

REDBANK, NORTH RICHMOND RIDGETOPS 2 PROPOSED CIVIL WORKS FOR SUBDIVISION WORKS CERTIFICATE (HAWKESBURY CITY COUNCIL - DA0498/18)

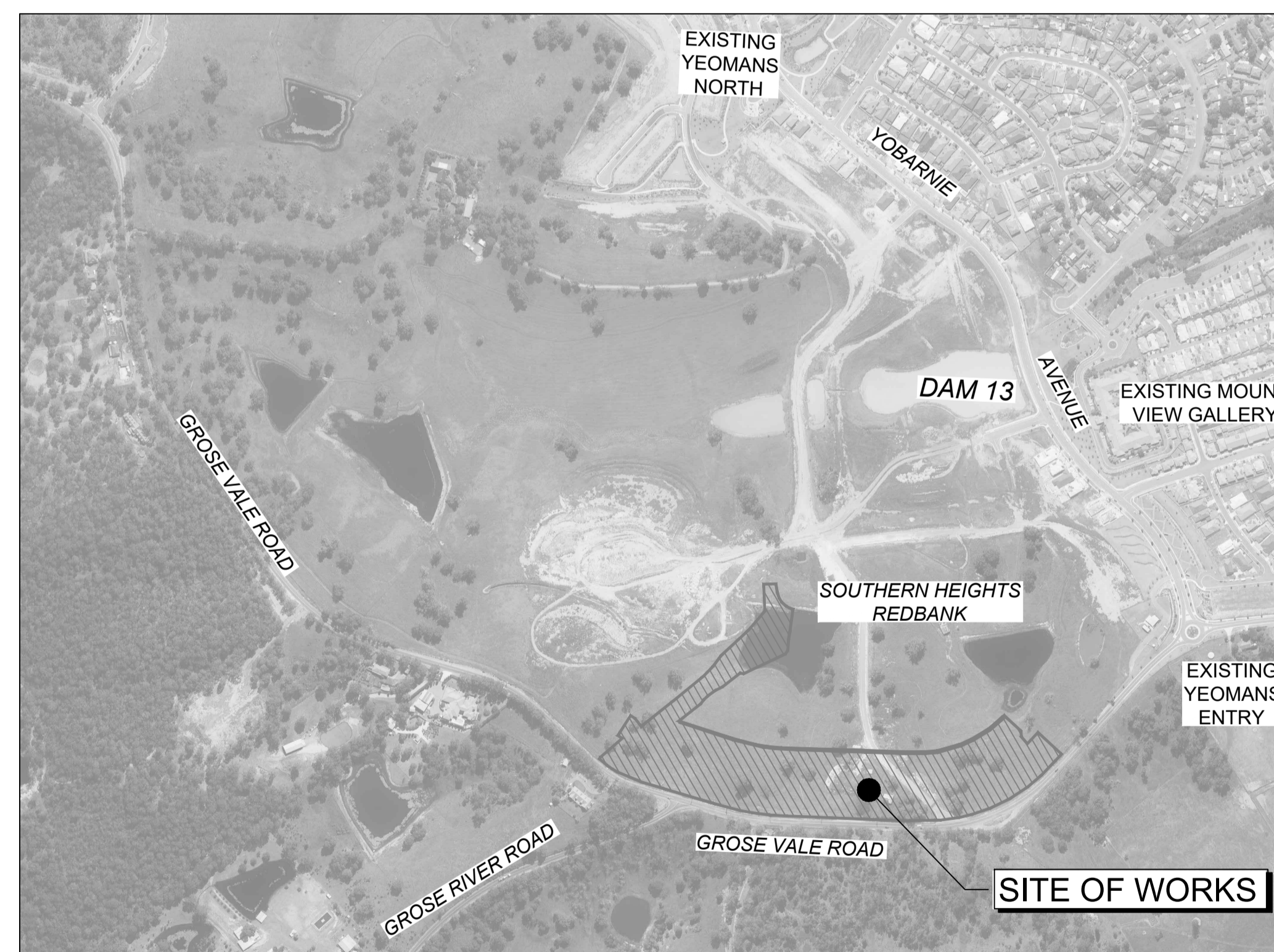
SUBDIVISION WORKS CERTIFICATE

Certificate No.	20130299SW77
Date of Issue	16/05/2022
Issuing Officer	<i>D. Resta</i>
Accreditation No.	BDC3367

These plans/specifications form part of the certificate issued 16th May 2022

No works are to occur outside of the property boundary unless written approval from Hawkesbury City Council has been received.

WORK AS EXECUTED SHOWN IN RED
SIGNATURE.....*PR*.....
VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800



Survey By:
VINCE MORGAN SURVEYORS
REGISTERED SURVEYORS
1/77 UNION ROAD PENRITH NSW 2750
Ph. (02) 4721 5293
REF: NORTH RICHMOND - DETAIL SURVEY UPDATE 15 MARCH 2017 & 5th MAY 2017, 11 DEC 2019
LOT LAYOUT PLAN OF SUBDIVISION REF: 22a-REDBANK-PRO-DP-1266750-PLAN-DRAFT-201203

Plotted: 29 April, 2022 4:59:10 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RTP\2110185-12-CC4000.dwg

A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

J. WYNDHAM PRINCE
CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

PO Box 4366 PENRITH WESTFIELD NSW 2750
P 02 4720 3300 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT:

STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**

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**REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
COVER SHEET**

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN:

PROJECT No:
110185-12

SHEET No:
CC4000

PLAN No: 110185-12-CC4000

SUBDIVISION WORKS CERTIFICATE

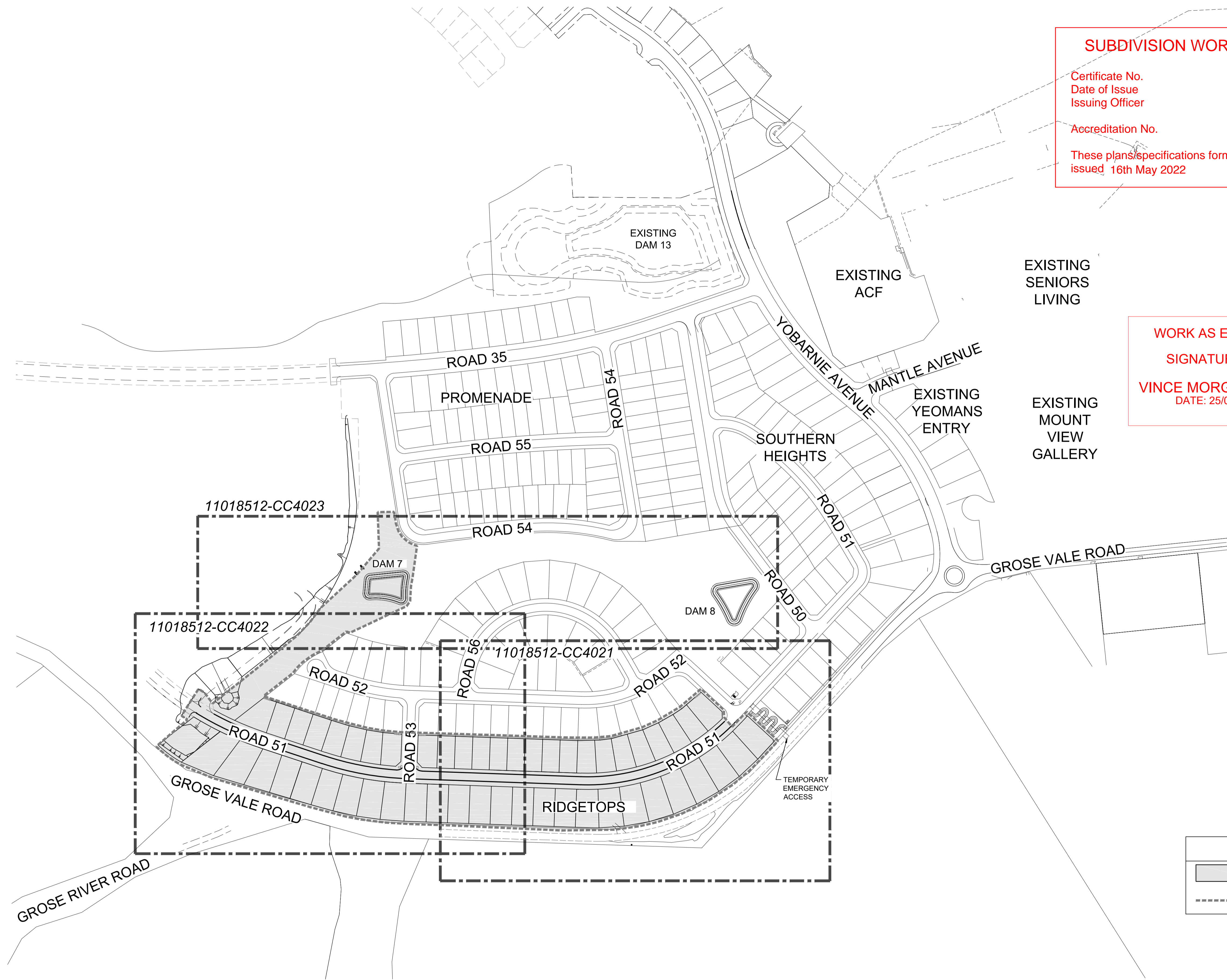
Certificate No. 20130299SW77
 Date of Issue .16/05/2022
 Issuing Officer *D. Restin*
 Accreditation No. BDC3367

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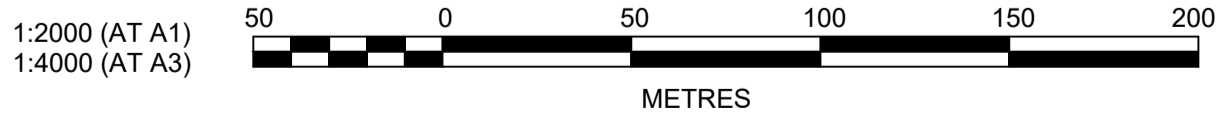
WORK AS EXECUTED SHOWN IN RED

SIGNATURE.....*PR*.....

VINCE MORGAN SURVEYORS PTY LTD
 DATE: 25/01/23 REF:16800



LEGEND	
	LIMIT OF WORKS
	SITE BOUNDARY



Plotted: 4 May 2022 3:09:11 PM. File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RTP2\110185-12-CC4002.dwg

REV	DESCRIPTION	DES	DRN	CKD	APR	DATE
B	ROAD 51 RELOCATED	MP	JM	JB	CM	29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

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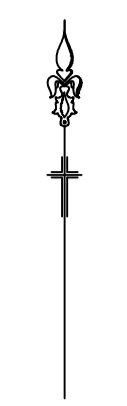
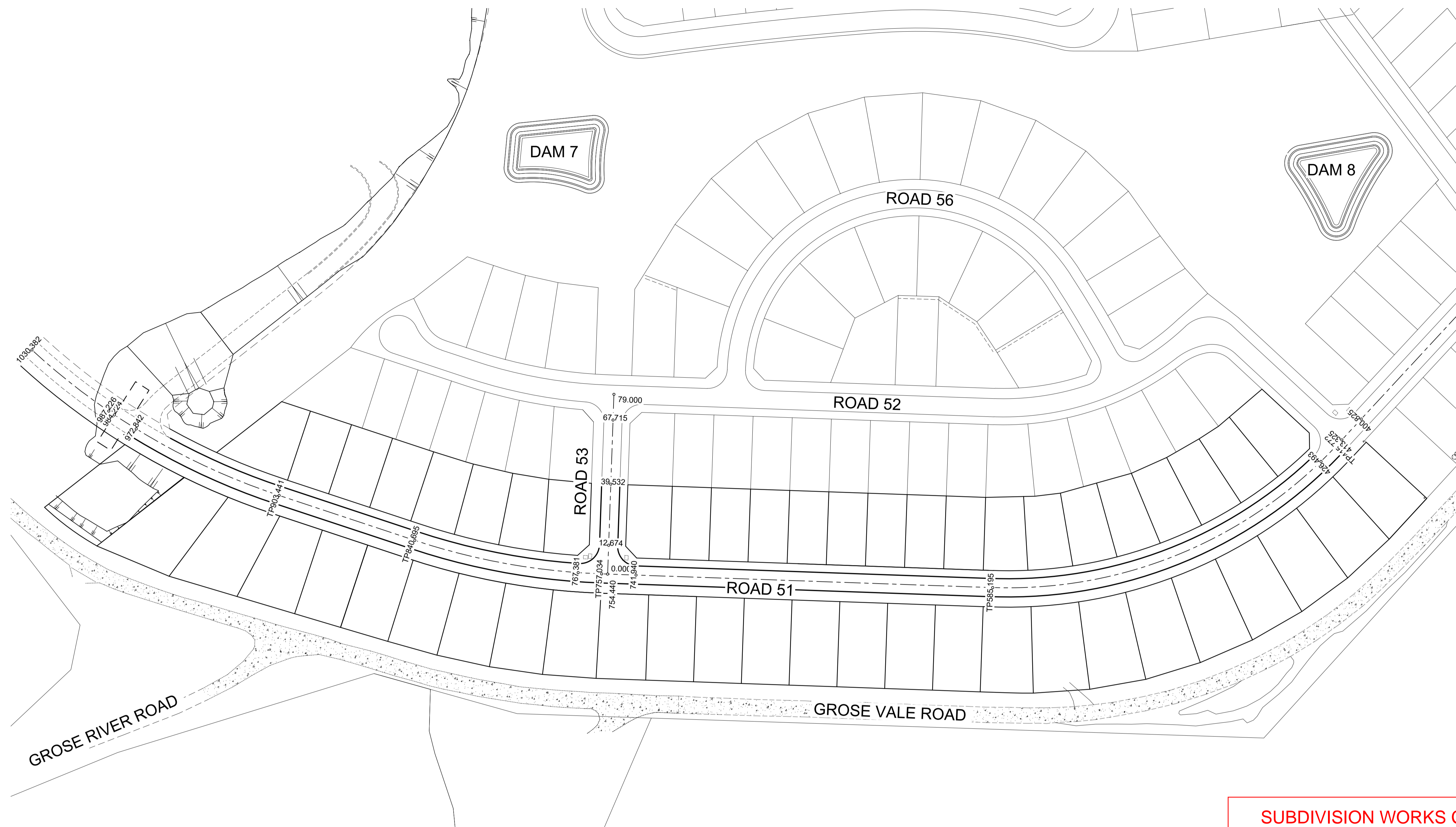
REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC
 GENERAL LAYOUT PLAN

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4002

PROJECT No: **110185-12**
 SHEET No: **CC4002**

B

Plotfile: 4 May 2022 10:55:05 AM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RTP2\110185-12-CC4003.dwg



ROAD 51					
CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH
300.02	286796.91	6281176.69	222°48'55.65"		
415.79	286718.22	6281091.76	222°48'55.65"		
500.5	286656.83	6281025.5		197.3	169.42
585.21	286596.55	6281028.68	272°00'57.16"		
757.05	286394.82	6281034.72	272°00'57.16"		
798.88	286352.73	6281036.2		294	83.66
840.71	286312.75	6281049.44	288°19'12.69"		
903.46	286253.19	6281069.16	288°19'12.69"		
966.93	286192.01	6281089.42		299	126.94
1030.4	286144.61	6281133.08	312°38'42.83"		

ROAD 53			
CHAINAGE	EASTING	NORTHING	BEARING
0	286397.43	6281034.63	2°00'57.16"
79	286400.21	6281113.58	2°00'57.16"

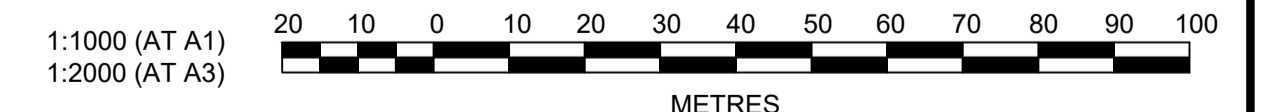
WORK AS EXECUTED SHOWN IN RED
 SIGNATURE.....*PR*.....
VINCE MORGAN SURVEYORS PTY LTD
 DATE: 25/01/23 REF:16800

SUBDIVISION WORKS CERTIFICATE
 Certificate No. 20130299SW77
 Date of Issue .16/05/2022.....
 Issuing Officer *D. Restar*
 Accreditation No. BDC3367
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UTILITIES SHOWN ARE DIAGRAMMATIC ONLY. CONTRACTORS ARE RESPONSIBLE TO LOCATE AND AVOID DAMAGE TO THEM AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDE LINES & STANDARDS. NOTE: UTILITIES SHOWN MAY NOT INCLUDE ALL SERVICES WITHIN THE LIMIT OF WORKS



UNDERGROUND SERVICE CABLES IN VICINITY. EXERCISE EXTREME CAUTION DURING EXCAVATION. CONTACT "DIAL BEFORE YOU DIG" PRIOR TO ANY CONSTRUCTION WORK



REV	DESCRIPTION	MP	JM	JB	CM	DATE
B	ROAD 51 RELOCATED					29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

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CLIENT:

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REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC
 ROAD SETOUT PLAN
 AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4003

PROJECT No:
110185-12
 SHEET No:
CC4003
 B

EASEMENT NOTES

(A) EASEMENT FOR PADMOUNT STATION 2.75m x 5.5m AND VARIABLE.

(B) RESTRICTION ON THE USE OF LAND IN RELATION TO FIRE RATINGS OF BUILDINGS MEASURED 3m FROM THE SUBSTATION PLINTH.

(C) RESTRICTION ON THE USE OF LAND IN RELATION TO SWIMMING POOLS MEASURED 5m FROM THE SUBSTATION PLINTH.

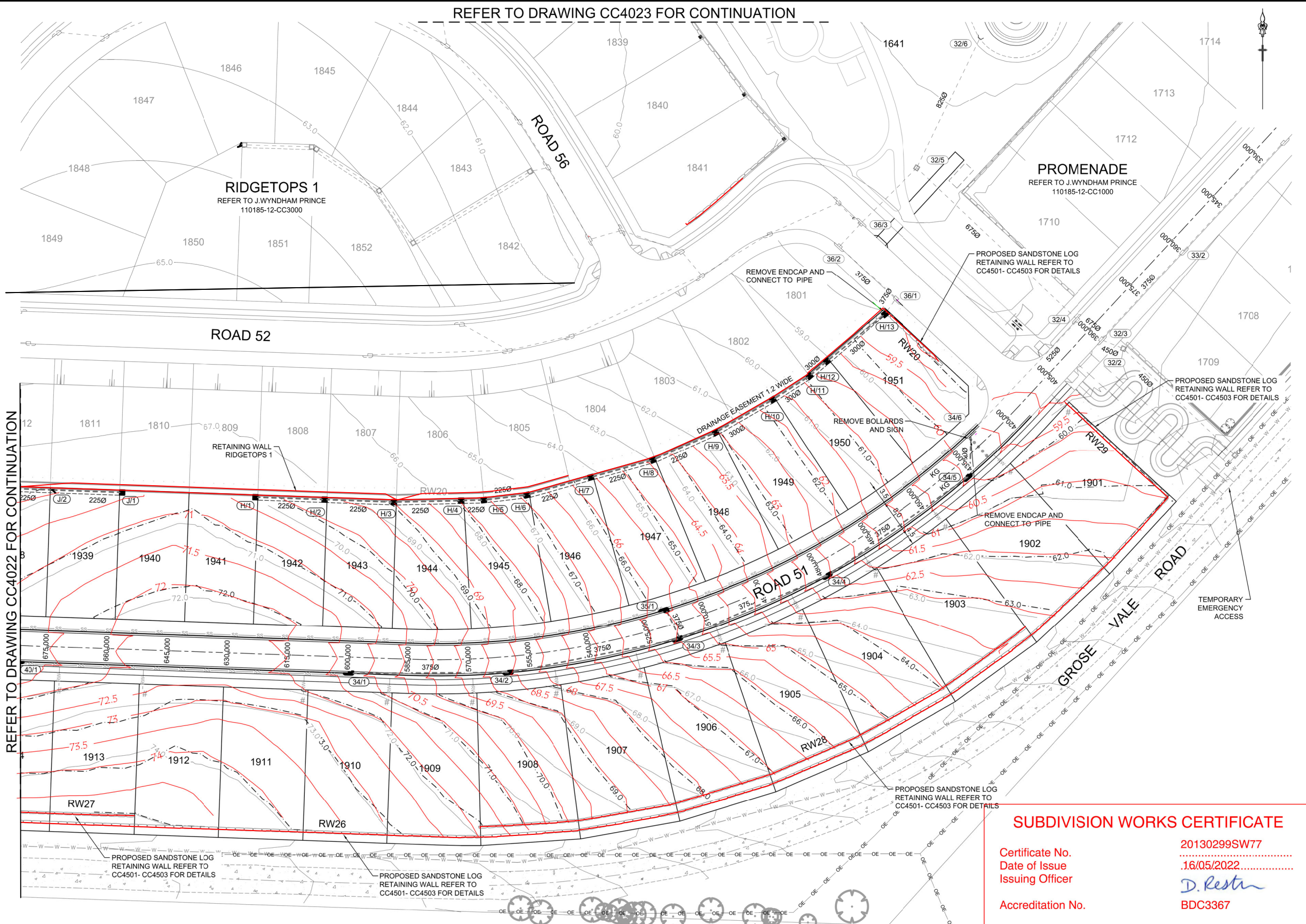
LEGEND

#-RW-# PROVIDE KERB ADAPTOR AND ROOF WATER CONNECTION TO KERB AND GUTTER TO HAWKESBURY CITY COUNCIL DRAWING SD39

PROPOSED CONCRETE PATH REFER TO SEPARATE LANDSCAPE PLANS BY ARTERRA FOR DETAILS

LAYBACK NOTES

LAYBACKS IN KERB AND GUTTER FOR VEHICLE CROSSOVERS TO BE COMPLETED AT EACH LOT PRIOR TO SUBDIVISION WORKS PRACTICAL COMPLETION



REFER TO DRAWING CC4022 FOR CONTINUATION

REFER TO DRAWING CC4023 FOR CONTINUATION

Plotfile: 4 May 2022 11:02:16 AM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RT\2110185-12-CC4021.dwg

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SUBDIVISION WORKS CERTIFICATE

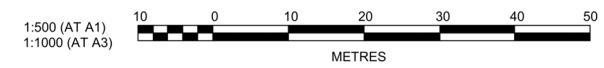
Certificate No. 20130299SW77

Date of Issue 16/05/2022

Issuing Officer D. Restin

Accreditation No. BDC3367

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B	ROAD 51 RELOCATED	MP	JM	JB	CM
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS
	AMENDMENT	DES	DRN	CKD	APR
					DATE
					29/04/22
					16/07/21

J. WYNDHAM PRINCE
CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

PO Box 4366 PENRITH WESTFIELD NSW 2750
P 02 4720 3300 W www.jwprince.com.au E jwpr@jwprince.com.au

CLIENT: **REDBANK**
NORTH RICHMOND

STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**

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REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
ENGINEERING PLAN
SHEET 1

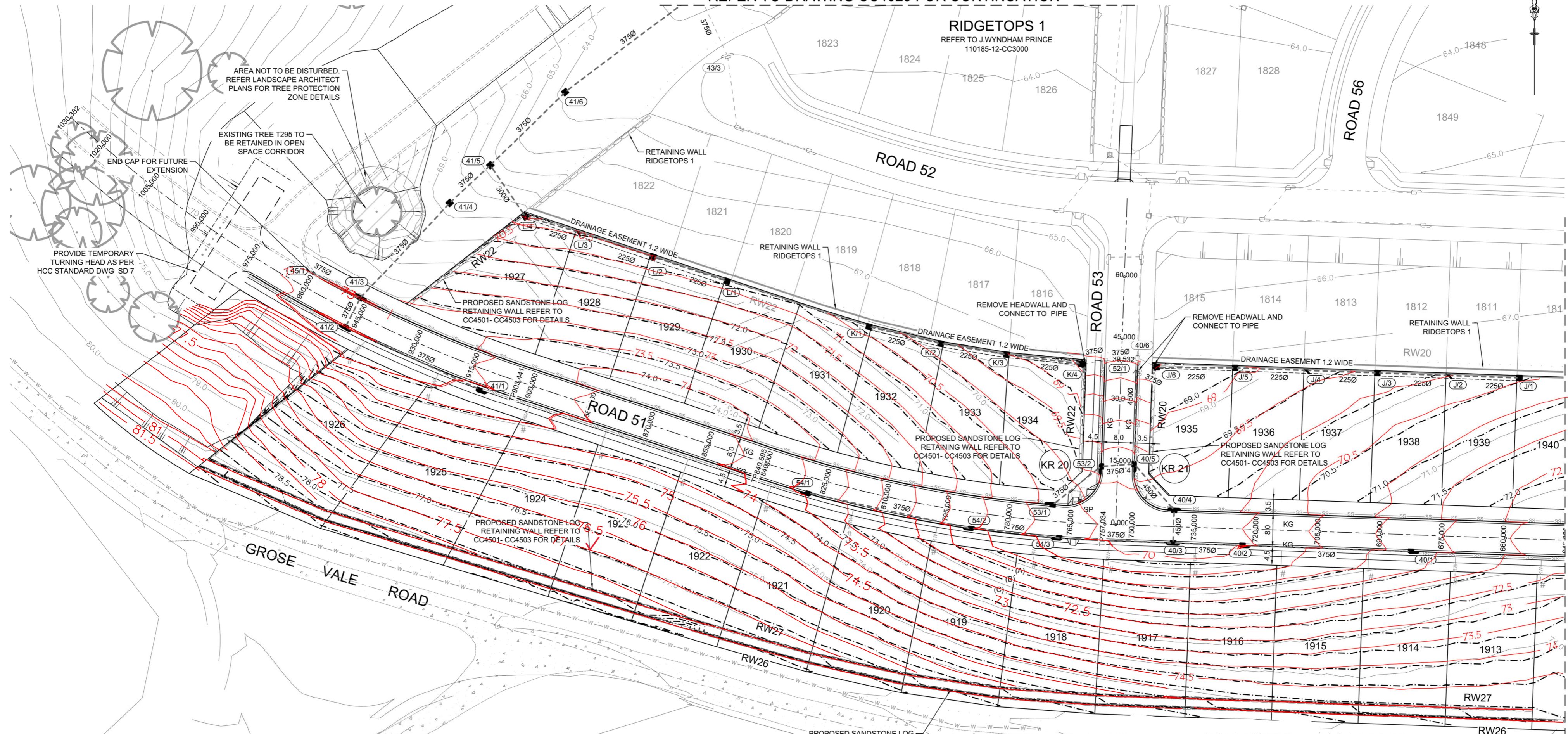
PROJECT No: 110185-12
SHEET No: CC4021

PLAN No: 110185-12-CC4021

PROJECT No:	110185-12
SHEET No:	CC4021
PLAN No:	110185-12-CC4021

B

REFER TO DRAWING CC4023 FOR CONTINUATION



REFER TO DRAWING CC4021 FOR CONTINUATION

SUBDIVISION WORKS CERTIFICATE

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 Date of Issue 16/05/2022
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WORK AS EXECUTED SHOWN IN RED

SIGNATURE *PR*

VINCE MORGAN SURVEYORS PTY LTD
 DATE: 25/01/23 REF: 16800

LAYBACK NOTES

LAYBACKS IN KERB AND GUTTER FOR VEHICLE CROSSOVERS TO BE COMPLETED AT EACH LOT PRIOR TO SUBDIVISION WORKS PRACTICAL COMPLETION

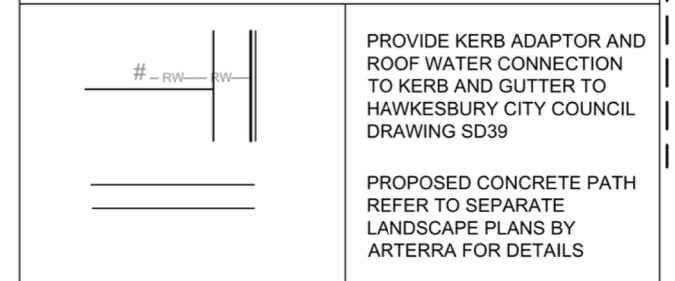
EASEMENT NOTES

- (A) EASEMENT FOR PADMOUNT STATION 2.75m x 5.5m AND VARIABLE
- (B) RESTRICTION ON THE USE OF LAND IN RELATION TO FIRE RATINGS OF BUILDINGS MEASURED 3m FROM THE SUBSTATION PLINTH.
- (C) RESTRICTION ON THE USE OF LAND IN RELATION TO SWIMMING POOLS MEASURED 5m FROM THE SUBSTATION PLINTH.

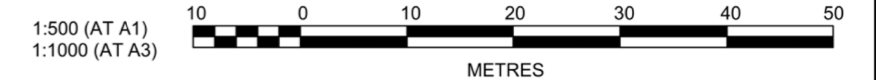
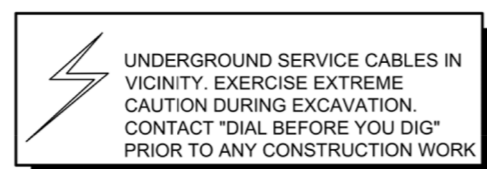
SIGNAGE NOTES

1. ALL SIGNS TO BE IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARD; AS 1743 - ROAD SIGNS AND COUNCIL'S SPECIFICATION UNLESS OTHERWISE SHOWN.
2. ROAD SIGNS ARE SIZE 'B', UNLESS OTHERWISE SHOWN. LOCATE OUTSIDE OF CLEAR ZONES.

LEGEND



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B	ROAD 51 RELOCATED	MP	JM	JB	CM	29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

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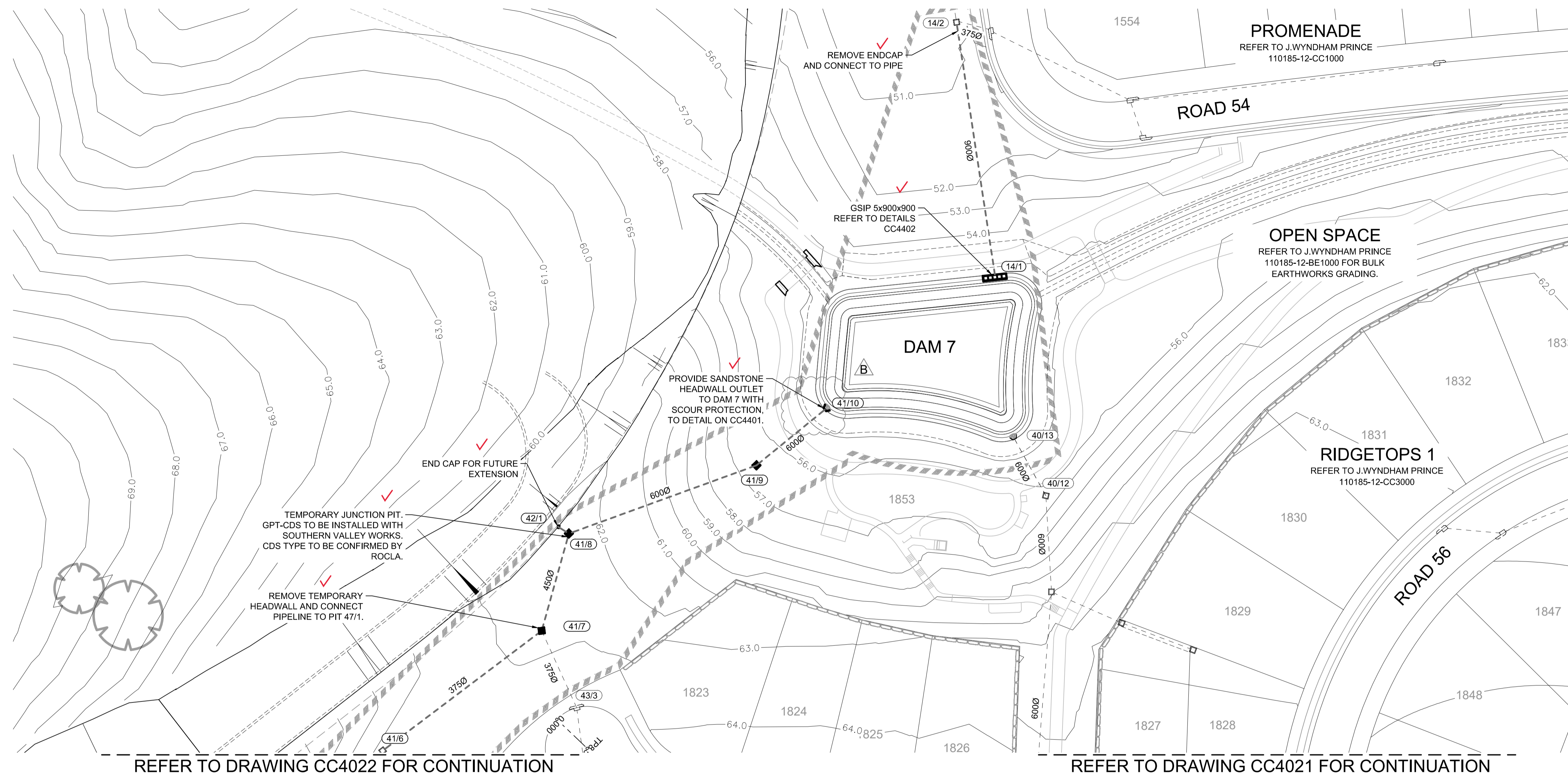
CLIENT: **REDBANK**
 NORTH RICHMOND

STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**
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REDBANK, NORTH RICHMOND RIDGETOPS 2 - SWC
 ENGINEERING PLAN SHEET 2
 AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4022

PROJECT No: **110185-12**
 SHEET No: **CC4022**
 B

Plotted: 29 April, 2022 5:01:25 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RTP\2110185-12-CC4023.dwg



REFER TO DRAWING CC4022 FOR CONTINUATION

REFER TO DRAWING CC4021 FOR CONTINUATION

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 VINCE MORGAN SURVEYORS PTY LTD
 DATE: 25/01/23 REF:16800

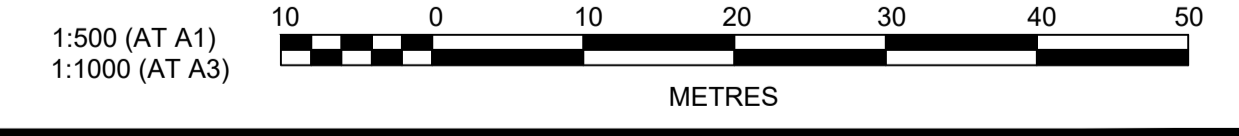
SUBDIVISION WORKS CERTIFICATE
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 Issuing Officer *D. Restu*
 Accreditation No. BDC3367
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LEGEND	
	PROVIDE KERB ADAPTOR AND ROOF WATER CONNECTION TO KERB AND GUTTER TO HAWKESBURY CITY COUNCIL DRAWING SD39
	PROPOSED CONCRETE PATH REFER TO SEPARATE LANDSCAPE PLANS BY ARTERRA FOR DETAILS

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REV	DESCRIPTION	DATE	BY	CHECKED	DATE
B	PRIVATE CERTIFIER COMMENTS	14/04/22	MP	MP	MS
A	ISSUED FOR CONSTRUCTION APPROVAL	16/07/21	MP	NM	RO
	AMENDMENT		DES	DRN	CKD
			APR		DATE

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**REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC**
 ENGINEERING PLAN
 SHEET 3

PROJECT No: **110185-12**
 SHEET No: **CC4023**
 PLAN No: 110185-12-CC4023

B

PAVEMENT NOTES

(ROAD 51)

- 2x10⁶ ESA (GEOTECHNICAL REPORT BY GEOTECHNIQUE, REF: 12261/31-AA-R1 DATED 4/12/2020)
- 50mm WEARING COURSE AC10
 - ONE COAT HOT BITUMEN FLUSH SEAL
 - 150mm DGB 20 BASE COURSE
 - 250mm SUB-BASE COURSE

NOTE:

SUBSOIL DRAINAGE TO BE PROVIDED UNDER KERBS ON BOTH SIDES OF THE ROAD EXCEPT WHERE STREET DRAINAGE IS PRESENT. REFER TO HCC STANDARD DRAWING No.SD3

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Accreditation No. BDC3367

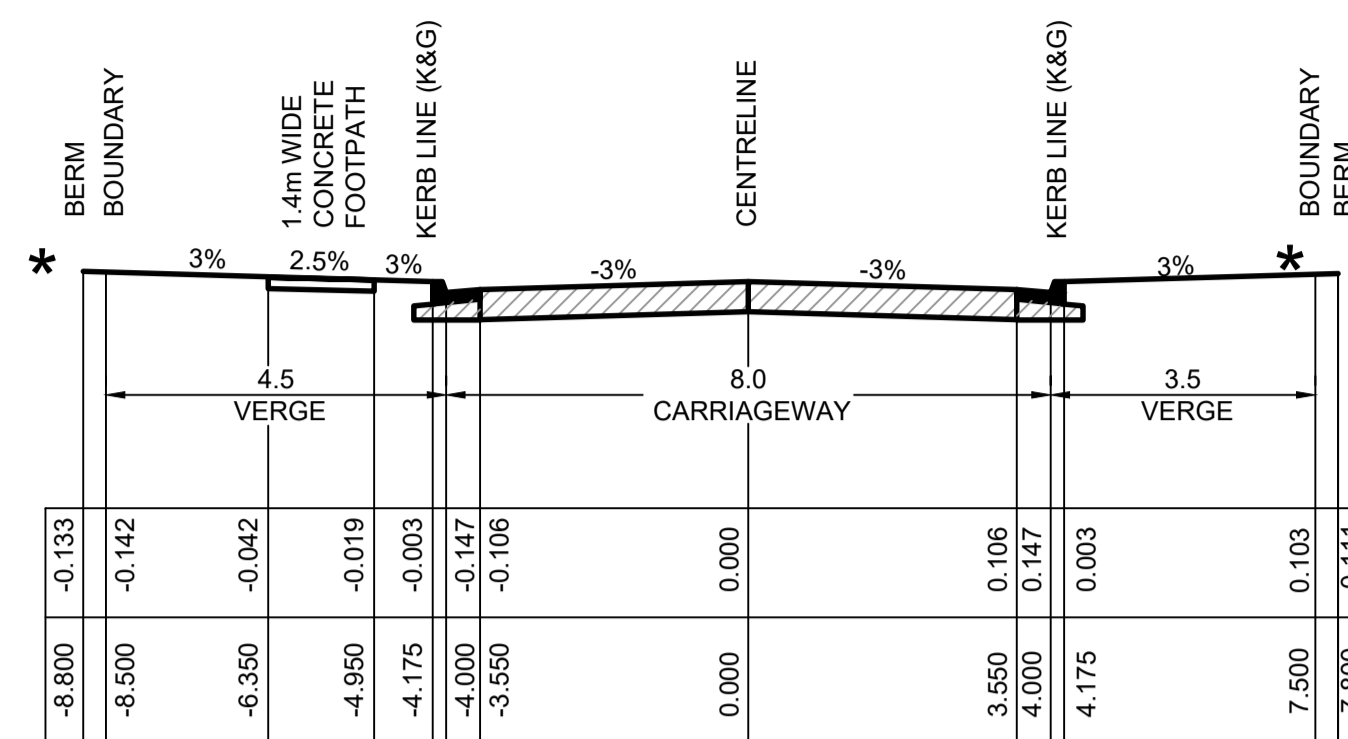
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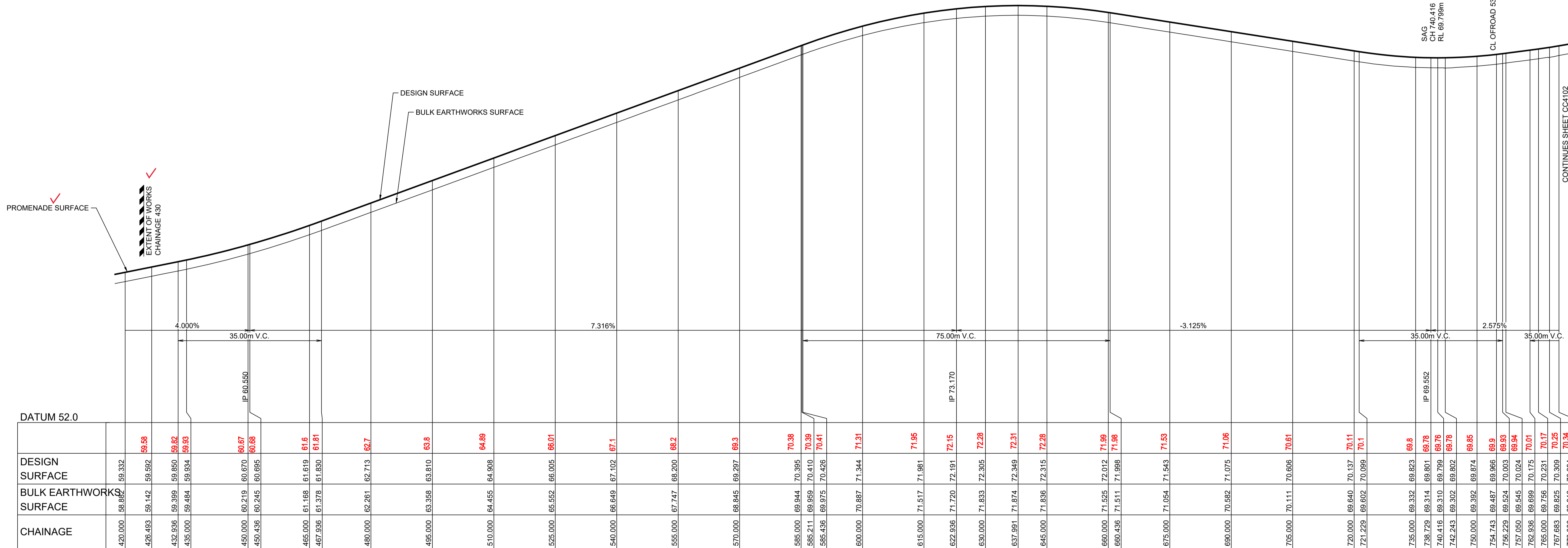
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VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800

* REFER TO ENGINEERING PLANS FOR SITE REGRADING

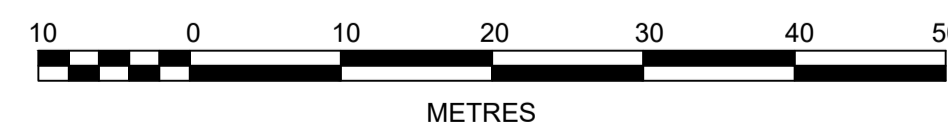


TYPICAL CROSS SECTION
ROAD No.51 (CH430 - END)
(16m ROAD RESERVE)
SCALE 1:100 NATURAL

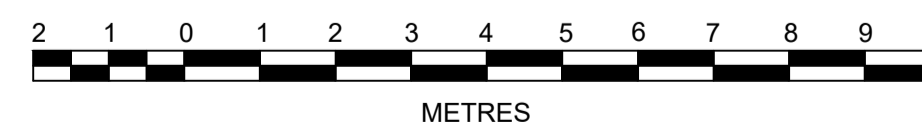


LONGITUDINAL SECTION ROAD 51M
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

1:500 (AT A1)
1:1000 (AT A3)



1:100 (AT A1)
1:200 (AT A3)



REV	DESCRIPTION	MP	JM	JB	CM	DATE
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	AMENDMENT	DES	DRN	CKD	APR	DATE

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REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
ROAD LONGITUDINAL SECTIONS
SHEET 1

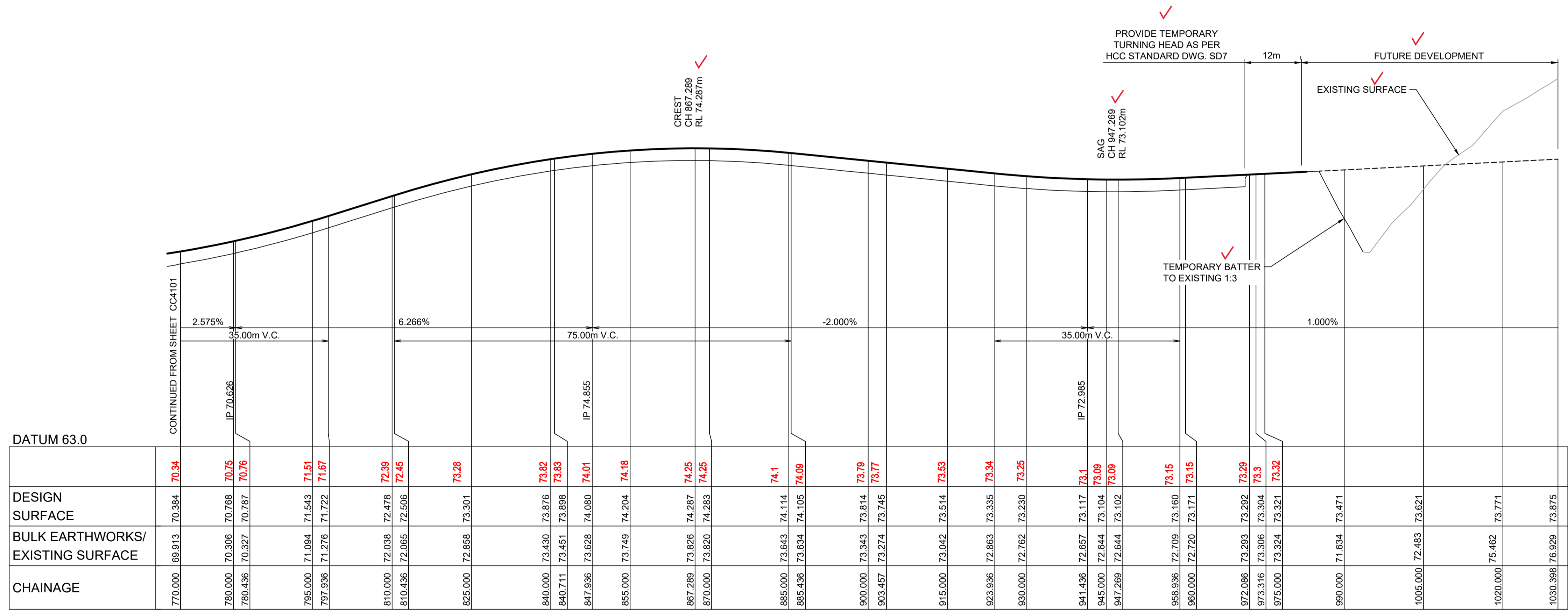
PROJECT No: 110185-12
SHEET No: CC4101

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4101

Plotfile: 4 May 2022 9:50:10 AM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CSOUTHERN HEIGHTS\4-RTP2\110185-12-CC4102.dwg

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CHAINAGE	770.000	780.000	780.436	795.000	810.000	810.436	825.000	840.000	840.711	847.936	855.000	867.289	870.000	885.000	885.436	900.000	903.457	915.000	923.936	930.000	941.436	945.000	947.269	966.936	960.000	972.086	973.316	975.000	990.000	1005.000	1020.000	1030.398
DESIGN SURFACE	70.34	70.384	70.768	71.51	72.39	72.46	73.28	73.82	73.83	74.01	74.18	74.25	74.1	74.09	73.79	73.77	73.53	73.34	73.25	73.1	73.09	73.09	73.15	73.15	73.29	73.3	73.32	73.471	73.621	73.771	73.875	
BULK EARTHWORKS/ EXISTING SURFACE	69.913	70.306	70.787	71.094	72.038	72.065	72.858	73.430	73.451	73.628	73.749	73.826	73.820	73.643	73.634	73.343	73.274	73.042	72.863	72.762	72.657	72.644	72.644	72.709	72.720	73.293	73.306	73.324	71.634	72.483	75.462	76.929

LONGITUDINAL SECTION ROAD 51M
 HORIZONTAL SCALE 1:500
 VERTICAL SCALE 1:100



AMENDMENT	DES	DRN	CKD	APR	DATE	
B	ROAD 51 RELOCATED	MP	JM	JB	CM	29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21

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 NORTH RICHMOND

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REDBANK, NORTH RICHMOND RIDGETOPS 2 - SWC
 ROAD LONGITUDINAL SECTIONS SHEET 2
 AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4102

PROJECT No: **110185-12**
 SHEET No: **CC4102**
 B

WORK AS EXECUTED SHOWN IN RED

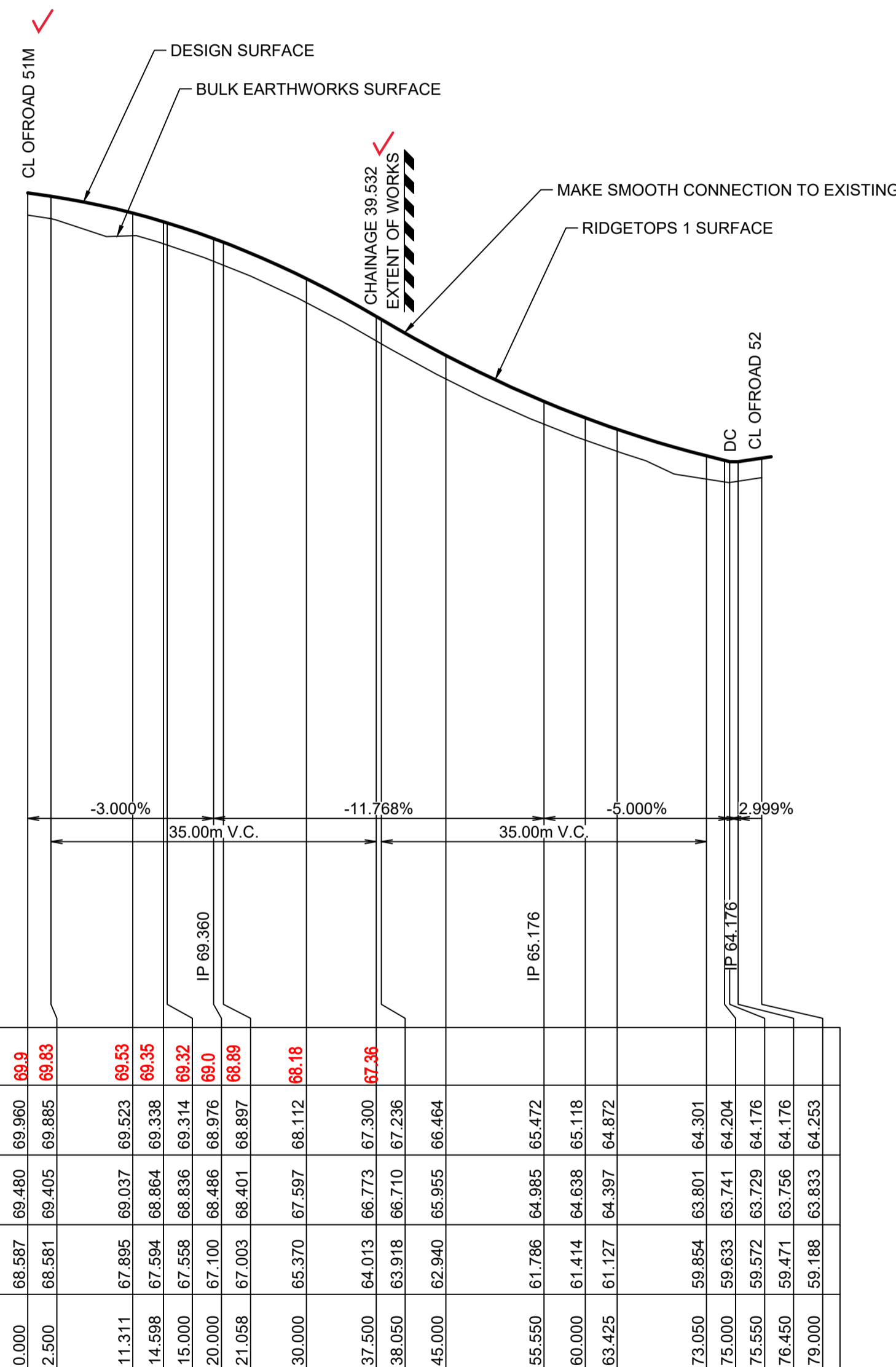
SIGNATURE.....*PR*.....

VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800

SUBDIVISION WORKS CERTIFICATE

Certificate No. 20130299SW77
Date of Issue 16/05/2022
Issuing Officer *D. Restin*
Accreditation No. BDC3367

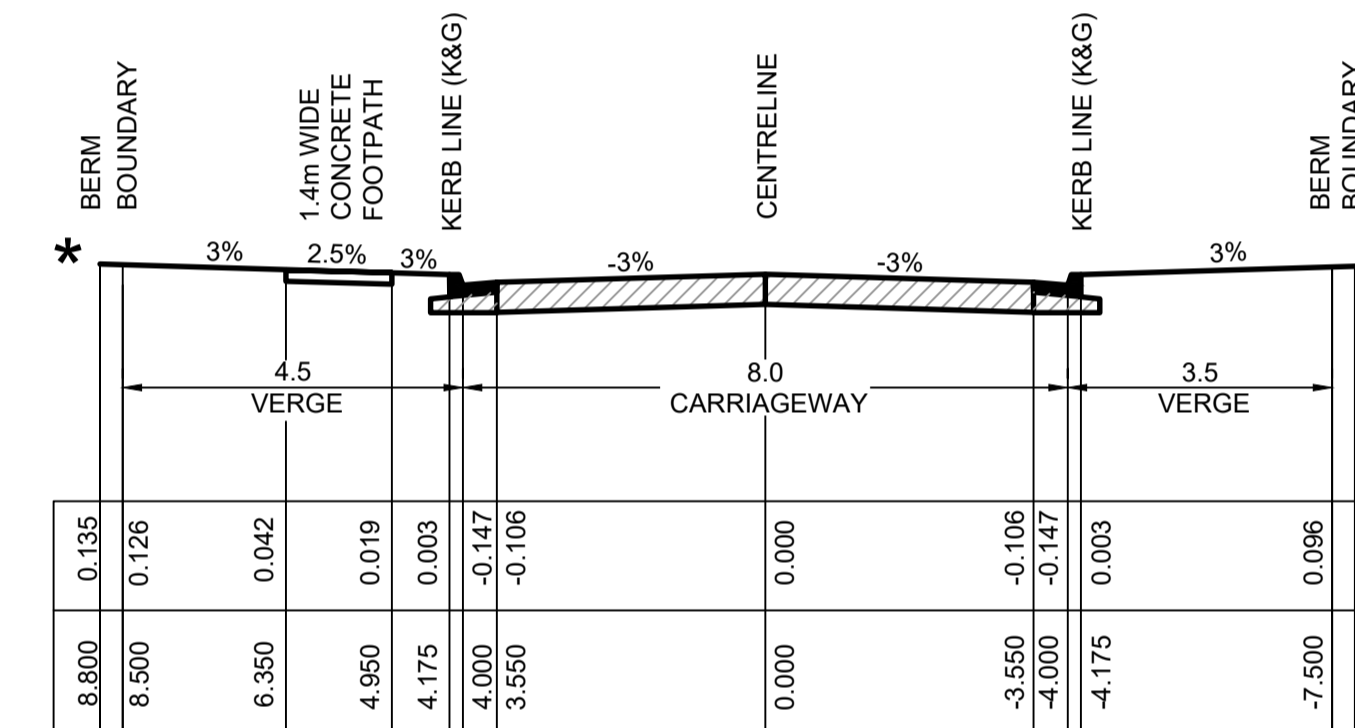
These plans/specifications form part of the certificate issued 16th May 2022



DATUM 52.0	0.000	2.500	11.311	14.598	15.000	20.000	21.058	30.000	37.500	38.050	45.000	55.550	60.000	63.425	73.050	75.000	76.550	76.450	79.000	
DESIGN SURFACE	69.960	69.895	69.83	69.53	69.35	69.32	69.0	68.897	68.18	67.36	67.236	66.472	65.118	64.872	64.301	64.204	64.176	64.176	63.633	64.253
BULK EARTHWORKS SURFACE	69.480	69.405	69.338	69.314	69.0	68.976	68.897	68.112	67.300	67.236	66.464	65.472	65.118	64.872	64.301	64.204	64.176	64.176	63.633	64.253
EXISTING SURFACE	68.957	68.981	67.895	67.594	67.558	67.100	66.486	65.370	64.013	63.918	62.940	61.786	61.414	61.127	59.854	59.633	59.471	59.471	59.188	64.253
CHAINAGE	0.000	2.500	11.311	14.598	15.000	20.000	21.058	30.000	37.500	38.050	45.000	55.550	60.000	63.425	73.050	75.000	76.550	76.450	79.000	

LONGITUDINAL SECTION ROAD 53
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

* REFER TO ENGINEERING PLANS FOR SITE REGRADING



TYPICAL CROSS SECTION
ROAD No.53
(16m ROAD RESERVE)
SCALE 1:100 NATURAL

PAVEMENT NOTES
(ROAD 53)
5x10⁴ ESA (GEOTECHNICAL REPORT BY GEOTECHNIQUE, REF: 12261/31-AA-R1 DATED 4/12/2020)
1. 50mm WEARING COURSE AC10
2. ONE COAT HOT BITUMEN FLUSH SEAL
3. 150mm DGB 20 BASE COURSE
4. 200mm SUB-BASE COURSE

NOTE:
SUBSOIL DRAINAGE TO BE PROVIDED UNDER KERBS ON BOTH SIDES OF THE ROAD EXCEPT WHERE STREET DRAINAGE IS PRESENT. REFER TO HCC STANDARD DRAWING No.SD3



Plotted: 4 May 2022 9:51:54 AM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CDCC\SOUTHERN HEIGHTS\4-RTP2\110185-12-CC4103.dwg

NO.	DESCRIPTION	DESIGNER	CHECKED	DATE
B	ROAD 51 RELOCATED	MP	JM	29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	16/07/21
	AMENDMENT	DES	DRN	CKD

J. WYNDHAM PRINCE
CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

PO Box 4366 PENRITH WESTFIELD NSW 2750
P 02 4720 3300 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT: **REDBANK**
NORTH RICHMOND

STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**

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REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
ROAD LONGITUDINAL SECTIONS
SHEET 3

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4103

PROJECT No: **110185-12**
SHEET No: **CC4103**

* NOTE
FOR LOT GRADING
REFER TO PLANS
CC4021 - CC4023



OFFSET	DESIGN SURFACE LEVEL	WAE	EXISTING SURFACE LEVEL
-8.8	59.992		59.992
-8.5	59.983		59.983
-4.025	59.984	59.74	59.74
-3.55	59.984	59.74	59.74
0	59.984	59.84	59.84
3.55	59.984	59.84	59.84
7.5	59.992		59.992
7.8	59.992		59.992

SUBDIVISION WORKS CERTIFICATE

Certificate No. 20130299SW77
 Date of Issue 16/05/2022
 Issuing Officer *D. Restin*

Accreditation No. BDC3367

These plans/specifications form part of the certificate issued 16th May 2022

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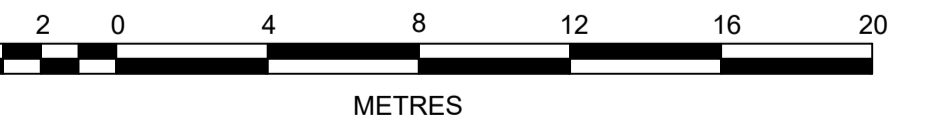
CLIENT: **REDBANK**
 NORTH RICHMOND

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**REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC
 ROAD CROSS SECTIONS
 SHEET 1**

PROJECT No: 110185-12
 SHEET No: CC4201

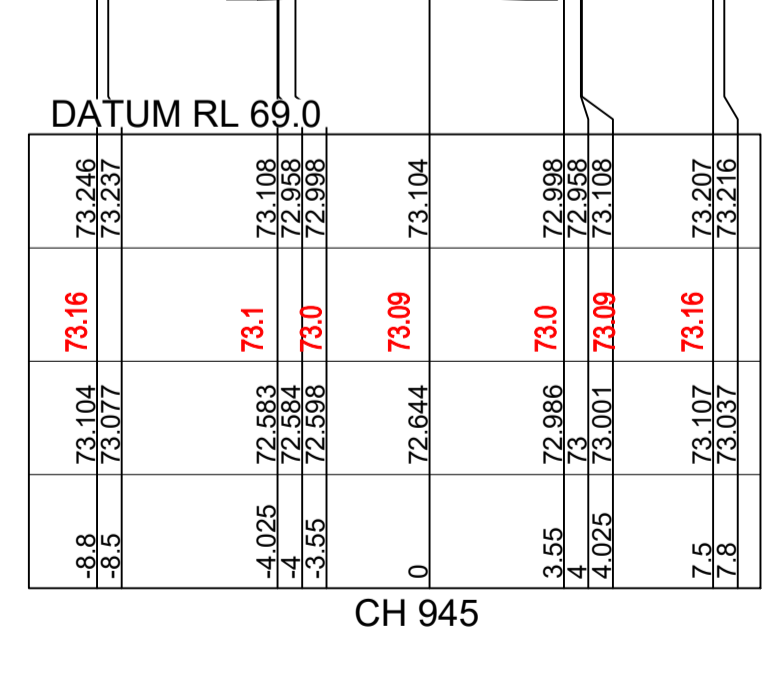
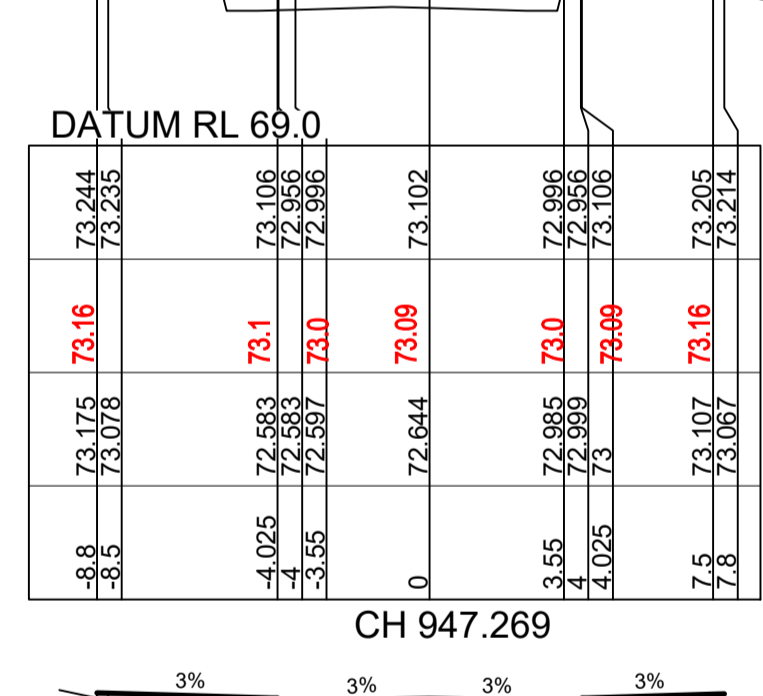
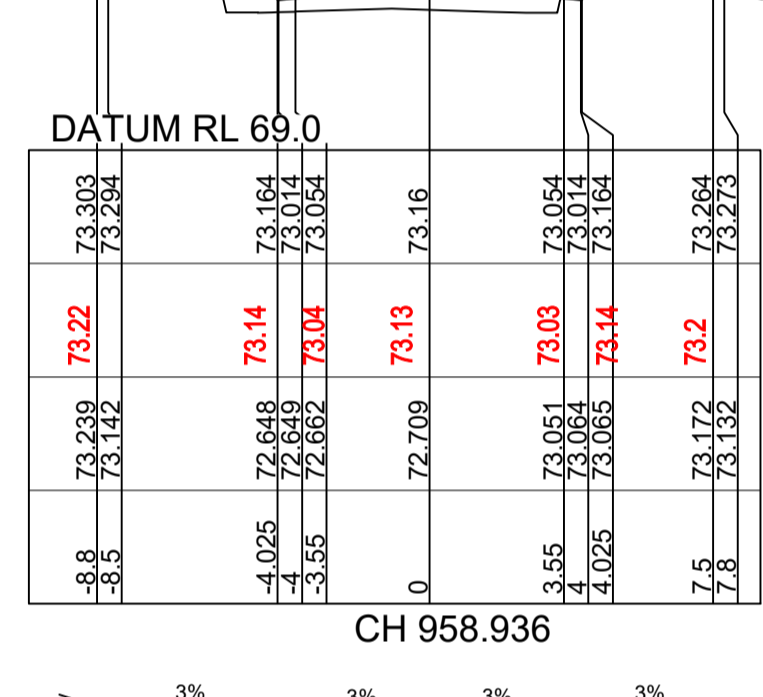
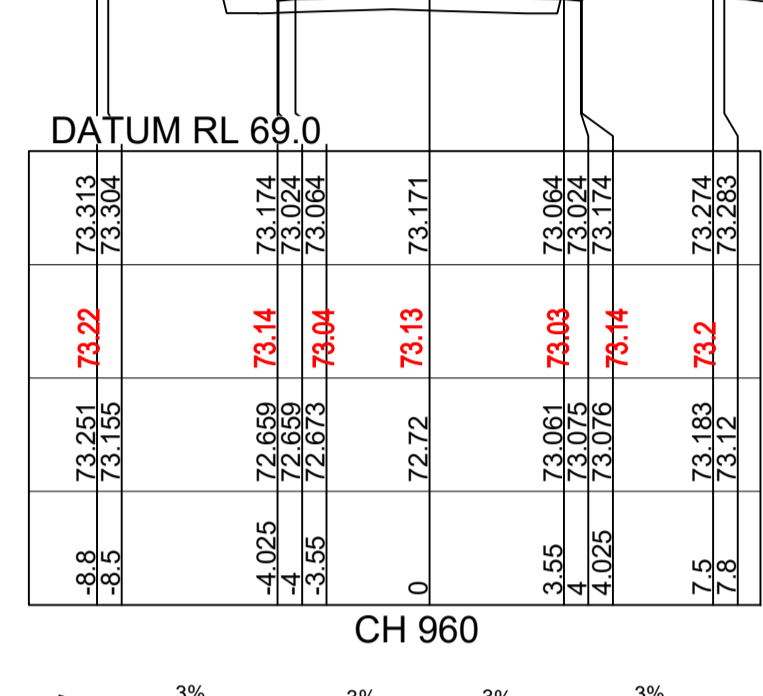
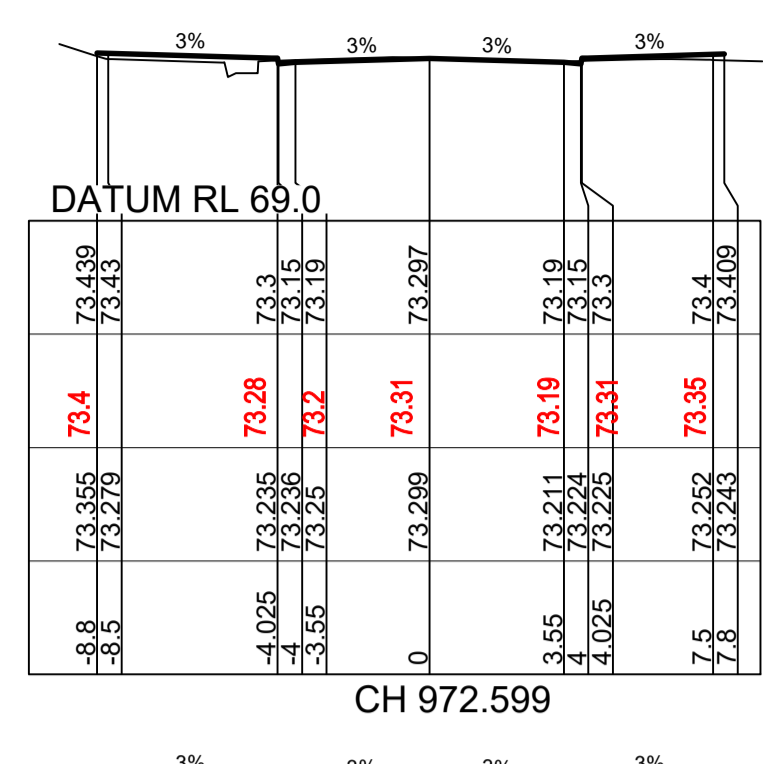
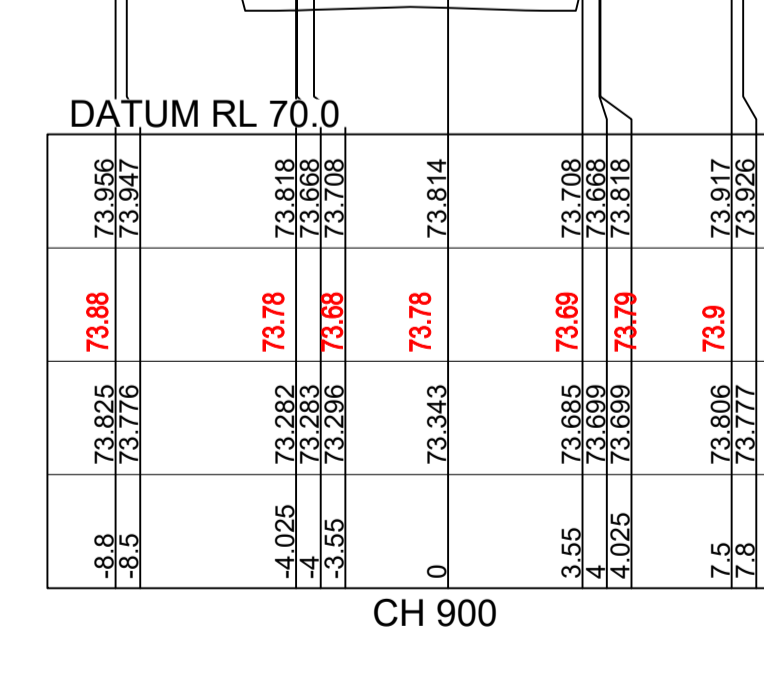
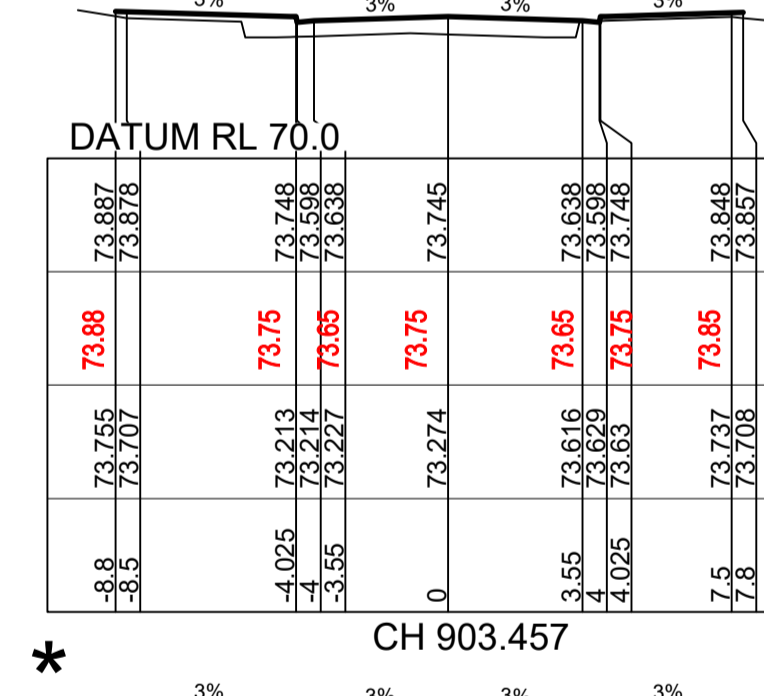
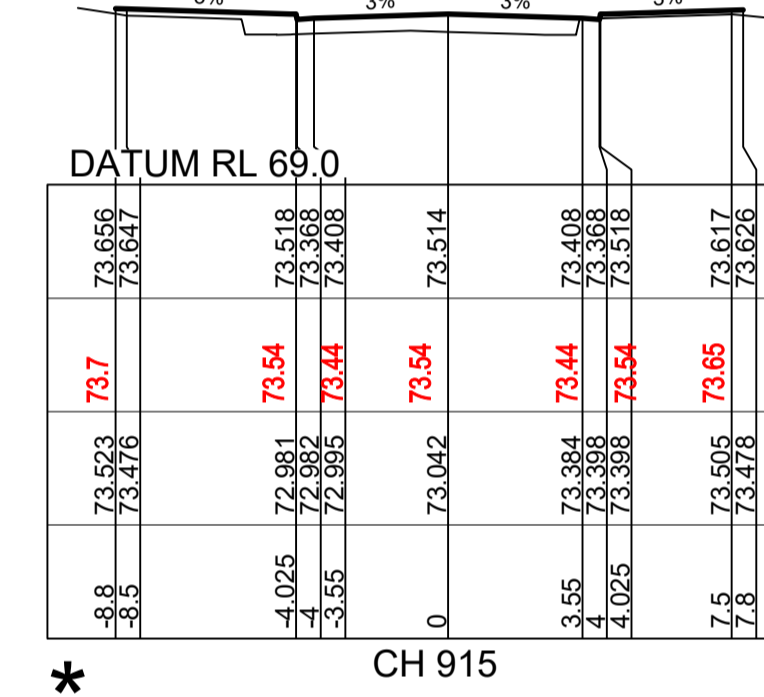
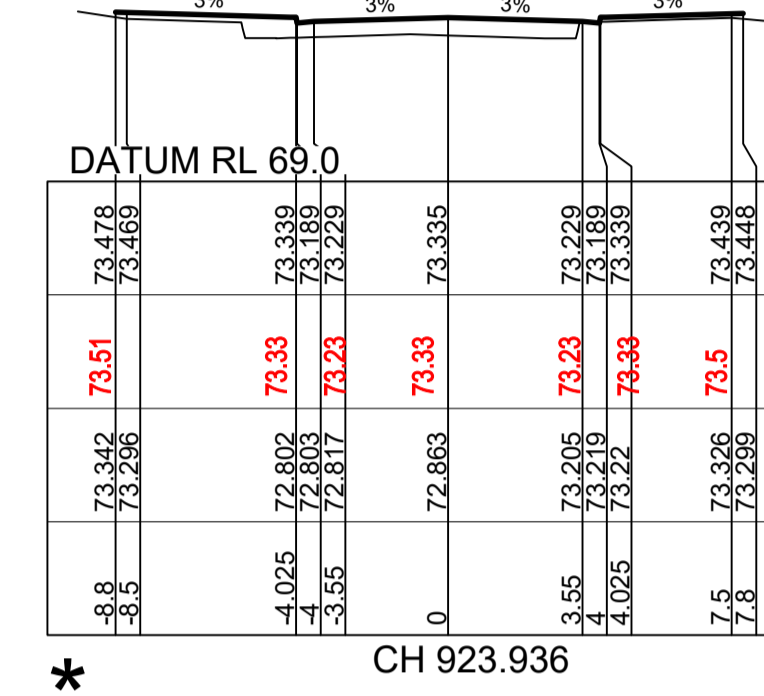
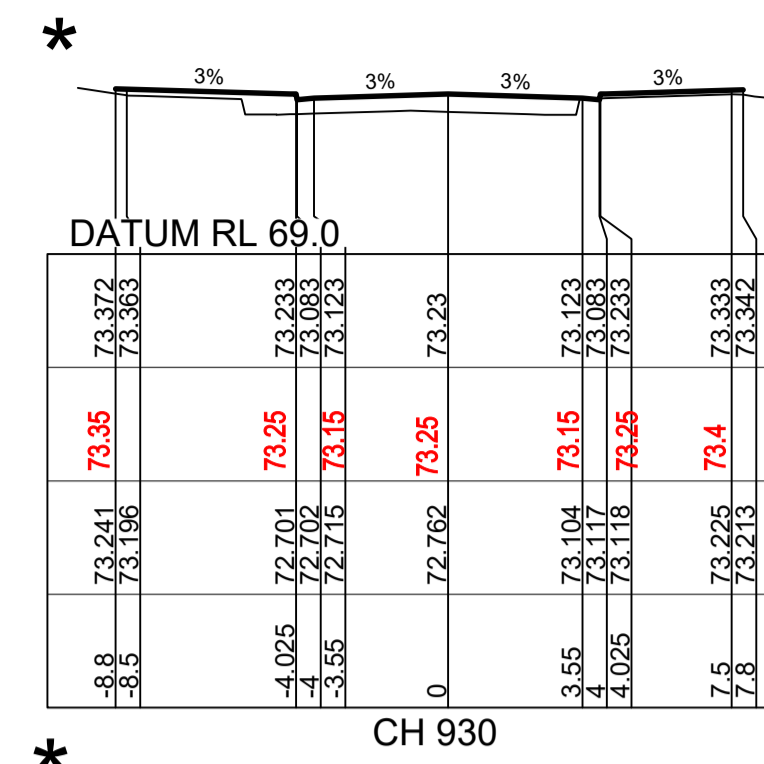
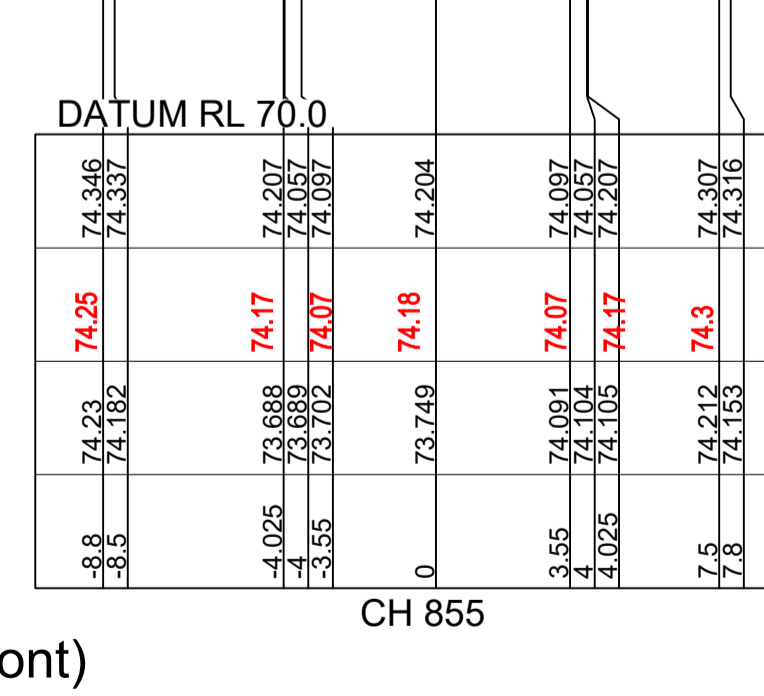
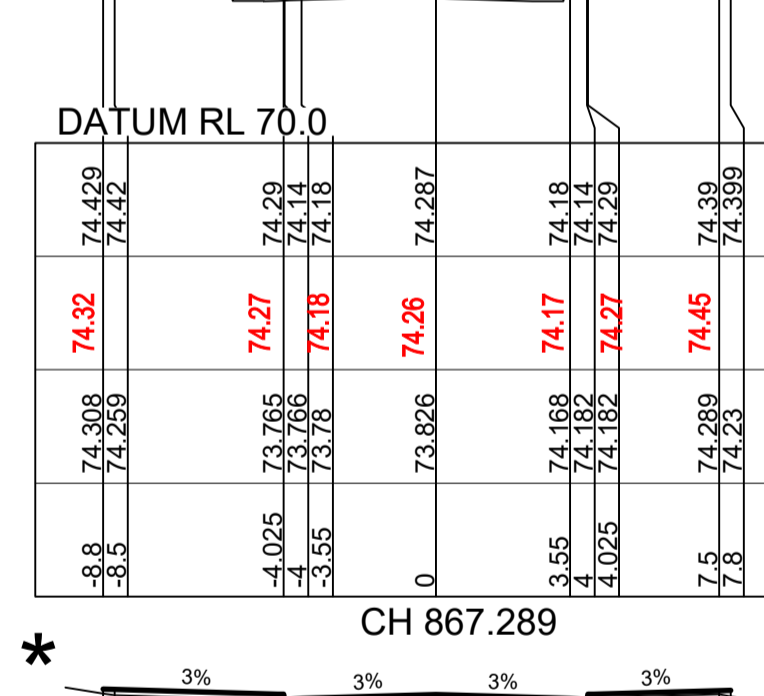
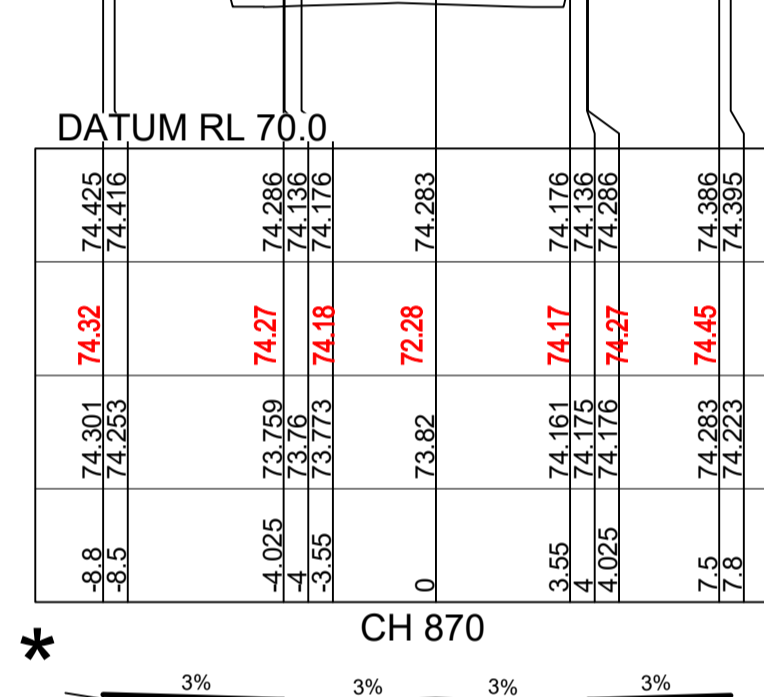
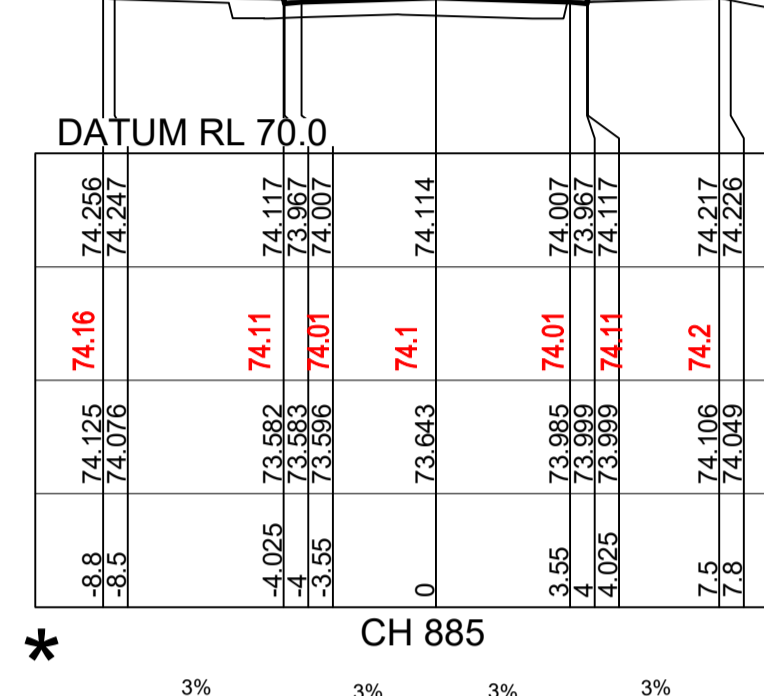
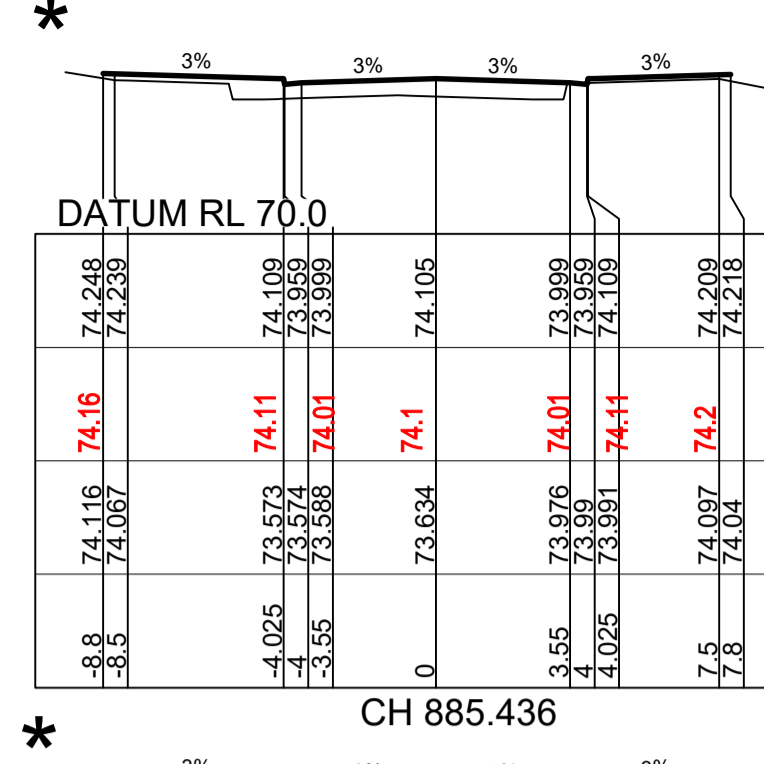
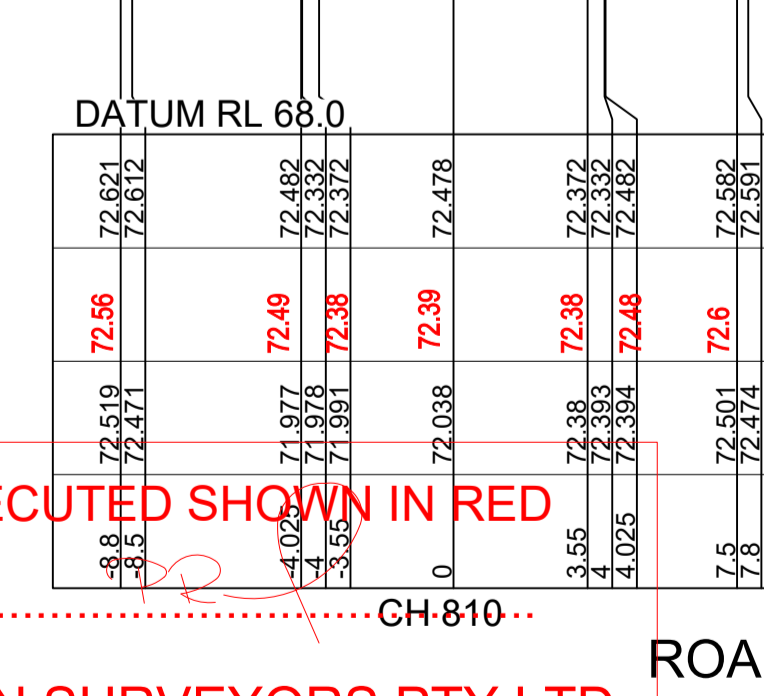
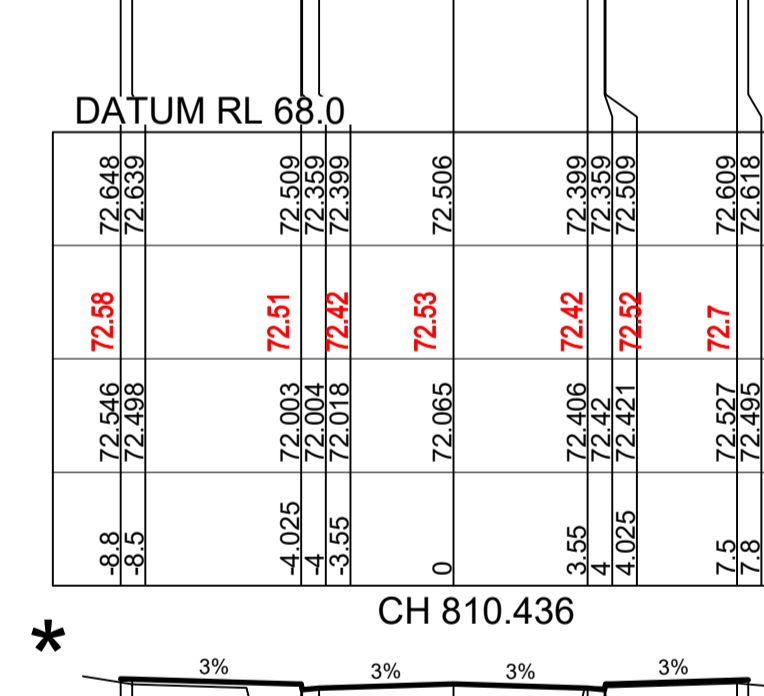
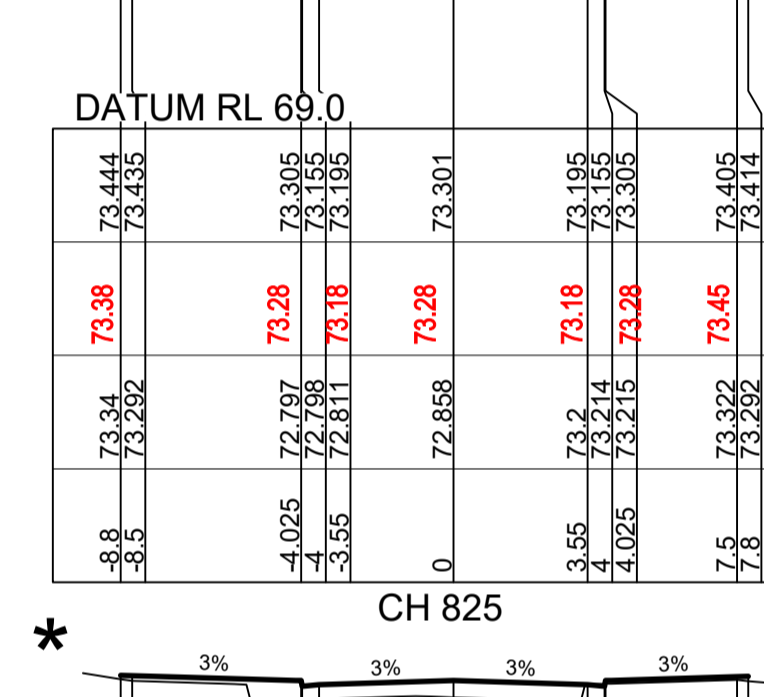
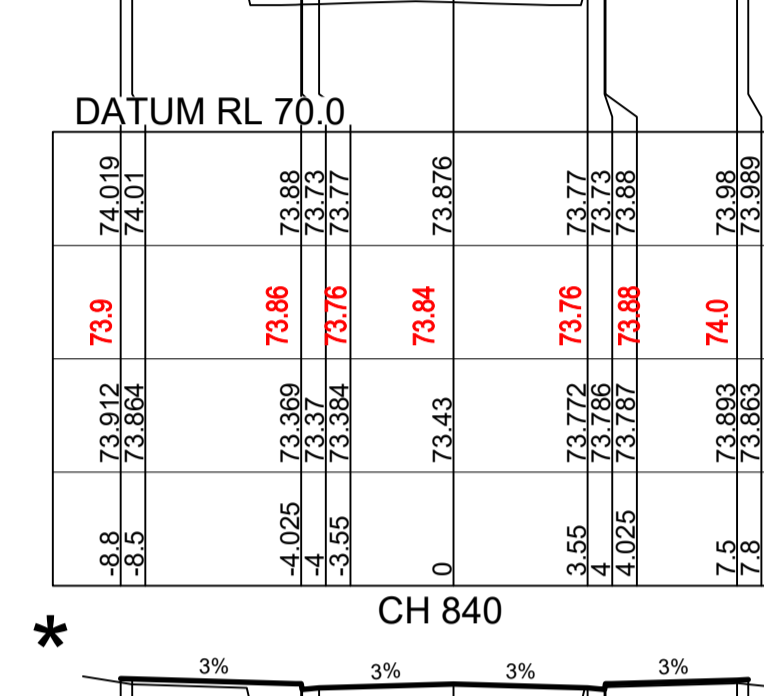
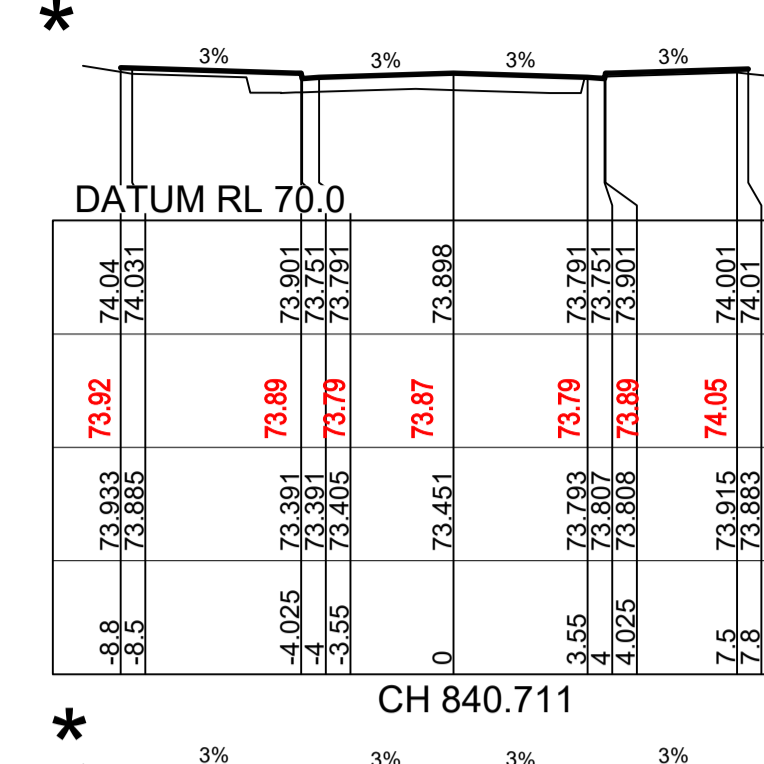
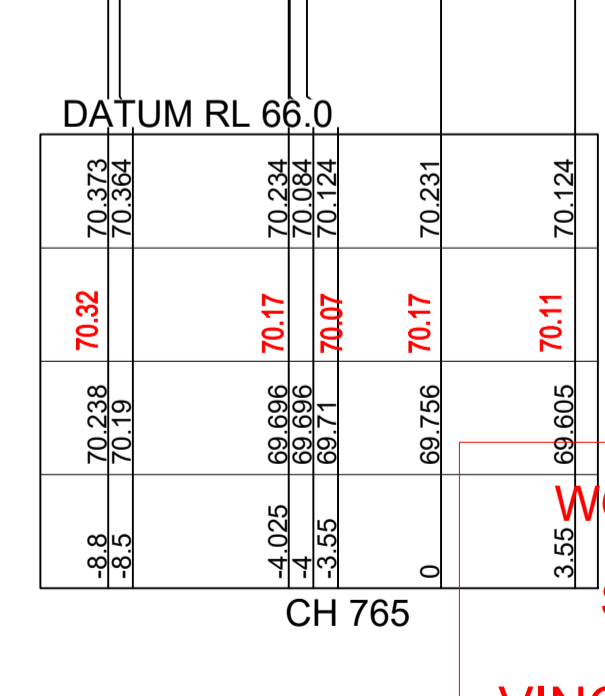
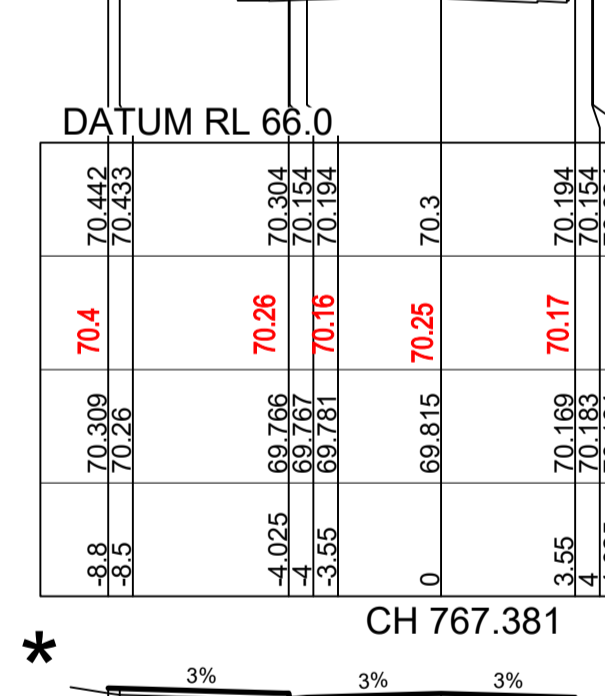
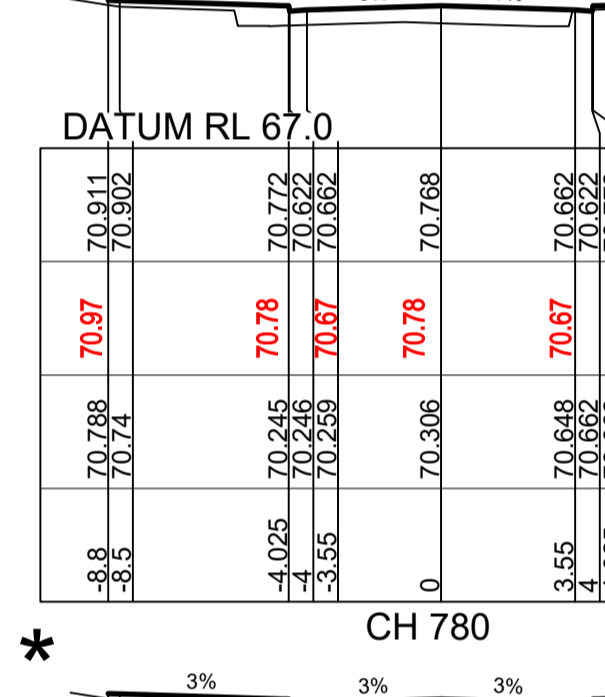
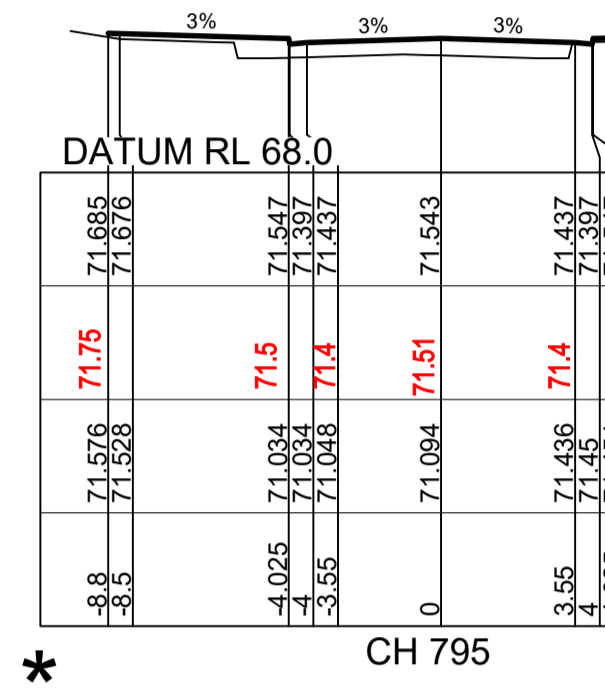
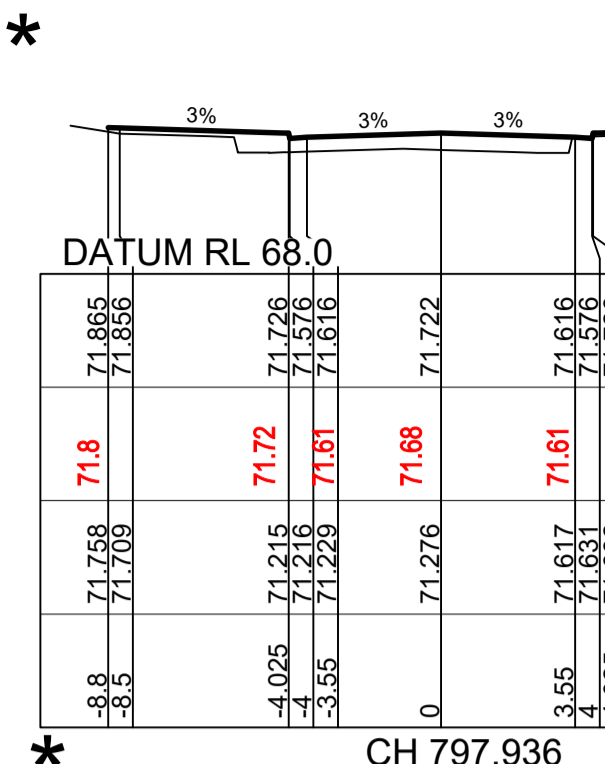
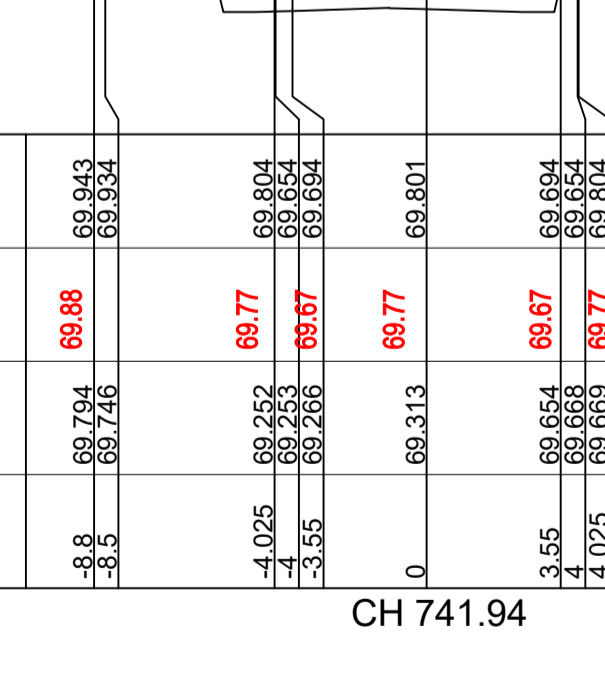
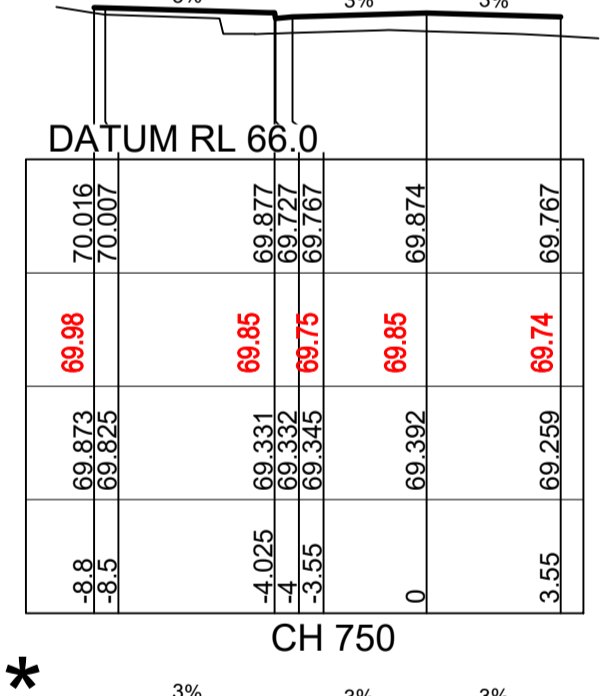
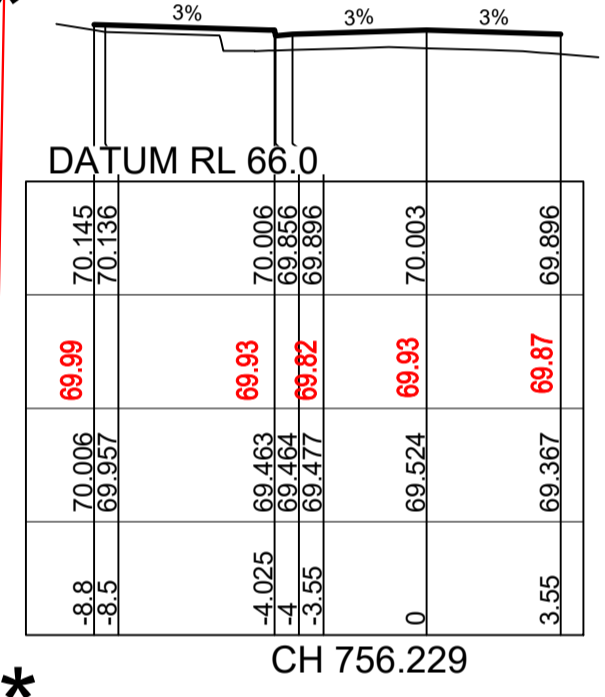
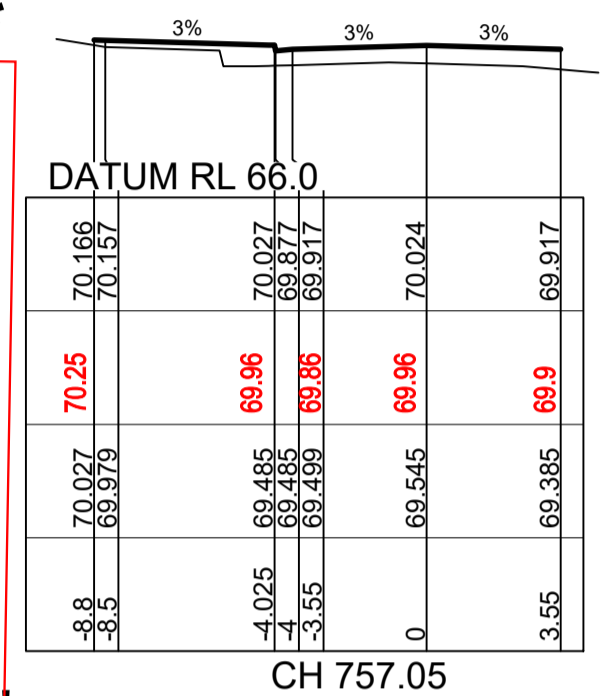
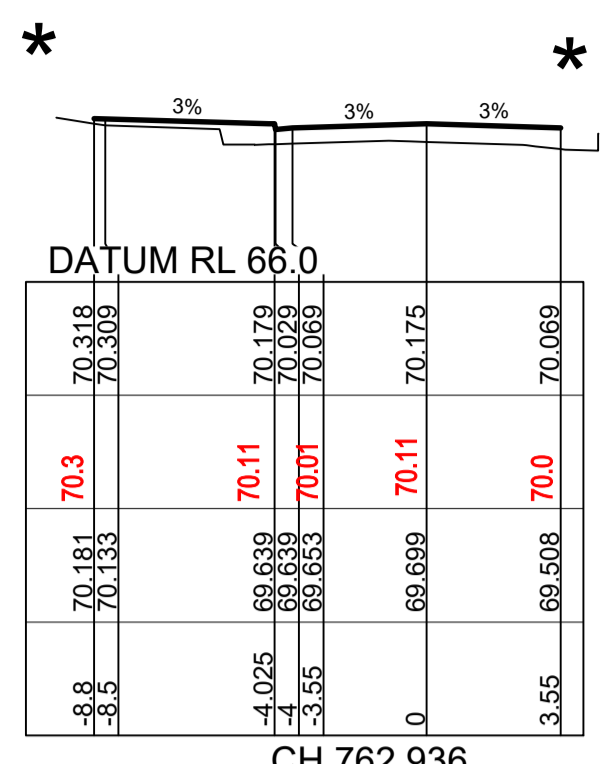


