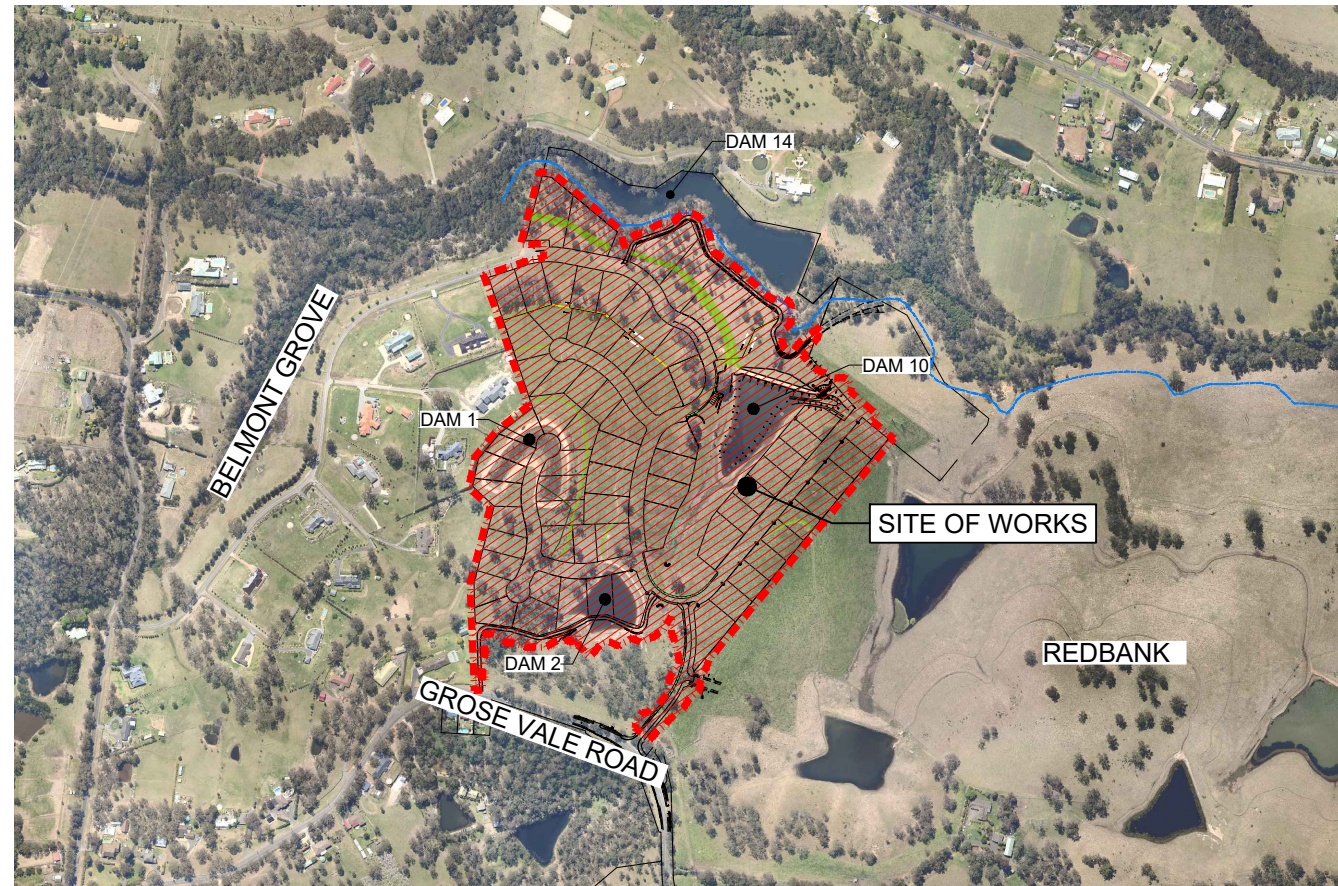




REDBANK - BELMONT PRECINCT DAM DECOMMISSIONING & BULK EARTHWORKS CONSTRUCTION CERTIFICATE

HAWKESBURY CITY COUNCIL REF: DA0438-14, DA0451-14, DA0452-14 & DA0467-15



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

Survey By:

VINCE MORGAN SURVEYORS

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

REF: NORTH RICHMOND - DETAIL SURVEY UPDATE 4 July 2016

LOT LAYOUT PLAN OF PROPOSED SUBDIVISION REF: 16800-6-P3(C) & 16800-12-L3(B)

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
Date of Issue 31 July 2017
Issuing Officer *Jerry Prince*
Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017

ISSUED FOR CONSTRUCTION APPROVAL

PLAN No. 110185BEL/BE00 C

FILE No. 110185BELBE00

LEGEND			
DESCRIPTION	PROPOSED	EXISTING	FUTURE
EXTENT OF WORKS			
KERB & GUTTER	KG		
ROLL KERB	RK		
KERB ONLY	KO		
DISH CROSSING	DC		
EDGE RESTRAINTS	ER		
PRAM RAMP			
DRAINAGE LINE, PIT & EASEMENT			
DRAINAGE LINE & PIT			
SUB SOIL LINE			
HEADWALL			
GUIDE POSTS			
EXTENT OF FILL			
EXTENT OF CUT			
CONTOURS			
CATCH DRAIN			
KERB RETURN No			
ELECTRICITY, POWER POLE			
TELECOM, BOX			
WATER, STOP VALVE, HYDRANT			
SEWER, MANHOLE			
GAS			
TREES TO BE PROTECTED			
TREES TO BE REMOVED			
STREET NAME SIGNS			
SURVEY MARKS - BENCH MARKS			
STATE SURVEY MARKS			
STABILISED SITE ACCESS			
SEDIMENT FENCE			
STRAW BALE BARRIER			
STOCKPILE			
PROTECTIVE FENCING			
MESH AND GRAVEL INLET FILTER			
GEOTEXTILE INLET FILTER			

CONSTRUCTION CERTIFICATE

Certificate No. 20130229C35
Date of Issue 31 July 2017
Issuing Officer *Jeffrey H...*
Accreditation No. BPPB0565

These plans/specifications form part of the certificate issued 31 July 2017

REVISION D
DRAWING INDEX AMENDED

GENERAL NOTES

- ALL WORKS ARE TO BE IN ACCORDANCE WITH HAWKESBURY CITY COUNCIL CIVIL WORKS SPECIFICATION - APPENDIX E. WHERE DISCREPANCIES OCCUR BETWEEN NOTES PRESENT ON DRAWINGS AND COUNCIL'S NOTES, THE COUNCIL'S NOTES TAKE PRECEDENCE.
- SURVEY MARKS: -
 - a. 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.
- NO TREE SHALL BE FELLED, LOPPED OR REMOVED WITHOUT THE PRIOR APPROVAL OF COUNCIL'S ENGINEER. REFER TO ARTERRA'S TREES RETAINED/REMOVED PLAN.
- TREES TO BE RETAINED ON SITE SHALL BE PROTECTED BY SUITABLE STURDY APPROVED PROTECTIVE FENCING PRIOR TO COMMENCEMENT OF SITE WORKS.
- THE CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH, FENCES, AND DEBRIS ETC.
- 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 FROM THE COUNCIL OR THE PRINCIPAL'S NOMINATED CONSULTANTS FOR BOTH GEOTECHNICAL AND CONTAMINATION.
- SITE FILL AREAS: - THE CONTRACTOR SHALL TAKE LEVELS OF EXISTING SURFACE AFTER STRIPPING TOPSOIL AND PRIOR TO COMMENCING FILL OPERATIONS.
- ALL SITE FILLING TO BE COMPACTED TO 95% STANDARD COMPACTION AND SHALL BE CONTROLLED BY A REGISTERED SOIL LABORATORY IN ACCORDANCE WITH COUNCIL'S DEVELOPMENT CONTROL PLAN APPENDIX "E" - CIVIL WORKS SPECIFICATIONS, PART 2 CONSTRUCTION SPECIFICATIONS.
- ALL SITE REGRADING AREAS SHALL BE GRADED AT A MINIMUM 1% TO THE ENGINEERS' 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.
- SERVICE ADJUSTMENTS TO BE AT DEVELOPERS EXPENSE.
- IF TWO OF MORE SPECS ARE APPLICABLE FOR PARTICULAR ELEMENT, AREA, ZONE OR PHASE OF WORK, THE PREVALENCE OF THESE MULTIPLE SPECIFICATIONS IS TO BE IDENTIFIED BY THE CONTRACTOR TO THE SUPERINTENDENT FOR DIRECTION. NOTING THAT IS THE INTENTION OF THIS CONSTRUCTION CERTIFICATE SET AND ITS APPROVAL BY THE ACCREDITED CERTIFIER FOR THE HIGHER SPECIFICATION TO BE SELECTED BY THE SUPERINTENDENT FOR APPLICATION BY THE CONTRACTOR.

SURVEY SET OUT INFORMATION NOTES:

- ALL SITE SET OUT AND CONTROL POINTS ARE TO BE CERTIFIED BY A REGISTERED SURVEYOR.
- THE INFORMATION DETAILED ON THE CERTIFIED CONSTRUCTION CERTIFICATE PLANS TAKES PRECEDENCE OVER ALL ELECTRONIC INFORMATION PROVIDED. THE ORDER OF PRIORITY FOR USE OF ALL INFORMATION PROVIDED IS AS FOLLOWS:
 - a. CERTIFIED CONSTRUCTION CERTIFICATE DRAWINGS
 - b. 2D DRAFTING BASE (ELECTRONIC FILE)
 - c. 3D DTM (ELECTRONIC FILE)
- ANY DISCREPANCY BETWEEN ANY OF THE INFORMATION CONTAINED WITHIN THESE FILES IS TO BE BROUGHT TO THE ATTENTION OF THE SUPERINTENDENT WHO WILL SEEK CLARIFICATION AND ISSUE INSTRUCTIONS ON THE APPROPRIATE COURSE OF ACTION.



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

DWG No.	DRAWING TITLE	REV No.
110185BEL/BE00	COVER SHEET	C
110185BEL/BE01	GENERAL NOTES, LEGEND & INDEX	D
110185BEL/BE02	LAYOUT PLAN	C
110185BEL/BE03	SETOUT PLAN SHEET 1	C
110185BEL/BE04	SETOUT PLAN SHEET 2	C
110185BEL/BE05	DAM 10 SITE PLAN BULK EARTHWORKS PHASE 1	C
110185BEL/BE06	DAM 10 SITE SECTIONS BULK EARTHWORKS PHASE 1	C
110185BEL/BE07	EXISTING DAM 1 REMOVAL PHASE 1 BULK EARTHWORKS CUT & FILL PLAN	B
110185BEL/BE08	EXISTING DAM 1 REMOVAL PHASE 1 BULK EARTHWORKS SITE SECTIONS	C
110185BEL/BE09	EXISTING DAM 2 REMOVAL PHASE 1 BULK EARTHWORKS CUT & FILL PLAN	B
110185BEL/BE10	EXISTING DAM 2 REMOVAL PHASE 1 BULK EARTHWORKS SITE SECTIONS	C
110185BEL/BE11	BULK EARTHWORKS CUT & FILL PLAN PHASE 2 SHEET 1	C
110185BEL/BE12	BULK EARTHWORKS CUT & FILL PLAN PHASE 2 SHEET 2	C
110185BEL/BE13	BULK EARTHWORKS CUT & FILL PHASE 2 SITE SECTION SHEET 1	C
110185BEL/BE14	BULK EARTHWORKS CUT & FILL PHASE 2 SITE SECTION SHEET 2	C
110185BEL/BE15	BULK EARTHWORKS CUT & FILL PHASE 2 SITE SECTION SHEET 3	C
110185BEL/BE16	BULK EARTHWORKS CUT & FILL PHASE 2 SITE SECTION SHEET 4	C
110185BEL/BE17	BULK EARTHWORKS CUT & FILL PHASE 2 SITE SECTION SHEET 5	C
110185BEL/BE18	BULK EARTHWORKS CUT & FILL PHASE 2 SITE SECTION SHEET 6	C
110185BEL/BE19	BULK EARTHWORKS CUT & FILL PHASE 2 SITE SECTION SHEET 7	C
110185BEL/BE20	BULK EARTHWORKS CUT & FILL PHASE 2 SITE SECTION SHEET 8	C
110185BEL/BE21	LONGITUDINAL SECTIONS SHEET 1	C
110185BEL/BE22	LONGITUDINAL SECTIONS SHEET 2	C
110185BEL/BE23	LONGITUDINAL SECTIONS SHEET 3	C
110185BEL/BE24	LONGITUDINAL SECTIONS SHEET 4	C
110185BEL/BE25	LONGITUDINAL SECTIONS SHEET 5	C
110185BEL/BE26	LONGITUDINAL SECTIONS SHEET 6	C
110185BEL/BE27	LONGITUDINAL SECTIONS SHEET 7	C
110185BEL/BE28	LONGITUDINAL SECTIONS SHEET 8	C
110185BEL/BE29	SITE ESTABLISHMENT SHEET 1	C
110185BEL/BE30	SITE ESTABLISHMENT SHEET 2	C
110185BEL/BE31	TREE PROTECTION AND REMOVAL PLAN SHEET 1	C
110185BEL/BE32	TREE PROTECTION AND REMOVAL PLAN SHEET 2	C
110185BEL/BE33	SOIL & WATER MANAGEMENT PLAN PHASE 1 - OVERALL SITE	C
110185BEL/BE34	SOIL & WATER MANAGEMENT PLAN PHASE 1A - DAM 1 REMOVAL	B
110185BEL/BE35	SOIL & WATER MANAGEMENT PLAN PHASE 1A - DAM 2 REMOVAL	B
110185BEL/BE36	SOIL & WATER MANAGEMENT PLAN PHASE 1A - DAM 10 DECOMMISSIONING	C
110185BEL/BE37	SOIL & WATER MANAGEMENT PLAN PHASE 2 BULK EARTHWORKS	C
110185BEL/BE38	SOIL & WATER MANAGEMENT DETAILS	B
110185BEL/BE39	SOIL & WATER MANAGEMENT NOTES	B
110185BEL/BE40	TRAFFIC MANAGEMENT PLAN SHEET 1	A
110185BEL/BE41	TRAFFIC MANAGEMENT PLAN SHEET 2	A

COMPACTION SPECIFICATION

- WITHIN FULL WIDTH OF ROAD CARRIAGEWAY PLUS 1.0M EITHER SIDE -
 - a) ALL SUBGRADE SHALL BE CARRIED UP IN HORIZONTAL LAYERS, OF NOT MORE THAN 300MM THICK LOOSE MEASUREMENT, IF REQUIRED, AND SHALL HAVE EACH LAYER COMPACTED TO A 100% 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".
 - b) ALL SUB-BASE COURSE SHALL BE PLACED AND COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO DETERMINED IN ACCORDANCE WITH AS 1289 5.4.1-2007 "COMPACTION CONTROL TEST - DRY DENSITY RATIO, MOISTURE VARIATION AND MOISTURE RATIO".
 - c) ALL BASE COURSE SHALL BE PLACED AND COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO DETERMINED IN ACCORDANCE WITH AS 1289 5.4.1-2007 "COMPACTION CONTROL TEST - DRY DENSITY RATIO, MOISTURE VARIATION AND MOISTURE RATIO".
 - d) ALL ROAD CROSSINGS TO BE PROVIDED IN EXISTING ROADS, THE TRENCHES SHALL BE BACKFILLED AND COMPACTED WITH A SAND/CEMENT BLEND 20:1 MIX TO SUBGRADE LEVEL, THEN DGB20 TO WITHIN 50MM OF THE ROAD SURFACE, OR IF REQUIRED TO A HIGHER SPECIFICATION BY A SPECIFIC UTILITY AUTHORITY, TO THAT SPECIFICATION AS INSTRUCTED BY THE PROJECT SUPERINTENDENT.
 - e) ALL TESTS TO BE TAKEN EVERY 50 METRE LENGTH OF PAVEMENT, TAKEN 1.0M FROM ALTERNATE SIDES OF PAVEMENT, BY A NATA REGISTERED LABORATORY.
 - f) THESE AND ALL OTHER REQUIREMENTS TO BE COMPLIED WITH, TO BE READ IN CONJUNCTION WITH HAWKESBURY CITY COUNCIL DCP PART II - CONSTRUCTION SPECIFICATION.
 - g) ANY ERRORS, OMISSIONS OR QUERIES TO BE SUBMITTED TO THE PROJECT SUPERINTENDENT FOR INSTRUCTION.
- WITHIN FULL WIDTH OF ROAD FOOTPATH / VERGE EXCLUDING 1.0M BESIDE ROAD CARRIAGEWAY EITHER SIDE -
 - a) 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 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".
 - b) ALL TESTS TO BE TAKEN EVERY 50 METRE LENGTH OF ROAD FOOTPATH / VERGE ON CENTRELINE, BY A NATA REGISTERED LABORATORY.
 - c) ALL TRENCHES TO BE BACKFILLED TO HAVE EQUAL COMPACTION (+2%/-0% VARIATION) AS THE SURROUNDING ROAD FOOTPATH / VERGE.
 - d) ALL TRENCH TESTS TO BE TAKEN IN EACH 300MM LAYER AND EVERY 50 METRES OF TRENCH, BY A NATA REGISTERED LABORATORY.
 - e) THESE AND ALL OTHER REQUIREMENTS TO BE COMPLIED WITH, TO BE READ IN CONJUNCTION WITH HAWKESBURY CITY COUNCIL DCP PART II - CONSTRUCTION SPECIFICATION.
 - f) ANY ERRORS, OMISSIONS OR QUERIES TO BE SUBMITTED TO THE PROJECT SUPERINTENDENT FOR INSTRUCTION.
- WITHIN LOTS -
 - a) 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.
 - b) ALL TESTS TO BE A MINIMUM OF TWO COMPACTION TESTS PER LOT PER LAYER ARE TO BE CARRIED OUT, BY A NATA REGISTERED LABORATORY.
 - c) ALL TRENCHES TO BE BACKFILLED TO HAVE EQUAL COMPACTION (+2%/-0% VARIATION) AS THE SURROUNDING LOTS.
 - d) ALL TRENCH TESTS TO BE TAKEN IN EACH 300MM LAYER AND EVERY 50 METRES OF TRENCH, BY A NATA REGISTERED LABORATORY.
 - e) THESE AND ALL OTHER REQUIREMENTS TO BE COMPLIED WITH, TO BE READ IN CONJUNCTION WITH HAWKESBURY CITY COUNCIL DCP PART II - CONSTRUCTION SPECIFICATION.
 - f) ANY ERRORS, OMISSIONS OR QUERIES TO BE SUBMITTED TO THE PROJECT SUPERINTENDENT FOR INSTRUCTION.

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
BELMONT - BULK EARTHWORKS

PLAN No: 110185BEL/BE01 **D**

FILE No: 110185BELBE01

SHEET SIZE: A1 ORIGINAL

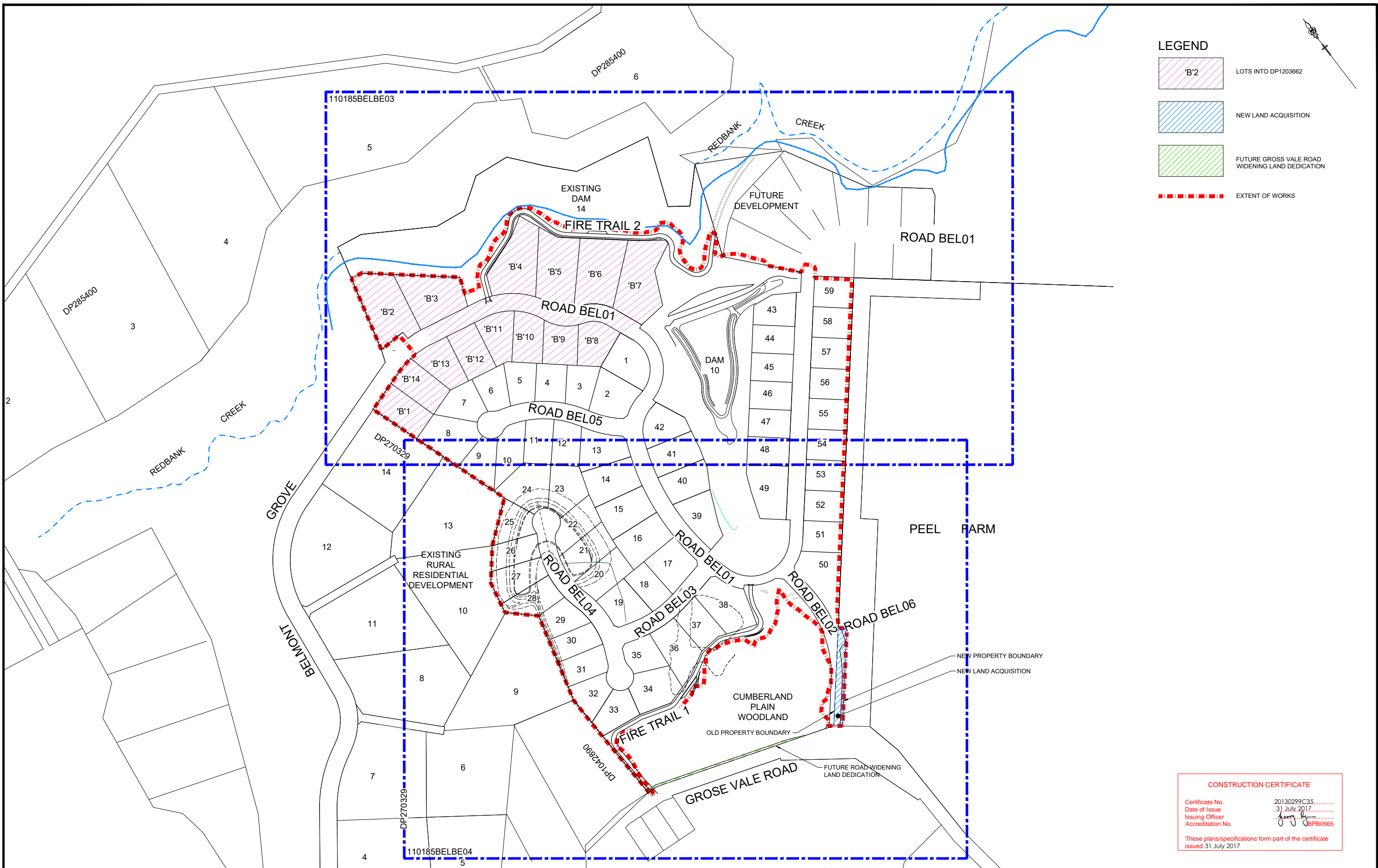
	DES	DRN	CKD	APR	DATE
D	MP	MG	RO	MS	24/07/17
C	VG	VG	MS	RO	25/10/16
B	MP	MG	MS	MS	27/09/16
A	MP	TG	RO	RO	22/07/16

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

AZIMUTH: MGA
DATUM: AHD
ORIGIN:

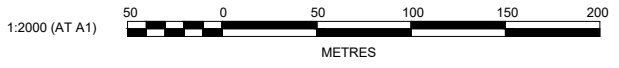
Plotted: 24 July 2017 3:52:42 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE02.dwg



LEGEND

- 'B'2 LOTS INTO DP1203662
- NEW LAND ACQUISITION
- FUTURE GROSS VALE ROAD WIDENING LAND DEDICATION
- EXTENT OF WORKS

REVISION C
 • FIRE TRAIL 1 AND 2 ALIGNMENT



CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer *[Signature]*
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017

REV	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

CLIENT: **REDBANK** NORTH RICHMOND

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

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

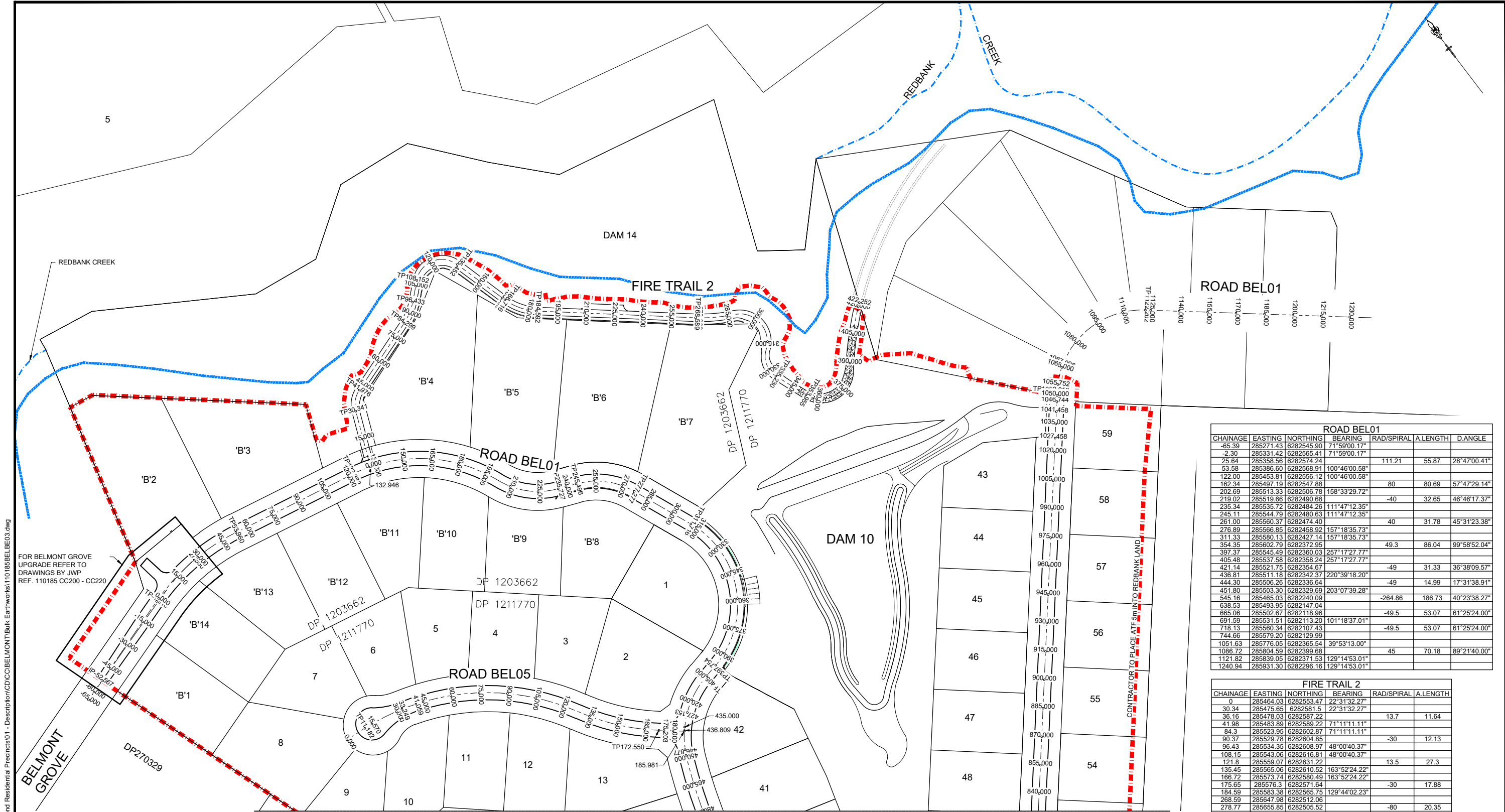
ISSUED FOR CONSTRUCTION APPROVAL

**REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 LAYOUT PLAN**

PLAN No: **110185BEL/BE02** C

FILE No: 110185BELBE02

SHEET SIZE: A1 ORIGINAL



ROAD BEL01						
CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	D.ANGLE
-65.39	285271.43	6282545.90	71°59'00.17"			
-2.30	285331.42	6282565.41	71°59'00.17"			
25.64	285358.56	6282574.24		111.21	55.87	28°47'00.41"
53.58	285386.60	6282588.91	100°46'00.58"			
122.00	285453.81	6282556.12	100°46'00.58"			
162.34	285497.19	6282547.88		80	80.69	57°47'29.14"
202.69	285513.33	6282506.78	158°33'29.72"			
219.02	285519.66	6282490.68		-40	32.65	46°46'17.37"
235.34	285535.72	6282484.26	111°47'12.35"			
245.11	285544.79	6282480.63	111°47'12.35"	40	31.78	45°31'23.38"
251.00	285550.37	6282474.40				
276.89	285566.85	6282458.92	157°18'35.73"			
311.33	285580.13	6282427.14	157°18'35.73"			
354.35	285602.79	6282372.95		49.3	86.04	99°58'52.04"
397.37	285545.49	6282360.03	257°17'27.77"			
405.48	285537.58	6282358.24	257°17'27.77"			
421.14	285521.75	6282354.67		-49	31.33	36°38'09.57"
436.81	285511.18	6282342.37	220°39'18.20"			
444.30	285506.26	6282336.64		-49	14.99	17°31'38.91"
451.89	285503.30	6282329.69	203°07'39.28"			
545.16	285485.03	6282240.09		-264.86	186.73	40°23'38.27"
638.53	285493.95	6282147.04				
665.06	285502.67	6282118.96		-49.5	53.07	61°25'24.00"
691.59	285531.51	6282113.20	101°18'37.01"			
718.13	285560.34	6282107.43		-49.5	53.07	61°25'24.00"
744.66	285579.20	6282129.99				
1051.63	285776.05	6282365.54	39°53'13.00"			
1086.72	285804.59	6282399.68		45	70.18	89°21'40.00"
1121.82	285839.05	6282371.53	129°14'53.01"			
1240.94	285931.30	6282296.16	129°14'53.01"			

FIRE TRAIL 2						
CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	D.ANGLE
0	285464.03	6282553.47	22°31'32.27"			
30.34	285475.65	6282581.5	22°31'32.27"			
36.16	285478.03	6282587.22		13.7	11.64	
41.98	285483.89	6282589.22	71°11'11.11"			
84.3	285523.95	6282602.87	71°11'11.11"			
90.37	285529.78	6282604.85		-30	12.13	
96.43	285534.35	6282608.97	48°00'40.37"			
108.15	285543.06	6282616.81	48°00'40.37"			
121.8	285559.07	6282631.22		13.5	27.3	
135.45	285565.06	6282610.52	163°52'24.22"			
166.72	285573.74	6282580.49	163°52'24.22"			
175.65	285576.3	6282571.64		-30	17.88	
184.59	285583.38	6282565.75	129°44'02.23"			
268.59	285647.98	6282512.06				
278.77	285655.85	6282505.52		-80	20.35	
288.94	285665.11	6282501.17				
304.18	285687.82	6282490.5		14.6	30.48	
319.42	285667.33	6282476.02				
327.33	285659.74	6282470.67		-12	15.81	
335.23	285663.02	6282461.98	159°18'00.01"			
353.95	285669.64	6282444.46	159°18'00.01"			
369.6	285678.73	6282420.4		-15	31.29	
385.24	285695.2	6282440.17	39°47'54.00"			
397.63	285703.14	6282449.7		193.5	24.79	
410.03	285712.24	6282458.14	47°08'14.44"			
414.37	285715.43	6282461.1		193.5	8.7	
418.72	285718.74	6282463.91	49°42'46.82"			
420.49	285720.09	6282465.05		193.5	3.53	
422.25	285721.46	6282466.17	50°45'28.06"			

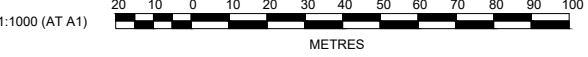
ROAD BEL05						
CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	D.ANGLE
0.00	285367.01	6282446.62	94°49'10.62"			
11.18	285378.15	6282445.68	94°49'10.62"			
70.10	285442.08	6282440.29		120	117.83	56°15'30.06"
129.01	285473.11	6282384.14	151°04'40.68"			
150.78	285483.76	6282364.86		-115	43.54	21°41'33.45"
172.55	285500.79	6282350.88				
185.98	285511.18	6282342.37	129°18'03.35"			

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPP0565

These plans/specifications form part of the certificate issued 31 July 2017

REVISION C
 FIRE TRAIL 2 ALIGNMENT AND SETOUT AMENDED



NO.	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

CLIENT: REDBANK NORTH RICHMOND

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

ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS

PLAN No: 110185BEL/BE03 C
 FILE No: 110185BELBE03
 SHEET SIZE: A1 ORIGINAL

SETOUT PLAN SHEET 1

Plotted: 24 July 2017 3:53:06 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CD\BELMONT\Bulk Earthworks\110185BELBE03.dwg

REFER TO DRAWING 110185BELBE03 FOR CONTINUATION

ROAD BEL02						
CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	D.ANGLE
0.00	285474.11	6281918.58	39°54'50.95"			
71.26	285519.83	6281973.23	39°54'50.95"			
125.79	285556.86	6282017.49		-135.11	109.06	46°14'56.80"
180.32	285550.49	6282074.83	353°39'54.15"			
218.22	285546.31	6282112.50	353°39'54.15"			

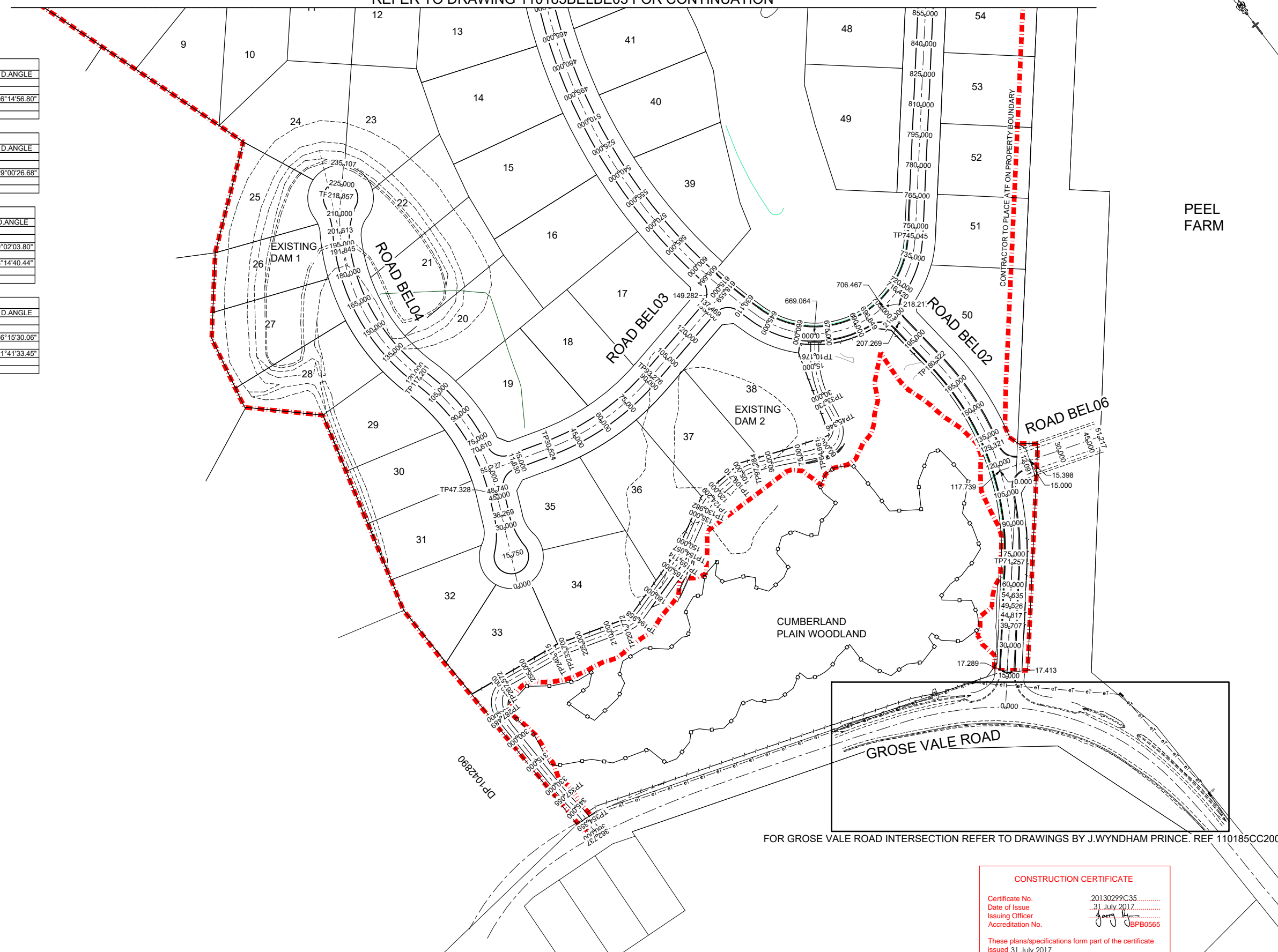
ROAD BEL03						
CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	D.ANGLE
0.00	285342.75	6282165.99	106°52'19.18"			
30.62	285372.06	6282157.11	106°52'19.18"			
61.95	285402.69	6282147.81		-123.75	62.65	29°00'26.68"
93.28	285433.99	6282154.54	77°51'52.50"			
149.28	285488.74	6282166.32	77°51'52.50"			

