

1	Royal Far West  14-22 Wentworth Street & 19-21 South Steyne, Manly Thermal Comfort Results & Performance Requirements									
Max:	45.4	29.5								
	Ι				U-value	SHGC	Additional Ins	Additional Ins		1
Unit	Heating	Cooling	Star	Glazing Description	(≤)	(+/- 10%)	To Exposed Floor Below Unit	To Roof/Exposed Ceiling	Additional External Wall Ins	All other walls
D1.1 D2.1	22.5	18	6.9	Double, Clear	3.6 4.8	0.47 0.51	R2.00	Unit Above	R1.50	As per Acoustic Specification
D2.1 D3.1	11.2 13.3	13 10.3	8.2 8.2	Single, Low-e, Clear Single, Low-e, Clear	4.8	0.51	Unit Below Unit Below	Unit Above Unit Above	R1.50 R1.50	As per Acoustic Specification As per Acoustic Specification
D4.1	25.6	10.3	7.2	Single, Low-e, Clear	4.8	0.51	Unit Below	R3.00	R1.50	As per Acoustic Specification  As per Acoustic Specification
54.1	25.0	10.7	7.2	Single, Low e, cicu	4.0	0.51	OTHE BEIOW	113.00	TAISO	As per Acoustic Specification
D1.2	33	11.7	6.5	Double, Clear	3.6	0.47	R2.00	Unit Above	R1.50	As per Acoustic Specification
D2.2	21.4	14	7.3	Single, Low-e, Clear	4.8	0.51	Unit Below	Unit Above	R1.50	As per Acoustic Specification
D3.2	23.6	11.8	7.3	Single, Low-e, Clear	4.8	0.51	Unit Below	Unit Above	R1.50	As per Acoustic Specification
D4.2	35	11.4	6.4	Single, Low-e, Clear	4.8	0.51	Unit Below	R3.00	R1.50	As per Acoustic Specification
D1.3	33.2	11.8	6.4	Double, Clear	3.6	0.47	R2.00	Unit Above	R1.50	As per Acoustic Specification
D2.3	21.1	13.4	7.3	Single, Low-e, Clear	4.8	0.51	Unit Below	Unit Above	R1.50	As per Acoustic Specification
D3.3	22.7	11.1	7.4	Single, Low-e, Clear	4.8	0.51	Unit Below	Unit Above	R1.50	As per Acoustic Specification
D4.3	32.6	11.8	6.5	Single, Low-e, Clear	4.8	0.51	Unit Below	R3.00	R1.50	As per Acoustic Specification
D1.4	32.8	11.8	6.5	Double, Clear	3.6	0.47	R2.00	Unit Above	R1.50	As per Acoustic Specification
D2.4	18.2	13.3	7.5	Single, Low-e, Clear	4.8	0.51	Unit Below	Unit Above	R1.50	As per Acoustic Specification As per Acoustic Specification
D3.4 D4.4	20.3 31.8	11 11.2	7.6 6.7	Single, Low-e, Clear Single, Low-e, Clear	4.8 4.8	0.51 0.51	Unit Below Unit Below	Unit Above R3.00	R1.50 R1.50	As per Acoustic Specification  As per Acoustic Specification
54.4	31.0	11.2	0.7	Single, Low-e, Clear	4.0	0.51	Offic Below	113.00	N1.50	As per Acoustic specification
C3.1	25.9	16.9	6.7	Single, Low-e, Clear	4.8	0.51	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification
C4.1	26.9	17.2	6.6	Single, Low-e, Clear	4.8	0.51	R2.00	R2.00 where exposed above	R1.50	As per Acoustic Specification
C5.1	24.9	20.1	6.5	Single, Low-e, Clear	4.8	0.51	R2.00	R2.00 where exposed above	R1.50	As per Acoustic Specification
C6.1	25.3	19.7	6.4	Single, Low-e, Clear	4.8	0.51	R2.00	R2.00 where exposed above	R1.50	As per Acoustic Specification
C7.1	14	26.1	6.9	Double, Clear	3.6	0.47	R2.00	R4.00 with reflective backing/ R2.00 where exposed above	R1.50	As per Acoustic Specification
C3.2	41.4	22.6	5.1	Double, Clear	3.6	0.47	R2.00 where exposed below	Unit Above	R1.50	As per Acoustic Specification
C4.2 C5.2	29.7 26.5	24.4 18.1	5.8 6.5	Double, Clear Double, Clear	3.6 3.6	0.47	R2.00 where exposed below Unit Below	Unit Above Unit Above	R1.50 R1.50	As per Acoustic Specification As per Acoustic Specification
C6.2	24.6	22.4	6.3	Double, Clear	3.6	0.47	R2.00 to exposed living floor	Unit Above	R1.50	As per Acoustic Specification
	2		0.0				The state of the s		71000	The per vision of contents.
C3.3	17.2	17.4	7.3	Single, Low-e, Clear	4.8	0.51	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification
C4.3 C5.3	12.2 12.8	18.6 18.3	7.6	Single, Low-e, Clear	4.8 4.8	0.51	R2.00 to west exposed floor	R2.00 where exposed above	R1.50 R1.50	As per Acoustic Specification
