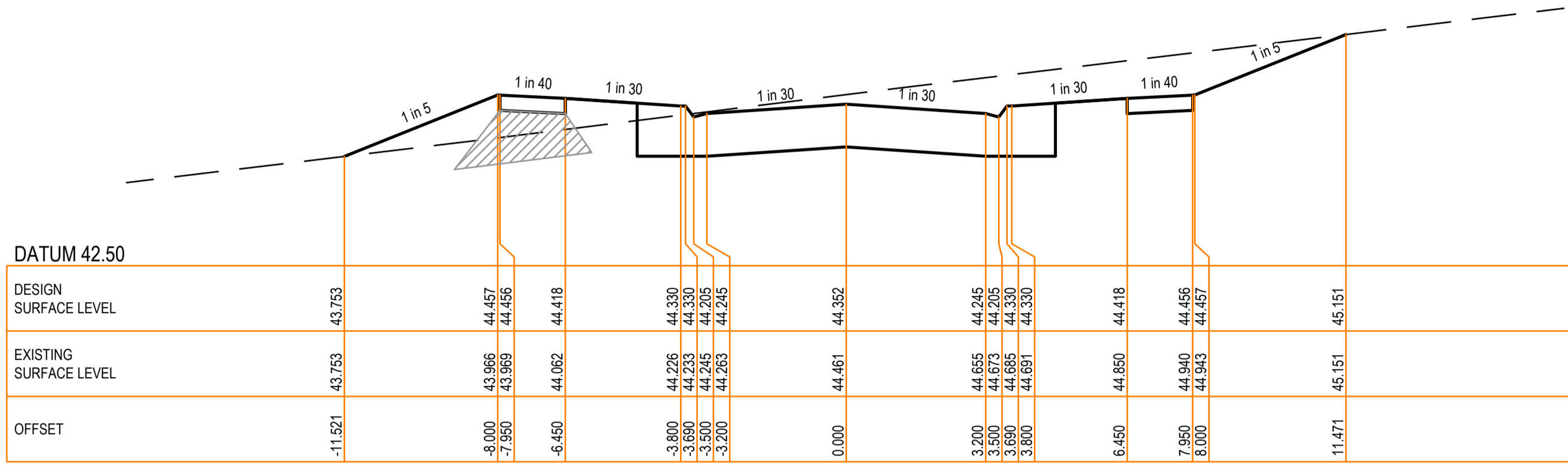
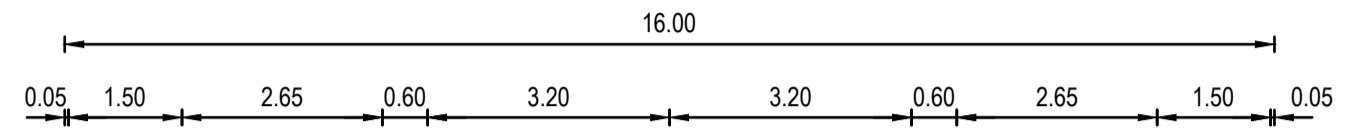
Brookfield Land Co Pty Ltd
Brookfield Lakes- Stage 5
135 Great Alpine Road
Lacknow

Mahogany Close
Cross Section - 2

Plan Number: 35753_05 R14
Revision: A
Sheet 14 of 28

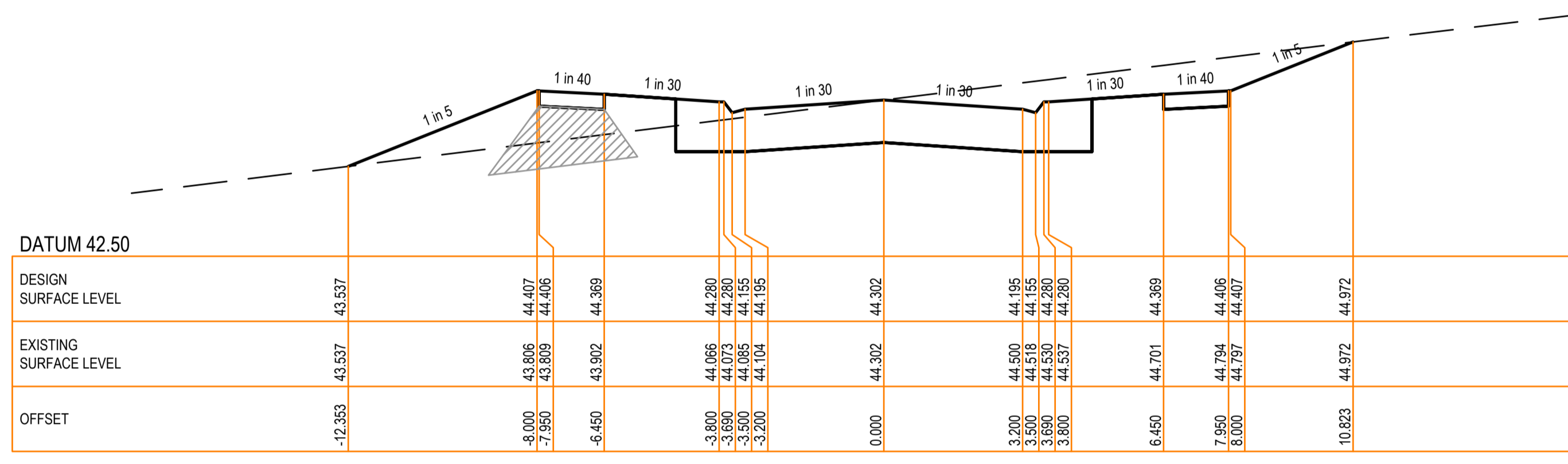
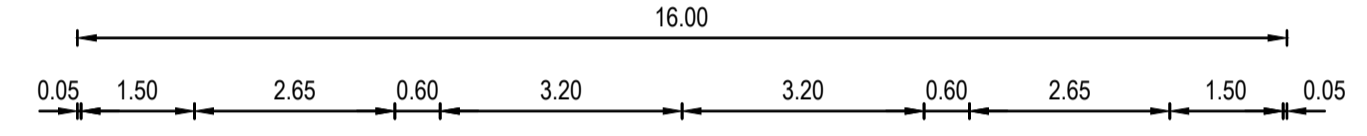
This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Self-out dimensions of all design lines, grid lines, contour lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work.

LEGEND	
	EXISTING SURFACE
	DESIGN LINE
	FCR BACKFILL



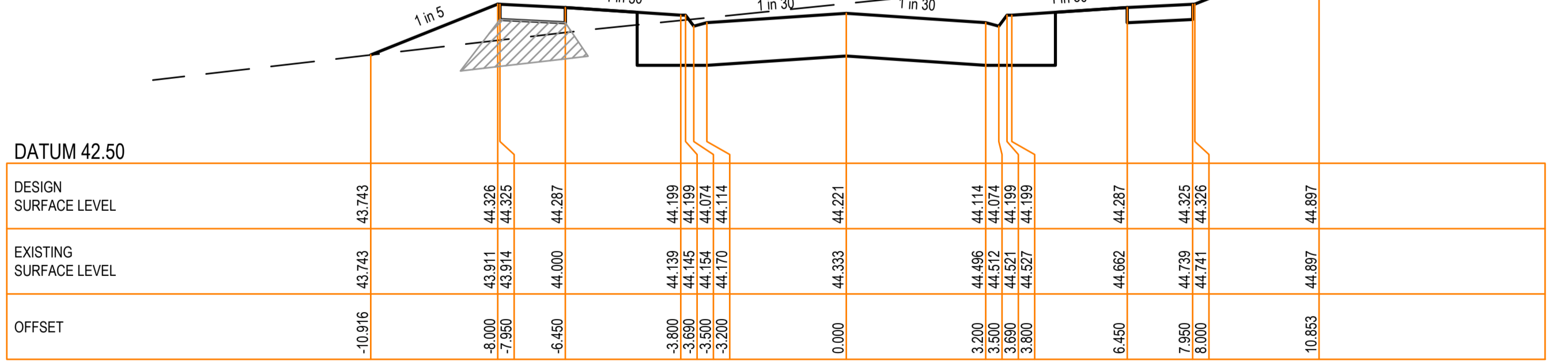
DATUM 42.50	
DESIGN SURFACE LEVEL	43.753, 44.457, 44.456, 44.418, 44.330, 44.330, 44.330, 44.330, 44.330, 44.330, 44.419, 44.456, 45.151
EXISTING SURFACE LEVEL	43.753, 43.966, 43.969, 44.062, 44.226, 44.233, 44.205, 44.245, 44.263, 44.330, 44.850, 44.943, 45.151
OFFSET	-11.521, -8.000, -7.950, -6.450, -3.800, -3.690, -3.500, -3.200, 0.000, 3.200, 3.690, 3.800, 6.450, 7.950, 8.000, 11.471

CH 700.733



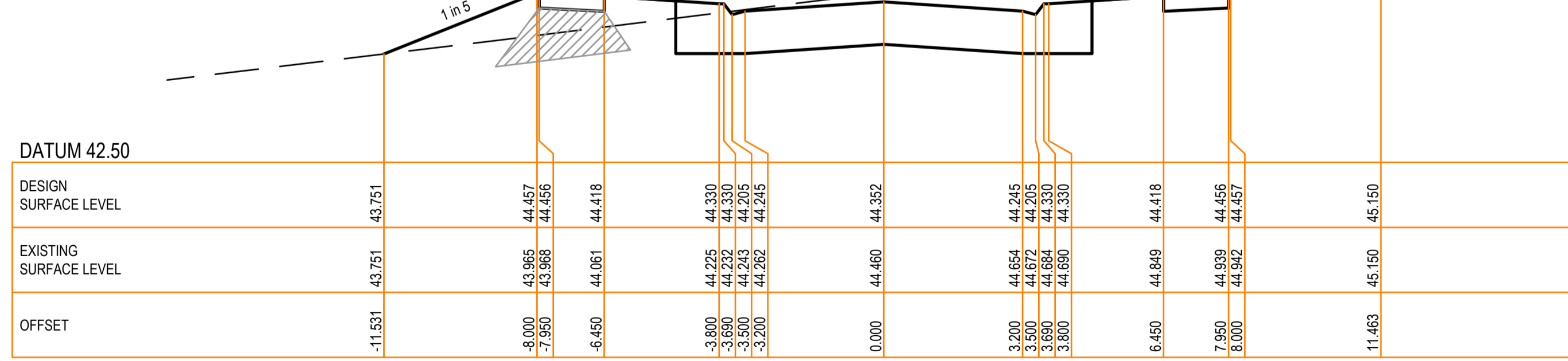
DATUM 42.50	
DESIGN SURFACE LEVEL	43.537, 44.407, 44.406, 44.389, 44.280, 44.280, 44.155, 44.302, 44.302, 44.369, 44.406, 44.407, 44.972
EXISTING SURFACE LEVEL	43.537, 43.806, 43.809, 43.902, 44.086, 44.073, 44.085, 44.104, 44.302, 44.701, 44.794, 44.972
OFFSET	-12.353, -8.000, -7.950, -6.450, 3.800, 3.690, -3.500, -3.200, 0.000, 6.450, 7.950, 8.000, 10.823

CH 712.933



DATUM 43.00	
DESIGN SURFACE LEVEL	43.820, 44.452, 44.430, 44.413, 44.325, 44.325, 44.325, 44.325, 44.325, 44.325, 44.413, 44.452, 45.202
EXISTING SURFACE LEVEL	43.820, 44.010, 44.013, 44.103, 44.265, 44.272, 44.200, 44.240, 44.302, 44.325, 44.884, 44.974, 45.202
OFFSET	-11.157, -8.000, -7.950, -6.450, -3.800, -3.690, -3.500, -3.200, 0.000, 3.200, 3.690, 3.800, 6.450, 7.950, 8.000, 11.752

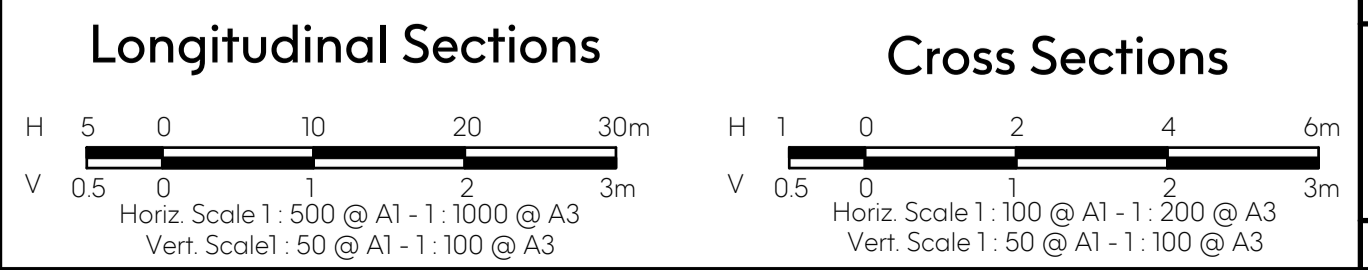
CH 697.733



DATUM 42.50	
DESIGN SURFACE LEVEL	43.751, 44.457, 44.456, 44.418, 44.330, 44.330, 44.205, 44.352, 44.352, 44.418, 44.456, 45.150
EXISTING SURFACE LEVEL	43.751, 43.966, 43.969, 44.061, 44.226, 44.233, 44.205, 44.245, 44.302, 44.849, 44.939, 45.150
OFFSET	-11.531, -8.000, -7.950, -6.450, -3.800, -3.690, -3.500, -3.200, 0.000, 6.450, 7.950, 8.000, 11.463

CH 700.822

Revision Details				
Revision	Date	Revised Sheets	Descriptions	Authorised
A	02-12-2022	-	Preliminary Issue	G.S.



Status: **Preliminary**

ISO 9001 AS/NZS 4801 Endorsed Integrated Management System

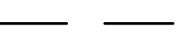


Project No. 35753_S	Scale: As Shown
Drawn: S.B. Date: Aug 2022	Date Printed: 2-Dec-22
Designed: S.B. Date: Aug 2022	Level Data: Ltopodgn
Authorised: G.S. Date: Aug 2022	Datum: AHD

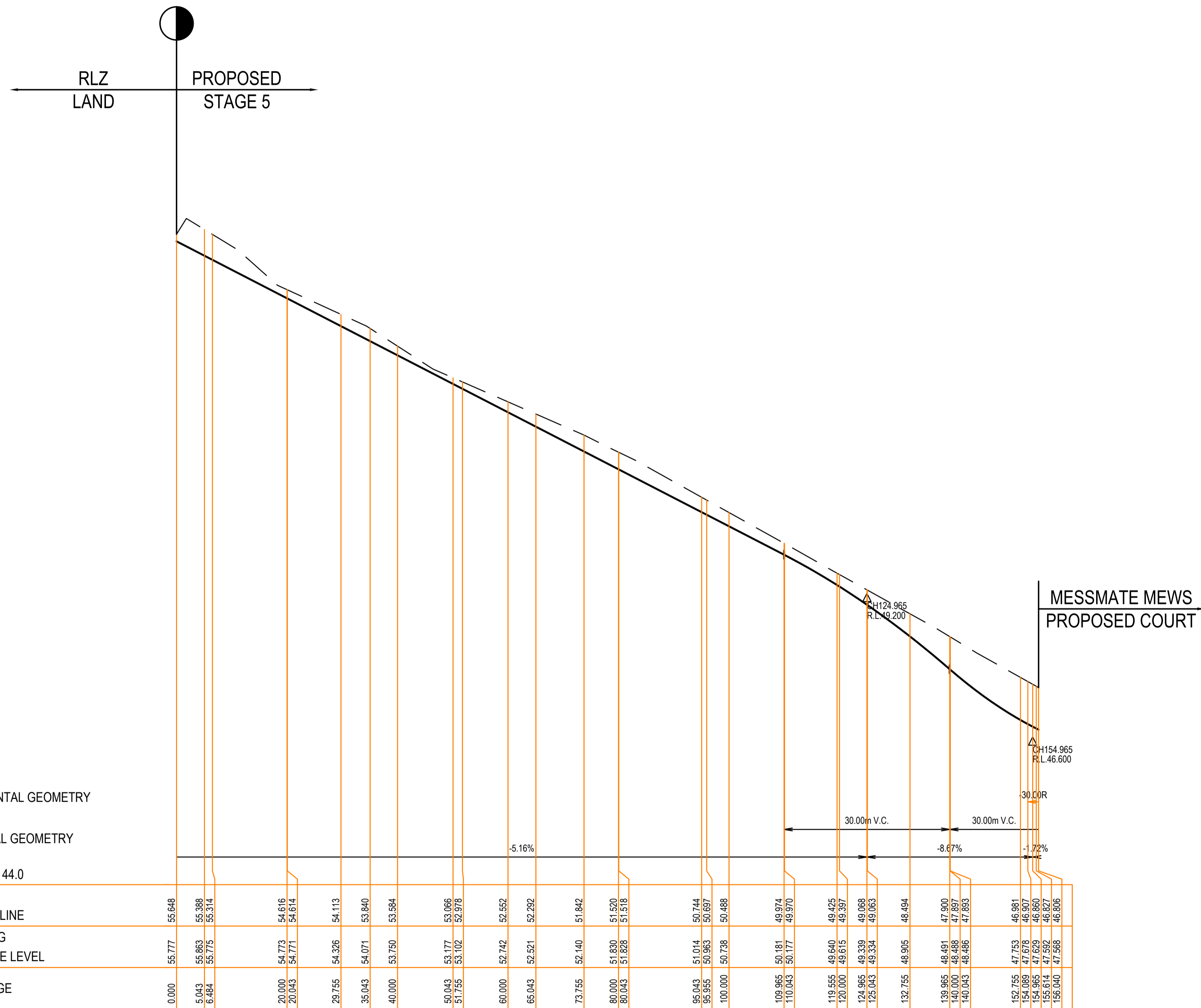
Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_5\35753_5_R09-20.dwg



East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lacknow		35753_05 R15
Mahogany Close Cross Section - 3		Revision A
		Sheet 15 of 28

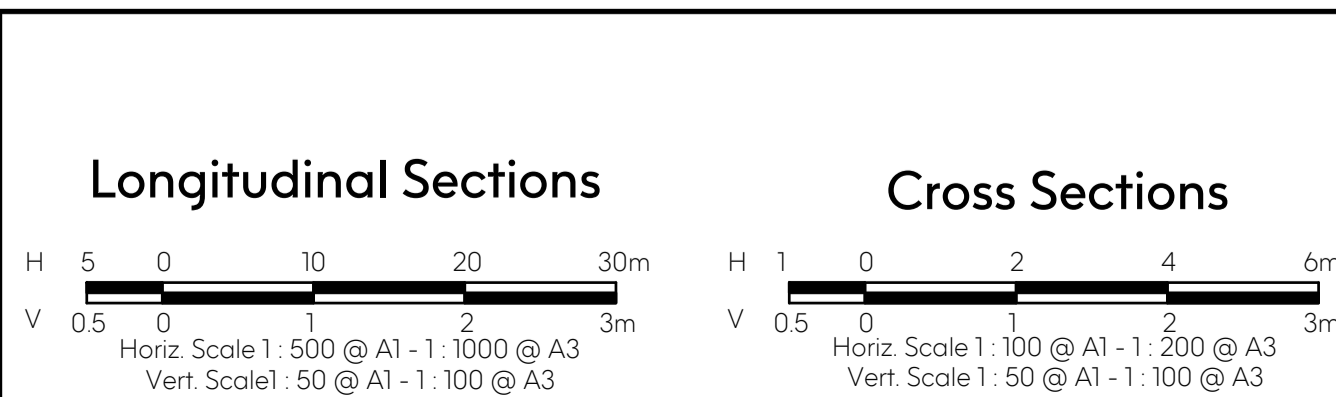
This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Self-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use. Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

LEGEND	
	EXISTING SURFACE
	DESIGN LINE
	FOR BACKFILL



MESSMATE MEWS LONGITUDINAL SECTION
SCALE HORIZONTAL 1:500
VERTICAL 1:50

Revision Details				
Revision	Date	Revised Sheets	Descriptions	Authorised
A	02-12-2022	-	Preliminary Issue	G.S.



Status: **Preliminary**

ISO 9001 AS/NZS 4801 Endorsed Integrated Management System

Project No.	35753_S	Scale:	As Shown
Drawn:	S.B. Date: Aug 2022	Date Printed:	2-Dec-22
Designed:	S.B. Date: Aug 2022	Level Data:	Ltopdgn
Authorised:	G.S. Date: Aug 2022	Datum:	AHD

Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_5\35753_5_R09-20.dwg

Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380 hello@marshal.melbourne marshal.melbourne

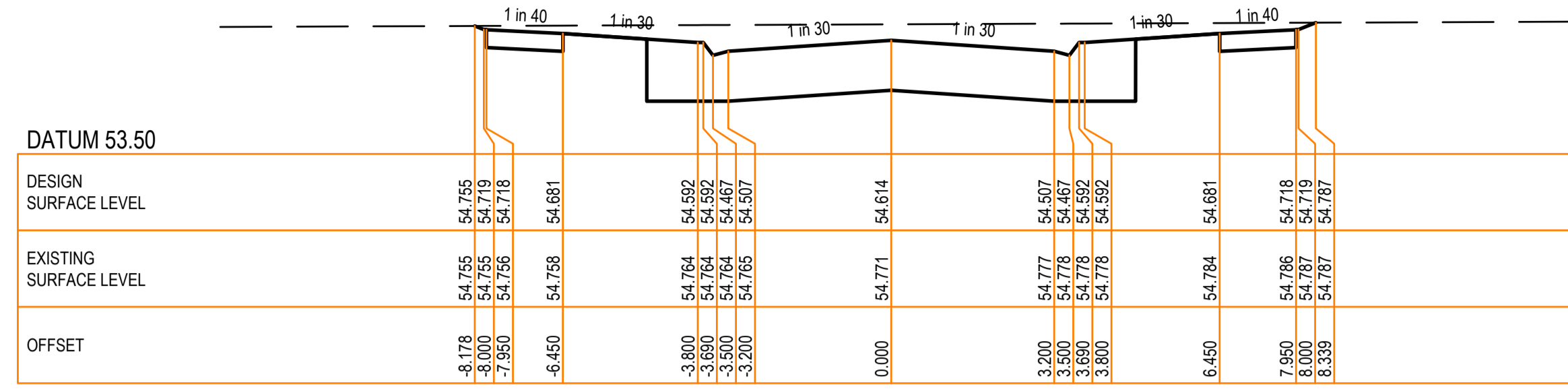
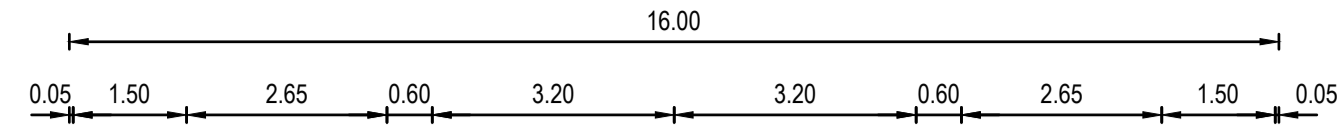
East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lacknow		35753_05 R16
Messmate Mews Longitudinal Section		Revision A
		Sheet 16 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use.