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 SIGNATURE: _____
VINCE MORGAN SURVEYORS PTY LTD
 DATE: 25/01/23 REF:16800

AMENDMENT	DATE	DES	DRN	CKD	APR
B ROAD 51 RELOCATED	29/04/22	MP	JM	JB	CM
A ISSUED FOR CONSTRUCTION APPROVAL	16/07/21	MP	NM	RO	MS

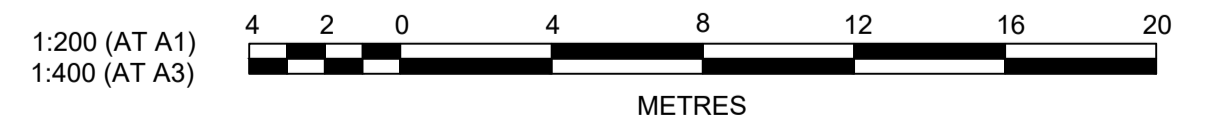
* NOTE
FOR LOT GRADING
REFER TO PLANS
CC4021 - CC4023

SUBDIVISION WORKS CERTIFICATE
Certificate No. 20130299SW77
Date of Issue .16/05/2022
Issuing Officer *D. Restu*
Accreditation No. BDC3367
These plans/specifications form part of the certificate issued 16th May 2022



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SIGNATURE.....
VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800

ROAD 51(cont)



B	ROAD 51 RELOCATED	MP	JM	JB	CM	29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

J. WYNDHAM PRINCE
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PO Box 4366 PENRITH WESTFIELD NSW 2750
P 02 4720 3300 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT: **REDBANK**
NORTH RICHMOND

STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**
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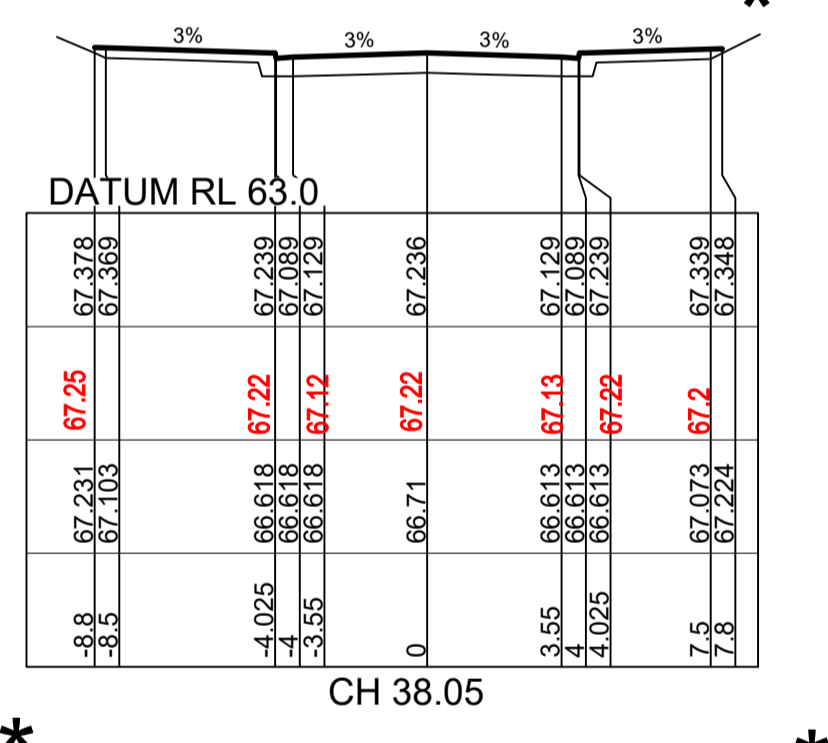
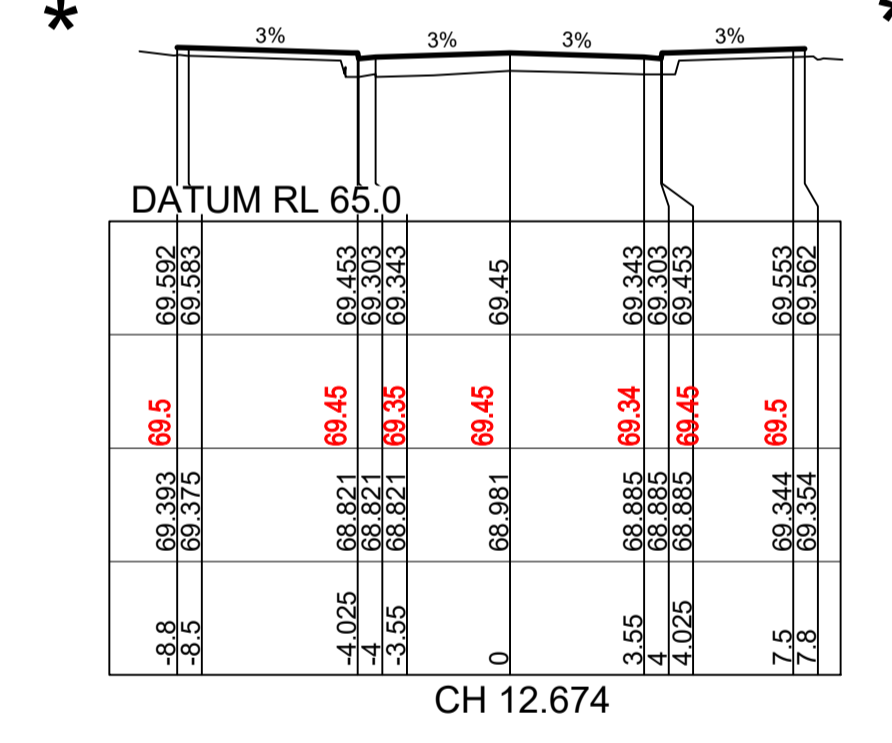
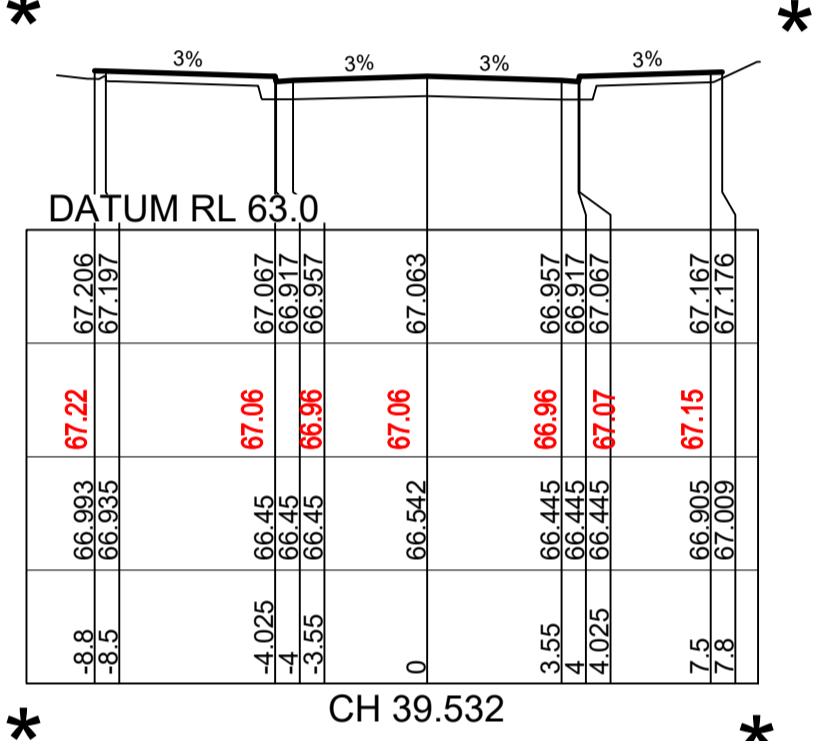
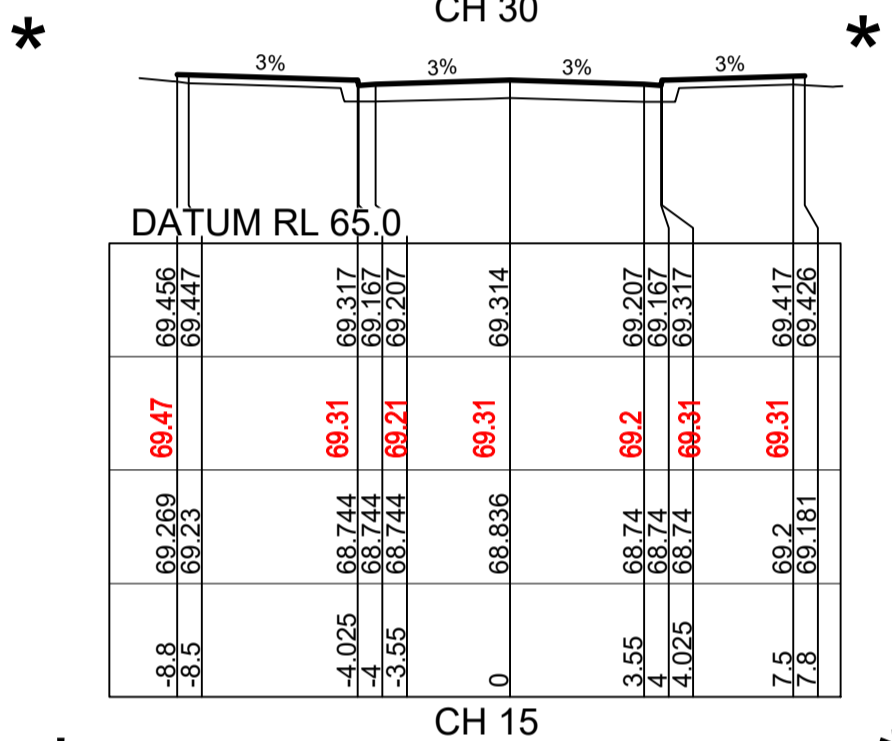
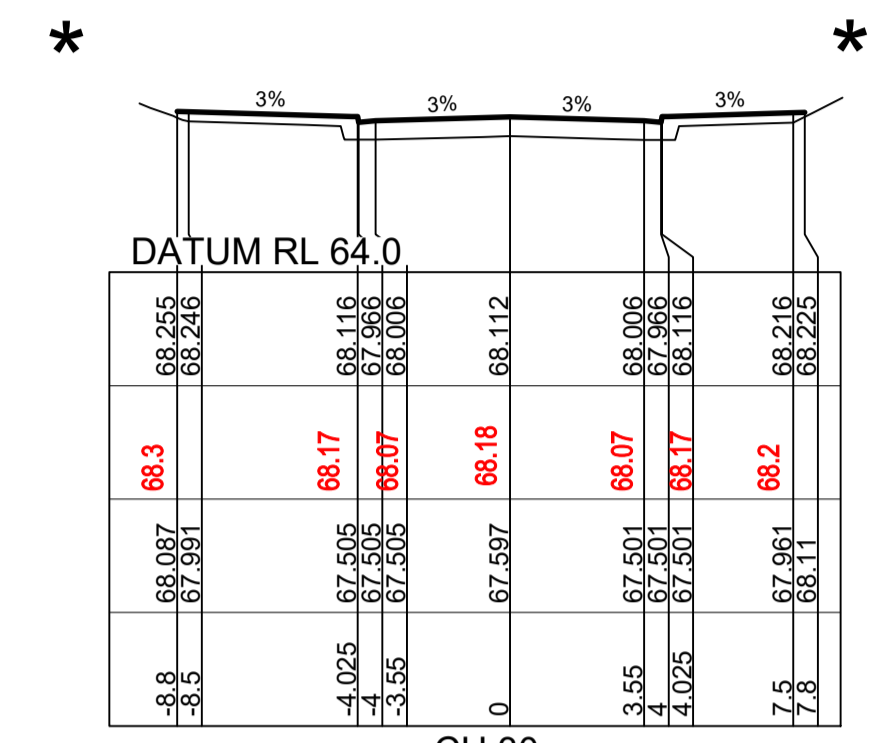
REDBANK, NORTH RICHMOND RIDGETOPS 2 - SWC ROAD CROSS SECTIONS SHEET 2
AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4202

PROJECT No: **110185-12**
SHEET No: **CC4202**
B

* NOTE
FOR LOT GRADING
REFER TO PLANS
CC4021 - CC4023

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SIGNATURE.....*PR*.....
VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800

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Issuing Officer *D. Restar*
Accreditation No. BDC3367
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DATUM RL 69.0	
DESIGN SURFACE LEVEL	73.442
WAE	73.433
EXISTING SURFACE LEVEL	73.303
OFFSET	73.299

ROAD 51(cont)

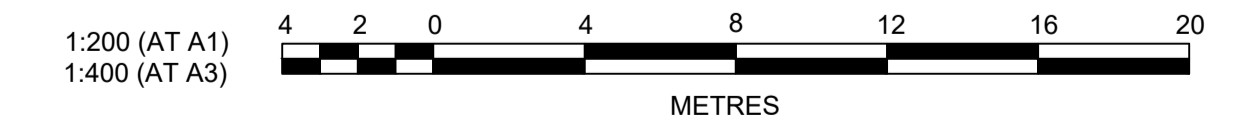
DATUM RL 65.0	
DESIGN SURFACE LEVEL	69.459
WAE	69.45
EXISTING SURFACE LEVEL	69.34
OFFSET	69.34

CH 12.5

ROAD 53

DATUM RL 63.0	
DESIGN SURFACE LEVEL	67.443
WAE	67.36
EXISTING SURFACE LEVEL	67.26
OFFSET	67.26

CH 37.5



Plotted: 29 April, 2022 5:02:32 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RTP2\110185-12-CC4023.dwg

AMENDMENT	DES	DRN	CKD	APR	DATE
B ROAD 51 RELOCATED	MP	JM	JB	CM	29/04/22
A ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21

J. WYNDHAM PRINCE
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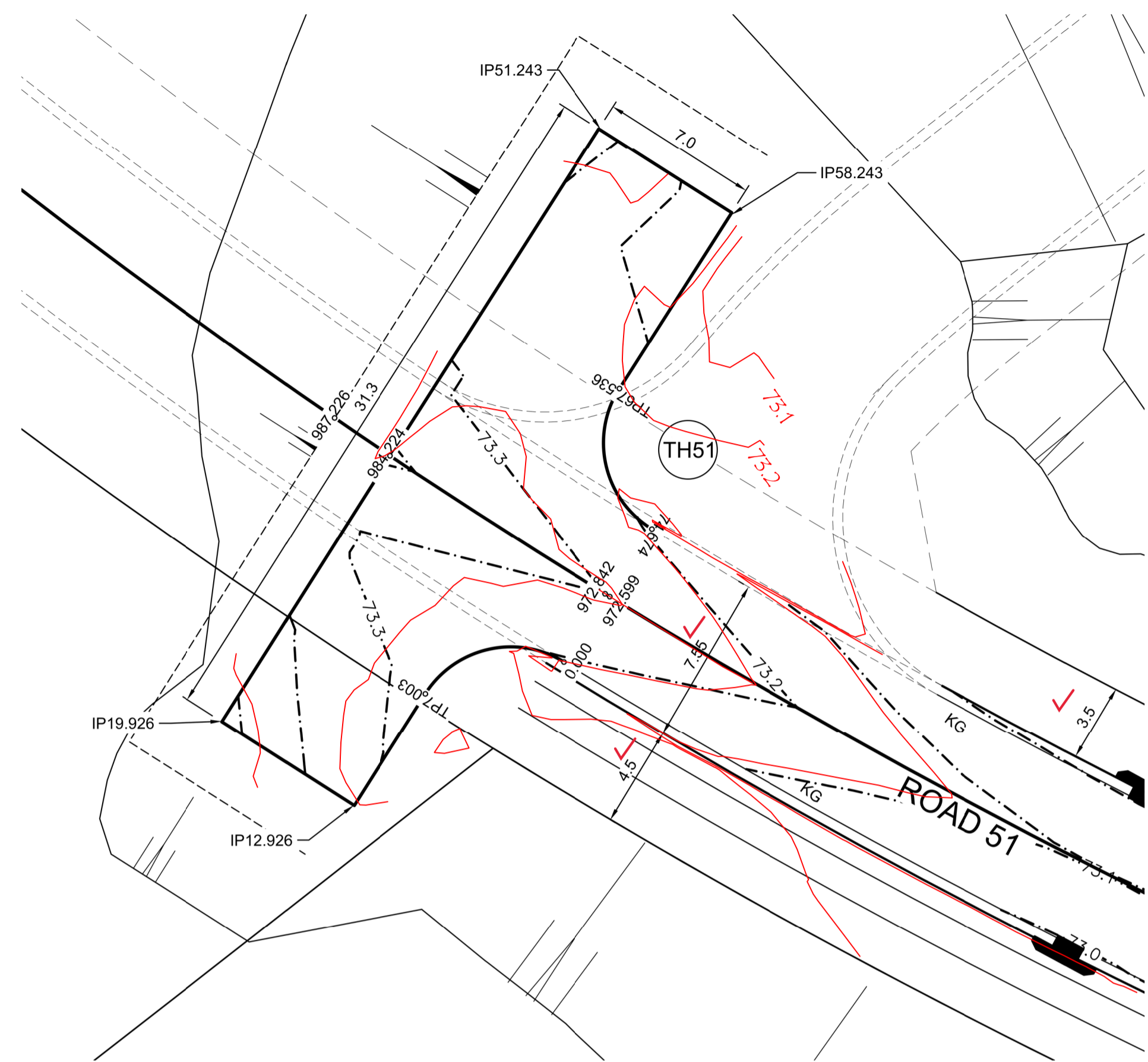


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REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
ROAD CROSS SECTIONS
SHEET 3

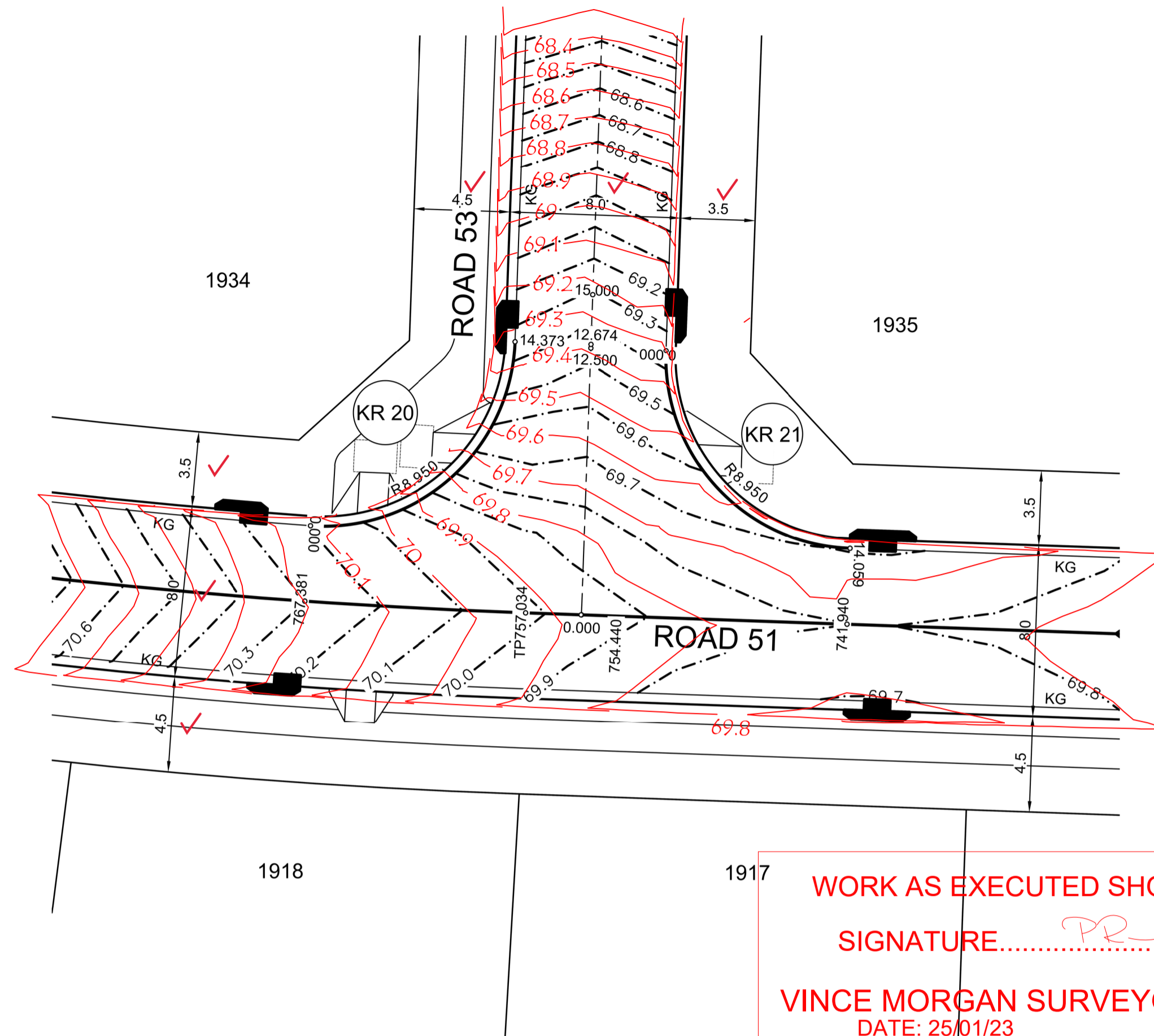
PROJECT No: 110185-12
SHEET No: CC4203
PLAN No: 110185-12-CC4203

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: B



PLAN
SCALE 1:200

DESIGN LEVELS, RADII AND
SETOUT ARE TO LIP OF GUTTER



PLAN
SCALE 1:200

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SIGNATURE.....*PR*.....
VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800

DESIGN GRADELINE	VERTICAL GEOMETRY	DATUM 68.0	DESIGN LIP GRADING	ROAD CHAINAGE	CHAINAGE
	1.000%	73.2	73.24	0	972.842
				7.003	73.263
	3.000%	73.31	73.32	12.926	73.322
		73.32	73.32	12.926	73.322
		73.32	73.32	15	73.384
		73.32	73.32	19.926	73.532
		73.32	73.32	19.926	73.532
	-2.356%	73.44	73.44	29.497	73.307
		73.44	73.44	30	73.307
	3.000%	73.34	73.34	30.397	73.307
		73.34	73.34	30.397	73.307
		73.34	73.34	33.947	73.413
		73.34	73.34	37.497	73.307
	-3.000%	73.28	73.28	38.397	73.307
		73.28	73.28	45	73.236
	-1.068%	73.13	73.13	51.243	73.169
		73.13	73.13	51.243	73.169
	3.000%	73.29	73.29	58.243	73.379
		73.29	73.29	59.243	73.379
		73.29	73.29	60	73.359
		73.29	73.29	67.536	73.273
	-1.150%	73.23	73.23	74.674	73.191

CREST
CH 19.926
RL 73.532m

CREST
CH 33.947
RL 73.413m

SAG
CH 51.243
RL 73.169m

CREST
CH 58.243
RL 73.379m

CREST
CH 13.352
RL 69.695m

TH51
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100

CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH
0	286188.57	6281095.36	301°36'57.46"		7
3.5	286184.79	6281097.69		-4.5	
12.93	286182.41	6281093.95	212°27'20.50"		
19.93	286179.32	6281098.95			
51.24	286190.13	6281119.13			
58.24	286196.04	6281115.37			
67.54	286191.05	6281107.53	212°27'20.50"		
71.11	286188.6	6281103.68		-4.5	7.14
74.67	286192.49	6281101.28	121°34'10.16"		

SUBDIVISION WORKS CERTIFICATE

Certificate No. 20130299SW77
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Issuing Officer *D. Restin*
Accreditation No. BDC3367

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DESIGN GRADELINE	VERTICAL GEOMETRY	DATUM 64.0	DESIGN LIP GRADING	ROAD CHAINAGE	CHAINAGE
	-3.081%	70.18	70.18	0	757.381
				3.593	70.044
	-7.373%	69.82	69.82	7.187	69.818
		69.82	69.82	10.78	69.567
	-5.840%	69.6	69.6	14.373	69.343

KR 20
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100

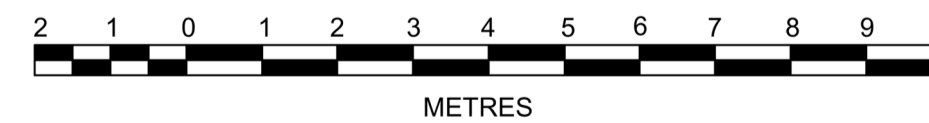
CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH
0	286384.75	6281038.81	94°01'45.45"		14.37
7.19	286394	6281038.16		-8.95	
14.37	286394.33	6281047.42	2°00'57.16"		

DESIGN GRADELINE	VERTICAL GEOMETRY	DATUM 64.0	DESIGN LIP GRADING	ROAD CHAINAGE	CHAINAGE
	5.527%	69.35	69.35	0	12.500
				3.515	69.518
	2.219%	69.48	69.48	7.029	69.625
		69.48	69.48	10.544	69.681
	-0.248%	69.66	69.66	13.352	69.695
		69.66	69.66	14.059	69.694

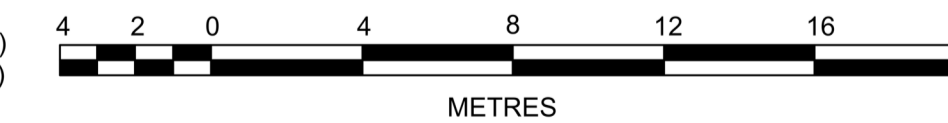
KR 21
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100

CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH
0	286401.42	6281047	182°00'57.16"		14.06
7.03	286401.1	6281038.05		-8.95	
14.06	286410.05	6281037.74	92°00'57.16"		

1:100 (AT A1)
1:200 (AT A3)



1:200 (AT A1)
1:400 (AT A3)



Plotfile: 4 May, 2022 9:32:07 AM File Name: J:\110185 - Redbank North Richmond Residential Precinct\110185-12-CC4301.dwg

DES	DRN	CKD	APR	DATE	
B	MP	JM	JB	CM	29/04/22
A	MP	NM	RO	MS	16/07/21

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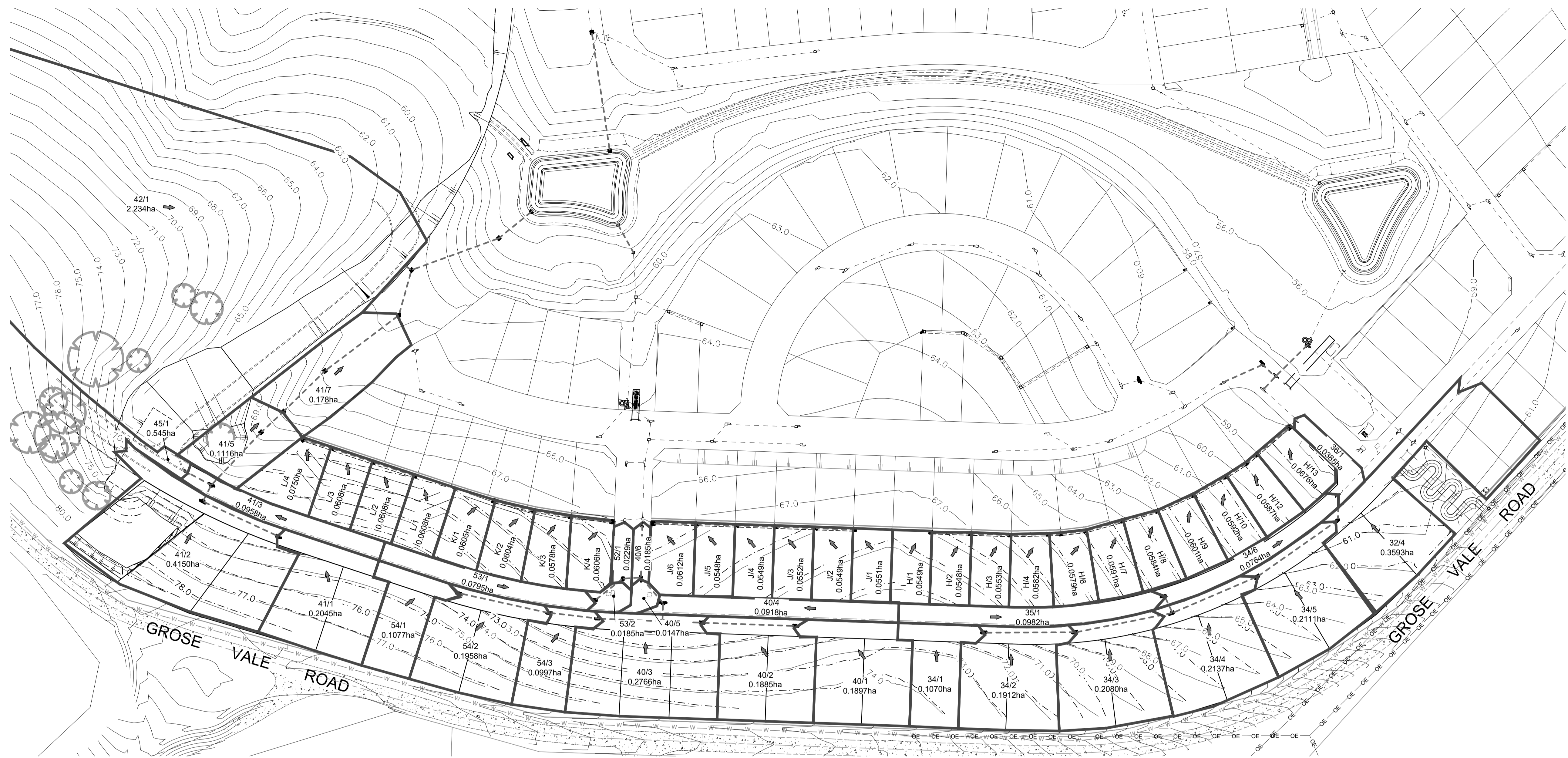
STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**
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REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
KERB RETURN PLAN
SHEET 1

PROJECT No: 110185-12
SHEET No: CC4301

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4301

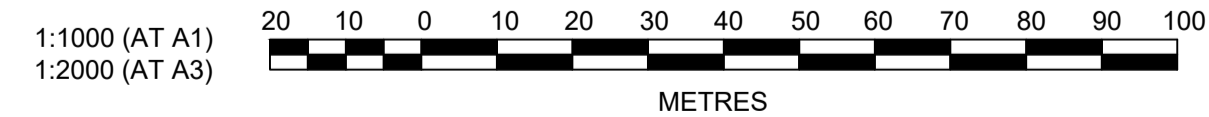
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VINCE MORGAN SURVEYORS PTY LTD
 DATE: 25/01/23 REF:16800

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 Certificate No. 20130299SW77
 Date of Issue .16/05/2022.....
 Issuing Officer *D. Restin*
 Accreditation No. BDC3367
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LEGEND	
CATCHMENT BOUNDARY	—
EXISTING CATCHMENT BOUNDARY	- - -
FLOW DIRECTION ARROW	➔
EXISTING CONTOURS	— 47.0 —
DESIGN CONTOURS	- - - 47.0 - - -
DRAINAGE LINE & PIT	— [PIT] —
EXISTING DRAINAGE LINE & PIT	- - - [PIT] - - -
FUTURE DRAINAGE LINE & PIT	- - - [PIT] - - -



A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

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CLIENT:

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REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
 CATCHMENT PLAN
 AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4400

PROJECT No: **110185-12**
 SHEET No: **CC4400**
A

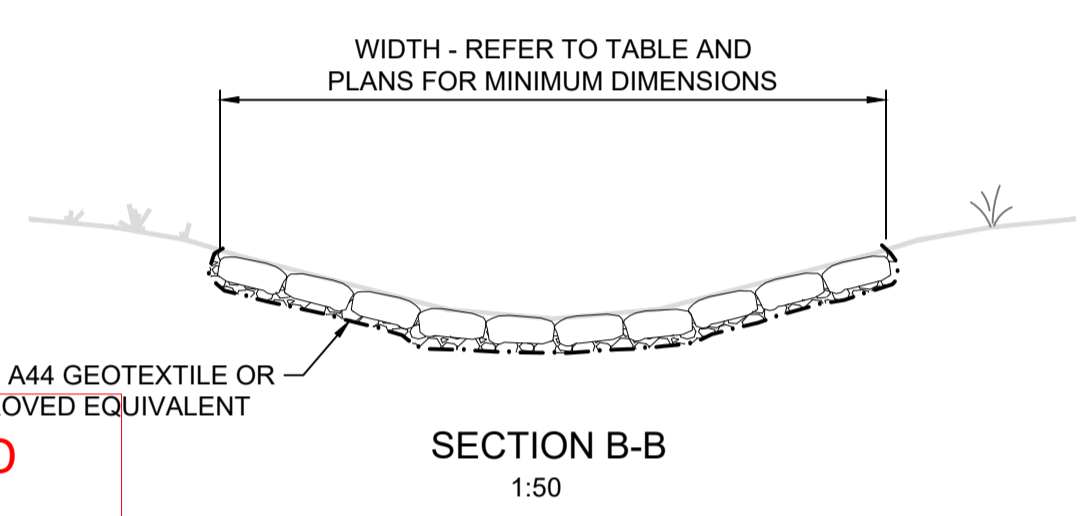
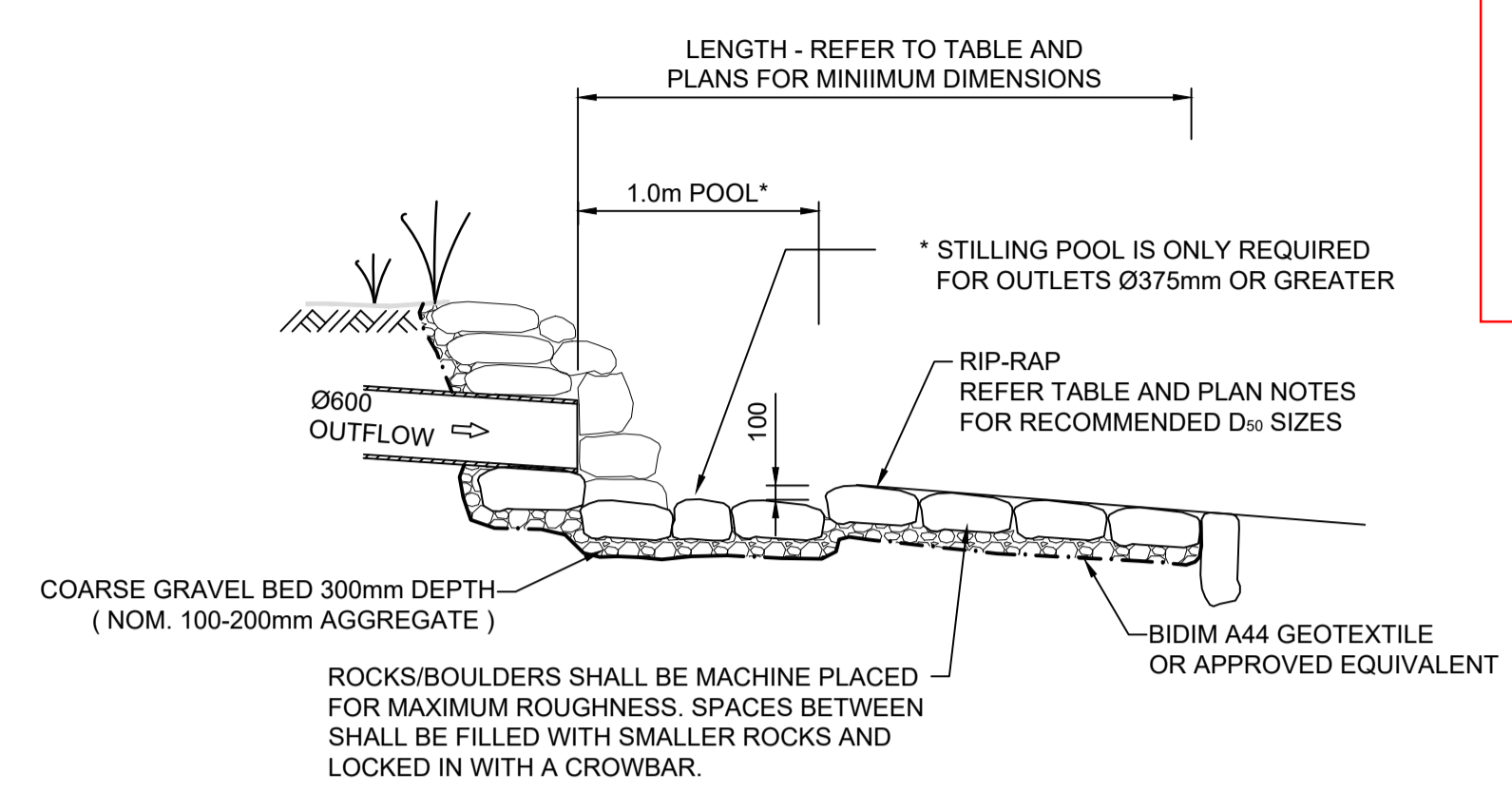
SUBDIVISION WORKS CERTIFICATE

Certificate No. 20130299SW77
 Date of Issue 16/05/2022
 Issuing Officer *D. Resti*
 Accreditation No. BDC3367