C6.3	11.5	18.2	7.6 7.7	Single, Low-e, Clear Single, Low-e, Clear	4.8	0.51 0.51	R2.00 to west exposed floor R2.00 to west exposed floor	R2.00 where exposed above R2.00 where exposed above	R1.50	As per Acoustic Specification As per Acoustic Specification
C7.2	20.6	25.6	6.4	Single, Low-e, Clear	4.8	0.51	R2.00 where exposed below (including East BR)	R3.00	R1.50	As per Acoustic Specification
							, and the same of		11000	
C3.4	27.2	17.2	6.5	Single, Low-e, Clear	4.8	0.51	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification
C4.4	20.3	18.5	7	Single, Low-e, Clear	4.8	0.51	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification
C5.4	23.6	18.5	6.7	Single, Low-e, Clear	4.8	0.51	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification
C6.4 C7.3	20.5 14.8	19.2 23.9	6.9 7	Single, Low-e, Clear Single, Low-e, Clear	4.8 4.8	0.51 0.51	R2.00 to west exposed floor R2.00 to west exposed floor	R2.00 where exposed above R4.00 with reflective backing	R1.50 R1.50	As per Acoustic Specification As per Acoustic Specification
67.5	14.0	23.3	<del> </del>	Single, Low-e, Clear	4.0	0.51	NZ.00 to West exposed floor	N4.00 With reflective backing	N1.50	As per Acoustic Specification
C3.5	40.9	17.4	5.4	Double, Clear	3.6	0.47	R2.00 where exposed below	Unit Above	R1.50	As per Acoustic Specification
C4.5	22.6	24.3	6.3	Double, Clear	3.6	0.47	R2.00 where exposed below	Unit Above	R1.50	As per Acoustic Specification
C5.5	24.1	19.5	6.6	Double, Clear	3.6	0.47	Unit Below	Unit Above	R1.50	As per Acoustic Specification
C6.5	24.9	21.8	6.4	Double, Clear	3.6	0.47	R2.00 where exposed below	Unit Above	R1.50	As per Acoustic Specification
C3.6	19.6	17.4	7.1	Single, Low-e, Clear	4.8	0.51	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification
C3.6 C4.6	14.3	17.4	7.1	Single, Low-e, Clear Single, Low-e, Clear	4.8	0.51	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification As per Acoustic Specification
C5.6	14.5	18.2	7.4	Single, Low-e, Clear	4.8	0.51	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification
C6.6	12.2	19.5	7.5	Single, Low-e, Clear	4.8	0.51	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification
C7.4	16.9	26.8	6.6	Single, Low-e, Clear	4.8	0.51	R2.00 where exposed below (including East BR)	R4.00 with reflective backing	R1.50	As per Acoustic Specification
C3.7	18	18.2	7.2	Single, Low-e, Clear	4.8	0.51	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification
C4.7	12.1	18.2	7.6	Single, Low-e, Clear	4.8	0.51	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification
C5.7 C6.7	14.9 12.8	18.5 20.4	7.4 7.4	Single, Low-e, Clear Single, Low-e, Clear	4.8	0.51 0.51	R2.00 to west exposed floor R2.00 to west exposed floor	R2.00 where exposed above R2.00 where exposed above	R1.50 R1.50	As per Acoustic Specification As per Acoustic Specification
C7.5	15	24.8	6.9	Single, Low-e, Clear	4.8	0.51	R2.00 to west exposed floor	R4.00 with reflective backing	R1.50	As per Acoustic Specification
C3.8	37.5	17.6	5.7	Double, Clear	3.6	0.47	R2.00 where exposed below	Unit Above	R1.50	As per Acoustic Specification
C4.8	18.8	25.2	6.6	Double, Clear	3.6	0.47	R2.00 where exposed below	Unit Above	R1.50	As per Acoustic Specification
C5.8	24.1	19.5	6.6	Double, Clear	3.6	0.47	R2.00 where exposed below	Unit Above	R1.50	As per Acoustic Specification
C6.8	24.9	21.8	6.4	Double, Clear	3.6	0.47	R2.00 where exposed below	Unit Above	R1.50	As per Acoustic Specification
										1
C3.9	34	14.7	6.2	Double, Clear	3.6	0.47	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification
C4.9	24.6	17.4	6.7	Double, Clear	3.6	0.47	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification
C5.9	26	17.2	6.6	Double, Clear	3.6	0.47	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification
C6.9	25.6	16.8	6.7	Double, Clear	3.6	0.47	R2.00 to west exposed floor	R2.00 where exposed above	R1.50	As per Acoustic Specification

