

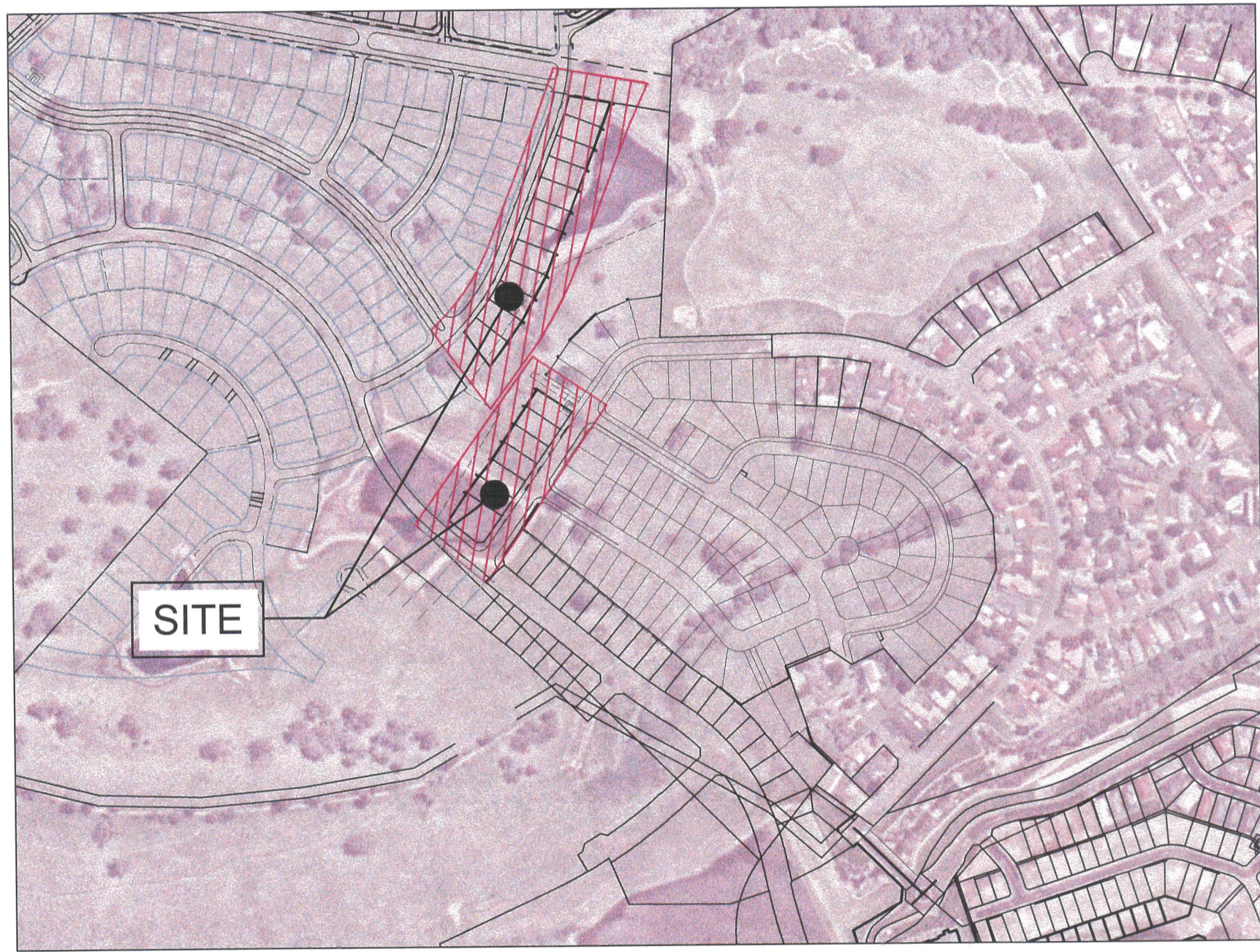
REDBANK, NORTH RICHMOND PROPOSED LOT AND DRAINAGE WORKS (YOBARNIE WEST AND YEOMANS EAST SUPERLOTS) HAWKESBURY COUNCIL REF 0284/17

WORKS AS EXECUTED SHOWN IN RED

SIGNATURE: *IAN VINCENT MYERS*
IAN VINCENT MYERS
 Registered Land Surveyor

VINCE MORGAN SURVEYORS PTY LTD

DATE: REF:



CIVIL PLAN INDEX		
PLAN NO.	PLAN NAME	REV
110185YY/CC01	COVER SHEET & INDEX	A
110185YY/CC02	LAYOUT PLAN & GENERAL NOTES	A
110185YY/CC03	ENGINEERING PLAN - SHEET 1 OF 2	A
110185YY/CC04	ENGINEERING PLAN - SHEET 2 OF 2	A
110185YY/CC05	RETAINING WALL 1 - LONGSECTION	A
110185YY/CC06	RETAINING WALL 2 - LONGSECTION - SHEET 1 OF 2	A
110185YY/CC07	RETAINING WALL 2 - LONGSECTION - SHEET 2 OF 2	A
110185YY/CC08	SOIL & WATER MANAGEMENT PLAN	A

LEGEND	
--- 29.0 ---	PROPOSED CONTOUR
--- 35.0 ---	EXISTING CONTOUR
-----	LIMIT OF WORKS
-----	PROPOSED EASEMENT
KG	KERB & GUTTER (EXISTING)
VC	VEHICULAR CROSSING
	TREES TO BE REMOVED
→ → →	CATCH DRAIN
-OE- OE- OE- OE-	EXISTING OVERHEAD ELECTRICAL
	STORMWATER DRAINAGE LINE AND PIT (EXISTING)
GPT ●	GROSS POLLUTANT TRAP
	PROPOSED RETAINING WALL

WORKS AS EXECUTED SHOWN IN RED

SIGNATURE: *I. Morgan*
IAN VINCENT MYERS
 Registered Land Surveyor

VINCE MORGAN SURVEYORS PTY LTD

DATE: 01.08.18 REF: 16800-11

LOCALITY SKETCH

Prepared By:

J. WYNDHAM PRINCE
 CONSULTING CIVIL INFRASTRUCTURE ENGINEERS
 & PROJECT MANAGERS
 PO Box 4366 PENRITH WESTFIELD NSW 2750
 P 02 4720 3300 F 02 4720 3399
 W www.jwprince.com.au
 E jwp@jwprince.com.au

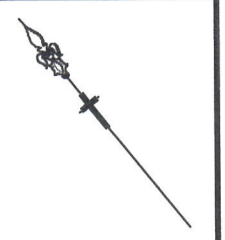
VINCE MORGAN SURVEYORS
 REGISTERED SURVEYORS
 1/77 UNION ROAD PENRITH NSW 2750
 Ph. (02) 4721 5293

DATE OF SURVEY FILE: Nth Rich - Detail Survey Update 15/03/2017
 LOT CALCULATION FILE: REDBANK YOB WEST 28/03/2017
 & REDBANK YEO EAST 28/03/2017

CONSTRUCTION CERTIFICATE
 Certificate No. 20130299C44
 Date of Issue 8 March 2018
 Issuing Officer *[Signature]*
 Accreditation No. 08PB0565
 These plans/specifications form part of the certificate
 issued 8 March 2018

ISSUED FOR CONSTRUCTION APPROVAL

PLAN No.	110185YY/CC01	A
FILE No.	110185YYCC01	



EXISTING PEEL PARK

LOT 1 DP786671



GENERAL NOTES

- ALL WORKS ARE TO BE IN ACCORDANCE WITH HAWKESBURY CITY COUNCILS' DEVELOPMENT CONTROL PLAN 2009, APPENDIX E "CIVIL WORKS SPECIFICATIONS", PART I, II & III, AND WHERE VARIED BY CHAPTER 8 (REDBANK) OF THE HCC DCP AND/OR SEPARATE AGREEMENT WITH COUNCIL.
- SURVEY MARKS: -
 - SURVEY MARKS SHOWN THUS ▲ SHALL BE RETAINED AT ALL TIMES. WHERE RETENTION IS NOT POSSIBLE THE SUPERINTENDENT MUST BE NOTIFIED AND CONSENT RECEIVED PRIOR TO THEIR REMOVAL.
- THE CONTRACTOR SHALL LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE OR ADJUST IF NECESSARY.
- THE CONTRACTOR SHALL NOT ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE WRITTEN PERMISSION OF THE OWNERS. TO BE PROVIDED PRIOR TO THE APPROVAL OF THE PLANS.
- THE CONTRACTOR SHALL MAINTAIN SERVICES AND ALL WEATHER ACCESS AT ALL TIMES TO ADJOINING PROPERTIES.
- THE CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH AND DEBRIS ETC.
- PUBLIC RESERVE AREAS SHALL BE CLEARED OF UNDERGROWTH, IMPROVEMENTS AND FENCES AS DIRECTED BY THE SITE SUPERINTENDENT.
- FILLING IS TO BE FROM A NOMINATED SOURCE, OF SOUND CLEAN MATERIAL, FREE FROM LARGE ROCK, STUMPS, CONTAMINATED MATTER, INDUSTRIAL AND BUILDING WASTE, ORGANIC MATTER AND OTHER DEBRIS. PLACING OF FILLING ON THE PREPARED AREAS SHALL NOT COMMENCE UNTIL THE AUTHORITY TO DO SO HAS BEEN OBTAINED.
- SITE FILL AREAS: - THE CONTRACTOR SHALL TAKE LEVELS OF EXISTING SURFACE AFTER STRIPPING TOPSOIL AND PRIOR TO COMMENCING FILL OPERATIONS.
- ALL SITE REGRADING AREAS SHALL BE GRADED AT A MINIMUM 1% TO THE ENGINEER'S REQUIREMENTS.
- SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE DIRECTED BY THE SUPERINTENDENT.
- ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING CONDITIONS.
- DIMENSIONS OF ANY DETAIL SHALL NOT BE SCALED - DIMENSIONS, IF IN DOUBT, SHALL BE VERIFIED BY THE SUPERINTENDENT.
- ALL CONSTRUCTION AND RESTORATION WORK ON COUNCIL'S ROAD AND FOOTPATH AREA ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE APPROVED DRAWINGS AND COUNCIL'S STANDARD SPECIFICATIONS.