ROAD BEL04						
CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	D.ANGLE
0.00	285319.03	6282111.32	24°10'58.27"			
47.33	285338.41	6282154.49				
82.26	285353.34	6282187.73		-100	69.87	40°02'03.80"
117.20	285343.39	6282222.77				
168.03	285328.17	6282276.36		100	101.66	58°14'40.44"
218.86	285365.73	6282317.51	42°23'34.91"			
235.11	285376.69	6282329.51	42°23'34.91"			

ROAD BEL05						
CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	D.ANGLE
0.00	285367.01	6282446.62	94°49'10.62"			
11.18	285378.15	6282445.68	94°49'10.62"			
70.10	285442.08	6282440.29		120	117.83	56°15'30.06"
129.01	285473.11	6282384.14	151°04'40.68"			
150.78	285483.76	6282364.86		-115	43.54	21°41'33.45"
172.55	285500.79	6282350.88				
185.98	285511.18	6282342.37	129°18'03.35"			

ROAD BEL06			
CHAINAGE	EASTING	NORTHING	BEARING
0.00	285543.00	6282013.26	108°26'33.39"
51.22	285591.59	6281997.06	108°26'33.39"

FIRE TRAIL 1						
CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	
0	285511.16	6282122.41	217°23'19.03"			
10.18	285504.98	6282114.32	217°23'19.03"			
21.95	285497.69	6282104.79		-50	23.55	
33.73	285495.53	6282092.98				
45.35	285493.61	6282081.53				
55	285491.33	6282067.93		10.5	19.31	
64.66	285478.83	6282073.74				
97.28	285449.24	6282087.47	294°54'06.60"			
103.5	285443.49	6282090.15		-25	12.43	
109.71	285437.16	6282089.75	266°25'25.76"			
124.21	285422.68	6282088.85	266°25'25.76"			
127.6	285419.25	6282088.63		-15.5	6.77	
130.98	285416.23	6282086.98	241°23'21.73"			
154.06	285395.97	6282073.93	241°23'21.73"			
156.59	285393.74	6282074.72		25	5.06	
159.11	285391.32	6282073.98	252°58'46.21"			
194.96	285357.04	6282063.48	252°58'46.21"			
198.36	285353.69	6282062.46		11.5	6.81	
201.77	285350.33	6282063.48	286°55'39.12"			
233.7	285319.79	6282072.77	286°55'39.12"			
236.91	285316.71	6282073.71		-37	6.42	
240.12	285313.52	6282074.1				
267.57	285286.3	6282077.7	277°31'27.01"			
277.53	285272.89	6282079.47		-11.5	19.92	
287.49	285273.3	6282065.95	178°17'33.00"			
337.05	285274.77	6282016.41	178°17'33.00"			
341.37	285274.9	6282012.09		-50	8.63	
345.68	285275.77	6282007.85	168°24'18.27"			
350.02	285276.65	6282003.57		30	8.68	
354.36	285276.27	6281999.22	184°58'33.54"			
362.74	285275.54	6281990.87	184°58'33.54"			



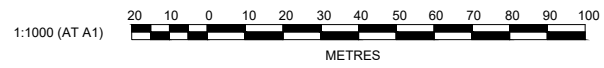
FOR GROSE VALE ROAD INTERSECTION REFER TO DRAWINGS BY J.WYNDHAM PRINCE. REF 110185CC200 - 220

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017

REVISION C
 FIRE TRAIL 1 ALIGNMENT AND SETOUT AMENDED



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: MGA
 DATUM: AHD
 ORIGIN:

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

ISSUED FOR CONSTRUCTION APPROVAL

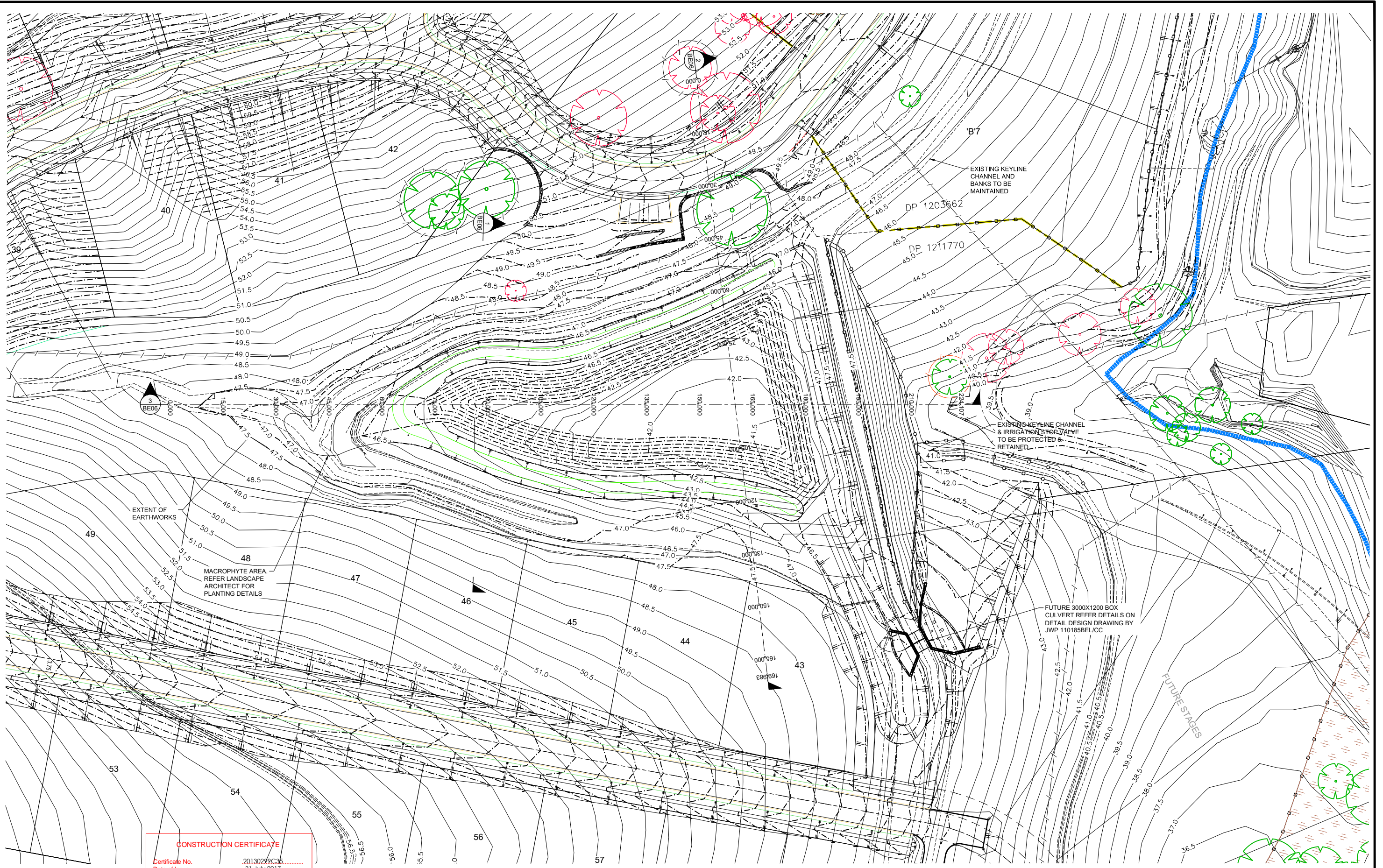
REDBANK, NORTH RICHMOND BELMONT - BULK EARTHWORKS

SETOUT PLAN
SHEET 2

PLAN No: **110185BEL/BE04** C
 FILE No: 110185BELBE04
 SHEET SIZE: A1 ORIGINAL

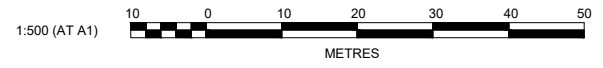
Plotted: 24 July 2017 3:53:33 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE04.dwg

Plotted: 24 July 2017 3:53:56 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BEL BE05.dwg



CONSTRUCTION CERTIFICATE
Certificate No. 20130299C35
Date of Issue 31 July 2017
Issuing Officer [Signature]
Accreditation No. JBPB0565
These plans/specifications form part of the certificate issued 31 July 2017

REVISION C
DAM 10 SURFACE
AMENDED



DES	DRN	CKD	APR	DATE	
C	MP	MG	RO	MS	24/07/17
B	MP	MG	MS	MS	27/09/16
A	MP	TG	RO	RO	22/07/16

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

AZIMUTH: MGA
DATUM: AHD
ORIGIN:

CLIENT:

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

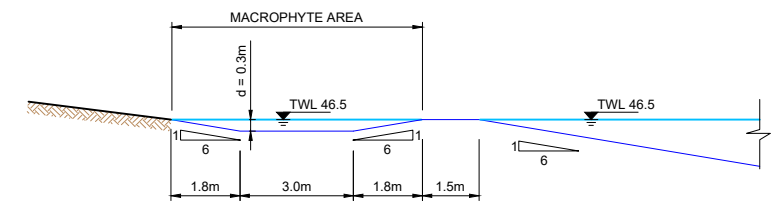
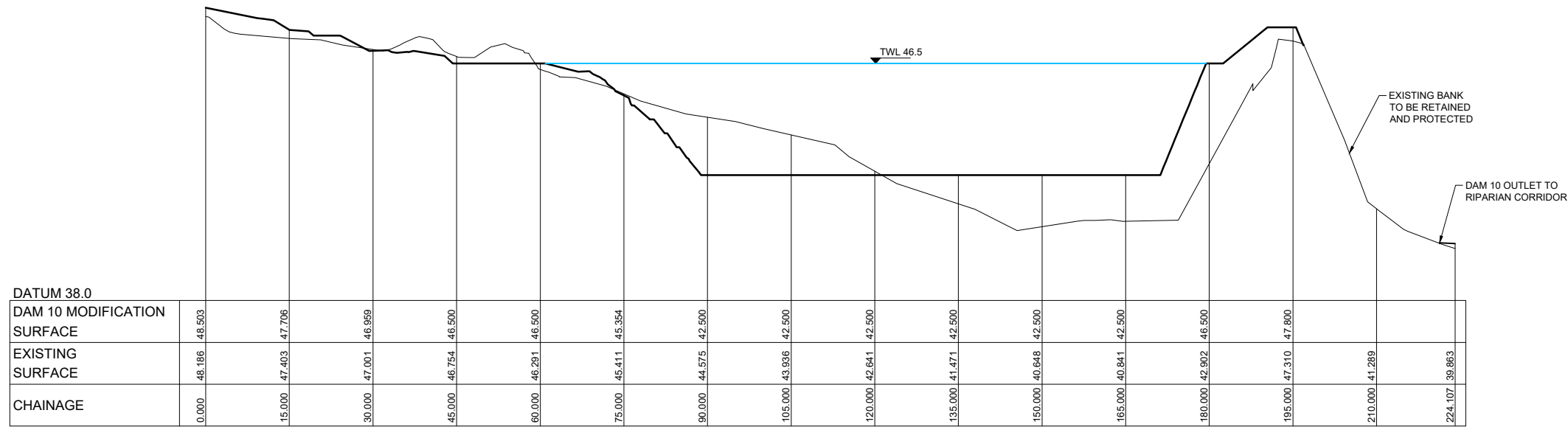
ISSUED FOR CONSTRUCTION APPROVAL
 REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 DAM 10 SITE PLAN
 BULK EARTHWORKS PHASE 1

PLAN No:	110185BEL/BE05	C
FILE No:	110185BELBE05	
SHEET SIZE:	A1 ORIGINAL	

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565
 These plans/specifications form part of the certificate issued 31 July 2017

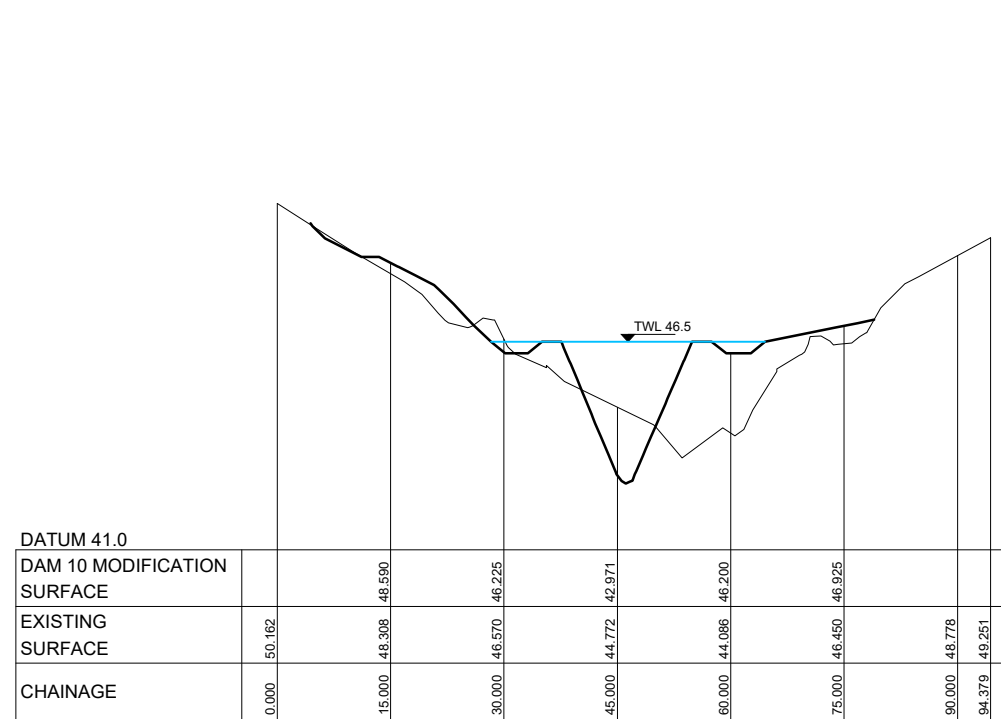
DAM 10 - WETLAND SIZING		
	REQUIRED	ACHIEVED
WETLAND AREA	1200	1440
WETLAND LENGTH	250m	300m
BASE WIDTH	3.0m	3.0m
WATER DEPTH	0.3m	0.3m



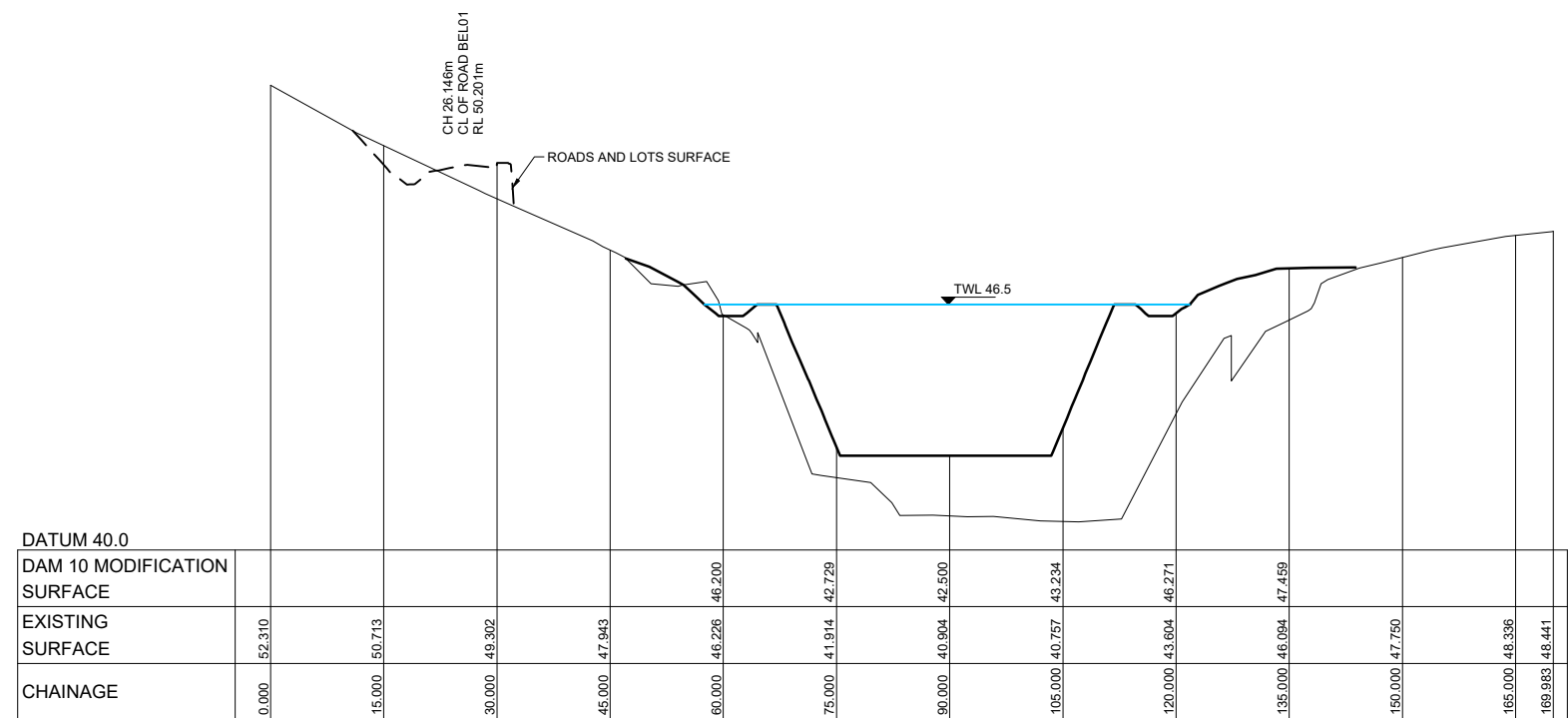
TYPICAL WETLAND SECTION A

SCALE 1:100

SECTION 3
 SCALE H 1:500
 V 1:100

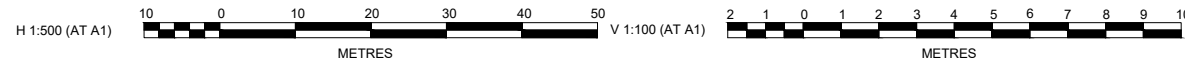


SECTION 1
 SCALE H 1:500
 V 1:100



SECTION 2
 SCALE H 1:500
 V 1:100

REVISION C
 • DAM 10 SITE SECTIONS AMENDED



CLIENT:



ISSUED FOR CONSTRUCTION APPROVAL

AMENDMENT	DES	DRN	CKD	APR	DATE
C	MP	MG	RO	MS	24/07/17
B	MP	MG	MS	MS	27/09/16
A	MP	TG	RO	RO	22/07/16

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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

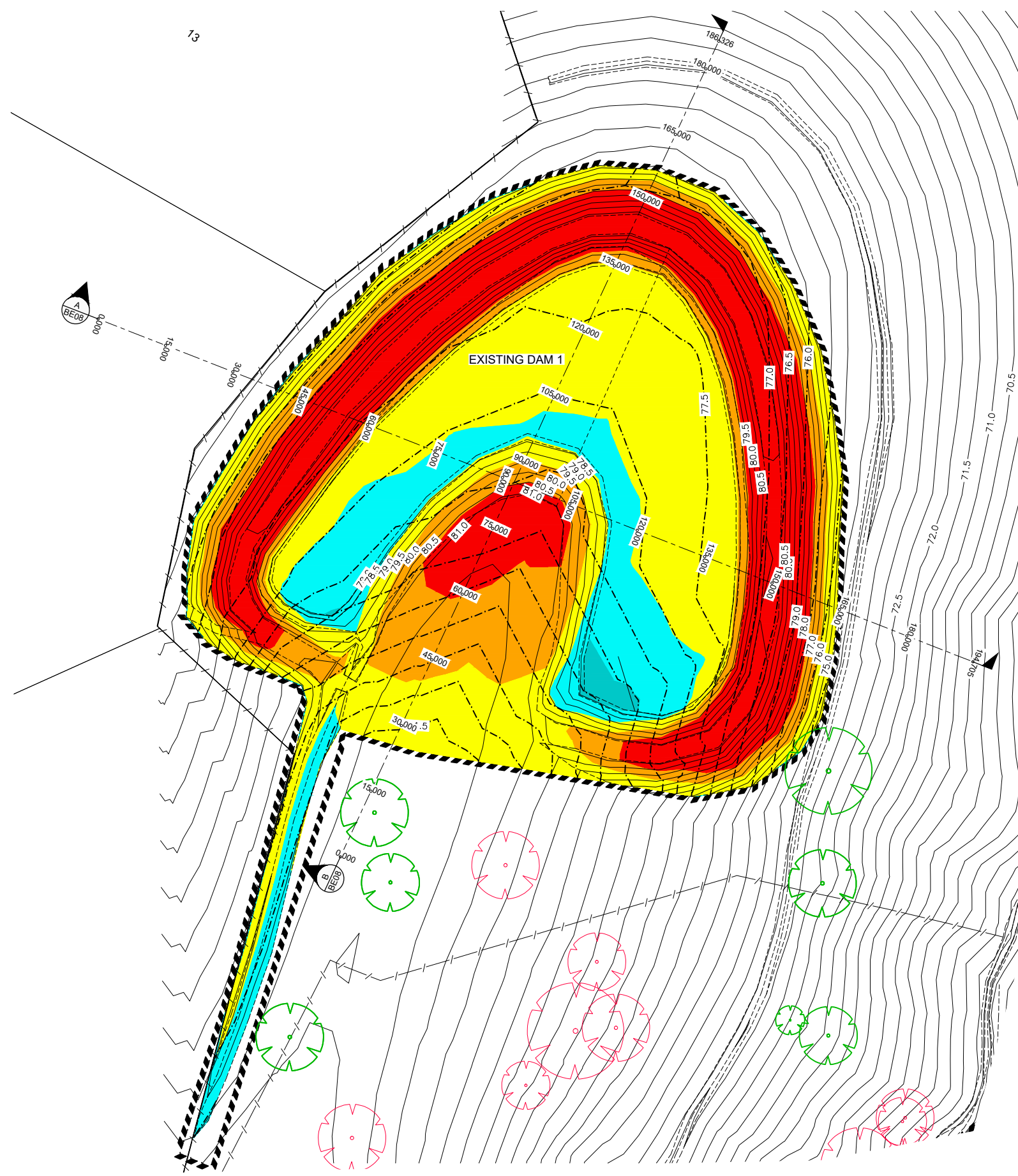
THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 DAM 10 SITE SECTIONS
 BULK EARTHWORKS PHASE 1

PLAN No:	110185BEL/BE06	C
FILE No:	110185BELBE06	
SHEET SIZE:	A1 ORIGINAL	

Plotted: 24 July 2017 3:54:12 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE06.dwg

Plotted: 24 July 2017 3:54:35 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE07.dwg



- NOTES**
- FOR DAM 1 STABILITY ASSESSMENT AND THE IMPACT ON ADJOINING ROADS AND FUTURE RESIDENTIAL DEVELOPMENT REFER TO GEOTECHNICAL REPORT PREPARED BY GEOTECHNIQUE- REFERENCE 12261/9 - AB, DATED 3RD JUNE 2015
 - DAM 1 REMOVAL SHOULD BE UNDERTAKEN FOLLOWING THE TASKS AS PER "DAM No. 1 REMOVAL FOR BELMONT PRECINCT AT 98 GROSE VALE ROAD, NORTH RICHMOND" REPORT PREPARED BY BIO ENGINEERED SOLUTIONS, DATED 28TH JUNE 2015, REFERENCE 1573DAM 1, ISSUE B.

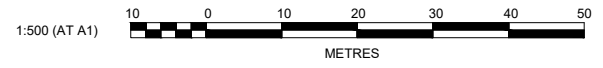
VOLUME OF EXCAVATIONS FROM EXISTING SURFACE TO DAM 1 FILL SURFACE:
 CUT = 18,060m³
 FILL = 608m³
 BALANCE = 17,450m³ EXCESS MATERIAL

LEGEND CUT/FILL DEPTH RANGE	
COLOUR	DEPTH RANGE (m)
	-10 TO -5
	-5 TO -2
	-2 TO -1
	-1 TO 0
	0 TO 1
	1 TO 2
	2 TO 4
	4 TO 6
	6 TO 8

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPPB0565

These plans/specifications form part of the certificate issued 31 July 2017



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
 BELMONT - BULK EARTHWORKS**

EXISTING DAM 1 REMOVAL PHASE 1
 BULK EARTHWORKS CUT & FILL PLAN

PLAN No: 110185BEL/BE07 **B**
 FILE No: 110185BELBE07
 SHEET SIZE: A1 ORIGINAL

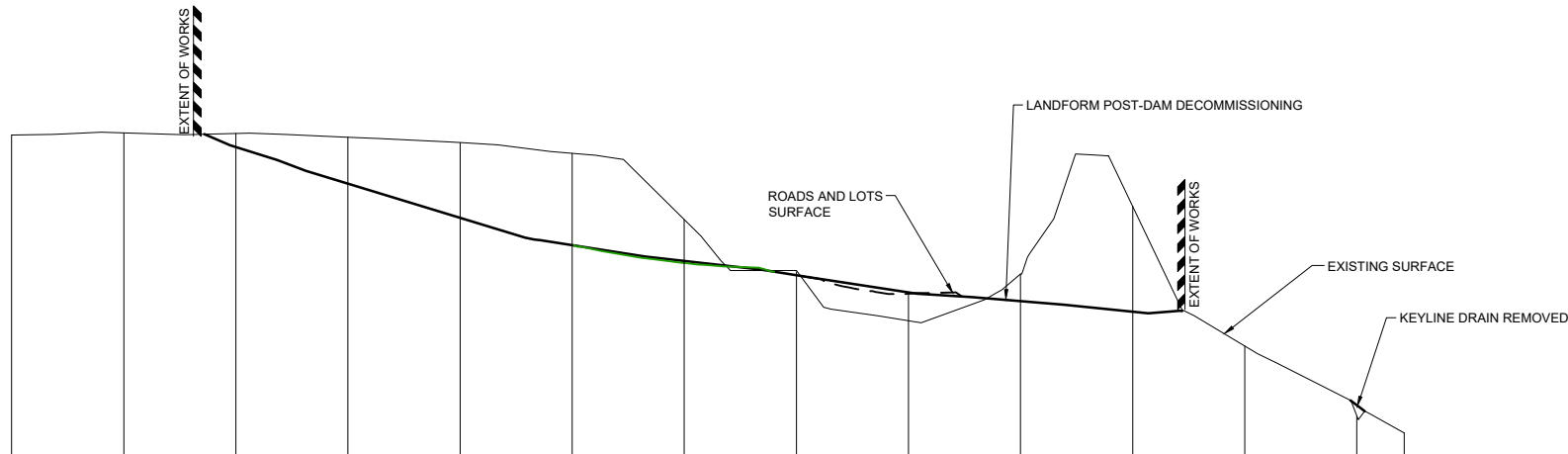
J. WYNDHAM PRINCE CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

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

MP	MG	MS	MS	27/09/16
MP	TG	RO	RO	22/07/16
DES	DRN	CKD	APR	DATE

B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

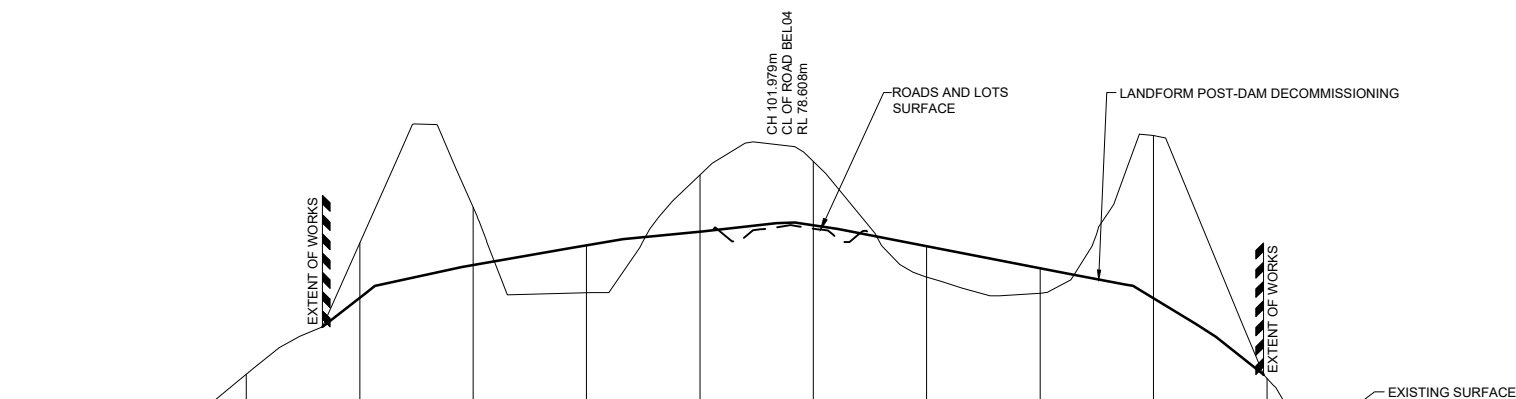
Plotted: 24 July 2017 3:54:51 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE08.dwg



DATUM 72.0

DAM 1 REMOVAL SURFACE																		
EXISTING SURFACE	81.766	81.819	81.803	81.439	80.464	79.548	78.921	78.396	78.013	77.557	77.319	77.041	76.123	74.249	73.796			
CHAINAGE	0.000	15.000	30.000	45.000	60.000	75.000	90.000	105.000	120.000	135.000	150.000	165.000	180.000	186.326				

SECTION B
SCALE H 1:500
V 1:100
BE07



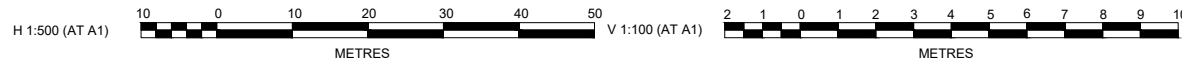
DATUM 63.0

DAM 1 REMOVAL SURFACE																		
EXISTING SURFACE	68.960	71.399	74.668	78.141	76.689	77.553	78.074	78.437	78.605	78.051	77.466	76.674	74.550	72.030	69.435			
CHAINAGE	0.000	15.000	30.000	45.000	60.000	75.000	90.000	105.000	120.000	135.000	150.000	165.000	180.000	194.705				

SECTION A
SCALE H 1:500
V 1:100
BE07

CONSTRUCTION CERTIFICATE
Certificate No. 20130299C35
Date of Issue 31 July 2017
Issuing Officer [Signature]
Accreditation No. PBP0565
These plans/specifications form part of the certificate issued 31 July 2017

REVISION C
• ROADS & LOTS SURFACE AMENDED



C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUE FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

AZIMUTH: MGA
DATUM: AHD
ORIGIN:

CLIENT:
REDBANK
NORTH RICHMOND
THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

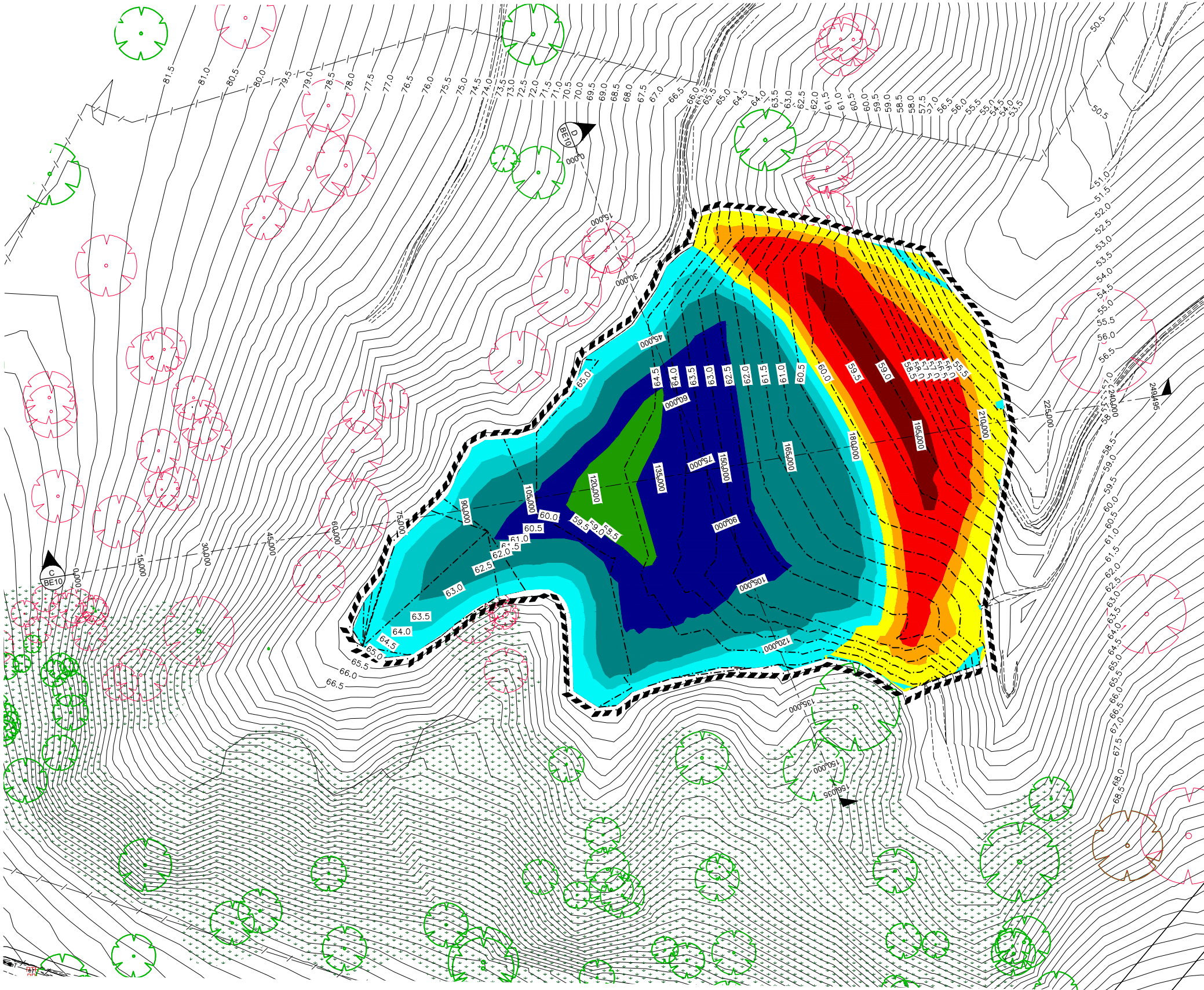
ISSUED FOR CONSTRUCTION APPROVAL
REDBANK, NORTH RICHMOND BELMONT - BULK EARTHWORKS
EXISTING DAM 1 REMOVAL PHASE 1 BULK EARTHWORKS SITE SECTIONS

PLAN No:	110185BEL/BE08	C
FILE No:	110185BELBE08	
SHEET SIZE:	A1 ORIGINAL	

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017



- NOTES**
- FOR DAM 2 STABILITY ASSESSMENT AND THE IMPACT ON ADJOINING ROADS AND FUTURE RESIDENTIAL DEVELOPMENT REFER TO GEOTECHNICAL REPORT PREPARED BY GEOTECHNIQUE. REFERENCE 12261/9 - AC, DATED 3RD JUNE 2015
 - DAM 2 REMOVAL SHOULD BE UNDERTAKEN FOLLOWING THE TASKS AS PER 'DAM DECOMMISSIONING IMPACT ASSESSMENT DAM 2 (DA12) - 99 GROSE VALE ROAD, NORTH RICHMOND' REPORT PREPARED BY BIO ENGINEERED SOLUTIONS, DATED 28TH JUNE 2015, REFERENCE 1573DAM 2, ISSUE B.