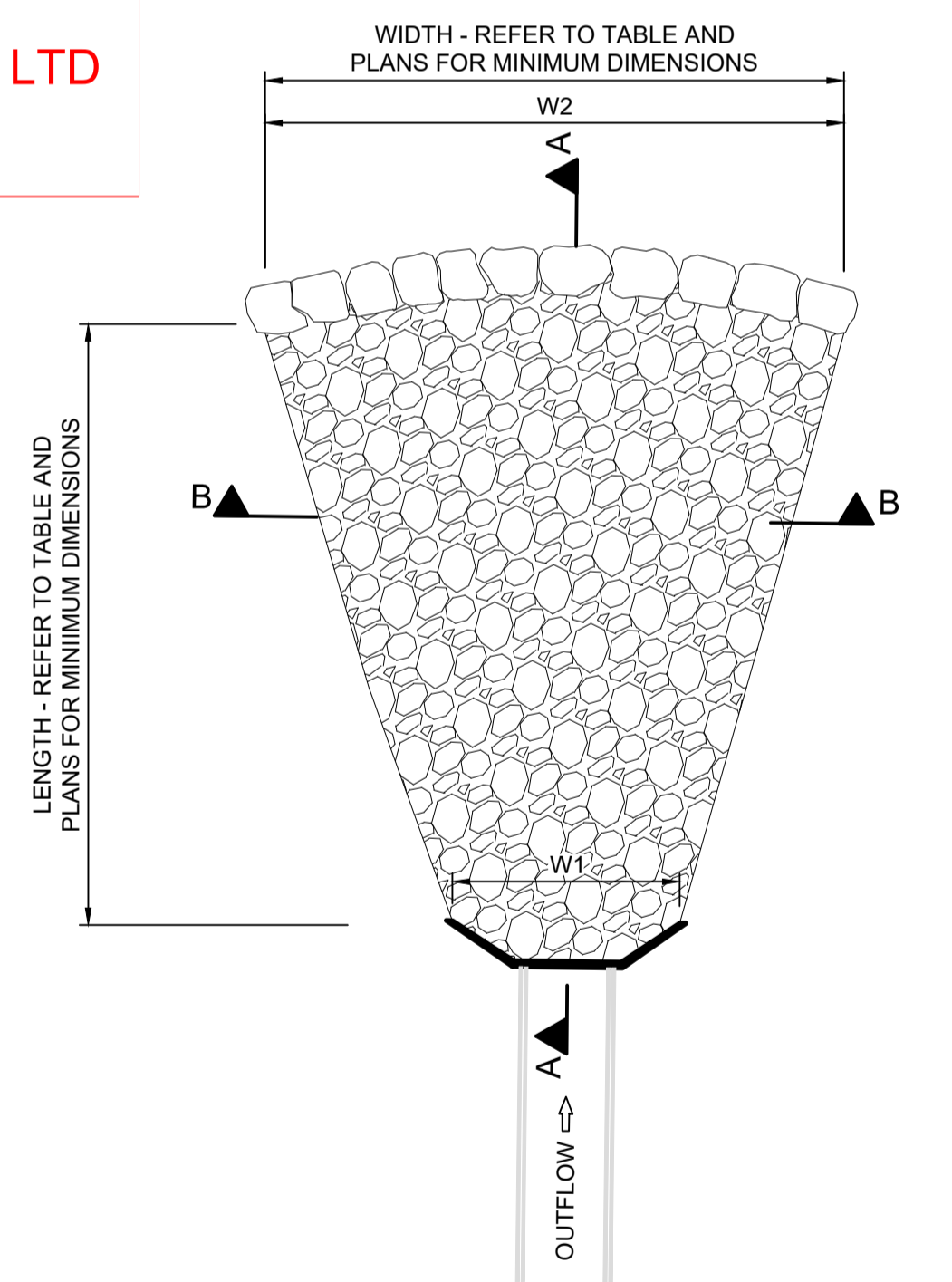
HYDROLOGY NOTES
 STORMWATER SYSTEM DESIGNED
 USING 12D RATIONAL METHOD

These plans/specifications form part of the certificate issued 16th May 2022

PIT SCHEDULE					
PIT NAME	SURFACE FITTING TYPE AND SIZE	PIT EASTING (m)	PIT NORTHING (m)	PIT DEPTH (m)	COMMENTS
14/1	GSIP 5x900x900	286388.37	6281235.21	3.9	DAM 7 OUTLET
14/2	JP GRATED 900 x 900	286380.51	6281286.9	2.29	PROMENADE STAGE
34/1	1.8 m lintel	286551.96	6281025.19	1.48	
34/2	1.8 m lintel	286591.74	6281025.38	1.61	
34/3	1.8 m lintel	286633.8	6281033.8	1.67	
34/4	1.8 m lintel	286671.03	6281049.76	1.91	
34/5	1.8 m lintel	286705.91	6281074.23	1.73	
34/6	1.8 m lintel	286706.25	6281085.34	1.34	PROMENADE STAGE
35/1	1.8 m lintel	286630.34	6281041.1	1.46	
36/1	1.8 m lintel	286687.45	6281118.18	1.62	
40/1	1.8 m lintel	286468.92	6281028.11	1.57	
40/2	1.8 m lintel	286428.16	6281029.55	1.55	
40/3	2.4 m lintel sag	286411.3	6281030.14	1.63	
40/4	2.4 m lintel sag	286411.58	6281038.13	1.78	
40/5	1.8 m lintel	286401.95	6281049.24	1.77	
41/1	1.8 m lintel	286243.85	6281068.17	1.63	
41/2	2.4 m lintel sag	286210.95	6281082.35	1.59	
41/3	2.4 m lintel sag	286214.55	6281089.5	1.8	
41/4	JP SEALED 900 x 900	286236.25	6281112.49	1.59	
41/5	GSIP 900x900 SAG	286246.05	6281121.57	1.77	
41/6	JP GRATED 900 x 900	286264.12	6281139.28	1.61	
41/7	GSIP 900x900 SAG	286296.53	6281164.18	1.85	
41/8	TEMP JP	286301.89	6281183.28	2.1	FUTURE GPT
41/9	JP GRATED 900 x 900	286340.16	6281197.3	1.98	
41/10	H.W.	286353.81	6281208.4	0	OUTLET TO DAM 7
42/1	CAPPED STUB	286299.71	6281184.66	2.08	
45/1	CAPPED STUB	286202.97	6281095.65	1.56	
53/1	1.8 m lintel	286382.21	6281039.47	1.65	
53/2	1.8 m lintel	286393.92	6281048.71	1.45	
54/1	1.8 m lintel	286323.13	6281042.05	1.56	
54/2	1.8 m lintel	286362.45	6281033.62	1.64	
54/3	1.8 m lintel	286385.48	6281031.19	1.63	
H/1	IAD 450x450	286528.34	6281068.95	0.75	
H/2	IAD 450x450	286545.53	6281068.34	0.75	
H/3	IAD 450x450	286562.83	6281067.73	0.75	
H/4	IAD 450x450	286579.52	6281068.09	0.75	
H/5	JP SEALED 600 x 600	286585.1	6281068.23	0.73	
H/6	IAD 600x900	286595.8	6281069.49	0.83	
H/7	IAD 600x900	286611.72	6281073.86	0.8	
H/8	IAD 600x900	286627.08	6281078.17	0.82	
H/9	IAD 600x900	286642.64	6281085.05	0.92	
H/10	IAD 600x900	286656.94	6281093.19	0.95	
H/11	JP SEALED 600 x 900	286666.07	6281099.04	0.93	
H/12	IAD 600x900	286670.37	6281102.72	0.87	
H/13	IAD 900x900	286684.77	6281114.39	2.92	
J/1	IAD 450x450	286495.16	6281070.11	0.75	
J/2	SLOPE JUNCTION	286477.97	6281070.72	0.72	
J/3	IAD 450x450	286460.79	6281071.32	0.74	
J/4	SLOPE JUNCTION	286443.6	6281071.93	0.74	
J/5	IAD 600x900	286426.41	6281072.53	0.79	
J/6	IAD 900x900	286407.37	6281072.7	2.95	
K/1	IAD 450x450	286337.74	6281082.52	0.75	
K/2	IAD 450x450	286355.06	6281078.42	0.75	
K/3	IAD 600x900	286370.98	6281075.76	0.84	
K/4	IAD 900x900	286389.19	6281073.48	2.83	
L/1	IAD 450x450	286303.37	6281093.52	0.68	
L/2	IAD 600x900	286285.34	6281099.49	0.87	
L/3	SLOPE JUNCTION	286267.3	6281105.47	1	
L/4	IAD 900x900	286254.53	6281109.17	2.76	

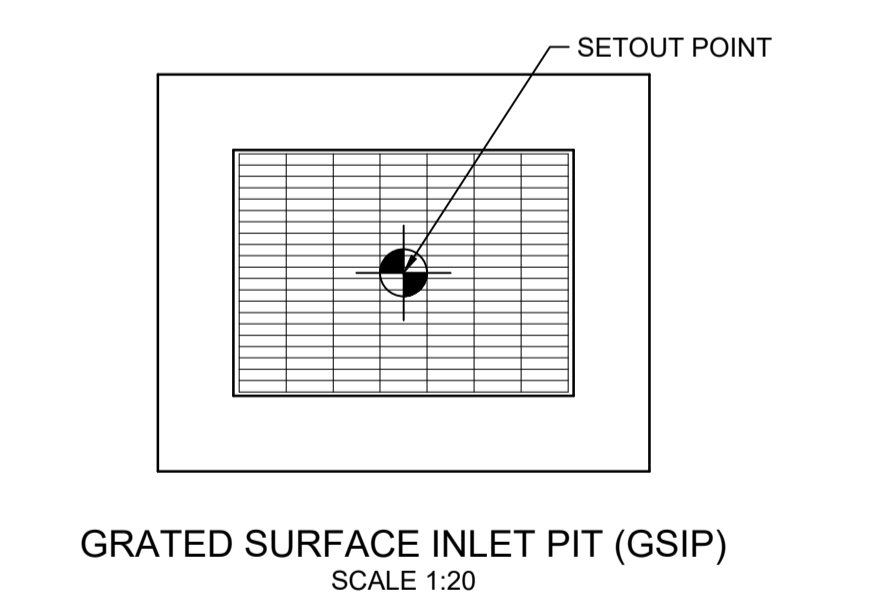
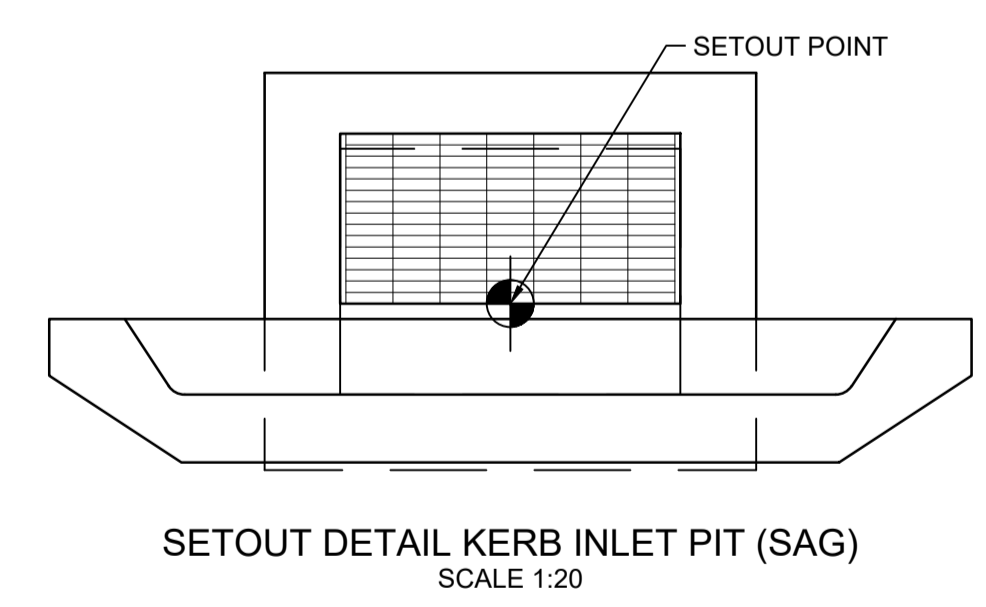
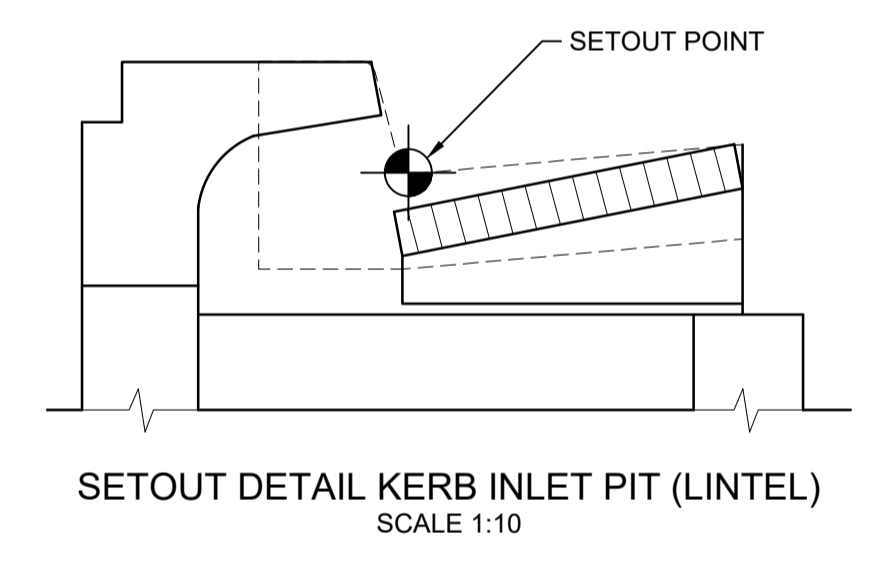
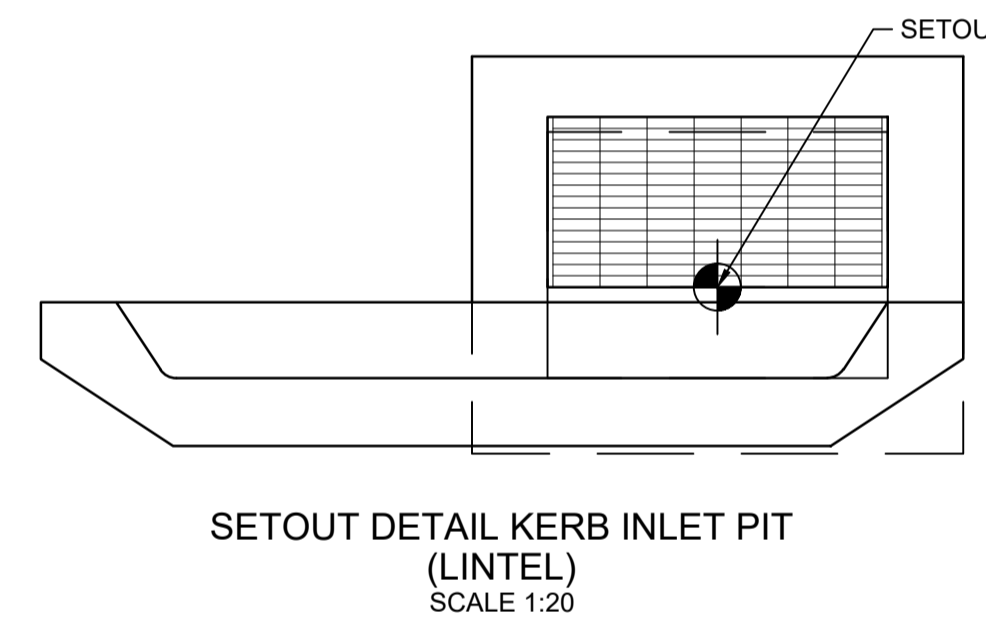


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 DATE: 25/01/23 REF:16800

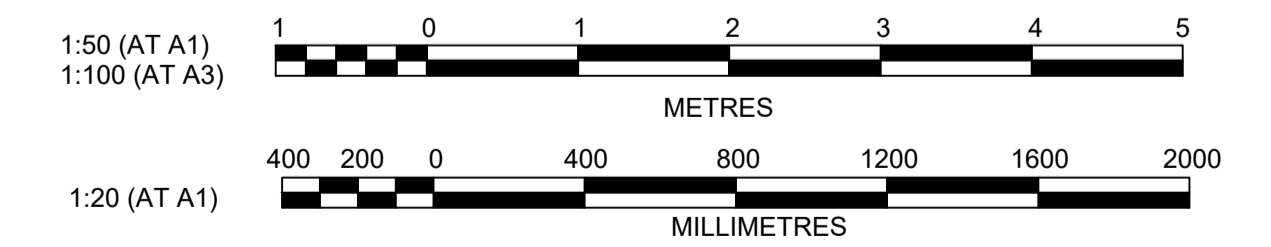


NOTES

- DESIGN BASED ON FLOW VELOCITIES FROM 12D DRAINAGE OUTPUTS FOR 100 YEAR ARI STORM EVENT
- RIP-RAP SCOUR PROTECTION DIMENSIONS CALCULATED FROM "ROCK SIZING FOR PIPE OUTLETS - STORMWATER MANAGEMENT PRACTICES" BY CATCHMENTS AND CREEKS, VERSION 2 DATED NOVEMBER 2014
- ROCK HEADWALL ARRANGEMENT SHOWN ON PLANS, PRECAST CONCRETE OUTLET ARRANGEMENT CAN BE ADOPTED, HOWEVER RIP-RAP LENGTH SHALL COMMENCE AT THE END OF THE PRECAST CONCRETE APRON SLAB
- ALL RIP-RAP TO CONSIST OF ANGULAR DURABLE QUARRY ROCK PLACED OVER A LAYER OF ANGULAR COBBLES
- RIP-RAP IS TO BE PLACED BY HAND AND PACKED INTO PLACE WITH A CROW-BAR TO ENSURE UNIFORM FIT WITH MINIMUM VOIDS



Outlet	Culvert Diameter (mm)	No Off.	Velocity (m/s)	Design Velocity (m/s)	Mean Rock Size (d ₅₀ mm)	Apron Length L (mm)	Apron Width W ₁ (mm)	Apron Width W ₂ (mm)	Bed Thickness T (mm)
41/10	600	1	4.5	4.5	300	2400	1200	1560	540



Plotted: 4 May, 2022 9:43:44 AM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CDCC\SOUTHERN HEIGHTS\H-RTP2\110185-12-CC4401.dwg

AMENDMENT	DES	DRN	CKD	APR	DATE
C ROAD 51 RELOCATED	MP	JM	JB	CM	29/04/22
B PRIVATE CERTIFIER COMMENTS	MP	MP	MS	MS	14/04/22
A ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21

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CLIENT: **REDBANK**
 NORTH RICHMOND

STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**

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REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
 PIT SCHEDULE & HEADWALL 41/10 SCOUR PROTECTION

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4401

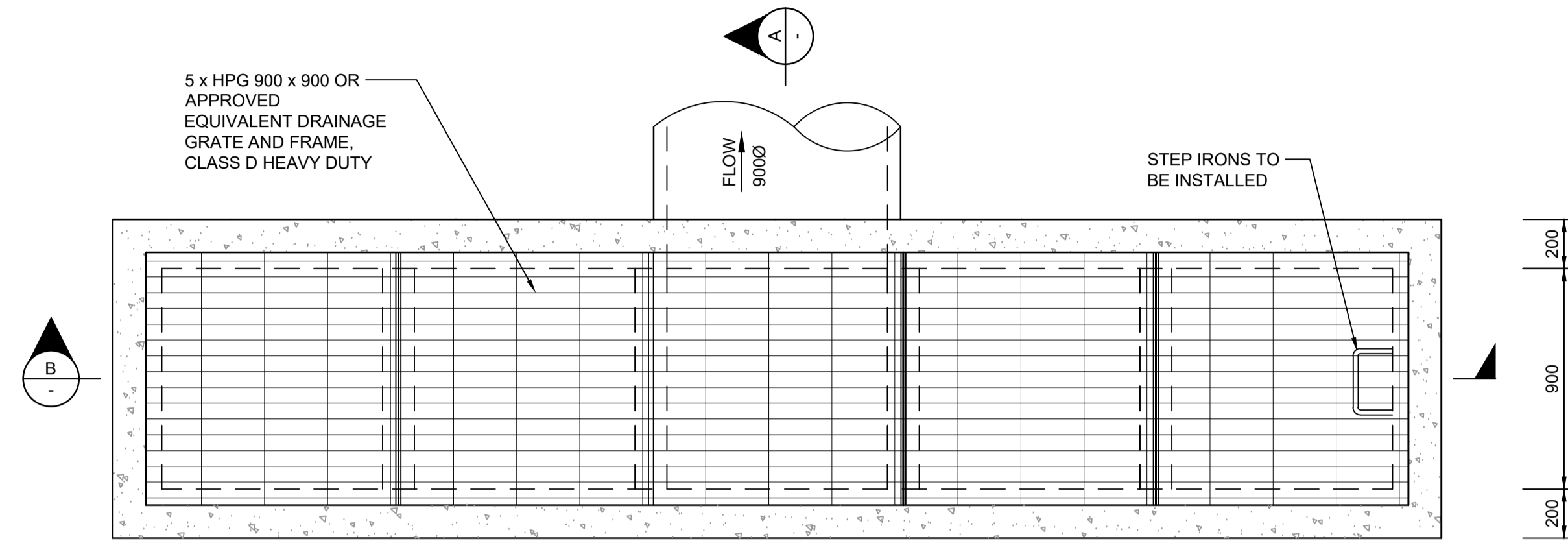
PROJECT No: **110185-12**
 SHEET No: **CC4401**

Plotted: 29 April, 2022 5:04:01 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RTP2\110185-12-CC4402.dwg

DAM OUTLET PIT DETAILS				
PIT NAME	GRATE LEVEL "A" (m)	INVERT LEVEL "B" (m)	PIT DEPTH "H" (m)	OUTLET PIPE SIZE (mm)
14/1	54.4	50.497	3.9030	Ø900

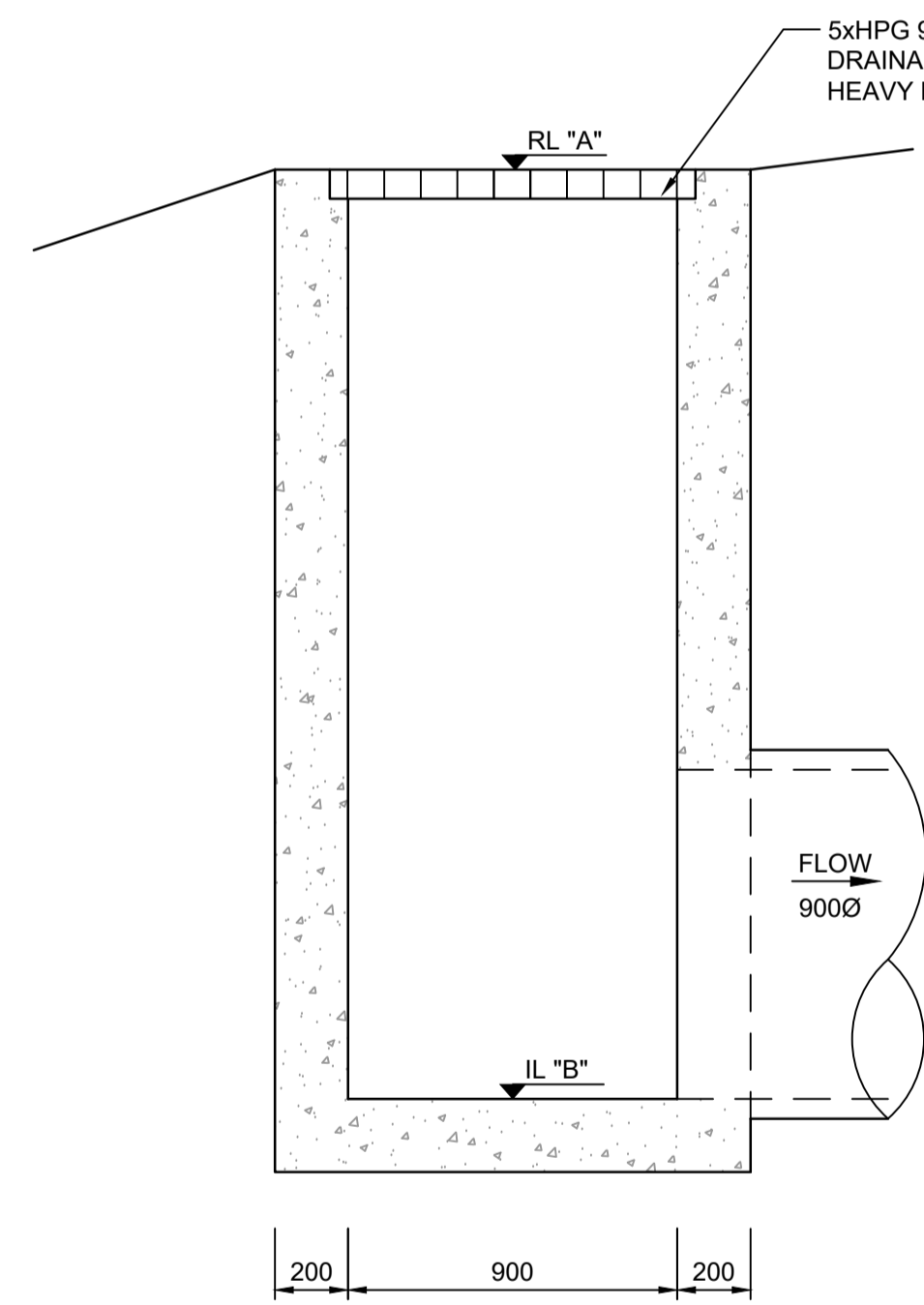
DAM 7 CALCULATIONS
 CATCHMENT AREA = 11.27Ha
 $Q_1 = 1.03\text{m}^3/\text{s}$
 $Q_2 = 1.109\text{m}^3/\text{s}$
 $Q_3 = 2.07\text{m}^3/\text{s}$
 $Q_{100} = 4.411\text{m}^3/\text{s}$

DAM 7 SPILLWAY CALCULATIONS
 $Q_{100} - Q_3 = 2.428$
 MANNINGS "n" GRASS = 0.035
 SPILLWAY LENGTH "L" = 27m
 DEPTH OF WATER "d" = 0.19m
 EMBANKMENT SLOPE 1.5 (20%)
 VELOCITY "V" = 0.8m²/s
 EMBANKMENT TO BE PROTECTED WITH REINFORCED TURF

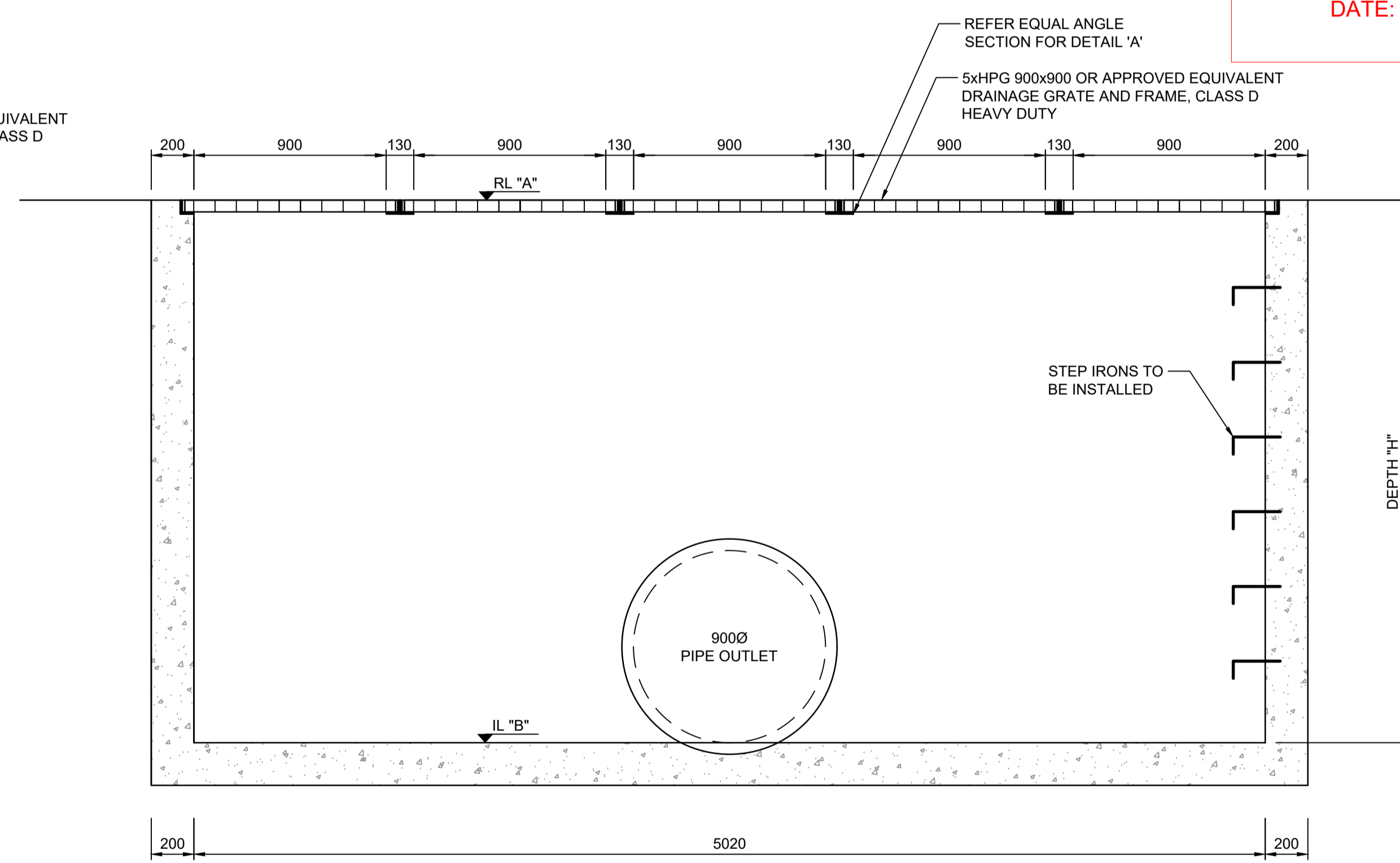


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 DATE: 25/01/23 REF:16800

GSIP INLET CAPACITY
 $Q_3 = 2.07\text{m}^3/\text{s}$
 $Q_3 = 1.56 \times P \times D^3$
 $D = 0.3\text{m}$
 CAPACITY = 2.21m³/s
 $\geq 2.07\text{m}^3/\text{s}$

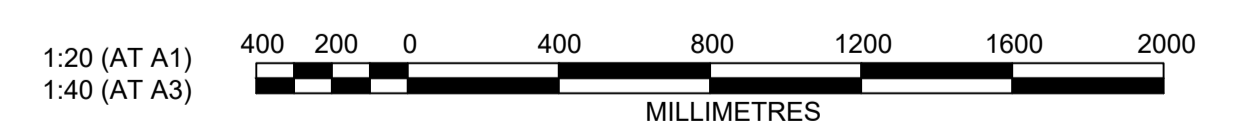


SECTION A
SCALE 1:20



SECTION B
SCALE 1:20

SUBDIVISION WORKS CERTIFICATE
 Certificate No. 20130299SW77
 Date of Issue .16/05/2022.....
 Issuing Officer *D. Restar*
 Accreditation No. BDC3367
 These plans/specifications form part of the certificate issued 16th May 2022



NO.	DESCRIPTION	MP	NM	RO	MS	DATE
A	ISSUED FOR CONSTRUCTION APPROVAL					16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

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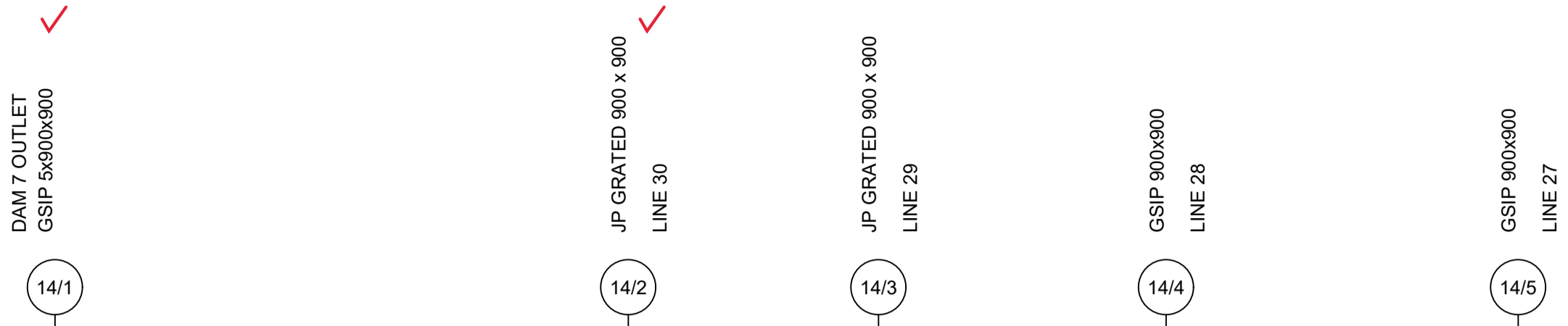
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REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC
 PIT 14/1 DETAILS

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4402

PROJECT No: **110185-12**
 SHEET No: **CC4402**
 A

Plotted: 29 April, 2022 5:05:07 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RTP2\110185-12-CC4421.dwg

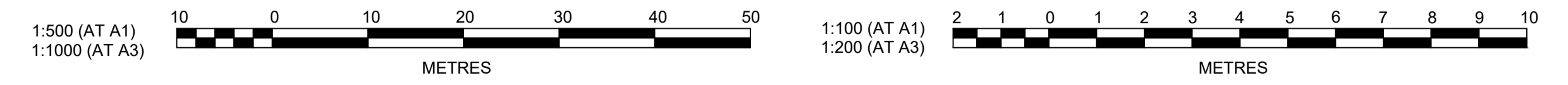


DATUM (m)	43.00				
PEAK FLOW (L/s)	2070		2136		2171
PIPE SIZE (mm)	900 ✓		900		900
PIPE CLASS	RRJ2		RRJ2		RRJ2
PIPE GRADE (%)	3.5 ✓		4.4		4.8
PIPE COVER MINIMUM	1.27		1.27		1.23
FULL PIPE VELOCITY (m/s)	3.25		3.36		3.41
HGL GRADE (%)	3.09		1.19		1.26
WAE					
HYDRAULIC GRADE LINE	51.397	49.782	49.303	48.17	46.506
INVERT LEVEL	50.497 50.43	48.35 48.667 48.637 48.54	47.629 47.599	46.333 46.303	44.598
DESIGN SURFACE LEVEL	54.4 54.38	50.85 50.944	49.916	48.578	47.008
ROAD CHAINAGE		430.54	453.35		
PIPE CHAINAGE	0	52.284	75.111	101.34	133.432

LINE 14

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 DATE: 25/01/23 REF:16800

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A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS
	AMENDMENT	DES	DRN	CKD	APR
					DATE

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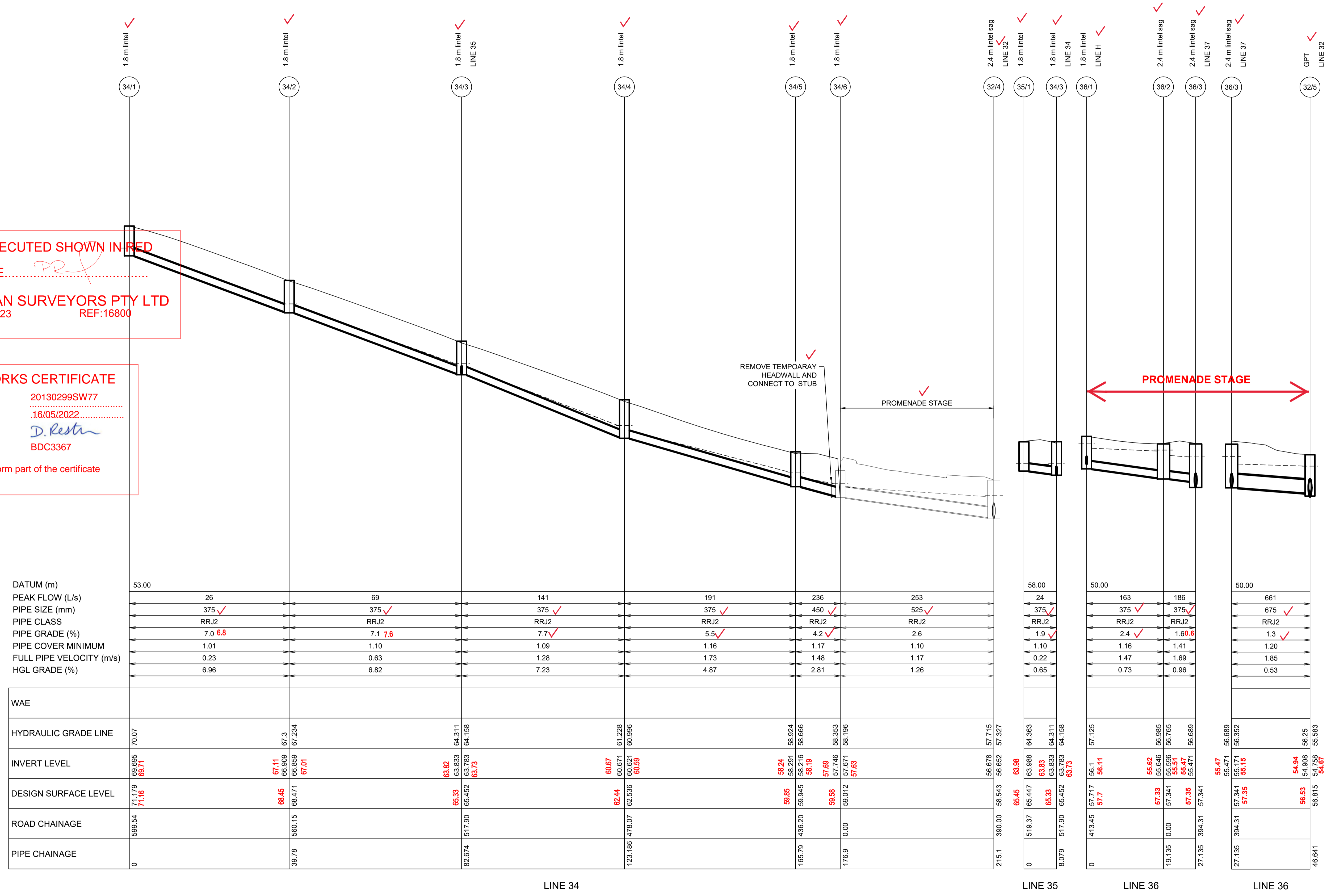
REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC
 DRAINAGE LONGITUDINAL SECTIONS
 SHEET 1
 AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4421

PROJECT No: **110185-12**
 SHEET No: **CC4421**
 A

Plotfile: 4 May 2022 10:27:37 AM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RT\2110185-12-CC4422.dwg

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PARAMETER	34/1	34/2	34/3	34/4	34/5	34/6	32/4	35/1	34/3	36/1	36/2	36/3	36/3	32/5		
DATUM (m)	53.00															
PEAK FLOW (L/s)	26			141			191			253			24		661	
PIPE SIZE (mm)	375 ✓			375 ✓			450 ✓			525 ✓			375 ✓		375 ✓	
PIPE CLASS	RRJ2															
PIPE GRADE (%)	7.0 6.8			7.1 7.6			5.5 ✓			4.2 ✓			1.9 ✓		1.3 ✓	
PIPE COVER MINIMUM	1.01															
FULL PIPE VELOCITY (m/s)	0.23			0.63			1.28			1.73			1.48		1.17	
HGL GRADE (%)	6.96			6.82			7.23			4.87			2.81		1.26	
WAE																
HYDRAULIC GRADE LINE	70.07															
INVERT LEVEL	68.985 68.11	66.909 67.3	67.11 66.859 67.01	63.82 63.833 64.311 63.783 64.158 63.73	60.67 60.671 61.228 60.621 60.996 60.59	58.24 58.291 58.924 58.216 58.666 58.19	57.69 57.746 58.353 57.671 58.196 57.63	56.678 56.543 56.652 57.327 63.98	63.988 63.983 63.933 64.311 63.783 64.158 63.73	56.1 56.11	55.62 55.646 56.985 56.765 55.51 55.471	55.47 55.471 55.171 56.352 55.15	54.94 54.908 54.935 54.67	56.815 56.815 56.25 55.363		
DESIGN SURFACE LEVEL	71.179 71.16	68.45 68.471	65.33 65.452	62.44 62.536	59.85 59.945	58.58 58.58	59.012 57.671	58.543 56.543	65.45 65.33	65.447 65.33	57.717 57.7	57.33 57.341	57.35 57.35	57.341		
ROAD CHAINAGE	599.54	560.15	517.90	476.07	436.20	0.00	390.00	519.37	517.90	413.45	0.00	394.31	394.31	46.641		
PIPE CHAINAGE	0	39.78	82.674	123.186	165.79	176.9	215.1	0	8.079	0	19.135	27.135	27.135	46.641		



REV	DESCRIPTION	DES	DRN	CKD	APR	DATE
B	ROAD 51 RELOCATED	MP	JM	JB	CM	29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
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**REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC
 DRAINAGE LONGITUDINAL SECTIONS
 SHEET 2**

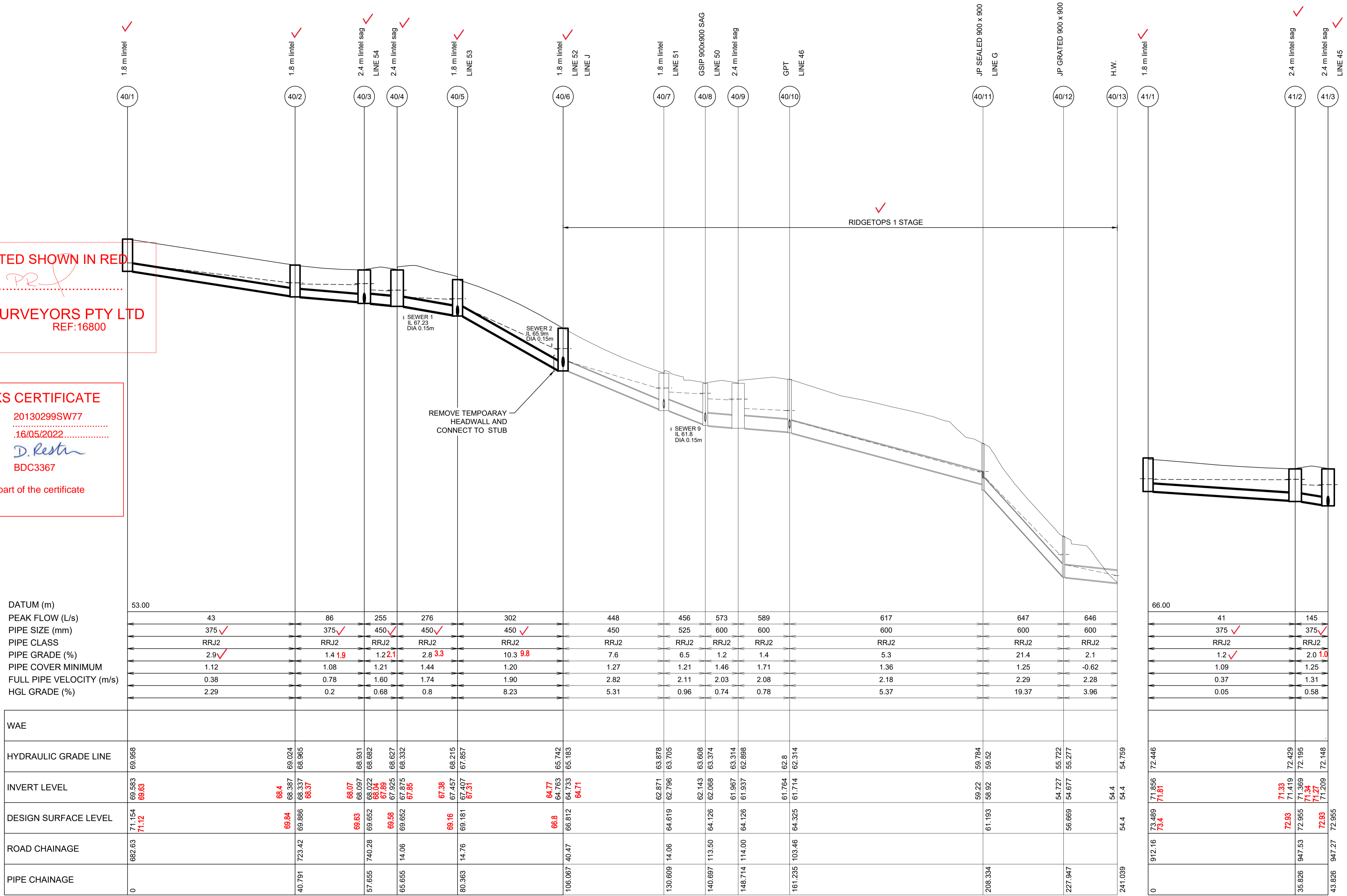
PROJECT No: **110185-12**
 SHEET No: **CC4422**
 PLAN No: **110185-12-CC4422**

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4422

Plotfile: 4 May 2022 10:03:32 AM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RT\2110185-12-CC4423.dwg

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 DATE: 25/01/23 REF:16800

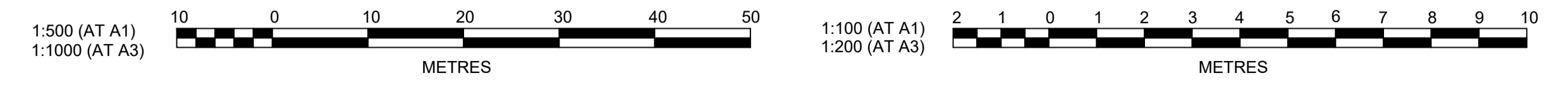
SUBDIVISION WORKS CERTIFICATE
 Certificate No. 20130299SW77
 Date of Issue .16/05/2022
 Issuing Officer *D. Restin*
 Accreditation No. BDC3367
 These plans/specifications form part of the certificate issued 16th May 2022



DATUM (m)	53.00													66.00						
PEAK FLOW (L/s)	43	86	255	276	302	448	456	573	589	617	647	646	41	145						
PIPE SIZE (mm)	375 ✓	375 ✓	450 ✓	450 ✓	450 ✓	450	525	600	600	600	600	600	375 ✓	375 ✓						
PIPE CLASS	RRJ2	RRJ2	RRJ2	RRJ2	RRJ2	RRJ2	RRJ2	RRJ2	RRJ2	RRJ2	RRJ2	RRJ2	RRJ2	RRJ2						
PIPE GRADE (%)	2.9 ✓	1.4 1.9	1.2 2.1	2.8 3.3	10.3 9.8	7.6	6.5	1.2	1.4	5.3	21.4	2.1	1.2 ✓	2.0 1.0						
PIPE COVER MINIMUM	1.12	1.08	1.21	1.44	1.20	1.27	1.21	1.46	1.71	1.36	1.25	-0.62	1.09	1.25						
FULL PIPE VELOCITY (m/s)	0.38	0.78	1.60	1.74	1.90	2.82	2.11	2.03	2.08	2.18	2.29	2.28	0.37	1.31						
HGL GRADE (%)	2.29	0.2	0.68	0.8	8.23	5.31	0.96	0.74	0.78	5.37	19.37	3.96	0.05	0.58						
WAE																				
HYDRAULIC GRADE LINE	69.958	69.024	68.931	68.682	68.332	68.215	65.742	63.705	62.871	63.608	63.374	62.314	62.446	72.446						
INVERT LEVEL	69.693 69.63	68.387 68.4	68.337 68.37	68.097 68.07	68.022 68.04	67.825 67.89	67.875 67.85	67.457 67.38	67.407 67.31	64.773 64.77	64.733 64.71	62.871 62.796	59.22 58.92	54.727 54.677	54.4 54.4	71.856 71.81	71.419 71.33	72.429 71.969	72.195 71.77	72.148 71.209
DESIGN SURFACE LEVEL	71.154 71.12	69.84 69.84	69.886 69.83	69.652 69.63	69.662 69.64	69.58 69.58	69.652 69.65	69.16 69.16	69.181 69.181	66.8 66.8	66.812 66.812	64.619 64.619	61.193 61.193	56.669 56.669	54.4 54.4	73.489 73.4	72.93 72.93	72.955 72.955	72.83 72.83	72.955 72.955
ROAD CHAINAGE	692.63	740.28	723.42	740.28	14.06	14.76	40.47	130.609	140.697	148.714	161.235	208.334	227.947	241.039	912.16	947.53	947.27			
PIPE CHAINAGE	0	40.791	57.655	65.655	80.363	106.067	130.609	140.697	148.714	161.235	208.334	227.947	241.039	0	35.826	43.826				

LINE 40

LINE 41



B	ROAD 51 RELOCATED	MP	JM	JB	CM	29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