COMPACTION SPECIFICATION

- WITHIN LOTS -
 - ALL FILL SHALL BE CARRIED OUT IN HORIZONTAL LAYERS, EXTENDING THE FULL WIDTH OF THE AREA BEING FILLED, OF NOT MORE THAN 300MM CONSOLIDATED THICKNESS. EACH LAYER SHALL BE COMPACTED TO A DENSITY OF AT LEAST 98% STANDARD DRY DENSITY RATIO DETERMINED IN ACCORDANCE WITH AS 1289 5.4.1-2007 "COMPACTION CONTROL TEST - DRY DENSITY RATIO, MOISTURE VARIATION AND MOISTURE RATIO". THE DEPTHS OF FILL AND THE COMPACTION THEREOF ARE TO BE VERIFIED BY THE SUBMISSION OF COMPACTION CERTIFICATES AND A PLAN SHOWING CONTOURED DEPTHS OF FILL IN RELATION TO LOT BOUNDARIES.
 - ALL TESTS TO BE A MINIMUM OF TWO COMPACTION TESTS PER LOT PER LAYER ARE TO BE CARRIED OUT, BY A NATA REGISTERED LABORATORY.
 - ALL TRENCHES TO BE BACKFILLED TO HAVE EQUAL COMPACTION (+2%/-0% VARIATION) AS THE SURROUNDING LOTS.
 - ALL TRENCH TESTS TO BE TAKEN IN EACH 300MM LAYER AND EVERY 50 METRES OF TRENCH, BY A NATA REGISTERED LABORATORY.
 - THESE AND ALL OTHER REQUIREMENTS TO BE COMPLIED WITH, TO BE READ IN CONJUNCTION WITH HAWKESBURY CITY COUNCIL DCP PART II - CONSTRUCTION SPECIFICATION.
 - ANY ERRORS, OMISSIONS OR QUERIES TO BE SUBMITTED TO THE PROJECT SUPERINTENDENT FOR INSTRUCTION.
- FOR ALL AREAS EXTERNAL TO LOTS REFER TO JWP PLANS 110185/CC000 TO CC312 FOR YEOMANS - NORTH FOR COMPACTION REQUIREMENTS.

WORKS AS EXECUTED SHOWN IN RED

SIGNATURE: IAN VINCENT MYERS
Registered Land Surveyor

VINCE MORGAN SURVEYORS PTY LTD

DATE: _____ REF: _____

WORKS AS EXECUTED SHOWN IN RED

SIGNATURE: IAN VINCENT MYERS
Registered Land Surveyor

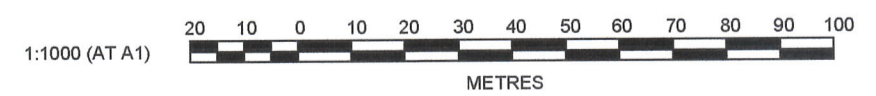
VINCE MORGAN SURVEYORS PTY LTD

DATE: 01.08.18 REF: 16800-11

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C44
Date of Issue 8 March 2018
Issuing Officer [Signature]
Accreditation No. JSPB0665

These plans/specifications form part of the certificate issued 8 March 2018



J. WYNDHAM PRINCE CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

PO Box 4366 PENRITH WESTFIELD NSW 2750
P 02 4720 3300 F 02 4720 3399 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT: **REDBANK**

AZIMUTH: _____
DATUM: _____
ORIGIN: _____

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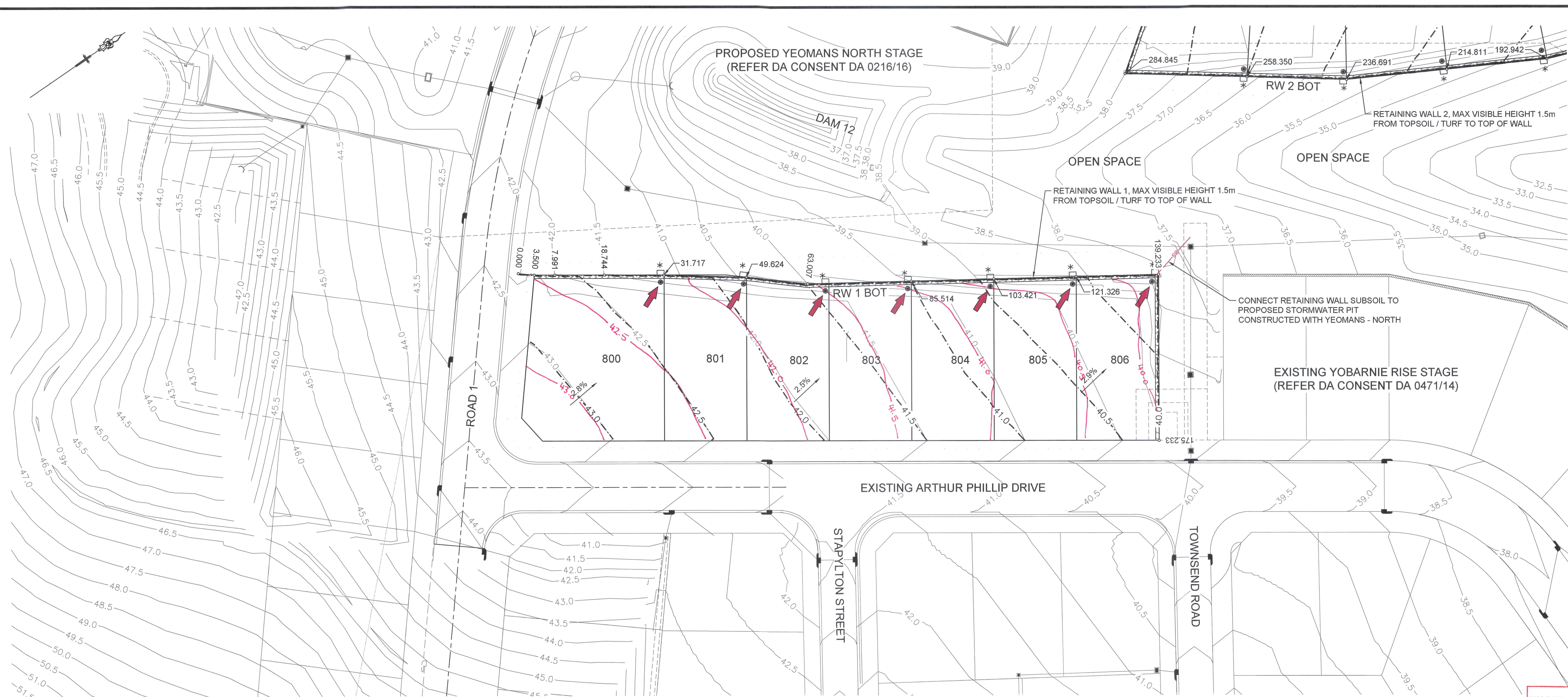
ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOIND STAGE 14A
DEVELOPMENT APPLICATION
LAYOUT PLAN & GENERAL NOTES

PLAN No: 110185YY/CC02 **A**
FILE No: 110185YYCC02
SHEET SIZE: A1 ORIGINAL

A	ISSUED FOR CONSTRUCTION APPROVAL AMENDMENT	MP	TG	RO	MS	19/02/18
		DES	DRN	CKD	APR	DATE

Plotted: 20 February, 2018 8:30:37 AM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CCYED YOB CCI110185YYCC03.dwg



PLAN
SCALE 1:500

LEGEND

- EASEMENT TO DRAIN WATER 1m x 1.5m WIDE PROVIDED FOR EACH LOT FUTURE DRAINING DIRECTLY TO OPEN SPACE
- FLOW ARROW
- PROVISION FOR EACH LOT FOR FUTURE ROOF WATER CONNECTION

RW 1 BOT

CHAINAGE	EASTING	NORTHING	BEARING
0	286426.14	6281930.34	39°37'51.43"
3.5	286428.38	6281933.03	
7.99	286430.91	6281936.74	
18.74	286436.99	6281945.61	
31.72	286444.32	6281956.31	
49.62	286454.86	6281970.79	
63.01	286463.59	6281980.93	
85.51	286475.82	6281999.83	
103.42	286485.54	6282014.86	
121.33	286495.27	6282029.9	
139.23	286504.99	6282044.93	
175.23	286534.7	6282024.59	124°23'58.09"

WORKS AS EXECUTED SHOWN IN RED

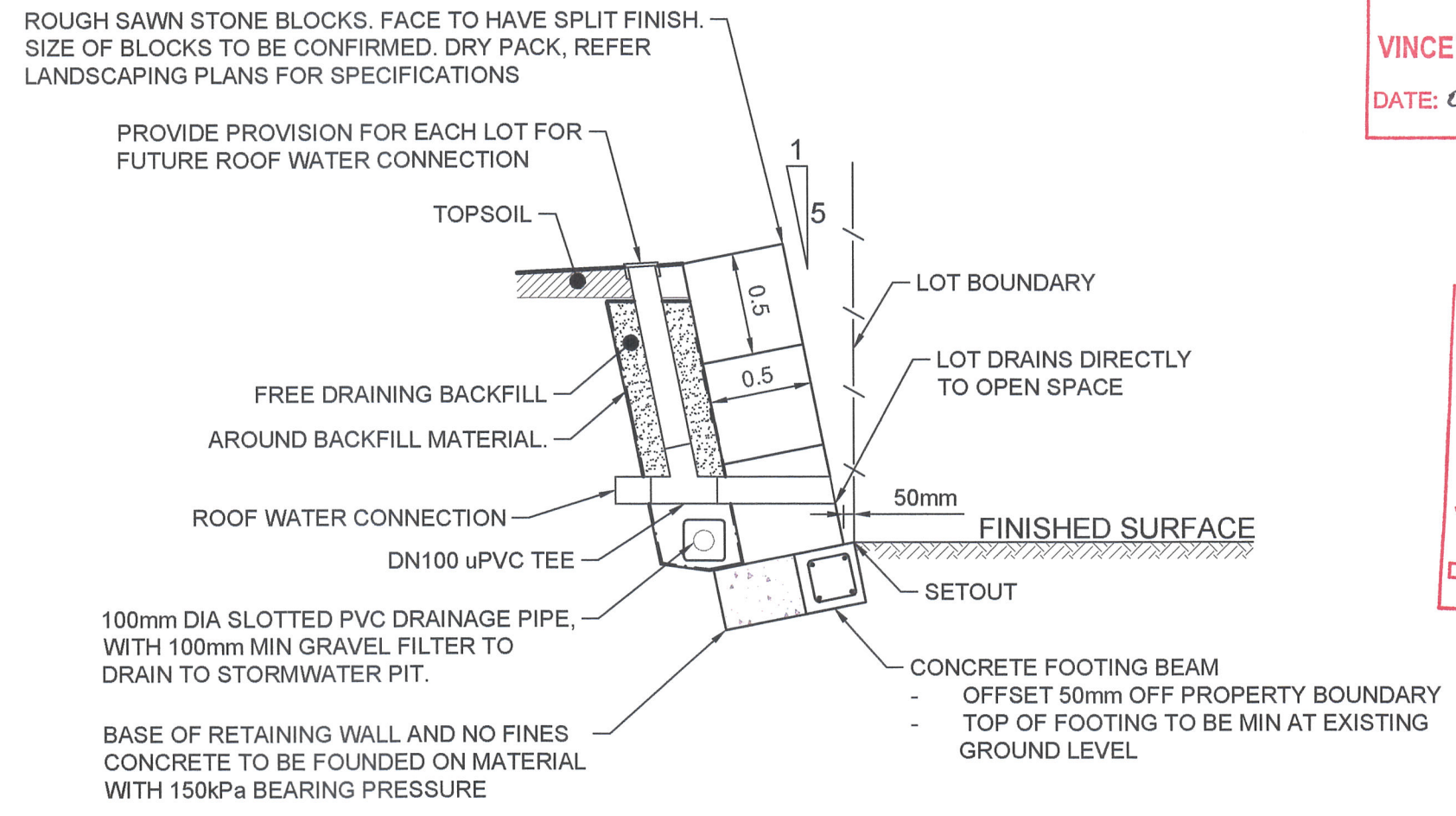
SIGNATURE: *Ian Vincent Myers*
IAN VINCENT MYERS
 Registered Land Surveyor