William G	lazing Performance Re	<u>equirements</u>						
Performance (Total System)			Description	Comment				
≤U3.6   SHGC 0.47 +/-10%			Double, Aluminium, Clear.	Units D1.1, D.2, D1.3, D1.4, C3.2, C3.5, C3.8, C3.9, C4.2, C4.5, C4.8, C4.9, C C5.8, C5.9, C6.2, C6.5, C6.8, C6.9, C7.1, C				
	≤U4.8   SHGC 0.51+	/-10%	Single, Aluminium, Clear low-e.	All remaining units.				
Minimum In	sulation Performance	Requirements						
Construction	n Element		Additional Insulation	Comment				
Units with Ra Medium Colo	oof/Exposed Ceiling Al our Roof	oove	>	Please refer to: Thermal Performance Requirements Sumr				
Units with F	loors to Unconditioned	l Spaces Below	>	Please refer to: Thermal Performance Requirements Sumn				
External Wa Medium Colo			>	Please refer to: Thermal Performance Requirements Sumn				
Walls to Cor	ridor & Intertenancy V	Valls	>	Please refer to: Thermal Performance Requirements Sumn				
Walls to Rise	er & Lifts		>	Please refer to: Thermal Performance Requirements Sumn				
Floor Coveri	ngs		Kitchen/Living: Timber   Wet Rooms: Tile   Remaining: Carpet					
Ceilings			Plasterboard below Concrete					
	elling Assumptions							
			No fans simulated in NatHERS modelli	ng				
•	Requirements: Dwelli	ngs						
<u>Category</u>	<u>ltem</u>	Comment						
	Fixtures	,	t ≤ 7.5 L/min)   5 star toilets   5 star t	aps				
Water	Appliances		o clothes washer specified					
	Hot Water		ntralised system   R1.00 insulation to					
	Exhaust Fans		hathroom fans individually ducted to façade or roof					
Energy	HVAC		4.5 Star Rating (Old Label GEMS 2012).					
	Lighting		ealed LED lighting throughout Star refrigerator  Gas cooktop & electric oven   3.5 Star dishwasher  5 Star dryer   No clothes washer speci					
Summary	Appliances		as cooktop & electric oven   3.5 Star (	alshwasher   5 Star Gryer   No clothes washer sp				
	Requirements: Comn ltem	<u>Comment</u>						
			ıt ≤ 7.5 L/min)   5 star toilets   5 star t	ans				
Water	Appliances	No common laundry						
	Landscape	, ·	n 1,300m² Common Area Garden   Minimum 1,200m² indigenous/low-water species					
	Lighting Type	LED required through	· · · · · · · · · · · · · · · · · · ·					
	Lighting Control		Report for detailed requirements.					
	Ventilation							
Energy	Ventilation Central HW System	2 x Centralised gas sy	estoms					