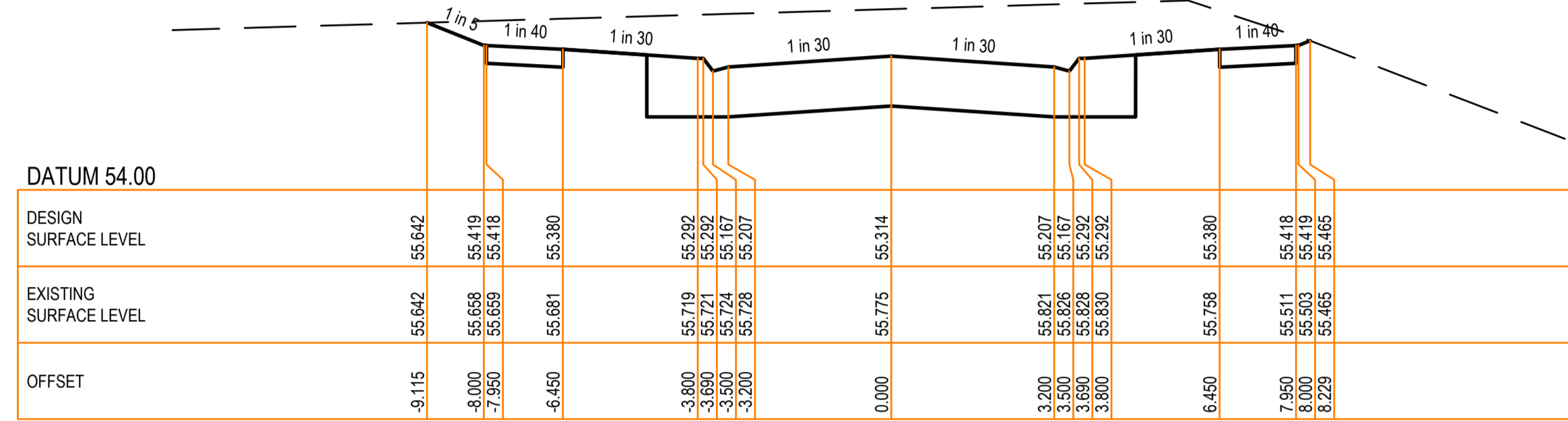
Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

LEGEND

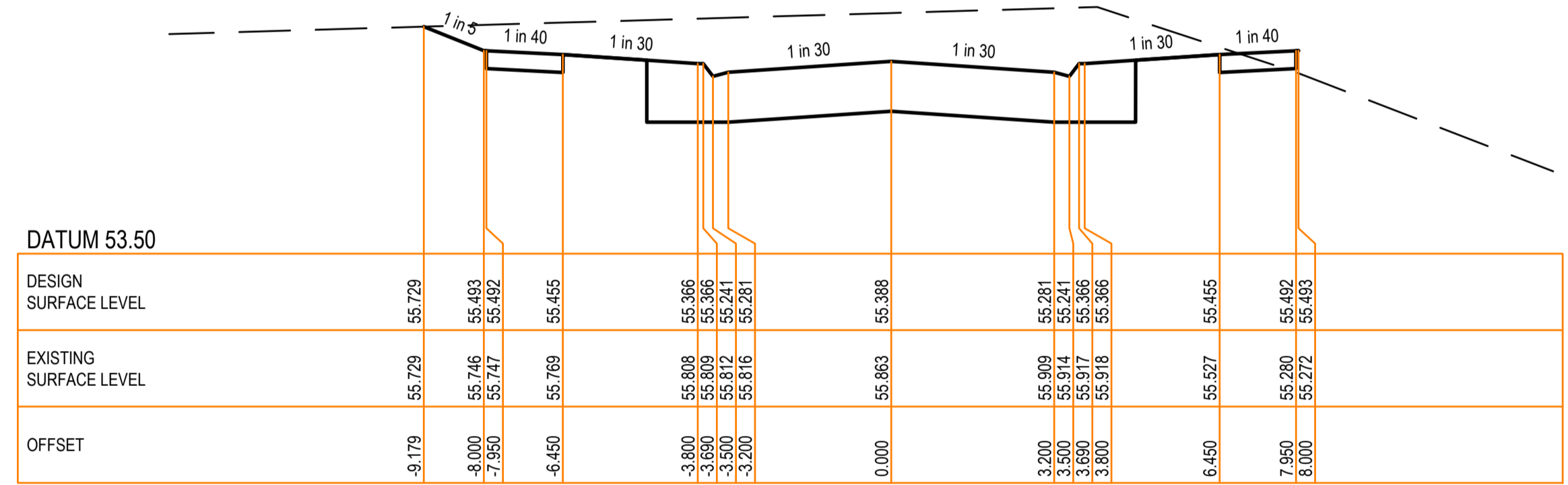
- EXISTING SURFACE
- DESIGN LINE
- FCR BACKFILL



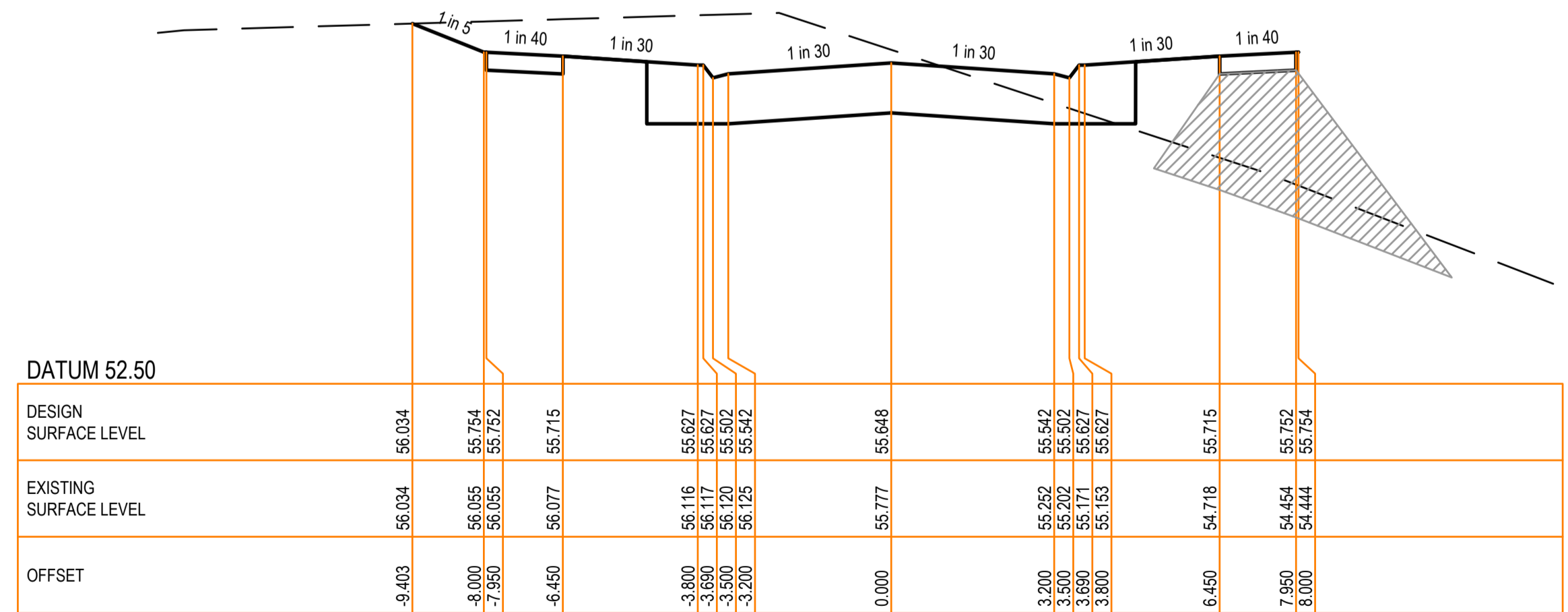
CH 20.043



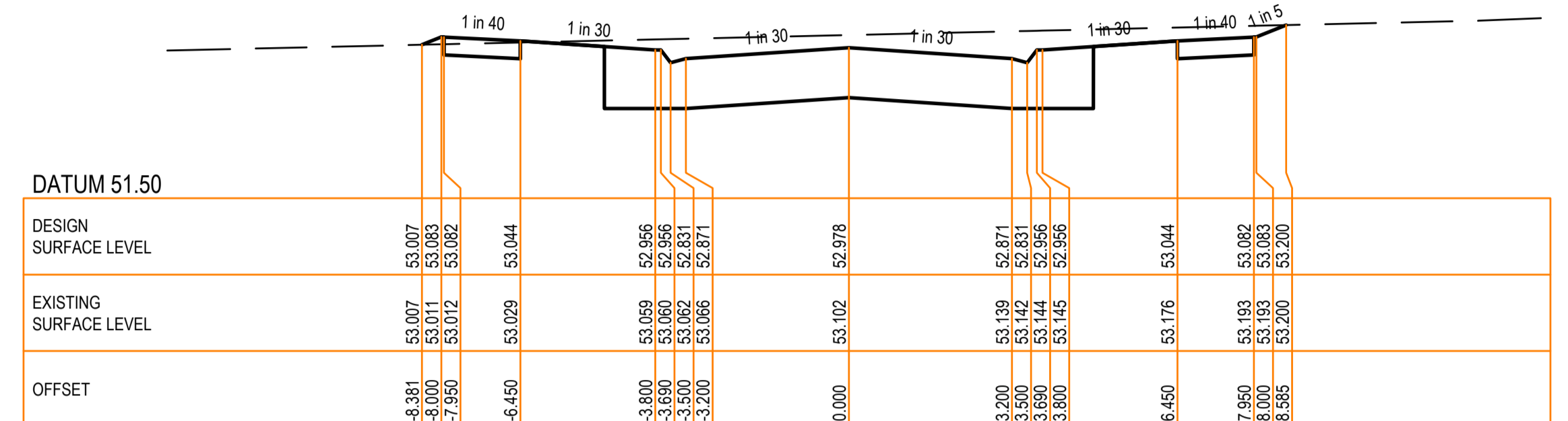
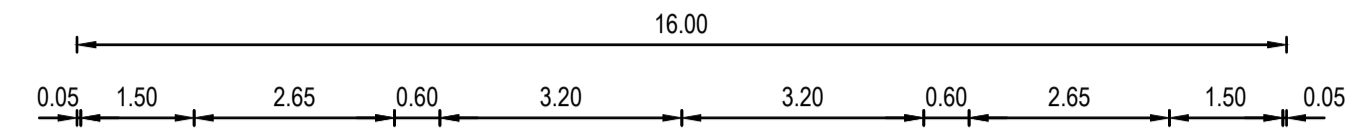
CH 6.484



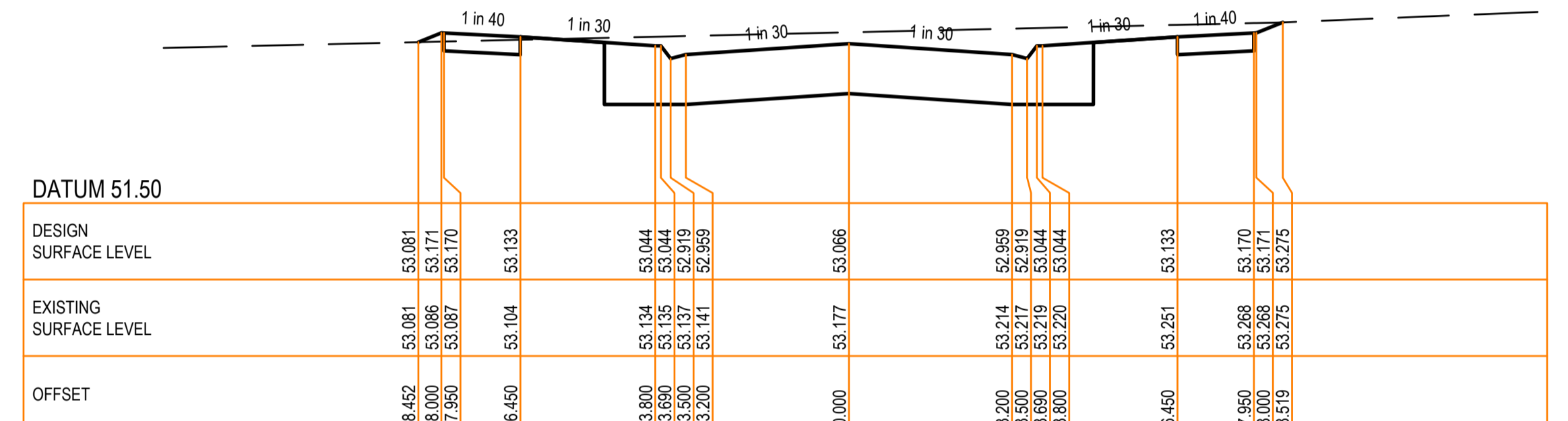
CH 5.043



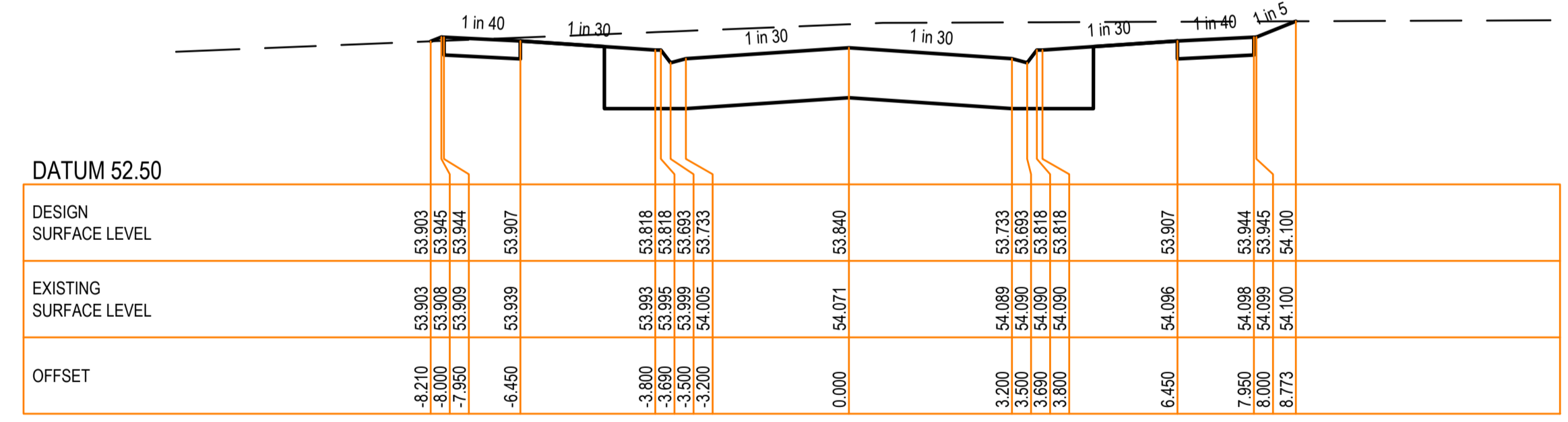
CH 0.000



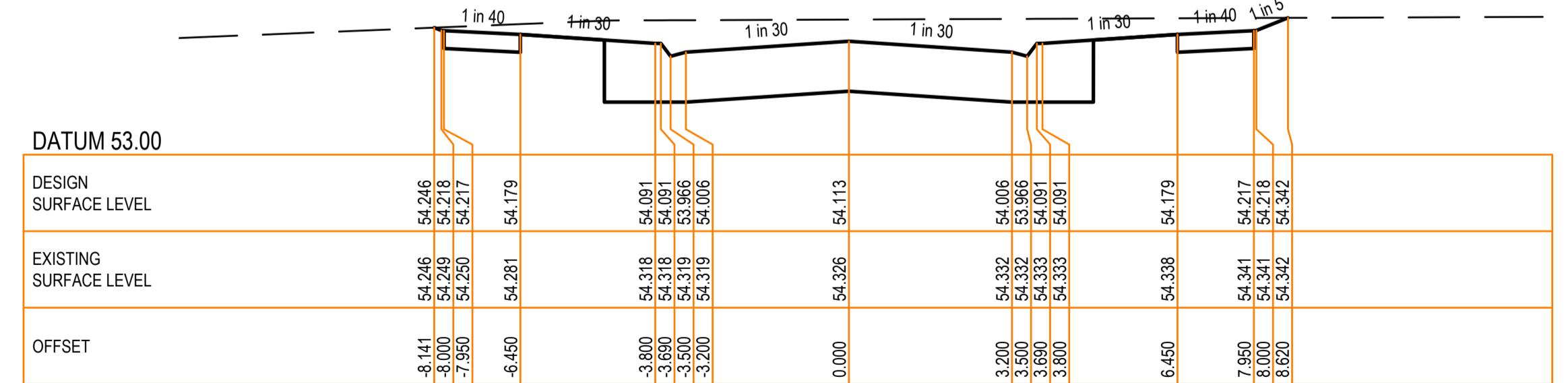
CH 51.755



CH 50.043

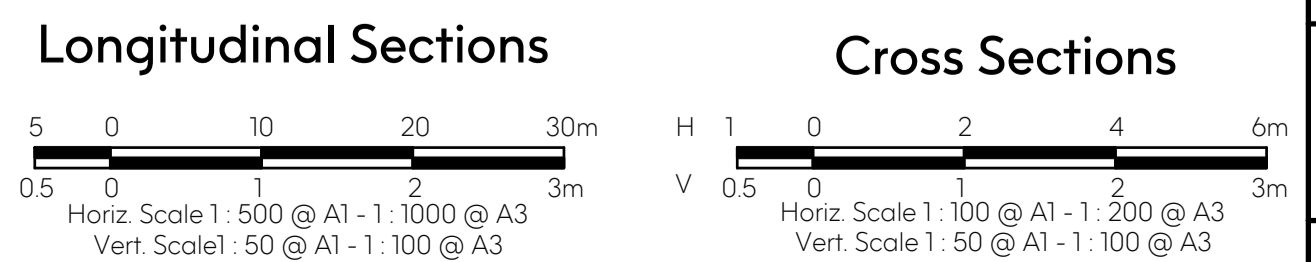


CH 35.043



CH 29.755

Revision Details				
Revision	Date	Revised Sheets	Descriptions	Authorised
A	02-12-2022	-	Preliminary Issue	G.S.



Status: **Preliminary**

ISO 9001 AS/NZS 4801 Endorsed Integrated Management System

Project No.	35753_S	Scale:	As Shown
Drawn:	S.B.	Date:	Aug 2022
Designed:	S.B.	Date:	Aug 2022
Authorised:	G.S.	Date:	Aug 2022

Level Data: Ltspodgn
Datum: AHD

Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_5\35753_S_R09-20.dwg

Suite 201, Level 2, 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380
hello@marsh.melbourne marsh.melbourne

East Gippsland Shire Council

Brookfield Land Co Pty Ltd
Brookfield Lakes - Stage 5
135 Great Alpine Road
Lacknow

Messmate Mews
Cross Section - 1

Plan Number: **35753_05 R17**

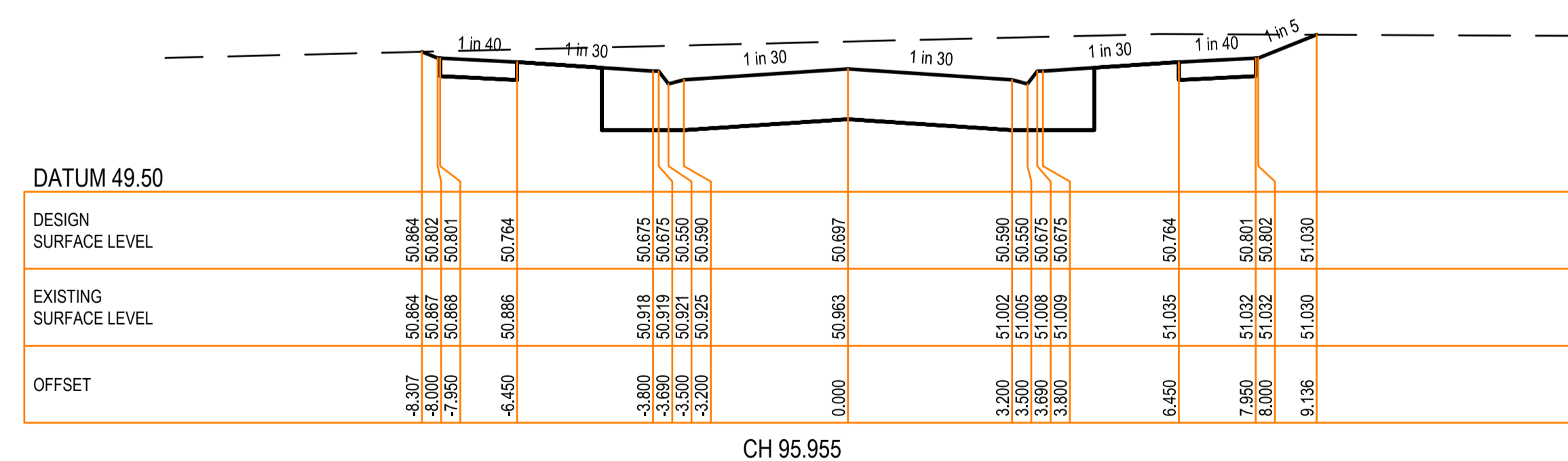
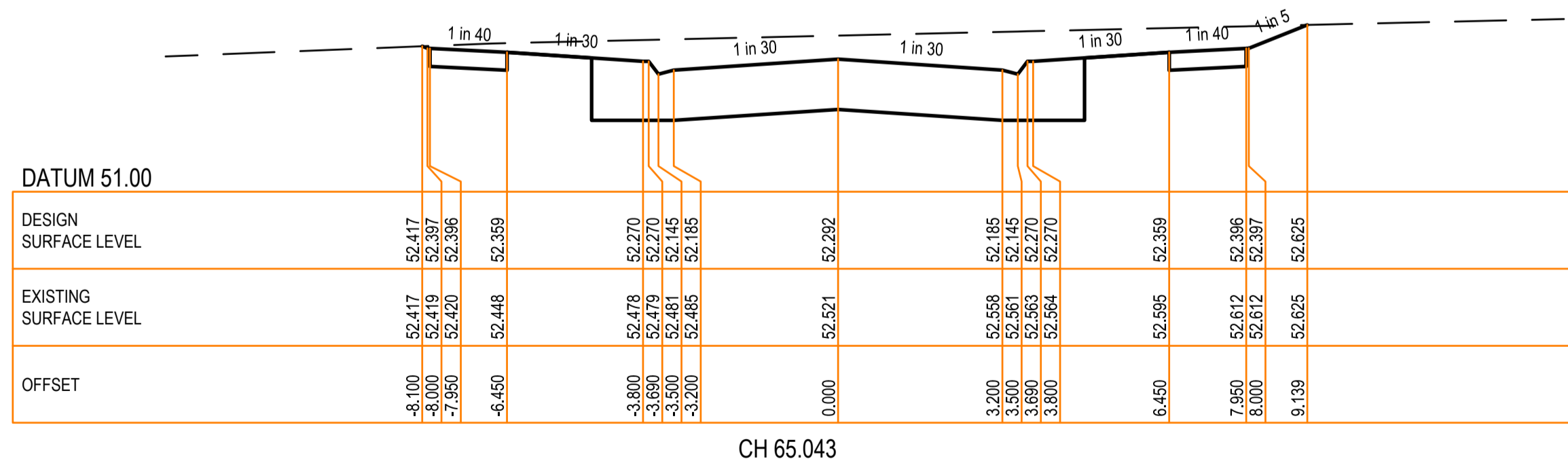
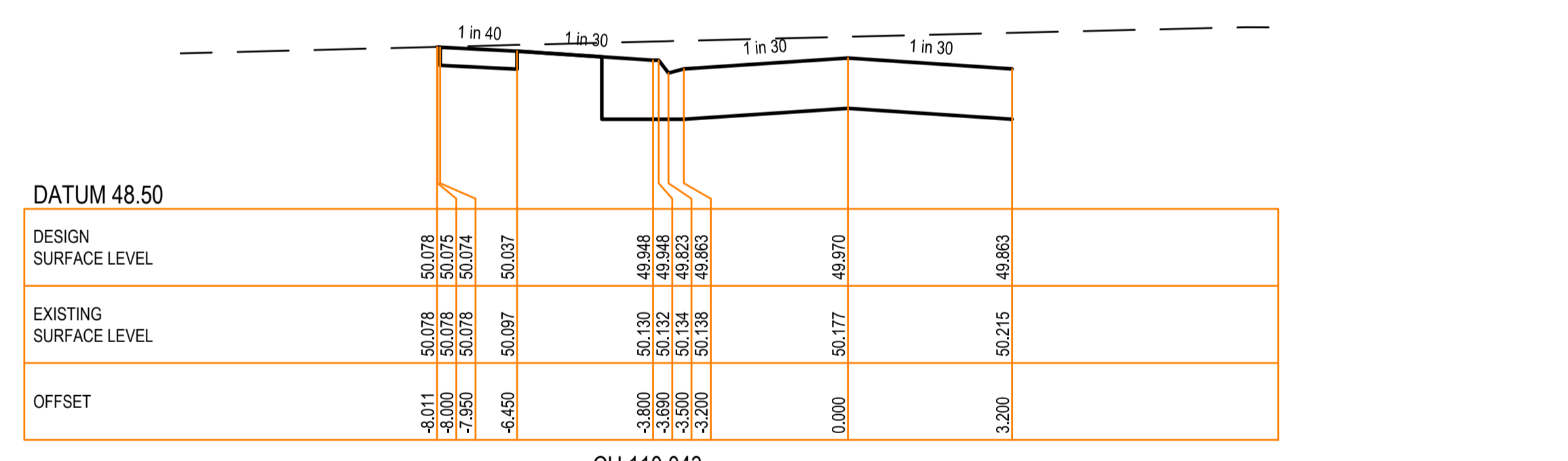
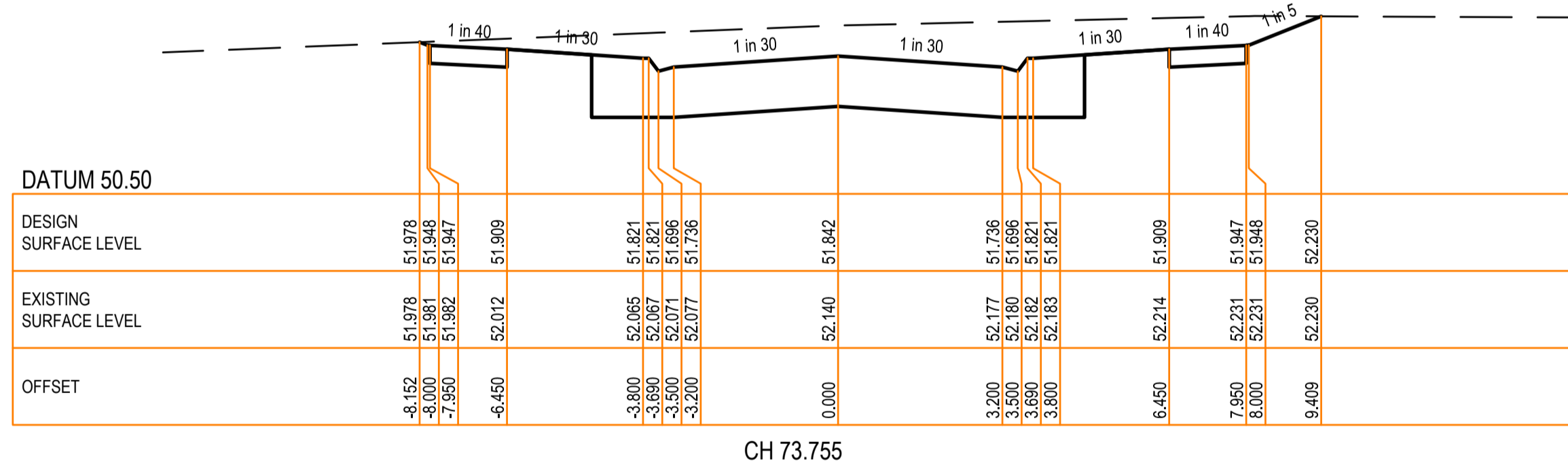
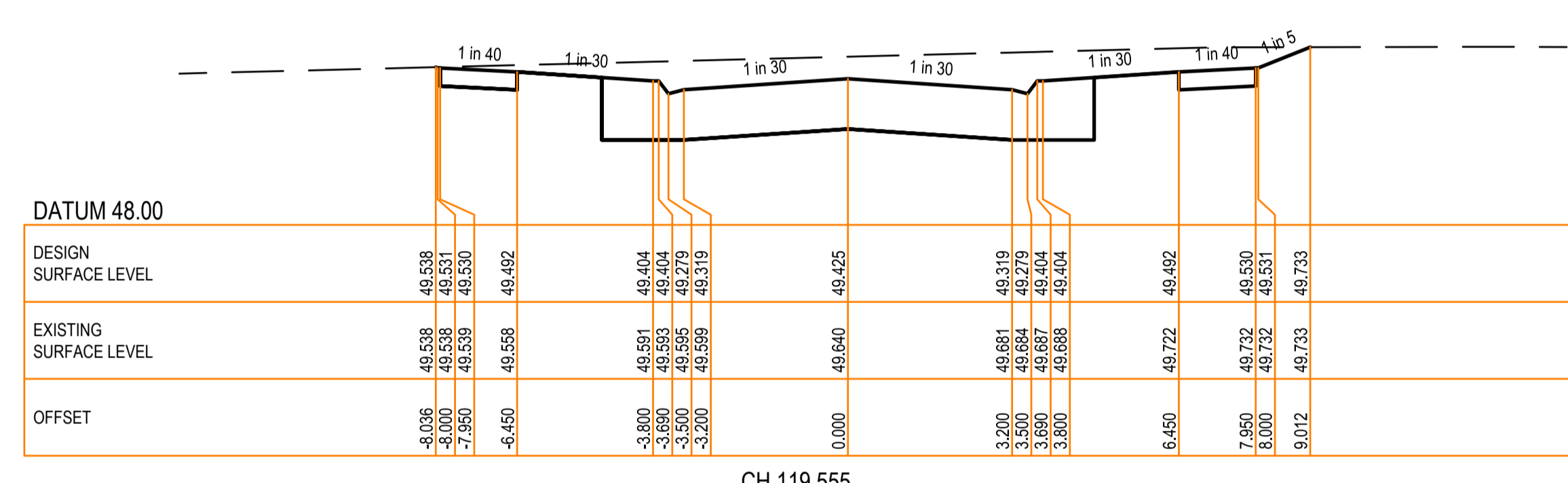
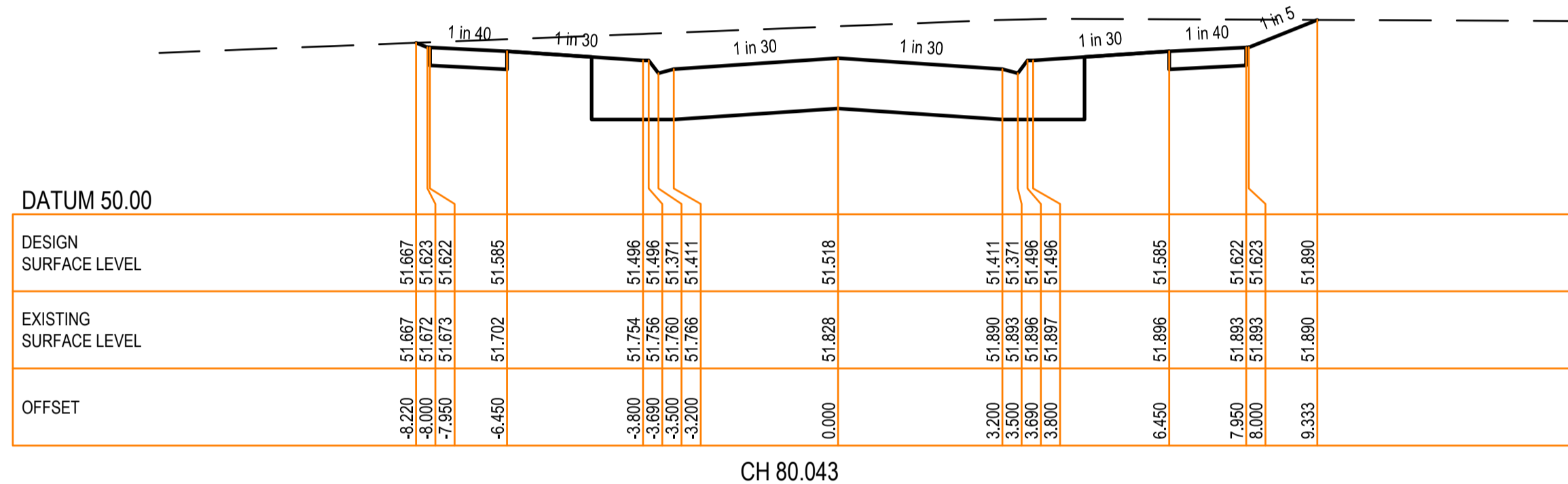
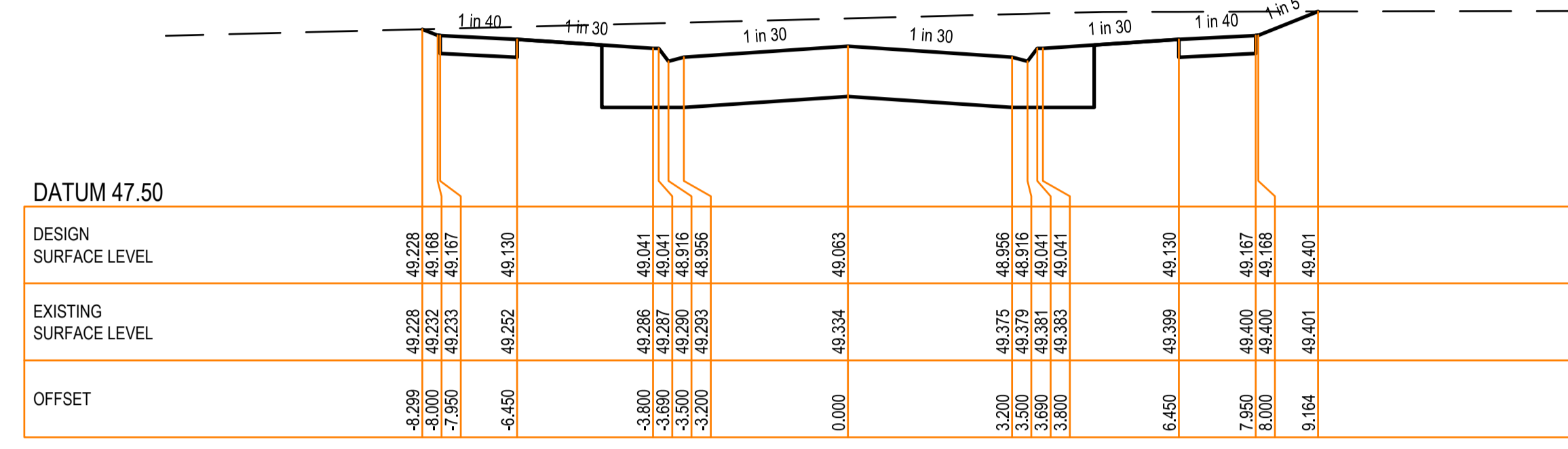
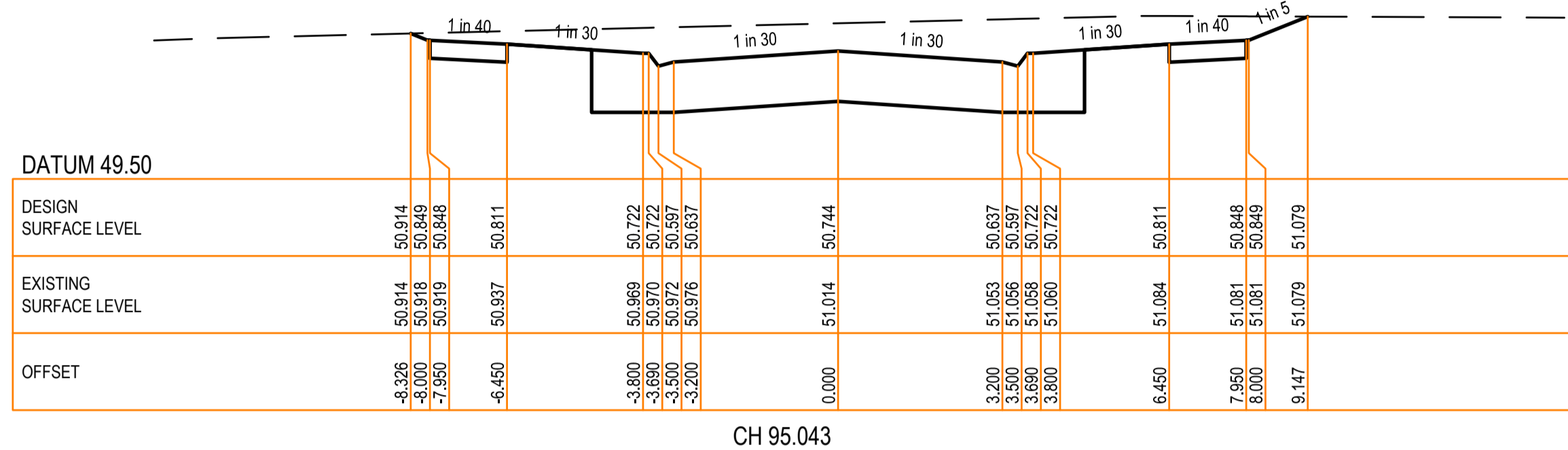
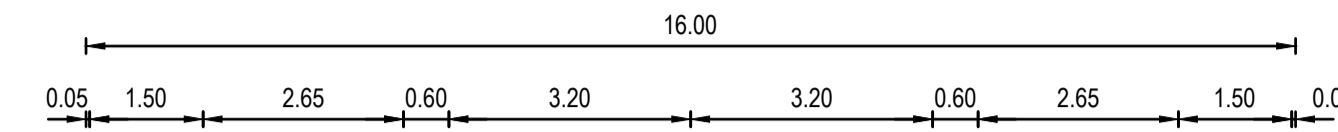
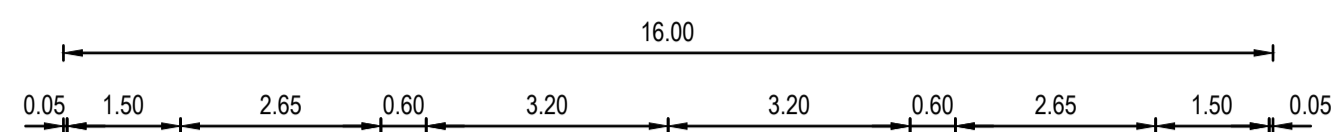
Revision: **A**