VINCE MORGAN SURVEYORS PTY LTD
 DATE: 01.08.18 REF: 16800-11

WORKS AS EXECUTED SHOWN IN RED

SIGNATURE: *Ian Vincent Myers*
IAN VINCENT MYERS
 Registered Land Surveyor

VINCE MORGAN SURVEYORS PTY LTD
 DATE: 01.08.18 REF: 16800-11



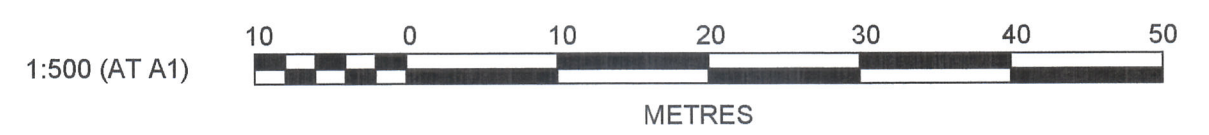
RETAINING WALL SANDSTONE LOGS DETAIL
 3 (AND LESS) BLOCK ARRANGEMENT (1.5m MAX HEIGHT)
 N.T.S.

RETAINING WALL SUBJECT TO STRUCTURAL DESIGN AND CERTIFICATION

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C44
 Date of Issue 8 March 2018
 Issuing Officer [Signature]
 Accreditation No. 03990565

These plans/specifications form part of the certificate issued 8 March 2018



CLIENT:

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

ISSUED FOR CONSTRUCTION APPROVAL

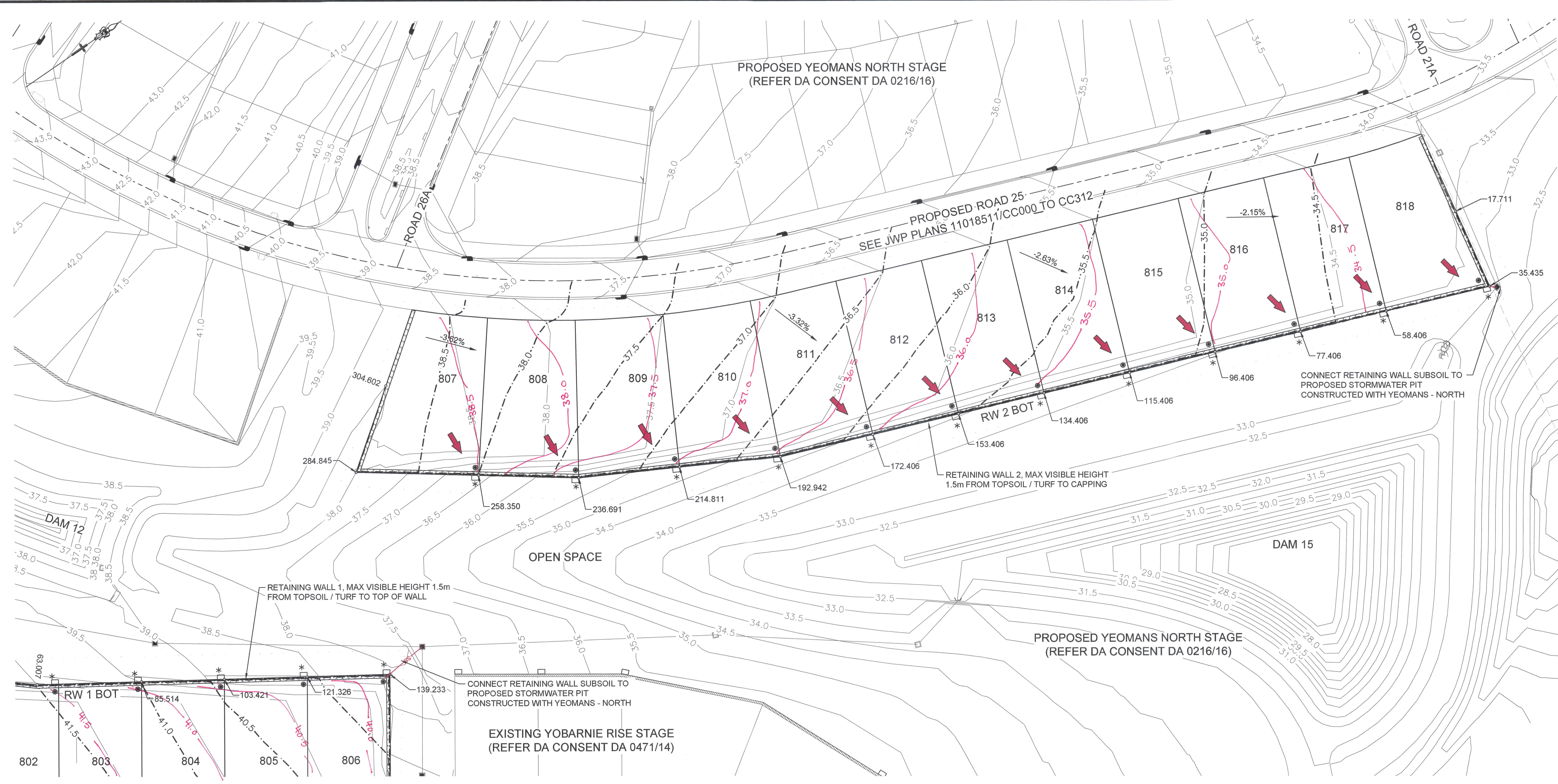
REDBANK, NORTH RICHMOND STAGE 14A
 DEVELOPMENT APPLICATION
 ENGINEERING PLAN - SHEET 1 OF 2

PLAN No: 110185YY/CC03 **A**
 FILE No: 110185YYCC03
 SHEET SIZE: A1 ORIGINAL

J. WYNDHAM PRINCE CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

PO Box 4366 PENRITH WESTFIELD NSW 2750
 P 02 4720 3300 F 02 4720 3399 W www.jwprince.com.au E jwp@jwprince.com.au

NO.	DESCRIPTION	MP	TG	RO	MS	DATE
A	ISSUED FOR CONSTRUCTION APPROVAL AMENDMENT	DES	DRN	CKD	APR	19/02/18



LEGEND

- EASEMENT TO DRAIN WATER 1m x 1.5m WIDE PROVIDED FOR EACH LOT FUTURE DRAINING DIRECTLY TO OPEN SPACE
- FLOW ARROW
- PROVISION FOR EACH LOT FOR FUTURE ROOF WATER CONNECTION

RW 2 BOT			
CHAINAGE	EASTING	NORTHING	BEARING
0	286535.92	6282294.4	100°21'06.32"
17.71	286553.35	6282291.22	
35.44	286570.78	6282288.04	
58.41	286582.54	6282266.6	
77.41	286555.72	6282248.87	
96.41	286548.9	6282231.13	
115.41	286542.08	6282213.4	
134.41	286535.25	6282195.67	
153.41	286528.43	6282177.93	
172.41	286521.61	6282160.2	
192.94	286514.24	6282141.03	
214.81	286503.8	6282121.81	
236.69	286493.36	6282102.59	
258.35	286480.64	6282085.06	
284.85	286465.08	6282063.81	
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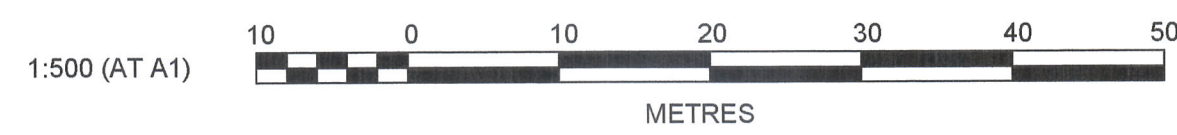
PLAN
SCALE 1:500

WORKS AS EXECUTED SHOWN IN RED
 SIGNATURE: *[Signature]*
 IAN VINCENT MYERS
 Registered Land Surveyor
VINCE MORGAN SURVEYORS PTY LTD
 DATE: 01.08.18 REF: 16800 11

WORKS AS EXECUTED SHOWN IN RED
 SIGNATURE:
 IAN VINCENT MYERS
 Registered Land Surveyor
VINCE MORGAN SURVEYORS PTY LTD
 DATE: REF:

RETAINING WALL SUBJECT TO STRUCTURAL DESIGN AND CERTIFICATION

CONSTRUCTION CERTIFICATE
 Certificate No. 20130299CAM
 Date of Issue 8 March 2018
 Issuing Officer [Signature]
 Accreditation No. JB90565
 These plans/specifications form part of the certificate issued 8 March 2018



CLIENT: **REDBANK**
 NORTH RICHMOND
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ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOND STAGE 14A DEVELOPMENT APPLICATION
 ENGINEERING PLAN - SHEET 2 OF 2

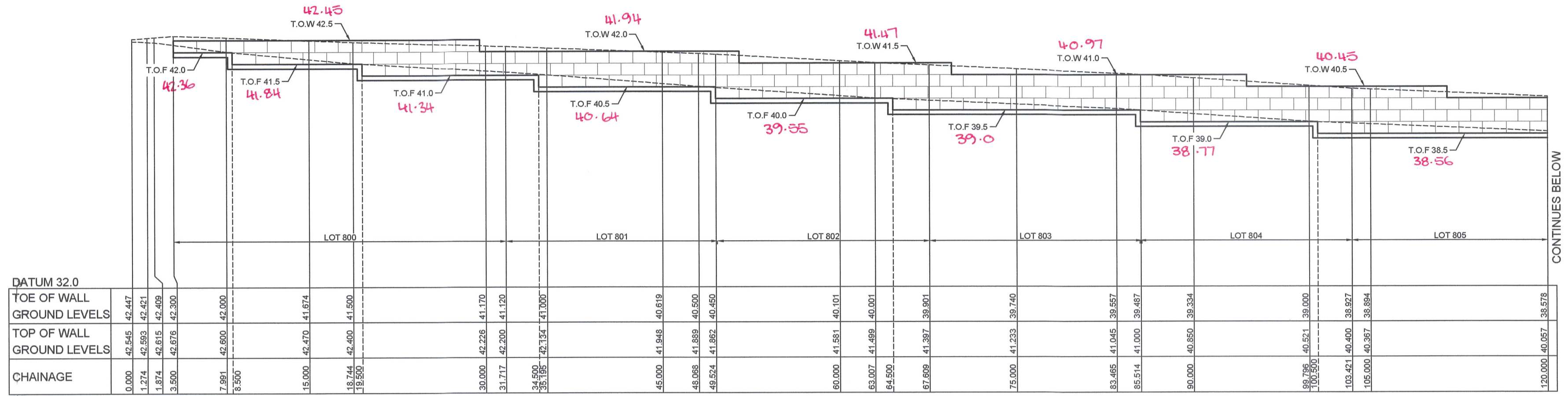
PLAN No:	110185YY/CC04	A
FILE No:	110185YYCC04	
SHEET SIZE:	A1 ORIGINAL	