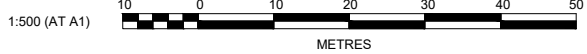
VOLUME OF EXCAVATIONS FROM EXISTING SURFACE TO DAM 2 FILL SURFACE:

CUT = 7,960m³
 FILL = 21,430m³
 BALANCE = 13,470m³ FILL

LEGEND CUT/FILL DEPTH RANGE

COLOUR	DEPTH RANGE (m)
Dark Red	-10 TO -5
Red	-5 TO -2
Orange	-2 TO -1
Yellow	-1 TO 0
Cyan	0 TO 1
Light Blue	1 TO 2
Dark Blue	2 TO 4
Blue	4 TO 6
Green	6 TO 8

Plotted: 24 July 2017 3:55:13 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE09.dwg



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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

CLIENT:

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

ISSUED FOR CONSTRUCTION APPROVAL

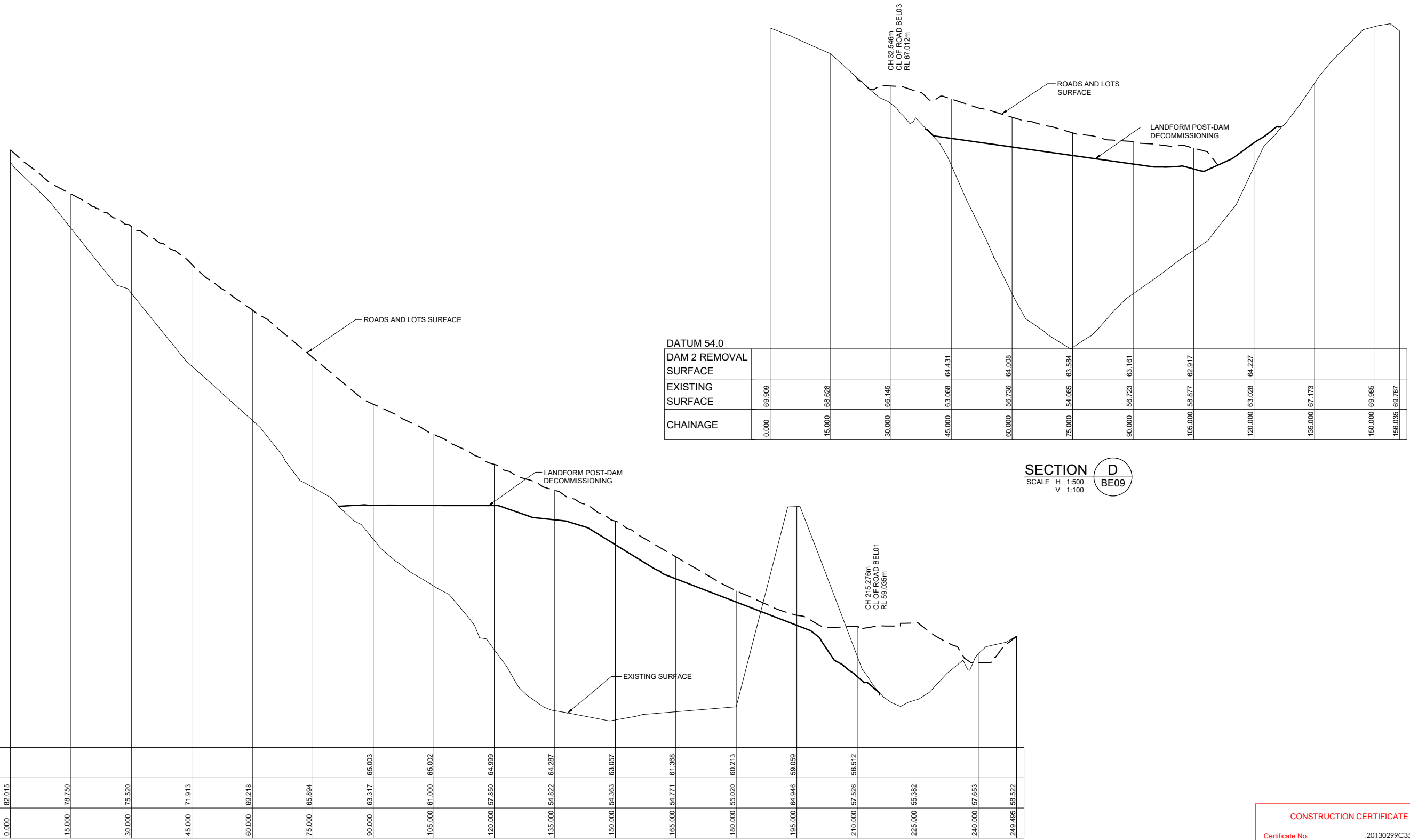
REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 EXISTING DAM 2 REMOVAL PHASE 1
 BULK EARTHWORKS CUT & FILL PLAN

PLAN No: 110185BEL/BE09 **B**
 FILE No: 110185BELBE09
 SHEET SIZE: A1 ORIGINAL

DES	DRN	CKD	APR	DATE
MP	MG	MS	MS	27/09/16
MP	TG	RO	RO	22/07/16
AMENDMENT				

B CERTIFIER COMMENTS
 A ISSUED FOR CONSTRUCTION APPROVAL

Plotted: 24 July 2017 3:55:28 PM File Name: J:\10185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BEL BE10.dwg



SECTION C
SCALE H 1:500
V 1:100

SECTION D
SCALE H 1:500
V 1:100

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer *[Signature]*
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017

REVISION C
 • ROADS & LOTS SURFACE AMENDED



C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

CLIENT:

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

ISSUED FOR CONSTRUCTION APPROVAL

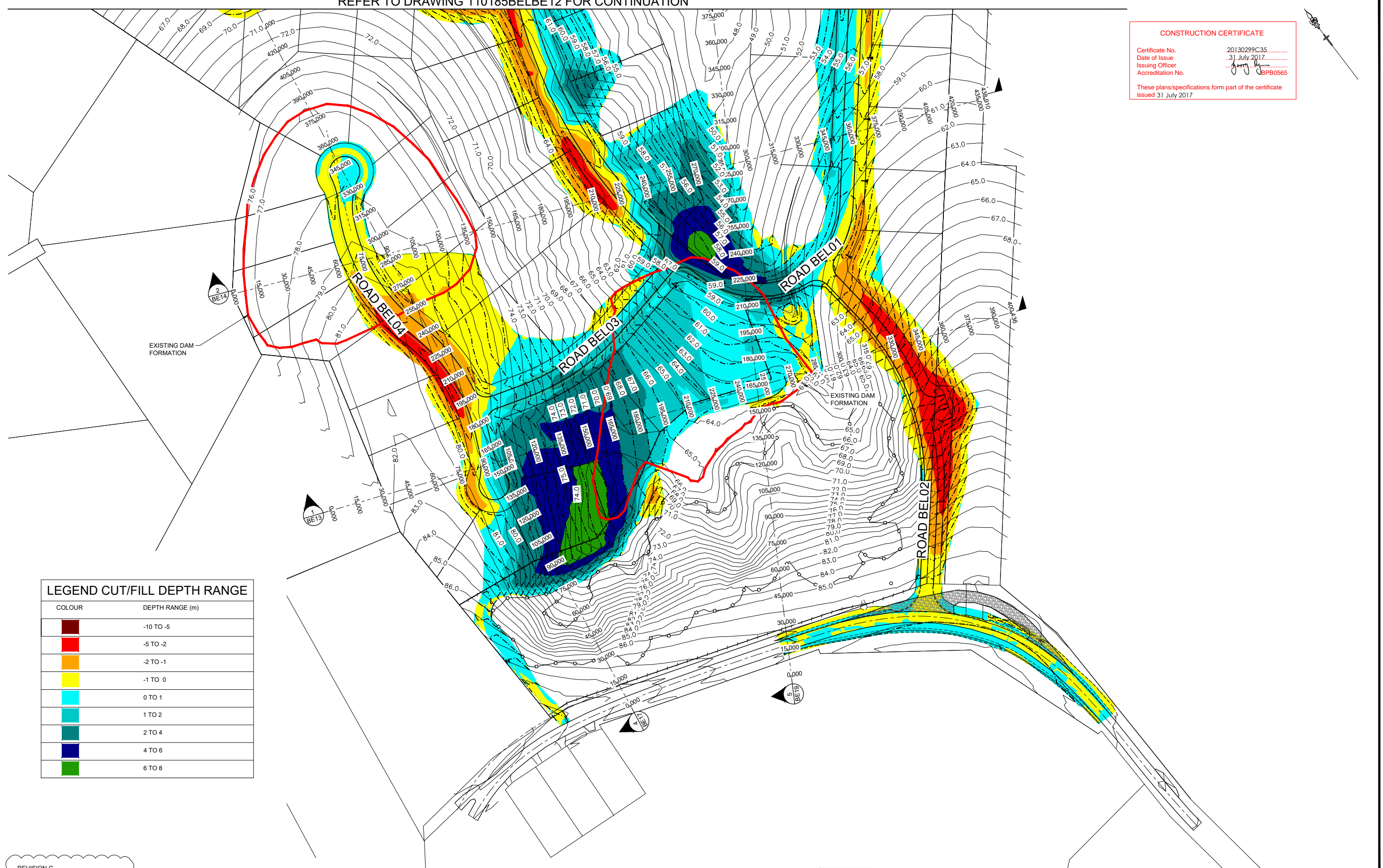
REDBANK, NORTH RICHMOND BELMONT - BULK EARTHWORKS

EXISTING DAM 2 REMOVAL PHASE 1 BULK EARTHWORKS SITE SECTIONS

PLAN No:	110185BEL/BE10	C
FILE No:	110185BELBE10	
SHEET SIZE:	A1 ORIGINAL	

REFER TO DRAWING 110185BELBE12 FOR CONTINUATION

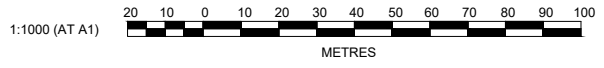
CONSTRUCTION CERTIFICATE
 Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565
 These plans/specifications form part of the certificate issued 31 July 2017



LEGEND CUT/FILL DEPTH RANGE

COLOUR	DEPTH RANGE (m)
Dark Red	-10 TO -5
Red	-5 TO -2
Orange	-2 TO -1
Yellow	-1 TO 0
Cyan	0 TO 1
Light Blue	1 TO 2
Dark Blue	2 TO 4
Blue	4 TO 6
Green	6 TO 8

REVISION C
 • RANGED CUT & FILL AMENDED
 • DESIGN SURFACE AMENDED



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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

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
 BELMONT - BULK EARTHWORKS
 BULK EARTHWORKS CUT & FILL PLAN
 PHASE 2 SHEET 1

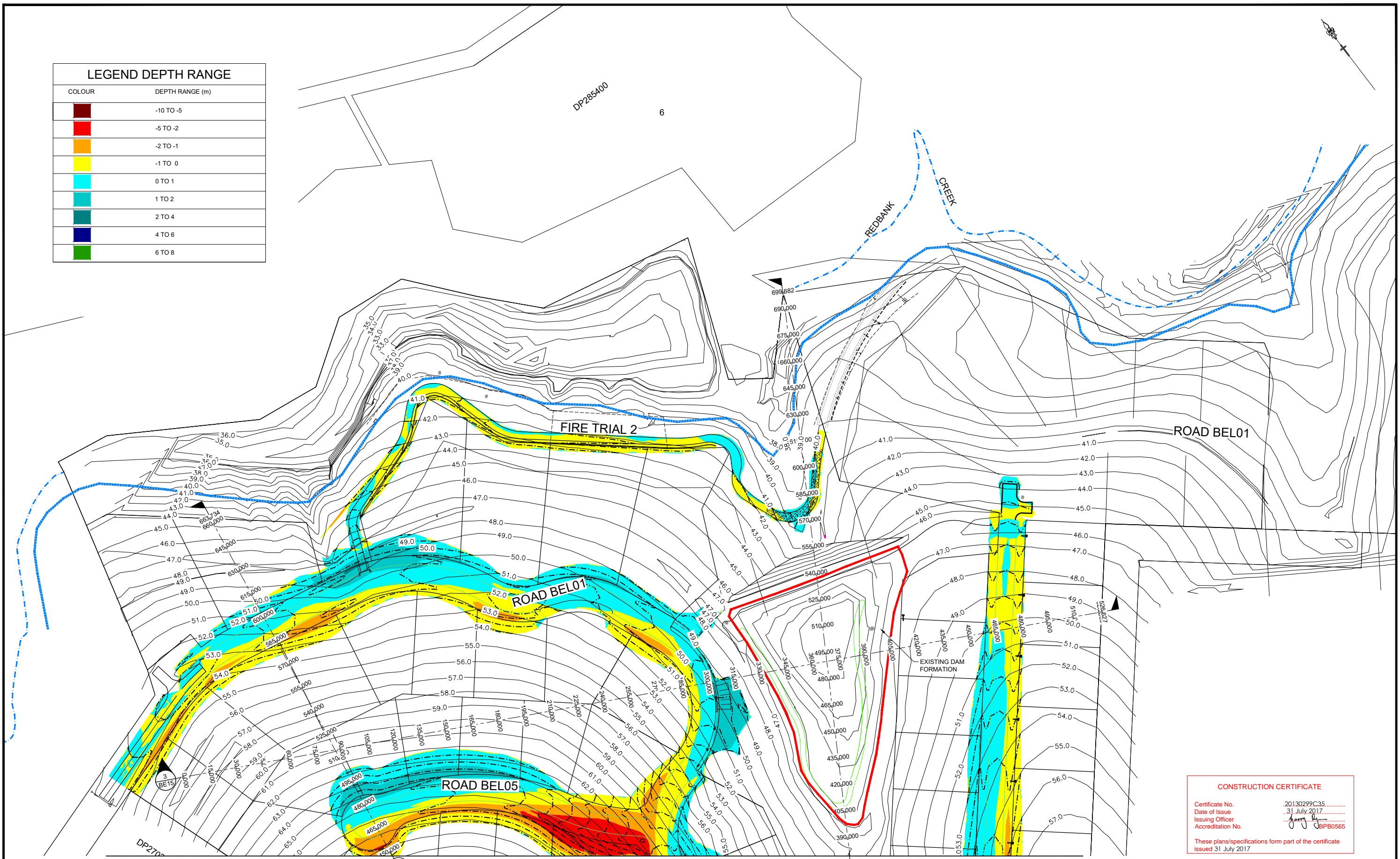
PLAN No: 110185BEL/BE11 **C**
 FILE No: 110185BELBE11
 SHEET SIZE: A1 ORIGINAL

Plotted: 24 July 2017 3:55:52 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE11.dwg

REV	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	AMENDMENT	DES	DRN	CKD	APR	DATE



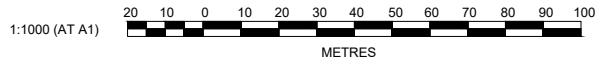
LEGEND DEPTH RANGE	
COLOUR	DEPTH RANGE (m)
Dark Red	-10 TO -5
Red	-5 TO -2
Orange	-2 TO -1
Yellow	-1 TO 0
Cyan	0 TO 1
Light Blue	1 TO 2
Dark Blue	2 TO 4
Blue	4 TO 6
Green	6 TO 8



REFER TO DRAWING 110185BELBE11 FOR CONTINUATION

CONSTRUCTION CERTIFICATE
 Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565
 These plans/specifications form part of the certificate issued 31 July 2017

REVISION C
 • RANGED CUT & FILL AMENDED
 • DESIGN SURFACE AMENDED



NO.	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUED FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

CLIENT: **REDBANK** NORTH RICHMOND
 AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:
 THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

ISSUED FOR CONSTRUCTION APPROVAL

RED BANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 BULK EARTHWORKS CUT & FILL PLAN
 PHASE 2 SHEET 2

PLAN No: 110185BEL/BE12 **C**
 FILE No: 110185BELBE12
 SHEET SIZE: A1 ORIGINAL

Plotted: 24 July 2017 3:56:16 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE12.dwg

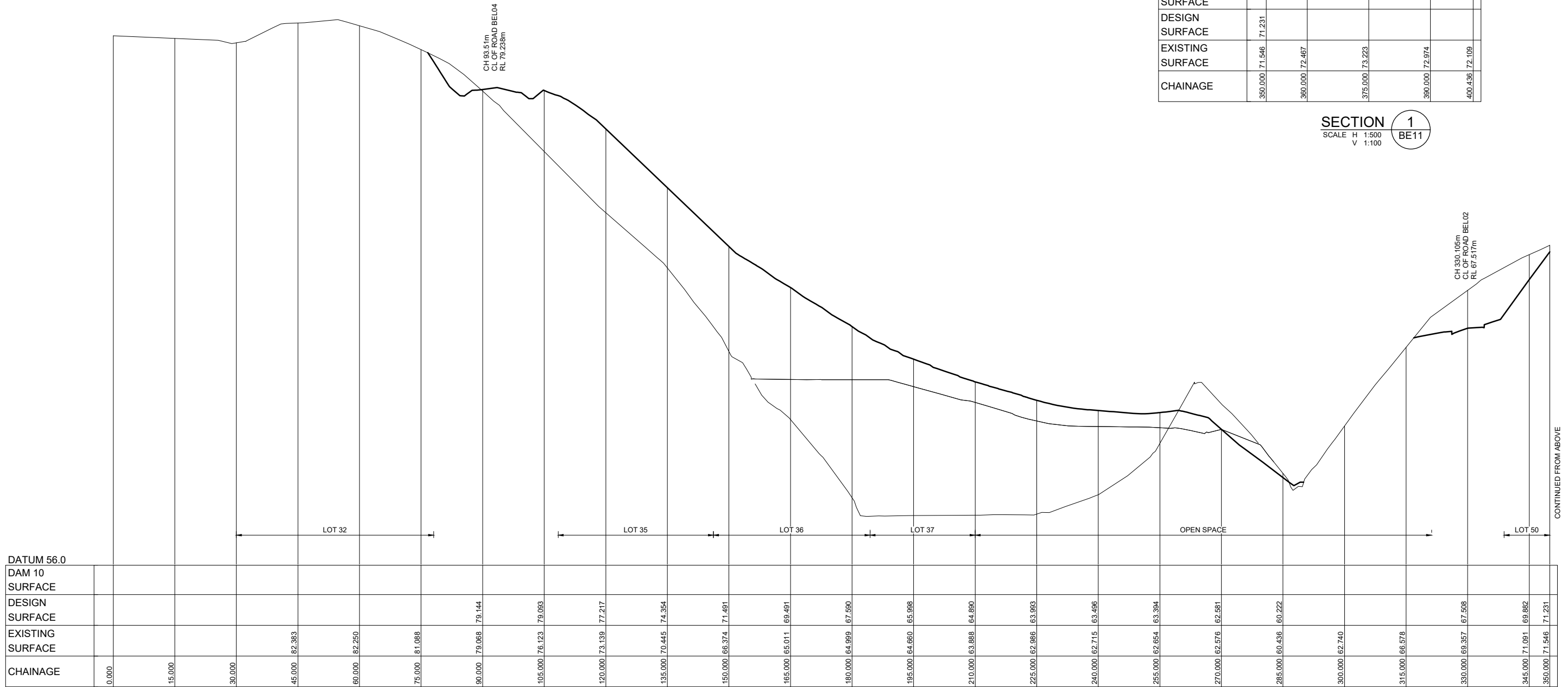
CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017

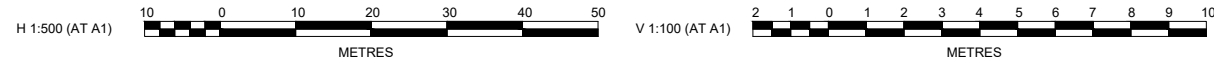
CONTINUED FROM BELOW				
DATUM 65.0				
DAM 10 SURFACE				
DESIGN SURFACE	71.231			
EXISTING SURFACE	71.546	72.467	73.223	72.974
CHAINAGE	350.000	360.000	375.000	390.000
				400.436

SECTION 1
 SCALE H 1:500
 V 1:100
 BE11



SECTION 1
 SCALE H 1:500
 V 1:100
 BE11

REVISION C
 • SITE SECTIONS AMENDED TO NEW SURFACE



NO.	REVISION	DATE	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	24/07/17	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	27/09/16	MP	MG	MS	MS	27/09/16
A	ISSUE FOR CONSTRUCTION APPROVAL	22/07/16	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

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
 BELMONT - BULK EARTHWORKS
 BULK EARTHWORKS CUT & FILL
 PHASE 2 SITE SECTION SHEET 1

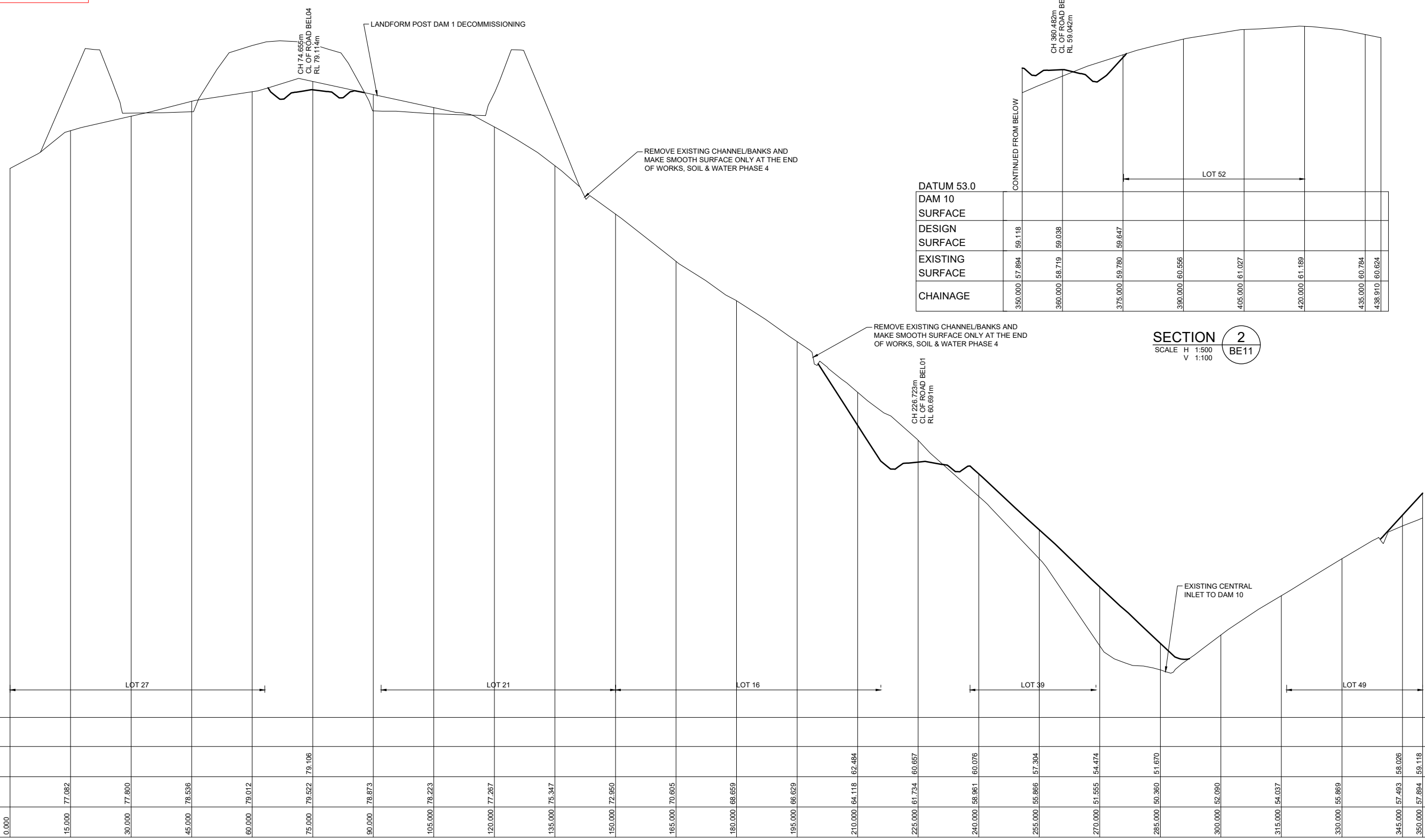
PLAN No: 110185BEL/BE13 **C**
 FILE No: 110185BELBE13
 SHEET SIZE: A1 ORIGINAL

Plotted: 24 July 2017 3:56:34 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE13.dwg

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017



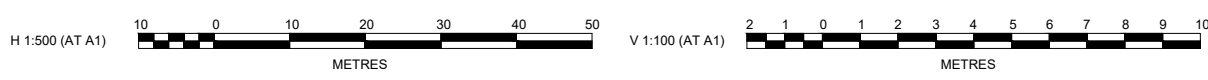
DATUM 53.0	
DAM 10 SURFACE	
DESIGN SURFACE	59.118
EXISTING SURFACE	57.894
CHAINAGE	350.000

SECTION 2
 SCALE H 1:500
 V 1:100

DATUM 48.0	
DAM 10 SURFACE	
DESIGN SURFACE	79.106
EXISTING SURFACE	77.082
CHAINAGE	0.000

SECTION 2
 SCALE H 1:500
 V 1:100

REVISION C
 • SITE SECTIONS AMENDED TO NEW SURFACE



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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

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
 BELMONT - BULK EARTHWORKS

BULK EARTHWORKS CUT & FILL
 PHASE 2 SITE SECTION SHEET 2

PLAN No: 110185BEL/BE14 **C**
 FILE No: 110185BELBE14
 SHEET SIZE: A1 ORIGINAL

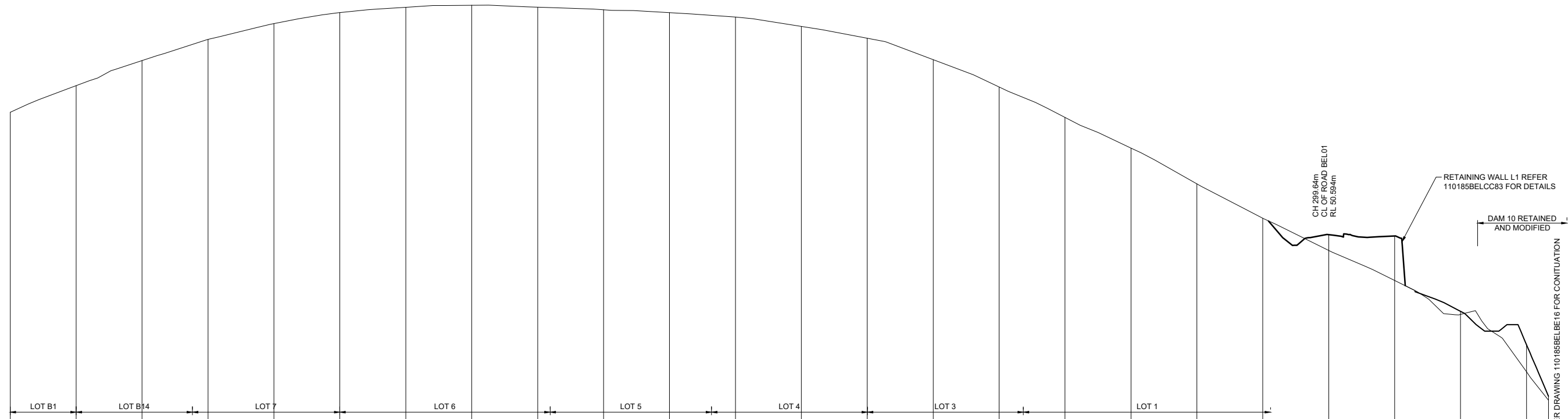
Plotted: 24 July 2017 3:56:49 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE14.dwg

NO.	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017



DATUM 41.0																									
DAM 10 SURFACE																					47.101	45.585	43.245		
DESIGN SURFACE																									
EXISTING SURFACE	55.150	57.360	58.502	59.459	60.180	60.677	60.918	61.014	60.927	60.805	60.677	60.477	60.051	59.514	58.541	57.299	55.917	54.518	52.900	51.331	49.871	48.508	47.101	45.585	43.245
CHAINAGE	0.000	15.000	30.000	45.000	60.000	75.000	90.000	105.000	120.000	135.000	150.000	165.000	180.000	195.000	210.000	225.000	240.000	255.000	270.000	285.000	300.000	315.000	330.000	345.000	360.000

SECTION 3
 SCALE H 1:500
 V 1:100
 BE12

REVISION C
 • SITE SECTIONS AMENDED TO NEW SURFACE



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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

CLIENT:

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

ISSUED FOR CONSTRUCTION APPROVAL

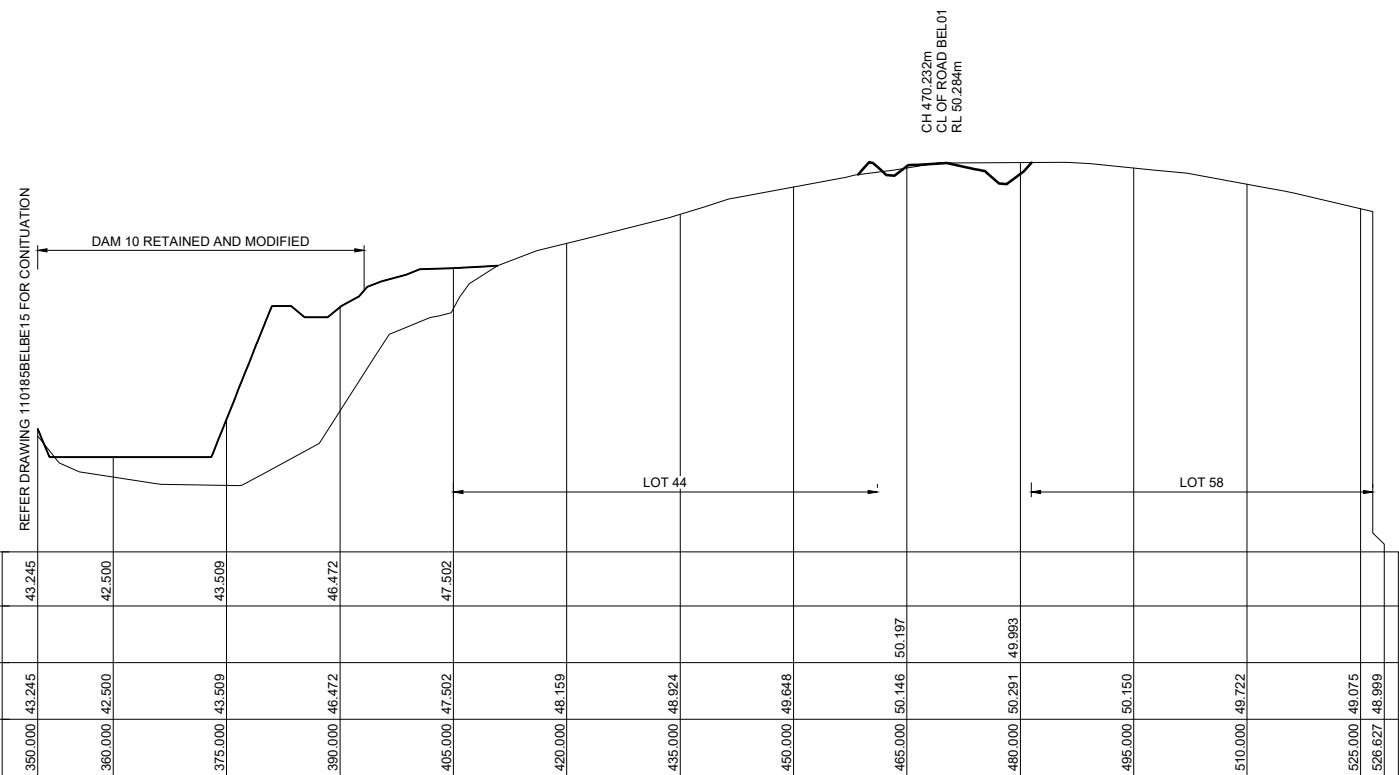
REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 BULK EARTHWORKS CUT & FILL
 PHASE 2 SITE SECTION SHEET 3

PLAN No: 110185BEL/BE15 **C**
 FILE No: 110185BELBE15
 SHEET SIZE: A1 ORIGINAL

Plotted: 24 July 2017 3:57:05 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE15.dwg

NO.	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUE FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

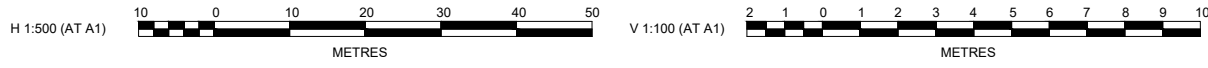
Plotted: 24 July 2017 3:57:21 PM File Name: J:\10185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE16.dwg



CHAINAGE	350.000	360.000	375.000	390.000	405.000	420.000	435.000	450.000	465.000	480.000	495.000	510.000	525.000	526.627
DAM 10 SURFACE	43.245	42.500	43.509	46.472	47.502									
DESIGN SURFACE									50.197	49.983				
EXISTING SURFACE	43.245	42.500	43.509	46.472	47.502	48.159	48.924	49.648	50.146	50.291	50.150	49.722	49.075	48.989

SECTION 3
SCALE H 1:500
V 1:100
BE12

REVISION C
• SITE SECTIONS AMENDED TO NEW SURFACE



CONSTRUCTION CERTIFICATE
Certificate No. 20130299C35
Date of Issue 31 July 2017
Issuing Officer [Signature]
Accreditation No. BPB0565
These plans/specifications form part of the certificate issued 31 July 2017

NO.	REVISION	DATE	BY	CHKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	24/07/17	MP	MG	RO	MS
B	CERTIFIER COMMENTS	27/09/16	MP	MG	MS	MS
A	ISSUED FOR CONSTRUCTION APPROVAL	22/07/16	MP	TG	RO	RO
	AMENDMENT		DES	DRN	CKD	APR

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

AZIMUTH: MGA
DATUM: AHD
ORIGIN:

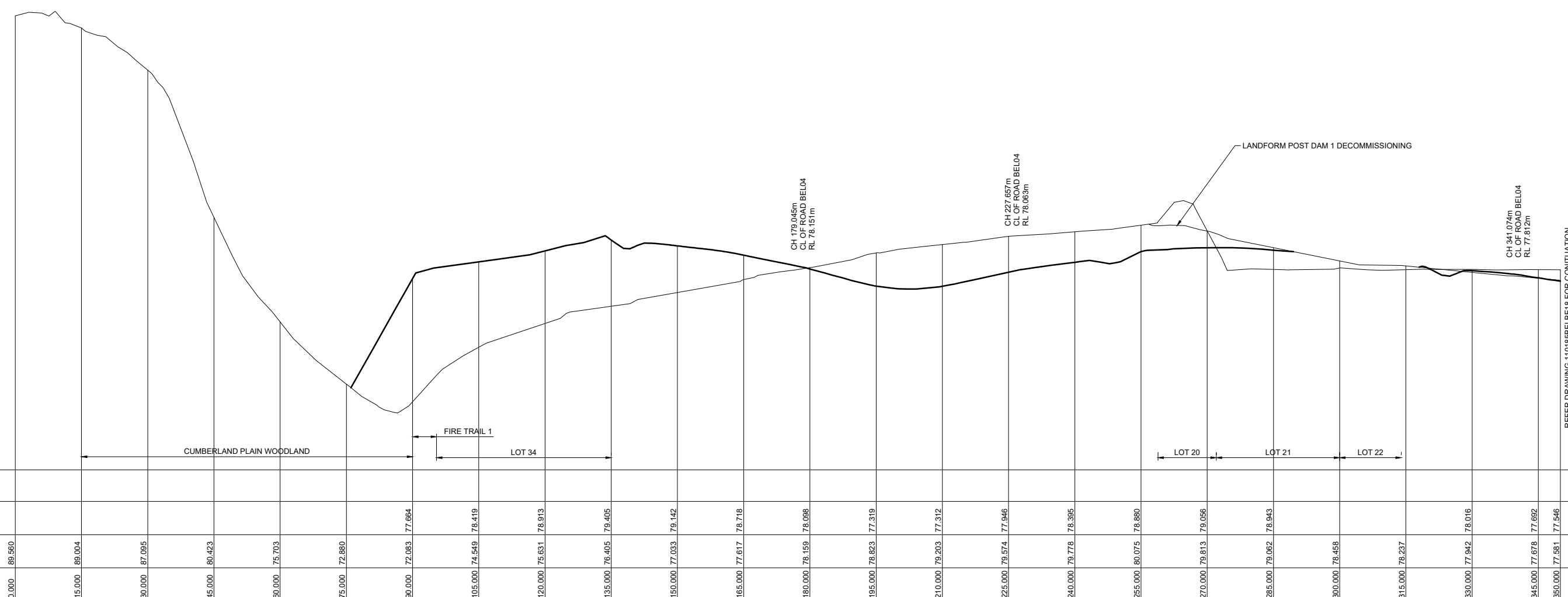
CLIENT:
REDBANK
NORTH RICHMOND
THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

ISSUED FOR CONSTRUCTION APPROVAL
RED BANK, NORTH RICHMOND
BELMONT - BULK EARTHWORKS
BULK EARTHWORKS CUT & FILL
PHASE 2 SITE SECTION SHEET 4
PLAN No: 110185BEL/BE16 C
FILE No: 110185BELBE16
SHEET SIZE: A1 ORIGINAL

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565
 These plans/specifications form part of the certificate issued 31 July 2017

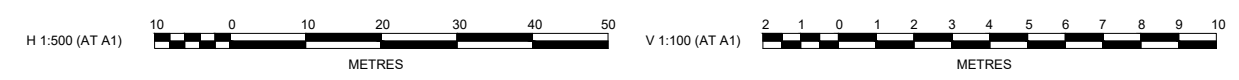
CH 3.047m
 CL OF PROSE VALE ROAD
 RL 88.77m



CHAINAGE	EXISTING SURFACE	DESIGN SURFACE	SURFACE	DAM 10	DATUM 69.0
0.000	89.560				
15.000	89.004				
30.000	87.095				
45.000	80.423				
60.000	75.703				
75.000	72.880				
90.000	72.083	77.684			
105.000	74.549	78.419			
120.000	75.631	78.913			
135.000	76.405	79.405			
150.000	77.083	79.142			
165.000	77.617	78.718			
180.000	78.159	78.098			
195.000	78.823	77.319			
210.000	79.203	77.312			
225.000	79.574	77.946			
240.000	79.778	78.395			
255.000	80.075	78.880			
270.000	79.813	79.056			
285.000	79.062	78.943			
300.000	78.458				
315.000	78.237				
330.000	77.942	78.016			
345.000	77.678	77.692			
350.000	77.581	77.546			

SECTION 4
 SCALE H 1:500
 V 1:100
 BE11

REVISION C
 • SITE SECTIONS AMENDED TO NEW SURFACE



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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

CLIENT:

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

ISSUED FOR CONSTRUCTION APPROVAL

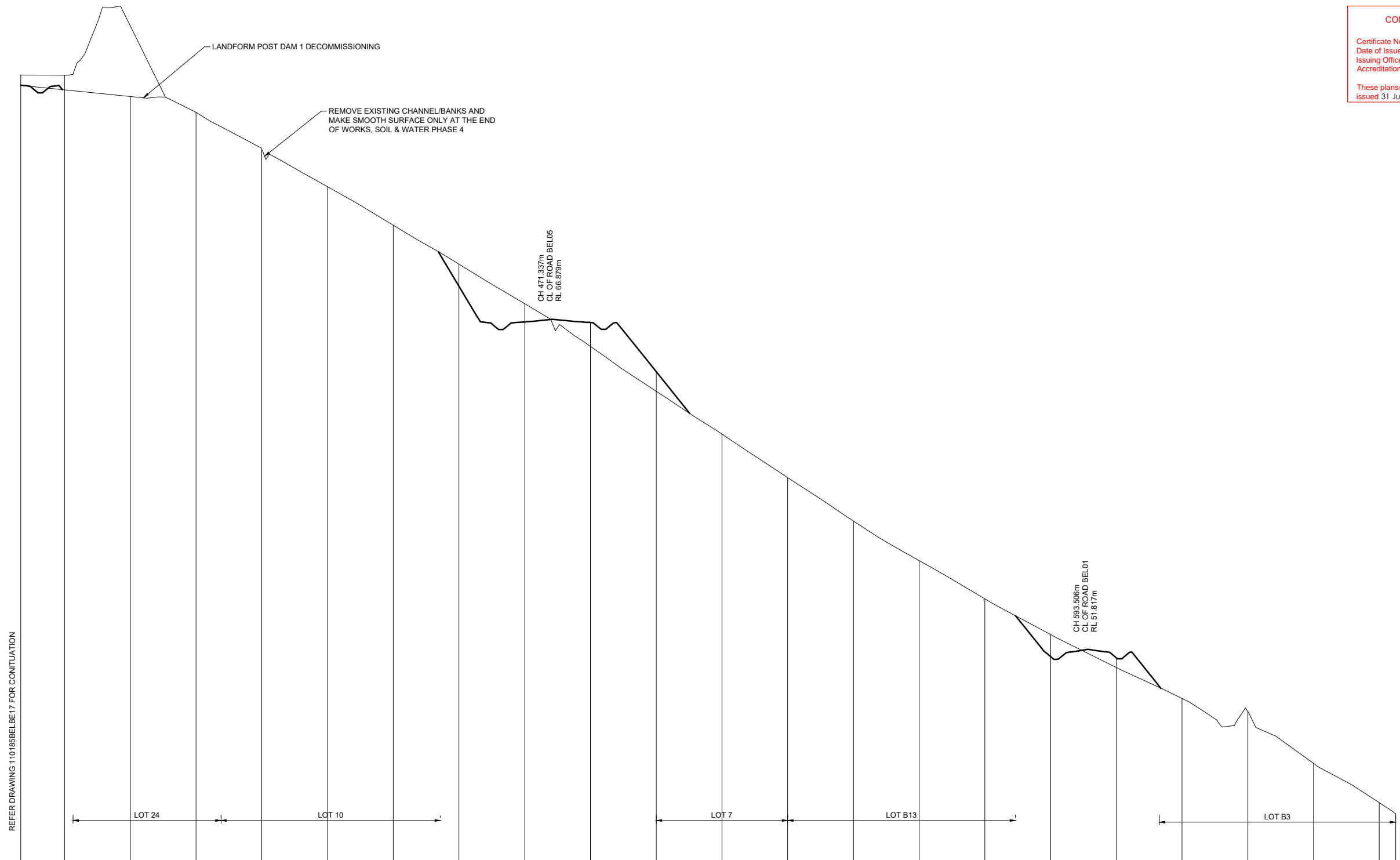
REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 BULK EARTHWORKS CUT & FILL
 PHASE 2 SITE SECTION SHEET 5

PLAN No: 110185BEL/BE17 C
 FILE No: 110185BELBE17
 SHEET SIZE: A1 ORIGINAL

Plotted: 24 July 2017 3:57:37 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE17.dwg

NO.	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

CONSTRUCTION CERTIFICATE
 Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565
 These plans/specifications form part of the certificate issued 31 July 2017



DATUM 42.0	
DAM 10 SURFACE	
DESIGN SURFACE	77.546
EXISTING SURFACE	77.581, 77.380, 77.077, 76.309, 74.613, 72.917, 71.161, 69.386, 66.753, 66.725, 64.490, 61.637, 59.654, 57.671, 55.868, 54.125, 52.494, 51.490, 50.989, 51.431, 49.592, 48.981, 46.622, 44.824, 44.320
CHAINAGE	350.000, 360.000, 375.000, 390.000, 405.000, 420.000, 435.000, 450.000, 465.000, 480.000, 495.000, 510.000, 525.000, 540.000, 555.000, 570.000, 585.000, 600.000, 615.000, 630.000, 645.000, 660.000, 663.734

SECTION 4
 SCALE H 1:500
 V 1:100
 BE11

REVISION C
 • SITE SECTIONS AMENDED TO NEW SURFACE



NO.	REVISION	DATE	BY	CHECKED	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	24/07/17	MP	MG	RO
B	CERTIFIER COMMENTS	27/09/16	MP	MG	MS
A	ISSUE FOR CONSTRUCTION APPROVAL	22/07/16	MP	TG	RO
	AMENDMENT		DES	DRN	CKD

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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

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
 BELMONT - BULK EARTHWORKS
 BULK EARTHWORKS CUT & FILL
 PHASE 2 SITE SECTION SHEET 6

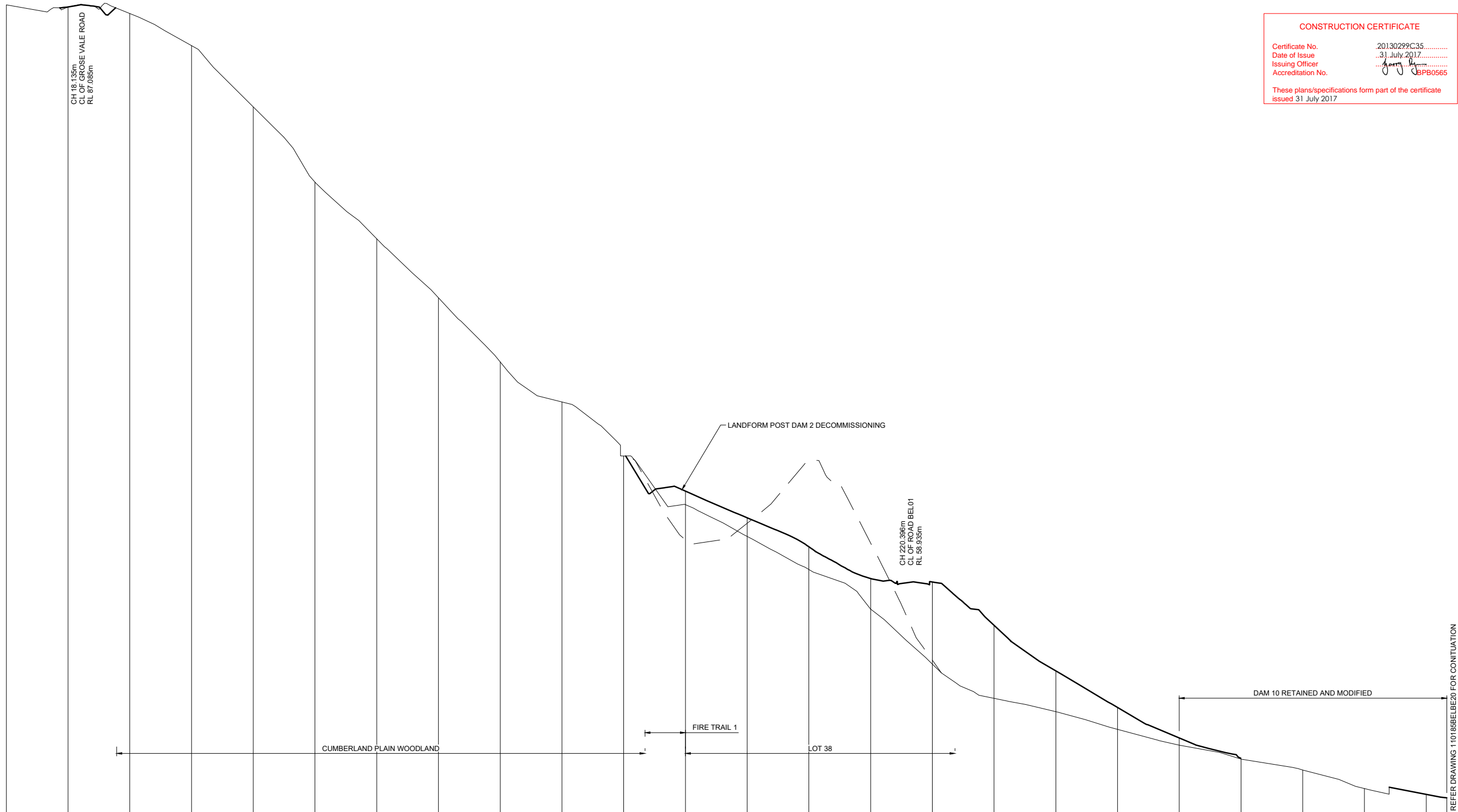
PLAN No:	110185BEL/BE18	C
FILE No:	110185BELBE18	
SHEET SIZE:	A1 ORIGINAL	

Plotted: 24 July 2017 3:57:53 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE18.dwg

CONSTRUCTION CERTIFICATE

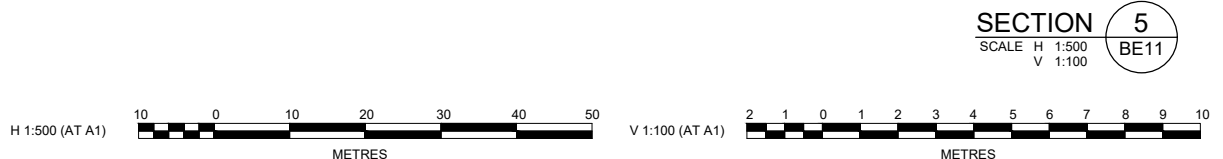
Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer *Joey B*
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017



CHAINAGE	0.000	15.000	30.000	45.000	60.000	75.000	90.000	105.000	120.000	135.000	150.000	165.000	180.000	195.000	210.000	225.000	240.000	255.000	270.000	285.000	300.000	315.000	330.000	345.000	350.000		
DAM 10 SURFACE																									48.604	48.435	
DESIGN SURFACE		86.972										63.338	62.043	60.638	59.093	58.924	56.819	54.603	52.829	51.348							
EXISTING SURFACE		86.961	86.651	85.088	82.115	78.350	75.606	72.733	69.619	67.678	65.047	62.684	61.142	59.534	57.609	54.939	53.271	52.625	51.765	50.996	50.323	49.784	49.889	48.604	48.435		

REVISION C
 • SITE SECTIONS AMENDED TO NEW SURFACE



NO.	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

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 BELMONT - BULK EARTHWORKS
 BULK EARTHWORKS CUT & FILL
 PHASE 2 SITE SECTION SHEET 7

PLAN No: 110185BEL/BE19 **C**
 FILE No: 110185BELBE19
 SHEET SIZE: A1 ORIGINAL

Plotted: 24 July 2017 3:58:09 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE19.dwg

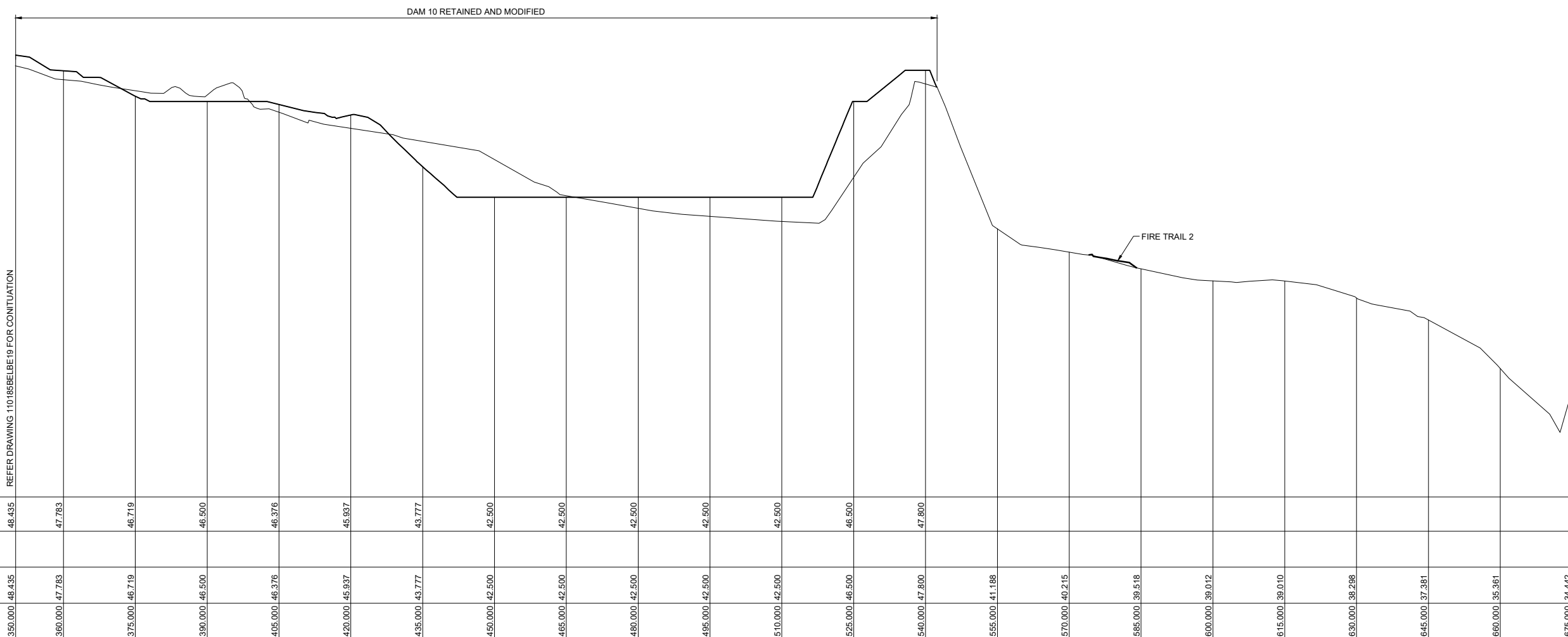
REFER DRAWING 110185BELBE20 FOR CONTINUATION

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017

Plotted: 24 July 2017 3:58:25 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE20.dwg



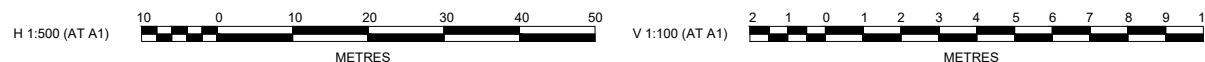
DATUM 30.0

REFER DRAWING 110185BELBE19 FOR CONTINUATION

FIRE TRAIL 2

SECTION 5
 SCALE H 1:500
 V 1:100

REVISION C
 • SITE SECTIONS AMENDED TO NEW SURFACE

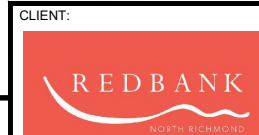


NO.	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUE FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

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 jwp@jwprince.com.au

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

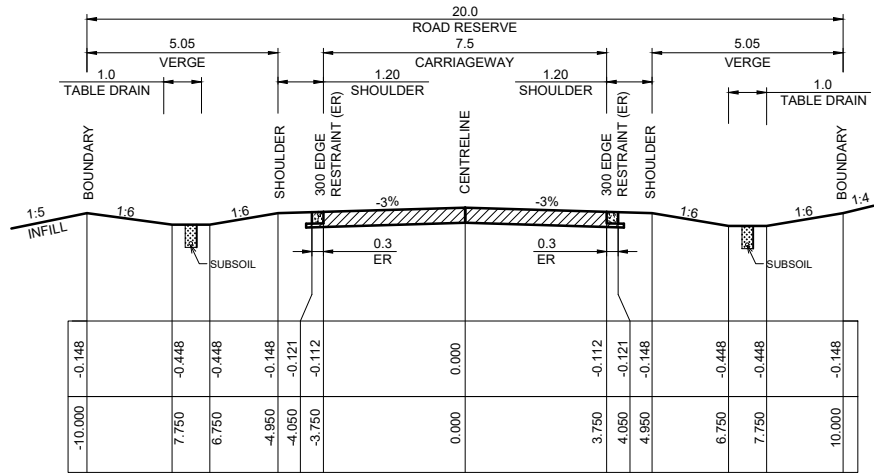


THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

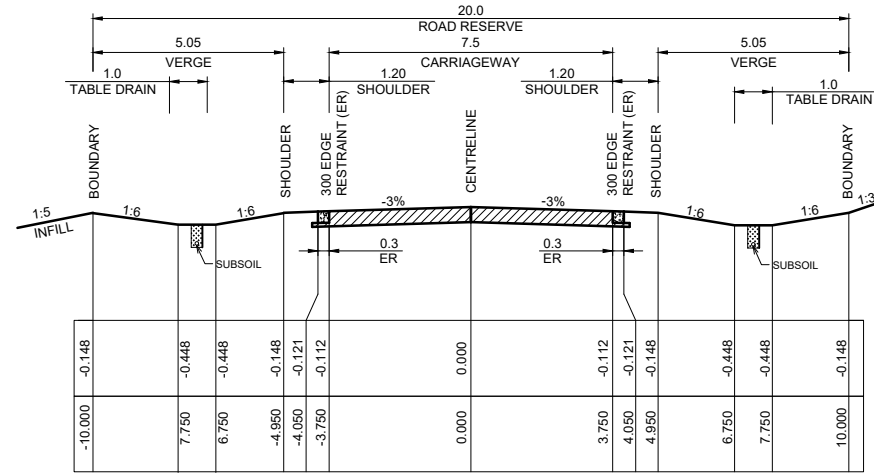
ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 BULK EARTHWORKS CUT & FILL
 PHASE 2 SITE SECTION SHEET 8

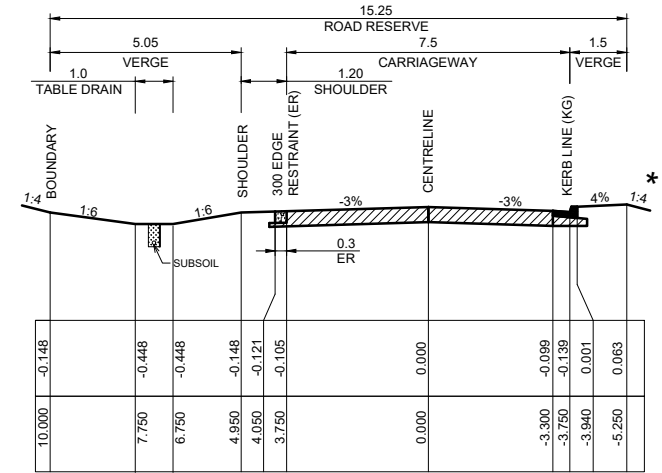
PLAN No: 110185BEL/BE20 C
 FILE No: 110185BELBE20
 SHEET SIZE: A1 ORIGINAL



TYPICAL CROSS SECTION ROAD BEL01
 CHAINAGE 27.55 - 233.00
 CHAINAGE 278 - 311.31
 CHAINAGE 397.368 - 427.153
 CHAINAGE 766.00 - 1050.00
 1:100 NATURAL



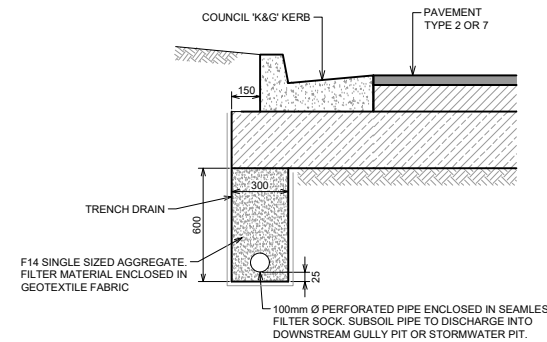
TYPICAL CROSS SECTION ROAD BEL01
 CHAINAGE 427.153 - 606.684
 1:100 NATURAL



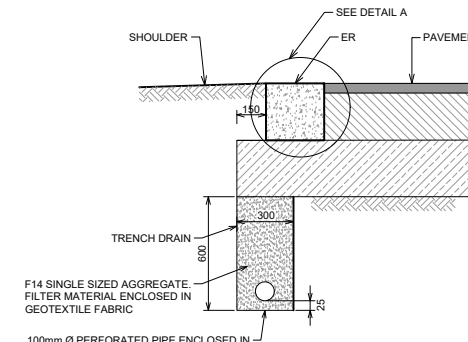
TYPICAL CROSS SECTION ROAD BEL01
 CHAINAGE 233.000 - 278.000
 1:100 NATURAL

REFER TO ENGINEERING PLANS FOR SITE REGRADING

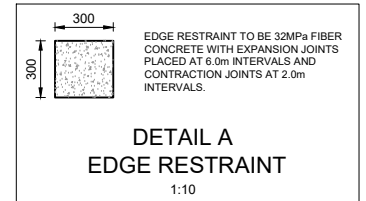
SUBSOIL DRAINAGE SHALL BE PROVIDED UNDER KERBS ON BOTH SIDES OF ROADS EXCEPT WHERE STREET DRAINAGE IS PRESENT REFER HCC STANDARD DRAWING No. SD3.



TYPICAL KERB & GUTTER SUBSOIL DETAIL
 1:20



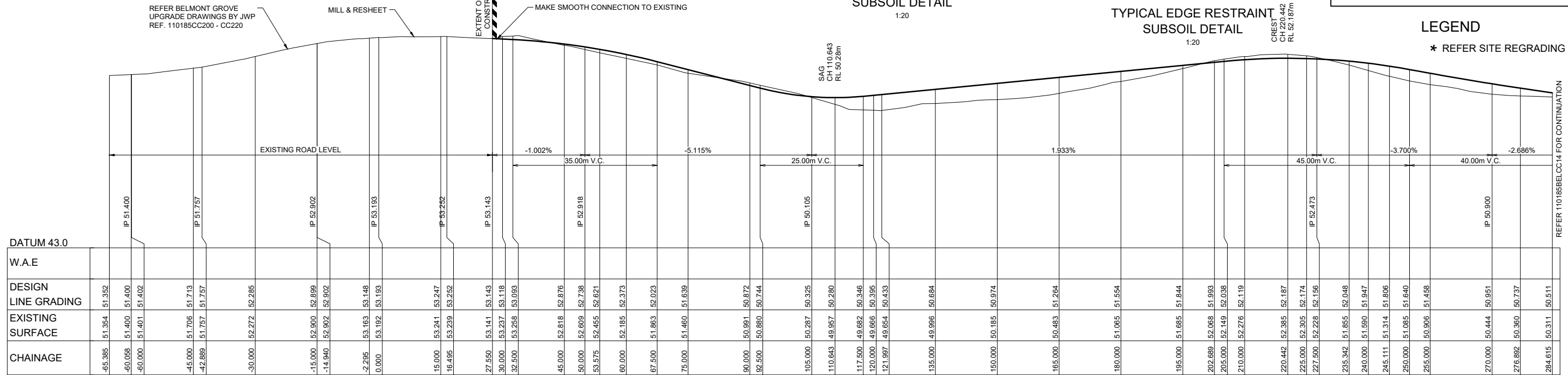
TYPICAL EDGE RESTRAINT SUBSOIL DETAIL
 1:20



DETAIL A EDGE RESTRAINT
 1:10

- PAVEMENT NOTES (ROAD BEL1 & BEL2)**
 2x10⁵ ESA (GEOTECHNICAL REPORT BY GEOTECHNIQUE, REF: 12261/14-AA-R2)
- 50mm WEARING COURSE AC10
 - ONE COAT HOT BITUMEN FLUSH SEAL
 - 125mm DGB 20 BASE COURSE
 - 250mm SUB-BASE COURSE

LEGEND
 * REFER SITE REGRADING



LONGITUDINAL SECTION ROAD BEL01
 HORIZONTAL SCALE 1:500
 VERTICAL SCALE 1:100

CHAINAGE	EXISTING SURFACE	DESIGN LINE GRADING	W.A.E
-65.385	51.354	51.352	
-60.068	51.400	51.400	
-60.000	51.401	51.402	
-45.000	51.706	51.713	
-42.888	51.757	51.757	
-30.000	52.272	52.285	
-15.000	52.900	52.899	
-14.940	52.902	52.902	
-2.295	53.163	53.148	
0.000	53.192	53.193	
15.000	53.241	53.247	
16.495	53.239	53.252	
27.550	53.141	53.143	
30.000	53.237	53.118	
32.500	53.258	53.093	
45.000	52.818	52.876	
50.000	52.609	52.738	
53.575	52.455	52.621	
60.000	52.185	52.373	
67.500	51.863	52.023	
75.000	51.460	51.639	
90.000	50.991	50.872	
92.500	50.880	50.744	
105.000	50.287	50.325	
110.643	49.957	50.280	
117.500	49.682	50.346	
120.000	49.666	50.395	
121.997	49.654	50.433	
135.000	49.996	50.684	
150.000	50.185	50.974	
165.000	50.483	51.264	
180.000	51.065	51.554	
195.000	51.685	51.844	
202.689	52.068	51.993	
205.000	52.149	52.038	
210.000	52.276	52.119	
220.442	52.385	52.187	
225.000	52.305	52.174	
227.500	52.228	52.156	
235.342	51.855	52.048	
240.000	51.590	51.947	
245.111	51.314	51.806	
250.000	51.085	51.640	
255.000	50.906	51.458	
270.000	50.444	50.951	
276.892	50.360	50.737	
284.615	50.311	50.511	

CONSTRUCTION CERTIFICATE
 Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPP0565
 These plans/specifications form part of the certificate issued 31 July 2017

- REVISION C**
- BEL01 ROAD LONGITUDINAL SECTION AMENDED
 - TYPICAL CROSS SECTIONS AMENDED
 - DETAIL A AMENDED



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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

CLIENT: **REDBANK** NORTH RICHMOND

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

ISSUED FOR CONSTRUCTION APPROVAL

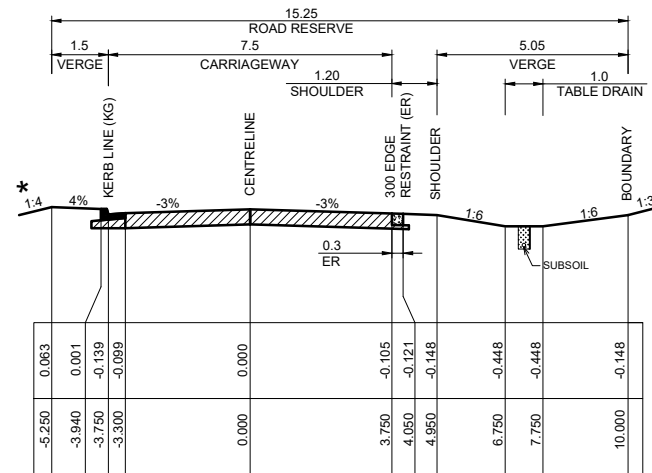
REDBANK, NORTH RICHMOND BELMONT - BULK EARTHWORKS
 LONGITUDINAL SECTIONS
 SHEET 1

PLAN No: **110185BEL/BE21** C
 FILE No: 110185BELBE21
 SHEET SIZE: A1 ORIGINAL

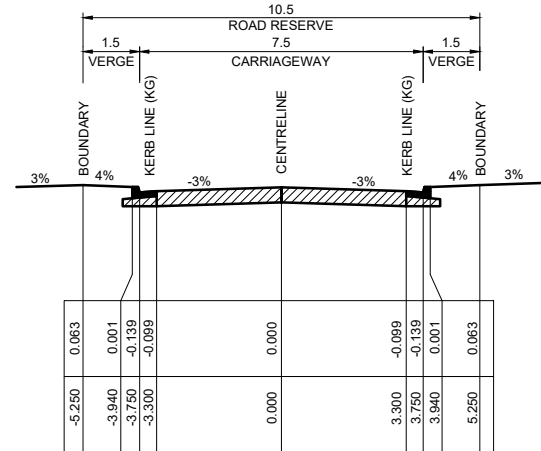
CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPP0565

These plans/specifications form part of the certificate issued 31 July 2017



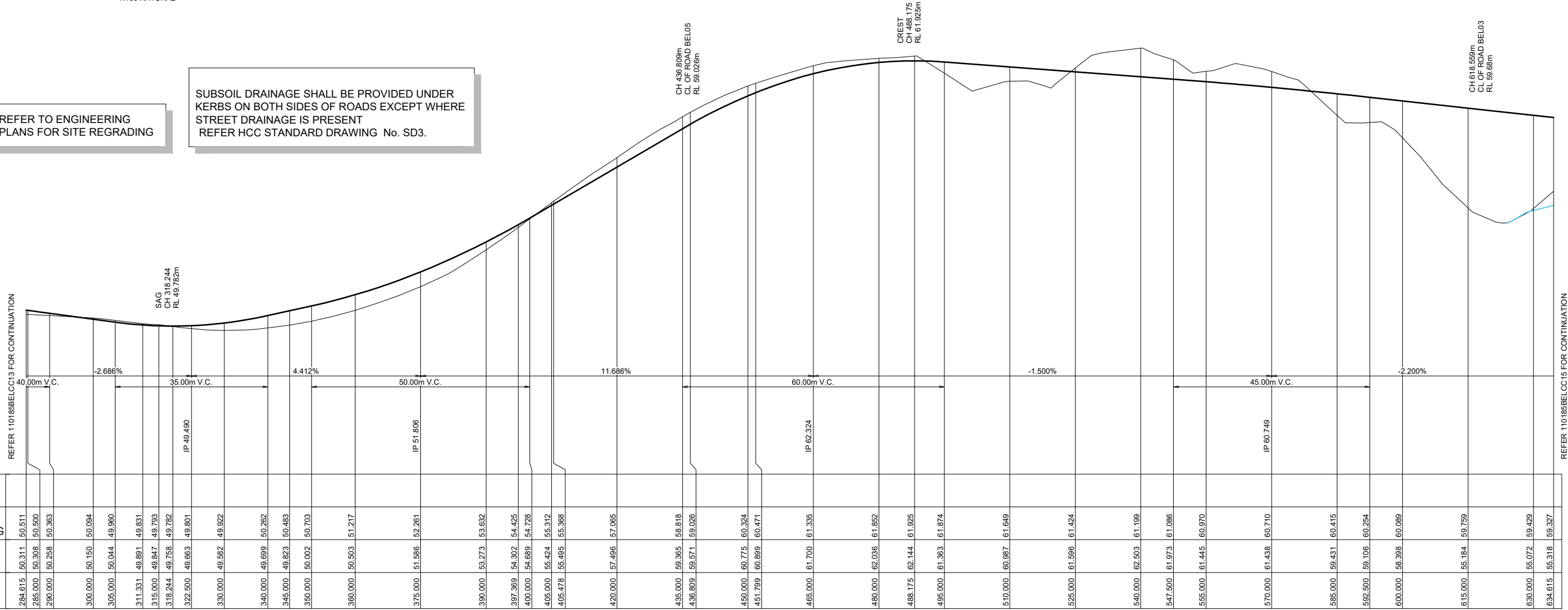
TYPICAL CROSS SECTION ROAD BEL01
 CHAINAGE 311.331 - 397.368
 CHAINAGE 606.684 - 659.500
 CHAINAGE 696.649 - 766.000
 1:100 NATURAL