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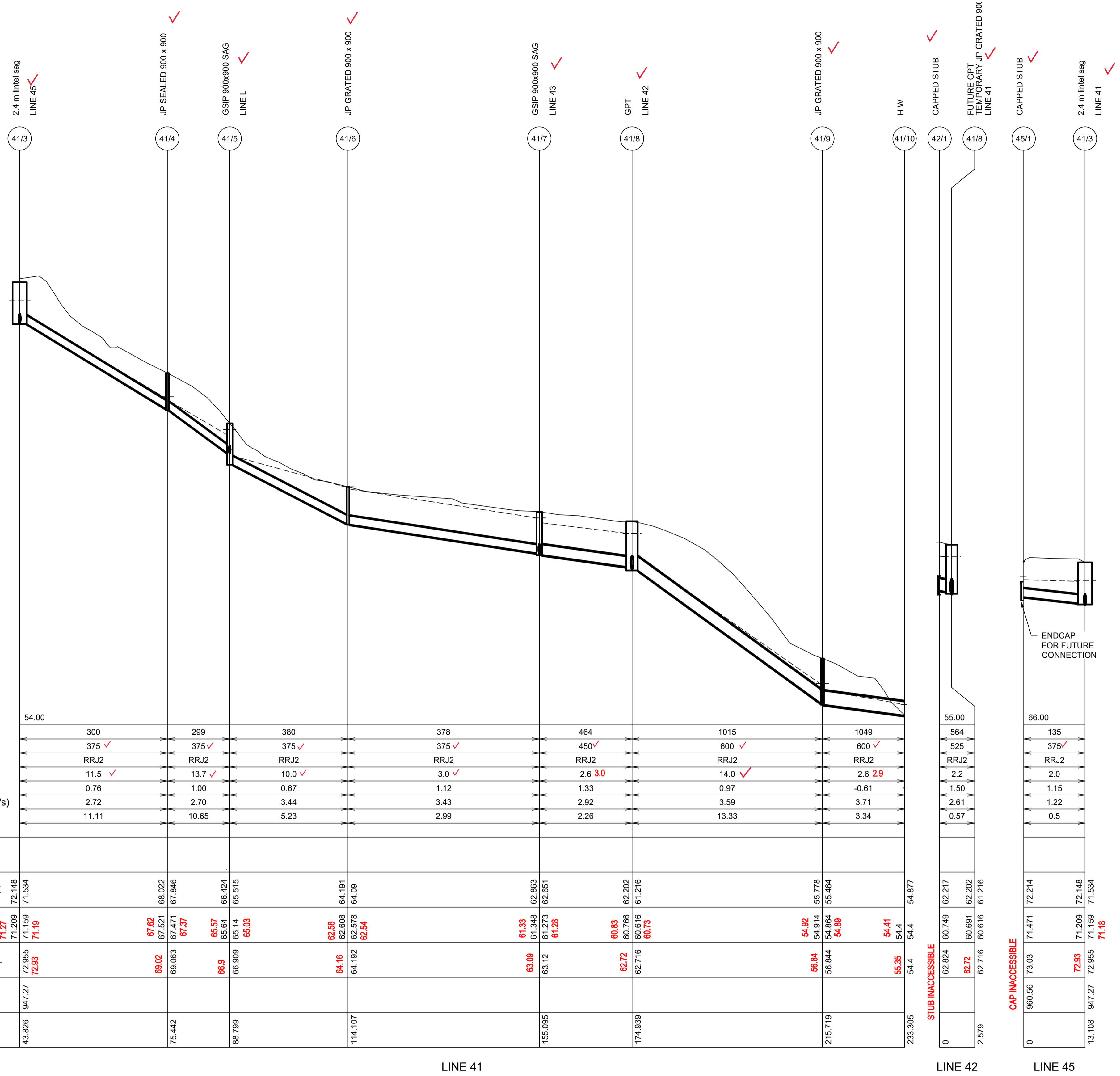
STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**
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REDBANK, NORTH RICHMOND RIDGETOPS 2 - SWC DRAINAGE LONGITUDINAL SECTIONS SHEET 3

PROJECT No: **110185-12**
 SHEET No: **CC4423**
 PLAN No: **110185-12-CC4423**

B

Plotfile: 4 May 2022 10:03:00 AM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CCSOUTHERN HEIGHTS\4-RT\2110185-12-CC4424.dwg

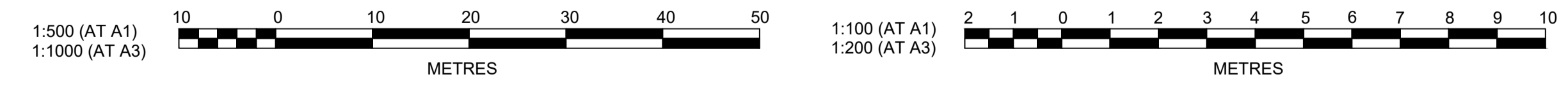


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 Date of Issue 16/05/2022
 Issuing Officer *D. Restin*
 Accreditation No. BDC3367
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DATUM (m)	54.00																																										
PEAK FLOW (L/s)	300			299			380			378			464			1015			1049																								
PIPE SIZE (mm)	375 ✓			375 ✓			375 ✓			375 ✓			450 ✓			600 ✓			600 ✓																								
PIPE CLASS	RRJ2			RRJ2			RRJ2			RRJ2			RRJ2			RRJ2			RRJ2																								
PIPE GRADE (%)	11.5 ✓			13.7 ✓			10.0 ✓			3.0 ✓			2.6 3.0			14.0 ✓			2.6 2.9																								
PIPE COVER MINIMUM	0.76			1.00			0.67			1.12			1.33			0.97			-0.61																								
FULL PIPE VELOCITY (m/s)	2.72			2.70			3.44			3.43			2.92			3.59			3.71																								
HGL GRADE (%)	11.11			10.65			5.23			2.99			2.26			13.33			3.34																								
WAE																																											
HYDRAULIC GRADE LINE	71.27	71.209	72.148	67.62	67.521	68.022	67.471	67.846	65.57	65.64	66.424	62.58	62.608	64.191	61.33	61.348	62.863	60.83	60.766	62.202	54.92	54.914	55.778	55.00	564	525	62.824	60.749	62.217	66.00	135	375											
INVERT LEVEL	71.27	71.209	72.148	67.62	67.521	68.022	67.471	67.846	65.57	65.64	66.424	62.58	62.608	64.191	61.33	61.348	62.863	60.83	60.766	62.202	54.92	54.914	55.778	55.00	564	525	62.824	60.749	62.217	66.00	135	375											
DESIGN SURFACE LEVEL	72.95	72.955	72.93	69.02	69.063	69.471	66.9	66.909	65.14	65.03	64.16	64.192	62.578	63.12	63.12	62.651	63.09	63.12	62.716	62.72	62.716	60.816	56.84	56.844	54.88	55.35	54.4	54.4	62.72	62.716	60.816	72.93	71.209	72.148									
ROAD CHAINAGE	947.27	947.27	947.27																										960.56	947.27	947.27	72.955	71.159	71.534									
PIPE CHAINAGE	43.826	43.826	43.826	75.442	75.442	75.442	88.789	88.789									155.095	155.095	155.095	174.939	174.939	174.939	215.719	215.719	215.719	233.305	233.305	233.305	0	0	0	2.579	2.579	2.579	0	0	0	13.108	947.27	947.27	72.955	71.159	71.534

LINE 41 LINE 42 LINE 45



REV	DESCRIPTION	DATE	BY	CHKD
B	ROAD 51 RELOCATED	29/04/22	JM	CM
A	ISSUED FOR CONSTRUCTION APPROVAL	16/07/21	NM	MS
	AMENDMENT		DES	DRN
			CKD	APR
				DATE

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 P 02 4720 3300 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT: **REDBANK**
 NORTH RICHMOND

STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**
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**REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC
 DRAINAGE LONGITUDINAL SECTIONS
 SHEET 4**

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4424

PROJECT No: **110185-12**
 SHEET No: **CC4424**

B

Plotfile: 4 May, 2022 9:58:17 AM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CDCC\SOUTHERN HEIGHTS\H-RTP2\110185-12-CC4425.dwg

SUBDIVISION WORKS CERTIFICATE

Certificate No. 20130299SW77
 Date of Issue 16/05/2022
 Issuing Officer *D. Restar*
 Accreditation No. BDC3367

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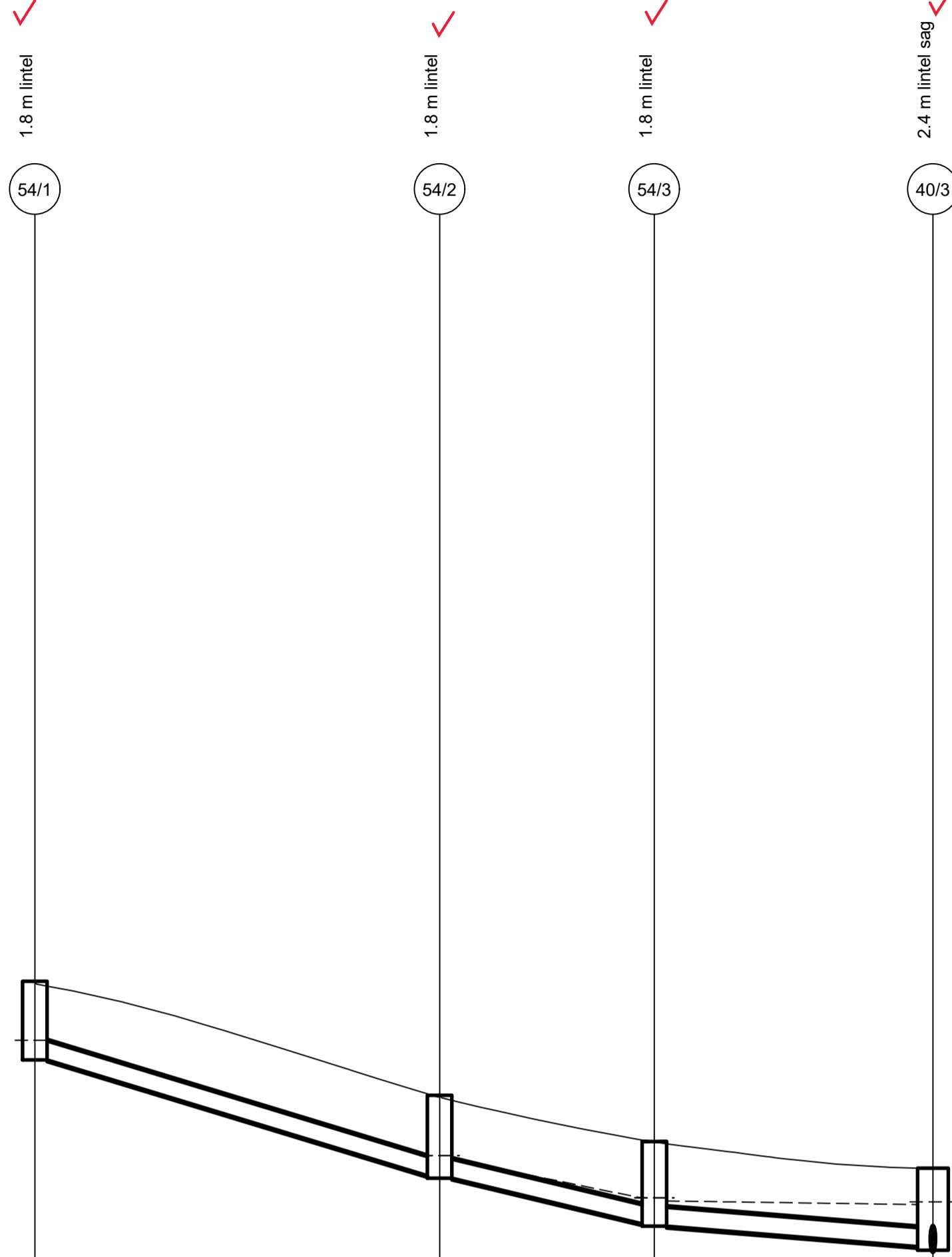
SIGNATURE *PR*

VINCE MORGAN SURVEYORS PTY LTD
 DATE: 25/01/23 REF:16800

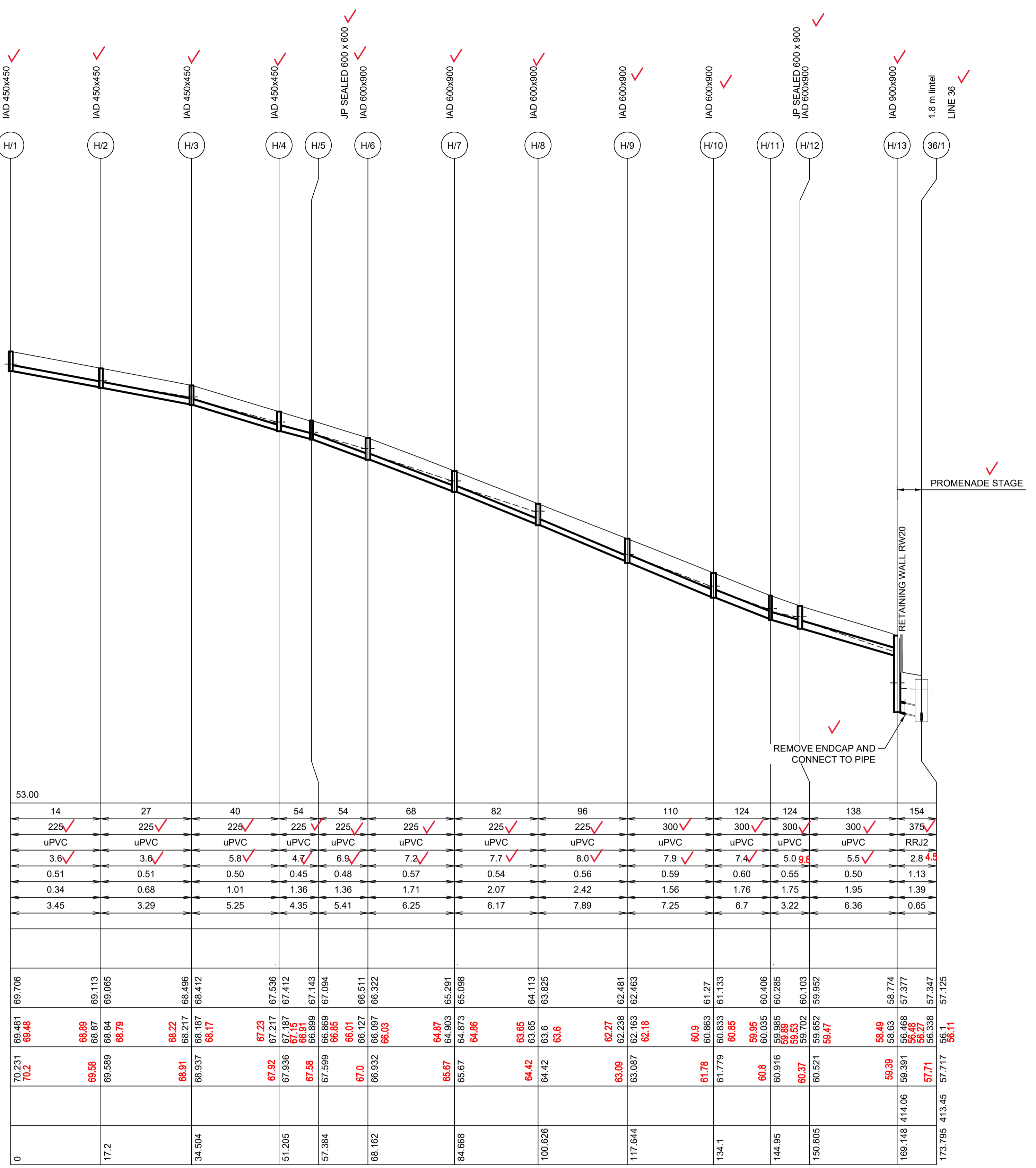
DATUM (m)	63.00
PEAK FLOW (L/s)	20 24
PIPE SIZE (mm)	375 ✓ 375 ✓
PIPE CLASS	RRJ2 ✓ RRJ2 ✓
PIPE GRADE (%)	6.1 ✓ 3.7 ✓
PIPE COVER MINIMUM	1.13 1.09
FULL PIPE VELOCITY (m/s)	0.18 0.22
HGL GRADE (%)	6 0.02
WAE	
HYDRAULIC GRADE LINE	69.116
INVERT LEVEL	69.741 68.69
DESIGN SURFACE LEVEL	70.987 70.2
ROAD CHAINAGE	770.00
PIPE CHAINAGE	0



LINE 53

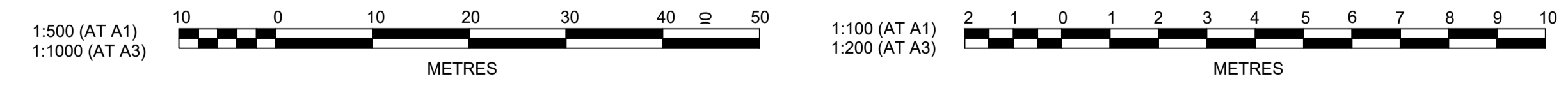


LINE 54



LINE H

DATUM (m)	63.00	64.00	63.00
PEAK FLOW (L/s)	20	24	375
PIPE SIZE (mm)	375 ✓	375 ✓	375 ✓
PIPE CLASS	RRJ2 ✓	RRJ2 ✓	RRJ2 ✓
PIPE GRADE (%)	6.1 ✓	3.7 ✓	5.7 ✓
PIPE COVER MINIMUM	1.13	1.09	1.13
FULL PIPE VELOCITY (m/s)	0.18	0.22	0.23
HGL GRADE (%)	6	0.02	3.62
WAE			
HYDRAULIC GRADE LINE	69.116	72.181	69.706
INVERT LEVEL	69.741 68.69	71.806 71.79	68.07 68.94
DESIGN SURFACE LEVEL	70.987 70.2	73.366 73.3	70.231 70.2
ROAD CHAINAGE	770.00	828.81	69.481 69.48
PIPE CHAINAGE	0	0	0



B	ROAD 51 RELOCATED	MP	JM	JB	CM	29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

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**REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC
 DRAINAGE LONGITUDINAL SECTIONS
 SHEET 5**

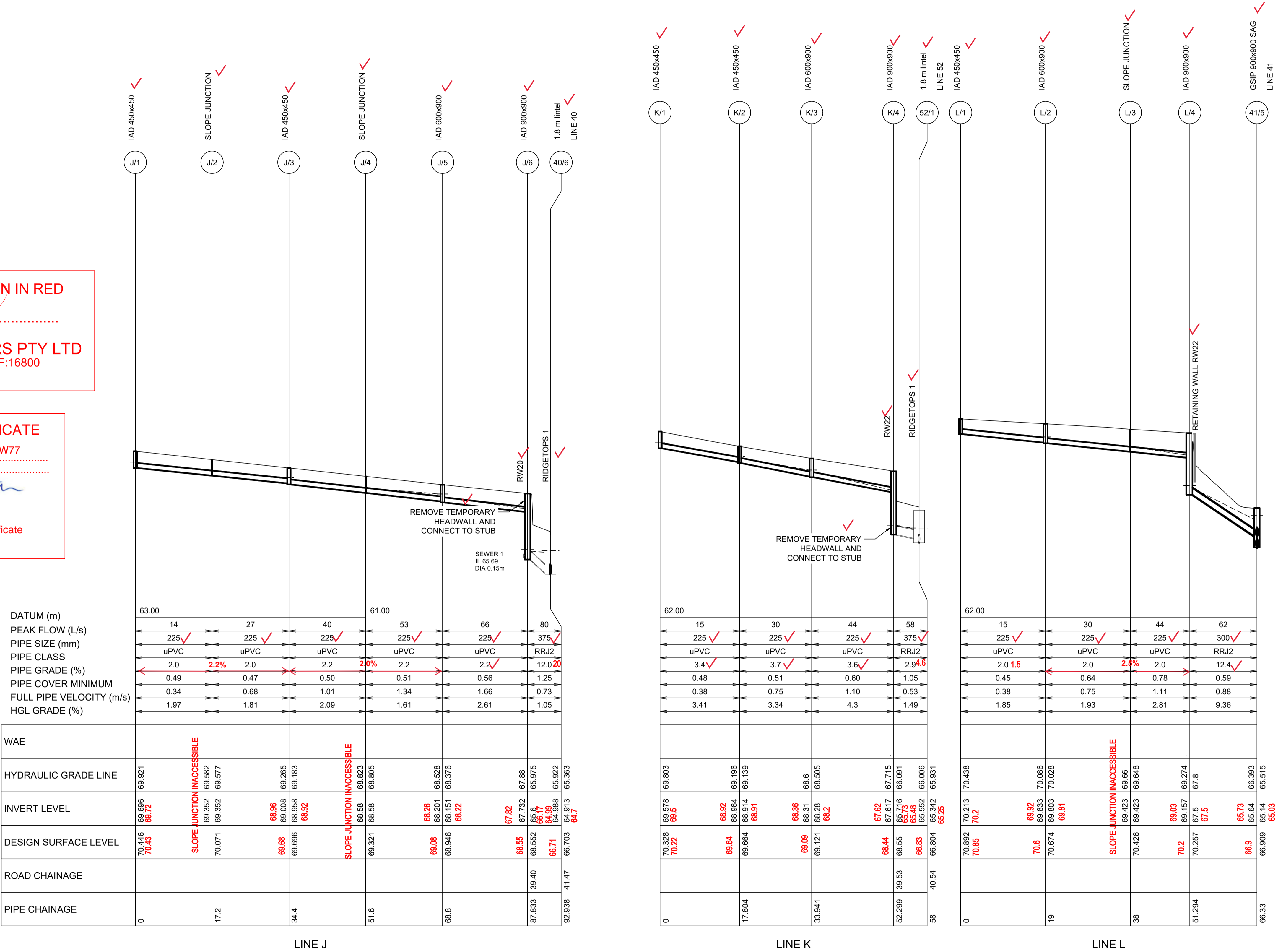
AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4425

PROJECT No: **110185-12**
 SHEET No: **CC4425**

Plotted: 4 May 2022 10:43:24 AM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CCSOUTHERN HEIGHTS\4-RTP2\110185-12-CC4426.dwg

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 Date of Issue .16/05/2022
 Issuing Officer *D. Resta*
 Accreditation No. BDC3367
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DATUM (m)	63.00					61.00		
PEAK FLOW (L/s)	14	27	40	53	66	80		
PIPE SIZE (mm)	225	225	225	225	225	375		
PIPE CLASS	uPVC	uPVC	uPVC	uPVC	uPVC	RRJ2		
PIPE GRADE (%)	2.0	2.2	2.2	2.2	2.2	2.9	2.0	
PIPE COVER MINIMUM	0.49	0.47	0.50	0.51	0.56	1.25		
FULL PIPE VELOCITY (m/s)	0.34	0.68	1.01	1.34	1.66	0.73		
HGL GRADE (%)	1.97	1.81	2.09	1.61	2.61	1.05		

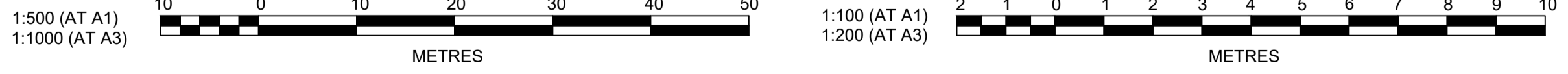
WAE							
HYDRAULIC GRADE LINE	69.921						
INVERT LEVEL	69.696 69.72		69.008 69.06		68.528 68.552	67.732 67.88	65.975 66.17
DESIGN SURFACE LEVEL	70.446 70.43		69.696 69.68		68.946 68.92	68.121 68.22	66.703 66.71
ROAD CHAINAGE							
PIPE CHAINAGE	0	17.2	34.4	51.6	68.8	87.833	92.938

DATUM (m)	62.00				
PEAK FLOW (L/s)	15	30	44	58	
PIPE SIZE (mm)	225	225	225	375	
PIPE CLASS	uPVC	uPVC	uPVC	RRJ2	
PIPE GRADE (%)	3.4	3.7	3.6	2.9	1.6
PIPE COVER MINIMUM	0.48	0.51	0.60	1.05	
FULL PIPE VELOCITY (m/s)	0.38	0.75	1.10	0.53	
HGL GRADE (%)	3.41	3.34	4.3	1.49	

WAE				
HYDRAULIC GRADE LINE	69.803			
INVERT LEVEL	69.576 69.5	68.964 68.91	68.31 68.2	67.617 67.73
DESIGN SURFACE LEVEL	70.328 70.22	69.664 69.64	68.912 68.9	68.121 68.44
ROAD CHAINAGE				
PIPE CHAINAGE	0	17.804	33.941	52.299

DATUM (m)	62.00				
PEAK FLOW (L/s)	15	30	44	62	
PIPE SIZE (mm)	225	225	225	300	
PIPE CLASS	uPVC	uPVC	uPVC	RRJ2	
PIPE GRADE (%)	2.0	2.0	2.0	12.4	1.6
PIPE COVER MINIMUM	0.45	0.64	0.78	0.59	
FULL PIPE VELOCITY (m/s)	0.38	0.75	1.11	0.88	
HGL GRADE (%)	1.85	1.93	2.81	9.36	

WAE				
HYDRAULIC GRADE LINE	70.438			
INVERT LEVEL	70.213 70.2	69.833 69.81	69.423 69.423	68.903 68.903
DESIGN SURFACE LEVEL	70.892 70.85	70.6 70.674	70.426 70.426	70.2 70.257
ROAD CHAINAGE				
PIPE CHAINAGE	0	19	38	51.294



REV	DESCRIPTION	BY	CHKD	DATE
B	ROAD 51 RELOCATED	MP	JM	29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	16/07/21
	AMENDMENT	DES	DRN	CKD

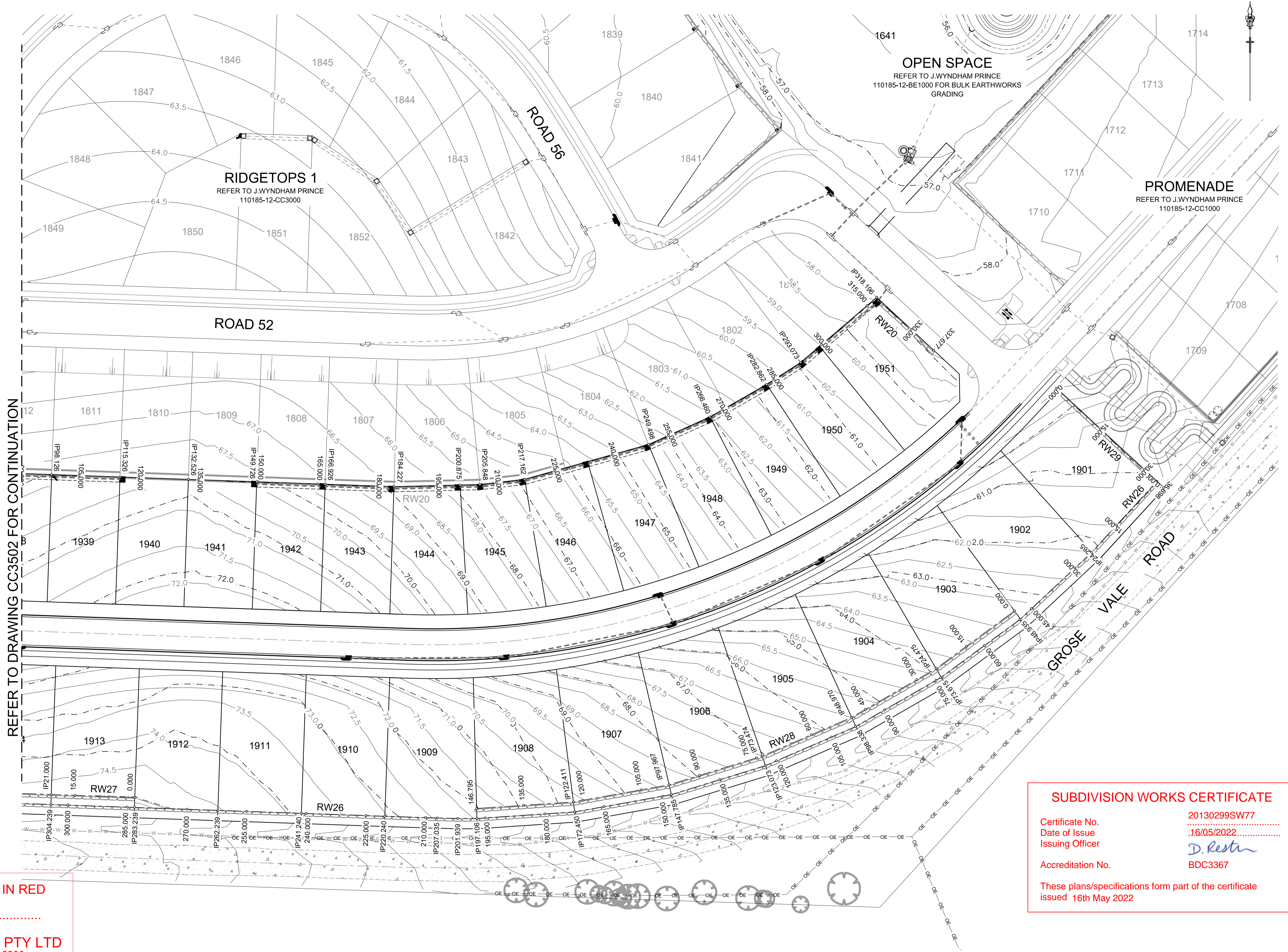
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REDBANK, NORTH RICHMOND RIDGETOPS 2 - SWC DRAINAGE LONGITUDINAL SECTIONS SHEET 6
 AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4426

PROJECT No: **110185-12**
 SHEET No: **CC4426**
 B



REFER TO DRAWING CC3502 FOR CONTINUATION

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REV	DESCRIPTION	DES	DRN	CKD	APR	DATE
B	ROAD 51 RELOCATED	MP	JM	JB	CM	29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT					

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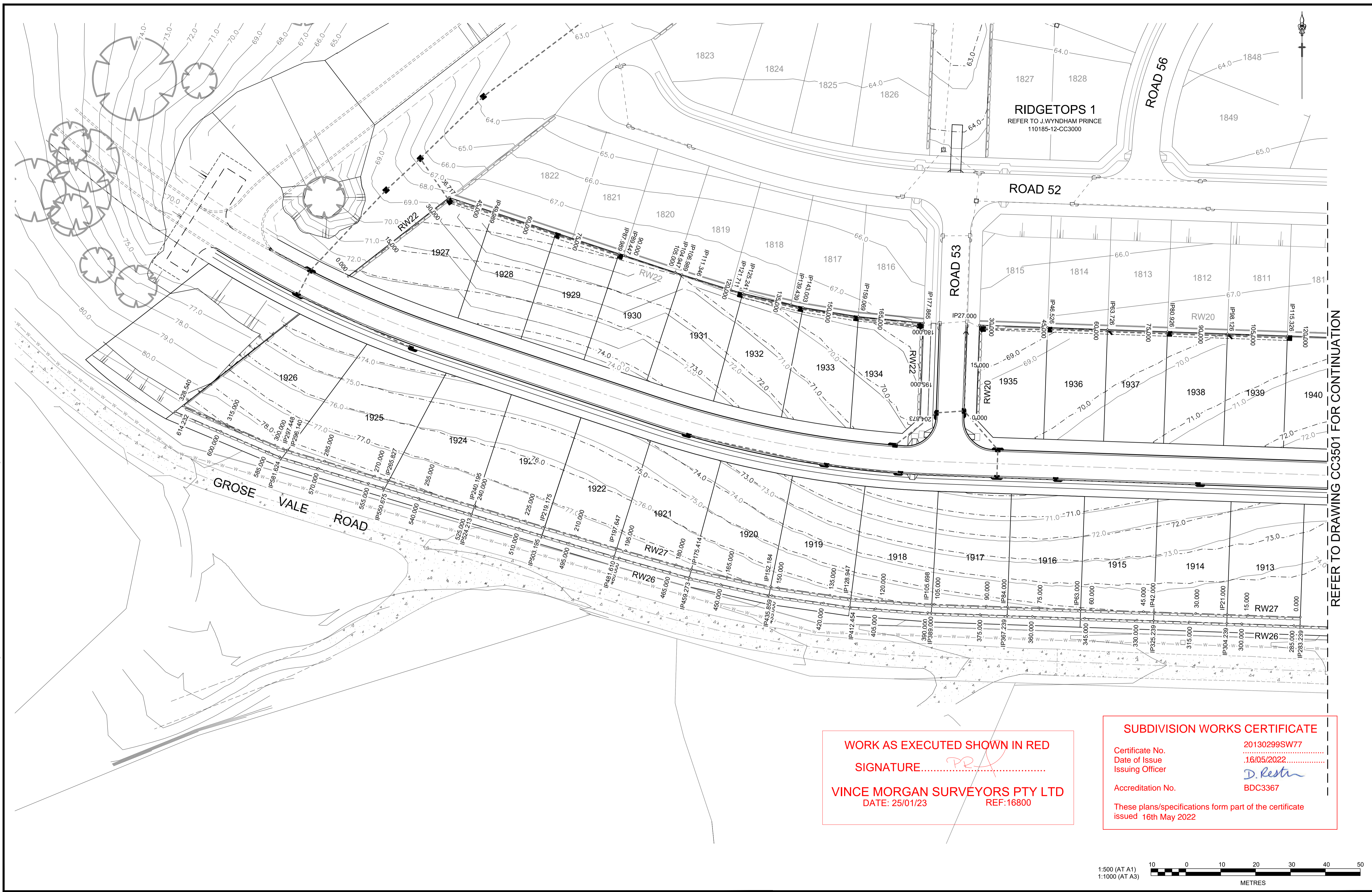
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**REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC
 RETAINING WALLS PLAN
 SHEET 1**

PROJECT No: **110185-12**
 SHEET No: **CC4501**
 PLAN No: 110185-12-CC4501

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4501 **B**

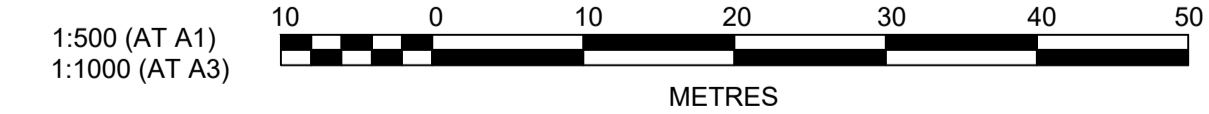
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B	ROAD 51 RELOCATED	MP	JM	JB	CM	29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

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 P 02 4720 3300 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT:

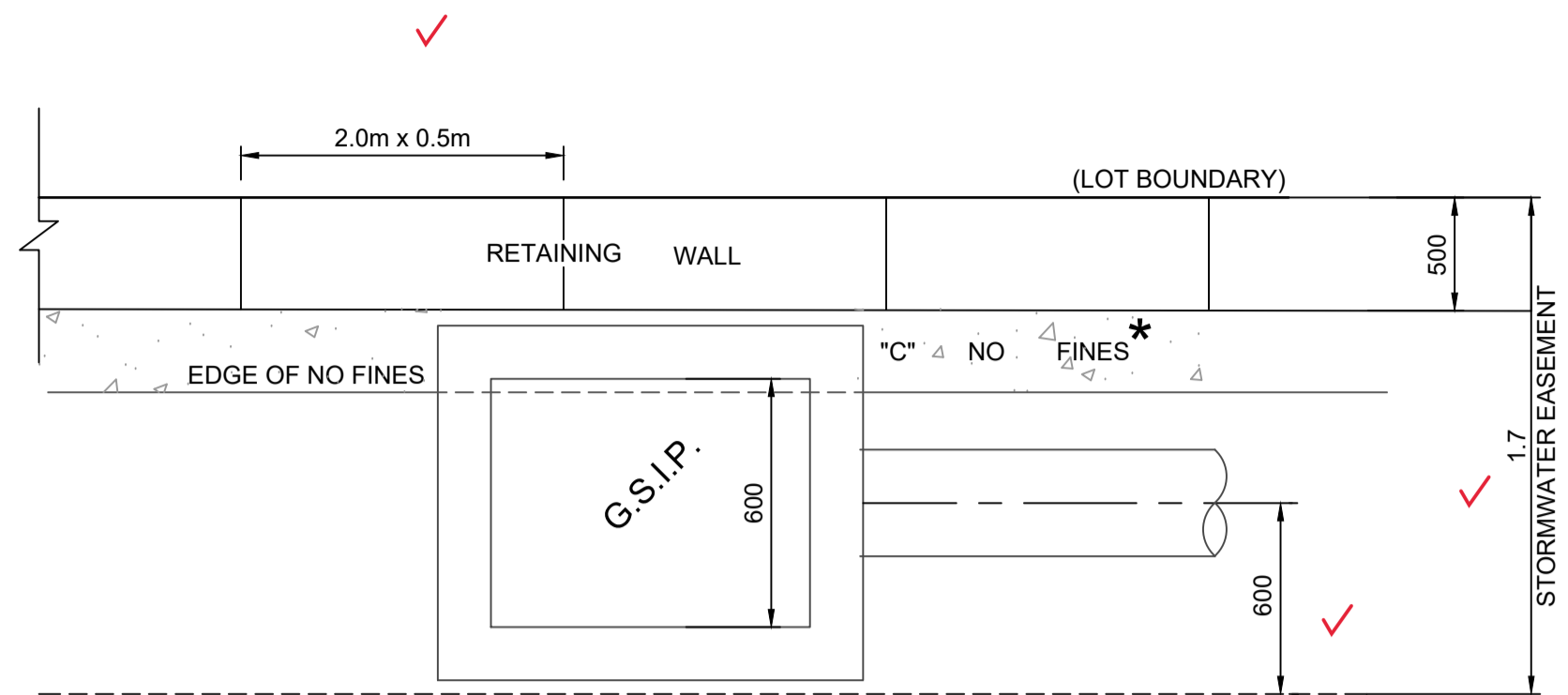
 NORTH RICHMOND

STATUS:
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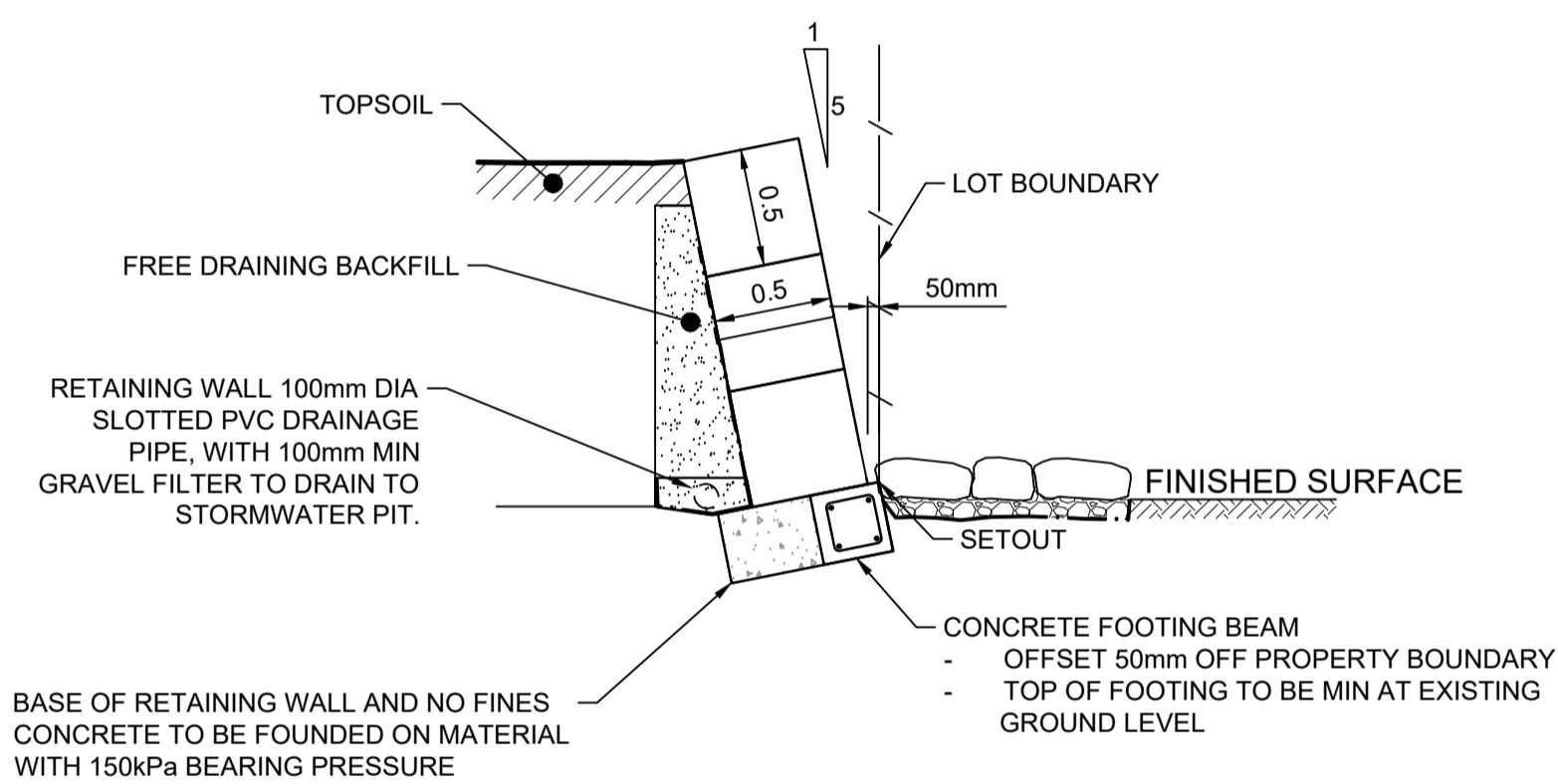
REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
 RETAINING WALLS PLAN
 SHEET 2
 AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4502

PROJECT No:
110185-12
 SHEET No:
CC4502
 B

Plotted: 29 April, 2022 5:07:42 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1\DA\CD\CC\Southern Heights\4-RTP\2110185-12-CC4503.dwg

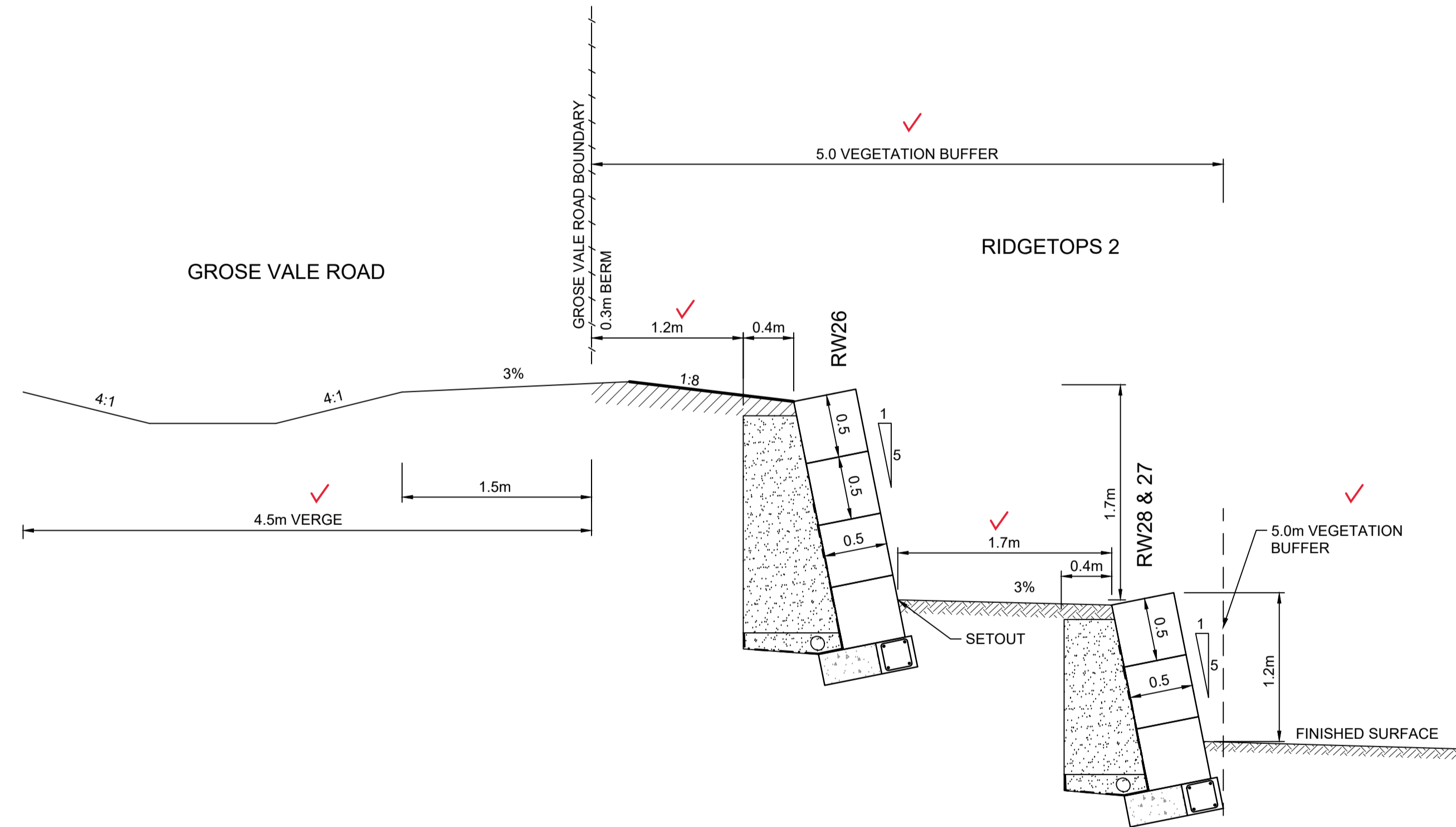


INTERALLOTMENT DRAINAGE EASEMENT WITH SANDSTONE LOGS RETAINING WALL ARRANGEMENT
N.T.S



SANDSTONE LOGS RETAINING WALL STANDARD DETAIL
FOR RW 20 & 22
3 (OR LESS) BLOCKS ARRANGEMENT AT 1.5m MAX HEIGHT
N.T.S

FOR SANDSTONE LOG RETAINING WALL REFER TO INHOUSE CONSULTING ENGINEERS REF 17770 Dwg No. S11 & S12 FOR STRUCTURAL DESIGN AND CERTIFICATION.