J. WYNDHAM PRINCE CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS
 PO Box 4366 PENRITH WESTFIELD NSW 2750
 P 02 4720 3300 F 02 4720 3399 W www.jwprince.com.au E jwp@jwprince.com.au

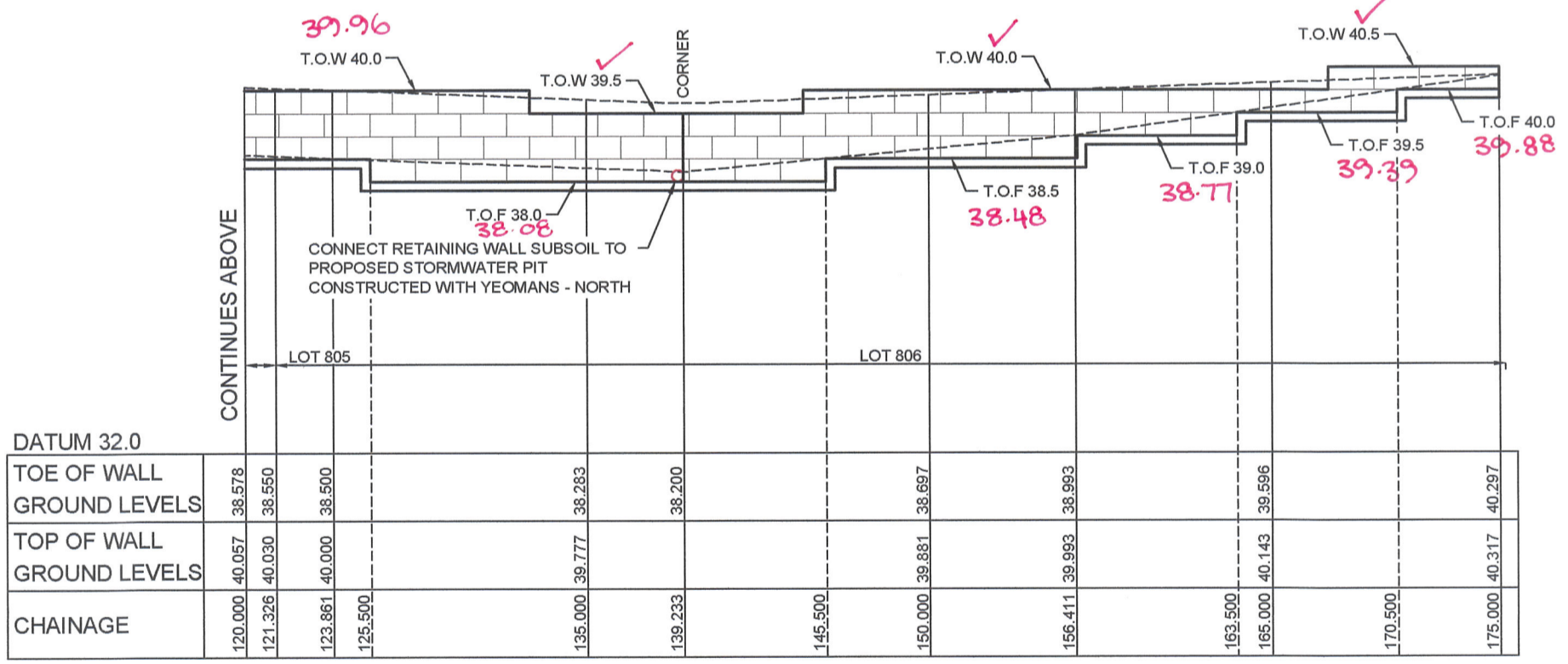
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NO.	DESCRIPTION	MP	TG	RO	MS	DATE
A	ISSUED FOR CONSTRUCTION APPROVAL AMENDMENT					19/02/18
		DES	DRN	CKD	APR	

Plotted: 20 February, 2018 8:32:02 AM File Name: J:\110185 - Redbank North Richmond Residential Precincts01 - Description\CD\CC05\Y06 CC0110185YYCC05.dwg



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



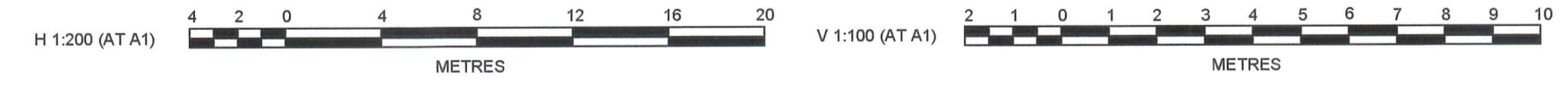
LONGITUDINAL SECTION RW 1 BOT
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100

WORKS AS EXECUTED SHOWN IN RED
SIGNATURE:
IAN VINCENT MYERS
Registered Land Surveyor
VINCE MORGAN SURVEYORS PTY LTD
DATE: REF:

WORKS AS EXECUTED SHOWN IN RED
SIGNATURE:
IAN VINCENT MYERS
Registered Land Surveyor
VINCE MORGAN SURVEYORS PTY LTD
DATE: 01.08.18 REF: 16800-11

CONSTRUCTION CERTIFICATE
Certificate No. 20130299C44
Date of Issue 8 March 2018
Issuing Officer
Accreditation No. JBSP0665
These plans/specifications form part of the certificate issued 8 March 2018

LEGEND
SANDSTONE LOGS
RETAINING WALL SUBJECT TO STRUCTURAL DESIGN AND CERTIFICATION

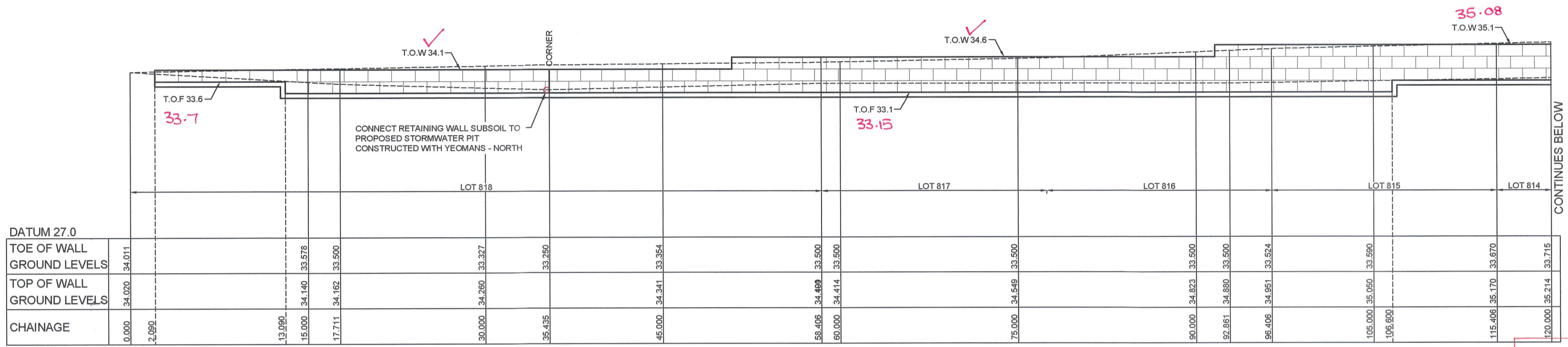


J. WYNDHAM PRINCE CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS
PO Box 4366 PENRITH WESTFIELD NSW 2750
P 02 4720 3300 F 02 4720 3399 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT:
REDBANK
NORTH RICHMOND
AZIMUTH:
DATUM:
ORIGIN:
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ISSUED FOR CONSTRUCTION APPROVAL
REDBANK, NORTH RICHMOND STAGE 14A DEVELOPMENT APPLICATION
RETAINING WALL 1 - LONGSECTION
PLAN No: 110185YY/CC05 **A**
FILE No: 110185YYCC05
SHEET SIZE: A1 ORIGINAL

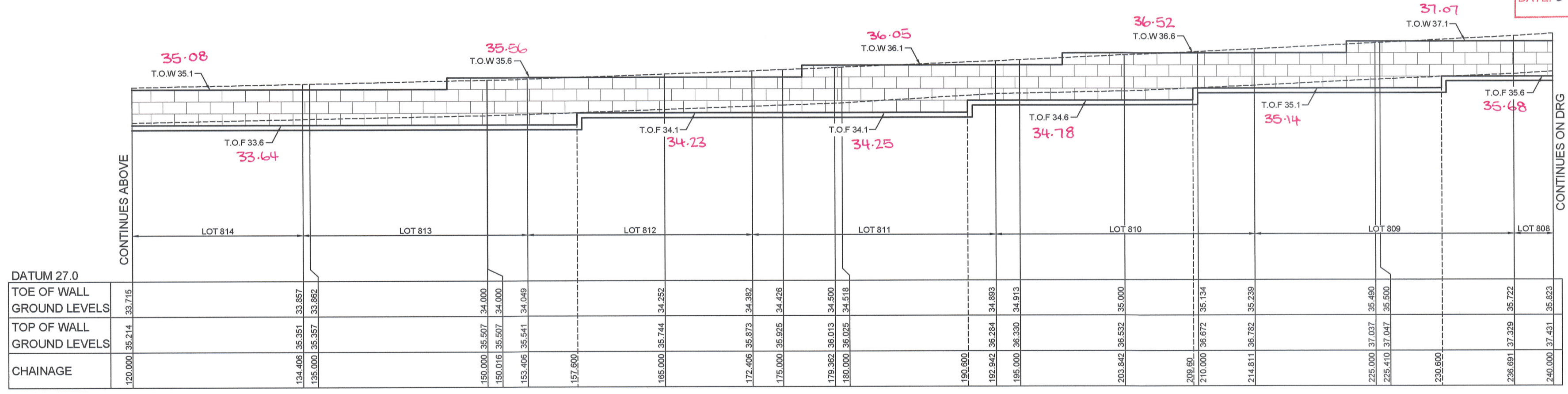
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DATUM 27.0	
TOE OF WALL GROUND LEVELS	34.020 34.011
TOP OF WALL GROUND LEVELS	34.020 34.140 33.578 33.500
CHAINAGE	0.000 2.090 13.090 15.000 17.711 30.000 34.260 33.327 33.250 33.354 45.000 34.341 33.554 58.406 34.489 33.500 60.000 34.414 33.500 75.000 34.549 33.500 90.000 34.823 33.500 92.861 34.880 33.500 96.406 34.951 33.524 105.000 35.050 33.500 106.600 115.406 35.170 33.670 120.000 35.214 33.715