TYPICAL CROSS SECTION ROAD BEL01
 CHAINAGE 659.000 - 696.649
 1:100 NATURAL

REFER TO ENGINEERING PLANS FOR SITE REGRADING

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



LONGITUDINAL SECTION ROAD BEL01
 HORIZONTAL SCALE 1:500
 VERTICAL SCALE 1:100

W.A.E	DESIGN LINE GRADING	EXISTING SURFACE	CHAINAGE
	50.511	50.311	284.615
	50.500	50.308	285.000
	50.363	50.258	290.000
	50.094	50.150	300.000
	49.960	50.044	305.000
	49.831	49.891	311.331
	49.793	49.847	315.000
	49.792	49.758	318.244
	49.801	49.663	322.500
	49.922	49.562	330.000
	50.262	49.699	340.000
	50.483	49.823	345.000
	50.703	50.002	350.000
	51.217	50.503	360.000
	52.261	51.566	375.000
	53.632	53.273	390.000
	54.425	54.302	397.368
	54.728	54.689	400.000
	55.312	55.424	405.000
	55.368	55.495	405.478
	57.065	57.496	420.000
	58.818	59.365	435.000
	59.026	59.571	436.809
	60.324	60.775	450.000
	60.471	60.889	451.799
	61.335	61.700	465.000
	61.852	62.036	480.000
	61.925	62.144	488.175
	61.874	61.963	495.000
	61.649	60.987	510.000
	61.424	61.596	525.000
	61.199	62.503	540.000
	61.096	61.973	547.500
	60.970	61.445	555.000
	60.710	61.438	570.000
	60.415	59.431	585.000
	60.254	59.106	592.500
	60.089	58.398	600.000
	59.759	55.184	615.000
	59.429	55.072	630.000
	59.327	55.318	634.615

REVISION C
 • BEL01 ROAD LONGITUDINAL SECTION AMENDED
 • TYPICAL CROSS SECTIONS AMENDED



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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

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
 BELMONT - BULK EARTHWORKS
 LONGITUDINAL SECTIONS
 SHEET 2

PLAN No: 110185BEL/BE22 **C**
 FILE No: 110185BELBE22
 SHEET SIZE: A1 ORIGINAL

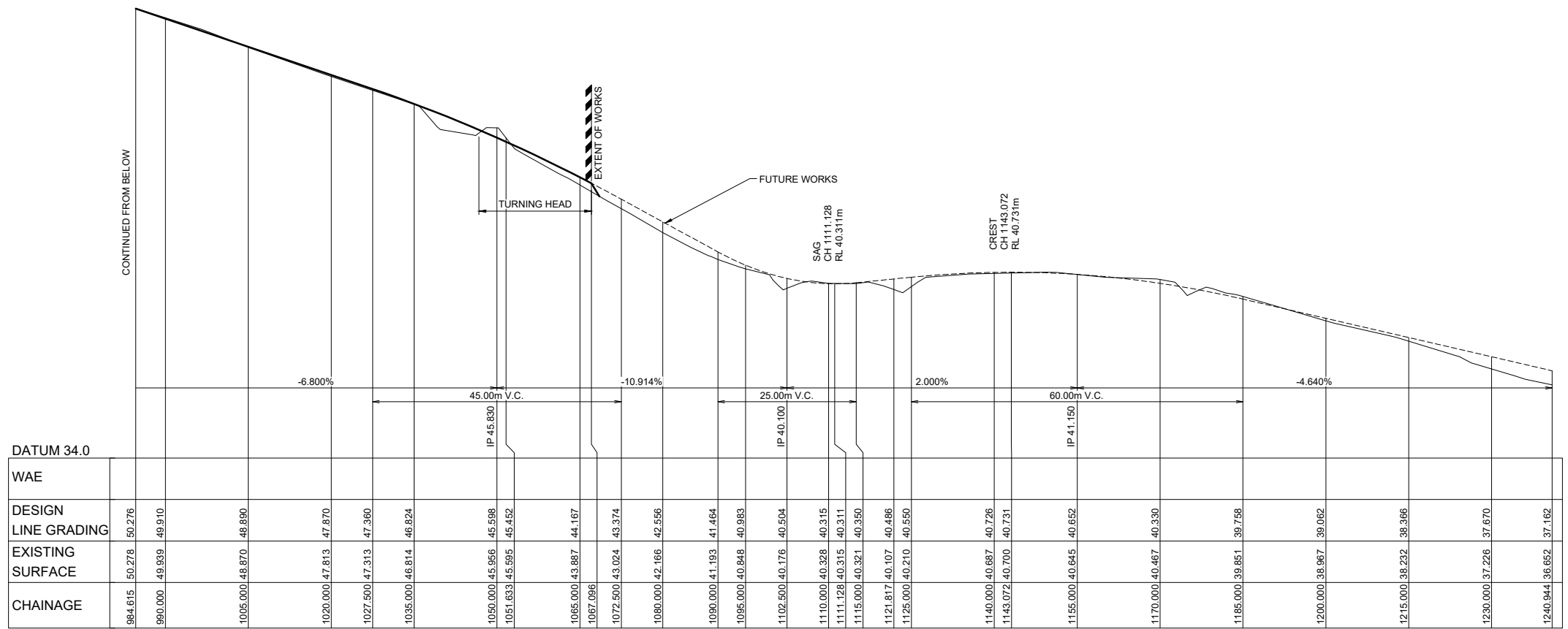
Plotted: 24 July 2017 3:50:09 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE22.dwg

NO	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

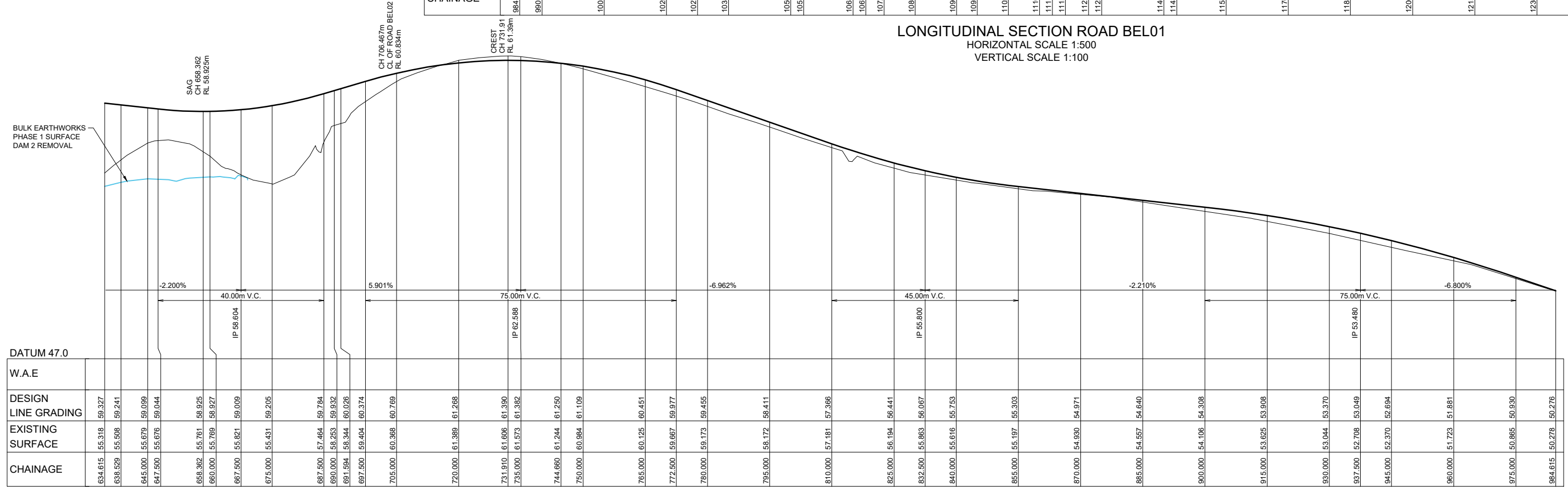
CONSTRUCTION CERTIFICATE

Certificate No. 20130229C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017



LONGITUDINAL SECTION ROAD BEL01
 HORIZONTAL SCALE 1:500
 VERTICAL SCALE 1:100



LONGITUDINAL SECTION ROAD BEL01
 HORIZONTAL SCALE 1:500
 VERTICAL SCALE 1:100

REVISION C
 • BEL01 ROAD LONGITUDINAL SECTION AMENDED



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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

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
 BELMONT - BULK EARTHWORKS
 LONGITUDINAL SECTIONS
 SHEET 3

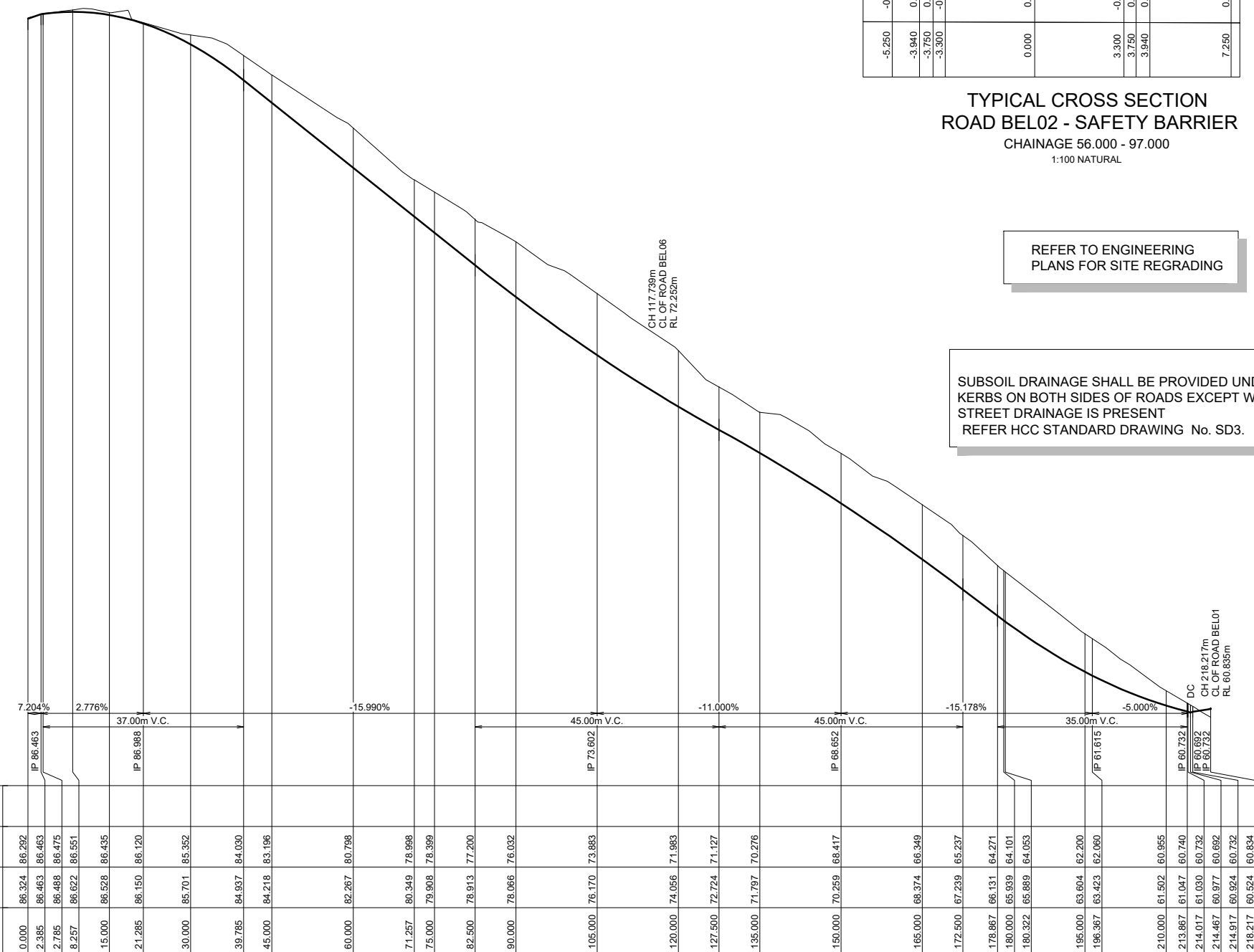
PLAN No: 110185BEL/BE23 **C**
 FILE No: 110185BELBE23
 SHEET SIZE: A1 ORIGINAL

Plotted: 24 July 2017 3:59:31 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE23.dwg

REV	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

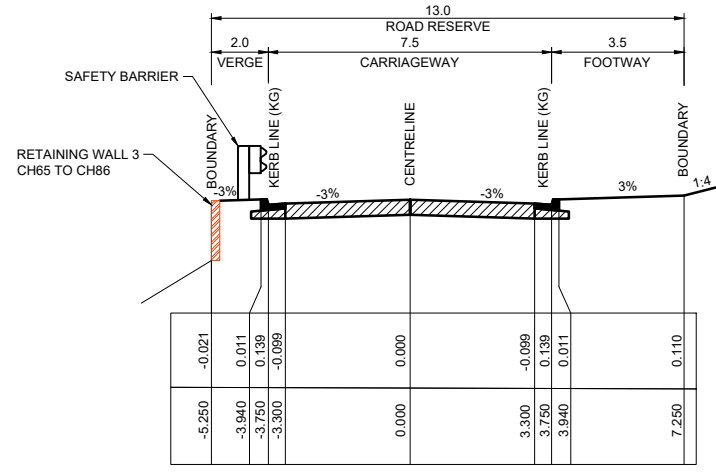
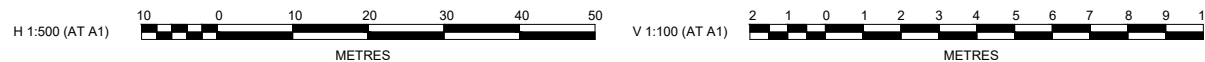
Plotted: 24 July 2017 3:59:53 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE24.dwg

CH 0m
CL OF GROSE VALE ROAD
RL 86.292m
CREST
CH 8.257
RL 86.551m

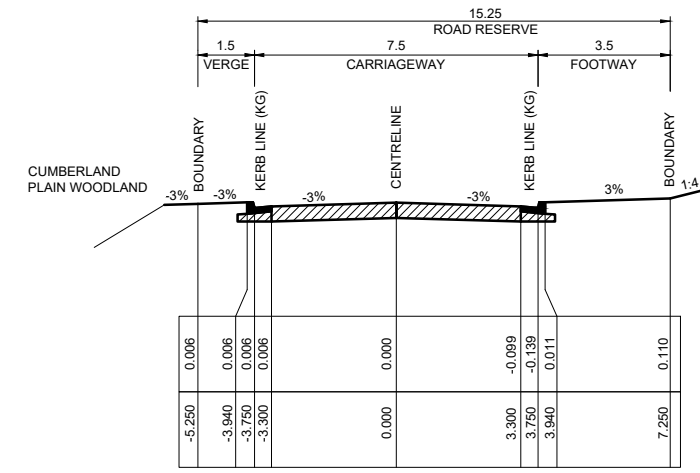


LONGITUDINAL SECTION ROAD BEL02
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

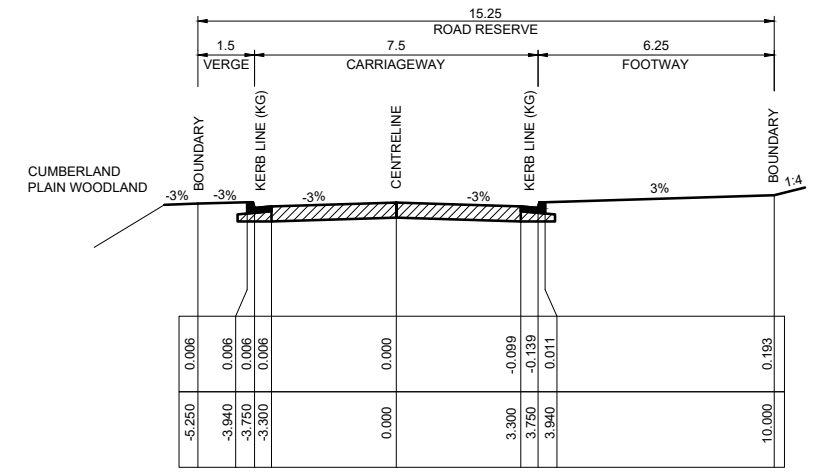
REVISION C
• BEL02 ROAD LONGITUDINAL SECTION AMENDED



TYPICAL CROSS SECTION ROAD BEL02 - SAFETY BARRIER
CHAINAGE 56.000 - 97.000
1:100 NATURAL



TYPICAL CROSS SECTION ROAD BEL02
CHAINAGE 17.413 - 56.000
CHAINAGE 97.000 - 129.000
1:100 NATURAL



TYPICAL CROSS SECTION ROAD BEL02
CHAINAGE 129.000 - 207.260
1:100 NATURAL

REFER TO ENGINEERING PLANS FOR SITE REGRADING

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

PAVEMENT NOTES (ROAD BEL2)
2x10⁵ESA (GEOTECHNICAL REPORT BY GEOTECHNIQUE, REF: 12261/14-AA-R2)
1. 50mm WEARING COURSE AC10 2x25mm
2. ONE COAT HOT BITUMEN FLUSH SEAL
3. 125mm DGB 20 BASE COURSE
4. 250mm SUB-BASE COURSE

CONSTRUCTION CERTIFICATE
Certificate No. 20130299C35
Date of Issue 31 July 2017
Issuing Officer [Signature]
Accreditation No. BPB0565
These plans/specifications form part of the certificate issued 31 July 2017

NO.	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

CLIENT: REDBANK NORTH RICHMOND
AZIMUTH: MSA
DATUM: AHD
ORIGIN:

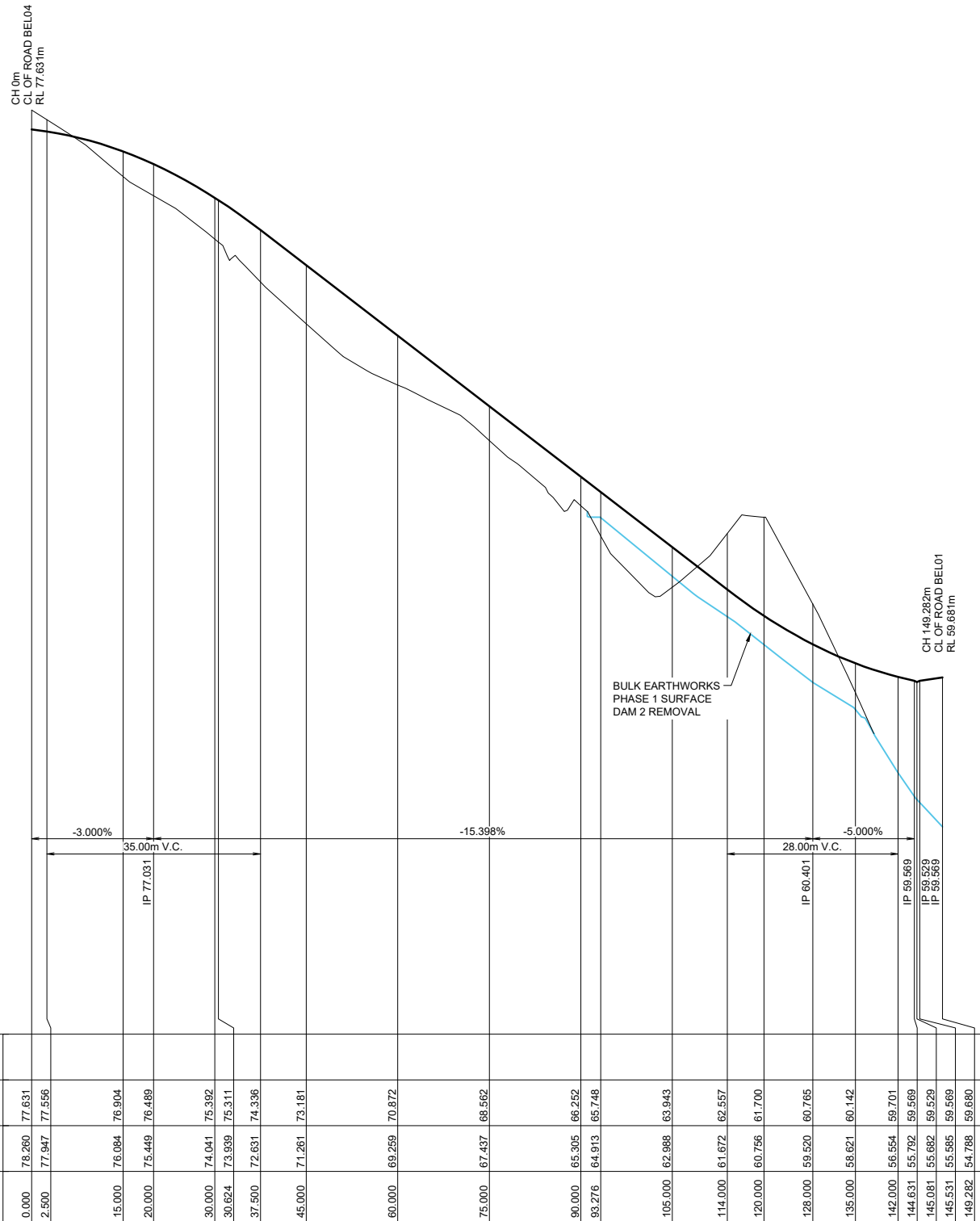
ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOND BELMONT - BULK EARTHWORKS
LONGITUDINAL SECTIONS
SHEET 4

PLAN No: 110185BEL/BE24 C
FILE No: 110185BELBE24
SHEET SIZE: A1 ORIGINAL

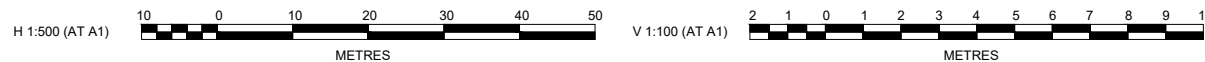
THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

Plotted: 24 July 2017 4:00:15 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE25.dwg



LONGITUDINAL SECTION ROAD BEL03
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

REVISION C
• BEL03 ROAD LONGITUDINAL SECTION AMENDED



AMENDMENT	DES	DRN	CKD	APR	DATE
C	MP	MG	RO	MS	24/07/17
B	MP	MG	MS	MS	27/09/16
A	MP	TG	RO	RO	22/07/16

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

AZIMUTH: MGA
DATUM: AHD
ORIGIN:

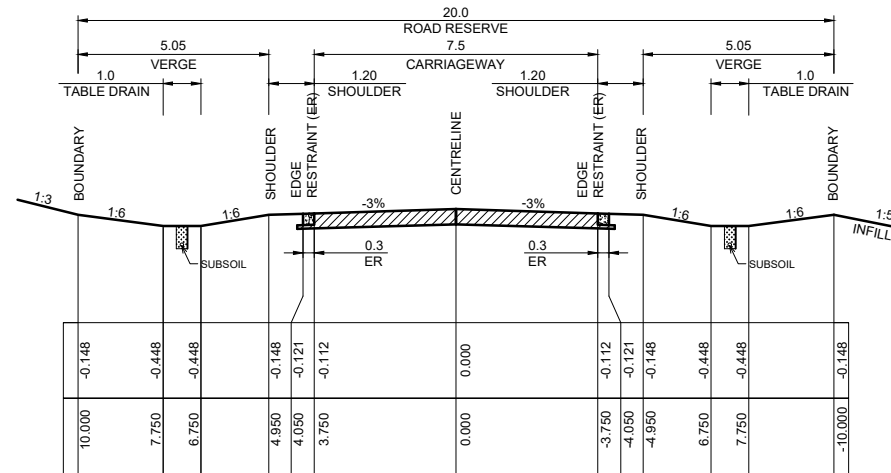


THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOND
BELMONT - BULK EARTHWORKS
LONGITUDINAL SECTIONS
SHEET 5

PLAN No: 110185BEL/BE25 C
FILE No: 110185BELBE25
SHEET SIZE: A1 ORIGINAL



TYPICAL CROSS SECTION - ROAD BEL03
1:100 NATURAL

REFER TO ENGINEERING PLANS FOR SITE REGRADING

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

PAVEMENT NOTES (ROAD BEL3)
5x10° ESA (GEOTECHNICAL REPORT BY GEOTECHNIQUE, REF: 12261/14-AA-R2)
1. 50mm WEARING COURSE AC10 2x25mm
2. ONE COAT HOT BITUMEN FLUSH SEAL
3. 125mm DGB 20 BASE COURSE
4. 200mm SUB-BASE COURSE

LEGEND
* REFER SITE REGRADING

CONSTRUCTION CERTIFICATE
Certificate No. 20130299C35
Date of Issue 31 July 2017
Issuing Officer [Signature]
Accreditation No. BPB0565
These plans/specifications form part of the certificate issued 31 July 2017

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPO565

These plans/specifications form part of the certificate issued 31 July 2017

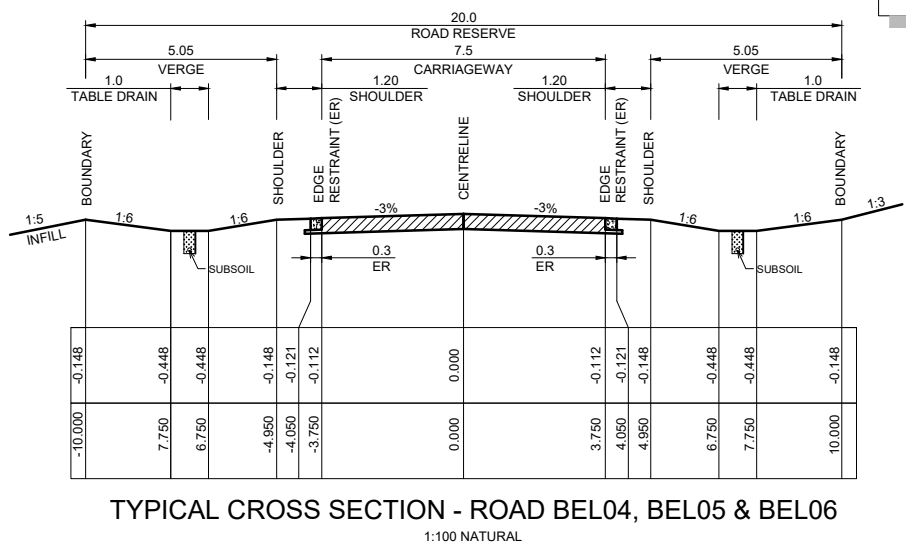
PAVEMENT NOTES (ROAD BEL4, BEL5 & BEL06)

5x10³ ESA (GEOTECHNICAL REPORT BY GEOTECHNIQUE, REF: 2261/14-AA-R2)

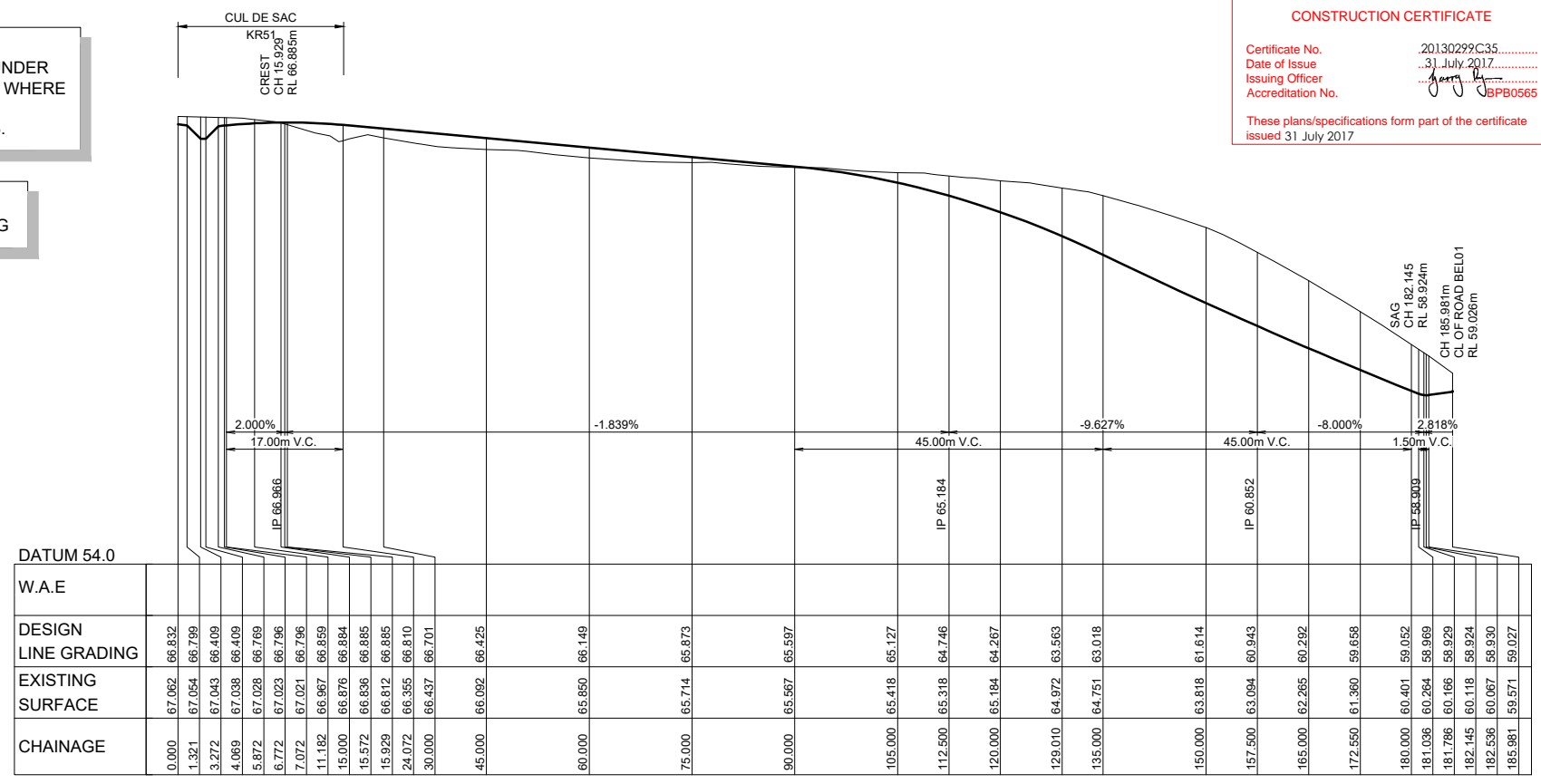
- 50mm WEARING COURSE AC10 2x25mm
- ONE COAT HOT BITUMEN FLUSH SEAL
- 125mm DGB 20 BASE COURSE
- 200mm SUB-BASE COURSE

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

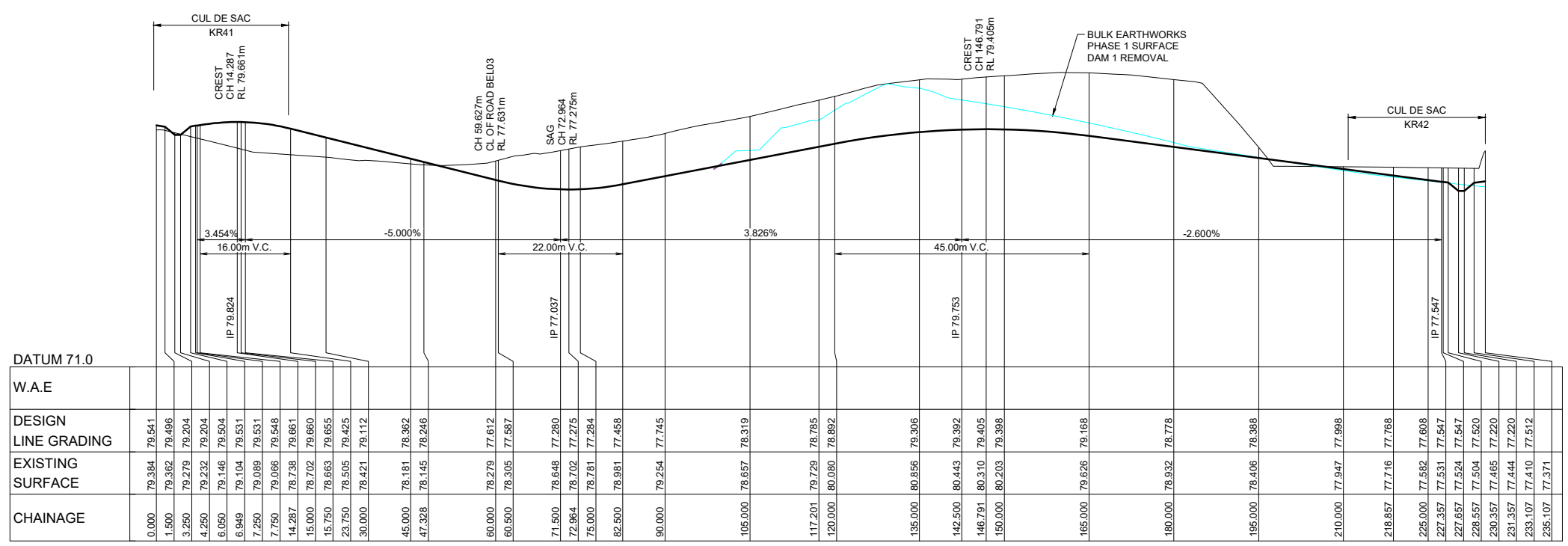
REFER TO ENGINEERING PLANS FOR SITE REGRADING



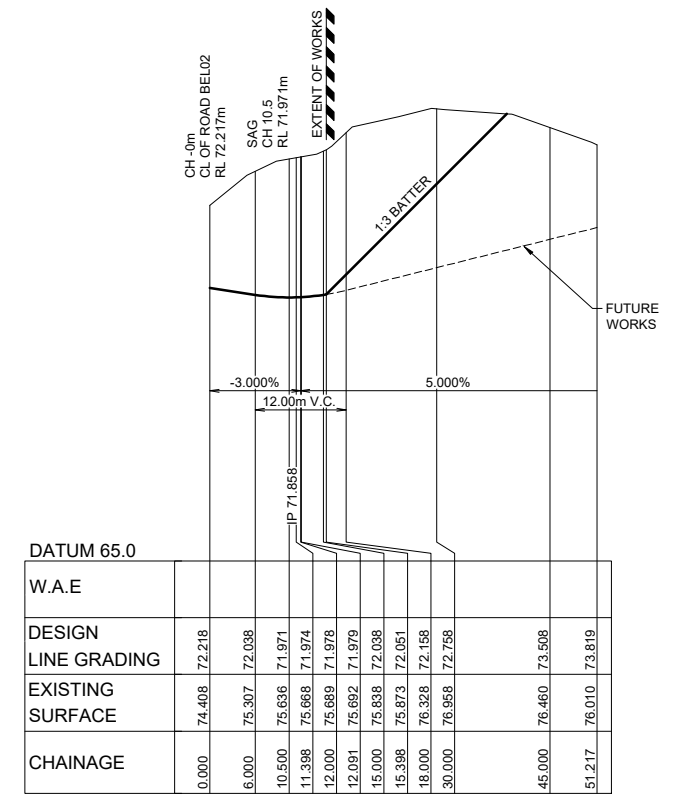
TYPICAL CROSS SECTION - ROAD BEL04, BEL05 & BEL06
1:100 NATURAL



LONGITUDINAL SECTION ROAD BEL05
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

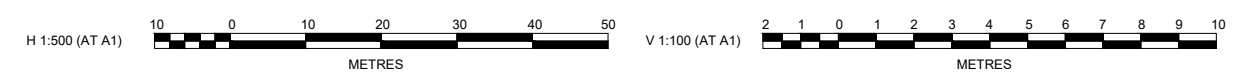


LONGITUDINAL SECTION ROAD BEL04
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



LONGITUDINAL SECTION ROAD BEL06
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

REVISION C
• BEL04 ROAD LONGITUDINAL SECTION AMENDED



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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

CLIENT: **REDBANK** NORTH RICHMOND

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

ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 LONGITUDINAL SECTIONS
 SHEET 6

PLAN No: 110185BEL/BE26 C
 FILE No: 110185BELBE26
 SHEET SIZE: A1 ORIGINAL

Plotted: 24 July 2017 4:00:36 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE26.dwg