Sheet 17 of 28

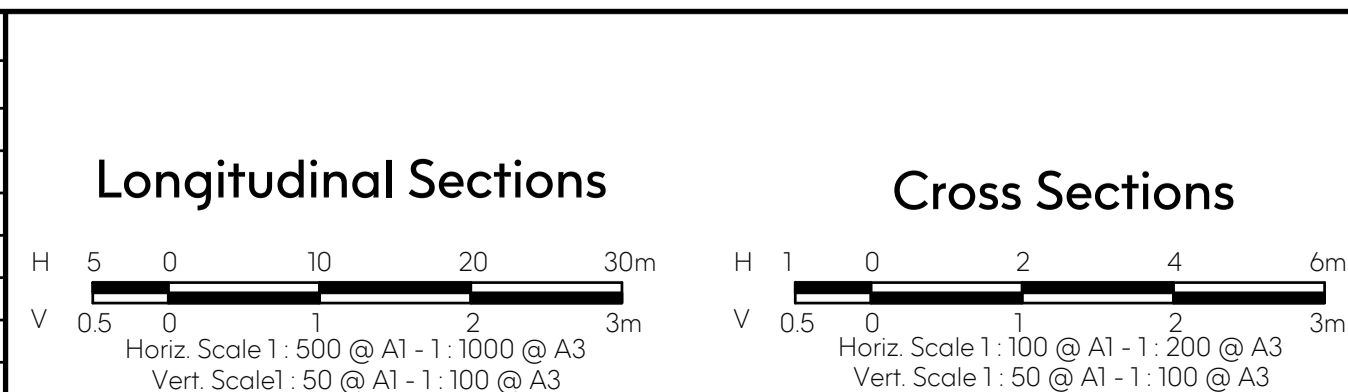
This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal disclaims any liability whatsoever & however caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

LEGEND

--- EXISTING SURFACE
 --- DESIGN LINE
 ▨ FOR BACKFILL



Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue



Status: **Preliminary**

Project No. 35753_S
 Drawn: S.B. Date: Aug 2022
 Designed: S.B. Date: Aug 2022
 Authorised: G.S. Date: Aug 2022

Scale: As Shown
 Date Printed: 2-Dec-22
 Level Data: Ltopodgn
 Datum: AHD

ISO 9001 AS/NZS 4801
 Integrated Management System

Filename: G:\COMPANY\MARSHAL\MELBOURNE\Brookfield Lakes\35753_5\35753_5_R09-20.dwg

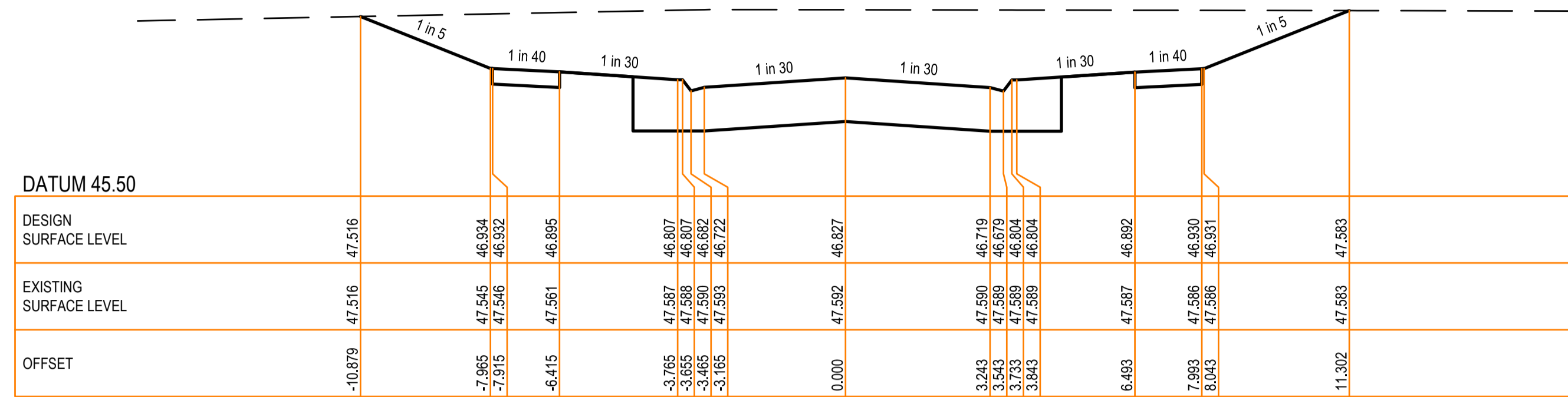
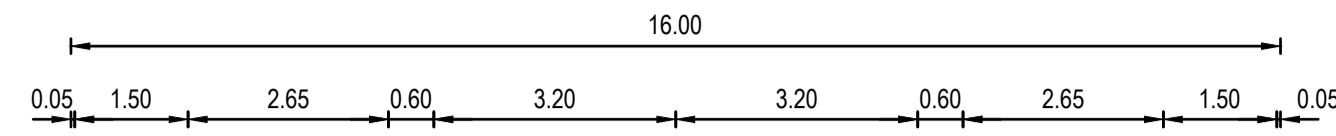
Suite 201, Level 2, 448 St Kilda Road Melbourne Victoria 3004
 +61 3 9860 0380 hello@marshallmelbourne marshallmelbourne

East Gippsland Shire Council			Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes - Stage 5 135 Great Alpine Road Lacknow			35753_05 R18
Messmate Mews Cross Section - 2			Revision A
			Sheet 18 of 28

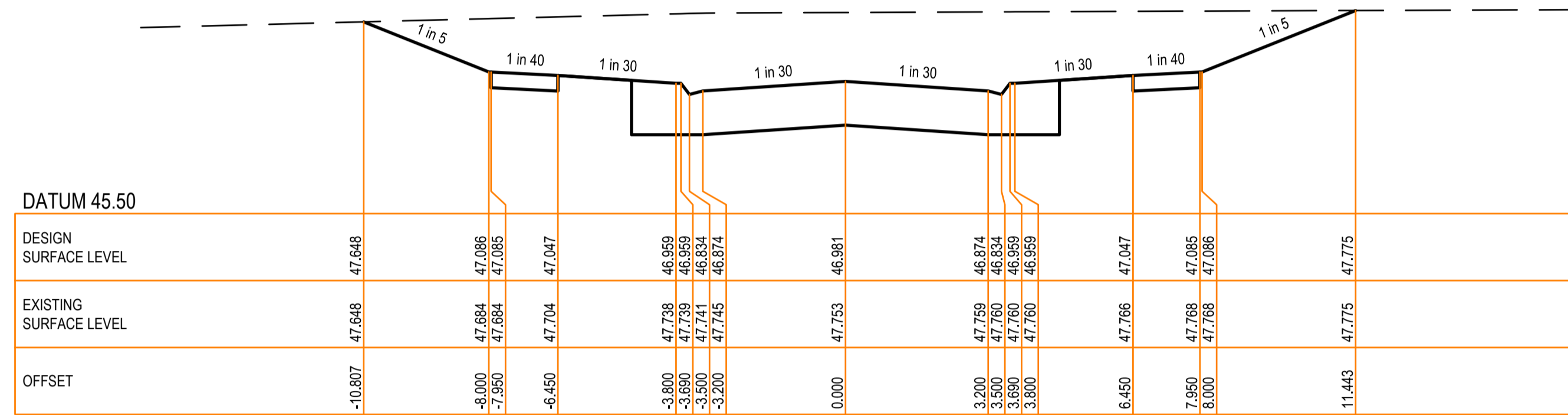
This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

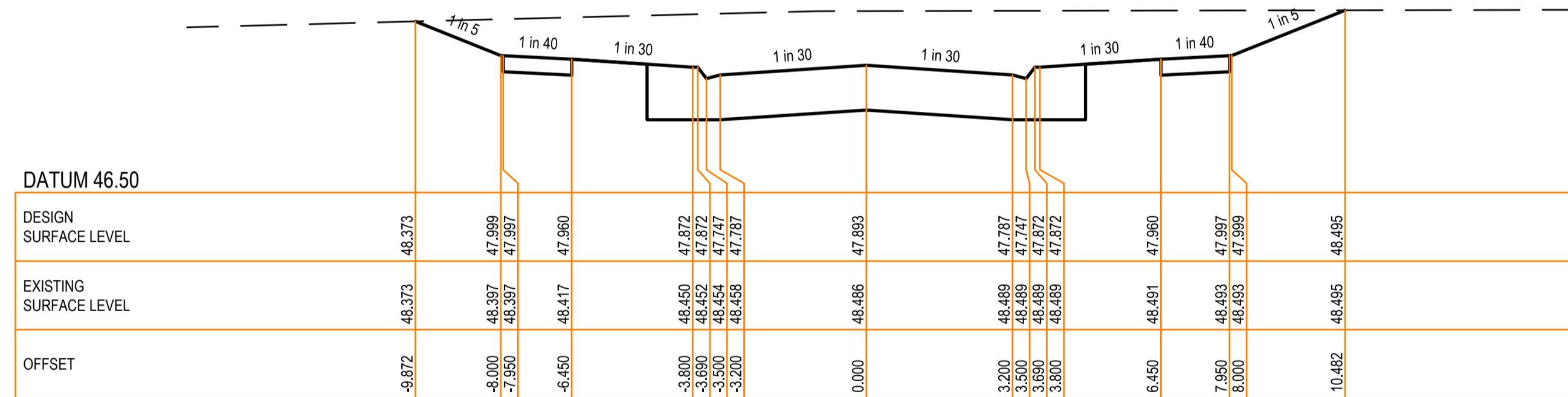
LEGEND	
	EXISTING SURFACE
	DESIGN LINE



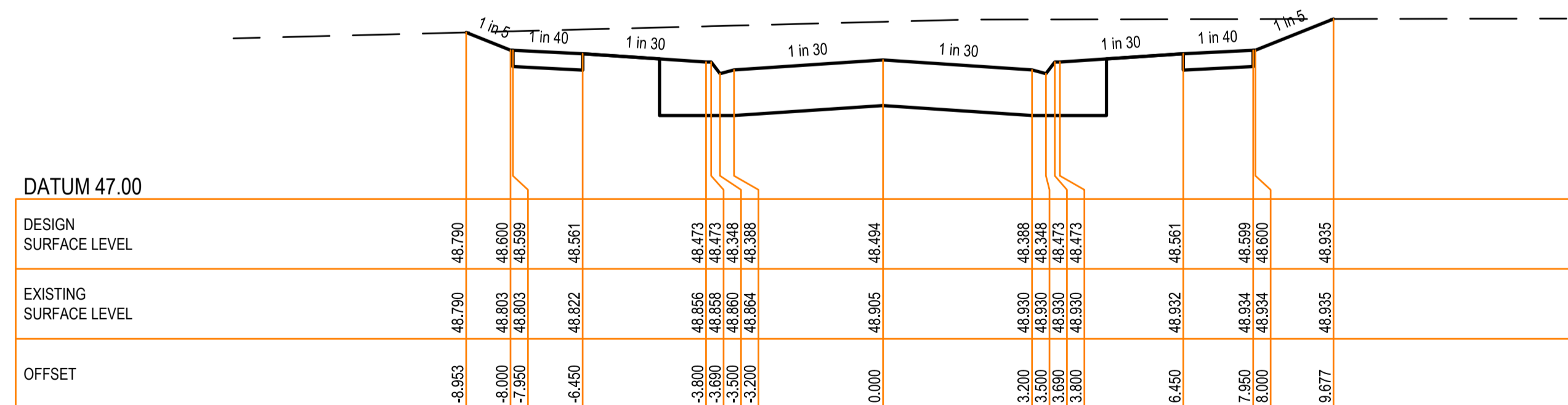
CH 155.614



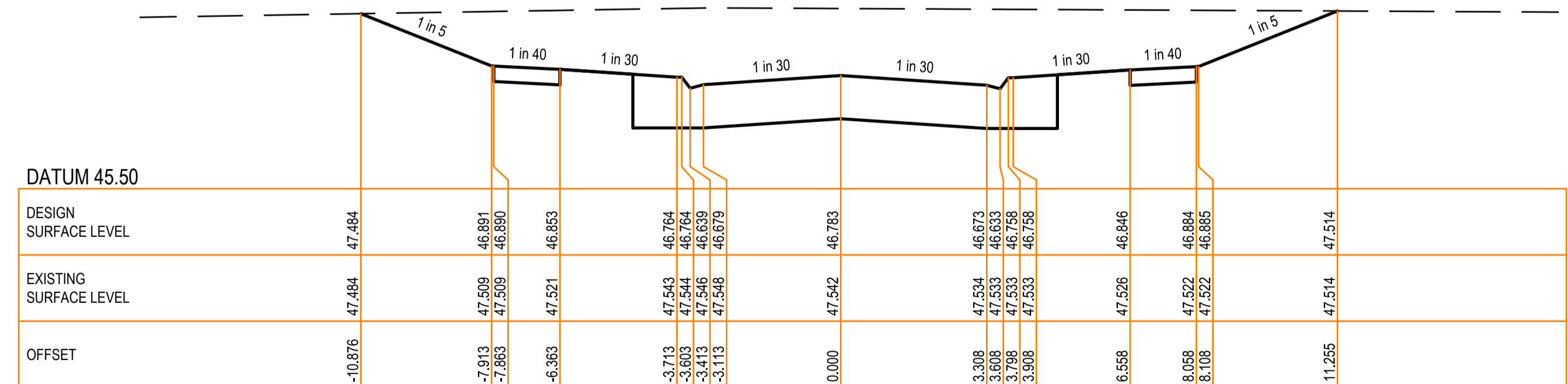
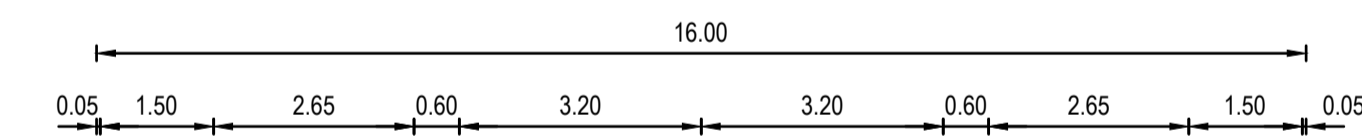
CH 152.755



CH 140.043

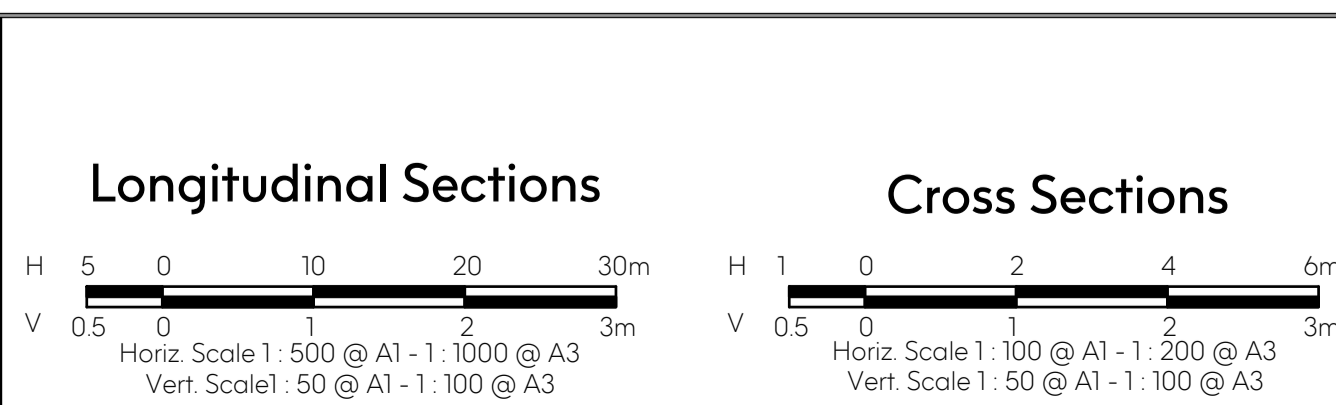


CH 132.755



CH 156.503

Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue



Status: **Preliminary**

ISO 9001 AS/NZS 4801 Endorsed Integrated Management System

Project No. 35753_S Scale: As Shown
 Drawn: S.B. Date: Aug 2022 Date Printed: 2-Dec-22
 Designed: S.B. Date: Aug 2022 Level Data: Ltopodgn
 Authorised: G.S. Date: Aug 2022 Datum: AHD

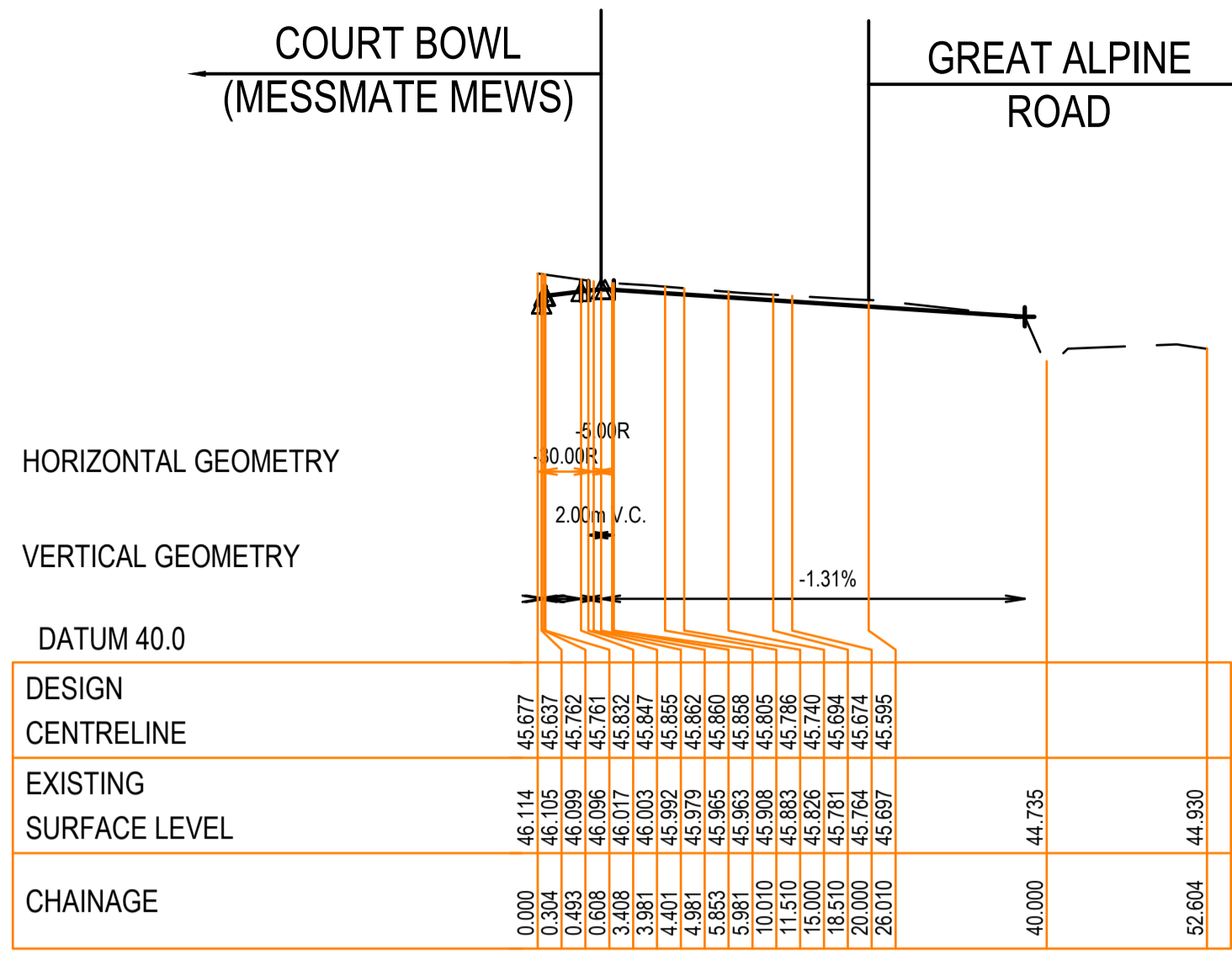
Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_5\35753_5_R09-20.dwg