LONGITUDINAL SECTION RW 2 BOT
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100

WORKS AS EXECUTED SHOWN IN RED
SIGNATURE: *Ian Vincent Myers*
IAN VINCENT MYERS
Registered Land Surveyor
VINCE MORGAN SURVEYORS PTY LTD
DATE: 01.08.18 REF: 16800-11



DATUM 27.0	
TOE OF WALL GROUND LEVELS	33.715
TOP OF WALL GROUND LEVELS	35.214 35.351 33.857 33.862 35.507 34.000 35.507 34.000 35.541 34.049 35.500 35.744 34.252 35.673 34.392 35.925 34.426 36.013 34.500 36.025 34.518 36.000 36.284 34.893 36.330 34.913 36.532 35.000 36.672 35.134 36.782 35.239 37.037 35.480 37.047 35.500 37.229 35.772 37.431 35.823
CHAINAGE	120.000 134.406 135.000 150.000 150.016 153.406 157.900 165.000 172.406 175.000 179.562 180.000 190.000 192.842 195.000 203.842 209.60 210.000 214.811 225.000 225.410 230.600 236.691 240.000

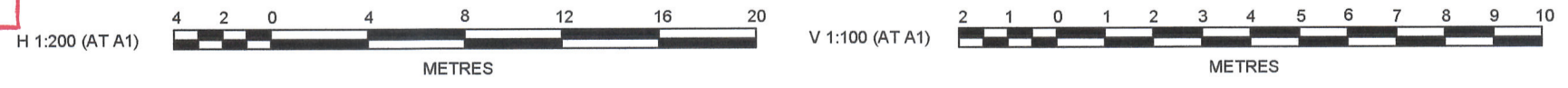
LONGITUDINAL SECTION RW 2 BOT
HORIZONTAL SCALE 1:200
VERTICAL SCALE 1:100

WORKS AS EXECUTED SHOWN IN RED
SIGNATURE: *Ian Vincent Myers*
IAN VINCENT MYERS
Registered Land Surveyor
VINCE MORGAN SURVEYORS PTY LTD
DATE: REF:

LEGEND
SANDSTONE LOGS

RETAINING WALL SUBJECT TO STRUCTURAL DESIGN AND CERTIFICATION

CONSTRUCTION CERTIFICATE
Certificate No. 20130299C44
Date of Issue 8 March 2018
Issuing Officer [Signature]
Accreditation No. JBPB0665
These plans/specifications form part of the certificate issued 8 March 2018



J. WYNDHAM PRINCE CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS
PO Box 4366 PENRITH WESTFIELD NSW 2750
P 02 4720 3300 F 02 4720 3399 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT: **REDBANK**
SOUTH RICHMOND

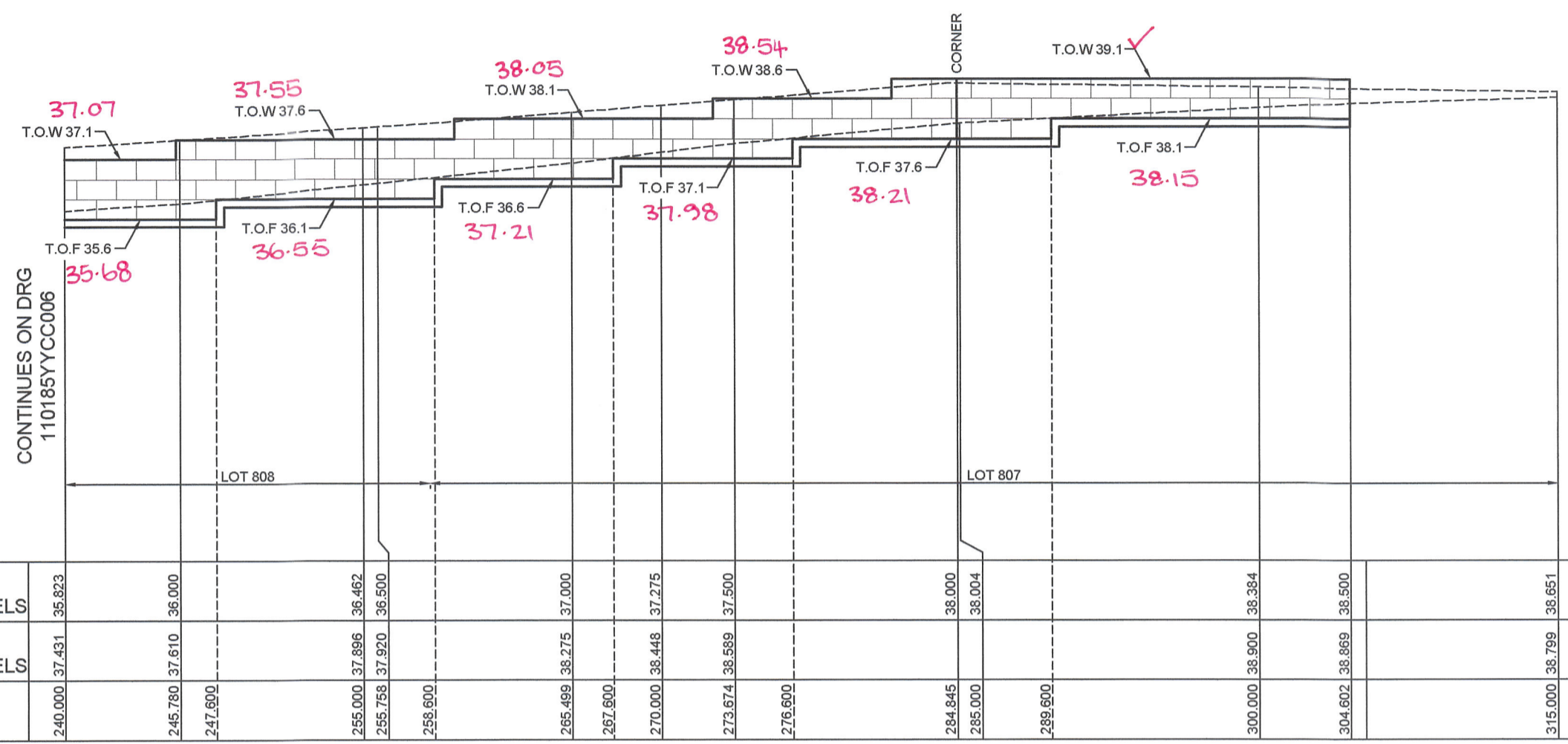
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ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOND STAGE 14A DEVELOPMENT APPLICATION
RETAINING WALL 2 - LONGSECTION - SHEET 1 OF 2

PLAN No: 110185YY/CC06 **A**
FILE No: 110185YYCC06
SHEET SIZE: A1 ORIGINAL

ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	MS	19/02/18
AMENDMENT	DES	DRN	CKD	APR	DATE



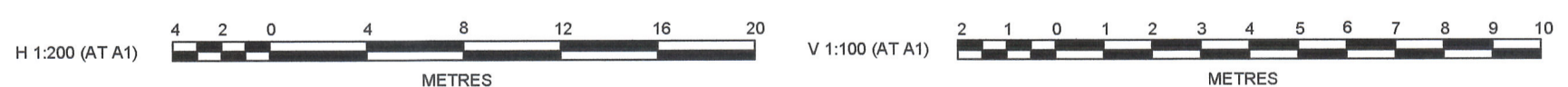
LONGITUDINAL SECTION RW 2 BOT
 HORIZONTAL SCALE 1:200
 VERTICAL SCALE 1:100

WORKS AS EXECUTED SHOWN IN RED
 SIGNATURE:
 IAN VINCENT MYERS
 Registered Land Surveyor
 VINCE MORGAN SURVEYORS PTY LTD
 DATE: REF:

WORKS AS EXECUTED SHOWN IN RED
 SIGNATURE:
 IAN VINCENT MYERS
 Registered Land Surveyor
 VINCE MORGAN SURVEYORS PTY LTD
 DATE 01.08.18 REF: 16800-11

LEGEND
 SANDSTONE LOGS
 RETAINING WALL SUBJECT TO STRUCTURAL DESIGN AND CERTIFICATION

CONSTRUCTION CERTIFICATE
 Certificate No. 20130299C44
 Date of Issue 8 March 2018
 Issuing Officer
 Accreditation No. JSPB0265
 These plans/specifications form part of the certificate issued 8 March 2018



Plotted: 20 February, 2018 8:33:12 AM File Name: J:\110185 - Redbank North Richmond Residential Precinct\01 - Description\CD\CC\YEO YOB CC\110185YYCC07.dwg

A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	MS	19/02/18
	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 F 02 4720 3399 W www.jwprince.com.au E jwpr@jwprince.com.au

CLIENT:

 DATUM:
 ORIGIN:
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ISSUED FOR CONSTRUCTION APPROVAL
 REDBANK, NORTH RICHMOND STAGE 14A
 DEVELOPMENT APPLICATION
 RETAINING WALL 2 - LONGSECTION - SHEET 2 OF 2