32kW PV system required

# SCHEDULE OF KEY AMENDMENTS (S4.55 ISSUE A)

- A1. MODIFICATION OF BASEMENT LEVEL PLANS INCLUDING ADJUSTMENT OF SETBACKS FROM SITE BOUNDARIES, INTERNAL REPLANNING OF BASEMENT LEVELS AND COORDINATION OF STRUCTURE, SERVICES AND LIFT CORES.
- A2. MINOR MODIFICATION TO PLANS TO ACCOMMODATE THE RETENTION OF AN EXISTING FIRE EGRESS STAIR WITHIN C.C.K. BUILDING.
- A3. MINOR MODIFICATION TO UPPER-LEVEL PLANS TO COORDINATE WITH REPLANING OF BASEMENT EGRESS STAIRS, LIFT CORES & CAR PARK EXHAUST RISER LOCATIONS.

## ARCHITECTURAL DRAWINGS S4.55 MODIFICATION APPLICATION

PROJECT:

ROYAL FAR WEST MANLY

APPLICANT:

ROYAL FAR WEST

PROJECT No:

5899

ARCHITECT:

MURCUTT CANDALEPAS

309 SUSSEX ST
SYDNEY NSW 2000
T: 9283 7755 F: 9283 7477
E: info@candalepas.com.au
NSW ARCHITECTS REG No. - 5773

### ARCHITECTURAL DRAWING SCHEDULE

S4.55 100	COVER SHEET
S4.55 101	SITE ANALYSIS PLAN
S4.55 102	
S4 55 103	DEMOLITION PLAN – LEVEL GROUND
	DEMOLITION PLAN - LEVEL 1
	DEMOLITION PLAN - LEVEL 2
54.55 106	DEMOLITION PLAN - LEVEL 3
S4.55 110	BASEMENT 2 FLOOR PLAN
S4.55 111	BASEMENT 1 FLOOR PLAN
S4.55 112	GROUND FLOOR PLAN
S4.55 113	LEVEL 1 FLOOR PLAN
S4.55 114	LEVEL 2 FLOOR PLAN
S4.55 115	LEVEL 3 FLOOR PLAN
S4.55 116	LEVEL 4 FLOOR PLAN
S4.55 117	LEVEL 5 FLOOR PLAN
S4.55 118	LEVEL 6 FLOOR PLAN
S4.55 119	LEVEL 7 FLOOR PLAN
S4.55 120	LEVEL 8 FLOOR PLAN (ROOF TERRACE)
S4.55 125	SECTION A
S4.55 126	SECTION B
S4.55 127	SECTION C
S4.55 128	SECTION D
S4.55 135	NORTH ELEVATION
S4.55 136	EAST ELEVATION
S4.55 137	SOUTH ELEVATION
<del>- \$4.55-145</del>	SHADOW ANALYSIS SHEET 1
<del>- \$4.55-146</del>	SHADOW ANALYSIS SHEET 2
<del>- \$4.55-147</del>	SHADOW ANALYSIS SHEET 3
<del>S4.55 148</del>	SHADOW ANALYSIS SHEET 4
<del>- \$4.55-149</del>	SHADOW ANALYSIS SHEET 5
<del>- \$4.55-150</del>	SHADOW ANALYSIS SHEET 6
<del>S4.55 151</del>	SHADOW ANALYSIS SHEET 7
<del>S4.55 152</del>	SHADOW ANALYSIS SHEET 8
S4.55 165	DEVELOPMENT CALCULATIONS
<del>- S4.55-170</del>	AMENITY CALCULATIONS
-S4.55 175	KITCHEN BULKHEAD
- \$4.55-180	ADAPTABLE UNITS SHEET 1
<del>- \$4.55-190</del>	STAGING DIAGRAMS



_	Note.	
	his drawing is to be read in conjunction with all relevant project documentation incl written architectural specifications) & all specialist consultant documentation	1 Y
ir	ncl structural, mechanical, electrical & hydraulic engineering documentation etc. Refer architectural drawing notes page for further notation.	SIZE.
0	Oo not scale from this drawing. Only figured dimensions shall be used.	₫
ir s c	Report any discrepancy between this drawing & other project documentation immediately to the architect for clarification prior to commencement of works on tite. All structural element (load bearing columns, beams, walls etc) sizes shown on these architectural documents are indicative only. Refer Structural Engineer's locuments for all sizes. Shop drawings to be completed for all metalwork, joinery etc and checked by architect & SE prior to fabrication.	AWING ORIGINAL