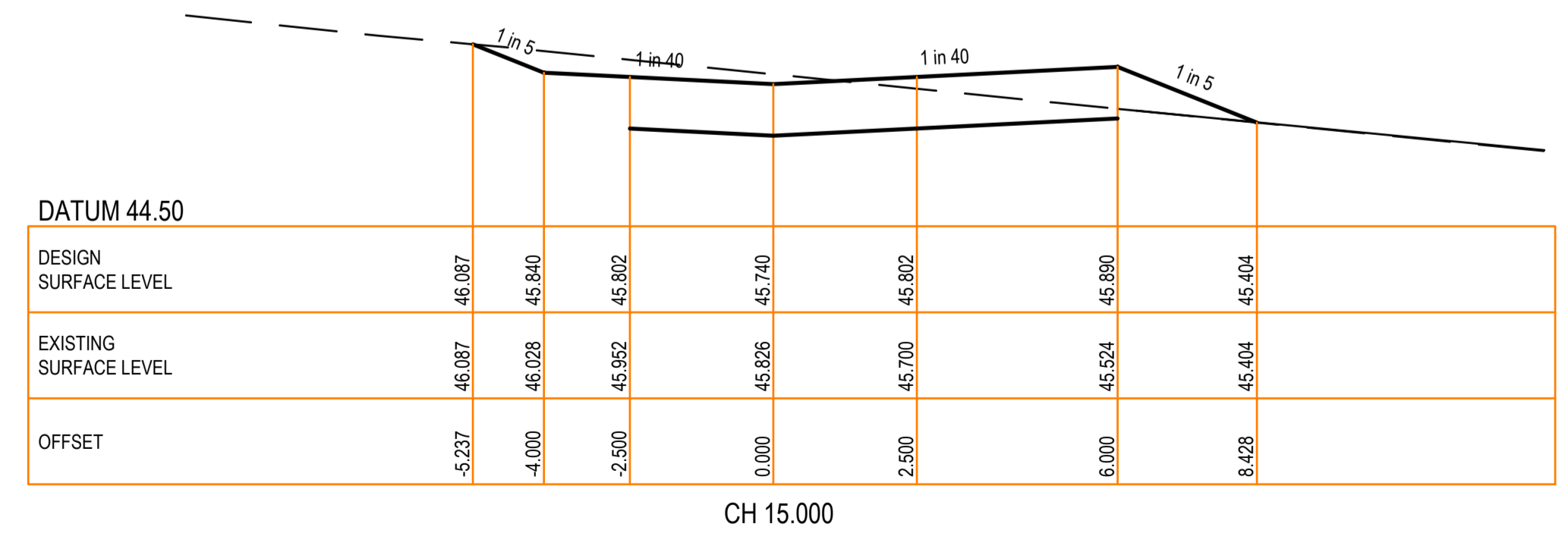
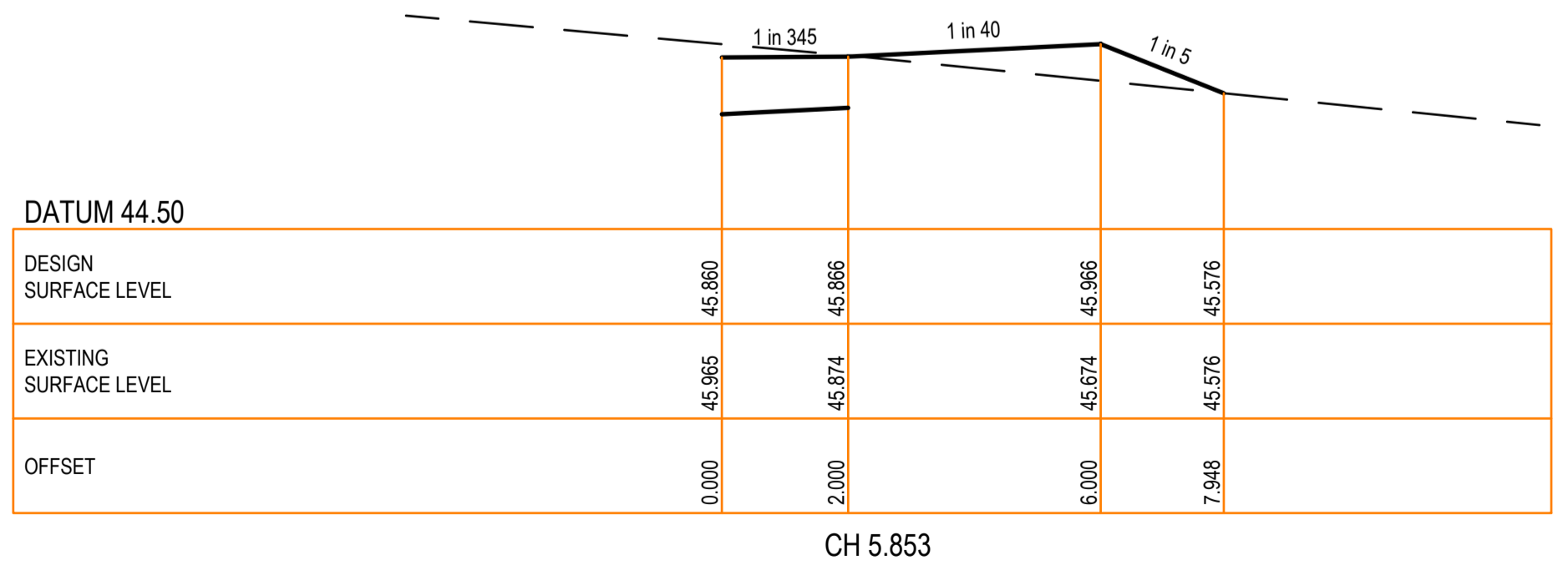
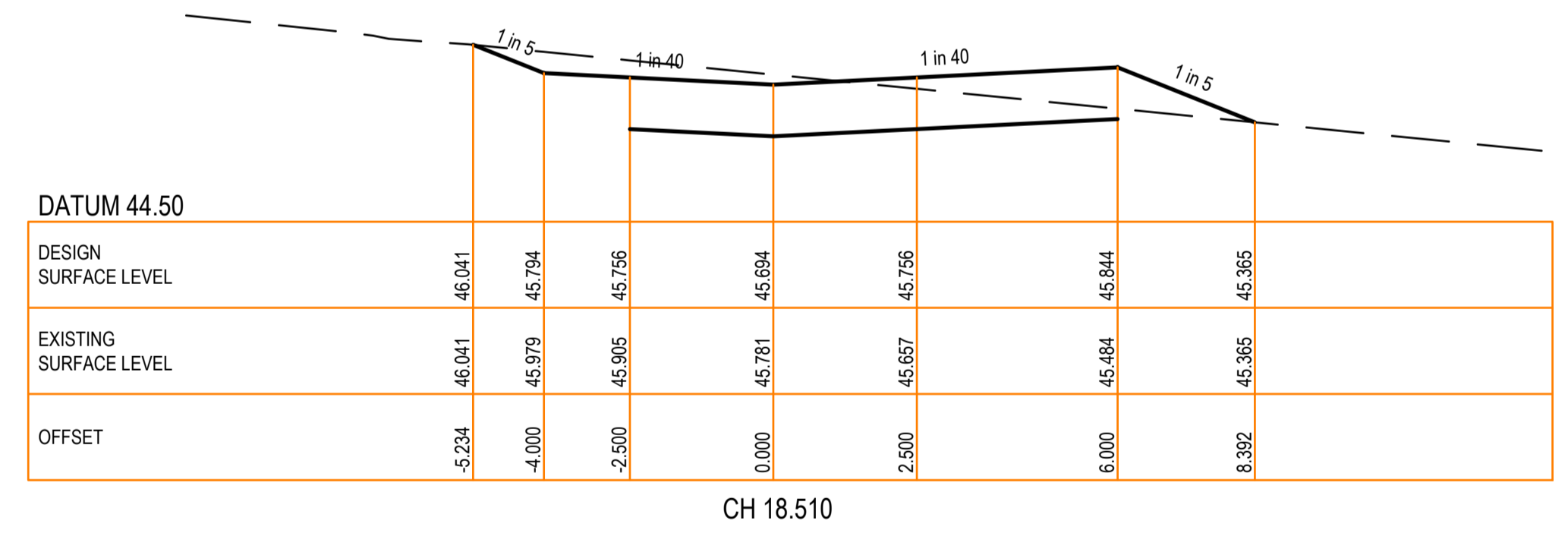
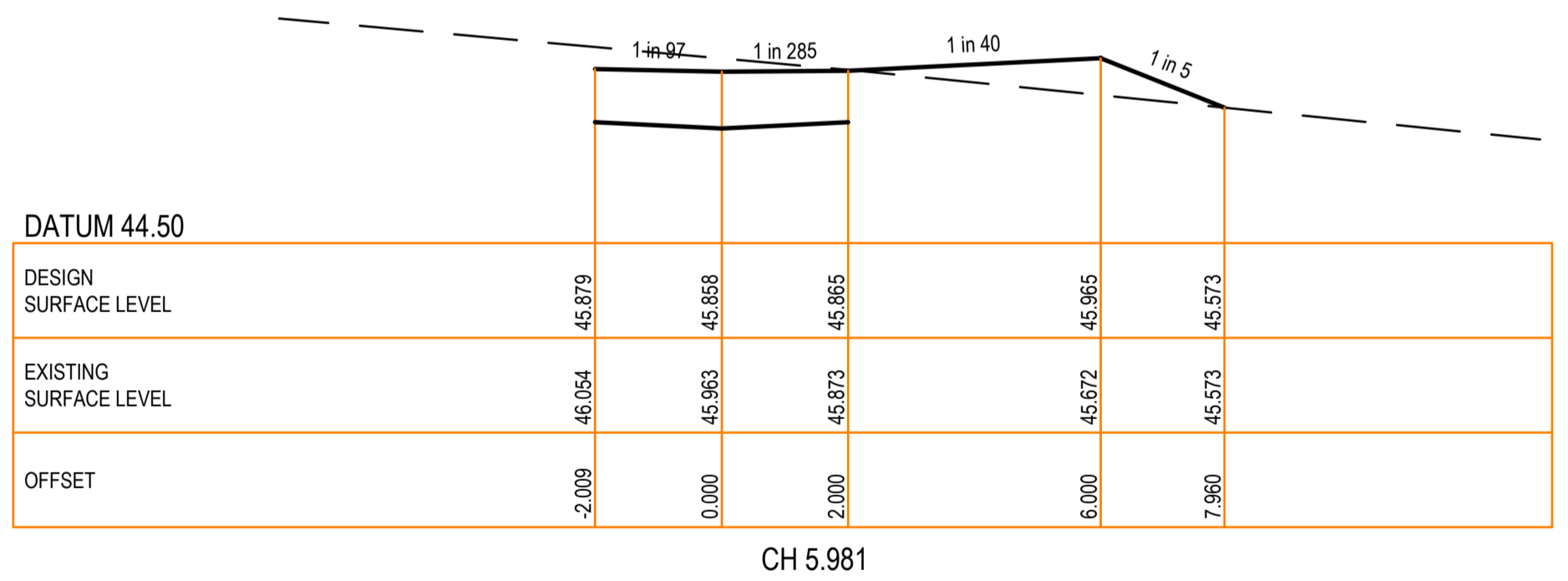
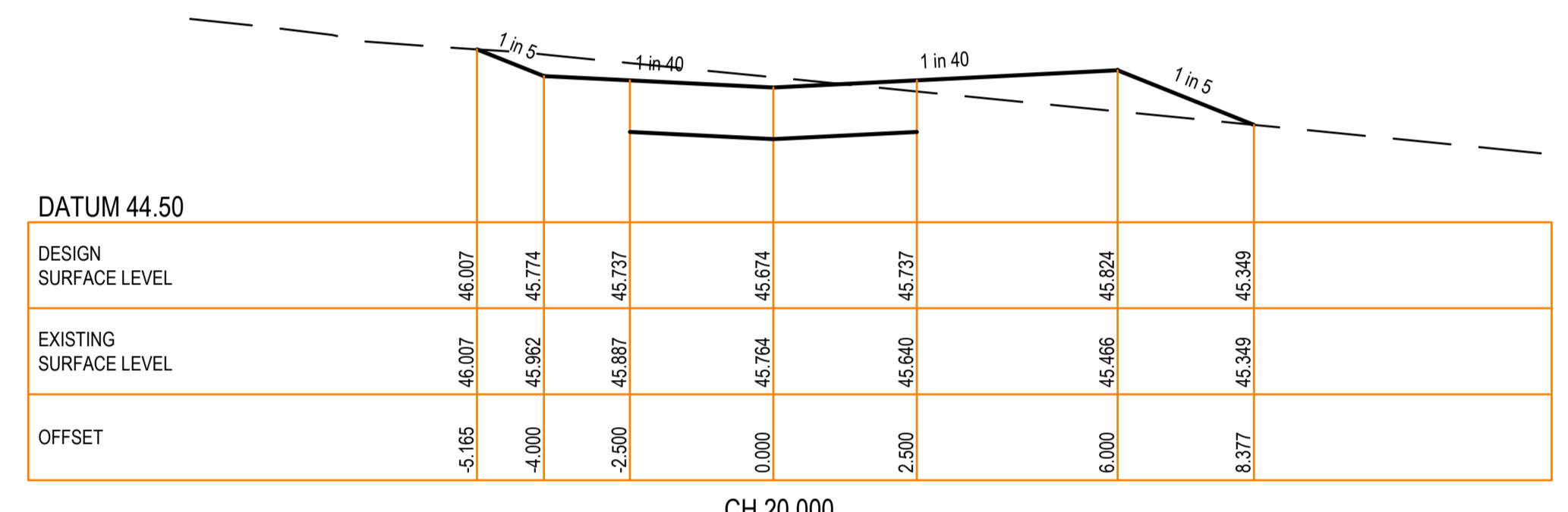
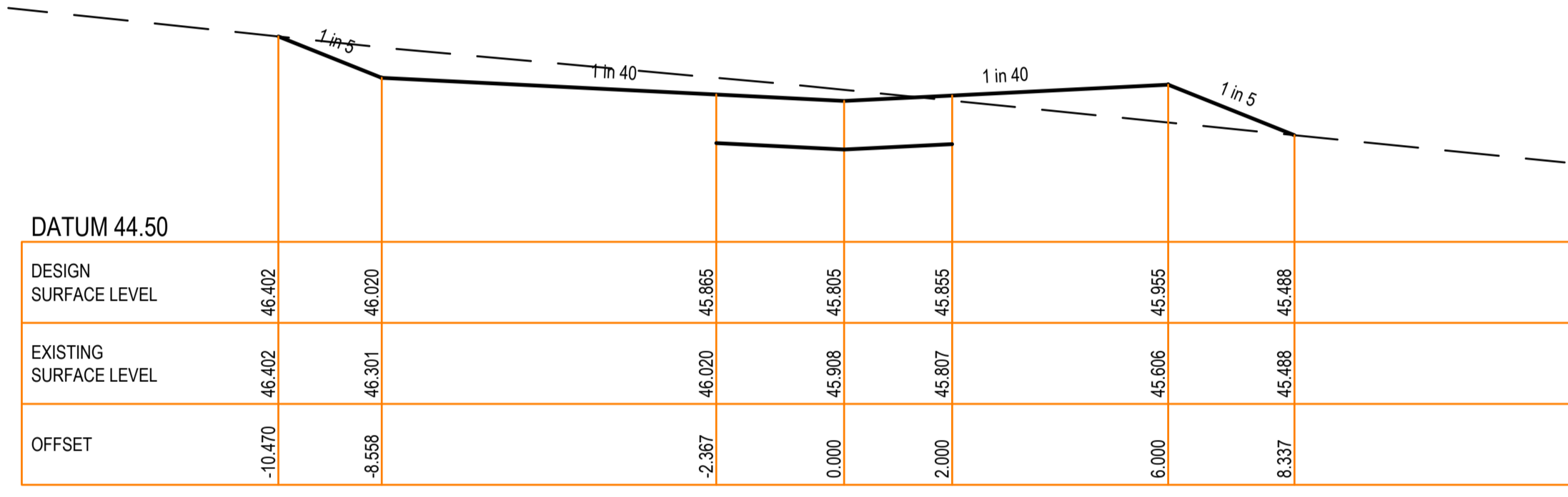
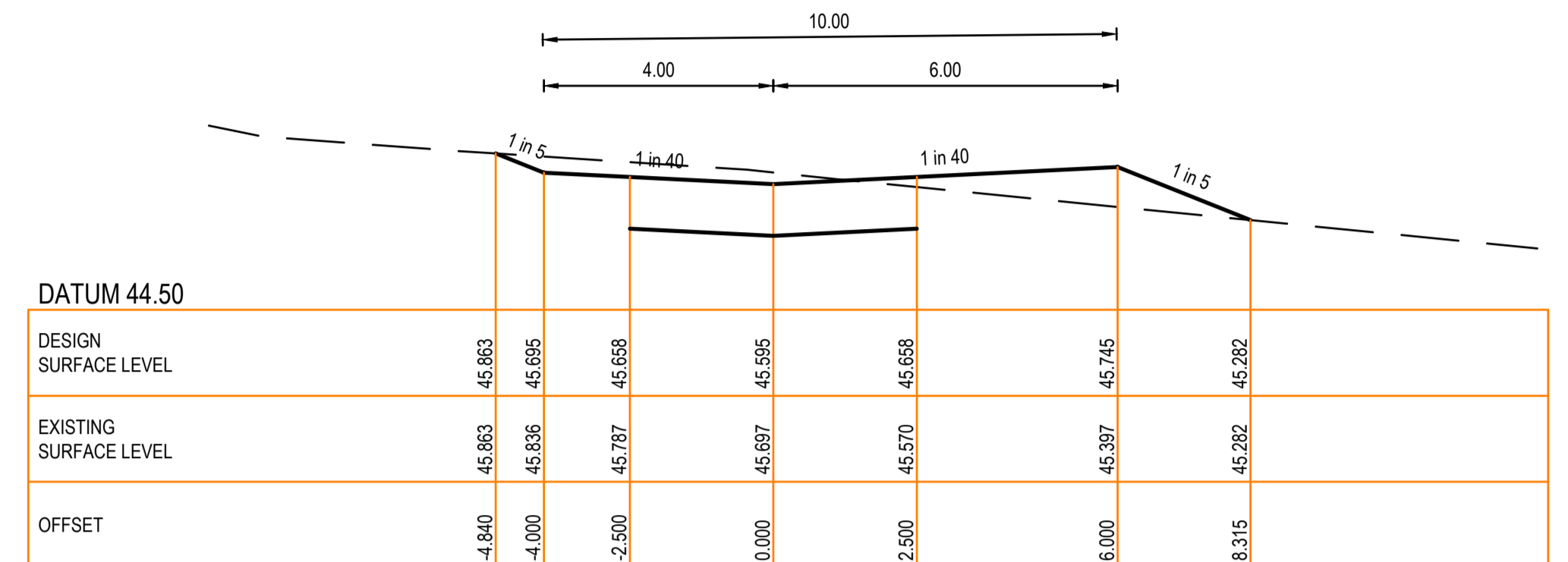
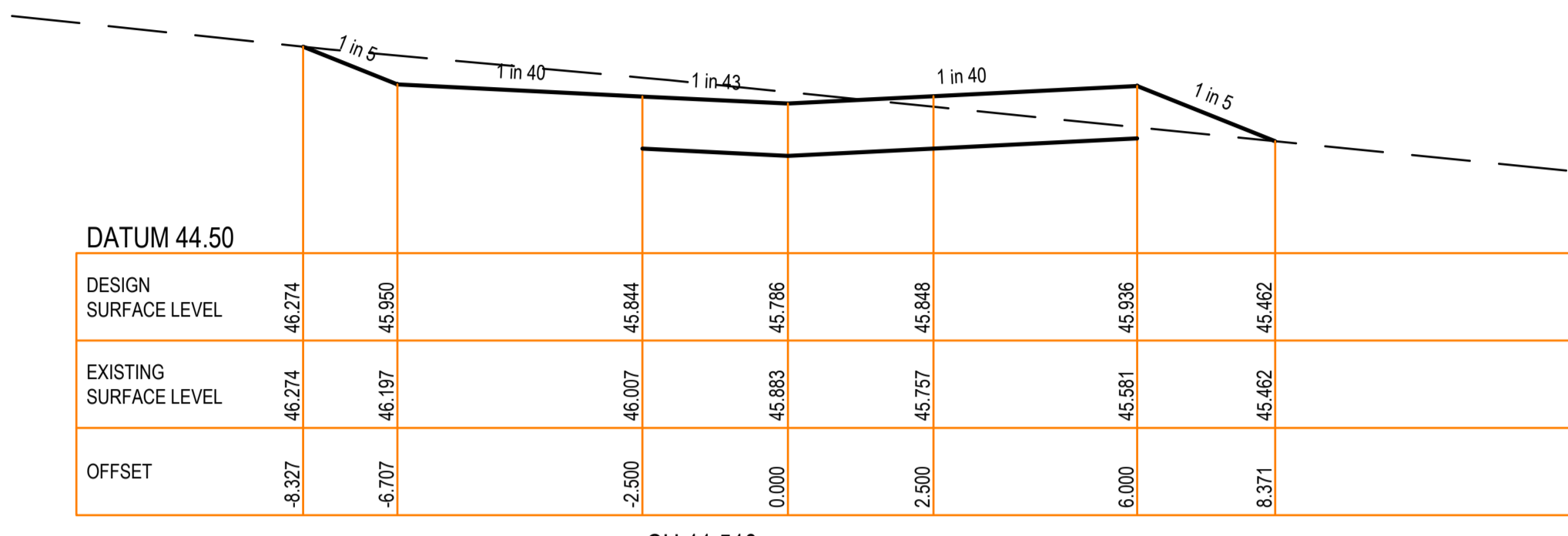
East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lacknow		35753_05 R19
Messmate Mews Cross Section - 3		Revision A
		Sheet 19 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Self-cut dimensions of all design lines, grid lines, contour lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use.

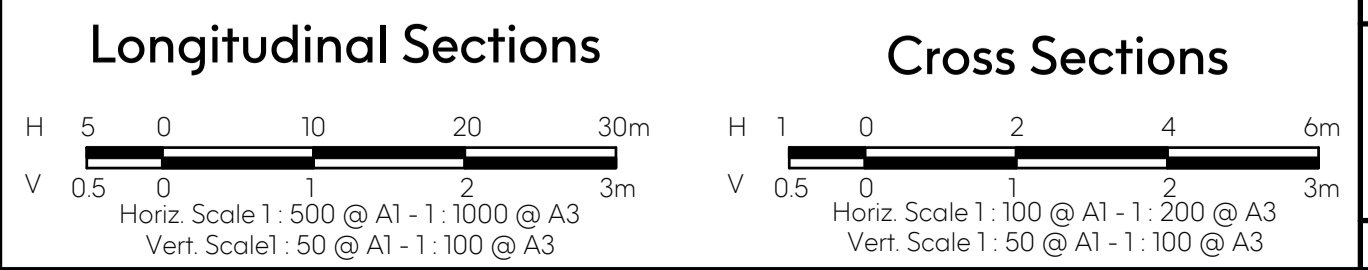
Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.