PLAN No:	110185YY/CC07	A
FILE No:	110185YYCC07	
SHEET SIZE:	A1 ORIGINAL	

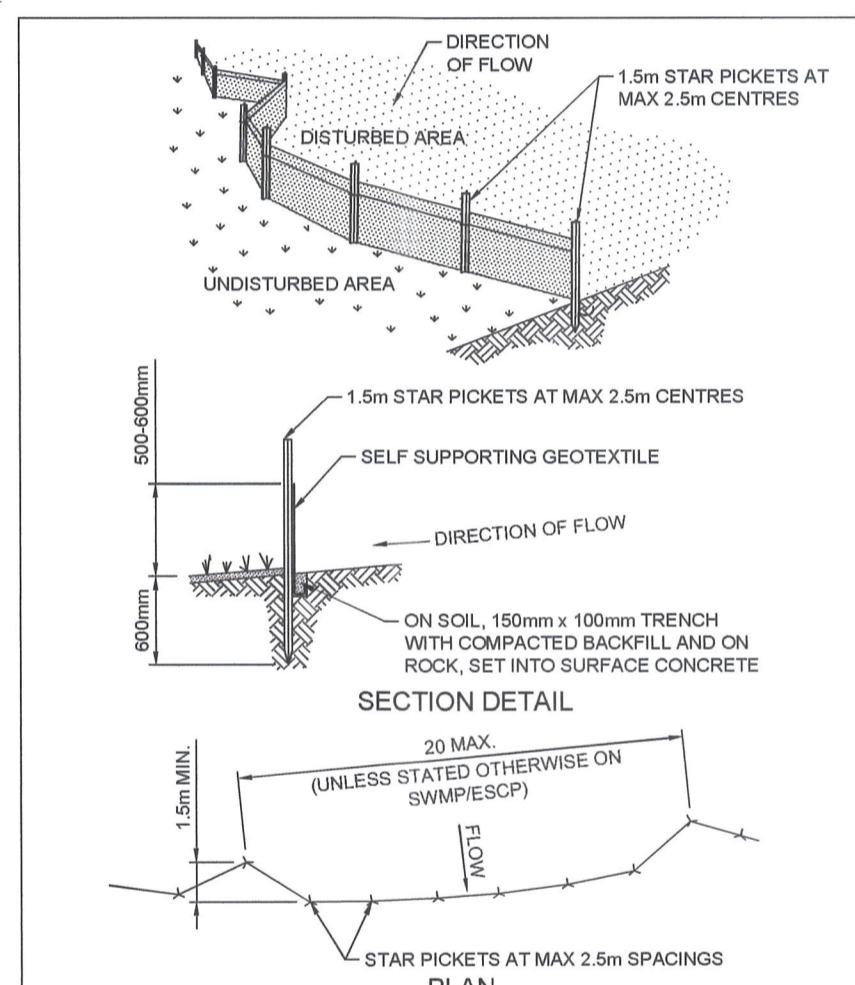


PLAN
SCALE 1:1000

CONSTRUCTION CERTIFICATE
 Certificate No. 20130299C44
 Date of Issue 8 March 2018
 Issuing Officer [Signature]
 Accreditation No. 16BP0966
 These plans/specifications form part of the certificate issued 8 March 2018

WORKS AS EXECUTED SHOWN IN RED
 SIGNATURE: [Signature]
 IAN VINCENT MYERS
 Registered Land Surveyor
 VINCE MORGAN SURVEYORS PTY LTD
 DATE: 01.08.18 REF: 16800-11

LEGEND	
SEDIMENT FENCE	
EXISTING CONTOURS	
DESIGN CONTOURS	
ATF FENCE	
FILTER ROLLS (AT KERB INLET PIT)	
SURFACE INLET SEDIMENT TRAP	
EXISTING STRAW BALES	

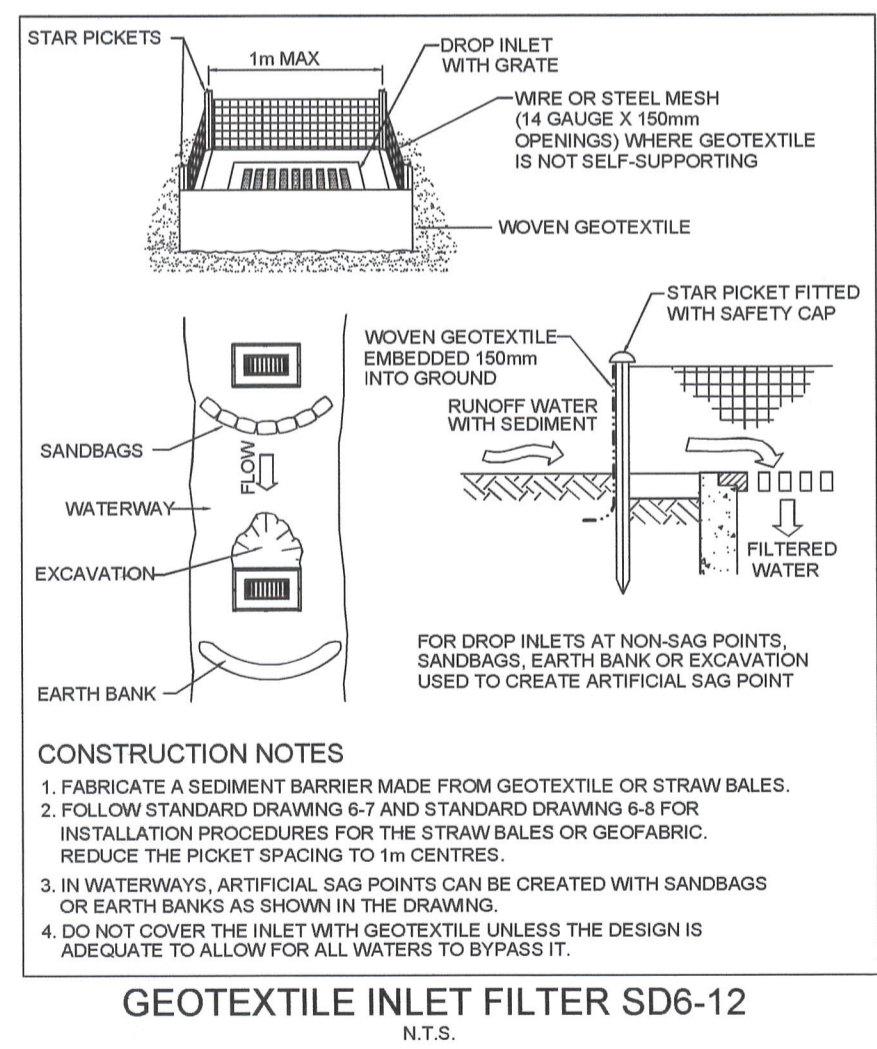


CONSTRUCTION NOTES

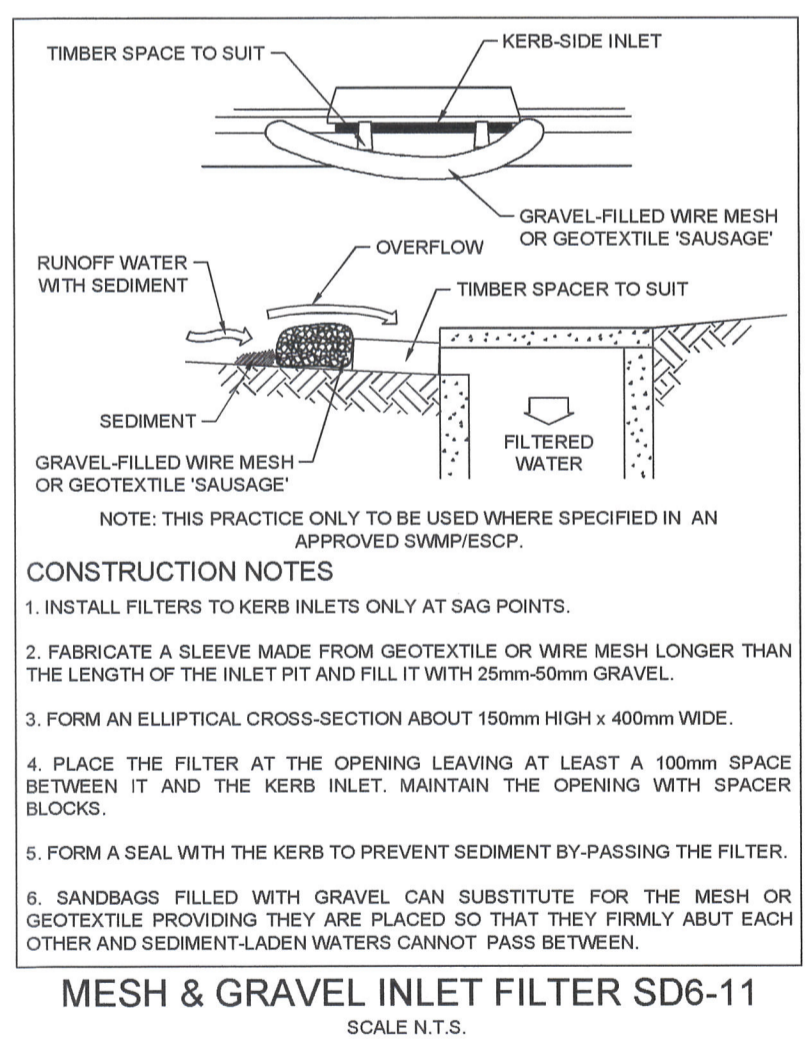
- CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
- CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
- 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.
- 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.
- JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
- BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

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 "ENVIRONMENT PROTECTION AUTHORITY".
 - TOPSOIL FROM ALL AREAS TO BE DISTURBED SHALL BE STOCKPILED AND LATER RESPREAD TO AID REVEGETATION IN THOSE AREAS.
 - DISTURBANCE OF VEGETATION SHALL BE LIMITED TO FILL AREAS. 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 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.
 - 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) 6-7.
 - CONSTRUCT STABILISED SITE ACCESS AS SHOWN ON THE PLAN AND TO DETAIL (SD) 5-7.
 - 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.
 - SEDIMENT FENCES (SD) 6-7 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 40litres/sec IN A MAX. 20yr To DISCHARGE.
 - 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.
 - ALL SOIL & EROSION CONTROLS CURRENTLY IN PLACE FOR THE CONSTRUCTION OF YEOMANS - NORTH SUPPORTING THE CONSTRUCTION OF THIS SPECIFIC OPEN SPACE CORRIDOR TO REMAIN IN PLACE AND BE MAINTAINED UNTILL ALL LOTS '800-818' COMPLETED AND REVEGETATION HAS SUITABLY ESTABLISHED.

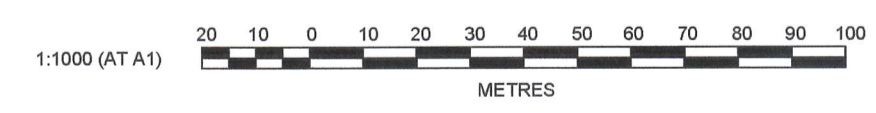


GEOTEXTILE INLET FILTER SD6-12
N.T.S.