C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

CONSTRUCTION CERTIFICATE

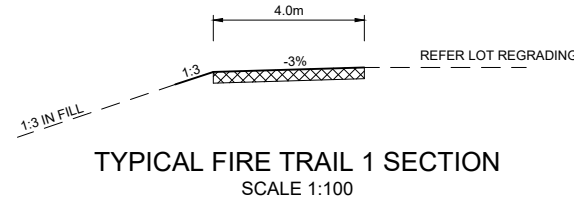
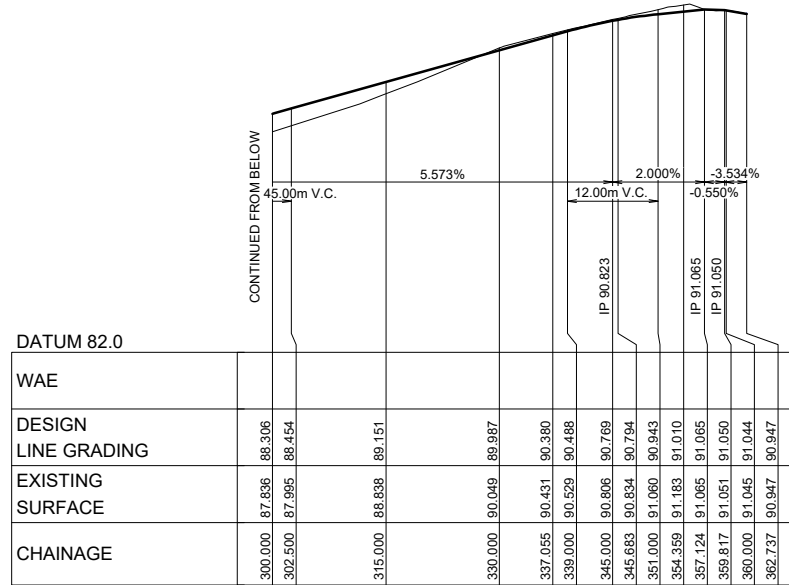
Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017

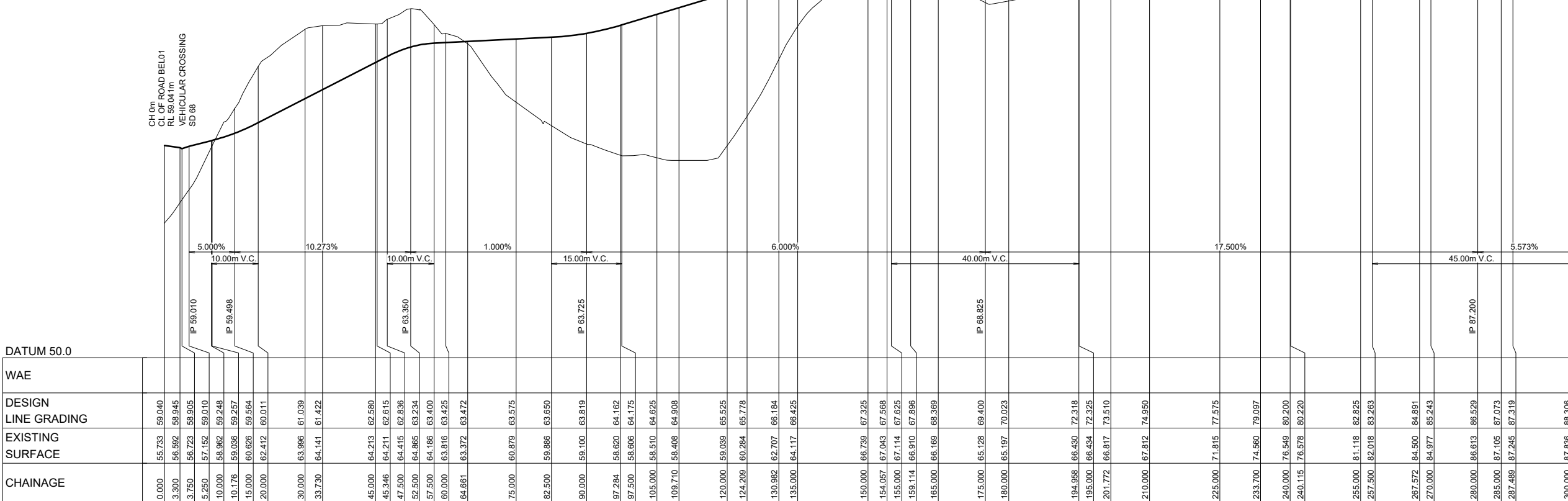
CH 362.731m
 CL OF GROSE VALE ROAD
 RL 90.946m

PAVEMENT NOTES (FIRE TRAIL)

- 1x10' ESA (GEOTECHNICAL REPORT BY GEOTECHNIQUE, REF: 12261/14-AA-R2)
 1. TWO COAT HOT BITUMEN FLUSH SEAL
 2. 125mm DGB 20 BASE COURSE
 3. 200mm SUB-BASE COURSE



LONGITUDINAL SECTION FIRE TRAIL 1
 HORIZONTAL SCALE 1:500
 VERTICAL SCALE 1:100



CHAINAGE	EXISTING SURFACE	DESIGN LINE GRADING	WAE
0.000	55.733	59.040	
3.300	56.592	59.945	
3.750	56.723	59.905	
5.250	57.152	59.010	
10.000	58.962	59.248	IP 59.010
10.176	59.036	59.257	IP 59.498
15.000	60.696	59.564	
20.000	62.412	60.011	
30.000	63.996	61.039	
33.730	64.141	61.422	
45.000	64.213	62.580	
45.346	64.211	62.615	
47.500	64.415	62.836	
52.500	64.885	63.234	IP 63.350
57.500	64.186	63.400	
60.000	63.816	63.425	
64.661	63.372	63.472	
75.000	60.879	63.575	
82.500	59.886	63.650	
90.000	59.100	63.819	IP 63.725
97.284	58.620	64.162	
97.500	58.606	64.175	
105.000	58.510	64.625	
109.710	58.408	64.908	
120.000	59.039	65.525	
124.209	60.284	65.778	
130.982	62.707	66.184	
135.000	64.117	66.425	
150.000	66.739	67.325	
154.057	67.043	67.588	
155.000	67.114	67.625	
159.114	66.910	67.896	
165.000	66.169	68.369	
175.000	65.128	69.400	
180.000	65.197	70.023	
194.958	66.430	72.318	
195.000	66.434	72.325	
201.772	66.817	73.510	
210.000	67.812	74.950	
225.000	71.815	77.575	
233.700	74.560	79.097	
240.000	76.549	80.200	
240.115	76.578	80.220	
255.000	81.118	82.825	
257.500	82.018	83.263	
267.572	84.500	84.891	
270.000	84.977	85.243	
280.000	86.613	86.529	IP 87.200
285.000	87.105	87.073	
287.489	87.245	87.319	
300.000	87.836	88.306	

REVISION C
 FIRE TRAIL 1 LONGITUDINAL SECTIONS AMENDED
 TYPICAL FIRE TRAIL 1 CROSS SECTION AMENDED



LONGITUDINAL SECTION FIRE TRAIL 1

CLIENT:

 AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 LONGITUDINAL SECTIONS
 SHEET 7

PLAN No: 110185BEL/BE27 **C**
 FILE No: 110185BELBE27
 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

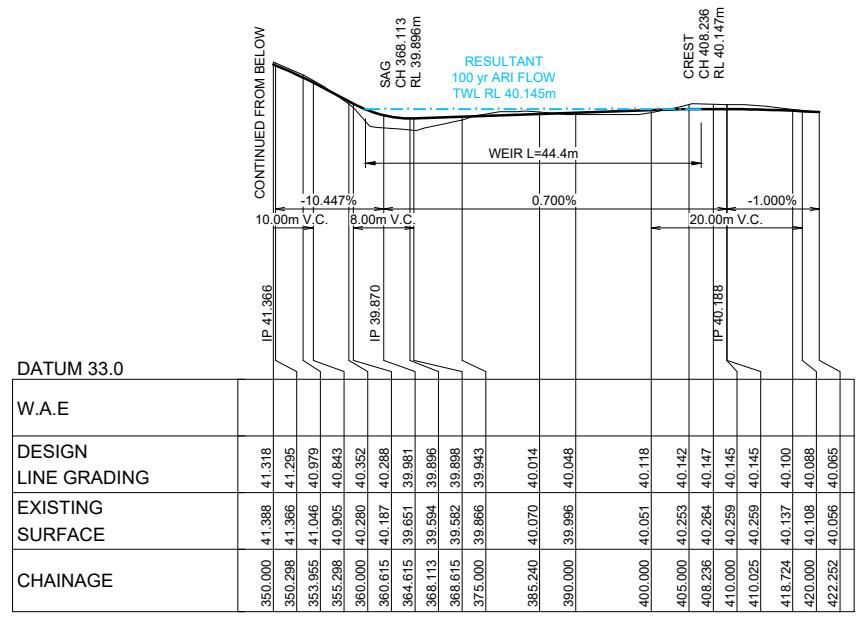
Plotted: 24 July 2017 4:00:57 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE27.dwg

NO	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUED FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

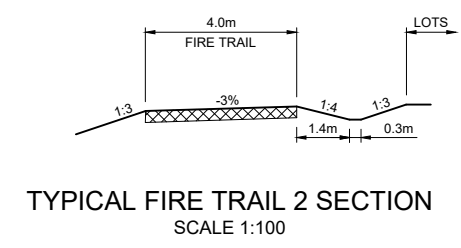
CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017



LONGITUDINAL SECTION FIRE TRAIL 2
 HORIZONTAL SCALE 1:500
 VERTICAL SCALE 1:100



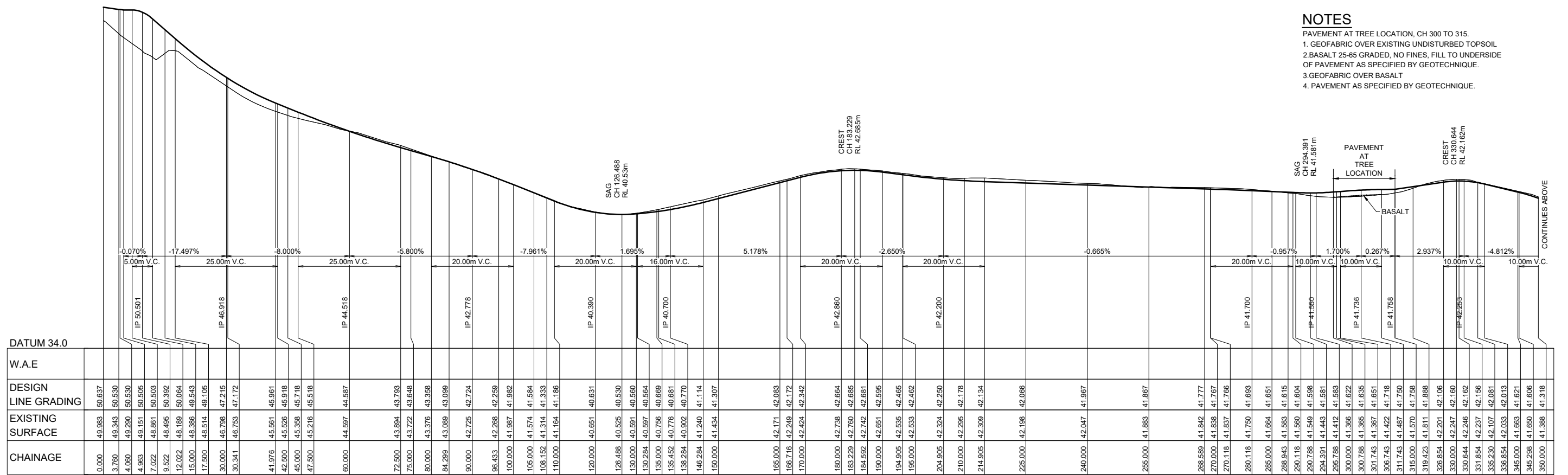
TYPICAL FIRE TRAIL 2 SECTION
 SCALE 1:100

PAVEMENT NOTES (FIRE TRAIL)
 1x10⁶ ESA (GEOTECHNICAL REPORT BY GEOTECHNIQUE, REF: 12261/14-AA-R2)
 1. TWO COAT HOT BITUMEN FLUSH SEAL
 2. 125mm DGB 20 BASE COURSE
 3. 200mm SUB-BASE COURSE

PAVEMENT NOTES (FIRE TRAIL 2 WEIR)
 1x10⁶ ESA (GEOTECHNICAL REPORT REF: 12261/14-AA-R2)
 1. 150mm REINFORCED CONCRETE WITH 2XF72, HEAVY BROOM FINISH. REFER STRUCTURAL DESIGN FOR DETAILS
 2. 200mm SUB-BASE COURSE CRUSHED SANDSTONE (DGS40)

NOTES
 PAVEMENT AT TREE LOCATION, CH 300 TO 315.
 1. GEOFABRIC OVER EXISTING UNDISTURBED TOPSOIL
 2. BASALT 25-65 GRADED, NO FINES, FILL TO UNDERSIDE OF PAVEMENT AS SPECIFIED BY GEOTECHNIQUE.
 3. GEOFABRIC OVER BASALT
 4. PAVEMENT AS SPECIFIED BY GEOTECHNIQUE.

CH 0m
 CL OF ROAD BELOW
 RL 50.637m



LONGITUDINAL SECTION FIRE TRAIL 2
 HORIZONTAL SCALE 1:500
 VERTICAL SCALE 1:100

REVISION F
 FIRE TRAIL 2 LONGITUDINAL SECTIONS AMENDED
 TYPICAL FIRE TRAIL 2 CROSS SECTION AMENDED



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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

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
 BELMONT - BULK EARTHWORKS
 LONGITUDINAL SECTIONS
 SHEET 8

PLAN No: 110185BEL/BE28 **C**
 FILE No: 110185BELBE28
 SHEET SIZE: A1 ORIGINAL

Plotted: 24 July 2017 4:01:20 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE28.dwg

DES	DRN	CKD	APR	DATE	
C	MP	MG	RO	MS	24/07/17
B	MP	MG	MS	MS	27/09/16
A	MP	TG	RO	RO	22/07/16

PRE-CIVIL WORKS COMMENCEMENT

REFER TO DRAWING 110185BELBE30 FOR CONTINUATION

LEGEND	
SEDIMENT FENCE	
PROTECTIVE FENCE TO CPW, RIPARIAN CORRIDOR AND UNDISTURBED LAND	
STAR PICKET / FLAGGING	
ATF FENCE	

NOTE:
REFER TO LANDSCAPE ARCHITECT PLANS FOR TREE PROTECTION DETAILS.

EXISTING KEYLINE CHANNEL & BANKS TO HAVE PROTECTION FENCE APPLIED PRIOR TO ANY COMMENCEMENT OF WORKS AND MAINTAINED SECURE FOR FULL DURATION OF WORKS. DO NOT DISTURB UNDER ANY CIRCUMSTANCE

CONTRACTOR TO KEEP OUTSIDE OF FLAGGED AREA AND OUTSIDE OF 10m WIDE AREA WHERE IAD & SEWER TO BE CONSTRUCTED OR 5m WIDE AREA WHERE IAD ONLY IS TO BE CONSTRUCTED

EXISTING FENCING TO BE MAINTAINED

FEDERALLY LISTED / CRITICALLY ENDANGERED CUMBERLAND PLAIN WOODLAND TO HAVE PROTECTION FENCE INSTALLED PROVIDED PRIOR TO ANY COMMENCEMENT OF WORKS AND MAINTAINED SECURE FOR FULL DURATION OF WORKS. DO NOT DISTURB UNDER ANY CIRCUMSTANCE

FULL WIDTH OF ACCESS ROAD CATTLE GRID (5m LONG)

PROVIDE SEALED ACCESS FROM EXISTING ROAD TO EXISTING PROPERTY BOUNDARY (25mm AC ON 150mm DG-B20)

PROTECTIVE FENCE TO BE APPLIED TO EXISTING KEYLINE CHANNEL TO REMAIN IN FUTURE OPEN SPACE

CIVIL / LANDSCAPE CONTRACTOR SITE COMPOUND, MATERIAL STOCKPILE, ALL VEHICLE / PLANT PARKING.

CONTRACTOR TO PLACE ATF 5m INTO REDBANK LAND

PEEL FARM

MIN 50m LONG, MIN 100mm DIA RECYCLED CONCRETE RUBBLE ACCESS

ACCESS ROAD 50m LONG DG20+ ONE COAT SEAL WITH WASHDOWN LAYBY WITH TEMP WATER TANK/PUMP/HOSE BY ALL DRIVERS

TWO LOCKABLE GATES, ONE FOR CONSTRUCTION ACCESS, AND OTHER FOR NRJV ACCESS TO 5m GAP BETWEEN ATF TO PEEL BOUNDARY

EXISTING FARM FENCE TO REMAIN INTACT, REPAIR ANY GAPS PRIOR TO WORKS COMMENCEMENT

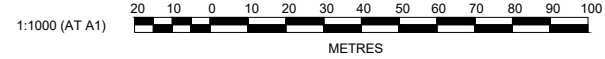
PHASE 1

1. PLACE PROTECTIVE FENCING
2. PLACE FLAGGING AREA FENCING
3. PLACE ATF AS INDICATED
4. CONSTRUCT ENTRY TO SITE AS INDICATED
5. PLACE PROTECTIVE FENCING TO KEYLINE CHANNEL AND BANKS

CONSTRUCTION CERTIFICATE	
Certificate No.	20130299C35
Date of Issue	31 July 2017
Issuing Officer	
Accreditation No.	BPB0565

These plans/specifications form part of the certificate issued 31 July 2017

REVISION C
• FIRE TRAIL 1 ALIGNMENT AMENDED



Plotted: 24 July 2017 4:01:37 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE29.dwg

REV	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

AZIMUTH: MGA
DATUM: AHD
ORIGIN:

CLIENT:

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

ISSUED FOR CONSTRUCTION APPROVAL

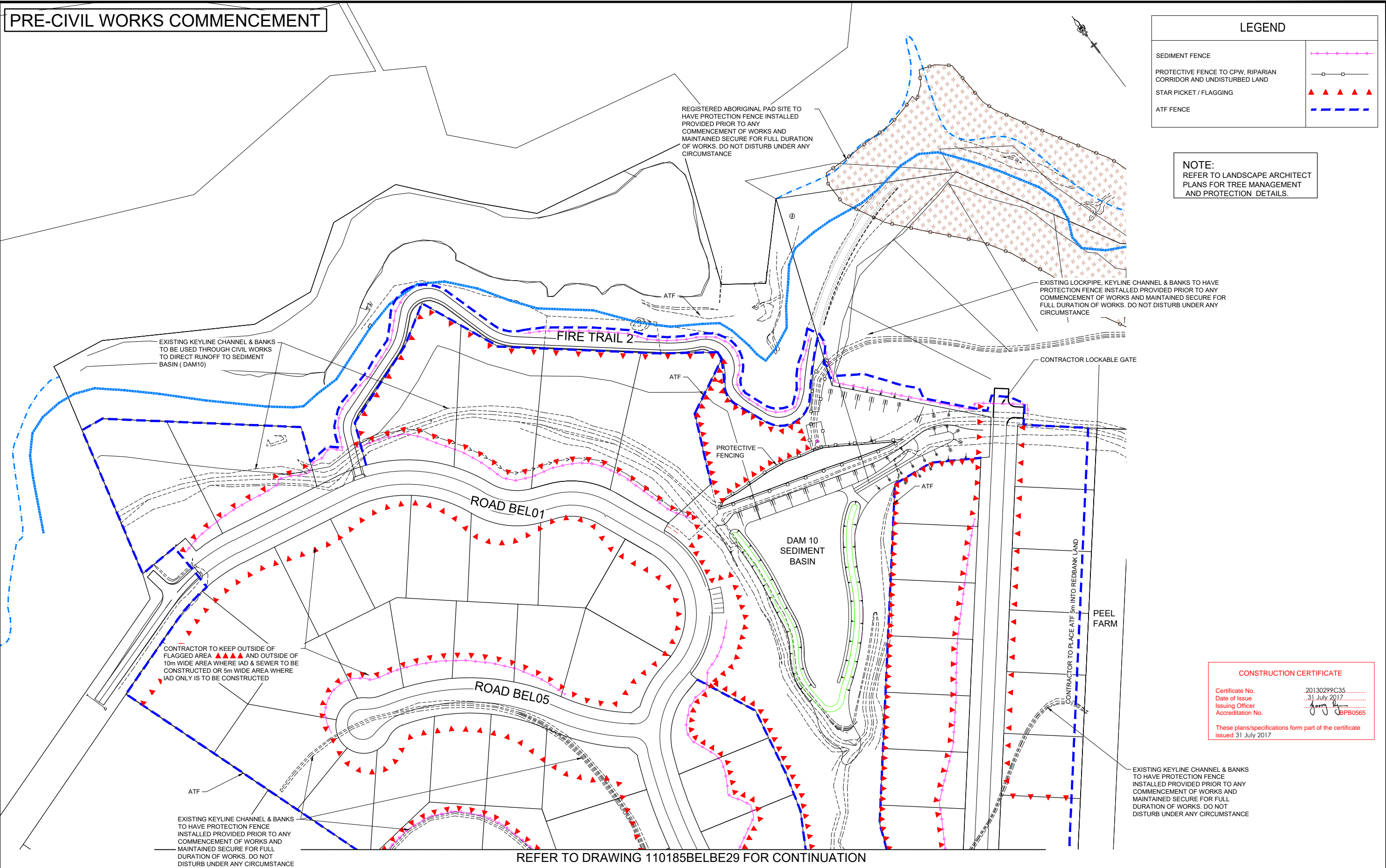
REDBANK, NORTH RICHMOND
BELMONT - BULK EARTHWORKS
SITE ESTABLISHMENT
SHEET 1

PLAN No:	110185BEL/BE29	C
FILE No:	110185BELBE29	
SHEET SIZE:	A1 ORIGINAL	

PRE-CIVIL WORKS COMMENCEMENT

LEGEND	
SEDIMENT FENCE	
PROTECTIVE FENCE TO CPW, RIPARIAN CORRIDOR AND UNDISTURBED LAND	
STAR PICKET / FLAGGING	
ATF FENCE	

NOTE:
REFER TO LANDSCAPE ARCHITECT PLANS FOR TREE MANAGEMENT AND PROTECTION DETAILS.

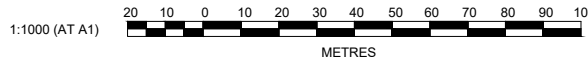


CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer *Jerry B*
 Accreditation No. BPP0565

These plans/specifications form part of the certificate issued 31 July 2017

REVISION C
 • ATF FENCE & SEDIMENT FENCE AMENDED TO SUIT BATTER INTERFACE



NO.	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

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
 BELMONT - BULK EARTHWORKS
 SITE ESTABLISHMENT
 SHEET 2

PLAN No: 110185BEL/BE30 **C**
 FILE No: 110185BELBE30
 SHEET SIZE: A1 ORIGINAL

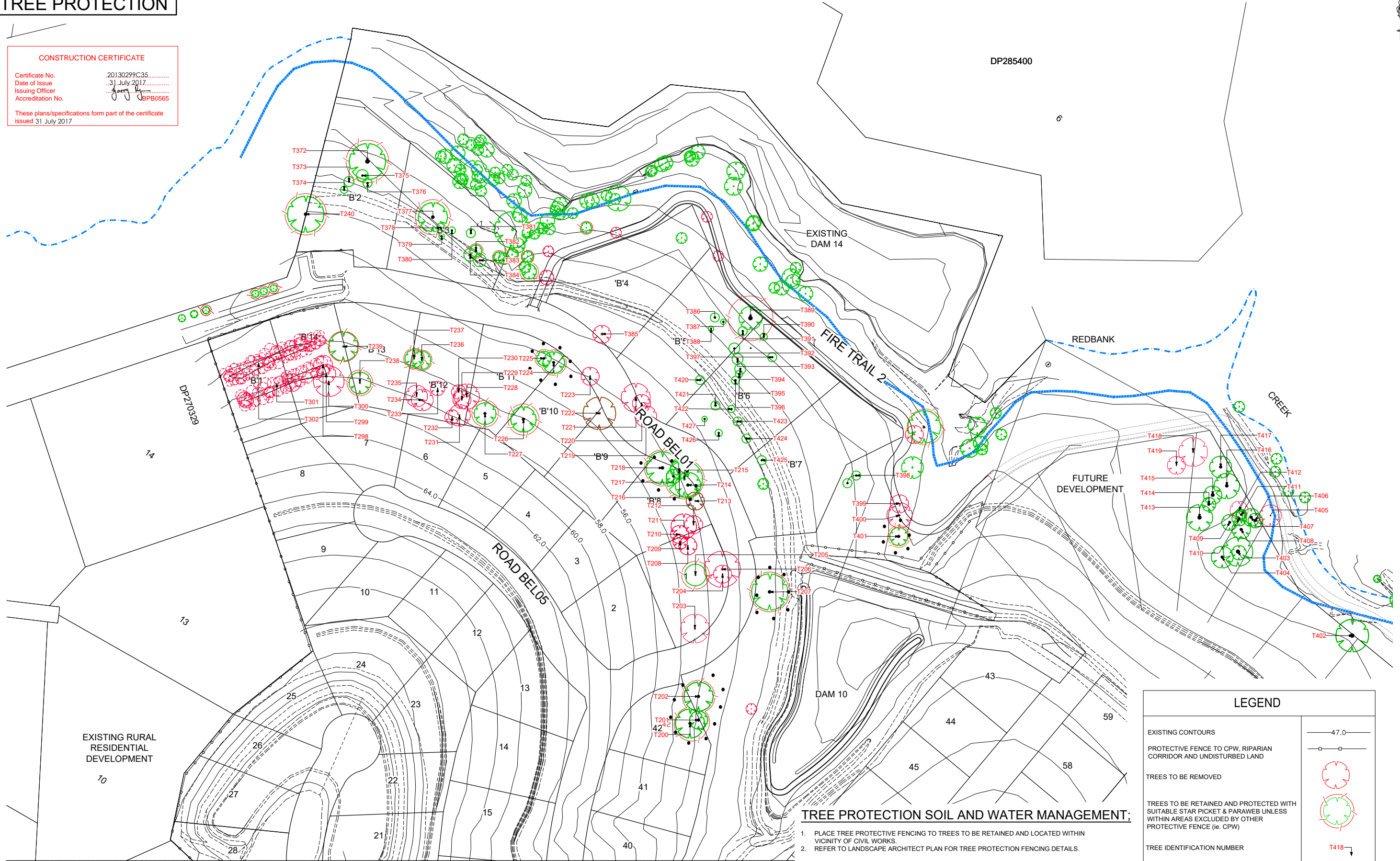
Plotted: 24 July 2017 4:01:55 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE30.dwg

TREE PROTECTION

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017



LEGEND

EXISTING CONTOURS	—47.0—
PROTECTIVE FENCE TO CPW, RIPARIAN CORRIDOR AND UNDISTURBED LAND	—o—o—o—
TREES TO BE REMOVED	
TREES TO BE RETAINED AND PROTECTED WITH SUITABLE STAR PICKET & PARAWEB UNLESS WITHIN AREAS EXCLUDED BY OTHER PROTECTIVE FENCE (ie. CPW)	
TREE IDENTIFICATION NUMBER	T418

TREE PROTECTION SOIL AND WATER MANAGEMENT;

1. PLACE TREE PROTECTIVE FENCING TO TREES TO BE RETAINED AND LOCATED WITHIN VICINITY OF CIVIL WORKS.
2. REFER TO LANDSCAPE ARCHITECT PLAN FOR TREE PROTECTION FENCING DETAILS.

REFER TO DRAWING 110185BELBE32 FOR CONTINUATION

REVISION C
 • FIRE TRAIL 2 ALIGNMENT AMENDED



REV	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

CLIENT:

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

ISSUED FOR CONSTRUCTION APPROVAL

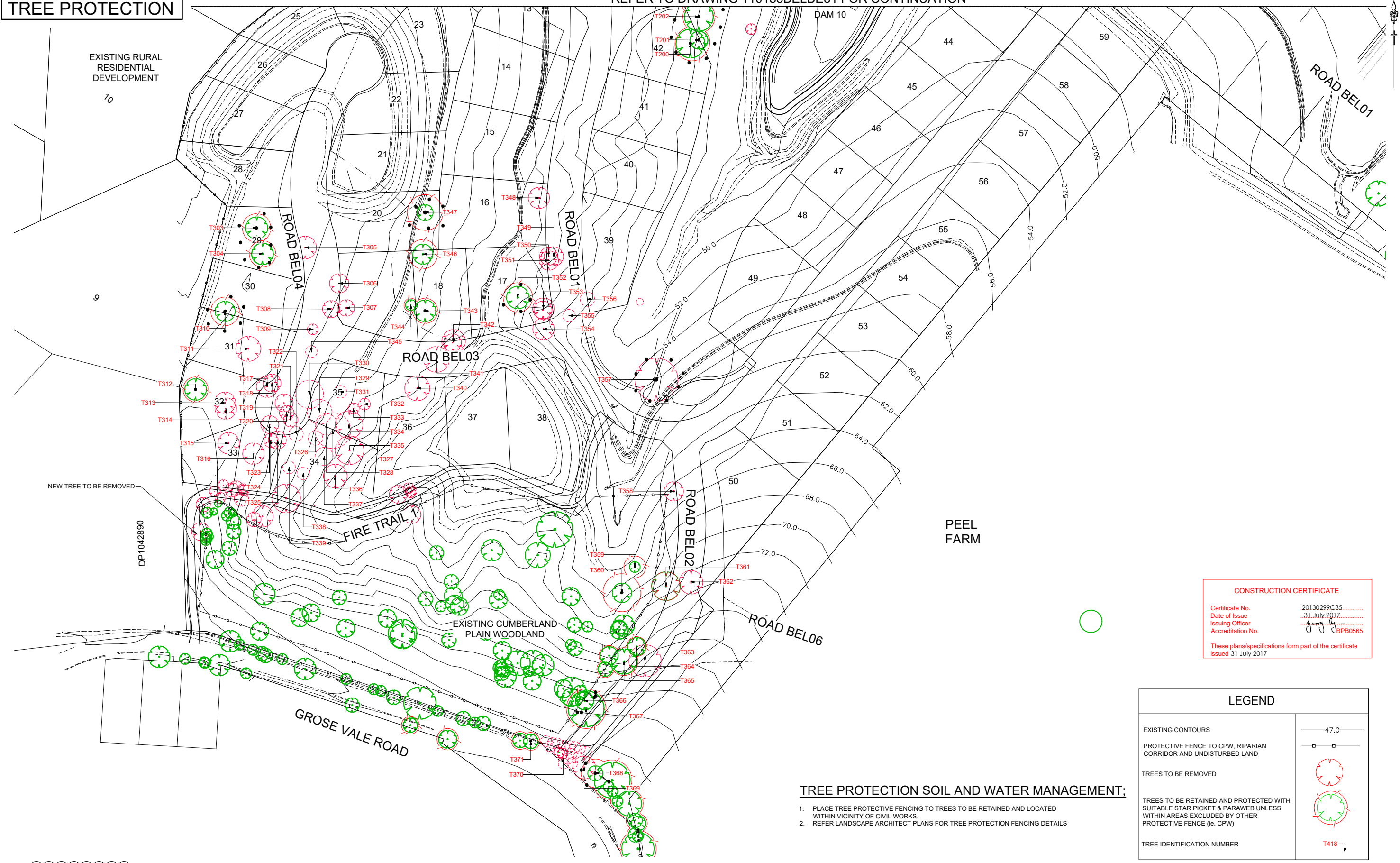
REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 TREE PROTECTION AND REMOVAL PLAN
 SHEET 1

PLAN No: 110185BEL/BE31 **C**
 FILE No: 110185BELBE31
 SHEET SIZE: A1 ORIGINAL

Plotted: 24 July 2017 4:02:14 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE31.dwg

TREE PROTECTION

REFER TO DRAWING 110185BELBE31 FOR CONTINUATION



CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017

LEGEND

EXISTING CONTOURS ——— 47.0 ———

PROTECTIVE FENCE TO CPW, RIPARIAN CORRIDOR AND UNDISTURBED LAND [Symbol]

TREES TO BE REMOVED [Red star symbol]

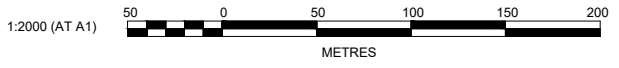
TREES TO BE RETAINED AND PROTECTED WITH SUITABLE STAR PICKET & PARAWEB UNLESS WITHIN AREAS EXCLUDED BY OTHER PROTECTIVE FENCE (ie. CPW) [Green star symbol]

TREE IDENTIFICATION NUMBER T418 [Arrow]

TREE PROTECTION SOIL AND WATER MANAGEMENT:

1. PLACE TREE PROTECTIVE FENCING TO TREES TO BE RETAINED AND LOCATED WITHIN VICINITY OF CIVIL WORKS.
2. REFER LANDSCAPE ARCHITECT PLANS FOR TREE PROTECTION FENCING DETAILS

REVISION C
 • FIRE TRAILS 1 ALIGNMENT AMENDED
 • NEW TREE TO BE REMOVED



Plotted: 24 July 2017 4:02:31 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE32.dwg

REV	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

CLIENT: **REDBANK** NORTH RICHMOND

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

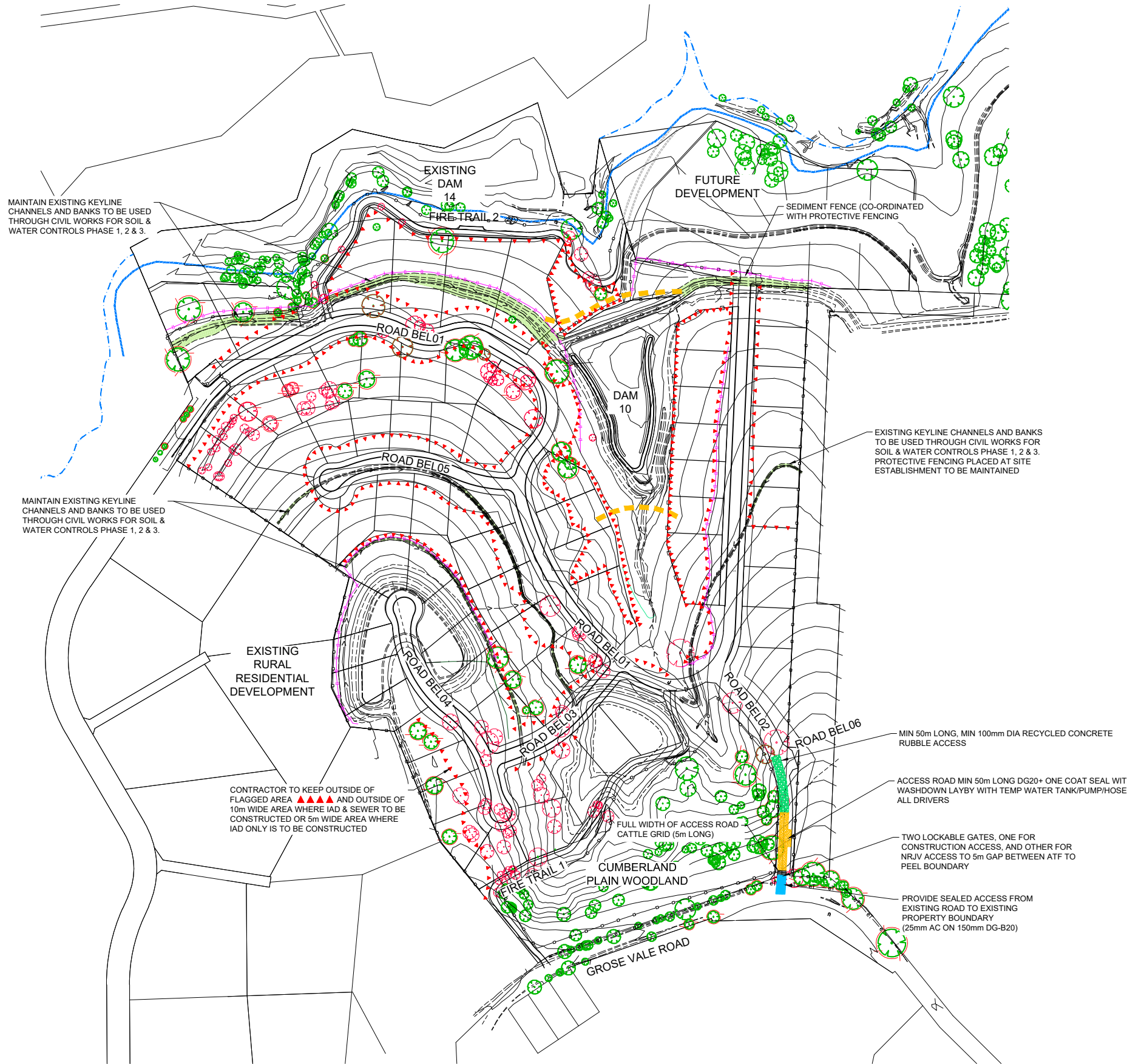
THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 TREE PROTECTION AND REMOVAL PLAN
 SHEET 2

PLAN No: 110185BEL/BE32 **C**
 FILE No: 110185BELBE32
 SHEET SIZE: A1 ORIGINAL

PHASE 1 - PRE-CIVIL WORKS COMMENCEMENT



MAINTAIN EXISTING KEYLINE CHANNELS AND BANKS TO BE USED THROUGH CIVIL WORKS FOR SOIL & WATER CONTROLS PHASE 1, 2 & 3.