LEGEND	
	EXISTING SURFACE
	DESIGN LINE



Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue



Status: **Preliminary**

Project No. 35753_S
Drawn: S.B. Date: Aug 2022
Designed: S.B. Date: Aug 2022
Authorised: G.S. Date: Aug 2022

Scale: As Shown
Date Printed: 2-Dec-22
Level Data: Lttopdgn
Datum: AHD

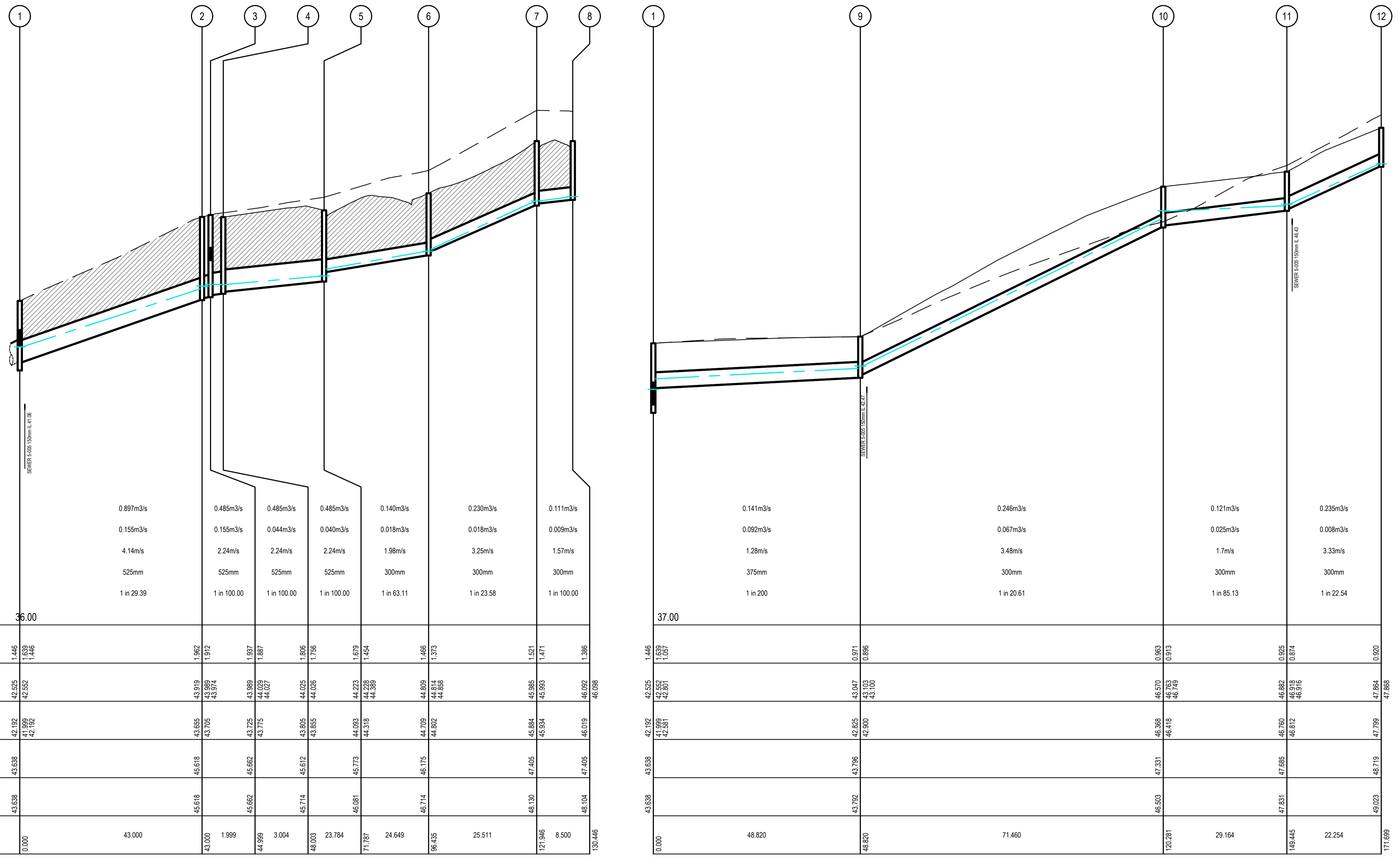
Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_5\35753_S_R09-20.dwg



East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lacknow		35753_05 R20
Messmate Mews Common Driveway Longitudinal Section & Cross Section		Revision A
		Sheet 20 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.



	1	2	3	4	5	6	7	8	9	10	11	12
PIPE CAPACITY		0.897m ³ /s	0.485m ³ /s	0.485m ³ /s	0.485m ³ /s	0.140m ³ /s	0.230m ³ /s	0.111m ³ /s	0.141m ³ /s	0.246m ³ /s	0.121m ³ /s	0.235m ³ /s
FLOW		0.155m ³ /s	0.155m ³ /s	0.044m ³ /s	0.040m ³ /s	0.018m ³ /s	0.018m ³ /s	0.009m ³ /s	0.092m ³ /s	0.067m ³ /s	0.025m ³ /s	0.008m ³ /s
PIPE VELOCITY		4.14m/s	2.24m/s	2.24m/s	2.24m/s	1.98m/s	3.25m/s	1.57m/s	1.28m/s	3.48m/s	1.7m/s	3.33m/s
PIPE DIAMETER		525mm	525mm	525mm	525mm	300mm	300mm	300mm	375mm	300mm	300mm	300mm
GRADE		1 in 29.39	1 in 100.00	1 in 100.00	1 in 100.00	1 in 63.11	1 in 23.58	1 in 100.00	1 in 200	1 in 20.61	1 in 85.13	1 in 22.54
DATUM RL	36.00								37.00			
DEPTH TO INVERT	1.446	1.962	1.912	1.937	1.887	1.806	1.756	1.466	1.446	0.971	0.953	0.920
H.G.L. LEVEL	42.525	43.919	43.989	43.989	44.029	44.025	44.026	44.809	42.525	45.047	46.570	47.864
PIPE INVERT LEVEL	42.192	43.655	43.705	43.725	43.775	43.805	43.855	44.709	42.192	42.825	46.418	47.799
FINISHED SURFACE RL	43.638	45.618	45.618	45.662	45.662	45.612	45.612	46.175	43.638	45.796	47.331	48.719
EXISTING SURFACE RL	43.638	45.618	45.618	45.662	45.662	45.714	45.714	46.175	43.638	45.796	47.331	48.719
PIPE CHAINAGE	0.000	43.000	43.000	44.999	44.999	46.003	71.787	96.435	121.846	148.820	169.415	171.699

DRAINAGE LONGITUDINAL SECTION - 1

LEGEND

- EXISTING SURFACE
- DESIGN SURFACE
- DRAINAGE PIPE/PIT
- EXISTING DRAINAGE PIPE/PIT
- HYDRAULIC GRADE LINE
- CLASS 2 CR BACKFILL

Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue

Drainage Longitudinal Sections

Status: **Preliminary**

Project No.	35753_S	Scale:	As Shown
Drawn:	S.B.	Date:	Aug 2022
Designed:	S.B.	Date:	Aug 2022
Authorised:	G.S.	Date:	Aug 2022

ISO 9001 AS/NZS 4801 Endorsed Integrated Management System

Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
 +61 3 9860 0380 hello@marshalmelbourne marshalmelbourne

East Gippsland Shire Council

Brookfield Land Co Pty Ltd
 Brookfield Lakes- Stage 5
 135 Great Alpine Road
 Lucknow

Drainage Longitudinal Sections - 1

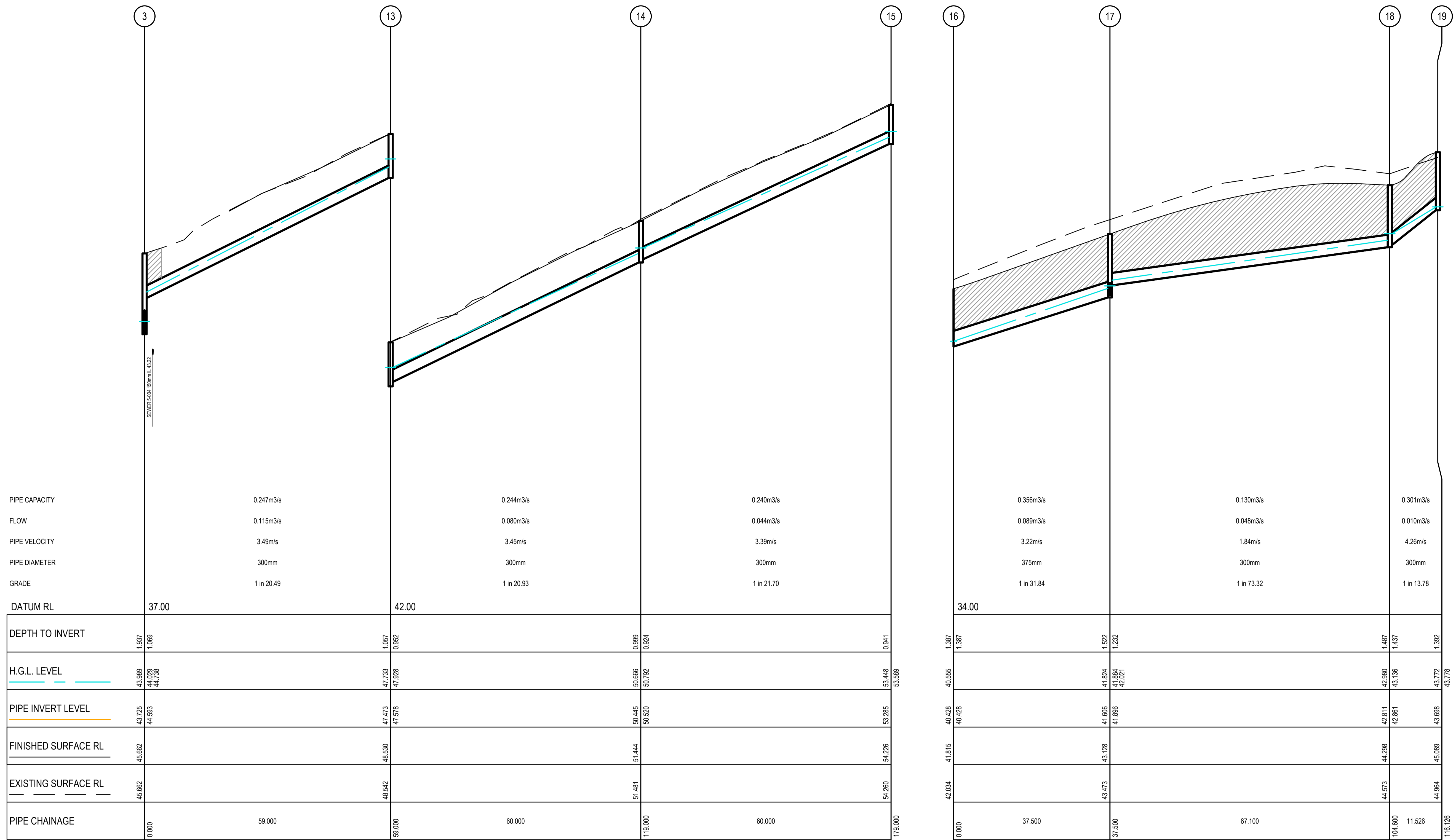
Project Number: **35753_05 R21**

Revision: **A**

Sheet 21 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.



DRAINAGE LONGITUDINAL SECTION - 2

LEGEND	
	EXISTING SURFACE
	DESIGN SURFACE
	DRAINAGE PIPE/PIT
	EXISTING DRAINAGE PIPE/PIT
	HYDRAULIC GRADE LINE
	CLASS 2 CR BACKFILL

Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue

Drainage Longitudinal Sections

H 5 0 10 20 30m

V 0.5 0 1 2 3m

Horiz. Scale 1: 500 @ A1 - 1: 1000 @ A3

Vert. Scale 1: 50 @ A1 - 1: 100 @ A3

Preliminary

ISO 9001
AS/NZS 4801
Endorsed
Integrated
Management
System

Project No: 35753_S
Scale: As Shown

Drawn: S.B. Date: Aug 2022 Date Printed: 2-Dec-22

Designed: S.B. Date: Aug 2022 Level Data: Ltopodgn

Authorised: G.S. Date: Aug 2022 Datum: AHD

Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_5\35753_5_R21-25.dwg

Status: **Preliminary**

Project No: 35753_S Scale: As Shown

Drawn: S.B. Date: Aug 2022 Date Printed: 2-Dec-22

Designed: S.B. Date: Aug 2022 Level Data: Ltopodgn

Authorised: G.S. Date: Aug 2022 Datum: AHD

Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_5\35753_5_R21-25.dwg

Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380 hello@marshal.melbourne marshal.melbourne

East Gippsland Shire Council

Brookfield Land Co Pty Ltd
Brookfield Lakes- Stage 5
135 Great Alpine Road
Lucknow

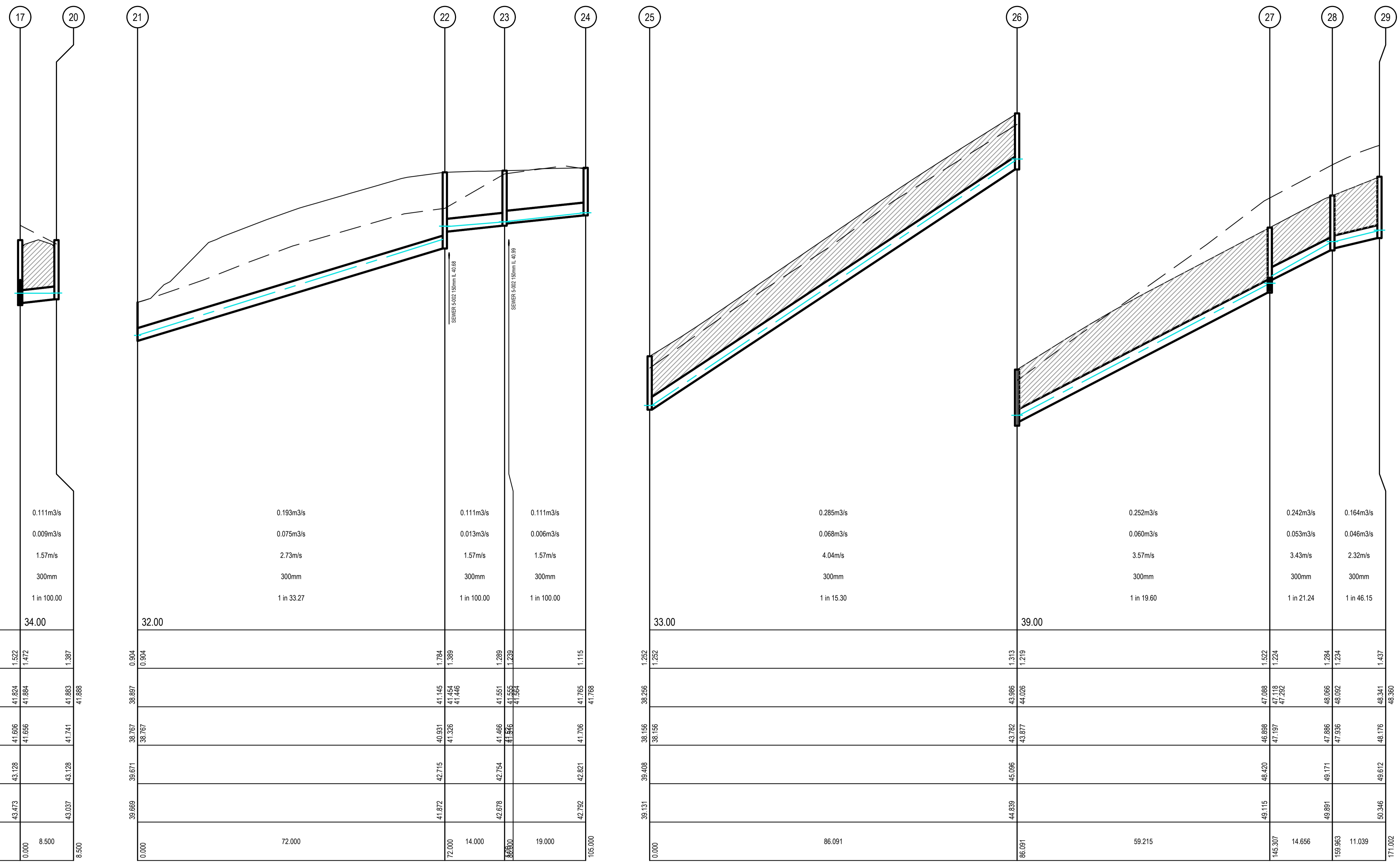
Plan Number
35753_05
R22

Drainage Longitudinal Sections - 2

Revision **A**
Sheet 22 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.



DRAINAGE LONGITUDINAL SECTION - 3

LEGEND	
	EXISTING SURFACE
	DESIGN SURFACE
	DRAINAGE PIPE/PIT
	EXISTING DRAINAGE PIPE/PIT
	HYDRAULIC GRADE LINE
	CLASS 2 CR BACKFILL

Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue

Drainage Longitudinal Sections

H 5 0 10 20 30m
 V 0.5 1 2 3m
 Horiz. Scale 1: 500 @ A1 - 1: 1000 @ A3
 Vert. Scale 1: 50 @ A1 - 1: 100 @ A3

Status: **Preliminary**

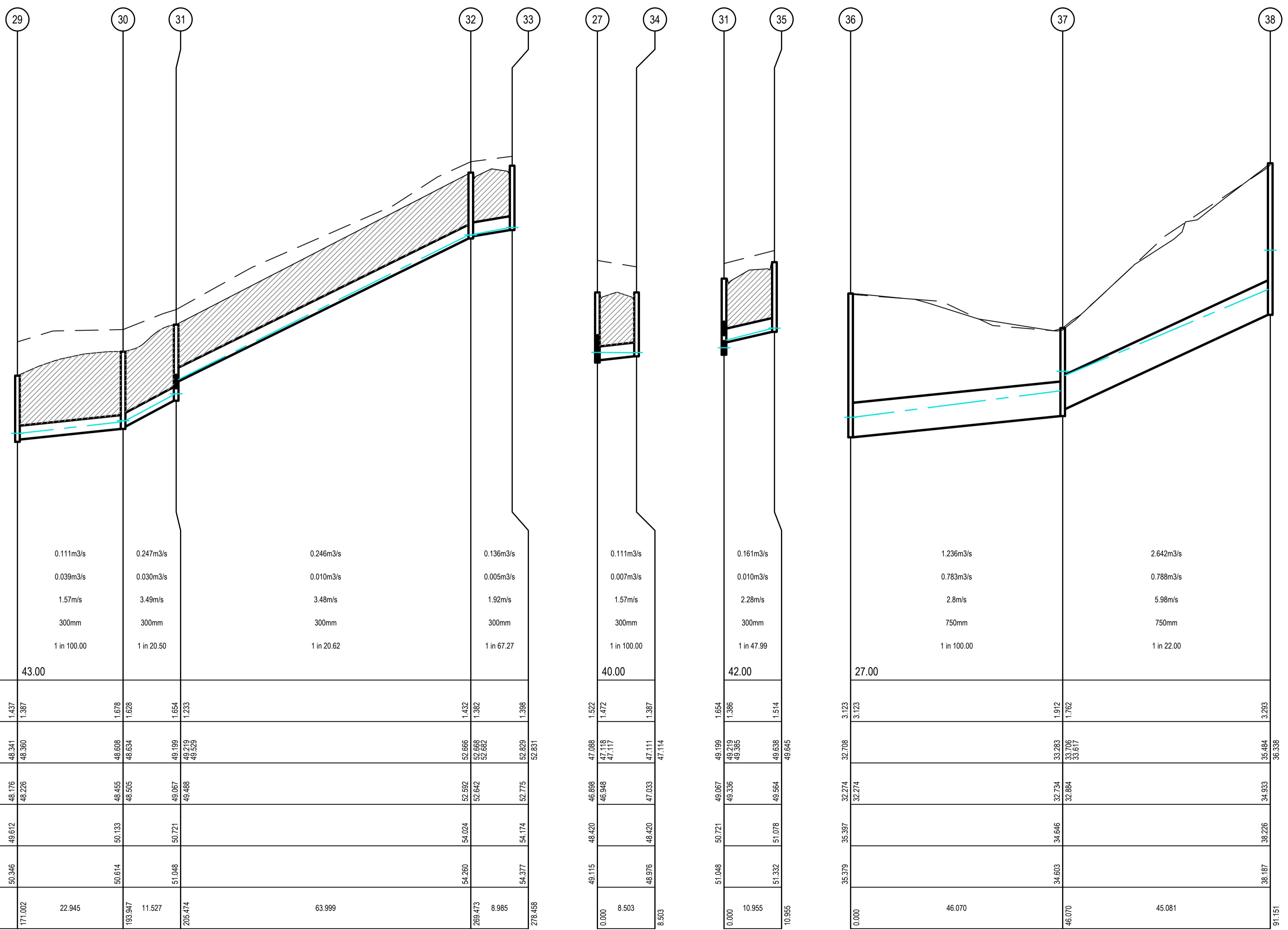
Project No.	35753_S	Scale:	As Shown
Drawn:	S.B.	Date:	Aug 2022
Designed:	S.B.	Date:	Aug 2022
Authorised:	G.S.	Date:	Aug 2022

Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
 +61 3 9860 0380 hello@marshalmelbourne marshal.melbourne



East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lucknow		35753_05 R23
Drainage Longitudinal Sections - 3		Revision A
		Sheet 23 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use. Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.



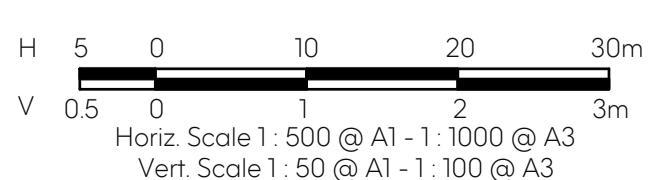
DRAINAGE LONGITUDINAL SECTION - 4

LEGEND

- EXISTING SURFACE
- DESIGN SURFACE
- DRAINAGE PIPE/PIT
- EXISTING DRAINAGE PIPE/PIT
- HYDRAULIC GRADE LINE
- CLASS 2 CR BACKFILL

Revision Details				
Revision	Date	Revised Sheets	Descriptions	Authorised
A	02-12-2022	-	Preliminary Issue	G.S.

Drainage Longitudinal Sections



Status: **Preliminary**

Project No: 35753_5
 Drawn: S.B. Date: Aug 2022
 Designed: S.B. Date: Aug 2022
 Authorised: G.S. Date: Aug 2022

Scale: As Shown
 Date Printed: 2-Dec-22
 Level Data: Ltspodgn
 Datum: AHD

Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_5\35753_5_R21-25.dwg



Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
 +61 3 9860 0380 hello@marshal.melbourne marshal.melbourne

East Gippsland Shire Council

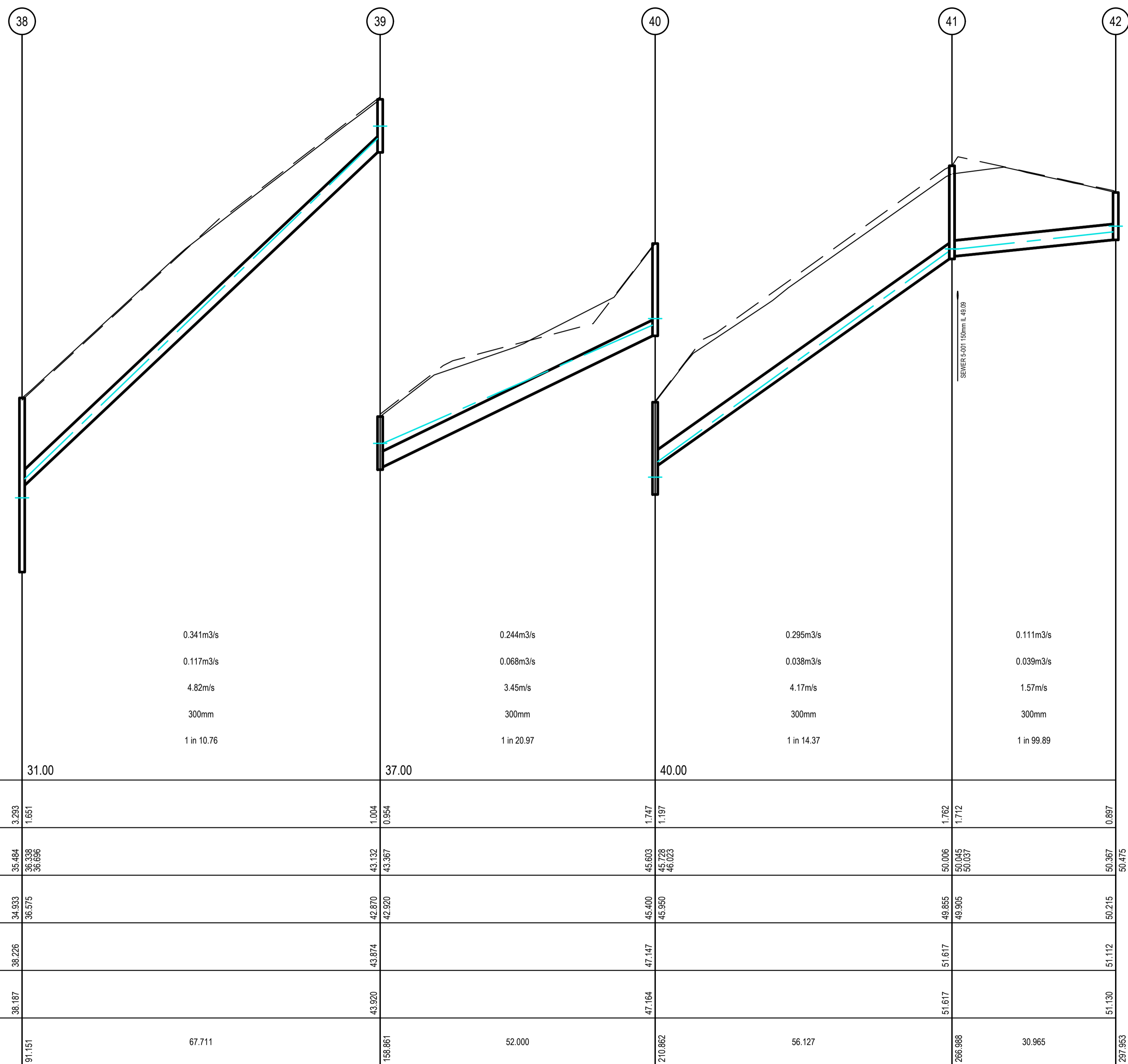
Brookfield Land Co Pty Ltd
 Brookfield Lakes- Stage 5
 135 Great Alpine Road
 Lucknow

Plan Number: **35753_05 R24**

Revision: **A**

Sheet 24 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use. Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

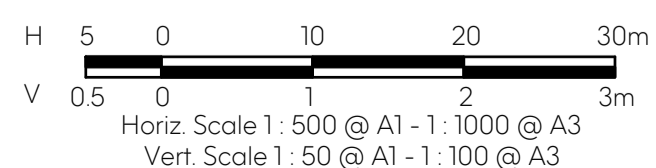


DRAINAGE LONGITUDINAL SECTION - 5

LEGEND	
	EXISTING SURFACE
	DESIGN SURFACE
	DRAINAGE PIPE/PIT
	EXISTING DRAINAGE PIPE/PIT
	HYDRAULIC GRADE LINE
	CLASS 2 CR BACKFILL

Revision Details				
Revision	Date	Revised Sheets	Descriptions	Authorised
A	02-12-2022	-	Preliminary Issue	G.S.