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

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



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 PO Box 4366 PENRITH WESTFIELD NSW 2750
 P 02 4720 3300 F 02 4720 3399 W www.jwprince.com.au E jwp@jwprince.com.au

CLIENT:

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

ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOIND STAGE 14A
 DEVELOPMENT APPLICATION
 SOIL & WATER MANAGEMENT PLAN

PLAN No: 110185YY/CC08 **A**
 FILE No: 110185YYCC08
 SHEET SIZE: A1 ORIGINAL

NO.	DESCRIPTION	MP	TG	RO	MS	DATE
A	ISSUED FOR CONSTRUCTION APPROVAL AMENDMENT	DES	DRN	CKD	APR	19/02/18

Plotted: 20 February, 2018 8:28:19 AM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC08\YEOB\CC0110185YYCC08.dwg

Drainage Structures Notes

General

- These drawings are to be read in conjunction with all the contract drawings and specifications. Refer any discrepancies to engineer before proceeding.
- Do not obtain dimensions by scaling structural drawings. All dimensions are in millimetres. All set-out dimensions to be verified by the builder.
- All workmanship and materials to comply with the requirements of current Australian Standards codes, the Building Code of Australia, the ordinances of relevant building authorities and with manufacturers specifications.
- The builder is to provide temporary bracing and shoring as necessary to ensure the structure and the excavations are maintained in a stable condition during construction.
- The structure has been designed in accordance with AS5100 bridge design code for the following applied loads:

Roadways M1600 moving traffic load and W80 wheel and A160 axle load as applicable
Pedestrian and Cycle Paths 5kPa with 20kN point load

- Footings and base slabs have been designed for an allowable bearing capacity of 150kPa on firm natural ground

Concrete

- Concrete quality

Element	Concrete Strength f _c	Max. Agg. Size	Maximum Slump	Cement Type
Piers	25MPa	20mm	100mm	GB
Slabs	40MPa	20mm	100mm	GB
Walls	40MPa	20mm	100mm	GB
Blinding Slabs	5MPa	20mm	100mm	GB

- No admixtures shall be used in concrete unless approved in writing by the engineer.
- Clear concrete cover to reinforcement shall be 40mm to all surfaces unless noted otherwise.
- Construction joints indicated shall be located and formed to the approval of the engineer.
- No penetrations, recesses or chases other than those indicated on the structural drawings shall be made in concrete members unless approved in writing by the engineer.
- Unless shown otherwise all external and re-entrant corners shall be chamfered 25mm.
- Slabs to be cured and kept moist for 7 days minimum.
- No concrete to be poured when site temperature exceeds 35 degrees celsius or falls below 5 degrees celsius

Reinforcement

- Reinforcement steel quality

Reinforcement Type	Grade	SAA Code	Symbol
Welding Grade Deformed	500	AS4671	N
Plain Round	230	AS1902	R
Fabric	500	AS4671	SL, RL, L

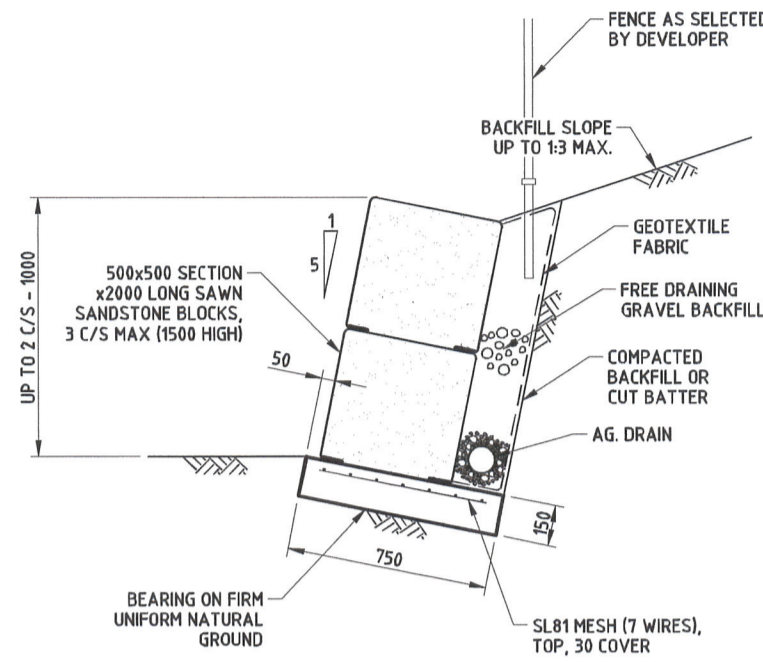
- Reinforcement is represented diagrammatically. It is not necessarily shown in true position.
- All reinforcement shall be securely tied and positioned accurately by means of steel or plastic chairs or other approved accessories. Masonry blocks will not be permitted.
- Provide the engineer with 24 hours notice of reinforcement being ready for inspection. No concrete is to be poured without approval of the engineer.
- Splices in reinforcement shall be made only in the position indicated. The approval of the engineer shall be obtained for any other splice.
- Welding of reinforcement will not be permitted unless indicated on the structural drawing or with written approval of the engineer.
- Minimum lap of reinforcement shall be as shown in table 13.1.2.2.(A) of AS3600 unless shown otherwise. Laps for mesh shall be 15 times the nominal wire spacing of approved equivalent.
- Reinforcement must not be continuous through contraction joints.
- Minimum radius for bends in reinforcement to be 4 bar diameters (DB) unless noted otherwise.

Proprietary Systems

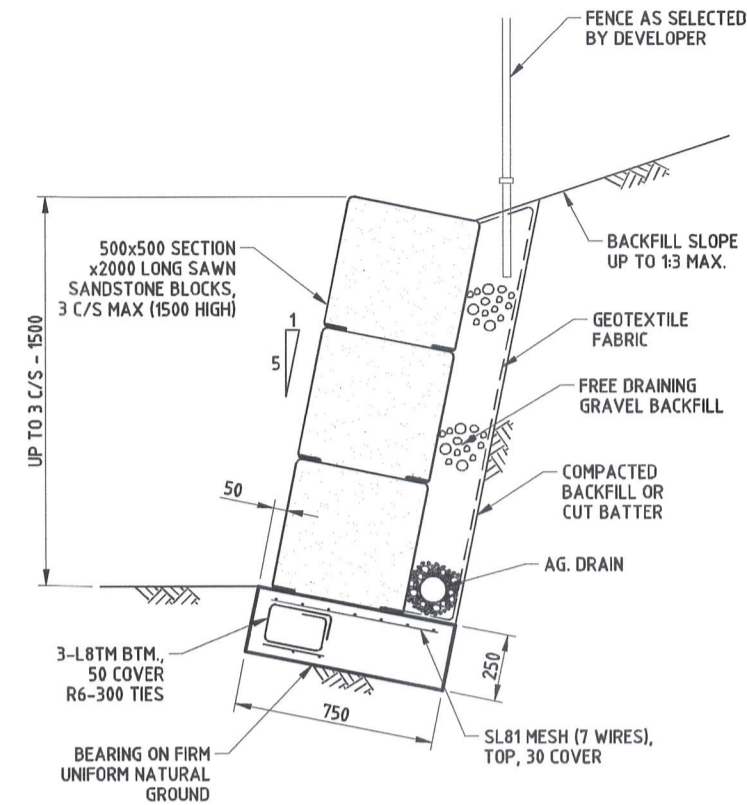
- All proprietary systems and products shall be installed and used as per the requirements of the manufacturer and/or supplier unless otherwise specified on these drawings.
- It is the builders responsibility to ensure compliance with requirements.
- Where an alternative proprietary system or product is favoured by the builder, the builder shall provide the engineer with all relevant information for the engineers approval to change the system.

DRAWING LIST

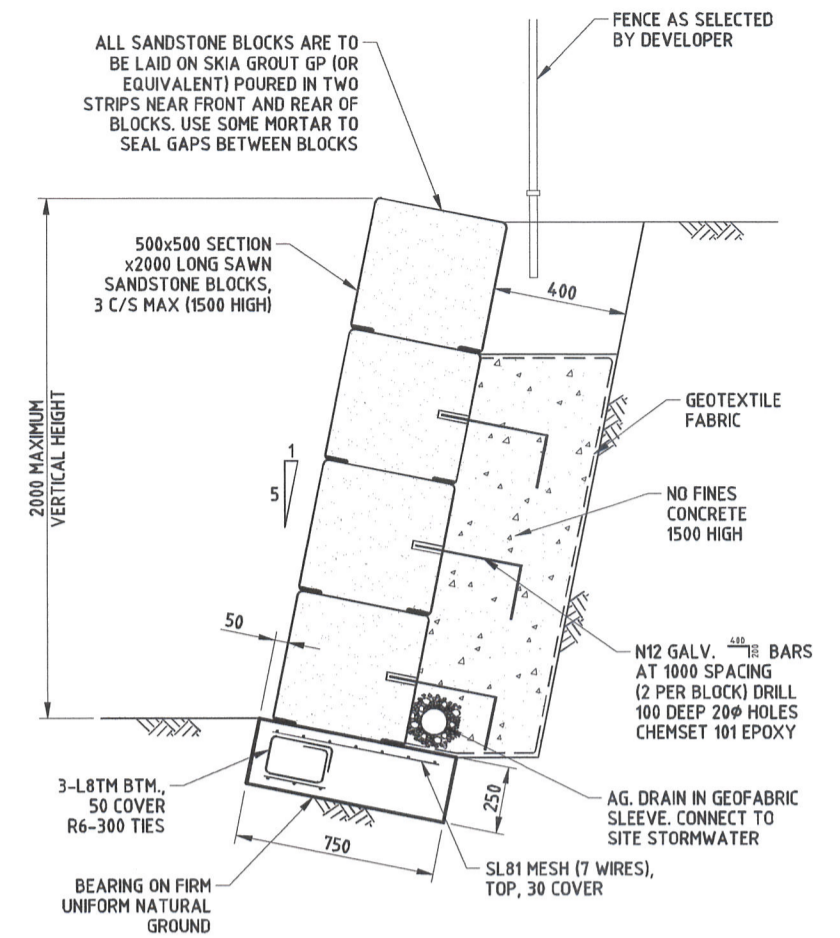
- S1 - TITLE SHEET & RETAINING WALL DETAILS
- S2 - DAM 4 OUTLET PIT 4/1
- S3 - SPECIAL PIT 4/2
- S4 - SPECIAL PIT 4/3, 4/4 & 4/5
- S5 - SPECIAL PIT 4/6
- S6 - SPECIAL PIT 4/7
- S7 - SPECIAL PIT 4/8, 4/9 & 4/10
- S8 - DAM 12 OUTLET PIT 12/01
- S9 - SPECIAL PIT 22/17
- S10 - SPECIAL PIT 30/18
- S11 - SPECIAL PIT 30/19
- S12 - HYDROCON PIT 30A
- S13 - HYDROCON PIT 22A
- S14 - SPECIAL PIT 22/10
- S15 - PANSY LINE CULVERT PLAN, SECTIONS & DETAILS
- S16 - DAM 15 OUTLET CULVERT PLANS
- S17 - DAM 15 SECTION 1 & DETAILS
- S18 - DAM 15 SECTIONS - SHEET 1
- S19 - DAM 15 SECTIONS - SHEET 2
- S20 - SPECIAL PIT 22/11
- S21 - SPECIAL PIT 22/12
- S22 - SPECIAL PIT 30/20
- S23 - SPECIAL PIT 4/11
- S24 - SPECIAL PIT 4/12
- S25 - STACKED ROCK RETAINING WALL DETAILS