TWO TIER SANDSTONE LOGS RETAINING WALL STANDARD DETAIL
4 BLOCK ARRANGEMENT (1.7m MAX HEIGHT) TOP RETAINING WALL
3 BLOCK ARRANGEMENT (1.2m MAX HEIGHT) LOWER RETAINING WALL
N.T.S

WORK AS EXECUTED SHOWN IN RED
SIGNATURE.....*PR*.....
VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800

SUBDIVISION WORKS CERTIFICATE
Certificate No. 20130299SW77
Date of Issue 16/05/2022
Issuing Officer *D. Restin*
Accreditation No. BDC3367
These plans/specifications form part of the certificate issued 16th May 2022

B	PRIVATE CERTIFIER COMMENTS	MP	MP	MS	MS	14/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

J. WYNDHAM PRINCE
CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS
PO Box 4366 PENRITH WESTFIELD NSW 2750
P 02 4720 3300 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT: **REDBANK**
NORTH RICHMOND


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REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
RETAINING WALLS DETAILS
AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4503

PROJECT No: **110185-12**
SHEET No: **CC4503**
B

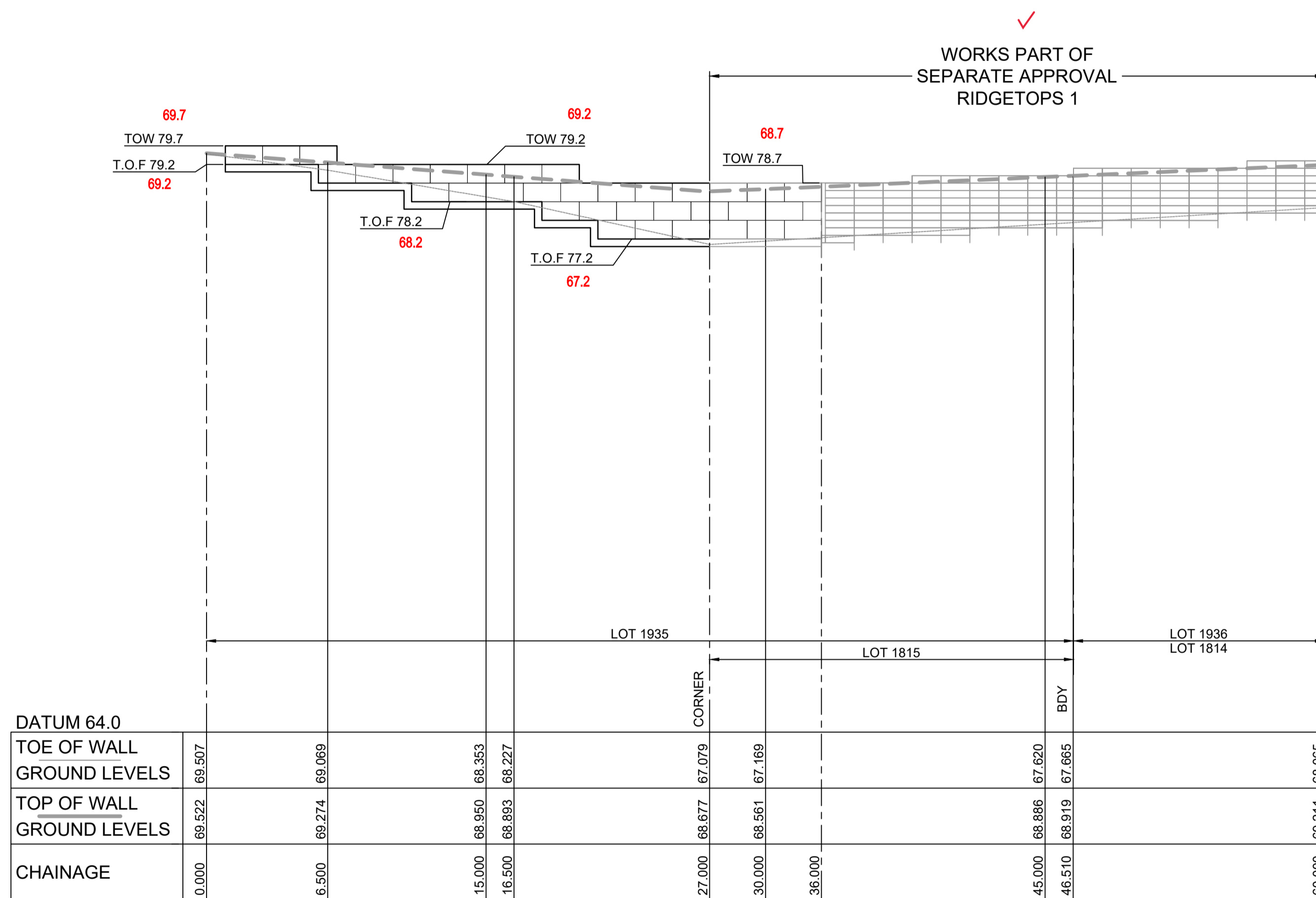
Plotted: 29 April, 2022 5:05:06 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RTP\2110185-12-CC4511.dwg

LEGEND

 CONCRETE PANELS I-BEAM RETAINING WALL

 SANDSTONE LOG RETAINING WALL

RW 20			
CHAINAGE	EASTING	NORTHING	BEARING
0	286405.36	6281046.86	2°00'57.16"
27	286406.31	6281073.84	
166.93	286546.15	6281068.92	
184.23	286563.44	6281068.31	
200.88	286580.09	6281068.71	
205.85	286585.06	6281068.83	
217.16	286596.29	6281070.15	
249.5	286627.43	6281078.89	
266.46	286642.91	6281085.82	
282.86	286657.13	6281093.99	
293.07	286665.71	6281099.53	
318.2	286684.8	6281115.86	
337.68	286699.09	6281102.62	132°48'55.65"



LONGITUDINAL SECTION RW 20
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100

WORK AS EXECUTED SHOWN IN RED

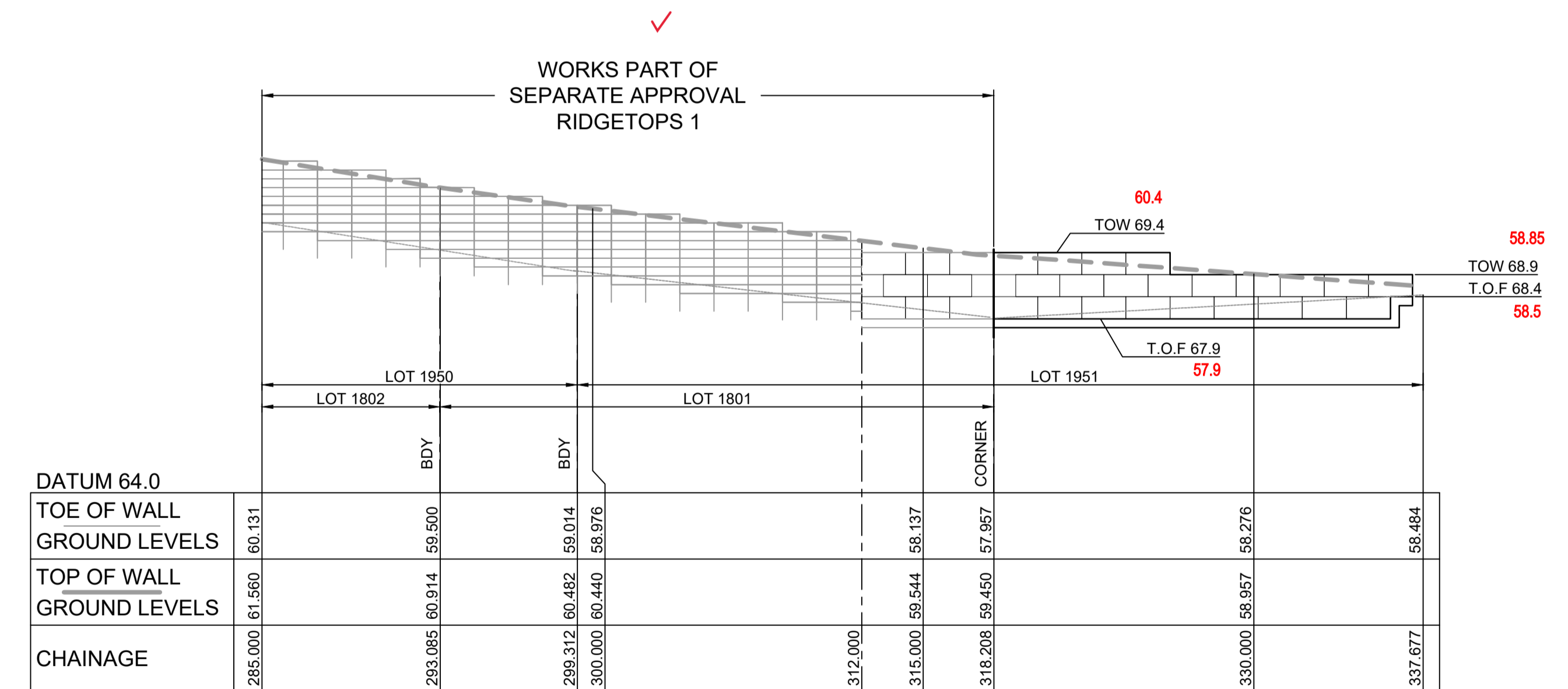
SIGNATURE.....*PR*.....

VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800

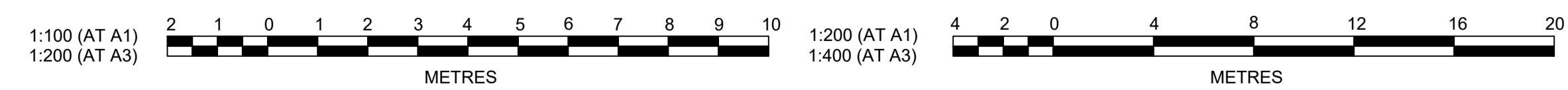
SUBDIVISION WORKS CERTIFICATE

Certificate No. 20130299SW77
Date of Issue .16/05/2022
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Accreditation No. BDC3367

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LONGITUDINAL SECTION RW 20 (Cont)
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100



REV	DESCRIPTION	BY	CHKD	DATE
B	PRIVATE CERTIFIER COMMENTS	MP	MP	MS MS 14/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM RO MS	16/07/21
	AMENDMENT	DES	DRN CKD APR	DATE

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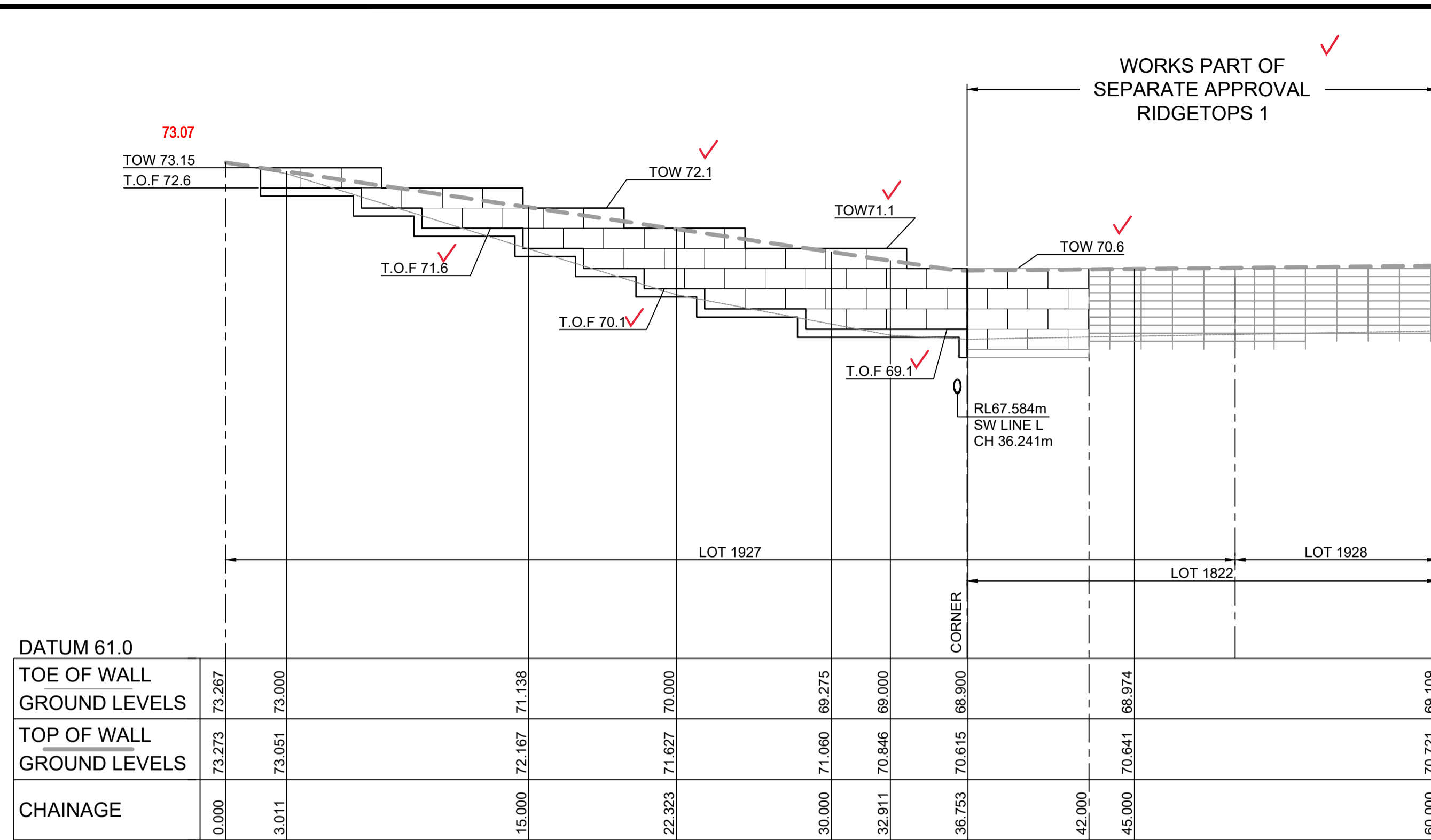
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REDBANK, NORTH RICHMOND RIDGETOPS 2 - SWC
RETAINING WALLS RW20 LONGITUDINAL SECTIONS
SHEET 1

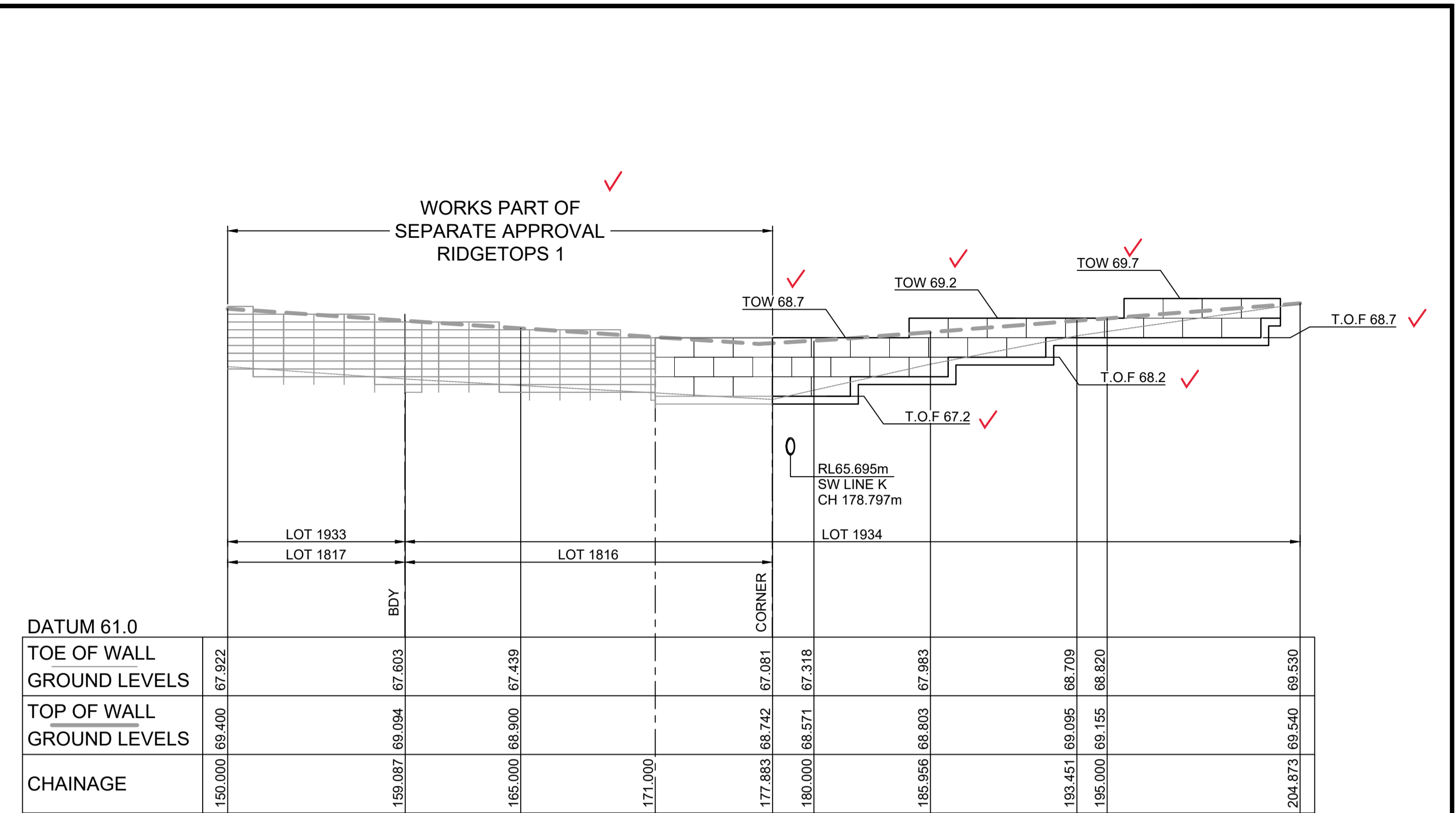
AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4511

PROJECT No: **110185-12**
SHEET No: **CC4511**

Plotted: 29 April, 2022 5:05:23 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1\DA\CD\CC\SOUTHERN HEIGHTS\4-RTP\2110185-12-CC4512.dwg



LONGITUDINAL SECTION RW 22
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100



LONGITUDINAL SECTION RW 22 (Cont)
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100

WORK AS EXECUTED SHOWN IN RED

SIGNATURE.....*PR*.....

VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800

RW 22			
CHAINAGE	EASTING	NORTHING	BEARING
0	286225.38	6281087.8	52°00'58.81"
36.72	286254.32	6281110.4	
49.99	286266.92	6281106.23	
87.99	286302.99	6281094.28	
89.45	286304.38	6281093.82	
111.35	286325.17	6281086.94	
121.71	286335.09	6281083.95	
125.24	286338.47	6281082.93	
139.44	286352.29	6281079.69	
143	286355.76	6281078.88	
159.07	286371.62	6281076.26	
177.87	286390.33	6281074.47	
204.87	286389.38	6281047.48	182°00'57.16"

LEGEND

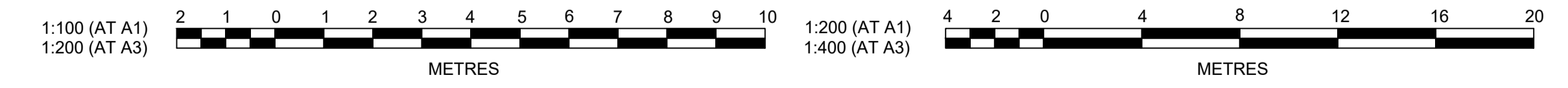
CONCRETE PANELS I-BEAM
RETAINING WALL

SANDSTONE LOG
RETAINING WALL

SUBDIVISION WORKS CERTIFICATE

Certificate No. 20130299SW77
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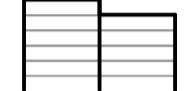
**REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
RETAINING WALLS RW22 LONGITUDINAL SECTIONS
SHEET 2**

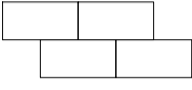
AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4512

PROJECT No: **110185-12**
SHEET No: **CC4512**

RW 26			
CHAINAGE	EASTING	NORTHING	BEARING
0	286755.26	6281069.65	222°37'19.21"
24.27	286738.83	6281051.8	
48.93	286720.81	6281034.95	
73.61	286700.91	6281020.34	
98.34	286679.48	6281008.02	
123.07	286656.78	6280998.2	
147.79	286633.17	6280990.92	
172.45	286608.88	6280986.59	
197.11	286584.28	6280984.93	
201.94	286579.45	6280984.93	
207.04	286574.36	6280985.05	
220.24	286561.16	6280985.49	
241.24	286540.17	6280986.23	
262.24	286519.19	6280986.97	
283.24	286498.2	6280987.71	
304.24	286477.21	6280988.44	
325.24	286456.22	6280989.17	
367.24	286414.25	6280990.64	
389	286392.5	6280991.41	
412.45	286369.11	6280993.14	
435.86	286345.95	6280996.48	
459.27	286323.09	6281001.55	
481.61	286301.58	6281007.58	
503.2	286280.88	6281013.7	
524.21	286260.74	6281019.71	
550.67	286235.38	6281027.27	
581.62	286205.73	6281036.13	
614.23	286175.79	6281049.05	293°20'53.51"

LEGEND

 CONCRETE PANELS I-BEAM RETAINING WALL

 SANDSTONE LOG RETAINING WALL

WORK AS EXECUTED SHOWN IN RED

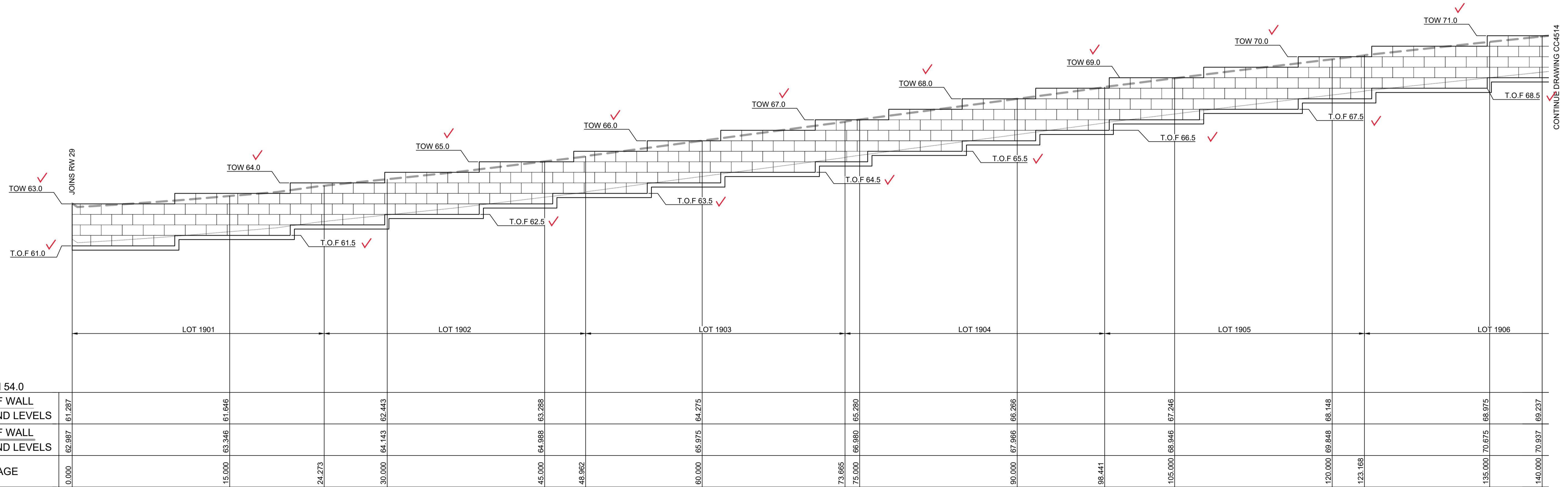
SIGNATURE.....*PR*.....

VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800

SUBDIVISION WORKS CERTIFICATE

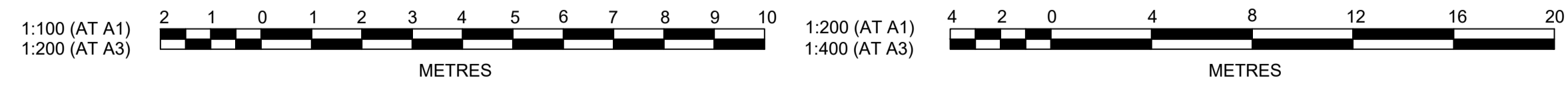
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Date of Issue 16/05/2022
Issuing Officer *D. Restin*
Accreditation No. BDC3367

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DATUM 54.0		TOE OF WALL GROUND LEVELS		TOP OF WALL GROUND LEVELS		CHAINAGE	
	61.287		61.646		62.987	0.000	
		15.000	63.346	61.646		15.000	
		24.273				24.273	
		30.000	64.143	62.443		30.000	
		45.000	64.988	63.288		45.000	
		48.962				48.962	
		60.000	65.975	64.275		60.000	
		73.665				73.665	
		75.000	66.980	65.280		75.000	
		90.000	67.986	66.266		90.000	
		98.441				98.441	
		105.000	68.946	67.246		105.000	
		120.000	69.848	68.148		120.000	
		123.168				123.168	
		135.000	70.675	68.975		135.000	
		140.000	70.937	69.237		140.000	

LONGITUDINAL SECTION RW 26
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100



Plotfile: 29 April, 2022 5:05:40 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RTP2\110185-12-CC4513.dwg

B	PRIVATE CERTIFIER COMMENTS	MP	MP	MS	MS	14/04/22
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**REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
RETAINING WALLS RW26 LONGITUDINAL SECTIONS
SHEET 3**


AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4513

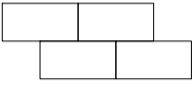
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SHEET No: **CC4513**

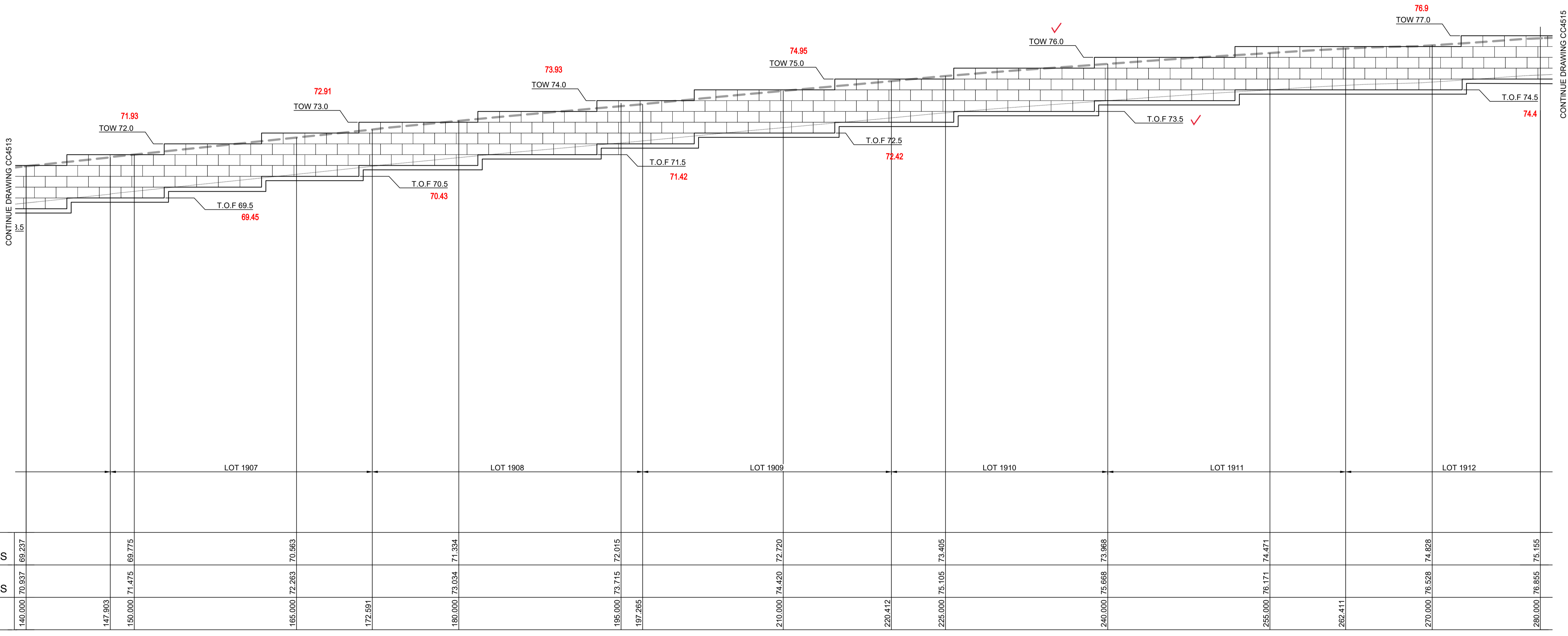
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 SIGNATURE.....*PR*.....
 VINCE MORGAN SURVEYORS PTY LTD
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LEGEND

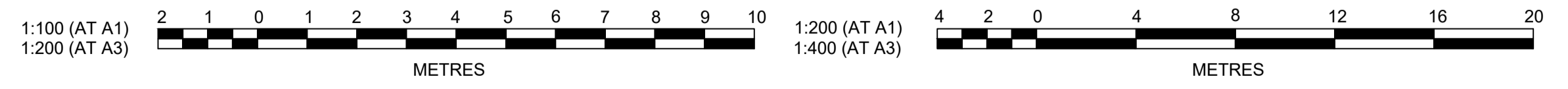
 CONCRETE PANELS I-BEAM RETAINING WALL

 SANDSTONE LOG RETAINING WALL



DATUM 54.0		LOT 1907		LOT 1908		LOT 1909		LOT 1910		LOT 1911		LOT 1912	
TOE OF WALL GROUND LEVELS	69.237	69.775	70.563	71.334	72.015	72.720	73.405	73.968	74.471	74.928	75.155		
TOP OF WALL GROUND LEVELS	70.937	71.475	72.263	73.034	73.715	74.420	75.105	75.668	76.171	76.528	76.855		
CHAINAGE	140.000	147.903	150.000	165.000	172.591	180.000	195.000	197.265	210.000	220.412	225.000	240.000	255.000

LONGITUDINAL SECTION RW 26 (Cont)
 HORIZONTAL SCALE 1:200
 VERTICAL SCALE 1:100



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B	PRIVATE CERTIFIER COMMENTS	MP	MP	MS	MS	14/04/22
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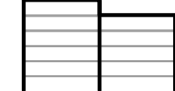
**REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC**
 RETAINING WALLS RW26 LONGITUDINAL SECTIONS
 SHEET 4

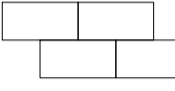
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PROJECT No: **110185-12**
 SHEET No: **CC4514**

Plotted: 29 April, 2022 5:09:19 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RTP2\110185-12-CC4515.dwg

LEGEND

 CONCRETE PANELS I-BEAM RETAINING WALL

 SANDSTONE LOG RETAINING WALL

WORK AS EXECUTED SHOWN IN RED

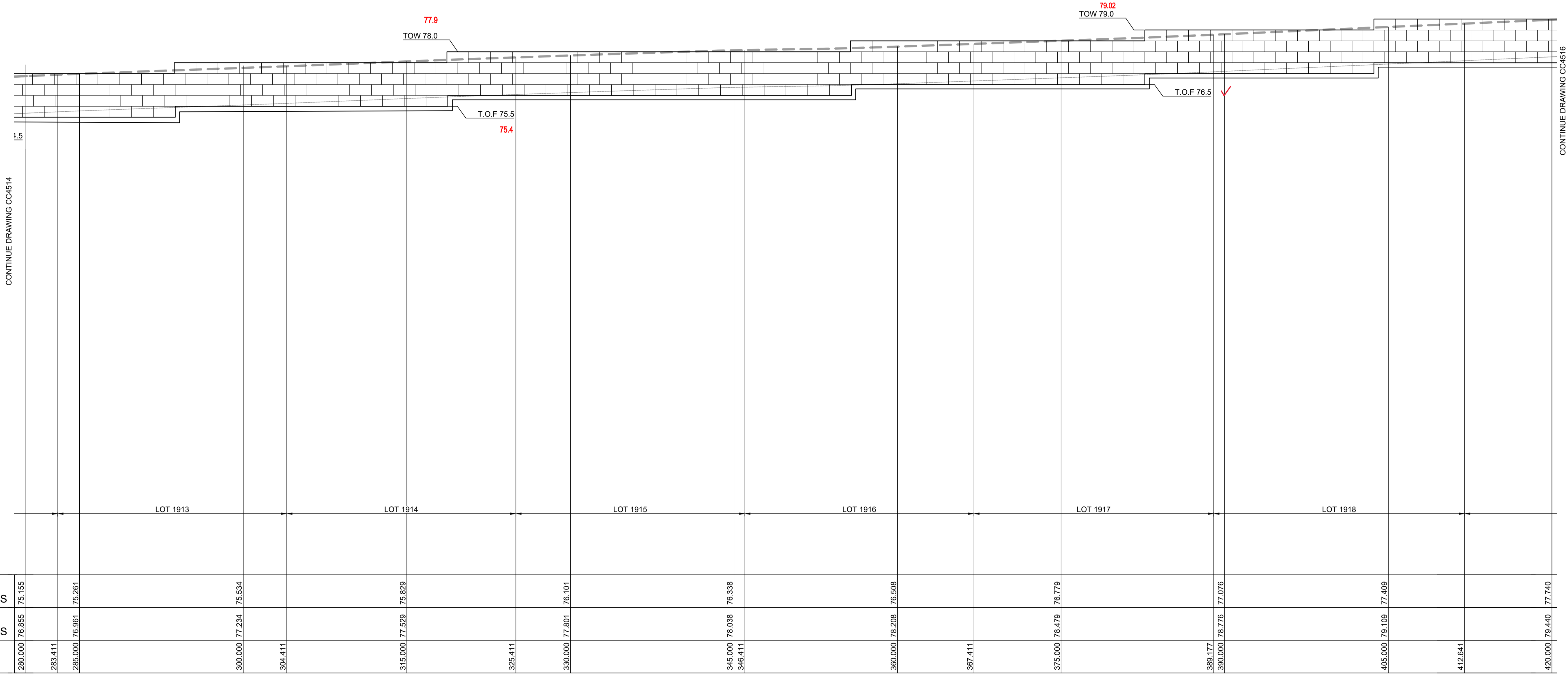
SIGNATURE.....*PR*.....

VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800

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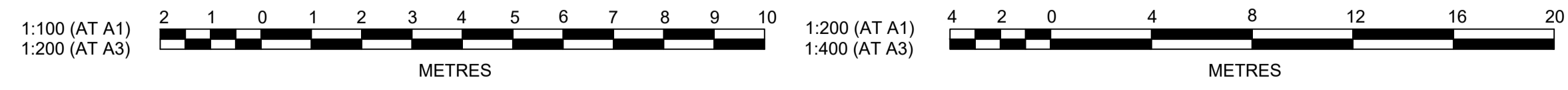
Certificate No. 20130299SW77
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Issuing Officer *D. Restin*
Accreditation No. BDC3367

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DATUM 54.0																		
TOE OF WALL																		
GROUND LEVELS	75.155	75.261	75.534	75.529	76.101	76.538	76.508	76.779	77.076	77.409	77.740							
TOP OF WALL																		
GROUND LEVELS	76.855	76.961	77.234	77.529	77.801	78.038	78.208	78.479	78.776	79.109	79.440							
CHAINAGE	280.000	283.411	285.000	300.000	304.411	315.000	325.411	330.000	345.000	346.411	360.000	367.411	375.000	389.177	390.000	405.000	412.641	420.000

LONGITUDINAL SECTION RW 26 (Cont)
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100



	AMENDMENT	DES	DRN	CKD	APR	DATE
B	PRIVATE CERTIFIER COMMENTS	MP	MP	MS	MS	14/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21

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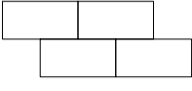
**REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC**
RETAINING WALLS RW26 LONGITUDINAL SECTIONS
SHEET 5

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4515

PROJECT No: **110185-12**
SHEET No: **CC4515**

LEGEND

 CONCRETE PANELS I-BEAM RETAINING WALL

 SANDSTONE LOG RETAINING WALL

WORK AS EXECUTED SHOWN IN RED

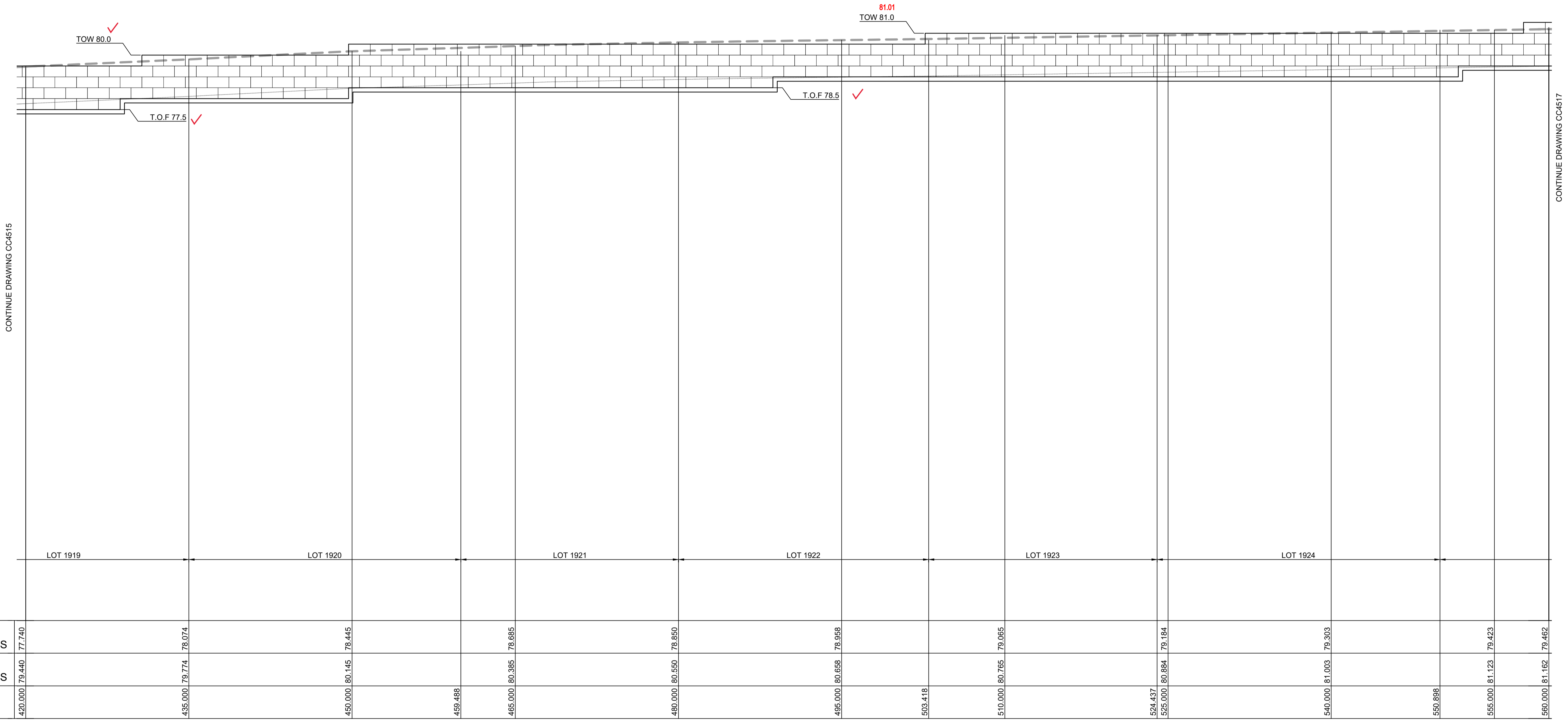
SIGNATURE.....*PR*.....

VINCE MORGAN SURVEYORS PTY LTD
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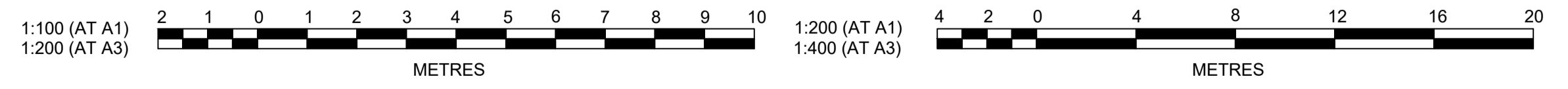
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DATUM 54.0		420.000	435.000	450.000	459.488	465.000	480.000	495.000	503.418	510.000	524.437	525.000	540.000	550.898	555.000	560.000
TOE OF WALL	77.740	78.074	78.445	78.685	78.850	78.958	79.184	79.303	79.423	79.462						
GROUND LEVELS																
TOP OF WALL	79.440	79.774	80.145	80.385	80.550	80.658	80.884	81.003	81.123	81.152						
GROUND LEVELS																
CHAINAGE																

LONGITUDINAL SECTION RW 26 (Cont)
 HORIZONTAL SCALE 1:200
 VERTICAL SCALE 1:100



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**REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC**
 RETAINING WALLS RW26 LONGITUDINAL SECTIONS
 SHEET 6

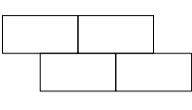
AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4516

PROJECT No: **110185-12**
 SHEET No: **CC4516**

B

LEGEND

 CONCRETE PANELS I-BEAM RETAINING WALL

 SANDSTONE LOG RETAINING WALL

SUBDIVISION WORKS CERTIFICATE

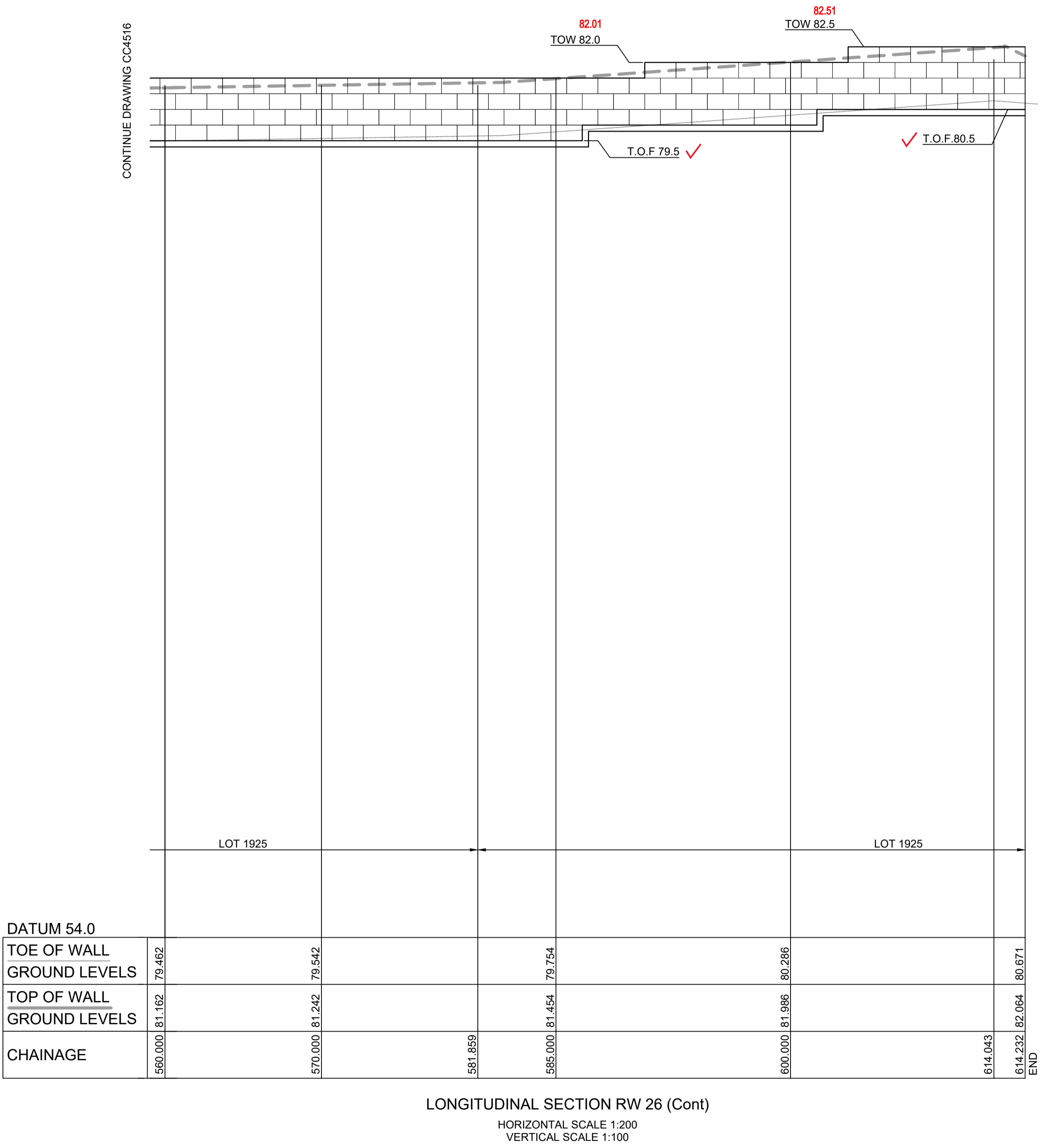
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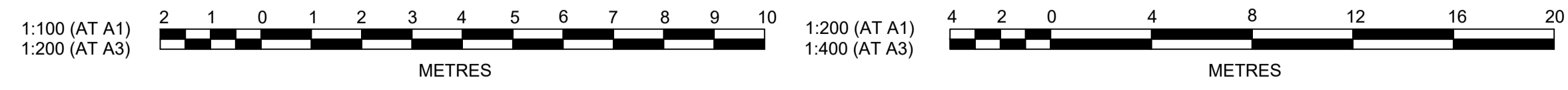
SIGNATURE.....*PR*.....

VINCE MORGAN SURVEYORS PTY LTD
 DATE: 25/01/23 REF:16800



DATUM 54.0	
TOE OF WALL	79.462
GROUND LEVELS	79.542
TOP OF WALL	80.286
GROUND LEVELS	81.454
CHAINAGE	560.000
	570.000
	581.859
	595.000
	600.000
	614.043
	614.232
	62.064
	80.671
	END

LONGITUDINAL SECTION RW 26 (Cont)
 HORIZONTAL SCALE 1:200
 VERTICAL SCALE 1:100



Plotted: 29 April, 2022 5:09:56 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RTP\2110185-12-CC4517.dwg

AMENDMENT	DES	DRN	CKD	APR	DATE
B	MP	MP	MS	MS	14/04/22
A	MP	NM	RO	MS	16/07/21

J. WYNDHAM PRINCE
 CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

PO Box 4366 PENRITH WESTFIELD NSW 2750
 P 02 4720 3300 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT:



STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**

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REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
 RETAINING WALLS RW26 LONGITUDINAL SECTIONS
 SHEET 7

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4517

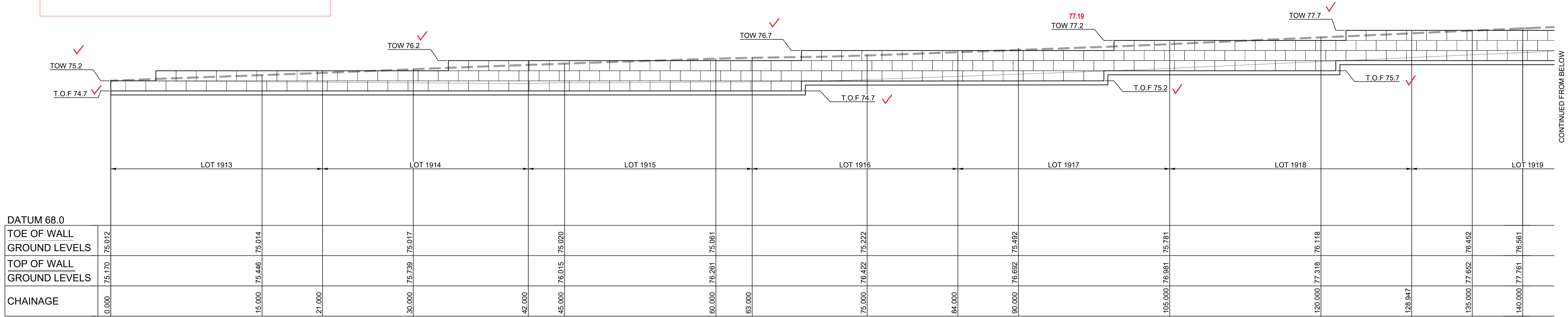
PROJECT No: **110185-12**
 SHEET No: **CC4517**

B

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SIGNATURE.....*PP*.....

VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800



LONGITUDINAL SECTION RW 27

HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100

LEGEND

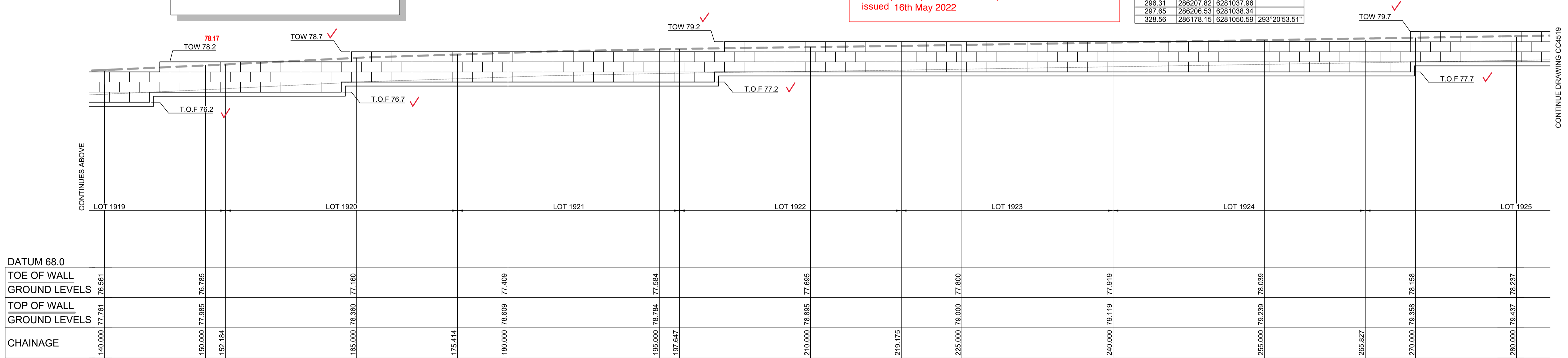
- CONCRETE PANELS I-BEAM RETAINING WALL
- SANDSTONE LOG RETAINING WALL

SUBDIVISION WORKS CERTIFICATE

Certificate No. 20130299SW77
Date of Issue .16/05/2022.....
Issuing Officer *D. Restin*
Accreditation No. BDC3367

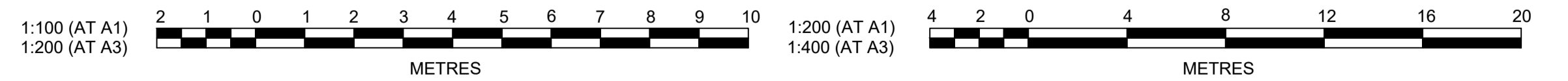
These plans/specifications form part of the certificate issued 16th May 2022

CHAINAGE	EASTING	NORTHING	BEARING
0	286498.28	6280990.06	272°00'06.30"
21	286477.3	6280990.79	
42	286456.31	6280991.52	
84	286414.33	6280992.99	
105.7	286392.64	6280993.75	
128.96	286369.45	6280995.47	
152.21	286346.44	6280998.78	
175.45	286323.74	6281003.8	
197.69	286302.33	6281009.81	
219.22	286281.68	6281015.91	
240.24	286261.54	6281021.92	
265.94	286236.92	6281029.27	
296.31	286207.82	6281037.96	
297.65	286206.53	6281038.34	
328.56	286178.15	6281050.59	293°20'53.51"



LONGITUDINAL SECTION RW 27 (Cont)

HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100

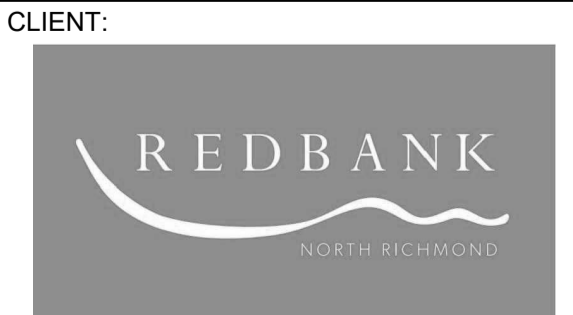


Plotted: 29 April, 2022 5:10:18 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RTP2110185-12-CC4518.dwg

NO.	REVISION	DATE	BY	CHKD	APPD
1	ISSUED FOR CONSTRUCTION APPROVAL	16/07/21	MP	NM	RO
2	AMENDMENT	14/04/22	MP	MP	MS

J. WYNDHAM PRINCE
CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

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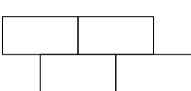
REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
RETAINING WALLS RW27 LONGITUDINAL SECTIONS
SHEET 8

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4518

PROJECT No: **110185-12**
SHEET No: **CC4518**

LEGEND

 CONCRETE PANELS I-BEAM RETAINING WALL

 SANDSTONE LOG RETAINING WALL

SUBDIVISION WORKS CERTIFICATE

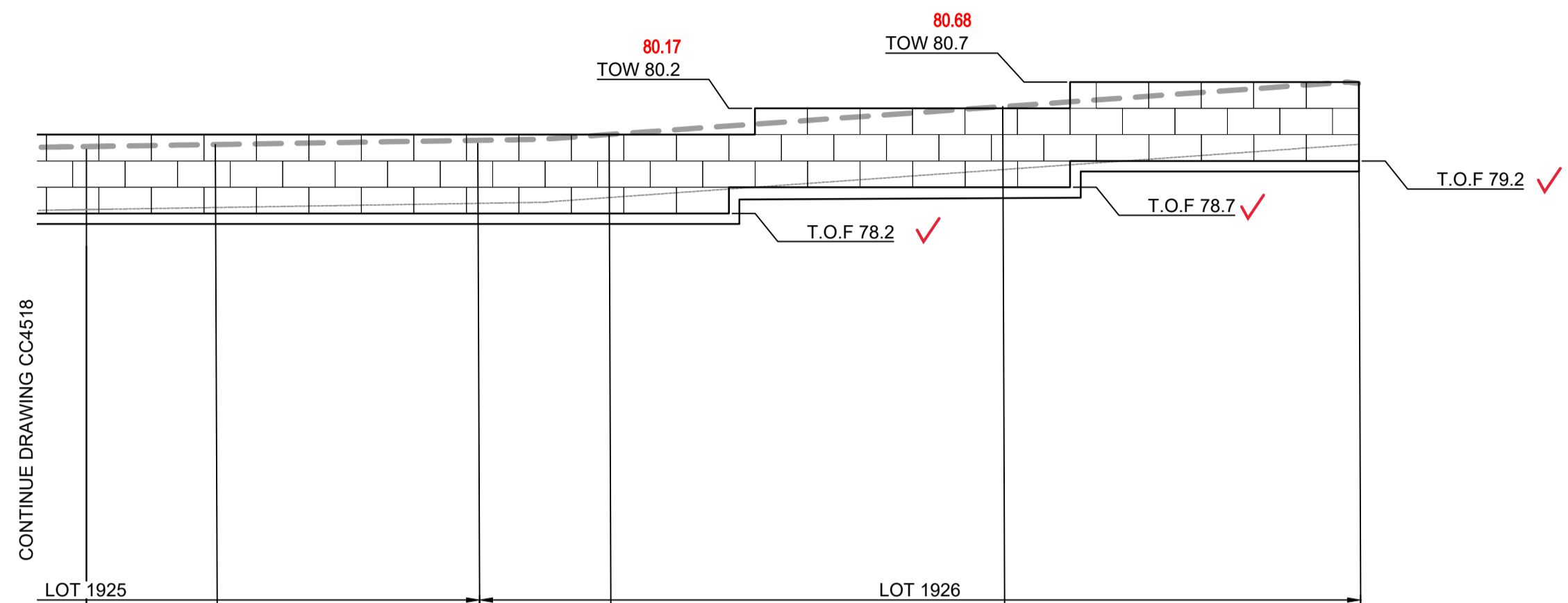
Certificate No. 20130299SW77
 Date of Issue 16/05/2022
 Issuing Officer *D. Restu*
 Accreditation No. BDC3367

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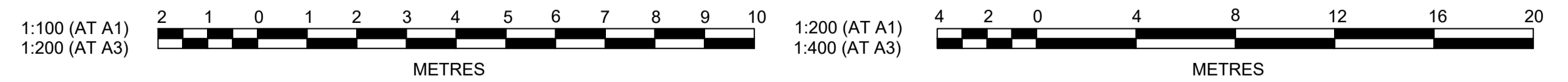
SIGNATURE.....*PR*.....

VINCE MORGAN SURVEYORS PTY LTD
 DATE: 25/01/23 REF:16800



DATUM 68.0					
TOE OF WALL					
GROUND LEVELS	78.237	78.277	78.467	78.999	79.440
TOP OF WALL					
GROUND LEVELS	79.437	79.477	79.667	80.199	80.641
CHAINAGE	280.000	285.000	296.140	300.000	315.000
					326.562

LONGITUDINAL SECTION RW 27 (Cont)
 HORIZONTAL SCALE 1:200
 VERTICAL SCALE 1:100



Plotted: 29 April, 2022 5:10:36 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CC\SOUTHERN HEIGHTS\4-RTP2\110185-12-CC4519.dwg

AMENDMENT	DES	DRN	CKD	APR	DATE
B	MP	MP	MS	MS	14/04/22
A	MP	NM	RO	MS	16/07/21

J. WYNDHAM PRINCE
 CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

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 P 02 4720 3300 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT:



STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**

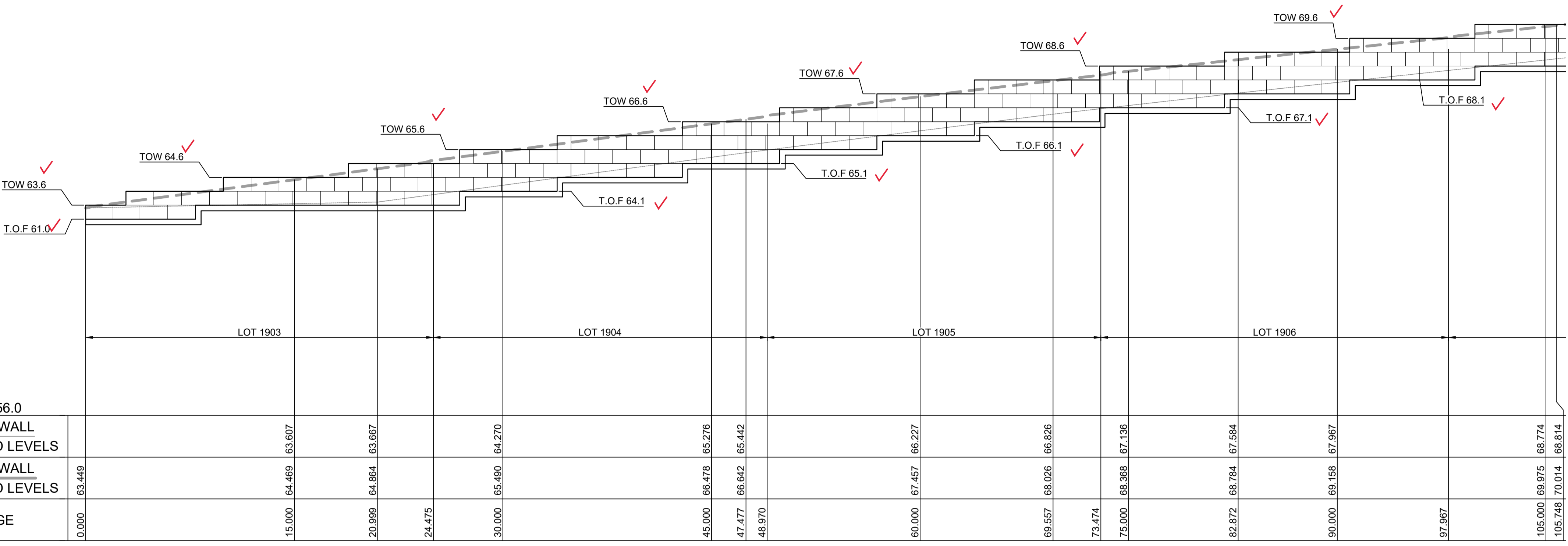
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REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
 RETAINING WALLS RW27 LONGITUDINAL SECTIONS
 SHEET 9

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4519

PROJECT No: **110185-12**
 SHEET No: **CC4519**

B



DATUM 56.0	
TOE OF WALL GROUND LEVELS	63.449
TOP OF WALL GROUND LEVELS	63.449
CHAINAGE	0.000
	15.000
	20.999
	24.475
	30.000
	45.000
	47.477
	48.970
	60.000
	69.557
	73.474
	75.000
	82.872
	90.000
	105.000
	105.748

LONGITUDINAL SECTION RW 28
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100

SUBDIVISION WORKS CERTIFICATE

Certificate No. 20130299SW77
Date of Issue 16/05/2022
Issuing Officer *D. Restu*
Accreditation No. BDC3367

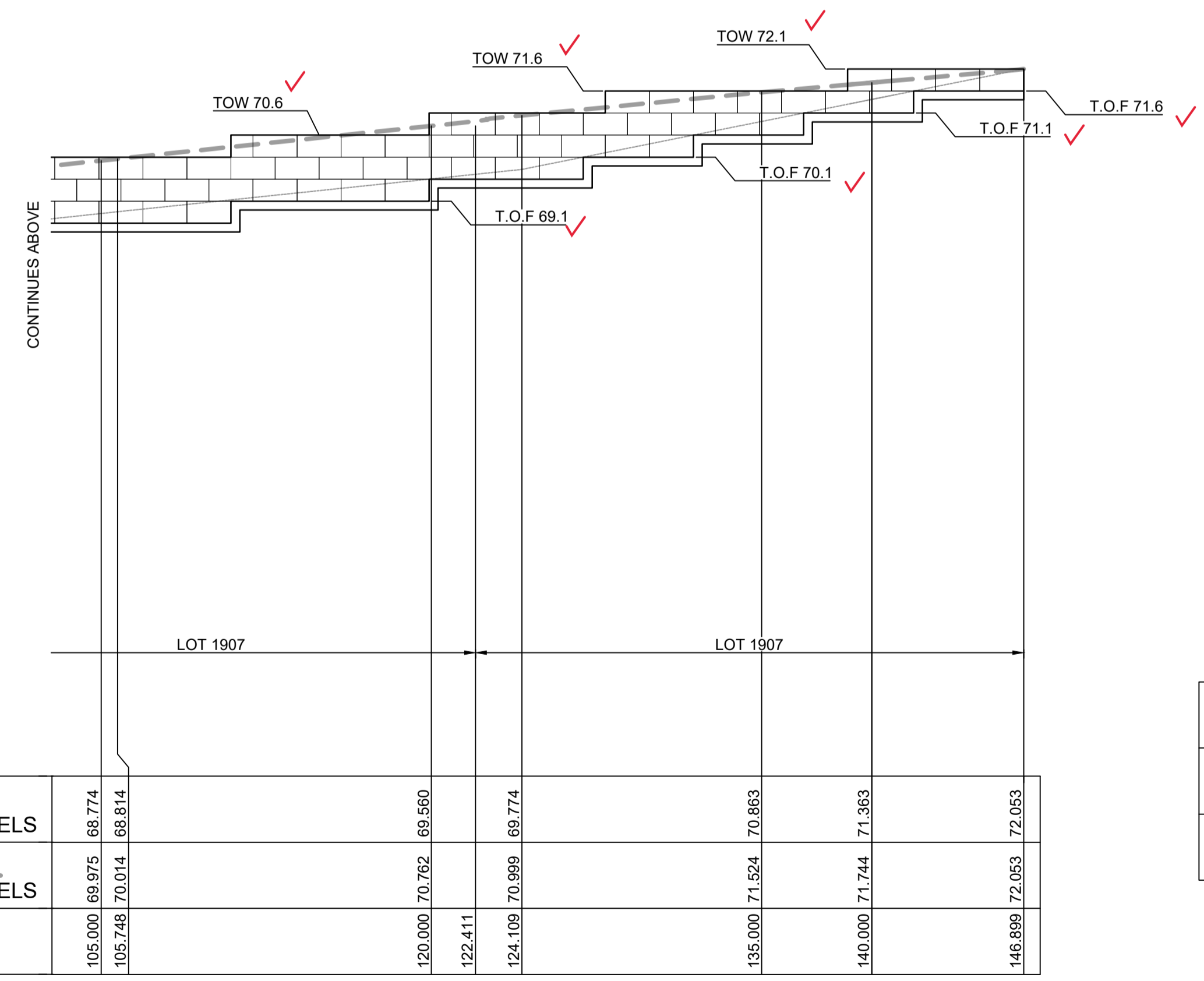
These plans/specifications form part of the certificate issued 16th May 2022

WORK AS EXECUTED SHOWN IN RED

SIGNATURE.....*PR*.....

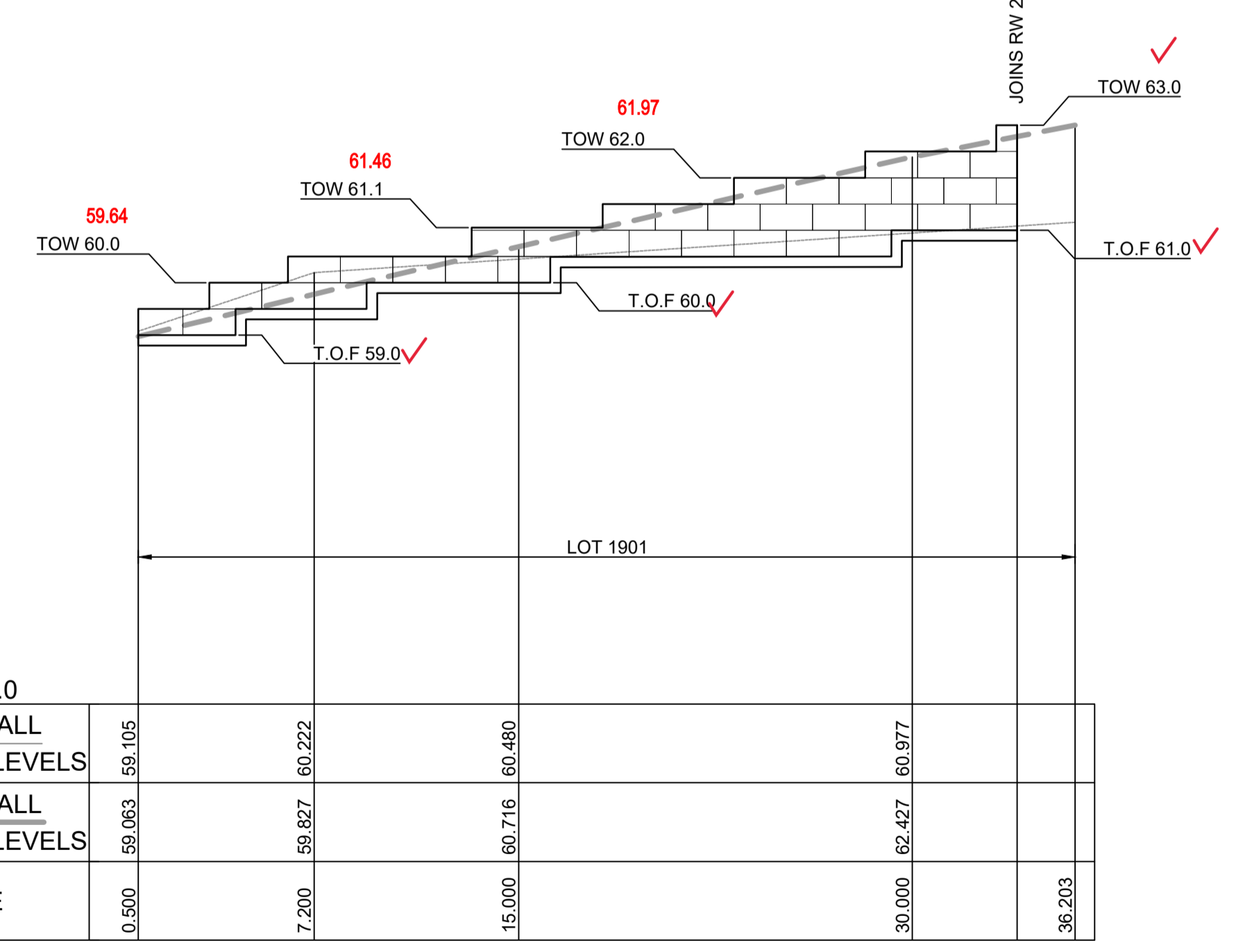
VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800

RW 28			
CHAINAGE	EASTING	NORTHING	BEARING
0	286719.54	6281036.94	233°43'02.36"
24.5	286699.79	6281022.44	
49.01	286678.57	6281010.18	
73.53	286656.07	6281000.44	
98.03	286632.65	6280993.22	
122.49	286608.57	6280988.92	
146.9	286584.22	6280987.27	266°07'33.19"



DATUM 56.0	
TOE OF WALL GROUND LEVELS	68.774
TOP OF WALL GROUND LEVELS	68.774
CHAINAGE	105.000
	105.748
	120.000
	122.411
	124.109
	135.000
	140.000
	146.899

LONGITUDINAL SECTION RW 28 (Cont)
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100



DATUM 52.0	
TOE OF WALL GROUND LEVELS	59.105
TOP OF WALL GROUND LEVELS	59.063
CHAINAGE	0.500
	7.200
	15.000
	30.000
	36.203

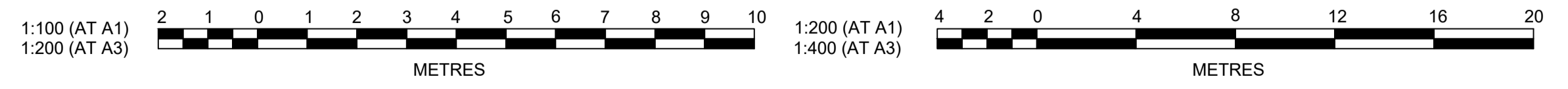
LONGITUDINAL SECTION RW29
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100

RW 29			
CHAINAGE	EASTING	NORTHING	BEARING
0	286730.04	6281093.04	132°48'55.65"
36.7	286756.95	6281068.09	132°48'55.65"

LEGEND

CONCRETE PANELS I-BEAM RETAINING WALL

SANDSTONE LOG RETAINING WALL



Plotted: 29 April, 2022 5:11:00 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1\DA\CD\CC\SOUTHERN HEIGHTS\4-RTP2\110185-12-CC4520.dwg

REV	DESCRIPTION	BY	CHKD	DATE		
B	PRIVATE CERTIFIER COMMENTS	MP	MP	MS	MS	14/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

J. WYNDHAM PRINCE
CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

PO Box 4366 PENRITH WESTFIELD NSW 2750
P 02 4720 3300 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT: **REDBANK**
NORTH RICHMOND

STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**

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REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
RETAINING WALLS RW28 & 29 LONGITUDINAL SECTIONS
SHEET 10

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4520

PROJECT No: **110185-12**
SHEET No: **CC4520**

B

SOIL AND WATER MANAGEMENT NOTES

GENERAL NOTES:

- ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING REVEGETATION AND STORAGE OF SOIL AND TOPSOIL, SHALL BE IMPLEMENTED TO THE REQUIREMENTS OF THE "SOILS AND CONSTRUCTION - VOLUME 1, 4TH EDITION, MARCH 2004".
- TOPSOIL FROM ALL AREAS TO BE DISTURBED SHALL BE STOCKPILED AND LATER RESPREAD TO AID REVEGETATION IN THOSE AREAS.
- ALL DRAINAGE WORKS SHALL BE CONSTRUCTED AND STABILISED AS EARLY AS POSSIBLE DURING DEVELOPMENT.
- ALL TAIL-OUT DRAINS SHALL BE COUCH GRASSED AND TRAPEZOIDAL IN SECTION. STRAW BALES SHALL BE PLACED AS A SEDIMENT CONTROL DEVICE WHERE REQUIRED.
- VEHICULAR TRAFFIC SHALL BE CONTROLLED DURING DEVELOPMENT CONFINING ACCESS WHERE POSSIBLE TO PROPOSED OR EXISTING ROAD ALIGNMENTS. AREAS TO BE LEFT UNDISTURBED SHALL BE MARKED OFF.
- ROADS SHALL BE PAVED AS EARLY AS POSSIBLE AFTER FORMATION.
- DISTURBANCE OF VEGETATION SHALL BE LIMITED TO FILL AREAS, ROADWAYS AND DRAINAGE LINES. NO LOT GRADING SHALL BE CARRIED OUT IN UNDISTURBED AREAS WITHOUT CONSULTATION WITH COUNCIL'S ENGINEER.
- ALL DISTURBED AREAS SHALL BE REVEGETATED AS SOON AS THE RELEVANT WORKS ARE COMPLETED.
- ALL SEDIMENT BASINS AND TRAPS SHALL BE CLEANED WHEN THE STRUCTURES ARE A MAXIMUM 60% FULL OF SOLID MATERIALS, INCLUDING DURING THE MAINTENANCE PERIOD.
- THE SOIL AND WATER MANAGEMENT PLAN IS TO BE READ IN CONJUNCTION WITH THE ENGINEERING PLANS, AND COUNCIL'S WRITTEN GUIDELINES FOR THE DEVELOPMENT OF LAND.
- CONTRACTORS SHALL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE UNDERTAKEN AS SPECIFIED ON THE PLAN AND IN ACCORDANCE WITH THE GUIDELINES SHOWN IN "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION 4TH EDITION" (THE BLUE BOOK).
- ALL CONTRACTORS AND SUBCONTRACTORS ARE RESPONSIBLE FOR REDUCING THE SOIL EROSION AND POLLUTION OF DOWNSLOPE AREAS.
- THE SOIL EROSION HAZARD ON THE SITE IS TO BE KEPT AS LOW AS POSSIBLE AND GENERALLY IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

LAND USE	LIMITATION	COMMENTS
CONSTRUCTION AREAS	DISTURBANCE TO BE NO FURTHER THAN 5m (PREF 2m) FROM THE EDGE OF ANY ESSENTIAL ENGINEERING ACTIVITY AS SHOWN ON THESE PLANS	ALL SITE WORKERS WILL CLEARLY RECOGNISE THESE ZONES - WHERE APPROPRIATE THE CONSTRUCTION AREAS ARE TO BE IDENTIFIED WITH BARRIER FENCING (DOWNSLOPE) OR SIMILAR MATERIAL.
ACCESS AREAS	LIMITED TO A MAXIMUM WIDTH OF 10m	THE SITE MANAGER SHALL DETERMINE AND MARK THE LOCATION OF THESE ZONES ONSITE. THEY CAN VARY IN POSITION TO BEST CONSERVE THE EXISTING VEGETATION AND PROTECT DOWNSTREAM AREAS WHILE BEING CONSIDERATE OF THE NEEDS OF EFFICIENT WORKS ACTIVITIES. ALL SITE WORKERS SHALL CLEARLY RECOGNISE THEIR BOUNDARIES. WHERE APPROPRIATE THE ACCESS AREAS ARE TO BE MARKED WITH BARRIER MESH, SEDIMENT FENCING OR SIMILAR MATERIALS.
REMAINING LANDS	ENTRY PROHIBITED EXCEPT FOR ESSENTIAL THINNING OF PLANT GROWTH	THINNING OF GROWTH MAY BE REQUIRED FOR FIRE HAZARD REDUCTION.

NOTE:
WORKS WITHIN WATERWAYS AND CREEKS SHALL BE RESTRICTED AS DIRECTED - ALL LANDS WITHIN CREEKS AND WATERWAYS SHALL HAVE A GROUND COVER MORE THAN 70%, USING MATERIALS THAT CAN CATER FOR CONCENTRATED FLOWS.

- WORKS ARE TO BE UNDERTAKEN IN THE FOLLOWING SEQUENCE. EACH SUBSEQUENT STAGE IS NOT TO COMMENCE UNTIL THE PREVIOUS ONE IS COMPLETE:-
 - INSTALL ALL BARRIER AND SEDIMENT FENCING WHERE SHOWN ON THE PLAN AND TO DETAIL (SD) 6-8.
 - CONSTRUCT STABILISED SITE ACCESS AS SHOWN ON THE PLAN AND TO DETAIL (SD) 6-14.
 - CONSTRUCT LOW FLOW EARTH BANKS WHERE SHOWN ON THE PLAN AND TO DETAIL (SD) 5-5.
 - PROVIDE TEMP. ACCESS TO THE SEDIMENT BASIN(S) AND PROTECT THIS WITH SEDIMENT FENCING (SD) 6-8 OR BARRIER FENCING AND EARTH BANKS (SD) 5-5.
 - PLACE SEDIMENT FENCING (SD) 6-8 DOWNSLOPE OF LANDS TO BE DISTURBED FOR CONSTRUCTION OF THE SEDIMENT BASINS.
 - CONSTRUCT SEDIMENT BASIN(S) GENERALLY IN ACCORDANCE WITH (SD) 6-4
 - STABILISE LAND SURFACES DISTURBED BY CONSTRUCTION OF THE SEDIMENT BASIN(S) AS SOON AS FINAL LEVELS ARE ESTABLISHED
 - CLEAR THE SITE AND STRIP AND STOCKPILE THE TOPSOIL IN THE LOCATIONS SHOWN ON THE PLAN OR AS DIRECTED BY THE SITE SUPERINTENDENT TO DETAIL (SD) 4-1.
 - UNDERTAKE ALL ESSENTIAL CONSTRUCTION WORKS.
 - GRADE LOT AREAS TO FINAL GRADES AND APPLY PERMANENT STABILISATION (LANDSCAPING) WITHIN 14 DAYS OF COMPLETION OF CONSTRUCTION WORKS.
 - REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER THE PERMANENT LANDSCAPING HAS BEEN COMPLETED.
- CLEARLY VISIBLE BARRIER FENCING SHALL BE INSTALLED WHERE DIRECTED BY THE SITE SUPERINTENDENT TO CONTROL AND PROHIBIT UNNECESSARY SITE DISTURBANCE
- EARTH BATTERS SHALL BE CONSTRUCTED WITH AS LOW A GRADIENT AS PRACTICABLE BUT NO STEEPER THAN:-
 - 2(h) - 1(v) WHERE SLOPE LENGTH IS LESS THAN 7m
 - 2.5(h) - 1(v) WHERE SLOPE LENGTH IS BETWEEN 7m AND 10m
 - 3(h) - 1(v) WHERE SLOPE LENGTH IS BETWEEN 10m AND 12m
 - 4(h) - 1(v) WHERE SLOPE LENGTH IS BETWEEN 12m AND 18m
 - 5(h) - 1(v) WHERE SLOPE LENGTH IS BETWEEN 18m AND 27m
 - 6(h) - 1(v) WHERE SLOPE LENGTH IS GREATER THAN 27m

SLOPE LENGTHS CAN BE SHORTENED BY USING LOW FLOW EARTH BANKS AS CATCH DRAINS ABOVE THE EARTH BATTER AREA.

- PROTECTION FROM EROSION FORCES SHALL BE UNDERTAKEN ON ALL LANDS. GROUND COVER TO BE IN PLACE WITHIN 10 WORKING DAYS FROM COMPLETION OF FORMATION AND BEFORE THEY ARE ALLOWED TO CARRY ANY CONCENTRATED FLOWS.
- TEMPORARY GROUND COVER SHOULD BE MINIMUM 70%. FOOT AND VEHICULAR TRAFFIC SHALL BE KEPT AWAY FROM REHABILITATED AREAS.
- WHERE POSSIBLE THE CONSTRUCTION PROGRAM IS TO SCHEDULE WORKS SUCH THAT LAND DISTURBANCE ACTIVITIES ARE COMPLETED IN LESS THAN 6 MONTHS. REVEGETATION WORKS MUST BE CARRIED OUT AS STIPULATED IN THE RELEVANT COUNCIL GUIDELINES / SPECIFICATIONS SUCH THAT A SATISFACTORY GROUND COVER IS PROVIDED TO AT LEAST 60% OF THE DISTURBED AREA WITHIN 10 DAYS AND AT LEAST 70% OF THE DISTURBED AREA WITHIN A FURTHER 60 DAYS..
- SEDIMENT FENCES (SD) 6-8 SHALL:-
 - BE INSTALLED WHERE SHOWN ON THE PLAN AND AS DIRECTED AT THE DISCRETION OF THE SITE SUPERINTENDENT DURING THE COURSE OF CONSTRUCTION TO CONTAIN THE COARSER SEDIMENT FRACTIONS AS NEAR AS POSSIBLE TO THEIR SOURCE.
 - HAVE A CATCHMENT AREA NOT EXCEEDING 720sq.m. AND A STORAGE DEPTH OF AT LEAST 0.6m.
 - PROVIDE AN UPSLOPE RETURN OF 1m AT INTERVALS ALONG THE FENCE WHERE THE CATCHMENT AREA EXCEEDS 720sq.m. TO LIMIT THE DISCHARGE REACHING EACH SECTION TO 50litres/sec IN A MAX. 10yr Tc DISCHARGE.
- STOCKPILES (SD) 4-1 SHALL BE LOCATED AS SHOWN ON THE PLANS AND AT THE DISCRETION OF THE SITE SUPERINTENDENT.
- DURING WINDY WEATHER LARGE UNPROTECTED AREAS ARE TO BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL. IN THE EVENT WATER IS NOT AVAILABLE IN SUFFICIENT QUANTITIES SOIL BINDERS AND/OR DUST RETARDANTS SHALL BE USED OR THE SURFACE SHALL BE LEFT IN A CLODDY STATE THAT RESISTS REMOVAL BY WIND.
- STOCKPILES SHALL NOT BE LOCATED WITHIN 5m OF HAZARD AREAS, INCLUDING LIKELY AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS OR DRIVEWAYS.
- THE SEDIMENT RETENTION BASINS (SD) 6-4 SHALL:-
 - BE CONSTRUCTED WHERE SHOWN ON THE PLANS.
 - BE FLOCCULATED (APPENDIX E MANAGING URBAN STORMWATER SOILS & CONSTRUCTION 4TH ED.) BEFORE DISCHARGE OCCURS (UNLESS THE DESIGN STORM EVENT IS EXCEEDED)
 - HAVE ONE OR MORE PEGS PLACED ON THE FLOOR TO CLEARLY INDICATE THE LEVEL AT WHICH DESIGN CAPACITY OCCURS AND WHEN SEDIMENT SHALL BE REMOVED.
- STORED CONTENTS OF THE BASINS SHALL BE TREATED WITH GYPSUM (APPENDIX E MANAGING URBAN STORMWATER SOILS & CONSTRUCTION 4TH ED.) OR OTHER FLOCCULATING AGENTS WHERE THEY CONTAIN MORE THAN 50mg/litre OF SUSPENDED SOLIDS. TREATMENT SHALL BE AS FOLLOWS:-
 - LOWER SUSPENDED SOLIDS TO LESS THAN 50mg/litre WITHIN 24hrs OF FILLING
 - THE BASINS SHALL THEN BE ALLOWED TO STAND 36 TO 48hrs FOR FLOCCULATED PARTICLES TO SETTLE
 - THE BASINS SHALL THEN BE DRAINED SO THAT FULL STORAGE CAPACITY IS REGAINED WITHOUT DISCHARGING SEDIMENT FROM THE SITE.
- SEDIMENT REMOVED FROM ANY TRAPPING DEVICE SHALL BE DISPOSED IN LOCATIONS WHERE FURTHER EROSION AND CONSEQUENT POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS SHALL NOT OCCUR.
- WATER SHALL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE (ie THE CATCHMENT HAS BEEN LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN TREATED IN AN APPROVED DEVICE) NEVERTHELESS STORMWATER INLETS SHALL BE PROTECTED (SD) 6-11 & 6-12.
- TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES SHALL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE STABILISED.
- ACCEPTABLE BINS SHALL BE PROVIDED FOR ANY CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHTWEIGHT WASTE MATERIALS AND LITTER. CLEARANCE SERVICES SHALL BE PROVIDED AT LEAST ONCE A WEEK.

STOCKPILE NOTES:

- SPOIL AND TOPSOIL STOCKPILES SHALL BE LOCATED AWAY FROM DRAINAGE LINES AND AREAS WHERE WATER MAY CONCENTRATE.
- IF STOCKPILES ARE TO BE IN PLACE FOR LONGER THAN 14 DAYS THEN THEY SHALL BE STABILIZED BY COVERING WITH A MULCH OR WITH TEMPORARY VEGETATION.
- FOLLOWING CONSTRUCTION, TOPSOIL SHALL BE RESPREAD TO A MINIMUM DEPTH OF 100mm ON THE BARE SOIL SURFACES AND REVEGETATED.

SEDIMENTATION CONTROL DEVICES:

- ALL STRAW BALES SHALL BE BOUND WITH WIRE. STRAW BALES SHALL BE PLACED END TO END IN A SINGLE ROW AND EMBEDDED INTO THE SOIL TO A DEPTH OF 100mm. EACH BALE SHALL BE SECURELY ANCHORED WITH TWO STEEL STAKES DRIVEN 600mm INTO THE GROUND AND LOCKED ON THE BALE CENTRELIN.
- SILT FENCES SHALL BE CONSTRUCTED BY STRETCHING A FILTER FABRIC (PROPEX OR SIMILAR) BETWEEN POSTS AT 2.5m CENTRES. FABRIC SHALL BE BURIED 150mm ALONG ITS LOWER EDGE.
- PROVIDE STRIP OF TURF (COUCH OR BUFFALO VARIETY) WITHIN THE ROAD VERGE + 1m WIDE AROUND ALL SURFACE INLET PITS

SITE INSPECTION AND MAINTENANCE:

- A SELF-AUDITING PROGRAM SHALL BE ESTABLISHED BASED ON AN INSPECTION TEST PLAN (ITP) OR LOG BOOK. A SITE INSPECTION USING THE ITP SHALL BE MADE BY THE SITE MANAGER:-
 - AT LEAST WEEKLY
 - IMMEDIATELY BEFORE SITE CLOSURE
 - IMMEDIATELY FOLLOWING RAINFALL EVENTS IN EXCESS OF 5mm IN ANY 24hr PERIOD.

THE SELF AUDIT SHALL INCLUDE:-

- RECORDING THE CONDITION OF EVERY 'BEST MANAGEMENT PRACTICE' EMPLOYED
- RECORDING MAINTENANCE REQUIREMENTS (IF ANY) FOR EACH 'BEST MANAGEMENT PRACTICE'
- RECORDING THE VOLUMES OF SEDIMENT REMOVED FROM SEDIMENT RETENTION SYSTEMS WHERE APPLICABLE
- RECORDING THE SITE WHERE SEDIMENT IS DISPOSED
- FORWARDING A SIGNED DUPLICATE OF THE COMPLETED CHECK SHEET TO THE PROJECT MANAGER/DEVELOPER FOR THEIR INFORMATION.

- IN ADDITION A SUITABLY QUALIFIED PERSON SHALL BE RESPONSIBLE FOR OVERSEEING THE INSTALLATION AND MAINTENANCE OF ALL SOIL AND WATER MANAGEMENT WORKS ON THE SITE. THE PERSON SHALL BE REQUIRED TO SPEND A MINIMUM OF:-
 - 2hrs ONSITE EACH FORTNIGHT UP UNTIL COMPLETION OF ROAD AND DRAINAGE WORKS AND/OR THE COMMISSIONING OF SEDIMENT BASIN(S)/WATER QUALITY CONTROL FACILITIES, AND DURING THE DECOMMISSIONING OF SAME AND/OR FINAL SITE STABILISATION. TO PROVIDE A SHORT MONTHLY WRITTEN REPORT.
 - ONE HOUR ONSITE EACH 2 MONTHS DURING THAT PHASE WHERE THE DEVELOPERS RESPONSIBILITIES ARE LIMITED TO MAINTENANCE OF THE SDS DEVICES AND/OR SEDIMENT BASINS (ie DURING THE STAGE WHEN BUILDING WORKS CAN BE UNDERTAKEN) TO PROVIDE A SHORT WRITTEN REPORT EACH 4 MONTHS

- NO LOW POINTS EXIST WHICH CAN OVERTOP IN A LARGE STORM EVENT.
- AREAS OF EROSION ARE REPAIRED (e.g LINED WITH SUITABLE MATERIAL) AND/OR VELOCITY OF FLOW IS REDUCED APPROPRIATELY THROUGH CONSTRUCTION OF SMALL CHECK DAMS OR INSTALLING ADDITIONAL DIVERSIONS UPSLOPE
- BLOCKAGES ARE CLEARED (THESE MIGHT OCCUR BECAUSE OF SEDIMENT POLLUTION, SAND/SOIL/SPOIL BEING DEPOSITED IN OR TOO CLOSE TO THEM, BREACHED BY VEHICLE WHEELS etc)

THE RESPONSIBLE PERSON SHALL ENSURE THAT:-

- THIS PLAN IS BEING IMPLEMENTED CORRECTLY
- REPAIRS ARE BEING UNDERTAKEN AS REQUIRED
- ESSENTIAL MODIFICATIONS TO THIS PLAN ARE BEING MADE IF AND WHEN NECESSARY. EACH REPORT SHALL CERTIFY THAT WORKS HAVE BEEN CARRIED OUT ACCORDING TO THE APPROVED PLANS.

- WASTE BINS SHALL BE EMPTIED AS NECESSARY, DISPOSAL OF WASTE SHALL BE IN A MANNER APPROVED BY THE SITE SUPERINTENDENT

- PROPER DRAINAGE OF THE SITE SHALL BE MAINTAINED. DRAINS (INCLUDING INLET AND OUTLET WORKS) SHALL BE CHECKED TO ENSURE THAT THEY ARE OPERATING AS INTENDED, ESPECIALLY THAT:-
 - NO LOW POINTS EXIST WHICH CAN OVERTOP IN A LARGE STORM EVENT.
 - AREAS OF EROSION ARE REPAIRED (e.g LINED WITH SUITABLE MATERIAL) AND/OR VELOCITY OF FLOW IS REDUCED APPROPRIATELY THROUGH CONSTRUCTION OF SMALL CHECK DAMS OR INSTALLING ADDITIONAL DIVERSIONS UPSLOPE
 - BLOCKAGES ARE CLEARED (THESE MIGHT OCCUR BECAUSE OF SEDIMENT POLLUTION, SAND/SOIL/SPOIL BEING DEPOSITED IN OR TOO CLOSE TO THEM, BREACHED BY VEHICLE WHEELS etc)

- SAND/SOIL/SPOIL MATERIALS PLACED CLOSER THAN 2m FROM HAZARD AREAS SHALL BE REMOVED SUCH HAZARD AREAS INCLUDE ANY AREAS OF HIGH VELOCITY WATER FLOWS (eg WATERWAYS AND GUTTERS) PAVED AREAS AND DRIVEWAYS.
- RECENTLY STABILISED LANDS SHALL BE CHECKED TO ENSURE THAT THE EROSION HAZARD HAS BEEN EFFECTIVELY REDUCED. ANY REPAIRS SHALL BE INITIATED AS APPROPRIATE.
- EXCESSIVE VEGETATIVE GROWTH SHALL BE CONTROLLED THROUGH MOWING OR SLASHING.
- ALL SEDIMENT DETENTION SYSTEMS SHALL BE KEPT IN GOOD WORKING CONDITION. IN PARTICULAR ATTENTION SHALL BE GIVEN TO:-
 - RECENT WORKS TO ENSURE THAT THEY HAVE NOT RESULTED IN DIVERSION OF SEDIMENT LADEN WATER AWAY FROM THEM.
 - DEGRADABLE PRODUCTS TO ENSURE THAT THEY ARE REPLACED AS REQUIRED
 - SEDIMENT REMOVAL TO ENSURE THE DESIGN CAPACITY OR LESS REMAINS IN THE SETTLING ZONE.

- ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS SHALL BE CONSTRUCTED AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS (ie MAKE ONGOING CHANGES TO THIS PLAN WHERE IT PROVES INADEQUATE IN PRACTICE OR IS SUBJECT TO CHANGES IN CONDITIONS AT THE WORKS SITE OR ELSEWHERE IN THE CATCHMENT.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN A FUNCTIONING CONDITION UNTIL ALL EARTHWORKS ACTIVITIES ARE COMPLETED AND THE SITE STABILISED.

- WATERS IN SEDIMENT RETENTION BASIN(S) THAT OCCUPY MORE THAN 1/4 OF THE DESIGN CAPACITY DURING THAT STAGE OF THE WORKS UP UNTIL COMMISSIONING OF THE BASIN(S) SHALL BE:-
 - TREATED WITH A FLOCCULATING AGENT (APPENDIX E MANAGING URBAN STORMWATER SOILS & CONSTRUCTION 4TH ED.)
 - DISCHARGED WITHIN 5 days FROM THE CONCLUSION OF ANY STORM EVENT LARGE ENOUGH TO FILL THE BASIN TO THAT LEVEL.

- LITTER, DEBRIS AND COARSE SEDIMENT SHALL BE REMOVED FROM THE GROSS POLLUTANT TRAPS AND TRASH RACKS AS REQUIRED.

SUBDIVISION WORKS CERTIFICATE

Certificate No. 20130299SW77
 Date of Issue 16/05/2022
 Issuing Officer D. Resta
 Accreditation No. BDC3367

These plans/specifications form part of the certificate issued 16th May 2022

WORK AS EXECUTED SHOWN IN RED
 SIGNATURE.....
 VINCE MORGAN SURVEYORS PTY LTD
 DATE: 25/01/23 REF:16800

Plotted: 29 April, 2022 5:11:06 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1\DA\CD\CC\SOILSOUTHERN HEIGHTS\4-RTP2\110185-12-CC4700.dwg

A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

J. WYNDHAM PRINCE
 CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

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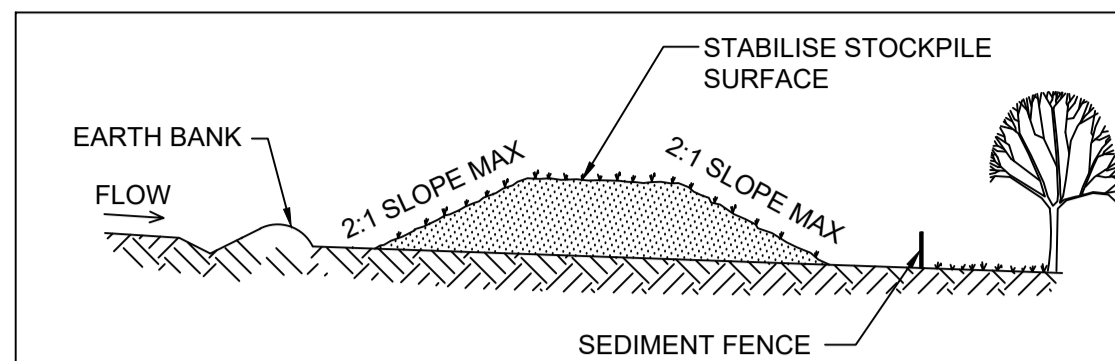
STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**
 THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC
 SOIL & WATER MANAGEMENT NOTES

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4700

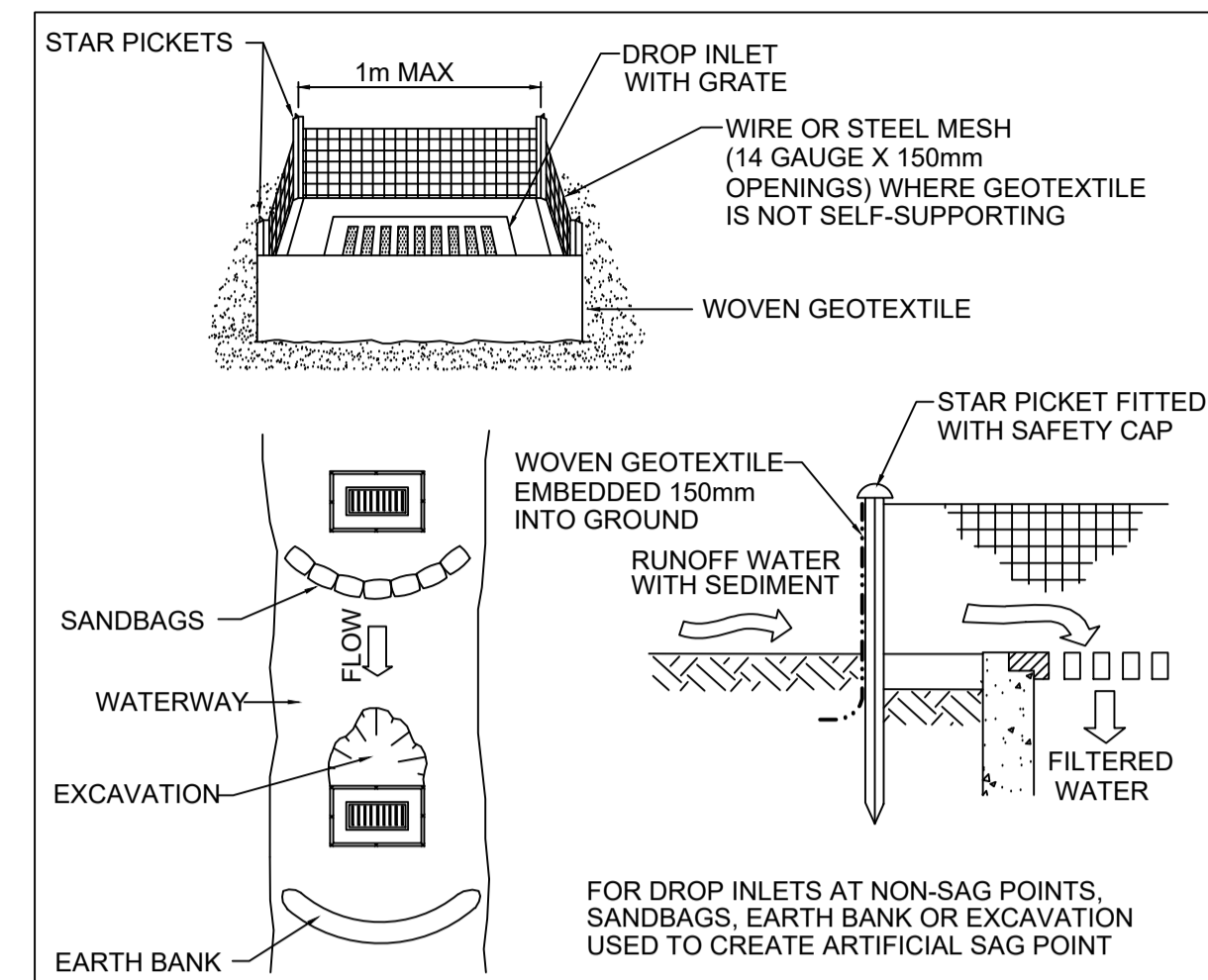
PROJECT No: 110185-12
 SHEET No: CC4700

Plotfile: 29 April, 2022 5:11:18 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1\DA\CD\CC\SO\Southern Heights\RT\2110185-12-CC4701.dwg



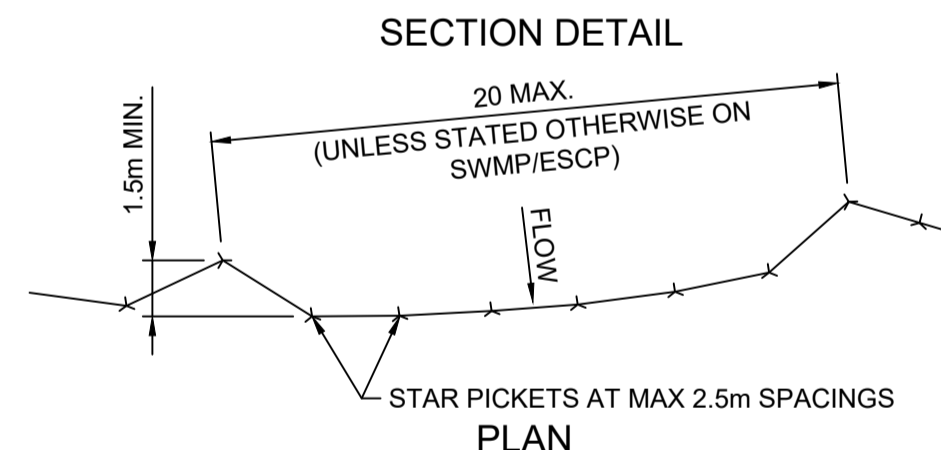
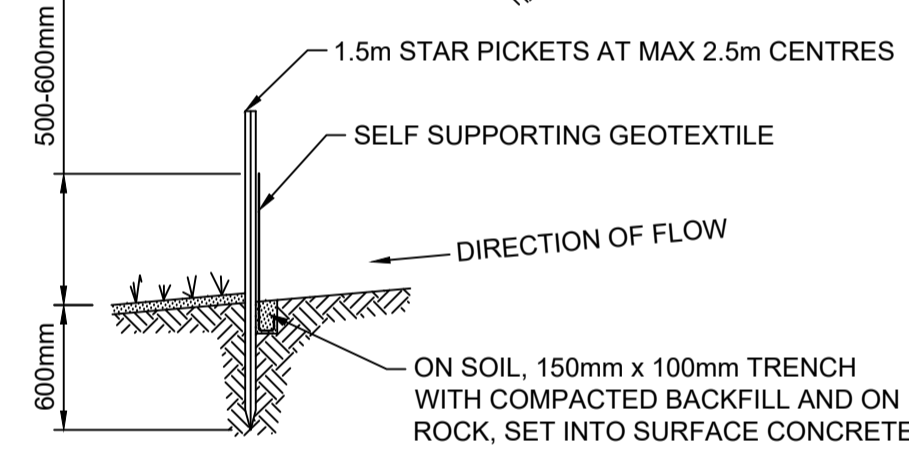
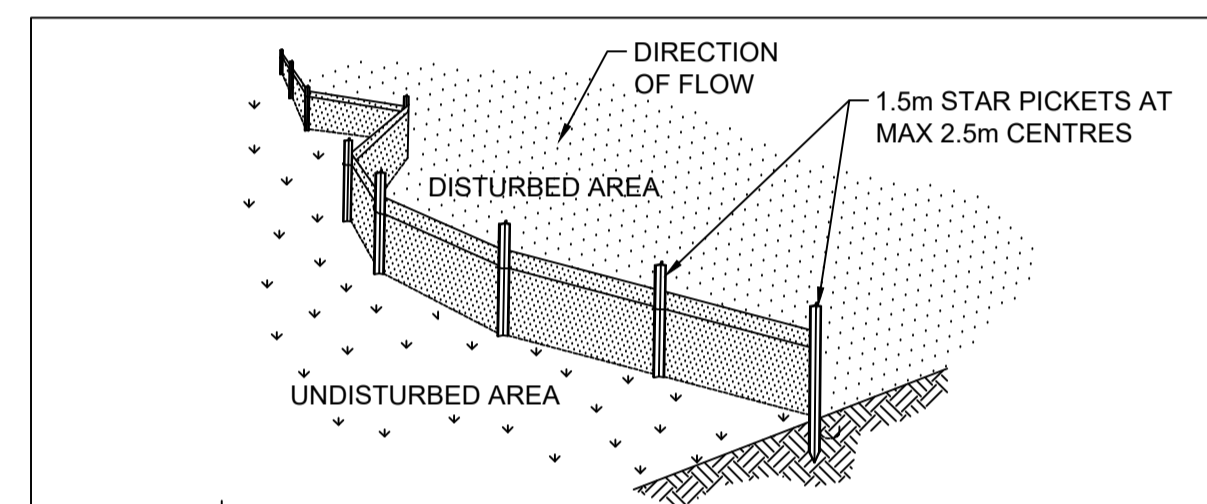
- CONSTRUCTION NOTES**
1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW AND HAZARD AREAS.
 2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
 3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METRES IN HEIGHT.
 4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10 EQUALS 60% GROUND COVER.
 5. CONSTRUCT EARTH BANKS (STANDARD DRAWING 5-5) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES (STANDARD DRAWING 6-8) 1 TO 2 METRES DOWNSLOPE.