Drainage Longitudinal Sections



Status: **Preliminary**

ISO 9001	Project No.	35753_5	Scale:	As Shown
AS/NZS 4801	Drawn:	S.B.	Date:	Aug 2022
Endorsed	Designed:	S.B.	Date:	Aug 2022
Integrated Management System	Authorised:	G.S.	Date:	Aug 2022
			Date Printed:	2-Dec-22
			Level Data:	Ltopodgn
			Datum:	AHD

Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_5\35753_5_R21-25.dwg



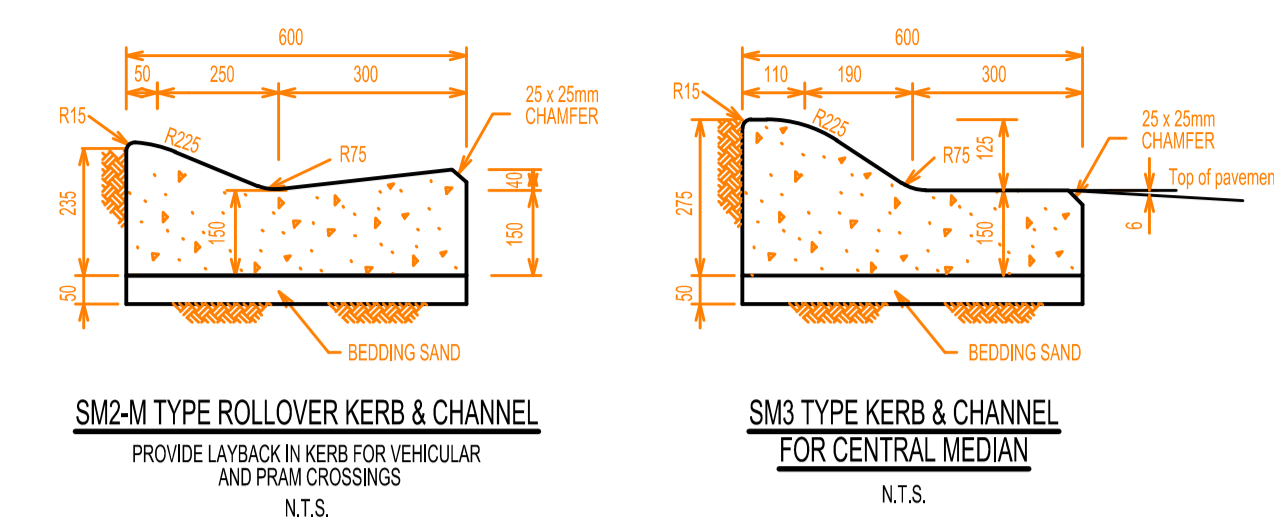
Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380 hello@marshal.melbourne marshal.melbourne

East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lucknow		35753_05 R25
Drainage Longitudinal Sections - 5		Revision A
		Sheet 25 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grad lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information of construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

PIT SCHEDULE										
PIT		INTERNAL (mm)		INLET		OUTLET		PIT		REMARKS
NO.	TYPE	WIDTH	LENGTH	DIAMETER (mm)	INVERT LEVEL (m)	DIAMETER (mm)	INVERT LEVEL	SETOUT RL	DEPTH (m)	
1	JP	750	900	525	42.192	525	42.192	43.638	1.446	IDM SD420
				375	42.581			43.638	1.446	
2	JP	750	900	525	43.705	525	43.655	45.618	1.962	IDM SD420
3	GP	750	900	525	43.775	525	43.725	45.662	1.937	IDM SD420 WITH V SHAPED GRATE
				300	44.593					
4	GP	750	900	525	43.855	525	43.805	45.612	1.806	IDM SD420 WITH V SHAPED GRATE
5	GP	600	900	300	44.318	525	44.093	45.773	1.679	IDM SD420 GRATED LID
6	JP	600	900	300	44.802	300	44.709	46.175	1.466	IDM SD420
7	SEP	600	900	300	45.934	300	45.884	47.405	1.521	IDM SD435
8	SEP	600	900			300	46.019	47.405	1.386	IDM SD435
9	JP	600	900	300	42.9	375	42.825	43.796	0.971	IDM SD420
10	JP	600	900	300	46.418	300	46.368	47.331	0.963	IDM SD420
11	JP	600	900	300	46.812	300	46.76	47.685	0.925	IDM SD421
12	JP	600	900			300	47.799	48.719	0.92	IDM SD422
13	JP	600	900	300	47.578	300	47.473	48.53	1.057	IDM SD423
14	JP	600	900	300	50.52	300	50.445	51.444	0.999	IDM SD424
15	JP	600	900			300	53.285	54.226	0.941	IDM SD425
16	EP	600	900	375	40.428			41.815	1.387	EXISTING ENDDPIPE
17	SEP	600	900	300	41.896	375	41.606	43.128	1.522	IDM SD435
				300	41.656					
18	SEP	600	900	300	42.861	300	42.811	44.298	1.487	IDM SD435
19	SEP	600	900			300	43.698	45.089	1.392	IDM SD435
20	SEP	600	900			300	41.741	43.128	1.387	IDM SD435
21	EP	600	900	300	38.767			39.671	0.904	EXISTING ENDDPIPE
22	JP	600	900	300	41.326	300	40.931	42.715	1.784	IDM SD420
23	JP	600	900	300	41.516	300	41.466	42.754	1.289	IDM SD420
24	JP	600	900			300	41.706	42.821	1.115	IDM SD420
25	JP	600	900	300	38.156			39.408	1.252	IDM SD420
26	SEP	600	900	300	43.877	300	43.782	45.096	1.313	IDM SD435
27	SEP	600	900	300	47.197	300	46.898	48.42	1.522	IDM SD435
				300	46.948					
28	JP	600	900	300	47.936	300	47.886	49.171	1.284	IDM SD420
29	JP	600	900	300	48.226	300	48.176	49.612	1.437	IDM SD420
30	SEP	600	900	300	48.505	300	48.455	50.133	1.678	IDM SD435
31	SEP	600	900	300	49.488	300	49.067	50.721	1.654	IDM SD435
				300	49.336					
32	SEP	600	900	300	52.642	300	52.592	54.024	1.432	IDM SD435
33	SEP	600	900			300	52.775	54.174	1.398	IDM SD435
34	SEP	600	900			300	47.033	48.42	1.387	IDM SD435
35	SEP	600	900			300	49.564	51.078	1.514	IDM SD435
36	JP	900	900	750	32.274			35.397	3.123	IDM SD420
37	JP	900	900	750	32.884	750	32.734	34.646	1.912	IDM SD420
38	JP	900	900	300	36.575	750	34.933	38.226	3.293	IDM SD420
39	JP	600	900	300	42.92	300	42.87	43.874	1.004	IDM SD420
40	JP	600	900	300	45.95	300	45.4	47.147	1.747	IDM SD420
41	JP	600	900	300	49.905	300	49.855	51.617	1.762	IDM SD420
42	JP	600	900			300	50.215	51.112	0.897	IDM SD420



KERB AND CHANNEL DETAILS

ENGRAVE THE FOLLOWING LETTERS 75 HIGH IN THE FACE OF THE KERB FOR EACH CONDUIT/SERVICE PASSING BELOW THE KERB
 WATER "W"
 GAS "G"
 HOUSE DRAIN "HD"
 TELSTRA "T"
 ELECTRICAL "E"

Revision Details			
Revision	Date	Revised Sheets	Descriptions
A	02-12-2022	-	Preliminary Issue

Authorised	
G.S.	

Status: **Preliminary**

ISO 9001 AS/NZS 4801 Endorsed Integrated Management System

Project No.	35753_S	Scale:	As Shown
Drawn:	S.B. Date: Aug 2022	Date Printed:	2-Dec-22
Designed:	S.B. Date: Aug 2022	Level Data:	Ltpodgn
Authorised:	G.S. Date: Aug 2022	Datum:	AHD

Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_5\35753_5_R26.dwg

marshal

Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
 +61 3 9860 0380 hello@marshalmelbourne marshalmelbourne

East Gippsland Shire Council

Brookfield Land Co Pty Ltd
 Brookfield Lakes- Stage 4
 135 Great Alpine Road
 Lucknow

Plan Number: **35753_05 R26**


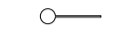
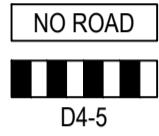
Revision: **A**

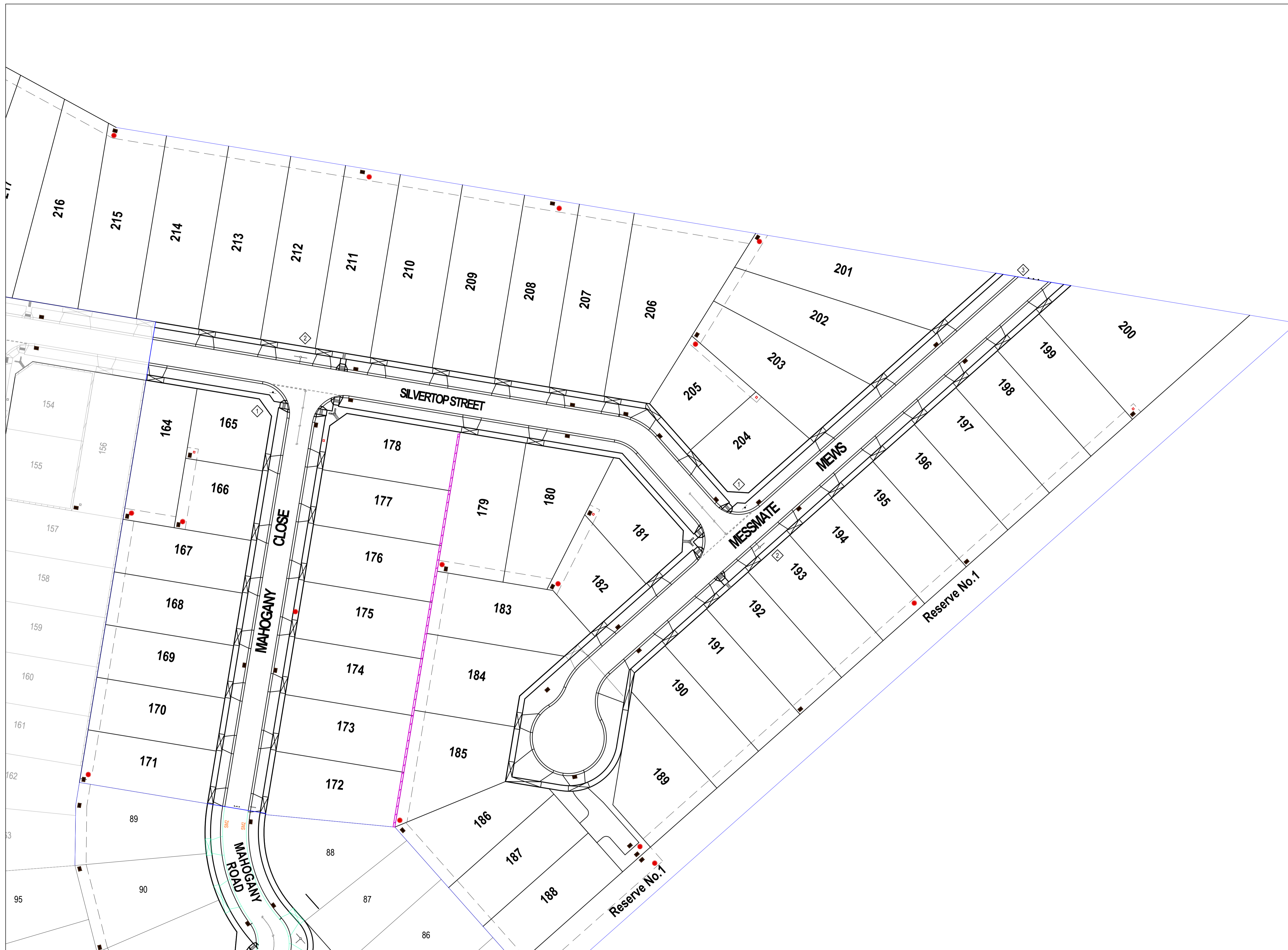
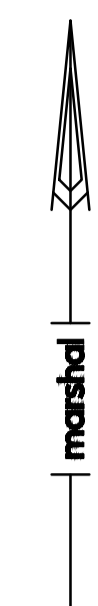
Sheet 26 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

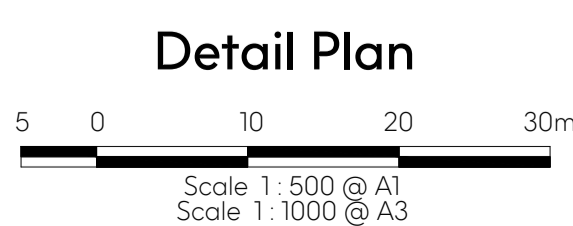
SIGN SCHEDULE

SIGN	NUMBER
 R1-2	1
 STREET SIGN	2
 D4-5	3



Revision Details

Revision	Date	Revised Sheets	Descriptions	Authorised
A	21-11-2022	-	Preliminary Issue	G.S.



Status: **Preliminary**

Project No.	35753_S	Scale:	As Shown
Drawn:	S.B. Date: Aug 2022	Date Printed:	2-Dec-22
Designed:	S.B. Date: Aug 2022	Level Data:	Ltopo.dgn
Authorised:	D.K. Date: Aug 2022	Datum:	AHD

ISO 9001
AS/NZS 4801
Endorsed
Integrated
Management
System

Filename: G:\COMPANY\MARSHAL MELBOURNE\Brookfield Lakes\35753_S\35753_5_R27.dwg

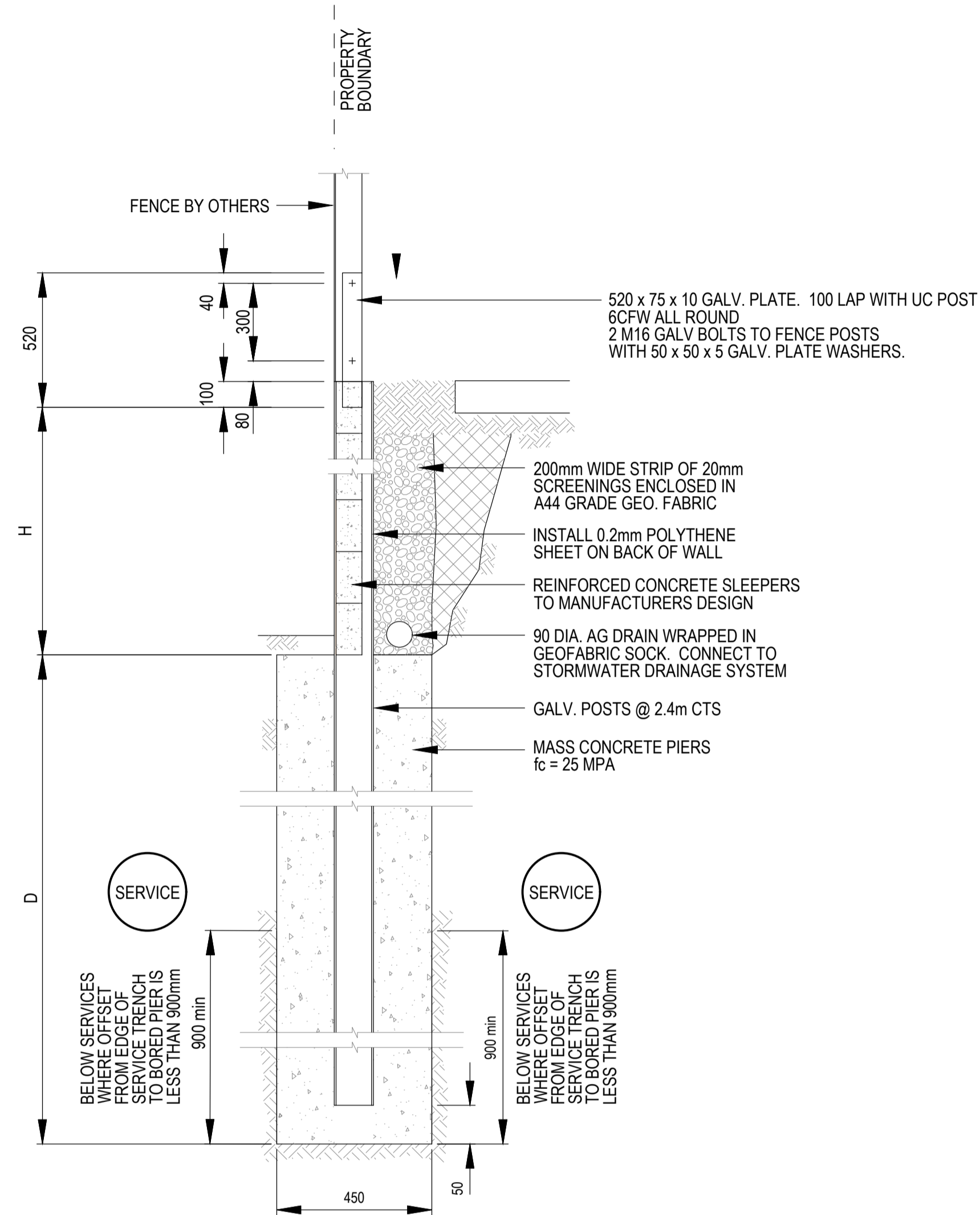


Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380 hello@marshalmelbourne marshalmelbourne

East Gippsland Shire Council	Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes- Stage 5 135 Great Alpine Road Lucknow	35753_05 R27
Linemarking & Signage Plan	Revision A
	Sheet 27 of 28

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.



REINFORCED CONCRETE SLEEPER RETAINING WALL DETAILS

N.T.S.

*REFER TO MARSHAL DRAWINGS FOR LOCATIONS OF RETAINING WALLS.

SLEEPER RETAINING WALL SCHEDULE				
RETAINING HEIGHT, H (mm)	SLEEPERS SPECIFICATION	UPRIGHTS		FOOTINGS D (mm)
		SPECIFICATION	SPACING (mm)	
0-600	MANUFACTURER DESIGN & SPECIFICATIONS	150 UB 14	2400	900*
601-800	MANUFACTURER DESIGN & SPECIFICATIONS	150 UB 14	2400	1200*
801-1000	MANUFACTURER DESIGN & SPECIFICATIONS	150 UB 14	2400	1500*
1001-1200	MANUFACTURER DESIGN & SPECIFICATIONS	150 UB 14	2400	1800*
1201-1400	MANUFACTURER DESIGN & SPECIFICATIONS	150 UB 18	2400	2100*
1401-1600	MANUFACTURER DESIGN & SPECIFICATIONS	150 UB 18	2400	2400*
1601-1800	MANUFACTURER DESIGN & SPECIFICATIONS	200 UB 23	2400	2700*
1801-2000	MANUFACTURER DESIGN & SPECIFICATIONS	200 UB 23	2400	3000*
2001-2200	MANUFACTURER DESIGN & SPECIFICATIONS	200 UB 29.8	2400	3300*
2201-2400	MANUFACTURER DESIGN & SPECIFICATIONS	200 UB 29.8	2400	3600*

*OR 900mm BELOW ADJACENT SERVICES. WHERE THE OFFSET FROM EDGE OF SERVICE TRENCH TO BORED PIER IS LESS THAN 900mm WHICHEVER IS THE GREATEST.

CONCRETE NOTES:

- ALL CONCRETE BASED ON $f_c = 25$ MPa NORMAL CONCRETE MIX
- CONCRETE WORKS TO BE INSTALLED AND FORMED TO SATISFY A CLASS 2 FINISH IN ACCORDANCE WITH AS3610 - 1995 'FORMWORK' CONCRETE UNLESS NOTIFIED OTHERWISE
- CONCRETE SLUMP TO BE 80mm WITH A MAXIMUM AGGREGATE SIZE = 20mm
- ALL CONCRETE TO BE COMPLIANT WITH THE MIX SUBMITTED TO BE DURABLE TO SATISFY CONDITIONS ASSOCIATED WITH BELOW GROUND CONDITIONS, EXPOSED TO WATER RUNOFF, INGRESS AND IF REQUIRED ADD A WATERPROOFING AGENT TO SATISFY CLIENT AND OR PROJECT SPECIFICATIONS REQUIREMENTS.
- MAXIMUM CONCRETE BASE SHRINKAGE STRAIN SHALL NOT EXCEED 600um AT 56 DAYS.
- CONCRETE SHALL BE THOROUGHLY COMPACTED IN THE FORMS BY MEANS OF MECHANICAL VIBRATION.
- CONCRETE THICKNESS NOMINATED ARE MINIMAL STRUCTURAL REQUIREMENTS.
- FORMWORK SHALL BE DESIGNED, CONSTRUCTED AND STRIPPED IN ACCORDANCE WITH AS3610.
- THE DESIGN CERTIFICATION CONSTRUCTION AND PERFORMANCE OF THE FORMWORK, INCLUDING AND STRIPPING AND BACKPROPPING SHALL BE THE RESPONSIBILITY OF THE FORMWORK SUB-CONTRACTOR.
- ALL REINFORCEMENT TO BE 'N' TYPE HOT ROLLED DEFORMED BARS IN ACCORDANCE WITH AS4671 AND BE GRADE DN500N.
- ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED AND MAINTAINED IN CORRECT POSITION DURING CONCRETING.
- WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER. ALL WELDING SHALL BE IN ACCORDANCE WITH AS1554.3.
- ALL CONCRETE WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3500 AND OTHER RELEVANT AUSTRALIAN STANDARDS.
- CONCRETE SHALL BE SUPPLIED BY AN APPROVED MANUFACTURER IN ACCORDANCE WITH AS1379.
- A GEOTECHNICAL ENGINEER IS TO BE ENGAGED TO CONFIRM THAT THE ASSUMED ALLOWABLE BEARING PRESSURE OF 150kPa IS ACHIEVED FOR THE BASE FOUNDATION MATERIAL. ANY VARIABLE BELOW THE ASSUMED BEARING PRESSURE SHALL BE REPORTED TO MA CIVIL FOR DESIGN REVIEW AND FURTHER ADVICE PRIOR TO RETAINING WALL WORKS COMMENCING.

STEELWORK:

CORROSION PROTECTION OF STEEL WORK SHALL BE AS FOLLOWS:- STEELWORK PERMANENTLY EXPOSED TO WEATHER OR AGGRESSIVE ENVIRONMENTS SHALL BE HOT DIPPED GALVANISED.

THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR AND AT ALL TIMES PROVIDE A SAFE WORKING ENVIRONMENT IN THE VICINITY OF THE SITE OF WORKS IN FULL COMPLIANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY REGULATIONS. IN ACCORDANCE WITH CLAUSE 15 OF AS2124-1992, THE CONTRACTOR MUST ENSURE THE SAFETY OF THE CONTRACTOR'S EMPLOYEES AND ALL OTHER PEOPLE WHO ARE ON OR ADJACENT TO THE SITE. THE CONTRACTOR MUST COMPLY WITH THE VICTORIAN OCCUPATIONAL HEALTH AND SAFETY ACT 2004, INCLUDING SAFETY HELMETS, SAFETY BOOTS, EAR AND EYE PROTECTION, WHERE APPROPRIATE.

CONTRACTOR TO NOTE

DIAL BEFORE YOU DIG
www.1100.com.au

BEWARE OF UNDERGROUND SERVICES. THE LOCATIONS 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. EXTREME CARE TO BE TAKEN AT ALL TIMES WHEN BORING NEAR OR ACROSS EXISTING SERVICES.

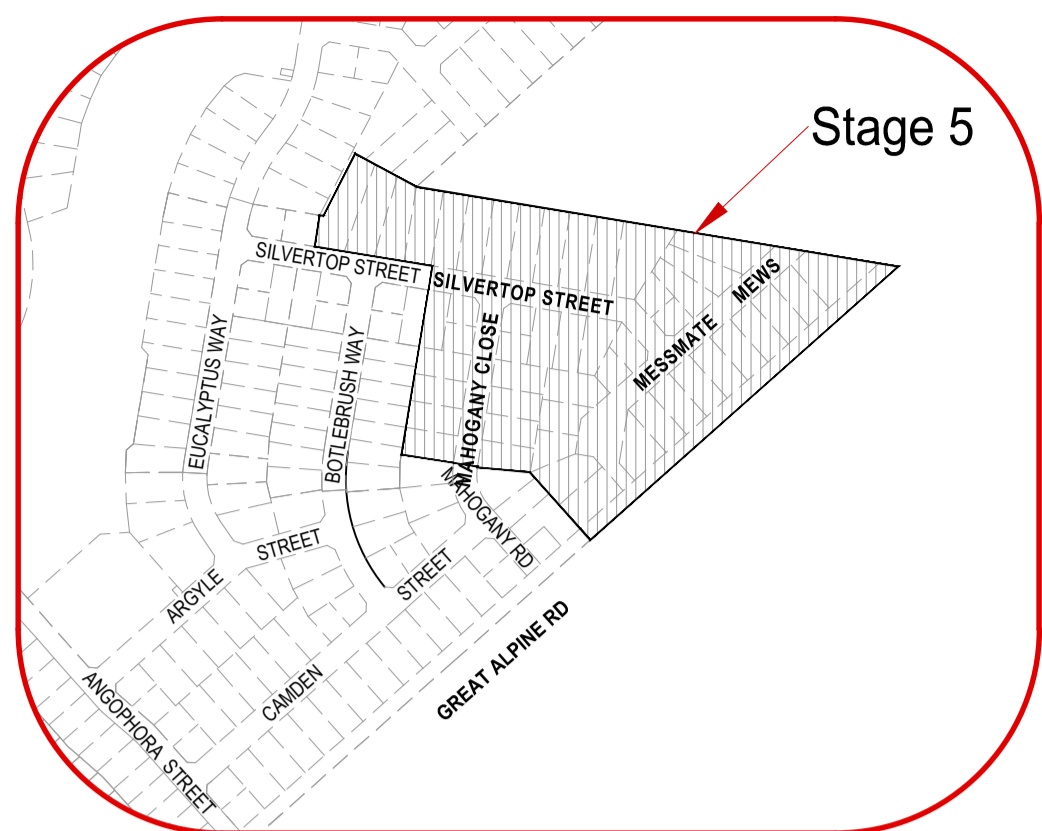
Revision Details				
Revision	Date	Revised Sheets	Descriptions	Authorised
A	02/12/2022	-	Preliminary Issue	G.S.

Status:																									
Preliminary																									
<ul style="list-style-type: none"> ✓ ISO 9001 ✓ AS/NZS 4801 ✓ Endorsed ✓ Integrated ✓ Management System 	<table border="1"> <tr> <td>Project No.</td> <td>35753_5</td> <td>Scale:</td> <td>As Shown</td> </tr> <tr> <td>Drawn:</td> <td>S.B.</td> <td>Date:</td> <td>Aug 2022</td> </tr> <tr> <td>Designed:</td> <td>S.B.</td> <td>Date:</td> <td>Aug 2022</td> </tr> <tr> <td>Authorised:</td> <td>G.S.</td> <td>Date:</td> <td>Aug 2022</td> </tr> <tr> <td>Date Printed:</td> <td>\$DATE\$</td> <td>Level Data:</td> <td>Ltopo.dgn</td> </tr> <tr> <td>Datum:</td> <td>AHD</td> <td></td> <td></td> </tr> </table>	Project No.	35753_5	Scale:	As Shown	Drawn:	S.B.	Date:	Aug 2022	Designed:	S.B.	Date:	Aug 2022	Authorised:	G.S.	Date:	Aug 2022	Date Printed:	\$DATE\$	Level Data:	Ltopo.dgn	Datum:	AHD		
Project No.	35753_5	Scale:	As Shown																						
Drawn:	S.B.	Date:	Aug 2022																						
Designed:	S.B.	Date:	Aug 2022																						
Authorised:	G.S.	Date:	Aug 2022																						
Date Printed:	\$DATE\$	Level Data:	Ltopo.dgn																						
Datum:	AHD																								

Suite 201 Level 2 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380 hello@marshal.melbourne marshal.melbourne



East Gippsland Shire Council		Plan Number
Brookfield Land Co Pty Ltd Brookfield Lakes - Stage 5 135 Great Alpine Way Lucknow		35753_5 R028
Retaining Wall Details	Revision	A
	Sheet	28 of 28



LOCALITY PLAN

SCALE: 1:10,000
MELWAYS: 628 J5

Schedule 7: Drawing Schedule

Drawing No.	Sheet No.	Title
547-2009-P-S01	1	Notes, Schedules & Locality Plan
547-2009-P-S02	2	Detail Plan
547-2009-P-S03	3	Longitudinal Section - 1
547-2009-P-S04	4	Longitudinal Section - 2
547-2009-P-S05	5	Manhole layout details



General Notes:

- Only contractors accredited by East Gippsland Water to SC1, SC2, SC7, SC9, SC10 & R3 shall be eligible to construct these works.
- Only products approved and catalogued by the Water Agency shall be used.
- Works must be to constructed according to the MRWA edition of the WSAA Sewerage code of Australia WSA 02-2014-3.1.
- The design consultant is responsible for the design and coordination of the works. Any problem arising during construction shall be directed to the consultant.
- For Construction of Maintenance Structures please refer to EGW Technical Bulletins: TB001 for Maintenance Holes & TB006 for Maintenance Shafts & EGW standard drgs SEW-1301-V & SEW-1308-V
- In paved areas, maintenance hole covers should be flush with surface. In non-trafficable areas, maintenance hole covers are to sit 75mm above FSL. The ground around the maintenance hole shall be built up and graded to tie into the surrounding FSL.
- Step Irons shall be installed for all MH's greater than 5m deep, and platforms for all MH's greater than 6m deep. Where step irons are installed, the top 2m of the MH shall have no step irons.