**RETAINING WALL RW15
UP TO 2 COURSES**
SCALE: 1:20

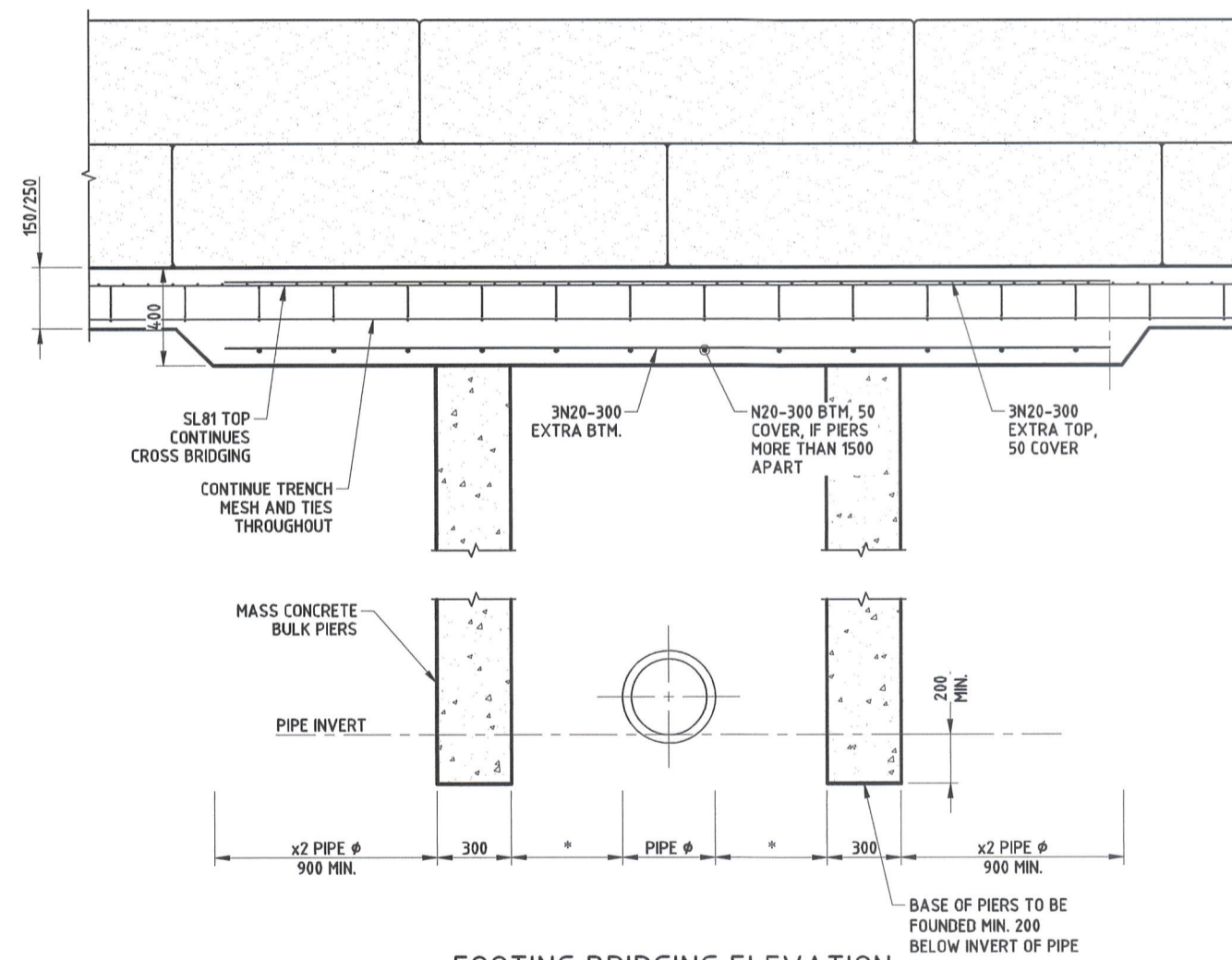


**RETAINING WALL RW15
AT 3 COURSES**
SCALE: 1:20



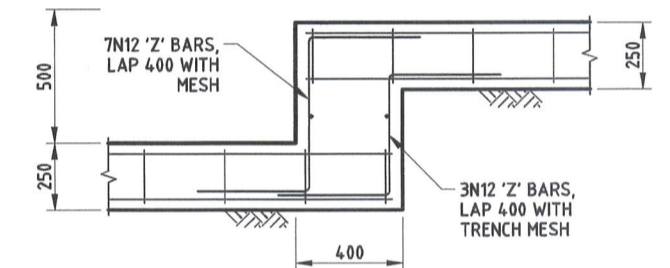
**RETAINING WALL RW15
AT 4 COURSES**
SCALE: 1:20

WORKS AS EXECUTED SHOWN IN RED
 SIGNATURE: *Ian Vincent Myers*
IAN VINCENT MYERS
 Registered Land Surveyor
VINCE MORGAN SURVEYORS PTY LTD
 DATE: 01.08.18 REF: 16800-11

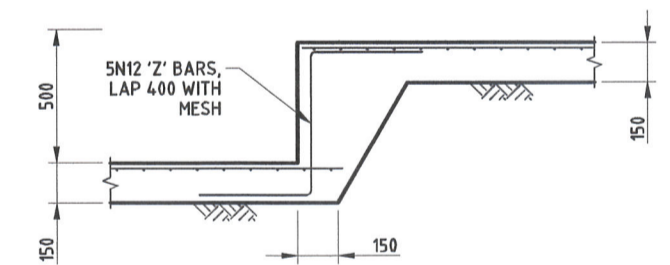


**FOOTING BRIDGING ELEVATION
FOR STORMWATER & SEWER**
SCALE: 1:20

- * 300 MIN. CLEARANCE FOR STORMWATER
- * 900 MIN. CLEARANCE FOR SEWER

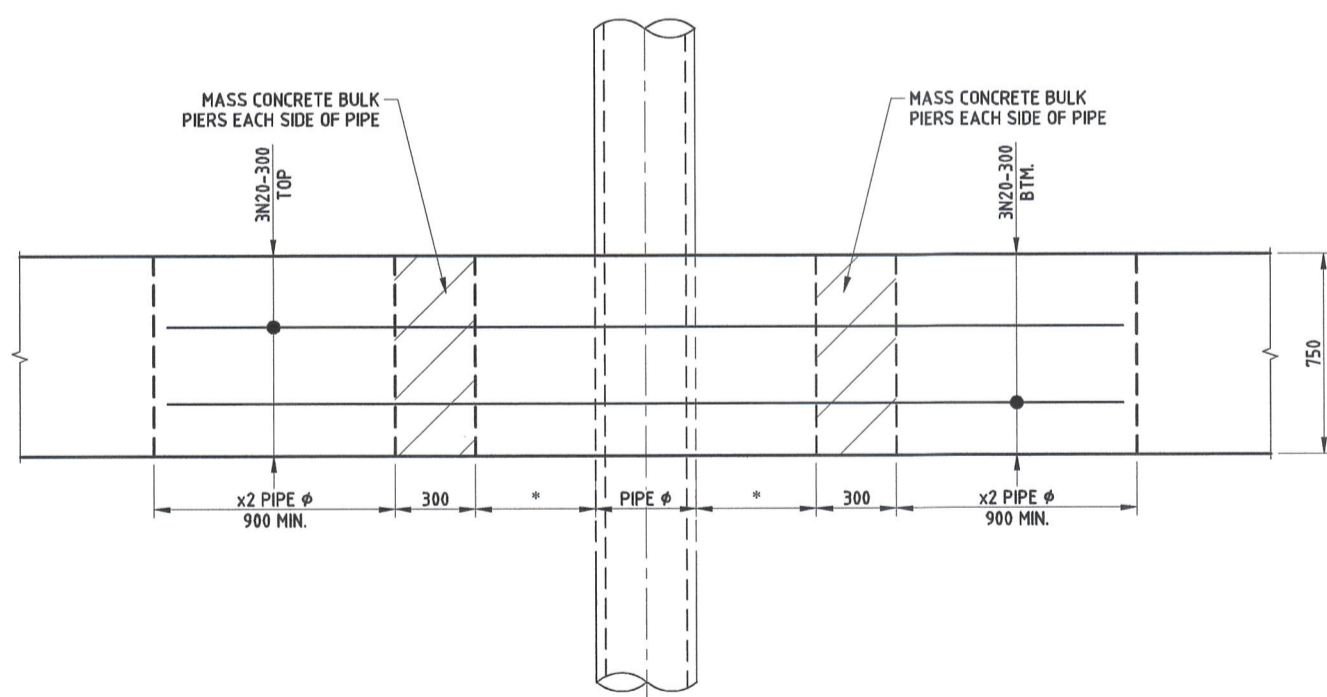


**RETAINING WALL RW15
FOOTING STEP DETAIL 1**
SCALE: 1:20



**RETAINING WALL RW15
FOOTING STEP DETAIL 2**
SCALE: 1:20

ANY ROCK TO BE USED IN RETAINING WALLS IS TO BE CERTIFIED BY A GEOTECHNICAL ENGINEER AS SUITABLE FOR THE REQUIRED DESIGN LIFE



FOOTING BRIDGING PLAN
SCALE: 1:20

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C44
 Date of Issue 8 March 2018
 Issuing Officer *[Signature]*
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 8 March 2018

REV.	DATE	DETAILS	ENG	DFT.
C	06/02/2018	GENERAL REVISION	RD	MM
B	14/11/2017	RETAINING WALL RW16 DETAILS REVISED	RD	MM
A	20/07/2017	ISSUED FOR CONSTRUCTION	RD	MM
P2	05/07/2017	ISSUED FOR CONSTRUCTION CERTIFICATE	RD	MM
P1	04/07/2017	ISSUED FOR CONSTRUCTION CERTIFICATE	RD	MM

USE OF THESE DRAWINGS
 THE DESIGN AND DETAILS SHOWN ON THESE DRAWINGS ARE APPLICABLE TO THIS PROJECT ONLY AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART OR BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE WRITTEN PERMISSION OF INHOUSE CONSULTING ENGINEERS WITH WHOM COPYRIGHT RESIDES

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 Email: info@inhouseengineers.com.au
 A.B.N. 44 066 587 719

DESIGNED R DOHNT
 DRAWN M MILLICAN
 SCALE 1:20 (A1)
 DATE JULY 2017

CLIENT NORTH RICHMOND JOINT VENTURE
 Mr Roger E. Dohnt
 DipTechEng, B.E. MIEAust, CPEng
 Signature: *[Signature]* Date: 06/02/18
 Registered on the National Engineering Register in the following areas of practice: Civil / Structural - N.E.R. No. 61807

PROJECT PROPOSED DRAINAGE STRUCTURES
 AT REDBANK YEOMANS NORTH, NORTH RICHMOND
 FOR NORTH RICHMOND JOINT VENTURE
 DRG TITLE TITLE SHEET & RETAINING WALL DETAILS

JOB No. 16370
 DRG No. S1
 REV. C