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DSC Consulting 57-59 Hill St Roseville NSW 2069 mail@dsc.com.au T: 02 9416 1177

Structural Engineer: SCP Engineers & Development Consultants L2 507 Kent St Sydney NSW 2000 mail@scpconsult.com.au T: 02 9267 9312

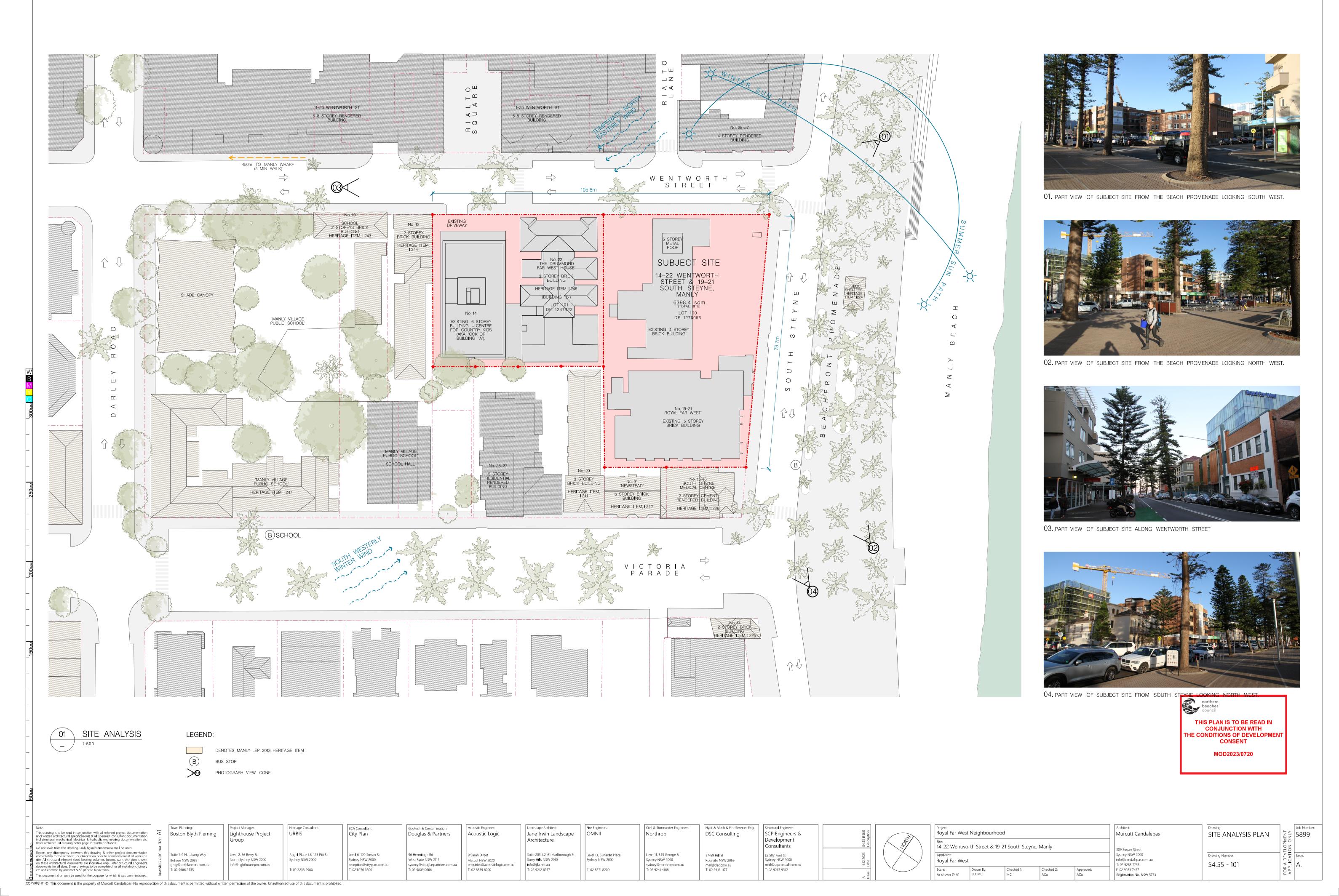
Interior Designer: Carr L4 31 Flinders Lane Melbourne VIC 3000 info@carr.net.au T: 03 9665 2300