Survey, Set Out and Asset Recording

- All contours and levels are in metres to the Australian height datum (A.H.D.)
- All co-ordinates shown are to map grid of Australia (MGA).
- Chainages shown on detail plans are discontinuous at maintenance structures. Chainages shown on long section sheets are continuous.
- Coordinates are to sewer line intersection point unless otherwise shown.
- Before commencement of work, the contractor must complete a level check between all TBM's to verify level values.
- TBM's and control points are to be maintained and protected at all times during construction. Should any marks be disturbed, the contractor will immediately notify the consultant to arrange re-installment at the contractors expense.

Property Connections

- Number of lots to be sewered: 55 lots
- All property connections to be DN100 unless otherwise indicated.
- Properties requiring boundary traps are indicated in the detailed plans. The remainder do not require boundary traps.
- Branch tie distance shown on detail plan are from approved subdivision survey pegs. Branch ties for future lots are shown as a chainage. (Ch) Distance is from the downstream sewer structure.
- Invert level of the property connection point is shown opposite the branch position.
- Where a Spur Branch connects to a shaft, both property connections are considered to be shaft connections

Earthworks and Retaining Walls:

- In areas subject to earthworks, construction of sewers shall not commence until earthworks has been completed unless written approval has been given by the Water Authority.

Embedment

- Embedment shall be Type A (refer MRWA-S-202) unless otherwise specified on the long section.

Backfill

- Selection and compaction of trench backfill material shall be in accordance with the Water Agency adopted version of MRWA specification no 04-03.
- Refer to Long Section drawings for backfill requirements.

Compaction Testing

- Test results shall be provided to the superintendent prior to practical completion / acceptance of works.
- The contractor is required to undertake all testing of fill compaction in accordance with the Water Agency adopted version of the MRWA Backfill Specification 04-03. Plan to be provided to the Water Agency with test locations and depth of test.

Work on Live Sewers:

- All works on live sewers must be carried out by a water company accredited contractor.
- All existing sewers must be plugged to stop gas emissions prior to any connections being made to these sewers.
- To enable connections to live assets or any work on live assets, the contractor shall submit the appropriate forms to the superintendent at least 3 working days prior to any works on live sewers.
- The contractor is not permitted to break into an existing live pipeline, enter a live sewer or remove the cover to a live maintenance structure unless authorised by the Water Agency.

Safety:

- Prior to commencement of works on site, the contractor must ensure that all matters relating to the Occupational Health and Safety Act 2004 and Occupational Health 2017, have been and will be complied with.

Testing:

- The contractor is to give a minimum of two (2) days notice to the superintendent and Water Agency prior to the testing being undertaken. Testing is to be undertaken in the presence of superintendent.
- The Water Agency are to provide CCTV and contractor to conduct vacuum testing. These tests shall be undertaken by agreement with the Water Agency (fortnightly or monthly).
- Ovality testing to be completed to MRWA specification 13-01.

Cultural Heritage Requirements

- The contractor is to keep a copy of the approved cultural heritage management plan on site at all times during works. (AAV Management Plan 10290 Heritage Insight).

Environmental Management Plan:

- On commencement of construction works the contractor must comply with the recommendations of the EPA publication "construction techniques for sediment pollution control" (publication no 275 1991).
- Prior to the commencement of work, the contractor is to submit a site environmental management plan to the Catchment Management Authority. (CMA)
- All trees and vegetation are to be protected unless otherwise indicated for removal. The extent of any vegetation removal shall be confirmed on site with the superintendent and local council prior to commencement, and in accordance with any planning permits. Any removal shall be documented.

- All areas containing creek vegetation, trees and revegetated areas near the construction zone are to be fenced off during the works with secure and highly visible material such as para-webbing fencing.

- Ensure all machinery, equipment and/or footwear entering the site is weed and pathogen free.

Boring:

- Boring shall be carried out where specified in accordance with WSA 02-2014 MRWA Edition (Version 2) specifications and standard drawing MRWA-S-208 - Trenchless Construction.
- Bore annulus to be grouted with in accordance with MRWA-S-208 - Requirement 3 - General Construction Requirements. Grouting mix is to consist of 1 : 1 (Sand/Cement) with a 1 : 0.67 (Water/Cement) ratio by weight, using fine well-rounded sand. Plasticisers may be used.
- Sewer main to be supported and levelled to design grade using MRWA approved Heavy Duty plastic centralisers located in accordance with MRWA-S-208.
- Refer MRWA-S-208 for General Bore Arrangement Detail.

Schedule 3: Service Offsets (m) and Locations:

Schedule 6: Water Seals, Boundary Traps and Syphons

Structure Type	Boundary Trap	Water Seals	Syphons
N/A			

Schedule 5: Maintenance Holes

Maintenance Hole ID	MH Shaft Type (GRP/PP / Concrete)	MH Top Type (Conical/Flat)	Construction Method (In-situ/ Pre-cast)	Cover Class	Internal Diameter (mm)	Min. Wall Thickness (mm)	Depth to Invert (mm)	Drops	Ladder (L) Step Irons (S) Landing (Ld)	Corrosion Protection (Coating / PE or PVC Lining)	Shaft Re-inforcement	Comments (Offsets / Details)
-	-	-	-	-	-	-	-	-	-	-	-	** = MH CL offset
BL5-1	N32 Concrete	Conical	Pre-cast	B	1050	150	2369	-	-	-	-	-
BL5-2	N32 Concrete	Conical	Pre-cast	B	1050	150	3847	1 x 150/1 x 100	-	-	-	Refer Manhole Details
BL5-3	N32 Concrete	Conical	Pre-cast	B	1050	150	1536	-	-	-	-	-
BL5-4	N32 Concrete	Conical	Pre-cast	B	1050	150	2330	-	-	-	-	-
BL5-5	N32 Concrete	Conical	Pre-cast	B	1050	150	2720	1 x 100	-	-	-	-
BL5-6	N32 Concrete	Conical	Pre-cast	B	1050	150	1564	-	-	-	-	-
BL5-7	N32 Concrete	Conical	Pre-cast	B	1050	150	2478	1 x 150/1 x 100	-	-	-	Refer Manhole Details
BL5-8	N32 Concrete	Conical	Pre-cast	B	1050	150	2029	-	-	-	-	-
BL5-9	N32 Concrete	Conical	Pre-cast	B	1050	150	1760	1x 100	-	-	-	-
BL5-10	N32 Concrete	Conical	Pre-cast	B	1050	150	1414	-	-	-	-	-
BL5-11	N32 Concrete	Conical	Pre-cast	B	1050	150	2719	-	-	-	-	-
BL5-12	N32 Concrete	Conical	Pre-cast	B	1050	150	2516	-	-	-	-	-
BL5-13	N32 Concrete	Conical	Pre-cast	B	1050	150	2519	1 x 150	-	-	-	Refer Manhole Details
BL5-14	N32 Concrete	Conical	Pre-cast	B	1050	150	1433	-	-	-	-	-
BL5-15	N32 Concrete	Conical	Pre-cast	B	1050	150	1390	1 x 100	-	-	-	-
BL5-16	N32 Concrete	Conical	Pre-cast	B	1050	150	1391	-	-	-	-	-
BL5-17	N32 Concrete	Conical	Pre-cast	B	1050	150	1367	-	-	-	-	-

Schedule 3: Service Offsets (m) and Locations:

ROAD NAME	SERVICES OFFSET SCHEDULE					
	ROAD RESERVE WIDTH	GAS	WATER	NBN	ELECTRICITY	SEWER
MESSMATE MENS	16.00	2.10 E	2.60 E	2.00 W	2.50 W	-
SILVERTOP STREET	16.00	2.10 N	2.60 N	2.00 S	2.50 S	-
MAHOGANY CLOSE	16.00	2.10 E	2.60 E	2.00 W	2.50 W	-

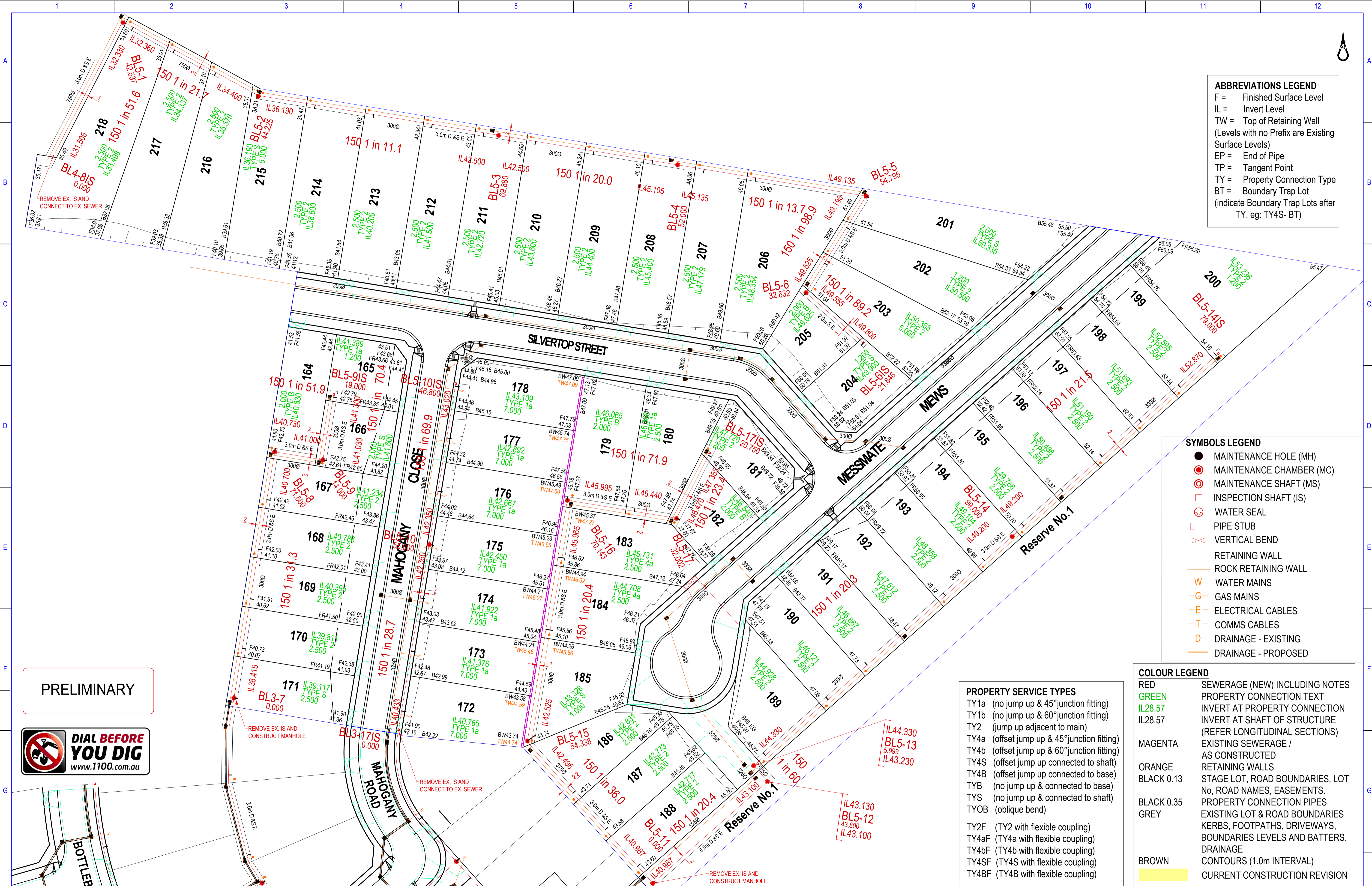
PRELIMINARY

Rev	Description	Date	Approved	Checked	Authorised	AUTH REF:	MM REF:
						547-2009-P	35753/5
A	Preliminary Issue	02/12/2022	GS			Melway Reference	628 J5
						D.Kennedy	D.Kennedy
						Date: 01/11/2022	Date: 01/11/2022



EAST GIPPSLAND WATER
EAST GIPPSLAND SHIRE COUNCIL
BROOKFIELD LAKES ESTATE - STAGE 5
SEWER RETICULATION
NOTES, SCHEDULES & LOCALITY PLAN

Scale: As Shown
Sheet: 01 of 05
Drawing No: 547-2009-P
Rev: S01
A



ABBREVIATIONS LEGEND

- F = Finished Surface Level
- IL = Invert Level
- TW = Top of Retaining Wall (Levels with no Prefix are Existing Surface Levels)
- EP = End of Pipe
- TP = Tangent Point
- TY = Property Connection Type
- BT = Boundary Trap Lot (indicate Boundary Trap Lots after TY, eg: TY4S- BT)

SYMBOLS LEGEND

- MAINTENANCE HOLE (MH)
- ⊙ MAINTENANCE CHAMBER (MC)
- ⊕ MAINTENANCE SHAFT (MS)
- INSPECTION SHAFT (IS)
- ⊗ WATER SEAL
- ┌ PIPE STUB
- ∩ VERTICAL BEND
- RETAINING WALL
- ROCK RETAINING WALL
- W WATER MAINS
- G GAS MAINS
- E ELECTRICAL CABLES
- T COMMS CABLES
- D DRAINAGE - EXISTING
- D DRAINAGE - PROPOSED

COLOUR LEGEND

- RED SEWERAGE (NEW) INCLUDING NOTES
- GREEN PROPERTY CONNECTION TEXT
- IL28.57 INVERT AT PROPERTY CONNECTION
- IL28.57 INVERT AT SHAFT OF STRUCTURE (REFER LONGITUDINAL SECTIONS)
- MAGENTA EXISTING SEWERAGE / AS CONSTRUCTED
- ORANGE RETAINING WALLS
- BLACK 0.13 STAGE LOT, ROAD BOUNDARIES, LOT No, ROAD NAMES, EASEMENTS.
- BLACK 0.35 PROPERTY CONNECTION PIPES
- GREY EXISTING LOT & ROAD BOUNDARIES, KERBS, FOOTPATHS, DRIVEWAYS, BOUNDARIES LEVELS AND BATTERS.
- BROWN DRAINAGE
- CONTOURS (1.0m INTERVAL)
- CURRENT CONSTRUCTION REVISION

PROPERTY SERVICE TYPES

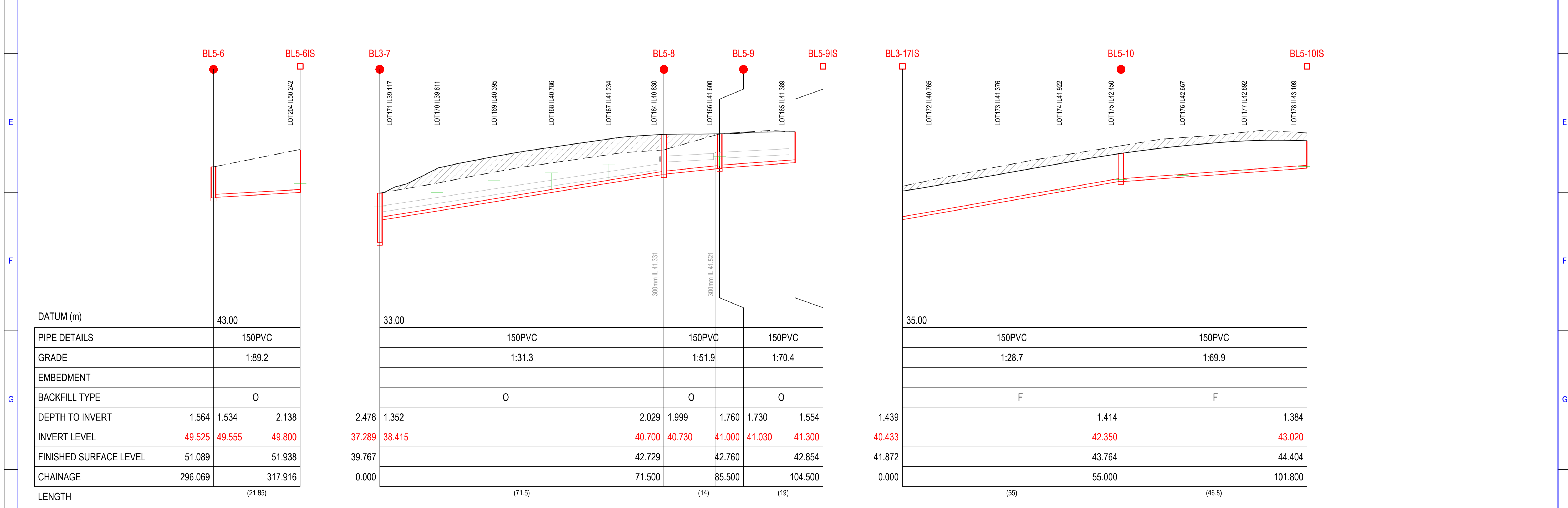
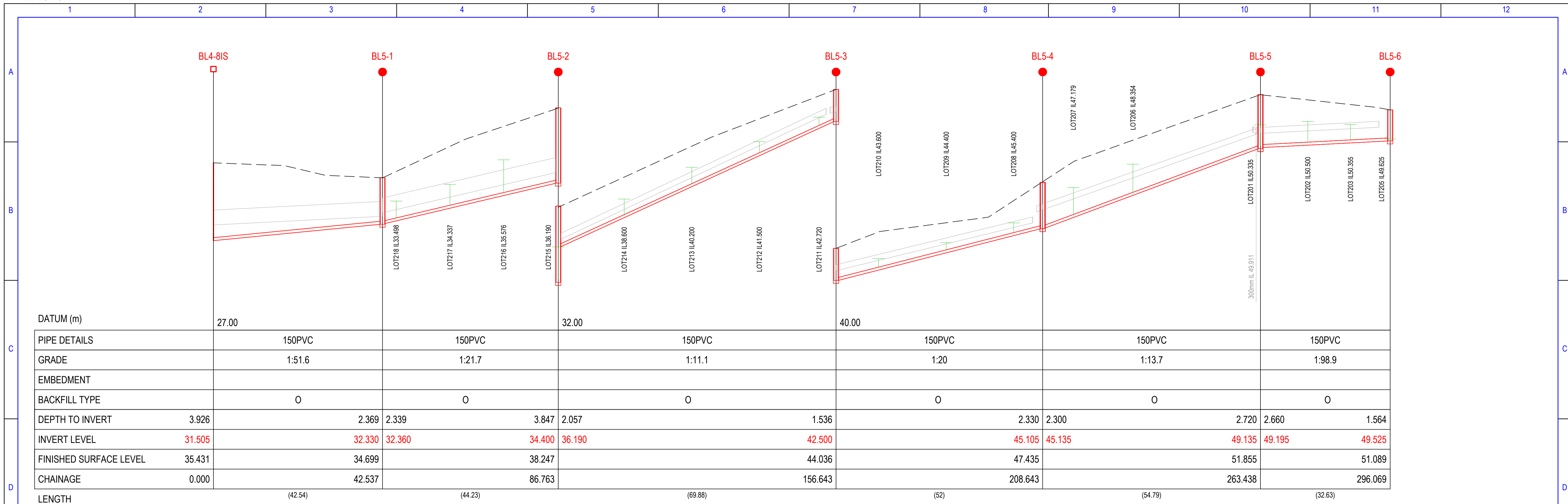
- TY1a (no jump up & 45° junction fitting)
- TY1b (no jump up & 60° junction fitting)
- TY2 (jump up adjacent to main)
- TY4a (offset jump up & 45° junction fitting)
- TY4b (offset jump up & 60° junction fitting)
- TY4S (offset jump up connected to shaft)
- TY4B (offset jump up connected to base)
- TYB (no jump up & connected to base)
- TYS (no jump up & connected to shaft)
- TYOB (oblique bend)
- TY2F (TY2 with flexible coupling)
- TY4aF (TY4a with flexible coupling)
- TY4bF (TY4b with flexible coupling)
- TY4SF (TY4S with flexible coupling)
- TY4BF (TY4B with flexible coupling)

PRELIMINARY



Designed		S.Baral	Date: 01/11/2022	AUTH REF: 547-2009-P		EAST GIPPSLAND WATER EAST GIPPSLAND SHIRE COUNCIL BROOKFIELD LAKES ESTATE - STAGE 5 Sewer Reticulation DETAIL PLAN	Scale: As Shown
Drawn		S.Baral	Date: 01/11/2022	MM REF: 35753/5			Sheet: 02 of 05
Checked		G.Sheath	Date: 01/11/2022	Authorised	G.Sheath	Date: 01/11/2022	Drawing No: 547-2009-P
Rev		Description		Date	Approved		Rev
A	Preliminary Issue		02/12/2022	GS			547-2009-P
							S02
							A

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work.



Designed		S.Baral	AUTH REF:	547-2009-P
Date:		01/11/2022	MM REF:	35753/5
Drawn		S.Baral	Melway Reference	628 J5
Date:		01/11/2022		
Checked		G.Sheath	Authorised	G.Sheath
Date:		01/11/2022	Date:	01/11/2022

Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004
+61 3 9860 0380 hello@marshal.melbourne marshal.melbourne

EAST GIPSSLAND WATER
EAST GIPSSLAND SHIRE COUNCIL
BROOKFIELD LAKES ESTATE - STAGE 5
SEWER RETICULATION
LONGITUDINAL SECTIONS - 1

Scale: As Shown

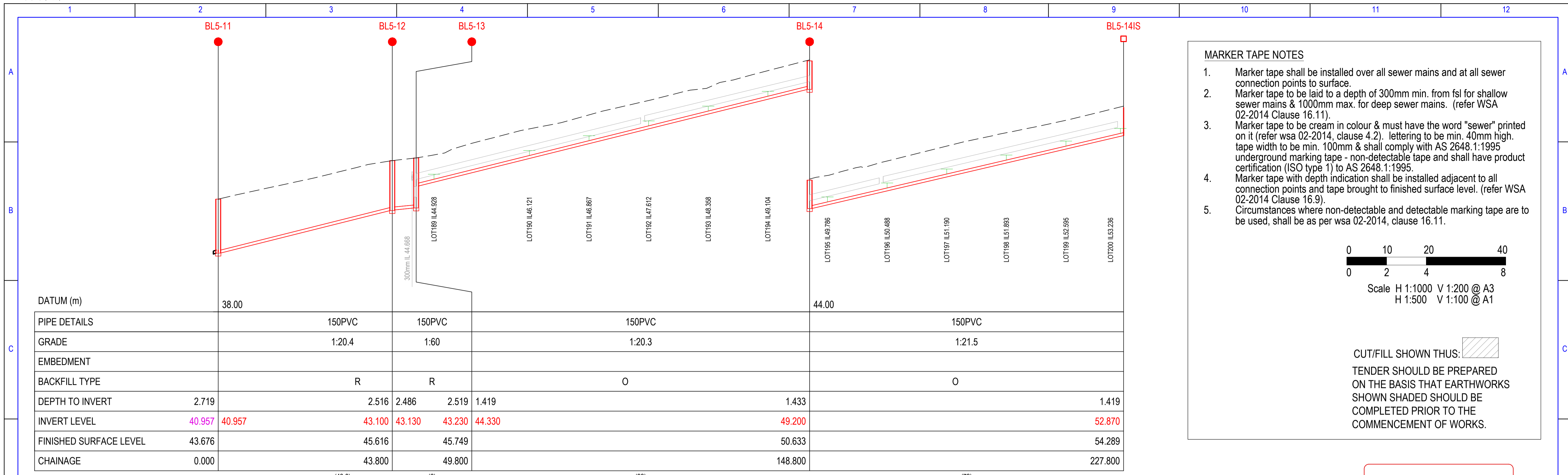
Sheet: 03 of 05

Drawing No.: 547-2009-P
S03

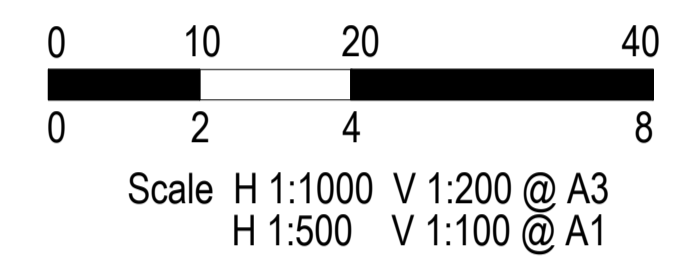
Rev: A

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.