MAINTAIN EXISTING KEYLINE CHANNELS AND BANKS TO BE USED THROUGH CIVIL WORKS FOR SOIL & WATER CONTROLS PHASE 1, 2 & 3.

EXISTING RURAL RESIDENTIAL DEVELOPMENT

CONTRACTOR TO KEEP OUTSIDE OF FLAGGED AREA ▲▲▲ AND OUTSIDE OF 10m WIDE AREA WHERE IAD & SEWER TO BE CONSTRUCTED OR 5m WIDE AREA WHERE IAD ONLY IS TO BE CONSTRUCTED

EXISTING KEYLINE CHANNELS AND BANKS TO BE USED THROUGH CIVIL WORKS FOR SOIL & WATER CONTROLS PHASE 1, 2 & 3. PROTECTIVE FENCING PLACED AT SITE ESTABLISHMENT TO BE MAINTAINED

MIN 50m LONG, MIN 100mm DIA RECYCLED CONCRETE RUBBLE ACCESS

ACCESS ROAD MIN 50m LONG DG20+ ONE COAT SEAL WITH WASHDOWN LAYBY WITH TEMP WATER TANK/PUMP/HOSE BY ALL DRIVERS

TWO LOCKABLE GATES, ONE FOR CONSTRUCTION ACCESS, AND OTHER FOR NRJV ACCESS TO 5m GAP BETWEEN ATF TO PEEL BOUNDARY

PROVIDE SEALED ACCESS FROM EXISTING ROAD TO EXISTING PROPERTY BOUNDARY (25mm AC ON 150mm DG-B20)

LEGEND	
CATCH DRAIN	
SEDIMENT FENCE	
EXISTING CONTOURS	
PROTECTIVE FENCE TO CPW, RIPARIAN CORRIDOR AND UNDISTURBED LAND	
STAR PICKET / FLAGGING	
TREES TO BE REMOVED	
TREES TO BE RETAINED AND PROTECTED WITH SUITABLE STAR PICKET & PARAWEB UNLESS WITHIN AREAS EXCLUDED BY OTHER PROTECTIVE FENCE (ie. CPW)	
STRAW BALE FILTER	

PHASE 1 SOIL AND WATER MANAGEMENT:

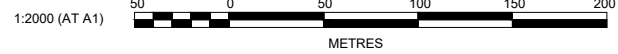
- ENSURE ALL CATCH DRAINS ARE CONNECTED AND DRAIN TO DAM 10
- MAINTAIN ALL PROTECTIVE FENCES AND SITE ACCESS AS INSTALLED ON PRELIMINARY PHASE

NOTE:
REFER TO LANDSCAPE ARCHITECT PLANS FOR TREE PROTECTION DETAILS.

CONSTRUCTION CERTIFICATE	
Certificate No.	20130299C35
Date of Issue	31 July 2017
Issuing Officer	
Accreditation No.	BPB0565

These plans/specifications form part of the certificate issued 31 July 2017

REVISION C
• FIRE TRAIL 1 & 2 ALIGNMENT AMENDED



NO.	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	RO	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

AZIMUTH: MGA
DATUM: AHD
ORIGIN:

CLIENT:

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

ISSUED FOR CONSTRUCTION APPROVAL

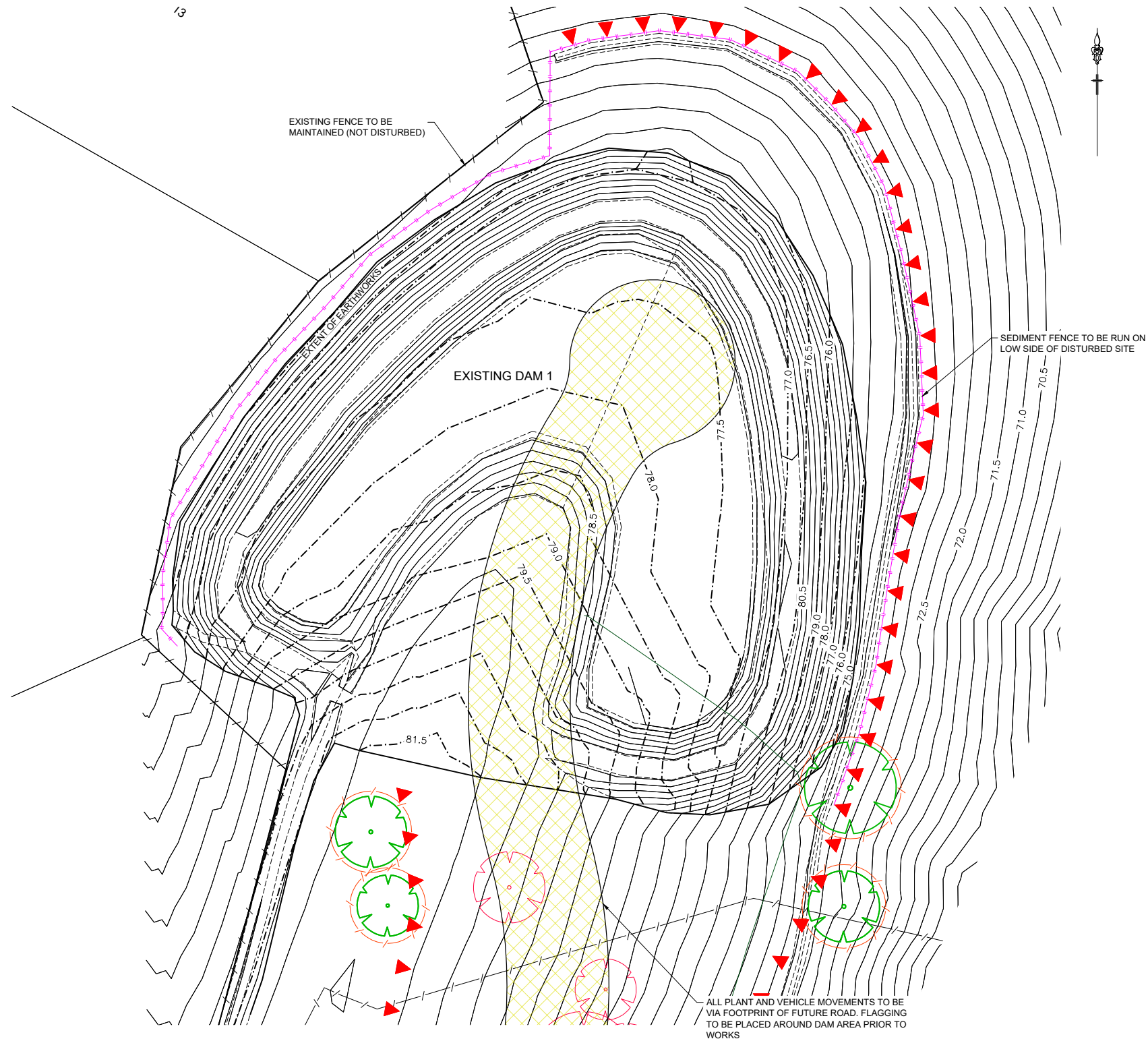
REDBANK, NORTH RICHMOND
BELMONT - BULK EARTHWORKS
SOIL & WATER MANAGEMENT PLAN
PHASE 1 - OVERALL SITE

PLAN No:	110185BEL/BE33	C
FILE No:	110185BELBE33	
SHEET SIZE:	A1 ORIGINAL	

PHASE 1A - DAM DECOMMISSIONING - DAM 1

DAM DECOMMISSIONING - DAM 1 PROCESS (REF DAM DECOMMISSIONING & HERITAGE IMPACT STATEMENT)

1. INSTALL PUMP AND FLOATING INLET & OUTLET HOSE WITH DISCHARGE (OUTLET) POINT TO BE DIRECTED ACROSS LANDFORM CONTOUR AND INTO AREA OF THICK EXISTING GRASS WITHIN 10m OF DAM 1 DOWNSTREAM FACE WITH OUTLET TO CAGE WRAPPED IN SILT FENCE
2. START ARCHIVAL RECORDING OF DAM AT THIS POINT. ALL RECORDING TO BE UNDERTAKEN WITH REFERENCE TO NSW HERITAGE OFFICE ARCHIVAL RECORDING GUIDELINE, DATED JUNE 1998. ALL SIGNIFICANT INFRASTRUCTURE (INCLUDING BUT NOT LIMITED TO VALVES, PIPES, STRUCTURES TO BE CAREFULLY REMOVED IN AS LARGE SECTIONS AS POSSIBLE, LABELLED AND STORED IN A SECURE CONTAINER ONSITE FOR SEPARATE ASSESSMENT BY HERITAGE CONSULTANT.
3. CHECK MIN DEPTH OF WATER IN DAM. IF OVER 1m TURN ON PUMP UNTIL MIN DEPTH OF 1m ACHIEVED. IF AT OR UNDER 1m MIN DEPTH CONTACT ECOLOGIST (MOLSTEN) TO BE PRESENT FOR IDENTIFYING AND RELOCATION FAUNA TO DAM 10.
4. ALL SOIL AND EROSION CONTROLS TO BE CHECKED IN PLACE AND FUNCTIONAL BY CONTRACTOR / SUPERINTENDENT AND PRINCIPLE. SEE SOIL & EROSION CONTROLS - PHASE 1.
5. BULK EARTHWORKS APPROVED TO START BY ECOLOGIST / HERITAGE / CONTAMINATION CONSULTANT TO REMOVE 1m OF DAM WALL.
6. ARCHIVAL PHOTO RECORDING.
7. BULK EARTHWORKS TO REMOVE A FURTHER 1m.
8. ARCHIVAL PHOTO RECORDING.
9. REPEAT (7) & (8) UNTIL LANDFORM DESIGN CONTOURS ACHIEVED, WITH AT ALL TIMES UNEXPECTED FINDS PROTOCOL TO BE COMPLIED WITH FOR EUROPEAN AND ECOLOGY.
 - a. PIPE / VALVE / DAM CORE FOR EXAMPLE, MATERIAL DISCOVERED.
 - b. STOP ALL WORK. SUPERVISOR CONTACTED, WITHIN 1 HOUR.
 - c. SITE SUPERVISOR TO NOTIFY CONTRACTOR SYSTEMS OFFICER AND PM, WITHIN 1 HOUR.
 - d. IF ECOLOGICAL SUPERINTENDENT / PRINCIPLE / CONSULTANT TO INSPECT SAME DAY AND IF NECESSARY FIND RECOVERED AND RELOCATED.
 - e. IF HERITAGE SUPERINTENDENT / PRINCIPLE / CONSULTANT TO INSPECT WITH 24 HOURS AND IF NECESSARY FIND EXTRACTED, LABELLED AND STORED.
 - f. ALL OTHER PROTOCOLS AS PER CONTRACTOR "EMERGENCY AND INCIDENT PREPAREDNESS AND RESPONSE - ON SITE" REQUIREMENTS
10. FINAL ARCHIVAL PHOTO RECORDING.
11. INSPECTION BY ECOLOGIST / HERITAGE / CONTAMINATION CONSULTANT.



LEGEND	
STAR PICKET / FLAGGING	▲ ▲ ▲ ▲ ▲
SEDIMENT FENCE	— — — — —

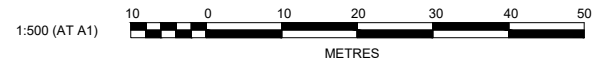
CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer *[Signature]*
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017

- NOTES**
1. DAM 1 REMOVAL SHOULD BE UNDERTAKEN FOLLOWING THE TASKS AS PER "DAM No.1 REMOVAL FOR BELMONT PRECINCT AT 98 GROSE VALE ROAD, NORTH RICHMOND" REPORT PREPARED BY BIO ENGINEERED SOLUTIONS, DATED 28TH JUNE 2015, REFERENCE 1573DAM 1, ISSUE B.

Plotted: 24 July 2017 4:03:06 PM File Name: J:\10185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE34.dwg



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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

CLIENT:

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

ISSUED FOR CONSTRUCTION APPROVAL

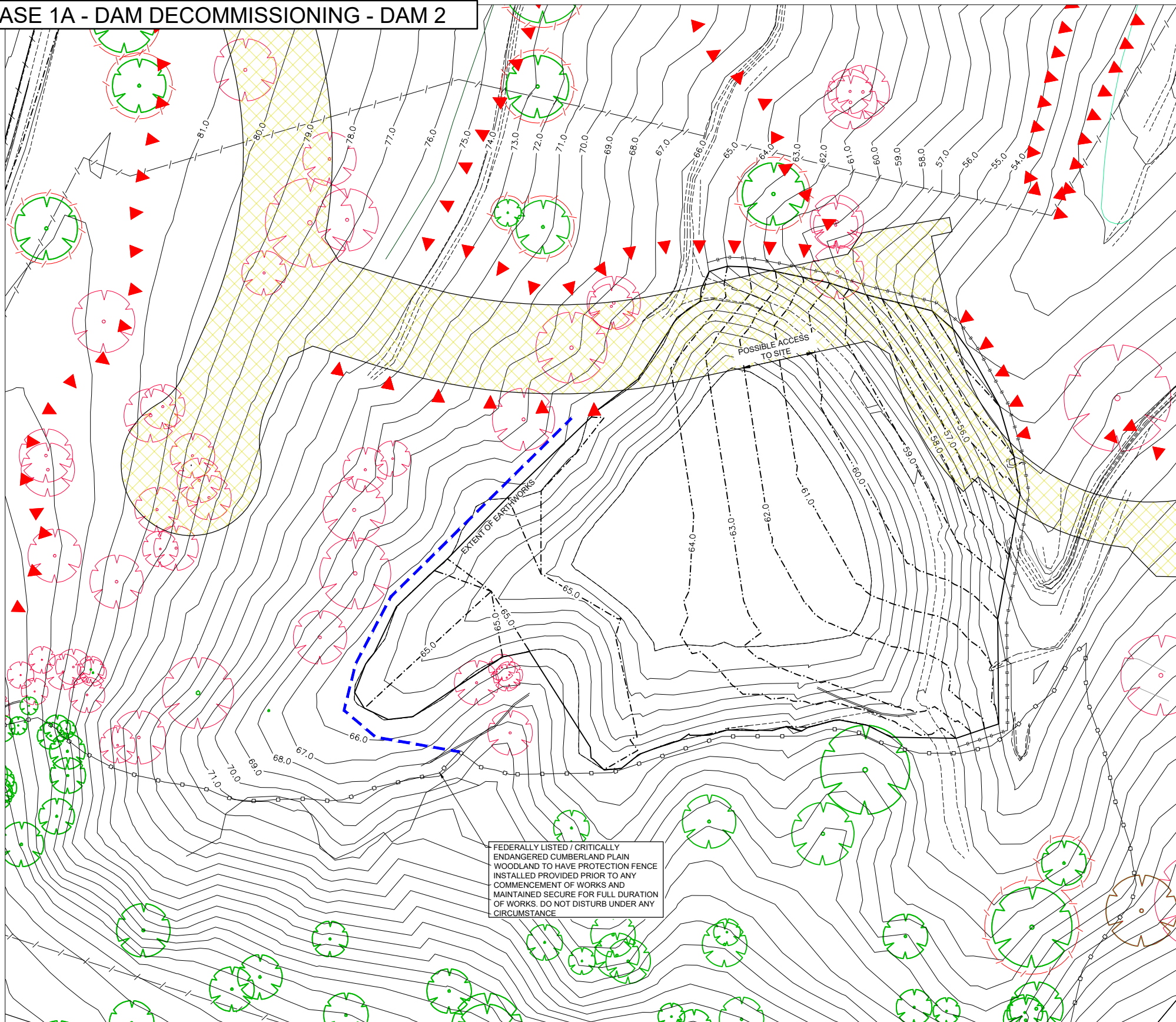
**REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS**

SOIL & WATER MANAGEMENT PLAN
 PHASE 1A - DAM 1 REMOVAL

PLAN No: 110185BEL/BE34	B
FILE No: 110185BELBE34	
SHEET SIZE: A1 ORIGINAL	

	DES	DRN	CKD	APR	DATE
B	MP	MG	MS	MS	27/09/16
A	MP	TG	RO	RO	22/07/16
	AMENDMENT				

PHASE 1A - DAM DECOMMISSIONING - DAM 2



DAM DECOMMISSIONING - DAM 1 PROCESS (REF DAM DECOMMISSIONING & HERITAGE IMPACT STATEMENT)

1. INSTALL PUMP AND FLOATING INLET & OUTLET HOSE WITH DISCHARGE (OUTLET) POINT TO BE DIRECTED ACROSS LANDFORM CONTOUR AND INTO AREA OF THICK EXISTING GRASS WITHIN 10m OF DAM 1 DOWNSTREAM FACE WITH OUTLET TO CAGE WRAPPED IN SILT FENCE
2. START ARCHIVAL RECORDING OF DAM AT THIS POINT. ALL RECORDING TO BE UNDERTAKEN WITH REFERENCE TO NSW HERITAGE OFFICE ARCHIVAL RECORDING GUIDELINE, DATED JUNE 1998. ALL SIGNIFICANT INFRASTRUCTURE (INCLUDING BUT NOT LIMITED TO VALVES, PIPES, STRUCTURES TO BE CAREFULLY REMOVED IN AS LARGE SECTIONS AS POSSIBLE, LABELLED AND STORED IN A SECURE CONTAINER ONSITE FOR SEPARATE ASSESSMENT BY HERITAGE CONSULTANT.
3. CHECK MIN DEPTH OF WATER IN DAM. IF OVER 1m TURN ON PUMP UNTIL MIN DEPTH OF 1m ACHIEVED. IF AT OR UNDER 1m MIN DEPTH CONTACT ECOLOGIST (MOLSTEN) TO BE PRESENT FOR IDENTIFYING AND RELOCATION FAUNA TO DAM 10.
4. ALL SOIL AND EROSION CONTROLS TO BE CHECKED IN PLACE AND FUNCTIONAL BY CONTRACTOR / SUPERINTENDENT AND PRINCIPLE. SEE SOIL & EROSION CONTROLS - PHASE 1.
5. BULK EARTHWORKS APPROVED TO START BY ECOLOGIST / HERITAGE / CONTAMINATION CONSULTANT TO REMOVE 1m OF DAM WALL.
6. ARCHIVAL PHOTO RECORDING.
7. BULK EARTHWORKS TO REMOVE A FURTHER 1m.
8. ARCHIVAL PHOTO RECORDING.
9. REPEAT (7) & (8) UNTIL LANDFORM DESIGN CONTOURS ACHIEVED, WITH AT ALL TIMES UNEXPECTED FINDS PROTOCOL TO BE COMPLIED WITH FOR EUROPEAN AND ECOLOGY.
 - a. PIPE / VALVE / DAM CORE FOR EXAMPLE, MATERIAL DISCOVERED.
 - b. STOP ALL WORK. SUPERVISOR CONTACTED, WITHIN 1 HOUR.
 - c. SITE SUPERVISOR TO NOTIFY CONTRACTOR SYSTEMS OFFICER AND PM, WITHIN 1 HOUR.
 - d. IF ECOLOGICAL SUPERINTENDENT / PRINCIPLE / CONSULTANT TO INSPECT SAME DAY AND IF NECESSARY FIND RECOVERED AND RELOCATED.
 - e. IF HERITAGE SUPERINTENDENT / PRINCIPLE / CONSULTANT TO INSPECT WITH 24 HOURS AND IF NECESSARY FIND EXTRACTED, LABELLED AND STORED.
 - f. ALL OTHER PROTOCOLS AS PER CONTRACTOR 'EMERGENCY AND INCIDENT PREPAREDNESS AND RESPONSE - ON SITE' REQUIREMENTS
10. FINAL ARCHIVAL PHOTO RECORDING.
11. INSPECTION BY ECOLOGIST / HERITAGE / CONTAMINATION CONSULTANT.

LEGEND	
STAR PICKET / FLAGGING	
SILT FENCE	
ATF FENCE	
PROTECTIVE FENCE TO CPW, RIPARIAN CORRIDOR AND UNDISTURBED LAND	

NOTES

1. DAM 2 REMOVAL SHOULD BE UNDERTAKEN FOLLOWING THE TASKS AS PER "DAM DECOMMISSIONING IMPACT ASSESSMENT DAM 2 (DA12) - 99 GROSE VALE ROAD, NORTH RICHMOND" REPORT PREPARED BY BIO ENGINEERED SOLUTIONS, DATED 28TH JUNE 2015, REFERENCE 1573DAM 2, ISSUE B.

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer *[Signature]*
 Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017

Plotted: 24 July 2017 4:03:23 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BEL BE35.dwg



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

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:



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

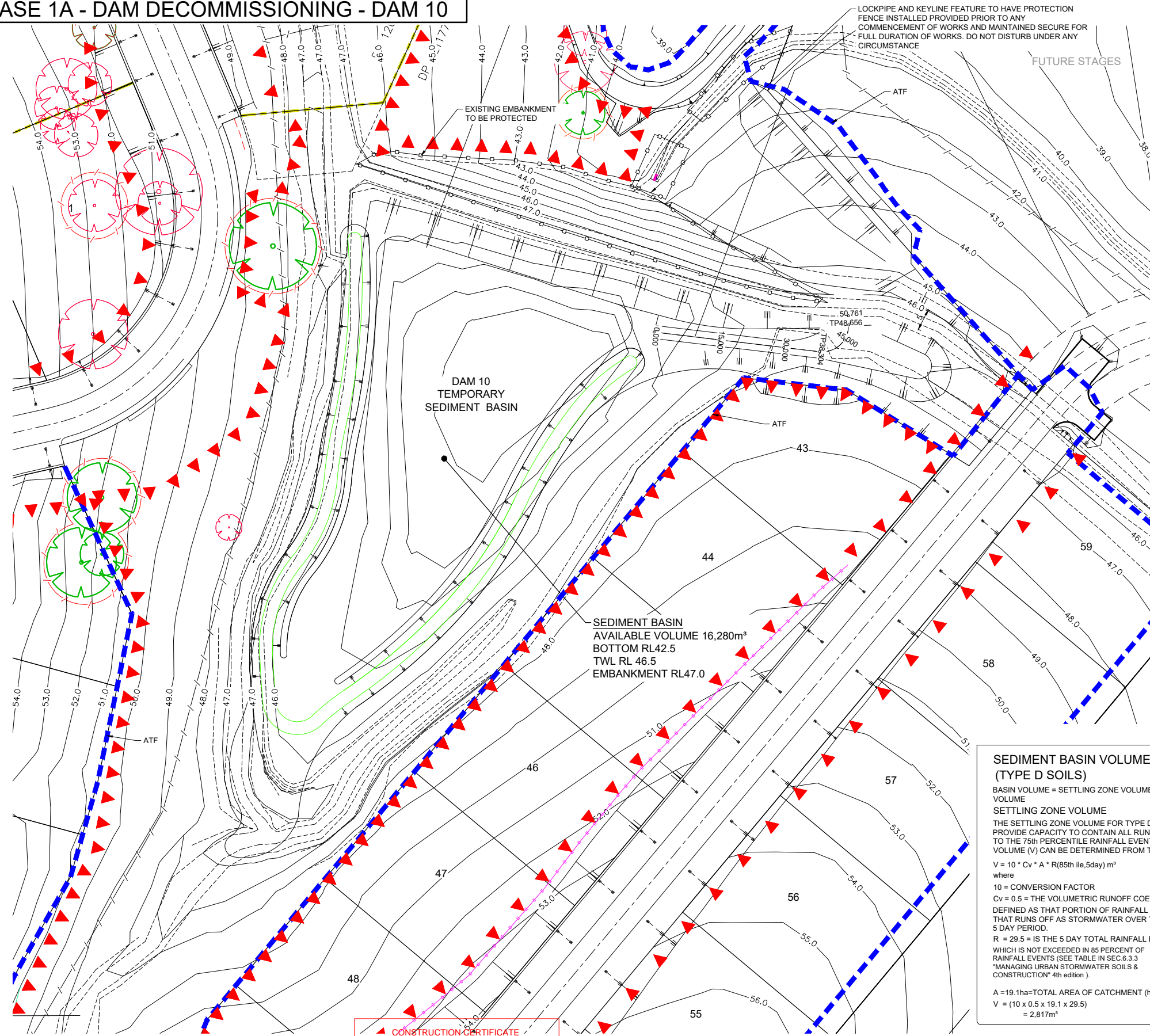
ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 SOIL & WATER MANAGEMENT PLAN
 PHASE 1A - DAM 2 REMOVAL

PLAN No: 110185BEL/BE35 **B**
 FILE No: 110185BELBE35
 SHEET SIZE: A1 ORIGINAL

REV	DESCRIPTION	DES	DRN	CKD	APR	DATE
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

PHASE 1A - DAM DECOMMISSIONING - DAM 10



DAM DECOMMISSIONING - DAM 1 PROCESS (REF DAM DECOMMISSIONING & HERITAGE IMPACT STATEMENT)

1. INSTALL PUMP AND FLOATING INLET & OUTLET HOSE WITH DISCHARGE (OUTLET) POINT TO BE DIRECTED ACROSS LANDFORM CONTOUR AND INTO AREA OF THICK EXISTING GRASS WITHIN 10m OF DAM 1 DOWNSTREAM FACE WITH OUTLET TO CAGE WRAPPED IN SEDIMENT FENCE
2. START ARCHIVAL RECORDING OF DAM AT THIS POINT. ALL RECORDING TO BE UNDERTAKEN WITH REFERENCE TO NSW HERITAGE OFFICE ARCHIVAL RECORDING GUIDELINE, DATED JUNE 1998. ALL SIGNIFICANT INFRASTRUCTURE (INCLUDING BUT NOT LIMITED TO VALVES, PIPES, STRUCTURES) TO BE CAREFULLY REMOVED IN AS LARGE SECTIONS AS POSSIBLE, LABELLED AND STORED IN A SECURE CONTAINER ONSITE FOR SEPARATE ASSESSMENT BY HERITAGE CONSULTANT.
3. CHECK MIN DEPTH OF WATER IN DAM. IF OVER 1m TURN ON PUMP UNTIL MIN DEPTH OF 1m ACHIEVED. IF AT OR UNDER 1m MIN DEPTH CONTACT ECOLOGIST (MOLSTEN) TO BE PRESENT FOR IDENTIFYING AND RELOCATION FAUNA TO DAM 10.
4. ALL SOIL AND EROSION CONTROLS TO BE CHECKED IN PLACE AND FUNCTIONAL BY CONTRACTOR / SUPERINTENDENT AND PRINCIPLE. SEE SOIL & EROSION CONTROLS - PHASE 1.
5. BULK EARTHWORKS APPROVED TO START BY ECOLOGIST / HERITAGE / CONTAMINATION CONSULTANT TO REMOVE 1m OF DAM WALL.
6. ARCHIVAL PHOTO RECORDING.
7. BULK EARTHWORKS TO REMOVE A FURTHER 1m.
8. ARCHIVAL PHOTO RECORDING.
9. REPEAT (7) & (8) UNTIL LANDFORM DESIGN CONTOURS ACHIEVED, WITH AT ALL TIMES UNEXPECTED FINDS PROTOCOL TO BE COMPLIED WITH FOR EUROPEAN AND ECOLOGY.
 - a. PIPE / VALVE / DAM CORE FOR EXAMPLE, MATERIAL DISCOVERED.
 - b. STOP ALL WORK. SUPERVISOR CONTACTED, WITHIN 1 HOUR.
 - c. SITE SUPERVISOR TO NOTIFY CONTRACTOR SYSTEMS OFFICER AND PM, WITHIN 1 HOUR.
 - d. IF ECOLOGICAL SUPERINTENDENT / PRINCIPLE / CONSULTANT TO INSPECT SAME DAY AND IF NECESSARY FIND RECOVERED AND RELOCATED.
 - e. IF HERITAGE SUPERINTENDENT / PRINCIPLE / CONSULTANT TO INSPECT WITH 24 HOURS AND IF NECESSARY FIND EXTRACTED, LABELLED AND STORED.
 - f. ALL OTHER PROTOCOLS AS PER CONTRACTOR 'EMERGENCY AND INCIDENT PREPAREDNESS AND RESPONSE - ON SITE' REQUIREMENTS
10. FINAL ARCHIVAL PHOTO RECORDING.
11. INSPECTION BY ECOLOGIST / HERITAGE / CONTAMINATION CONSULTANT.

LEGEND

STAR PICKET / FLAGGING	
SEDIMENT FENCE	
ATF FENCE	
PROTECTIVE FENCE TO CPW, RIPARIAN CORRIDOR AND UNDISTURBED LAND	

SEDIMENT STORAGE ZONE VOLUME

THE SEDIMENT STORAGE ZONE VOLUME CAN BE CALCULATED AS BEING EQUAL TO THE AVERAGE 2 MONTH SOIL LOSS FROM THE DISTURBED AREAS OF THE CATCHMENT. THIS VOLUME (V) IS DETERMINED BY THE REVISED UNIVERSAL SOIL LOSS EQUATION (RUSLE):

$$V = 0.12 \cdot A \cdot (R \cdot K \cdot L_s \cdot P \cdot C) / 1.3 \text{ m}^3$$

where
 0.12 = A FACTOR CONVERTING ANNUAL ESTIMATED SOIL LOSS TO THE 2 MONTH SOIL LOSS
 R = 2.500 = RUSLE R FACTOR
 K = 0.059 = RUSLE K FACTOR
 L_s = RUSLE L_s FACTOR
 P = 1.3 = RUSLE P FACTOR
 C = 1 = RUSLE C FACTOR
 1.3 = A FACTOR TO CONVERT TONNES TO CUBIC METRES BASED ON A TYPICAL DENSITY OF SATURATED SEDIMENT OF 1.3

A = 6.93 = THE DISTURBED AREA (ha)
 L_s = 4.08
 V = 0.12 x 6.93 x (2500 x 0.059 x 4.08 x 1.3 x 1) / 1.3 = 500m³

APPENDIX A "MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION" 4th edition.

SEDIMENT BASIN VOLUME REQUIRED FOR 50% SETTLEMENTS ZONE = 2,817m³ + 1,409m³
V = 4,226 m³

SEDIMENT BASIN VOLUME CALCULATIONS (TYPE D SOILS)

BASIN VOLUME = SETTLING ZONE VOLUME + SEDIMENT STORAGE ZONE VOLUME

SETTLING ZONE VOLUME

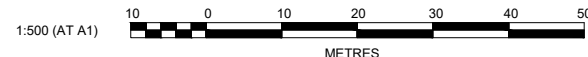
THE SETTLING ZONE VOLUME FOR TYPE D SOILS IS CALCULATED TO PROVIDE CAPACITY TO CONTAIN ALL RUNOFF EXPECTED FROM UP TO THE 75th PERCENTILE RAINFALL EVENT. THE SETTLING ZONE VOLUME (V) CAN BE DETERMINED FROM THE FOLLOWING:

$$V = 10 \cdot C_v \cdot A \cdot R(85th \text{ ile}, 5day) \text{ m}^3$$

where
 10 = CONVERSION FACTOR
 C_v = 0.5 = THE VOLUMETRIC RUNOFF COEFFICIENT, DEFINED AS THAT PORTION OF RAINFALL THAT RUNS OFF AS STORMWATER OVER THE 5 DAY PERIOD.
 R = 29.5 = IS THE 5 DAY TOTAL RAINFALL DEPTH (mm) WHICH IS NOT EXCEEDED IN 85 PERCENT OF RAINFALL EVENTS (SEE TABLE IN SEC 6.3.3 "MANAGING URBAN STORMWATER SOILS & CONSTRUCTION" 4th edition).
 A = 19.1ha = TOTAL AREA OF CATCHMENT (ha)
 V = (10 x 0.5 x 19.1 x 29.5) = 2,817m³

NOTE:
 REFER TO LANDSCAPE ARCHITECT PLANS FOR TREE PROTECTION DETAILS.

CONSTRUCTION CERTIFICATE
 Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. 3BPB0565
 These plans/specifications form part of the certificate issued 31 July 2017



REVISION C
 DAM 10 SURFACE AMENDED

C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL AMENDMENT	MP	TG	RO	RO	22/07/16
		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 jwp@jwprince.com.au

CLIENT: **REDBANK** NORTH RICHMOND
 AZIMUTH: MGA
 DATUM: AHD
 ORIGIN: THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

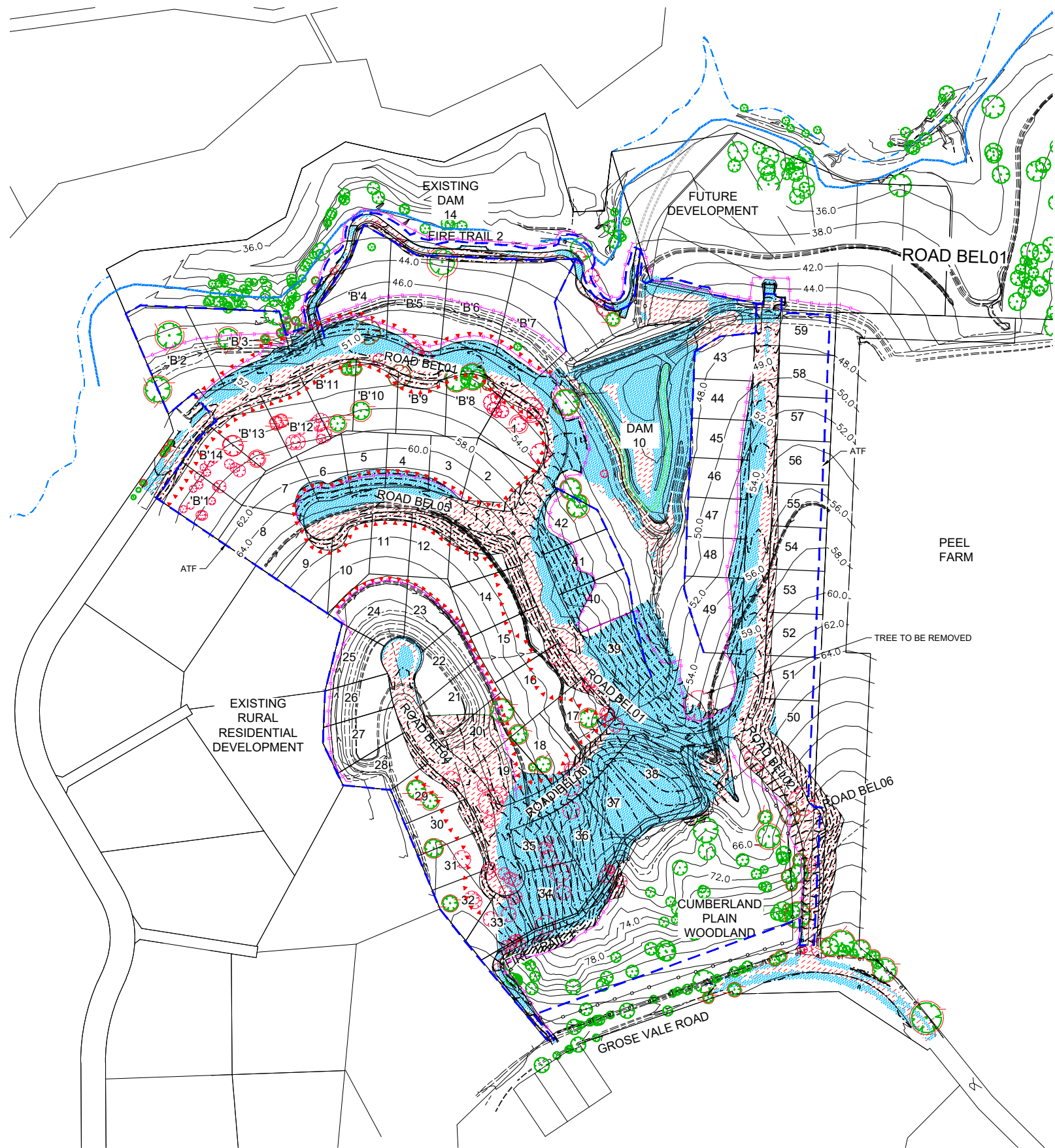
ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOND BELMONT - BULK EARTHWORKS
 SOIL & WATER MANAGEMENT PLAN
 PHASE 1A - DAM 10 DECOMMISSIONING

PLAN No: **110185BEL/BE36 C**
 FILE No: 110185BELBE36
 SHEET SIZE: A1 ORIGINAL

Plotted: 24 July 2017 4:03:40 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE36.dwg

PHASE 2 BULK EARTHWORKS



LEGEND	
SEDIMENT FENCE	
EXISTING CONTOURS	
ATF FENCE	
PROTECTIVE FENCE TO CPW, RIPARIAN CORRIDOR AND UNDISTURBED LAND	
STAR PICKET / FLAGGING	
TREES TO BE REMOVED	
TREES TO BE RETAINED AND PROTECTED WITH SUITABLE STAR PICKET & PARAWEB UNLESS WITHIN AREAS EXCLUDED BY OTHER PROTECTIVE FENCE (ie. CPW)	
SITE CUT	
SITE FILL	

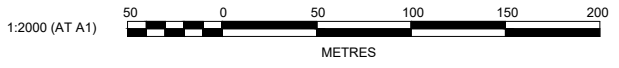
PHASE 2 SOIL AND WATER MANAGEMENT;

1. MAINTAIN PROTECTIVE FENCING TO CPW, RIPARIAN CORRIDOR AND LAND TO BE UNDISTURBED.
2. MAINTAIN DAM 10 SEDIMENT BASIN.
3. MAINTAIN TREE PROTECTIVE FENCING.
4. ENSURE ALL CATCH DRAINS ARE CONNECTED AND DRAIN TO DAM 10
5. MAINTAIN SEDIMENT FENCE

NOTE:
REFER TO LANDSCAPE ARCHITECT PLANS FOR TREE PROTECTION DETAILS.