STOCKPILE SD4-1
N.T.S.



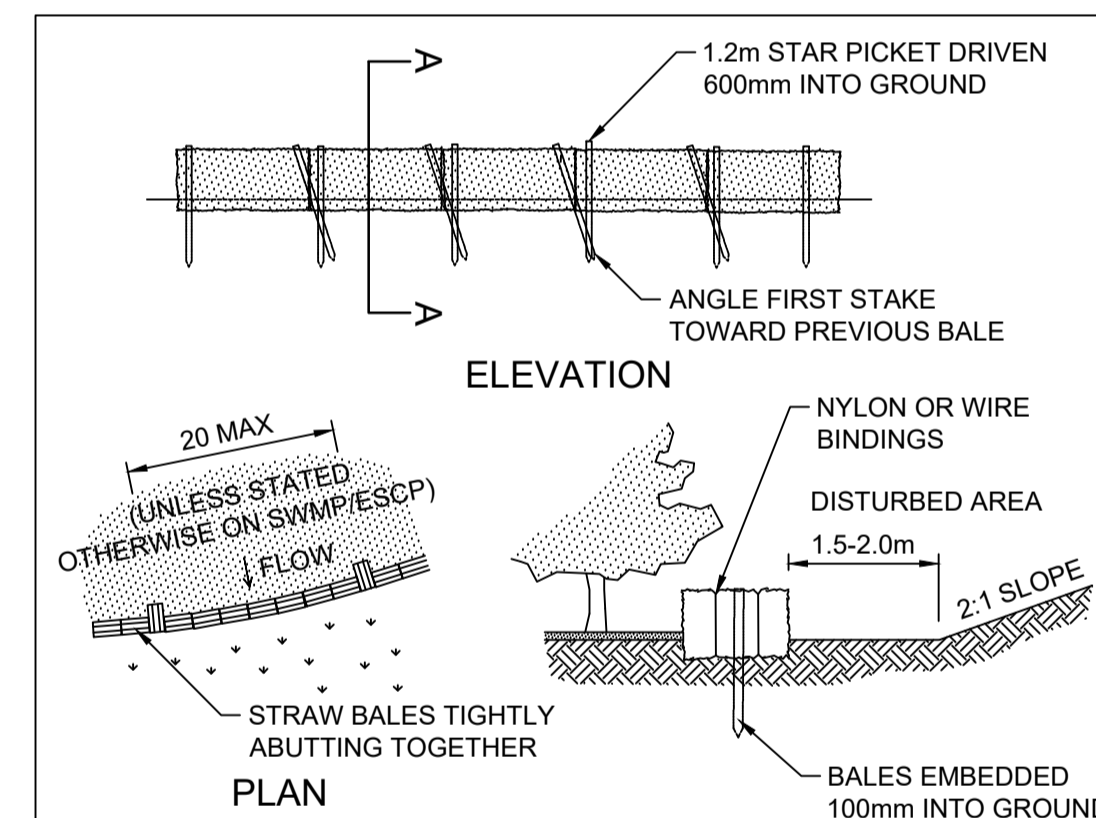
- CONSTRUCTION NOTES**
1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
 2. FOLLOW STANDARD DRAWING 6-7 AND STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOFABRIC. REDUCE THE PICKET SPACING TO 1m CENTRES.
 3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
 4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

GEOTEXTILE INLET FILTER SD6-12
N.T.S.



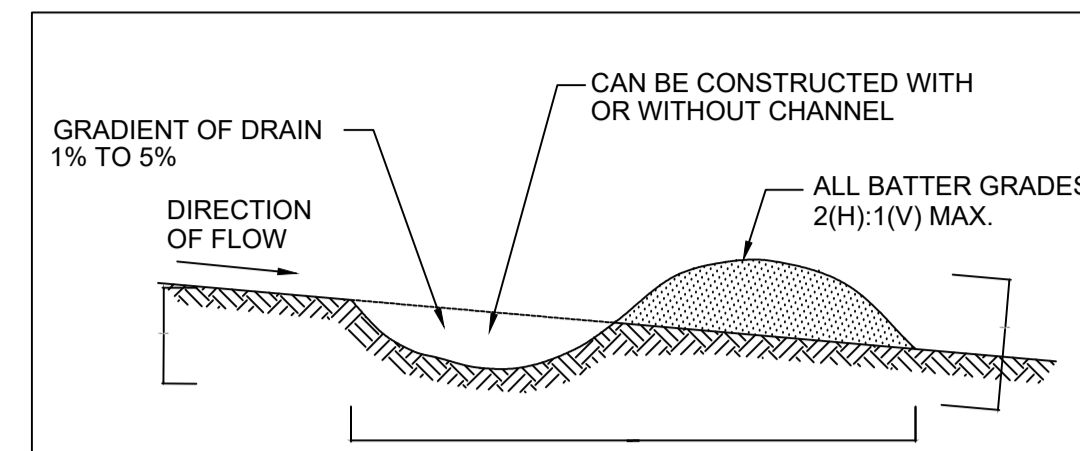
- CONSTRUCTION NOTES**
1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
 2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
 3. DRIVE 1.5 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
 4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
 5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
 6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

SEDIMENT FENCE SD6-8
SCALE: N.T.S.



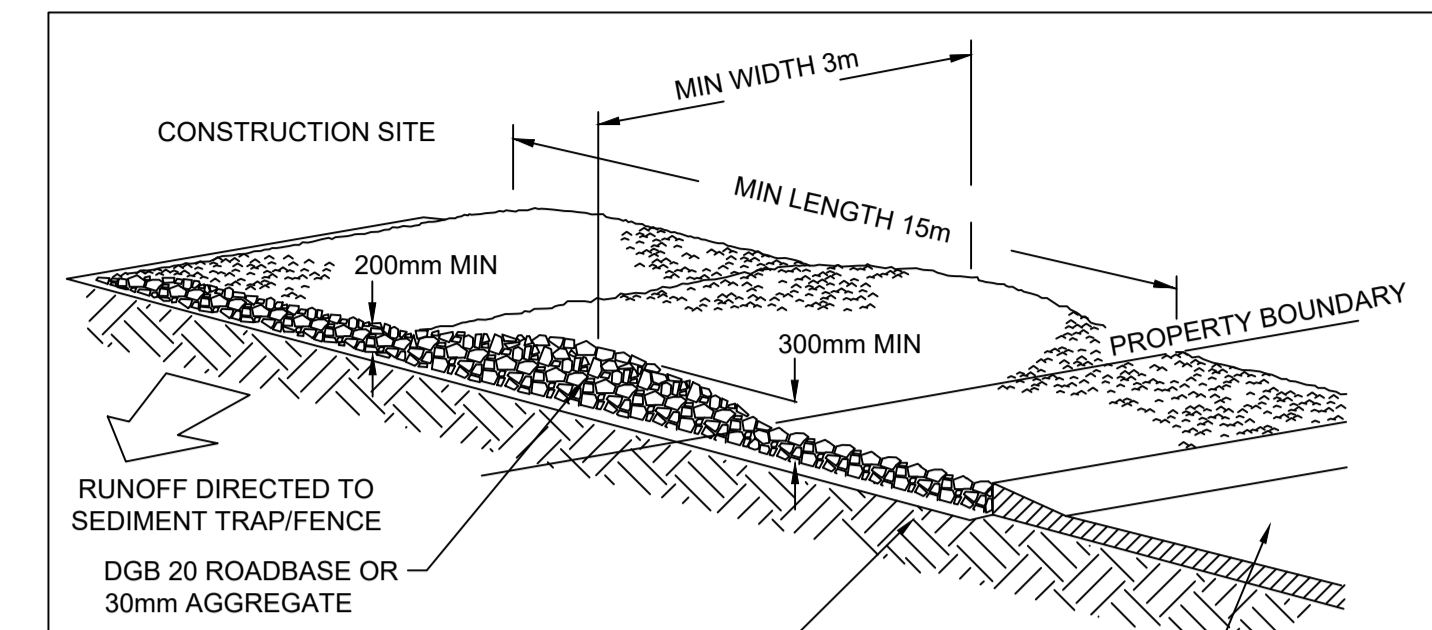
- CONSTRUCTION NOTES**
1. CONSTRUCT THE STRAW BALE FILTER AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE.
 2. PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS ARE TO BE PLACED PARALLEL TO GROUND.
 3. ENSURE THAT THE MAXIMUM HEIGHT OF THE FILTER IS ONE BALE.
 4. EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH TWO 1.2m STAR PICKETS OR STAKES. ANGLE THE FIRST STAR PICKET OR STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE. DRIVE THEM 600mm INTO THE GROUND AND, IF POSSIBLE, FLUSH WITH THE TOP OF THE BALES. WHERE STAR PICKETS ARE USED AND THEY PROTRUDE ABOVE THE BALES, ENSURE THEY ARE FITTED WITH SAFETY CAPS.
 5. WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWNSLOPE FROM A DISTURBED BATTER, ENSURE THE BALES ARE PLACED 1m TO 2m DOWNSLOPE FROM THE TOE.
 6. ESTABLISH A MAINTENANCE PROGRAM THAT ENSURES THE INTEGRITY OF THE BALES IS RETAINED - THEY COULD REQUIRE REPLACEMENT EACH TWO TO FOUR MONTHS.

STRAW BALE FILTER SD6-7
SCALE N.T.S.



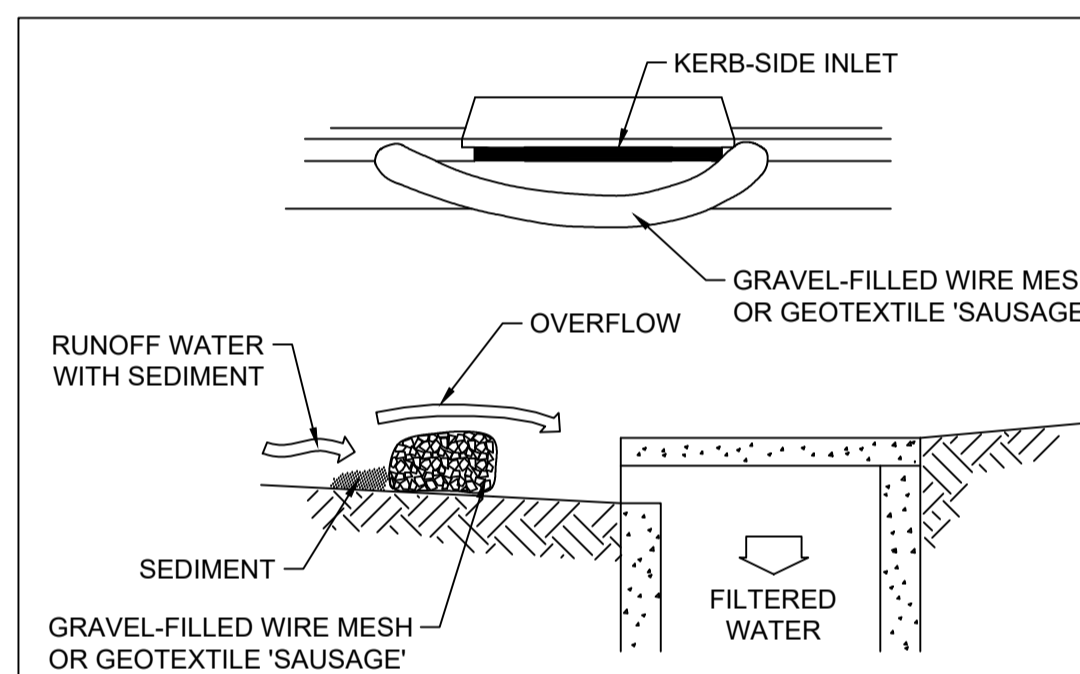
- CONSTRUCTION NOTES**
1. BUILD WITH GRADIENTS BETWEEN 1 PERCENT AND 5 PERCENT.
 2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
 3. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
 4. BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPED.
 5. ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION OR LINE WITH GEOFABRIC.

EARTH BANK (LOW FLOW) SD5-5
N.T.S.



- CONSTRUCTION NOTES**
1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
 2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
 3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
 4. ENSURE THE STRUCTURE IS AT LEAST 15m LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3m WIDE
 5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE

STABILISED SITE ACCESS SD6-14
N.T.S.



- CONSTRUCTION NOTES**
1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
 2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm-50mm GRAVEL.
 3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
 4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
 5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BY-PASSING THE FILTER.
 6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

MESH & GRAVEL INLET FILTER SD6-11
SCALE N.T.S.

SUBDIVISION WORKS CERTIFICATE

Certificate No. 20130299SW77
 Date of Issue 16/05/2022
 Issuing Officer *D. Resta*
 Accreditation No. BDC3367

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WORK AS EXECUTED SHOWN IN RED

SIGNATURE..... *PR*

VINCE MORGAN SURVEYORS PTY LTD
 DATE: 25/01/23 REF:16800

A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS
	AMENDMENT	DES	DRN	CKD	APR
					16/07/21
					DATE

J. WYNDHAM PRINCE
CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

PO Box 4366 PENRITH WESTFIELD NSW 2750
 P 02 4720 3300 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT: **REDBANK**
NORTH RICHMOND

STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**

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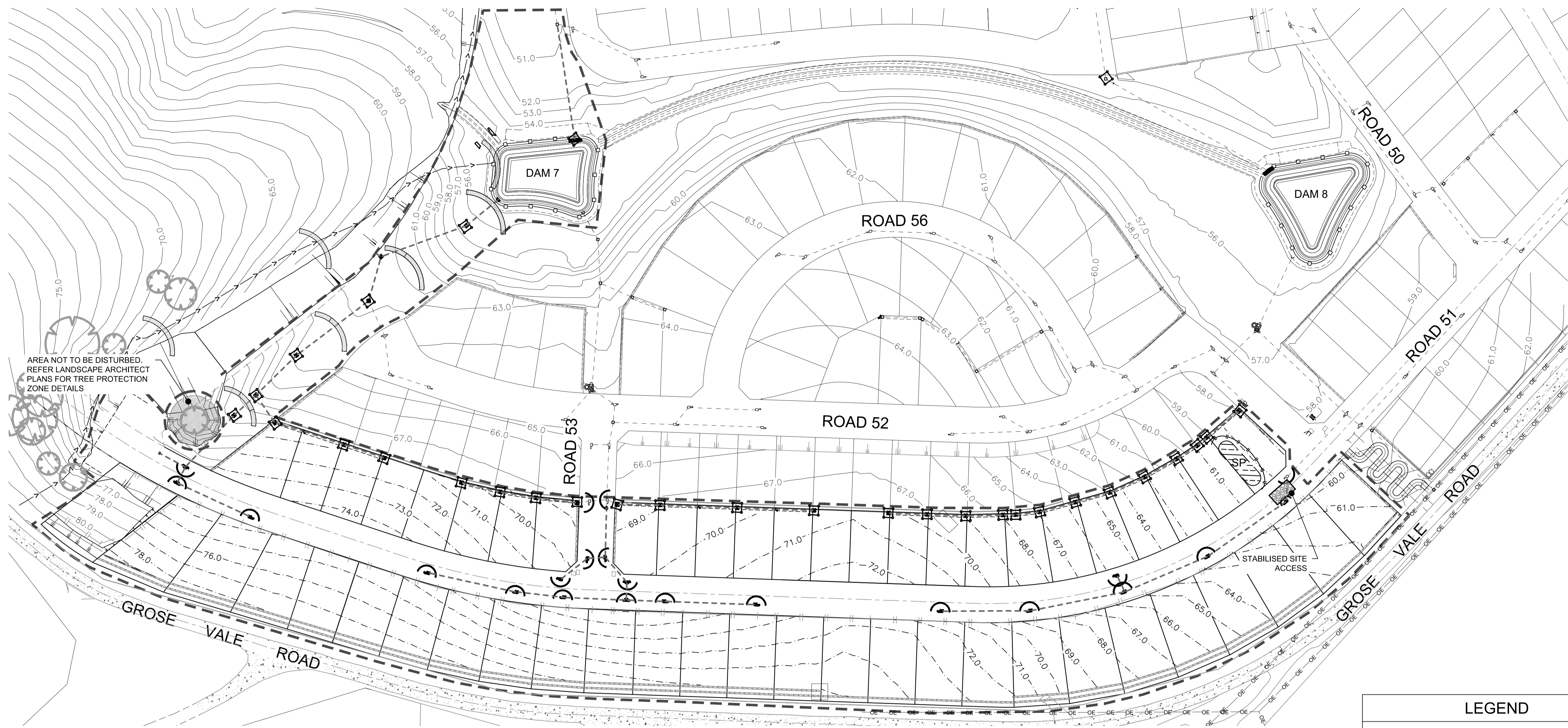
REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
SOIL & WATER MANAGEMENT DETAILS

PROJECT No: 110185-12
 SHEET No: CC4701

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4701

A

Plotted: 29 April, 2022 5:11:50 PM. File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CCSOUTHERN HEIGHTS\4-RTP\2110185-12-CC4702.dwg



AREA NOT TO BE DISTURBED.
REFER LANDSCAPE ARCHITECT
PLANS FOR TREE PROTECTION
ZONE DETAILS

STABILISED SITE
ACCESS

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VINCE MORGAN SURVEYORS PTY LTD
DATE: 25/01/23 REF:16800

- NOTES:**
1. MAINTAIN ATF AS INSTALLED WITH BULK EARTHWORKS.
 2. MAINTAIN SEDIMENT FENCE.
 3. MAINTAIN SEDIMENT BASINS.
 4. MAINTAIN PROTECTIVE FENCING TO SEDIMENT BASINS AND AROUND THE TREES TO BE RETAINED.
 5. DAM 7 AND DAM 8 AND OPERATES AS SEDIMENT BASINS.

LEGEND	
	GEOTEXTILE INLET FILTER
	FILTER ROLLS
	SEDIMENT FENCE
	STRAW BALE FILTER
	TREES TO BE RETAINED AND PROTECTED BY ATF TO PERIMETER AS PER LANDSCAPE DETAILS
	ATF FENCE
	PROTECTIVE FENCE TO SEDIMENT BASIN AND UNDISTURBED LAND
	STABILISED SITE ACCESS & WHEEL WASH BAY
	UNDISTURBED AREA
	STOCKPILE

1:1000 (AT A1)
1:2000 (AT A3)

METRES

AMENDMENT	DES	DRN	CKD	APR	DATE	
B	ROAD 51 RELOCATED	MP	JM	JB	CM	29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21

J. WYNDHAM PRINCE
CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

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REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
SOIL & WATER MANAGEMENT PLAN

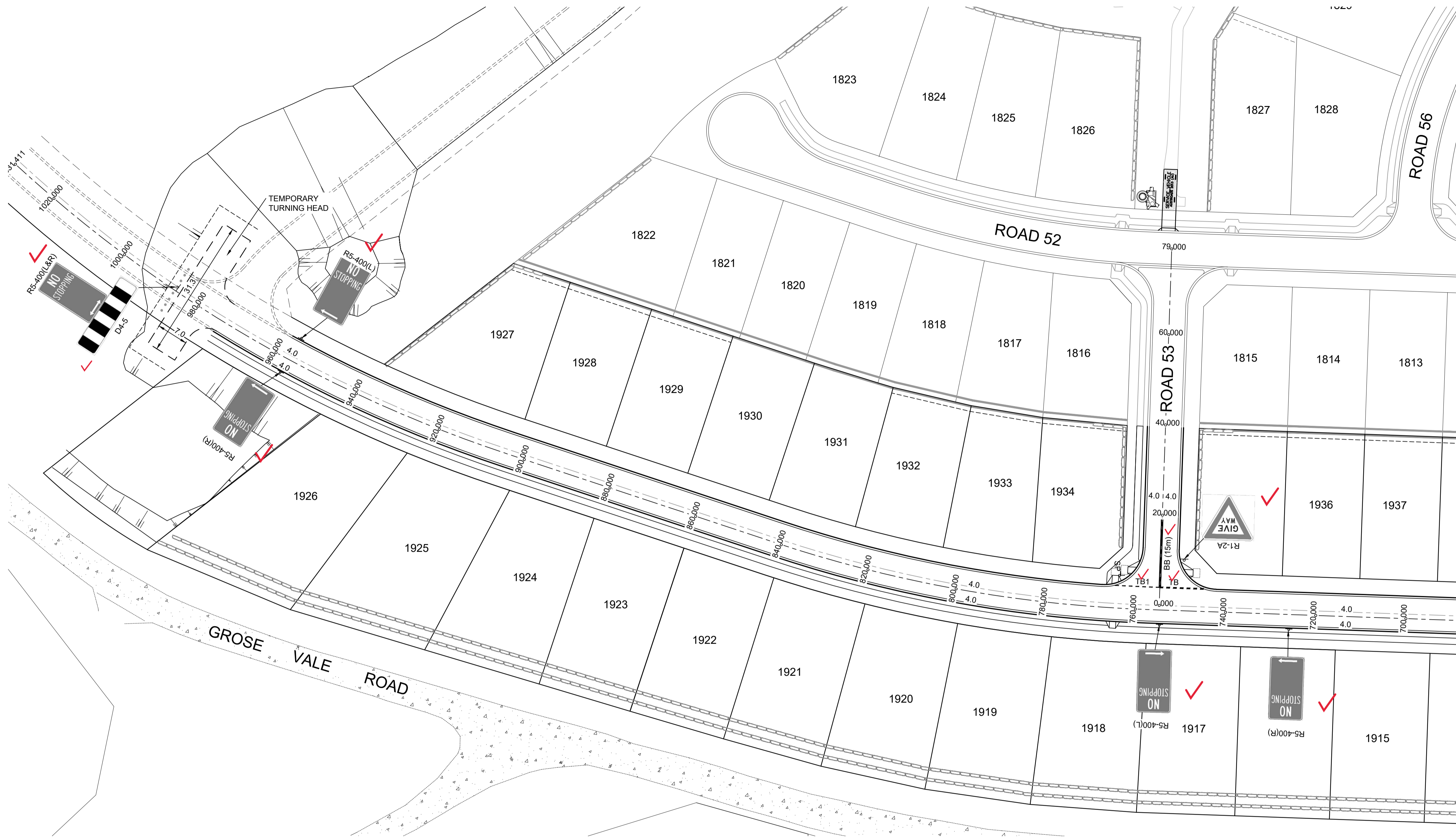
PROJECT No: 110185-12
SHEET No: CC4702

PLAN No: 110185-12-CC4702

PROJECT No: 110185-12
SHEET No: CC4702

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4702

Plotted: 29 April, 2022 5:12:02 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\CD\CCSOUTHERN HEIGHTS\4-RTP\2110185-12-CC4801.dwg



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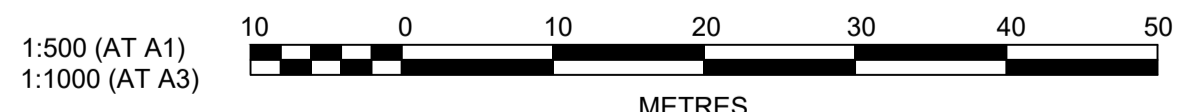
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NOTES

- ALL PAVEMENT MARKINGS, CHEVRONS AND REFLECTORS ARE TO BE IN ACCORDANCE WITH AUSTRROADS GUIDE TO TRAFFIC MANAGEMENT PART 6 AND AUSTRALIAN STANDARDS. AS1742-9, AS1743 AND RMS DELINEATION MANUAL.
- ALL SIGNS TO BE IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARD; AS 1743 - ROAD SIGNS AND COUNCIL'S SPECIFICATION UNLESS OTHERWISE SHOWN.
- ROAD SIGNS ARE SIZE 'B', UNLESS OTHERWISE SHOWN. LOCATE OUTSIDE OF CLEAR ZONES.
- ALL NEW PAVEMENT MARKINGS ARE TO BE INSTALLED IN WHITE, REFLECTIVE, THERMOPLASTIC PAINT.
- KERBSIDE LANE WIDTHS INCLUDE THE WIDTH OF THE GUTTER.
- RE-MARK EXISTING PAVEMENT MARKINGS AS DIRECTED BY THE COUNCIL'S ENGINEER.
- PAVEMENT MARKINGS THAT FORM NO PART OF THE FINAL WORKS ARE TO BE REMOVED BY SAND BLASTING OR OTHER METHOD AS APPROVED BY THE PROJECT MANAGER.
- ALL MEASUREMENTS ARE IN METRES UNLESS OTHERWISE SHOWN.

PAVEMENT MARKING SCHEDULE

CODE	USE	STYLE	COLOUR & TYPE
BB	Barrier line where sight is restricted in both directions or approach to median island		Reflectorised white type 'YY' pavement markers bi-directional reflective yellow
TB	Give way line (Used with Signs)		Reflectorised white
TB1	Give way line (Used on right side of side)		Reflectorised white



AMENDMENT	DES	DRN	CKD	APR	DATE
B	MP	JM	JB	CM	29/04/22
A	MP	NM	RO	MS	16/07/21

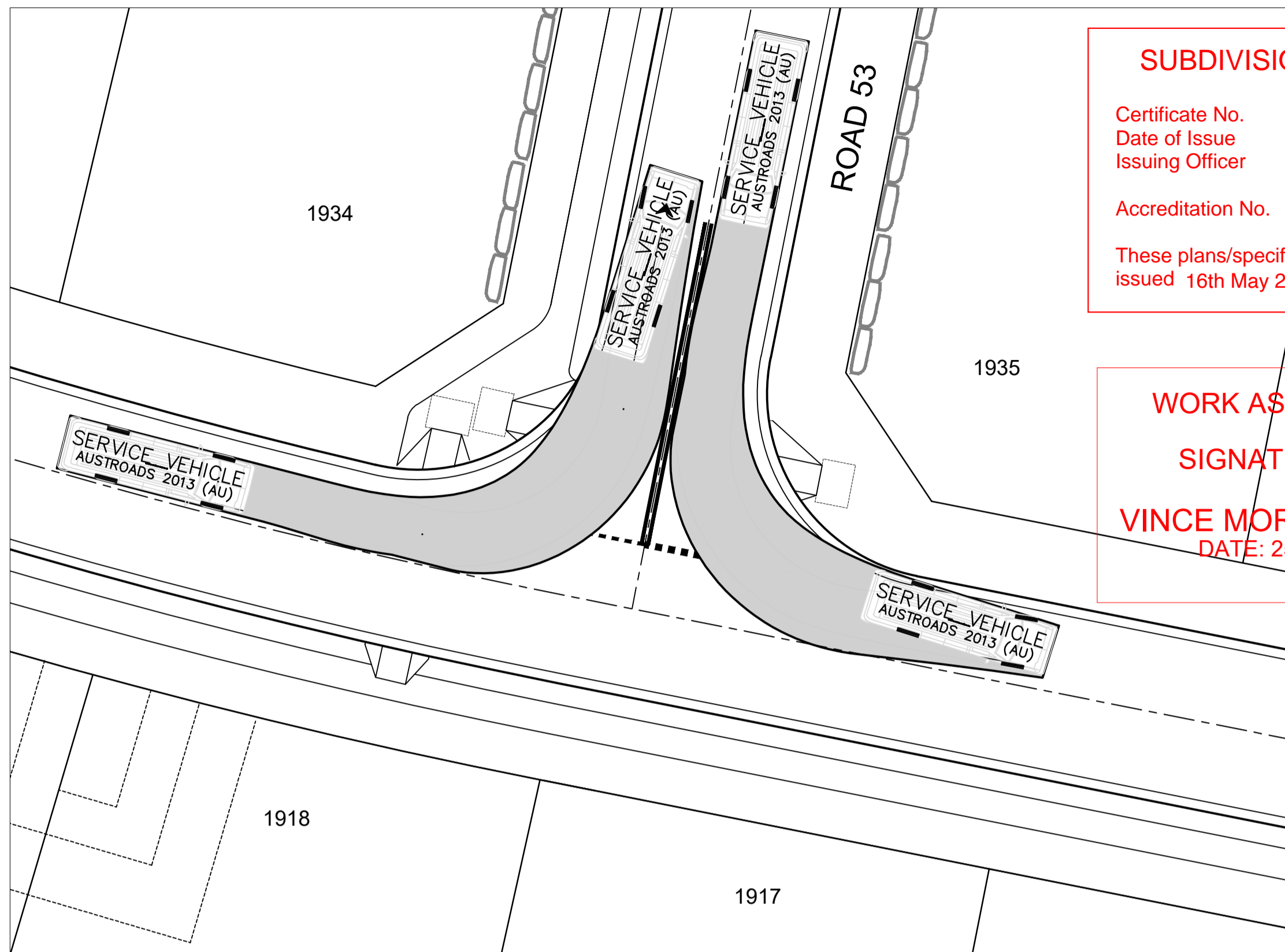
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 NORTH RICHMOND

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REDBANK, NORTH RICHMOND
RIDGETOPS 2 - SWC
SIGNAGE AND LINE MARKING PLAN
 AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4801

PROJECT No: **110185-12**
 SHEET No: **CC4801**
 B



PLAN
SCALE 1:200

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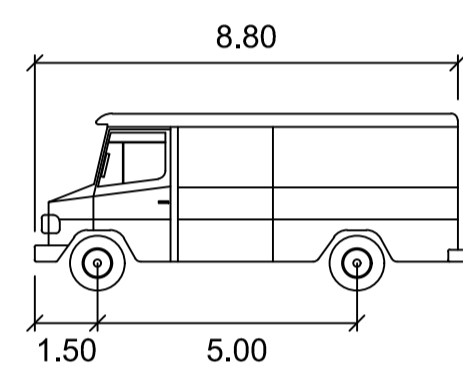
Certificate No. 20130299SW77
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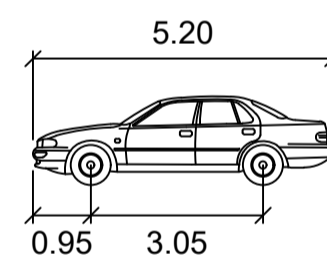
SIGNATURE.....*PR*.....

VINCE MORGAN SURVEYORS PTY LTD
 DATE: 25/01/23 REF:16800



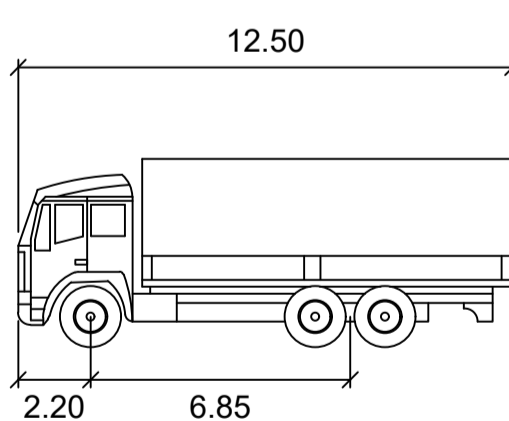
SERVICE VEHICLE

Width : 2.50 meters
 Track : 2.50
 Lock to Lock Time : 6.0
 Steering Angle : 38.7



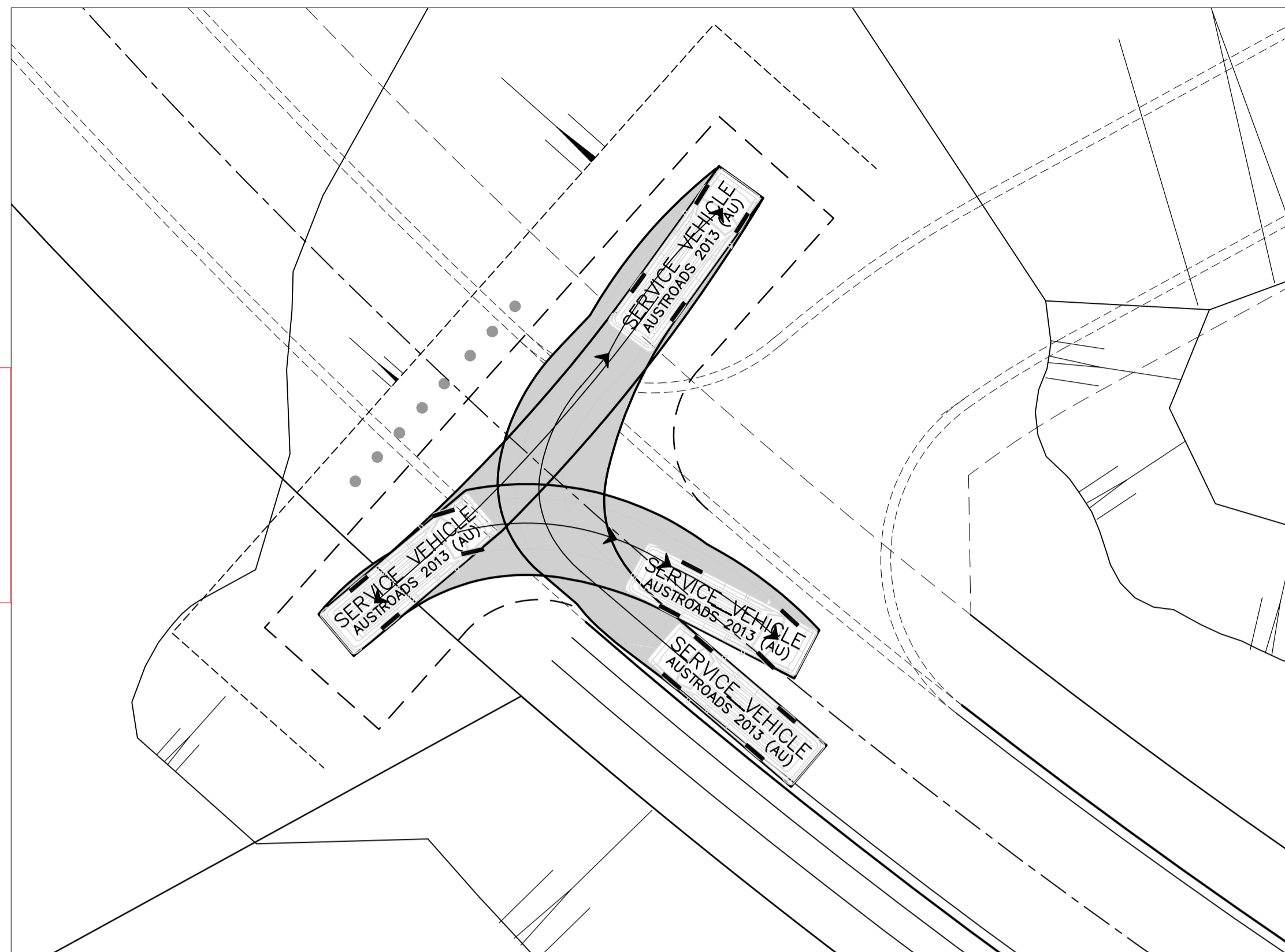
PASSENGER-CAR

Width : 1.94 meters
 Track : 1.84
 Lock to Lock Time : 6.0
 Steering Angle : 33.6

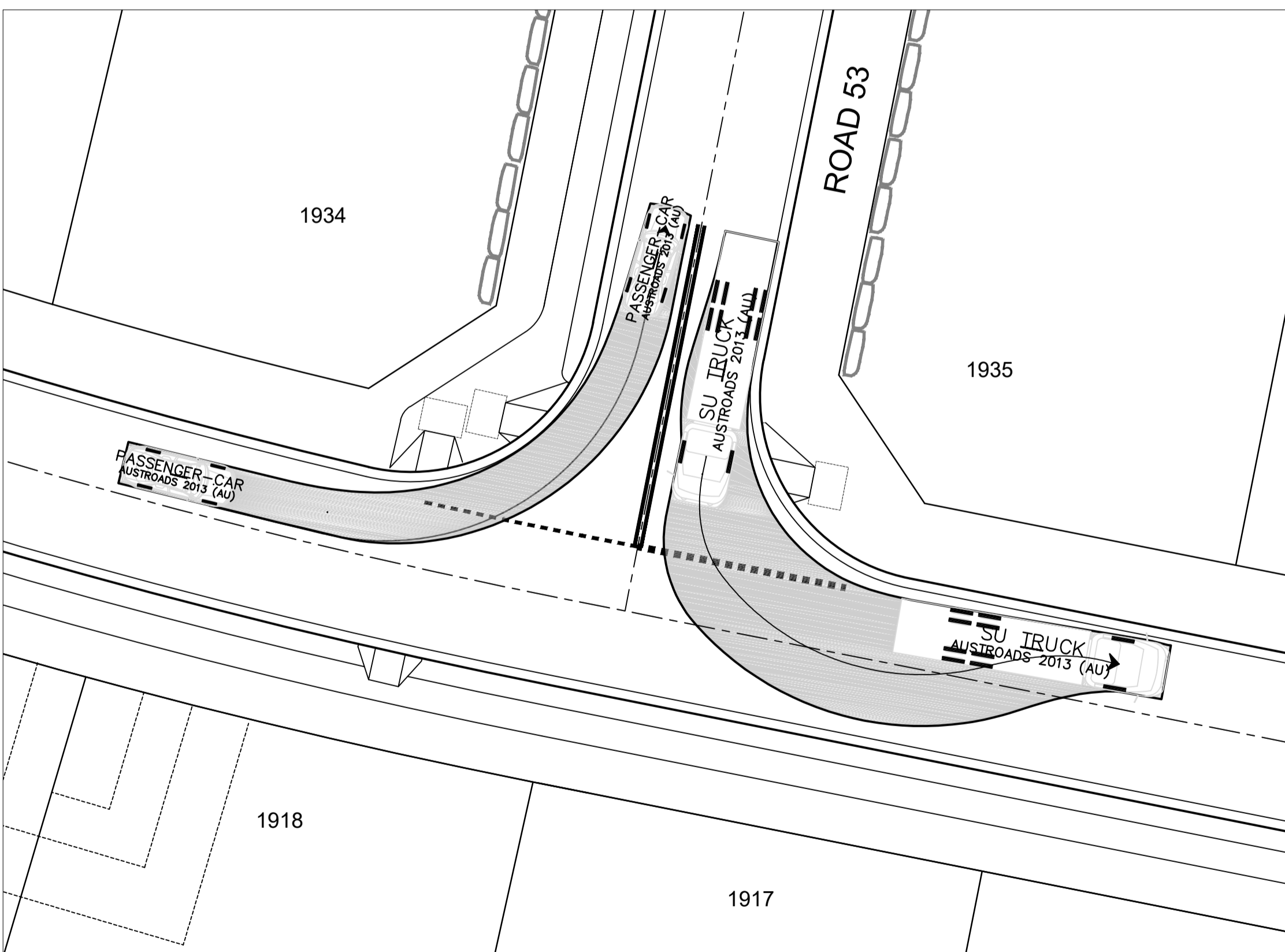


SU TRUCK

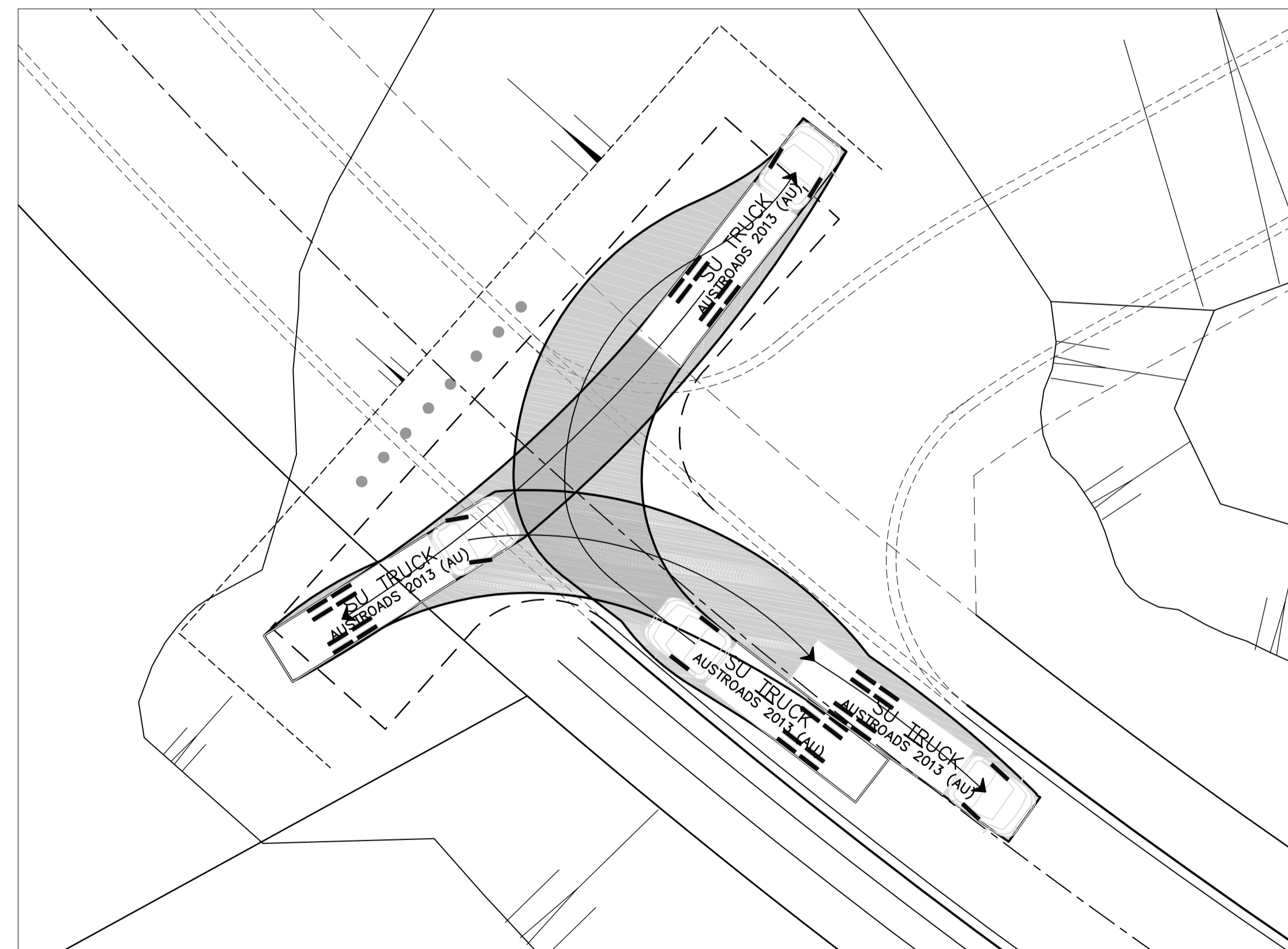
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 Track : 2.50
 Lock to Lock Time : 6.0
 Steering Angle : 36.6



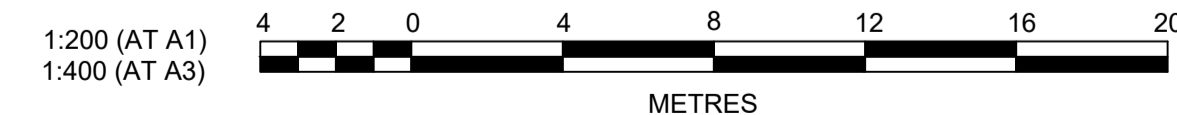
PLAN
SCALE 1:200



PLAN
SCALE 1:200



PLAN
SCALE 1:200

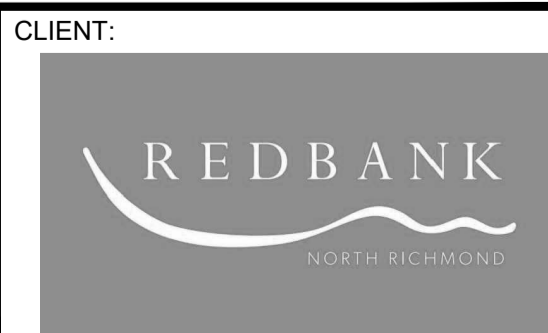


Plotted: 29 April, 2022 5:12:16 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\12 - Stage 1 DA\DC\CC\SOUTHERN HEIGHTS\4-RTP2\110185-12-CC4901.dwg

REV	DESCRIPTION	DES	DRN	CKD	APR	DATE
B	ROAD 51 RELOCATED	MP	JM	JB	CM	29/04/22
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	NM	RO	MS	16/07/21
	AMENDMENT	DES	DRN	CKD	APR	DATE

J. WYNDHAM PRINCE
 CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

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STATUS: **ISSUE FOR CONSTRUCTION APPROVAL**

THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

REDBANK, NORTH RICHMOND
 RIDGETOPS 2 - SWC
 SWEEP PATH PLAN

AZIMUTH: M.G.A. DATUM: A.H.D. ORIGIN: PLAN No: 110185-12-CC4901

PROJECT No: **110185-12**
 SHEET No: **CC4901**

B