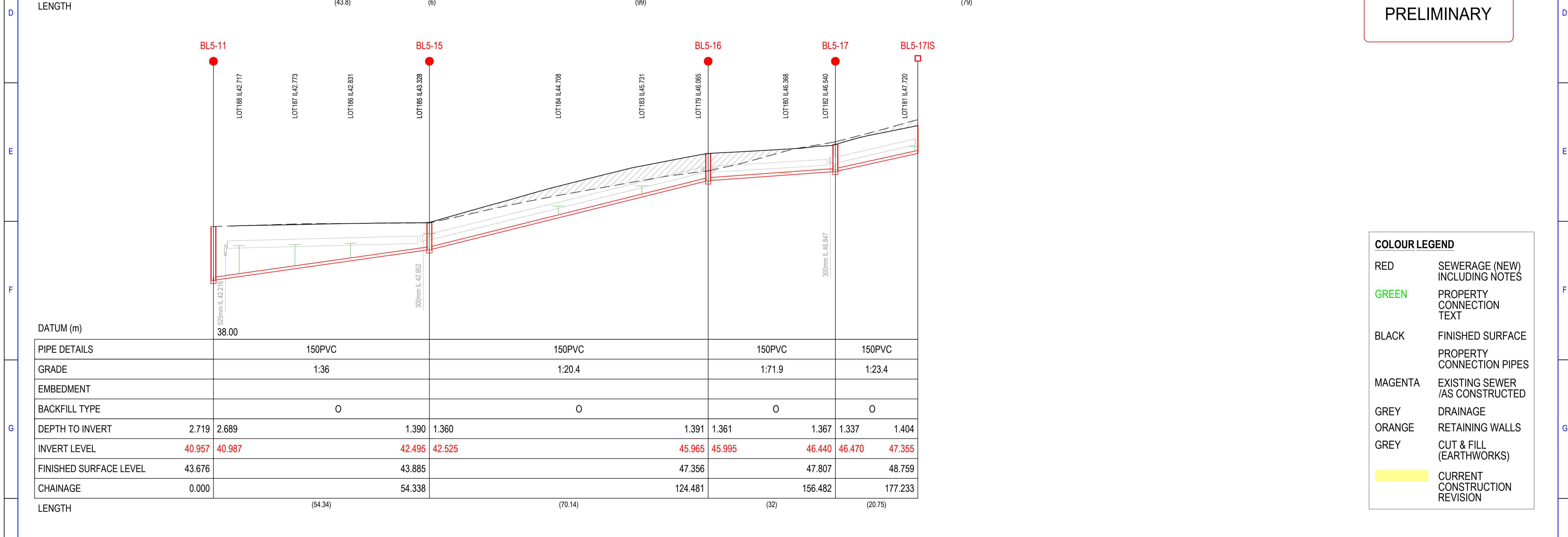
- MARKER TAPE NOTES**
1. Marker tape shall be installed over all sewer mains and at all sewer connection points to surface.
 2. Marker tape to be laid to a depth of 300mm min. from fsl for shallow sewer mains & 1000mm max. for deep sewer mains. (refer WSA 02-2014 Clause 16.11).
 3. Marker tape to be cream in colour & must have the word "sewer" printed on it (refer wsa 02-2014, clause 4.2). Lettering to be min. 40mm high. tape width to be min. 100mm & shall comply with AS 2648.1:1995 underground marking tape - non-detectable tape and shall have product certification (ISO type 1) to AS 2648.1:1995.
 4. Marker tape with depth indication shall be installed adjacent to all connection points and tape brought to finished surface level. (refer WSA 02-2014 Clause 16.9).
 5. Circumstances where non-detectable and detectable marking tape are to be used, shall be as per wsa 02-2014, clause 16.11.



CUT/FILL SHOWN THUS:

TENDER SHOULD BE PREPARED ON THE BASIS THAT EARTHWORKS SHOWN SHADED SHOULD BE COMPLETED PRIOR TO THE COMMENCEMENT OF WORKS.

PRELIMINARY



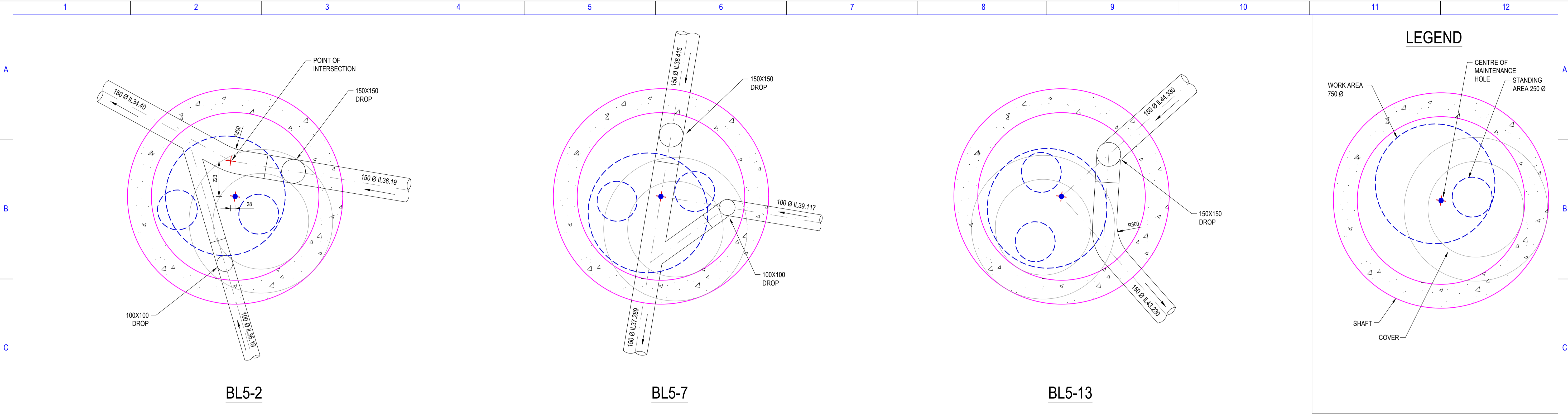
COLOUR LEGEND

RED	SEWERAGE (NEW) INCLUDING NOTES
GREEN	PROPERTY CONNECTION TEXT
BLACK	FINISHED SURFACE PROPERTY CONNECTION PIPES
MAGENTA	EXISTING SEWER /AS CONSTRUCTED
GREY	DRAINAGE
ORANGE	RETAINING WALLS
GREY	CUT & FILL (EARTHWORKS)
	CURRENT CONSTRUCTION REVISION

Designed				S.Baral	AUTH REF:	547-2009-P			EAST GIPPSLAND WATER EAST GIPPSLAND SHIRE COUNCIL BROOKFIELD LAKES ESTATE - STAGE 5 SEWER RETICULATION LONGITUDINAL SECTIONS - 2	Scale: As Shown
Date: 01/11/2022				MM REF:	35753/5	Sheet: 04 of 05				
Drawn				S.Baral	Melway Reference:	628 J5	Drawing No.: 547-2009-P S04	Rev A		
Date: 01/11/2022				Checked	G.Sheath	Authorised				G.Sheath
Date: 01/11/2022				Approved						



This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.



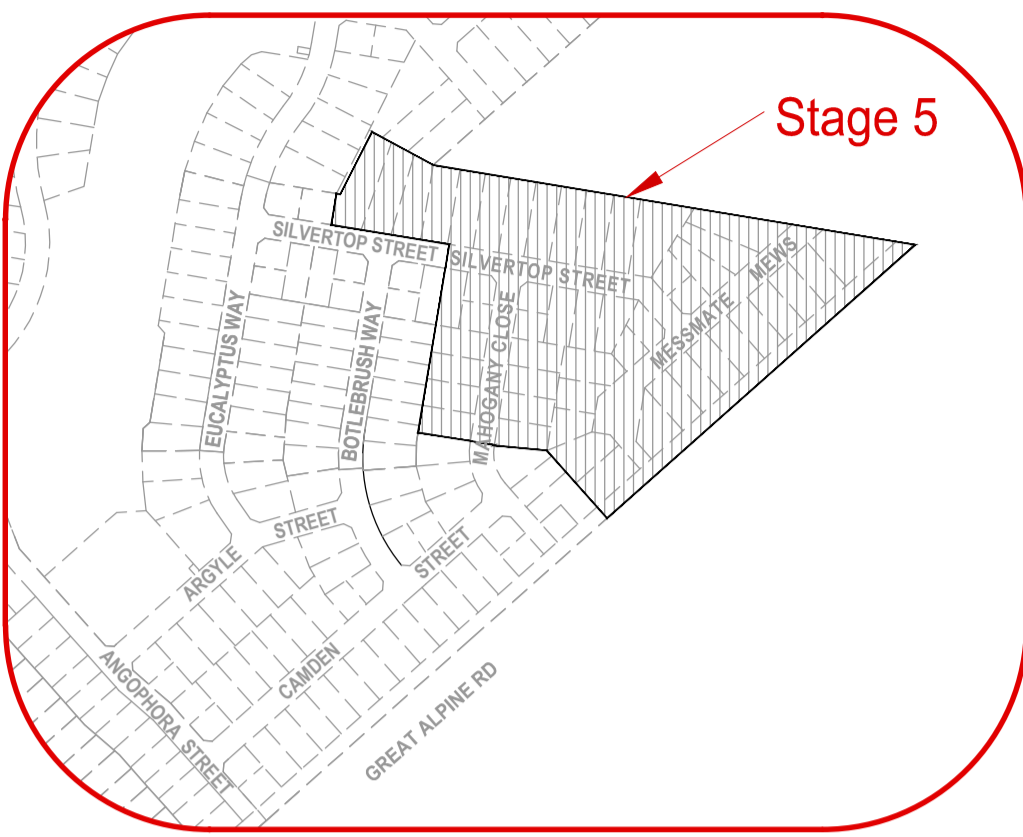
PROPOSED MAINTENANCE HOLE BASE ARRANGEMENT (1050Ø)

ISSUED FOR CONSTRUCTION

				Designed	S.Baral Date: 10/11/2022	AUTH REF:	547-2009-P	 Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004 +61 3 9860 0380 hello@marshal.melbourne marshal.melbourne	 EAST GIPSSLAND WATER EAST GIPSSLAND SHIRE COUNCIL BROOKFIELD LAKES ESTATE - STAGE 5 SEWER RETICULATION MANHOLE LAYOUT DETAILS	Scale: 1:25 @ A3
				Drawn	S.Baral Date: 10/11/2022	MM REF:	35753/5			Sheet: 05 of 05
				Checked	G.Sheath Date: 10/11/2022	Melway Reference	628 J5			Drawing No.: 547-2009-P
Rev	Description			Date	Approved	Checked	Date	Authorised	Date	Rev
A	Preliminary Issue			02/12/2022	GS			G.Sheath	10/11/2022	A
	1	2	3	4	5	6	7	8	9	10

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work.
 Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.

DESIGN HEAD: 113 m
 ZONE: RESIDENTIAL
 TEST PRESSURE: 1418 kPa



LOCALITY PLAN

SCALE: 1:10,000
 MELWAYS: 628 J5



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.

WARNING

BEWARE OF ASBESTOS
 SOME UNDERGROUND SERVICES MAYBE CONSTRUCTED FROM ASBESTOS CONTAINING MATERIAL. CONTACT THE SUPERINTENDENT FOR INSTRUCTIONS ON HOW TO MANAGE ANY POTENTIAL ASBESTOS HAZARD

FOR THE DURATION OF PROCLAIMED WATER RESTRICTIONS, THE CONTRACTOR SHALL CONFORM WITH THE RESTRICTIONS AND ANY OTHER WATER CONSERVATION REQUIREMENTS IMPOSED BY THE WATER AGENCY.

General Notes:

- Only contractors accredited by East Gippsland Water to WC1 & RC1 shall be eligible to construct these works.
- Only products approved and catalogued by the Water Agency shall be used.
- Works must be constructed according to WSA 03- 2011 MRWA edition. The Contractor shall ensure that they are conversant with all current revisions, amendments and updates that the relevant Water Agency has made to their standards.
- DW assets shall only be constructed after deeper assets affecting the water mains have been constructed (eg: sewerage & drainage assets).
- This design is to be read in conjunction with road and drainage plans.
- The Contractor shall obtain a road opening permit for any works within the road reserve and comply with all requirements of the road owner.

Survey, Set Out and Asset Recording

- Temporary Bench Marks (TBM) for the set out of works to the Australian Height Datum (AHD) are provided in the design drawings.
- All levels are in metres to AHD.
- All co-ordinates are in metres to the Map Grid of Australia (MGA 55- 94).
- The Contractor is directly responsible for ensuring the project set out is consistent with the design. Should actual site conditions conflict in any way with that documented, the Contractor shall contact the Superintendent for clarification before proceeding.
- The Contractor is to engage a suitably qualified and experienced Surveyor to undertake asset recording of the work. All surveyor works and data recording shall be undertaken in accordance with the MRWA survey manual.
- All specific pipe materials (eg: PVC-M) shall be indicated in the As Constructed information

Products and Materials (Refer Table 1 & 2)

- No additional notes.

Appurtenances (Fittings- Refer Table 3)

- Fitting details including DI fittings, Hydratech hydrants etc. to be in accordance with EGW tech bulletins. Hydratech Hydrants to be used as per EGW Technical Bulletin #002. Unless noted otherwise, fittings on PVC mains to be DI and fittings on PE mains to be PE. All valves are to be below ground & inline as per std drawings MRWA-W-300, 301 & 302.

Water Main Alignment, Trenching & Cover (Refer Table 5 for alignment)

- Offsets of mains from property boundaries shall be; min 600mm (mains < DN100) and min 1m (mains ≥ DN100).
- All water mains shall pass over drains and sewers unless shown otherwise in the design drawings.
- Mains to have a minimum cover of 600mm in accordance with EGW requirements.
- For typical sections refer MRWA-W-202 Fig 202-A (Typical 2 Pipe shared trench) and MRWA-W-201 Fig 201-A & 201-B.

Embedment

- Where Trench Stops & Bulkheads are required, Cement Stabilised Embedment shall be used as per MRWA-W-203, Type B, Table 203-B, Item 1.
- Unless noted otherwise Type A Embedment to be used as per MRWA-W-203 (Type A).

Backfill

- Trafficable backfill shall be completed as per MRWA-W-201, Table 201-A and the current version of the MRWA Backfill Specification
- Non trafficable backfill shall be completed as per MRWA-W-201, Table 201-B and the current version of the MRWA Backfill Specification.

Thrust Restraint (Refer Table 6)

- Thrust restraints have been designed on the basis of the AHBP (ground strength) nominated in TABLE 6. The Contractor shall confirm the actual ground conditions and discuss with the Superintendent any ground conditions which are found to be different to that nominated. INLINE restraints will require reinforcement (as per MRWA-W-205 Fig A-H to A-K). PLAIN restraints will not require reinforcement. (as per MRWA-W-205 Fig A-A to A-D).
- Trench Stops can be either Earthwork or Bagged as per MRWA-W-209 Details C-F. Locations shown on Drg W01, Table 3 and on Detail Plans.
- Concrete Bulkhead as per MRWA-W-209 Details A & B. Locations shown on Drg W01, Table 3 and on Detail Plans.
- Thrust restraints for PE pipe as per MRWA-W-205A 205A-L.

Property Services

- All property services to be wrapped in tracer wire.

Connections (All types)

- All property service connections to new residential ≤ DN150 PVC reticulation mains are to be completed using pretapped connectors.
- All property service connections to new residential ≥ DN225 to DN300 PVC or ≤DN355 PE reticulation mains to have minimum 500mm separation between tappings.

Other Services (Ref- Table 5 & 7)

- To receive the most up to date information prior to construction, "Dial before you Dig" shall be undertaken to aid in the location of other services. Other services shall be carefully located prior to full excavation at the contractor's cost. Any clashes of proposed new works with other assets shall be reported to the Superintendent immediately for clarification.
- Clearances to other services shall be as per Table 7 and Table 5.5 of WSA03- 2011 MRWA edition. These clearances shall apply to surface covers as well as underground assets.

Earthworks and Retaining Walls:

- In areas subject to earthworks, construction of water assets shall not commence until earthworks and retaining walls has been completed unless written approval has been given by the Water Authority.

Testing, Asset Acceptance and Live Connections

- Post construction activities of DW such as swabbing, water quality testing, pressure testing and chlorination shall be carried out in accordance with WSA03-2011 MRWA edition and the MRWA Water Quality Compliance Specification. All test results shall be documented and reported to the Superintendent.
 - The Water Agency shall be notified in writing **2 full working days** in advance of testing being undertaken.
 - Both ends of DW main to meter property services shall be inspected by the Water Agency. The Water Agency shall be notified in writing **2 full working days** in advance of this inspection being carried out.
 - N/A
 - The Water Agency shall be notified in writing 10 full working days in advance of connection to the live network being undertaken. Shut down work shall be as short as practical and scheduled to commence at 9am on working days with completion to occur no later than 4pm. In industrial and commercial areas, the impact on business shall be considered and it may be necessary to carry out the work outside normal working hours. Also refer to EGW Standard Operating Procedure SOP 038 (Planned Shutdowns).
 - Valves connecting new assets to the Water Agency's live system shall not be operated by the Contractor.
- Boring**
- Refer MRWA-W-210 Notes G & H for grouting of annulus for bored sections.

TABLE 7. Vertical Clearances

Existing or proposed Service	Minimum vertical clearance (mm)	Existing or proposed Service	Minimum vertical clearance (mm)
Water mains < DN375	150	Electricity conduits and cables	225
Water mains >DN375	300	Stormwater drains & pits	150
Gas mains	150	Sewers - gravity	500
Teleco conduits and cables	150	Sewers - pressure & vacuum	300

- Vertical clearance between water mains shall depend on the larger main diameter.
- Water mains shall cross over sewers and drains unless shown otherwise.
- Maintain additional clearance from High Voltage electrical cables to allow for a protective barrier and marking.

TABLE 1. New Pipe Schedule

New Work - PVC Drinking Main							New Work - PE Drinking Main					
Size (DN)	Type	Series	Class	Pressure Rating	Joint Type	Length	Size (DN)	Type	Class	Pressure Rating	Joint Type	Length
100	PVC-M	2	PN16	PN16/SDR11	RRJ	142.2	125	PE100	PN16	PN16/SDR11	BW	172.4
150	PVC-M	2	PN16	PN16/SDR11	RRJ	127.7	180	PE100	PN16	PN16/SDR11	BW	161.4
							25	PE100	PN16	PN16/SDR11	BW	Property Services

BW = Butt Welded (Electrofusion couplings are only to be used in exceptional circumstances where specific approval has been requested from, and granted by, EGW).

TABLE 2. Pipe Material Schedule

MATERIAL	Reference	MATERIAL	Reference
PVC-M	WSA-PS-209	PE (retic & submain)	WSA-PS-207
PVC-O	WSA-PS-210	PE (property services)	WSA-PS-215

TABLE 3. Hydrant, & Washout Schedule

Main Size	Fitting Type	Ownership	Location	Street	Location
150	WASHOUT	DW - EGW	End of Line	MESSMATE MEWS	North of Lot 200
150	HYDRANT	DW - EGW	In Line	SILVERTOP STREET	In front of Lot 204
100	HYDRANT	DW - EGW	In Line	MAHOGANY CLOSE	In front of Lot 178
100	HYDRANT	DW - EGW	In Line	MESSMATE MEWS	In front of Lot 196
150	HYDRANT	DW - EGW	In Line	MESSMATE MEWS	In front of Lot 190

TABLE 5. Service Alignment Schedules (offsets in m)

ROAD NAME	ROAD RESERVE WIDTH	SERVICES OFFSET SCHEDULE				
		GAS	WATER	NBN	ELECTRICITY	SEWER
MESSMATE MEWS	16.00	2.10 E	2.60 E	2.00 W	2.50 W	-
SILVERTOP STREET	16.00	2.10 N	2.60 N	2.00 S	2.50 S	-
MAHOGANY CLOSE	16.00	2.10 E	2.60 E	2.00 W	2.50 W	-

TABLE 4. Curved Pipe & Deflection Schedule

Location	Method	Offset / Radius (m)	Total Pipe Length (m)	Pipe Lengths (m)

TABLE 6. Thrust Restraint Schedule

Location	Type	Thrust	AHBP (kPa) USED	Area (m2)	No. of Locations
A	IN LINE	DN150 VALVE + DN180 PE THERMAL SHRINKAGE	50	1.49	1
B	IN LINE	DN125 PE THERMAL SHRINKAGE	50	0.71	2
C	PLAIN	DN150 WASHOUT	50	0.68	1
D	IN LINE	DN150X100 TEE	50	0.68	1

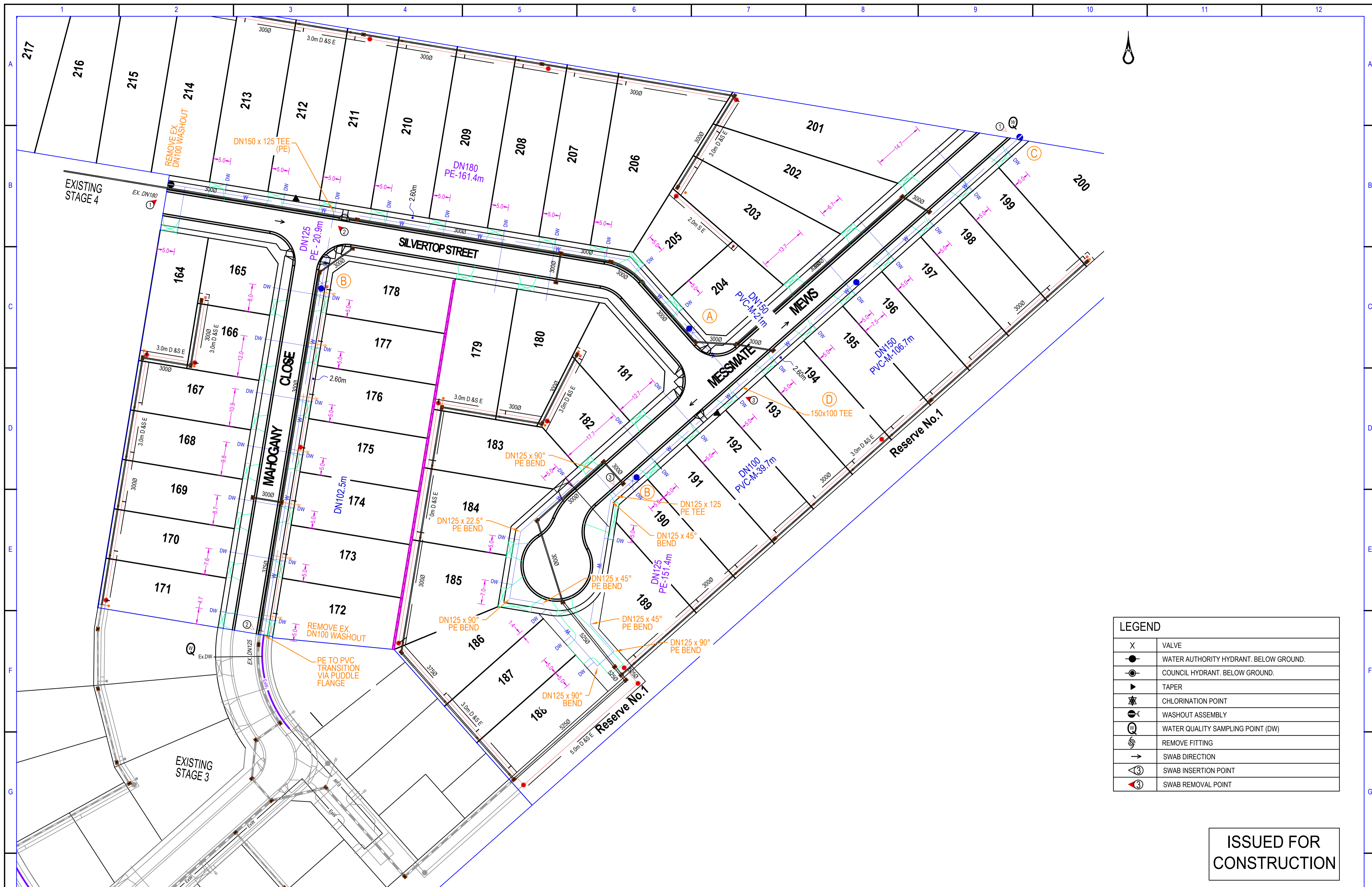
NOTE: Pipe temperature of 25° allowed

PRELIMINARY

								EAST GIPPSLAND WATER EAST GIPPSLAND SHIRE COUNCIL BROOKFIELD LAKES ESTATE - STAGE 5 135 GREAT ALPINE ROAD, LUCKNOW WATER RETICULATION NOTES, SCHEDULES & LOCALITY PLAN				Scale: As Shown Sheet: 01 of 02 Drawing No.: Auth Ref: W01		Rev A	
Designed	S.Baral Date: 01/09/2022	Project Number	35753/5	Drawn	S.Baral Date: 01/09/2022	Melway Reference	628 J5	Checked	G.Sheath Date: 01/09/2022	Authorised	G.Sheath Date: 01/09/2022	Preliminary Issue Date: 02/12/2022 G.S.			
Rev	1	2	3	4	5	6	7	8	9	10	11	12			

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.



LEGEND	
X	VALVE
●	WATER AUTHORITY HYDRANT. BELOW GROUND.
⊙	COUNCIL HYDRANT. BELOW GROUND.
▶	TAPER
⊙	CHLORINATION POINT
⊙	WASHOUT ASSEMBLY
⊙	WATER QUALITY SAMPLING POINT (DW)
⊙	REMOVE FITTING
→	SWAB DIRECTION
⊙	SWAB INSERTION POINT
⊙	SWAB REMOVAL POINT

**ISSUED FOR
CONSTRUCTION**

<p style="font-size: 24px; font-weight: bold; margin: 0;">marshall</p> <p style="font-size: 10px; margin: 0;">Suite 201, Level 2 448 St Kilda Road Melbourne Victoria 3004 +61 3 9860 0380 hello@marshallmelbourne marshallmelbourne</p>			<p style="font-weight: bold; margin: 0;">EAST GIPPSLAND WATER</p> <p style="font-size: 8px; margin: 0;">EAST GIPPSLAND SHIRE COUNCIL BROOKFIELD LAKES ESTATE - STAGE 5</p> <p style="font-weight: bold; margin: 0;">WATER RETICULATION DETAIL PLAN</p>		<p>Scale: As Shown</p> <p>Sheet: 02 of 02</p> <p>Drawing No: W02</p> <p>Rev: A</p>
<p>Designed: S.Baral Date: 01/09/2022</p> <p>Drawn: S.Baral Date: 01/09/2022</p> <p>Checked: G.Sheath Date: 01/09/2022</p>	<p>Project Number: 35753/5</p> <p>Melway Reference: 628 J5</p> <p>Authorised: G.Sheath Date: 01/09/2022</p>	<p>02/12/2022</p> <p>G.S.</p> <p>Approved</p>	<p>Prepared: Preliminary Issue</p> <p>Date: 02/12/2022</p> <p>Approved: G.S.</p>		

This plan (or the data transmitted herewith) has been prepared to facilitate the construction & should not be used for any other purpose. Marshal accepts no responsibility whatsoever for the use of unapproved plans in any construction or for any commercial purposes. Set-out dimensions of all design lines, grid lines, control lines, recovery marks & bench marks should be verified & confirmed against the latest information at construction. Marshal is to be notified immediately of any error or discrepancy and the matter resolved prior to the commencement or continuation of any work. This note is an integral part of this plan/data. Reproduction of this plan or any part of it without this note being included in full will render the information shown on such reproduction invalid & not suitable for use.

Disclaimer - Marshal therefore disclaims any liability whatsoever & howsoever caused for loss or damage arising from a third party's misuse of the plan/data (whether inadvertent or not) caused by the failure to inform any such third party of the limitations which apply to the information contained in this plan/within the accompanying data.