Plotted: 24 July 2017 4:04:00 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE37.dwg

REVISION C	
•	DESIGN SURFACE AMENDED
•	FIRE TRAILS 1 & 2 ALIGNMENT AMENDED
•	TREE REMOVED
•	CUT/FILL HATCH AMENDED



CONSTRUCTION CERTIFICATE	
Certificate No.	20130299C35
Date of Issue	31 July 2017
Issuing Officer	<i>Joey By</i>
Accreditation No.	BPB0565
These plans/specifications form part of the certificate issued 31 July 2017	

REV	ISSUED FOR CONSTRUCTION APPROVAL	DES	DRN	CKD	APR	DATE
C	ISSUE FOR CONSTRUCTION APPROVAL	MP	MG	RO	MS	24/07/17
B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

CLIENT:

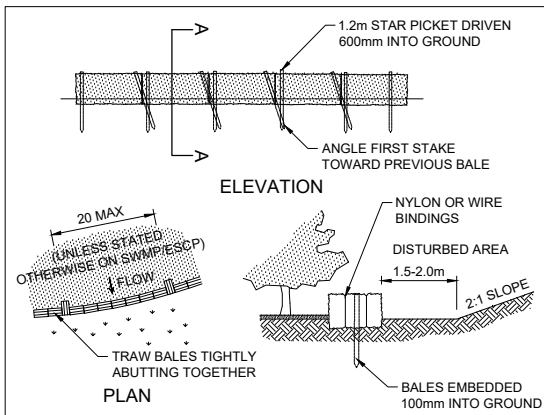
THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

ISSUED FOR CONSTRUCTION APPROVAL

REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 SOIL & WATER MANAGEMENT PLAN
 PHASE 2 BULK EARTHWORKS

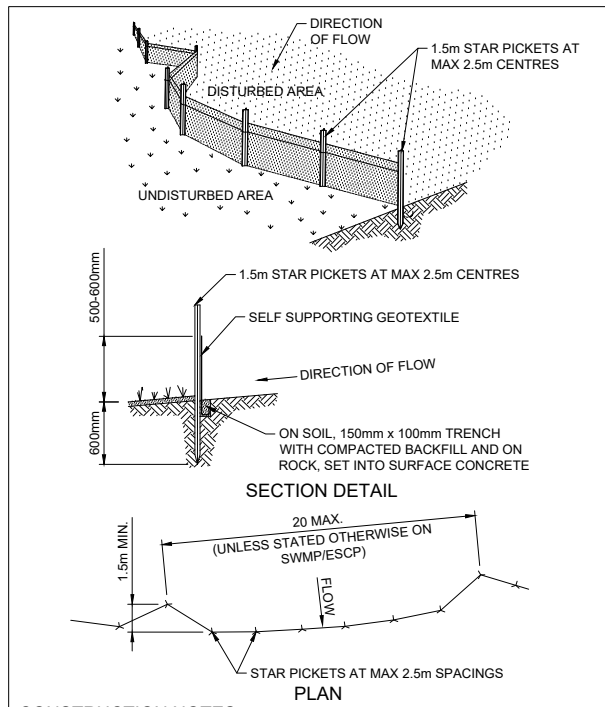
PLAN No:	110185BEL/BE37	C
FILE No:	110185BELBE37	
SHEET SIZE:	A1 ORIGINAL	

Plotted: 24 July 2017 4:04:11 PM File Name: J:\10185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE38.dwg



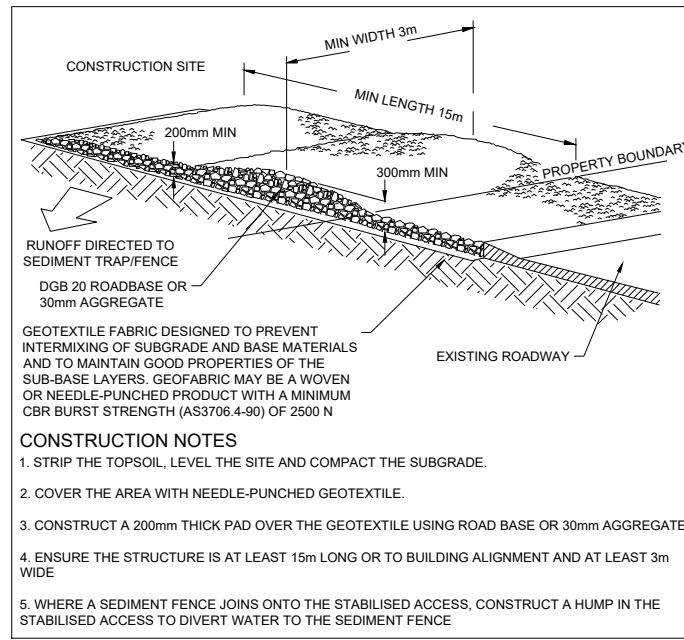
- CONSTRUCTION NOTES**
1. CONSTRUCT THE STRAW BALE FILTER AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE.
 2. PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS ARE TO BE PLACED PARALLEL TO GROUND.
 3. ENSURE THAT THE MAXIMUM 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. 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.
 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.



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

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. JPB0565

These plans/specifications form part of the certificate issued 31 July 2017

	MP	MG	MS	MS	27/09/16
B	CERTIFIER COMMENTS				
A	ISSUED FOR CONSTRUCTION APPROVAL				22/07/16
	AMENDMENT	DES	DRN	CKD	APR

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: MGA
 DATUM: AHD
 ORIGIN:

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

ISSUED FOR CONSTRUCTION APPROVAL

**REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS
 SOIL & WATER MANAGEMENT DETAILS**

PLAN No: 110185BEL/BE38 **B**
 FILE No: 110185BELBE38
 SHEET SIZE: A1 ORIGINAL

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 BLUE BOOK (CHECK DENOTE & DATE)
- 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. STAKED 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 SITE SUPERINTENDENT.
- 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 ON SITE. 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) 6-7.
 - 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) 4-1.
 - 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 BASIN.
 - 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:-
 - 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 BE SCHEDULED SO THAT THE TIME FROM STARTING LAND DISTURBANCE ACTIVITIES TO STABILISATION IS A DURATION OF LESS THAN 6 MONTHS - SETTING IN MOTION A PROGRAM THAT ENSURES THAT EROSION DROPS PERMANENTLY, (BY VEGETATION, PAVING, ARMOURING etc.) TO MORE THAN 70% WITHIN A FURTHER 60 DAYS. LOCAL WATER RESTRICTIONS PERMITTING, LANDS THAT HAVE BEEN NEWLY PLANTED WITH GRASS SPECIES SHALL BE WATERED REGULARLY UNTIL AN EFFECTIVE COVER HAS BEEN ESTABLISHED AND PLANTS ARE GROWING VIGOROUSLY. FOLLOW-UP SEED AND FERTILISER SHALL BE APPLIED AS NECESSARY IN AREAS OF MINOR SOIL EROSION AND/OR INADEQUATE VEGETATIVE PROTECTION. NOTWITHSTANDING THIS SCHEDULE WORKS SO THAT THE DURATION FROM THE CONCLUSION OF LAND SHAPING TO THE COMPLETION OF FINAL STABILISATION IS LESS THAN 20 WORKING 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.
- 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.
- 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 450mm 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 MIN. 300mm WIDE BEHIND KERB + 1m WIDE AROUND ALL SURFACE INLET PITS

SITE INSPECTION AND MAINTENANCE

- A SELF-AUDITING PROGRAM SHALL BE ESTABLISHED BASED ON A CHECK SHEET. A SITE INSPECTION USING THE CHECK SHEET SHALL BE MADE BY THE SITE SUPERVISOR / PROJECT 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.

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:-
 - 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 INSTALLED 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.

CONSTRUCTION CERTIFICATE

Certificate No.	20130299C35
Date of Issue	31 July 2017
Issuing Officer	<i>[Signature]</i>
Accreditation No.	BPB0565

These plans/specifications form part of the certificate issued 31 July 2017

Plotted: 24 July 2017 4:04:23 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CIBELMONT\Bulk Earthworks\110185BELBE39.dwg

B	CERTIFIER COMMENTS	MP	MG	MS	MS	27/09/16
A	ISSUED FOR CONSTRUCTION APPROVAL	MP	TG	RO	RO	22/07/16
	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 jwp@jwprince.com.au

CLIENT: 

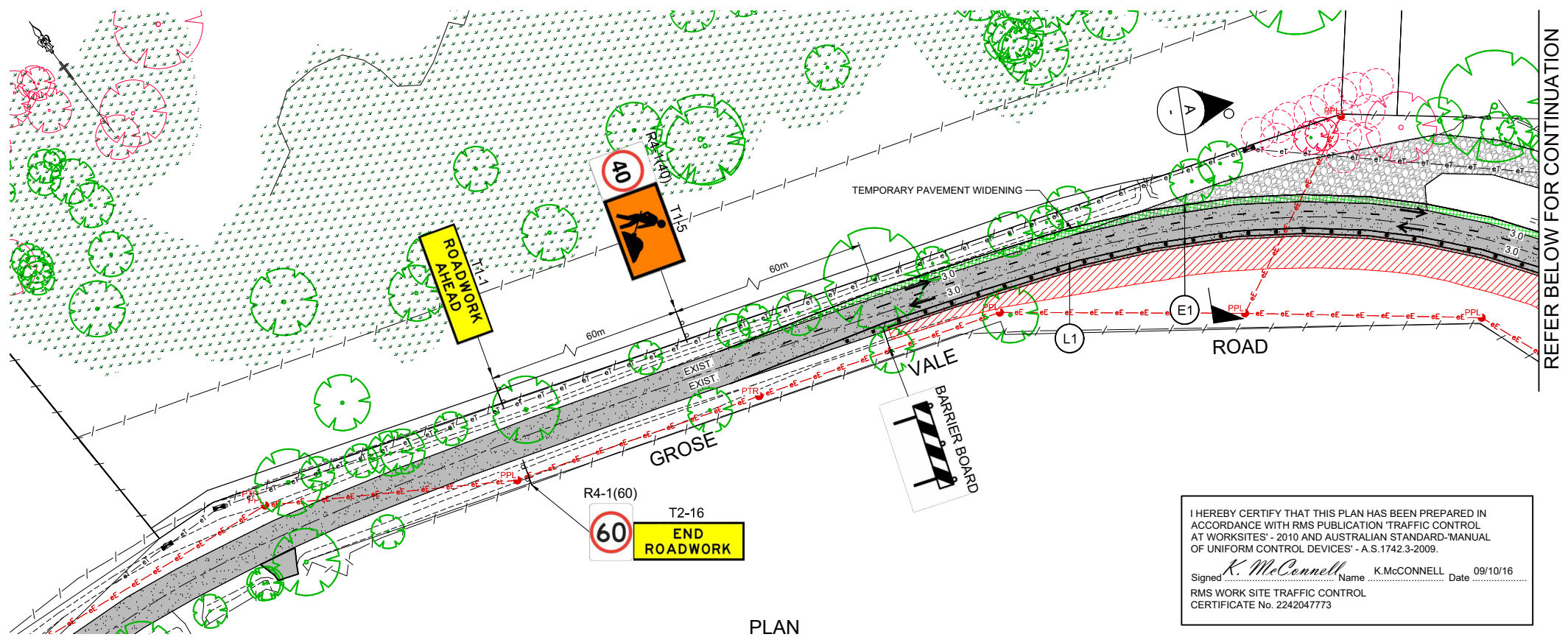
AZIMUTH: MGA
 DATUM: AHD
 ORIGIN: THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

ISSUED FOR CONSTRUCTION APPROVAL

**REDBANK, NORTH RICHMOND
 BELMONT - BULK EARTHWORKS**
 SOIL & WATER MANAGEMENT NOTES

PLAN No:	110185BEL/BE39	B
FILE No:	110185BELBE39	
SHEET SIZE:	A1 ORIGINAL	

Plotted: 24 July 2017 4:14:13 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BEL BE40.dwg



PLAN
SCALE 1:500

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH RMS PUBLICATION 'TRAFFIC CONTROL AT WORKSITES' - 2010 AND AUSTRALIAN STANDARD 'MANUAL OF UNIFORM CONTROL DEVICES' - A.S.1742.3-2009.

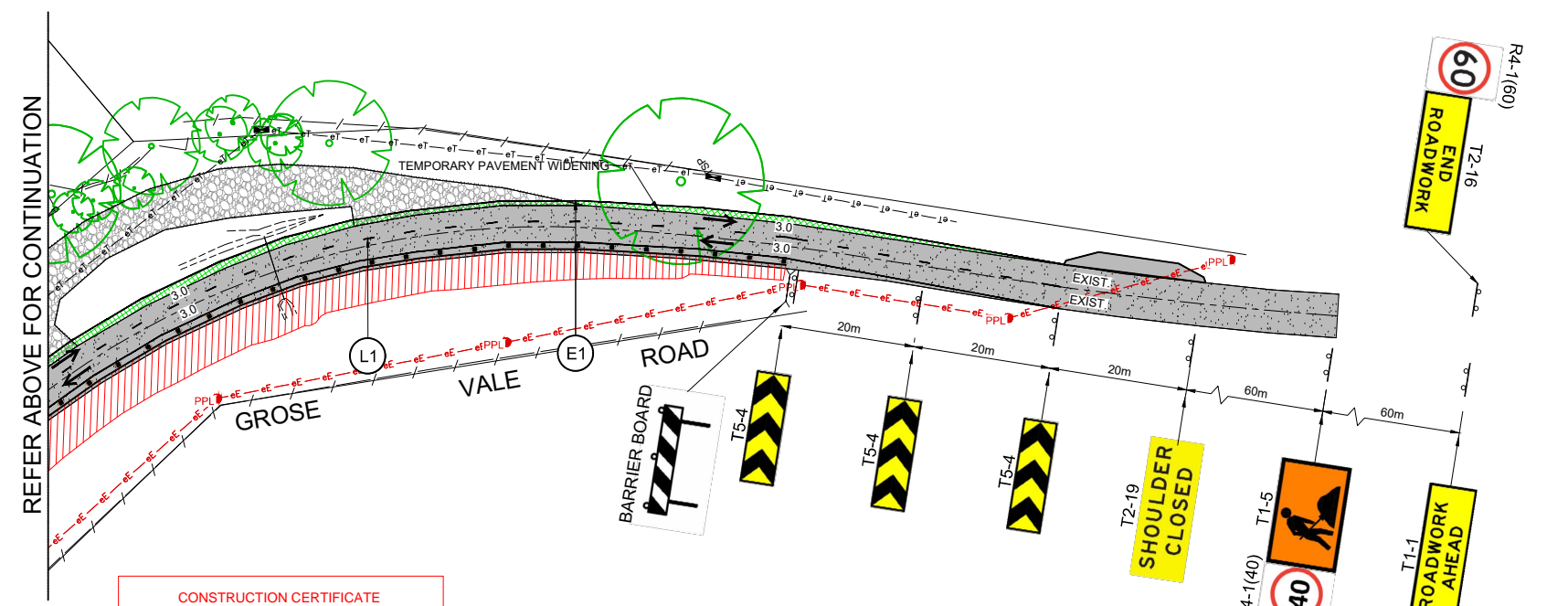
Signed *K. McConnell* Name K.McCONNELL Date 09/10/16
RMS WORK SITE TRAFFIC CONTROL CERTIFICATE No. 2242047773

NOTES:

- ALL TRAFFIC CONTROL AND MANAGEMENT WORKS ARE TO BE COMPLETED AND MAINTAINED IN ACCORDANCE WITH AUSTRALIAN STANDARD 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES' (AS1742.3-2009).
- THIS PLAN IS PROVIDED AS A GUIDE ONLY BASED ON RTA 'TRAFFIC CONTROL AT WORKSITES' - Ver. 4/JUNE 2010. TOP No. 42 TO BE ADJUSTED TO SUIT THE ACTIVITY AND LOCAL SITE CONDITIONS AND CONSTRUCTION STAGING.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ALL TRAFFIC CONTROL IS IN ACCORDANCE WITH AS1742.3-2009 AND RTA - 'TRAFFIC CONTROL AT WORKSITES' GUIDELINES AND THAT ALL NECESSARY APPROVALS INCLUDING STAGING OF THE WORKS ARE OBTAINED PRIOR TO WORKS COMMENCING.
- A 'ROAD OCCUPANCY' APPLICATION IS TO BE MADE TO COUNCIL AT LEAST 10 DAYS PRIOR TO WORKS COMMENCING.
- PROVIDE APPROVED REFLECTORISED TRAFFIC SAFETY BARRIERS, 'TRITON' PLASTIC (WATER FILLED) OR EQUIVALENT, OR CONCRETE (TYPE F) FOR DURATION OF WORKS. LOCATE MIN. 1.2m CLEAR OF ANY WORKS, MAINTAINING A 3.0m MIN. THROUGH LANE ROAD WIDTH.
- SPEED ZONING THROUGH THE SITE IS 40kph.
- THIS PLAN ASSUMES WORKS ARE TO BE UNDERTAKEN DURING DAYLIGHT HOURS ONLY. AT COMPLETION OF DAILY WORKS:
 - SIGNS T1-5 ARE TO BE COVERED
 - SIGNS T1-1 ARE TO BE COVERED
 - BARRIER BOARDS, WITH FLASHING LIGHTS, TO BE PLACED ACROSS THE WORK SITE @ 15m INTERVALS.
- ALL SIGNAGE, DELINEATION AND FLASHING LIGHTS ARE TO BE MAINTAINED AT ALL TIMES AND PLACED PRIOR TO ANY WORKS.
- CONTRACTOR TO NOTIFY ALL AFFECTED RESIDENTS NEAR AREA OF WORKS VIA DOOR KNOCK, LETTERBOX DROP, IN WRITING AND KEPT INFORMED OF ROAD WORKS AND CONFIGURATIONS TO TRAFFIC MANEUVERING
- THE CONTRACTOR SHALL MAKE GOOD ANY DAMAGE TO EXISTING ROADS DURING WORK.
- CURRENT GROSE VALE ROAD POSTED SPEED LIMIT 60KPH.

LEGEND

- AREA OF NEW WORKS
- TEMPORARY PAVEMENT WIDENING
- AREA OF NEW SPRAY SEAL
- DIRECTION OF TRAVEL
- TRAFFIC BOLLARDS/CONES
- SIGN POSTS
- BARRIER BOARD

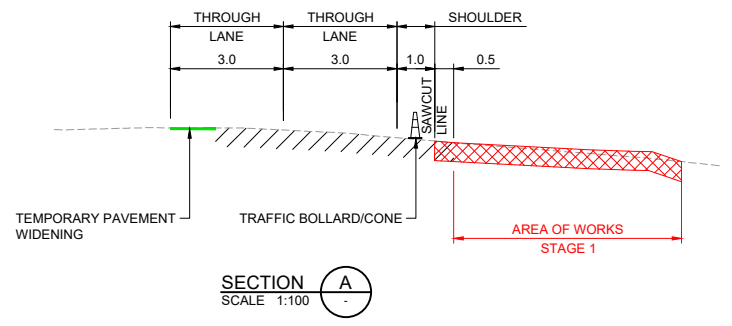
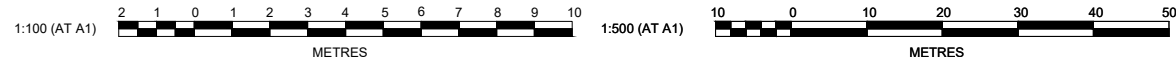


PLAN
SCALE 1:500

CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
Date of Issue 31 July 2017
Issuing Officer *Joey B*
Accreditation No. BPB0565

These plans/specifications form part of the certificate issued 31 July 2017



SECTION A
SCALE 1:100

PAVEMENT MARKING SCHEDULE

CODE	USE	STYLE	COLOUR & TYPE
L1	LANE LINE ON MULTI LANE ROADS INCLUDING MOTORWAYS AND DUAL CARRIAGEWAYS		REFLECTORISED WHITE TYPE 'W' PAVEMENT MARKERS MONO-DIRECTIONAL REFLECTIVE WHITE
E1	LEFT HAND EDGE LINE ON GENERAL PURPOSE ROAD		REFLECTORISED WHITE

ISSUED FOR CONSTRUCTION APPROVAL

CLIENT:

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

REDBANK, NORTH RICHMOND
BELMONT - BULK EARTHWORKS
TRAFFIC MANAGEMENT PLAN
SHEET 1

PLAN No:
110185BEL/BE40 A

FILE No: 110185BELBE40

SHEET SIZE: A1 ORIGINAL

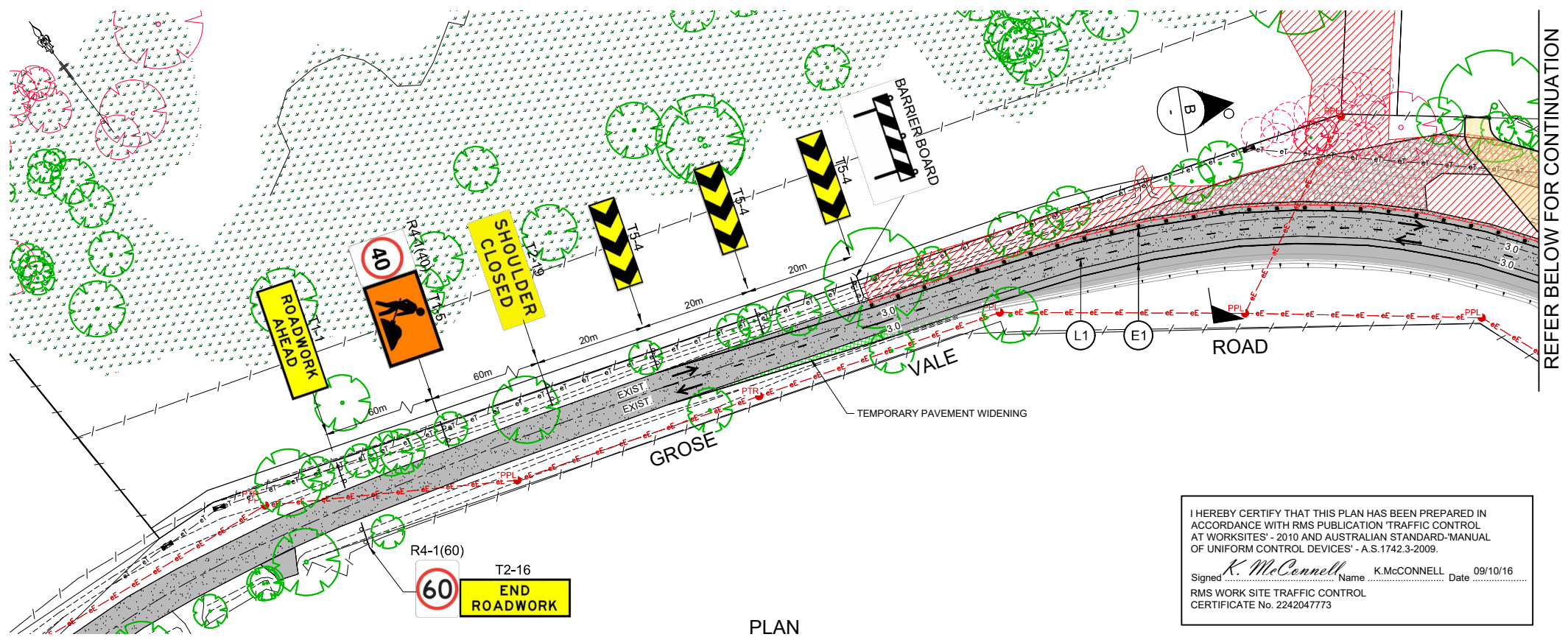
J. WYNDHAM PRINCE CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

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

A	ISSUED FOR COUNCIL APPROVAL	MP	MG	RO	MS	11/10/16
	AMENDMENT	DES	DRN	CKD	APR	DATE

AZIMUTH: MGA
DATUM: AHD
ORIGIN:

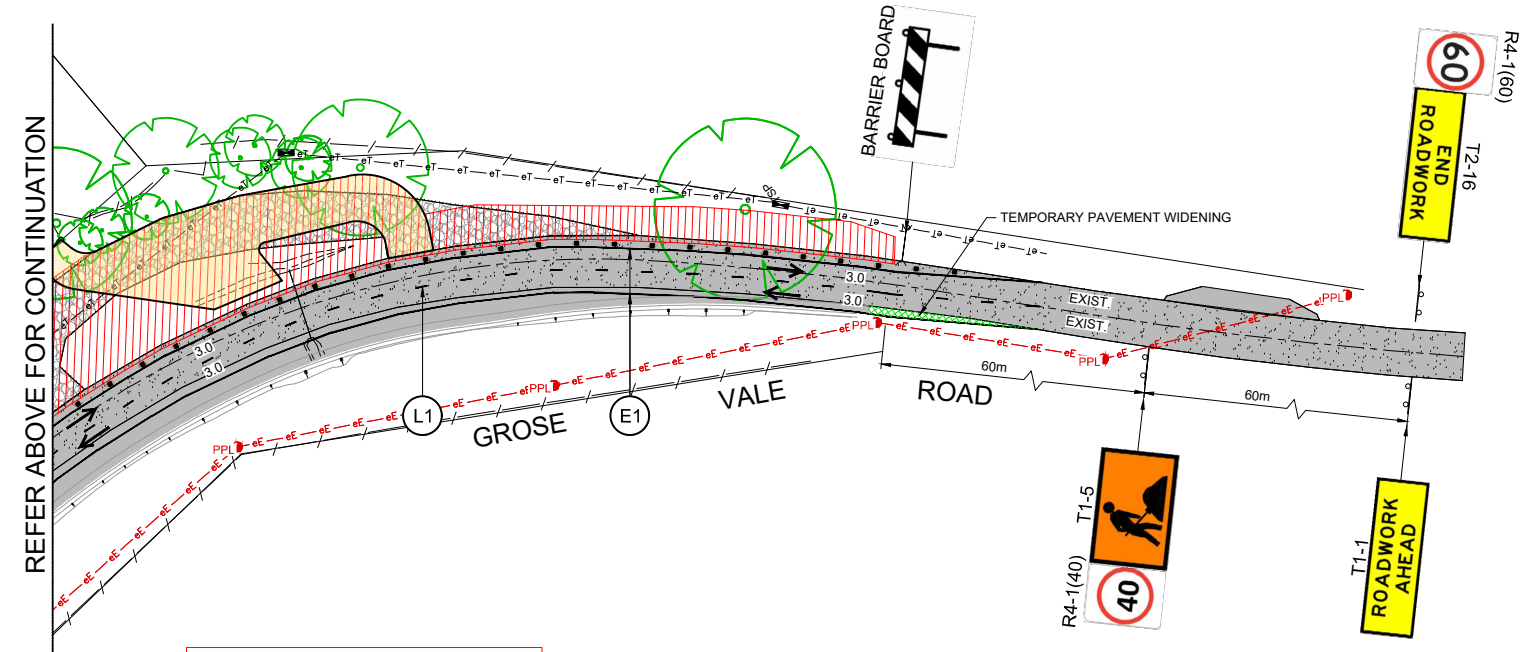
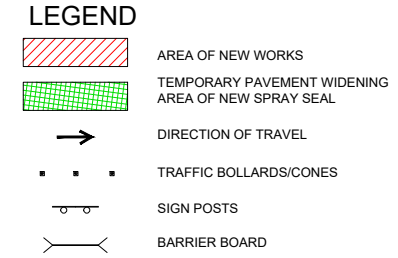
Plotted: 24 July 2017 4:14:29 PM File Name: J:\110185 - Redbank North Richmond Residential Precincts\01 - Description\CD\CC\BELMONT\Bulk Earthworks\110185BELBE41.dwg



I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH RMS PUBLICATION 'TRAFFIC CONTROL AT WORKSITES' - 2010 AND AUSTRALIAN STANDARD-MANUAL OF UNIFORM CONTROL DEVICES' - A.S.1742.3-2009.

Signed *K. McConnell* Name K.McCONNELL Date 09/10/16
 RMS WORK SITE TRAFFIC CONTROL CERTIFICATE No. 2242047773

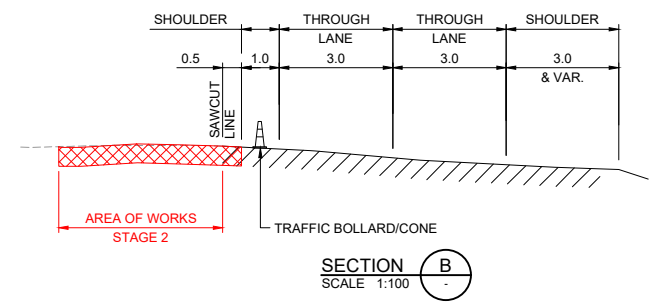
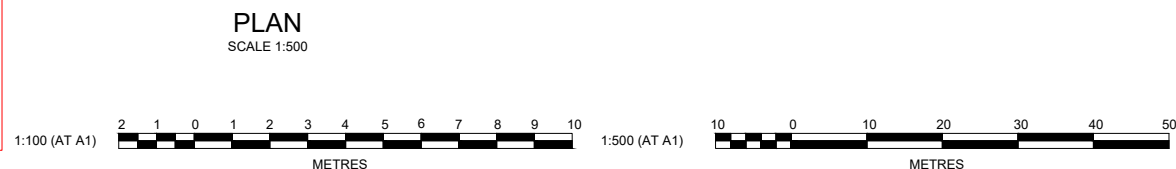
- NOTES:**
- ALL TRAFFIC CONTROL AND MANAGEMENT WORKS ARE TO BE COMPLETED AND MAINTAINED IN ACCORDANCE WITH AUSTRALIAN STANDARD 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES' (AS1742.3-2009).
 - THIS PLAN IS PROVIDED AS A GUIDE ONLY BASED ON RTA 'TRAFFIC CONTROL AT WORKSITES' - Ver. 4/JUNE 2010, TOP No. 42 TO BE ADJUSTED TO SUIT THE ACTIVITY AND LOCAL SITE CONDITIONS AND CONSTRUCTION STAGING.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ALL TRAFFIC CONTROL IS IN ACCORDANCE WITH AS1742.3-2009 AND RTA - 'TRAFFIC CONTROL AT WORKSITES' GUIDELINES AND THAT ALL NECESSARY APPROVALS INCLUDING STAGING OF THE WORKS ARE OBTAINED PRIOR TO WORKS COMMENCING.
 - A 'ROAD OCCUPANCY' APPLICATION IS TO BE MADE TO COUNCIL AT LEAST 10 DAYS PRIOR TO WORKS COMMENCING.
 - PROVIDE APPROVED REFLECTORISED TRAFFIC SAFETY BARRIERS, 'TRITON' PLASTIC (WATER FILLED) OR EQUIVALENT, OR CONCRETE (TYPE F) FOR DURATION OF WORKS. LOCATE min. 1.2m CLEAR OF ANY WORKS, MAINTAINING A 3.0m min. THROUGH LANE ROAD WIDTH.
 - SPEED ZONING THROUGH THE SITE IS 40kph.
 - THIS PLAN ASSUMES WORKS ARE TO BE UNDERTAKEN DURING DAYLIGHT HOURS ONLY. AT COMPLETION OF DAILY WORKS:
 - SIGNS T1-5 ARE TO BE COVERED
 - SIGNS T1-1 ARE TO BE COVERED
 - BARRIER BOARDS, WITH FLASHING LIGHTS, TO BE PLACED ACROSS THE WORK SITE @ 15m INTERVALS.
 - ALL SIGNAGE, DELINEATION AND FLASHING LIGHTS ARE TO BE MAINTAINED AT ALL TIMES AND PLACED PRIOR TO ANY WORKS.
 - CONTRACTOR TO NOTIFY ALL AFFECTED RESIDENTS NEAR AREA OF WORKS VIA DOOR KNOCK, LETTERBOX DROP, IN WRITING AND KEPT INFORMED OF ROAD WORKS AND CONFIGURATIONS TO TRAFFIC MANEUVERING
 - THE CONTRACTOR SHALL MAKE GOOD ANY DAMAGE TO EXISTING ROADS DURING WORK.
 - CURRENT GROSE VALE ROAD POSTED SPEED LIMIT 60KPH.



CONSTRUCTION CERTIFICATE

Certificate No. 20130299C35
 Date of Issue 31 July 2017
 Issuing Officer [Signature]
 Accreditation No. BPP0565

These plans/specifications form part of the certificate issued 31 July 2017



PAVEMENT MARKING SCHEDULE

CODE	USE	STYLE	COLOUR & TYPE
L1	LANE LINE ON MULTI LANE ROADS INCLUDING MOTORWAYS AND DUAL CARRIAGEWAYS		REFLECTORISED WHITE TYPE 'W' PAVEMENT MARKERS MONO-DIRECTIONAL REFLECTIVE WHITE
E1	LEFT HAND EDGE LINE ON GENERAL PURPOSE ROAD		REFLECTORISED WHITE

A	ISSUED FOR COUNCIL APPROVAL	MP	MG	RO	MS
	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 jwp@jwprince.com.au

AZIMUTH: MGA
 DATUM: AHD
 ORIGIN:

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
 BELMONT - BULK EARTHWORKS
 TRAFFIC MANAGEMENT PLAN
 SHEET 2

PLAN No: 110185BEL/BE41 **A**
 FILE No: 110185BELBE41
 SHEET SIZE: A1 ORIGINAL