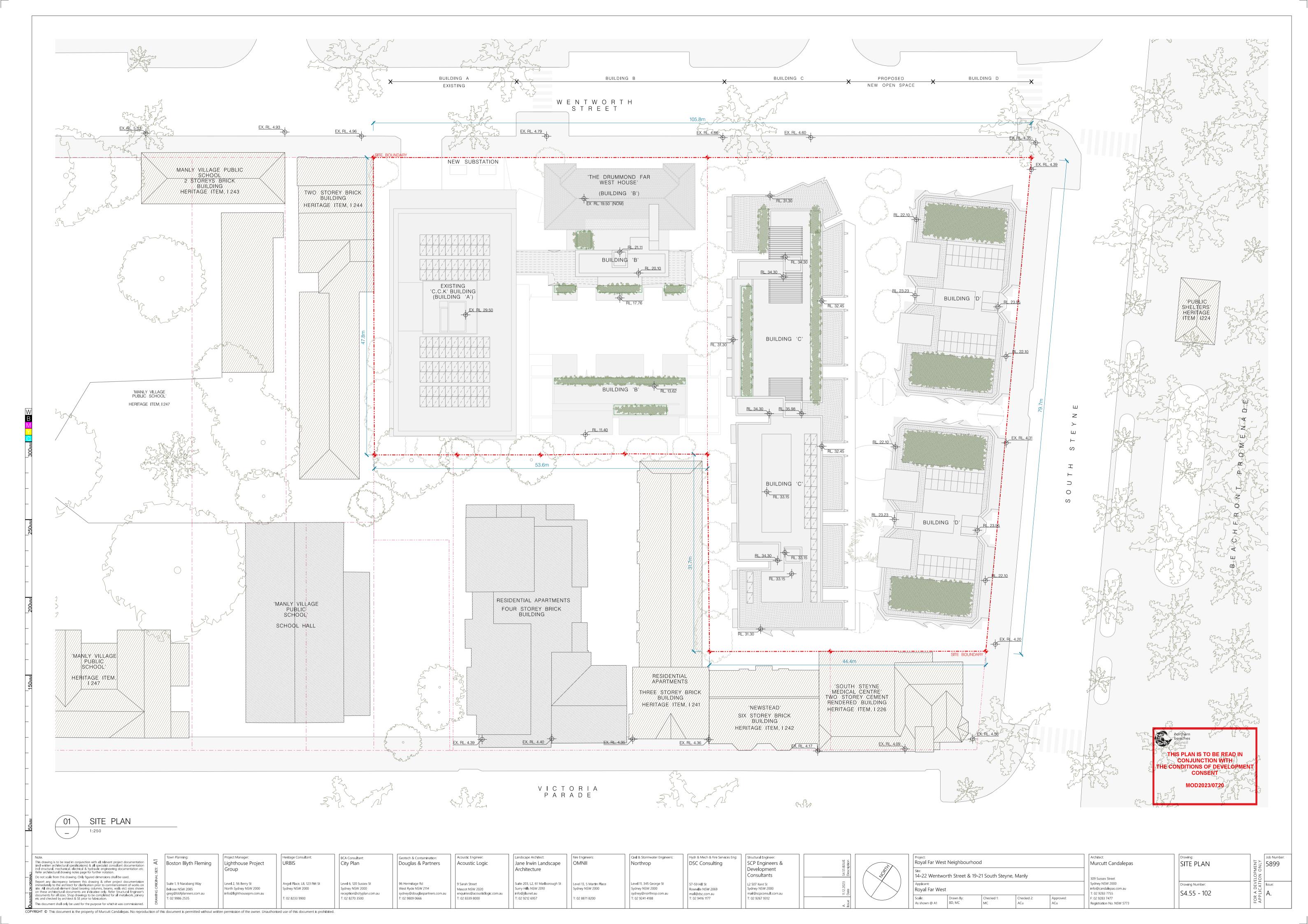
Royal Far West Neighbourhood

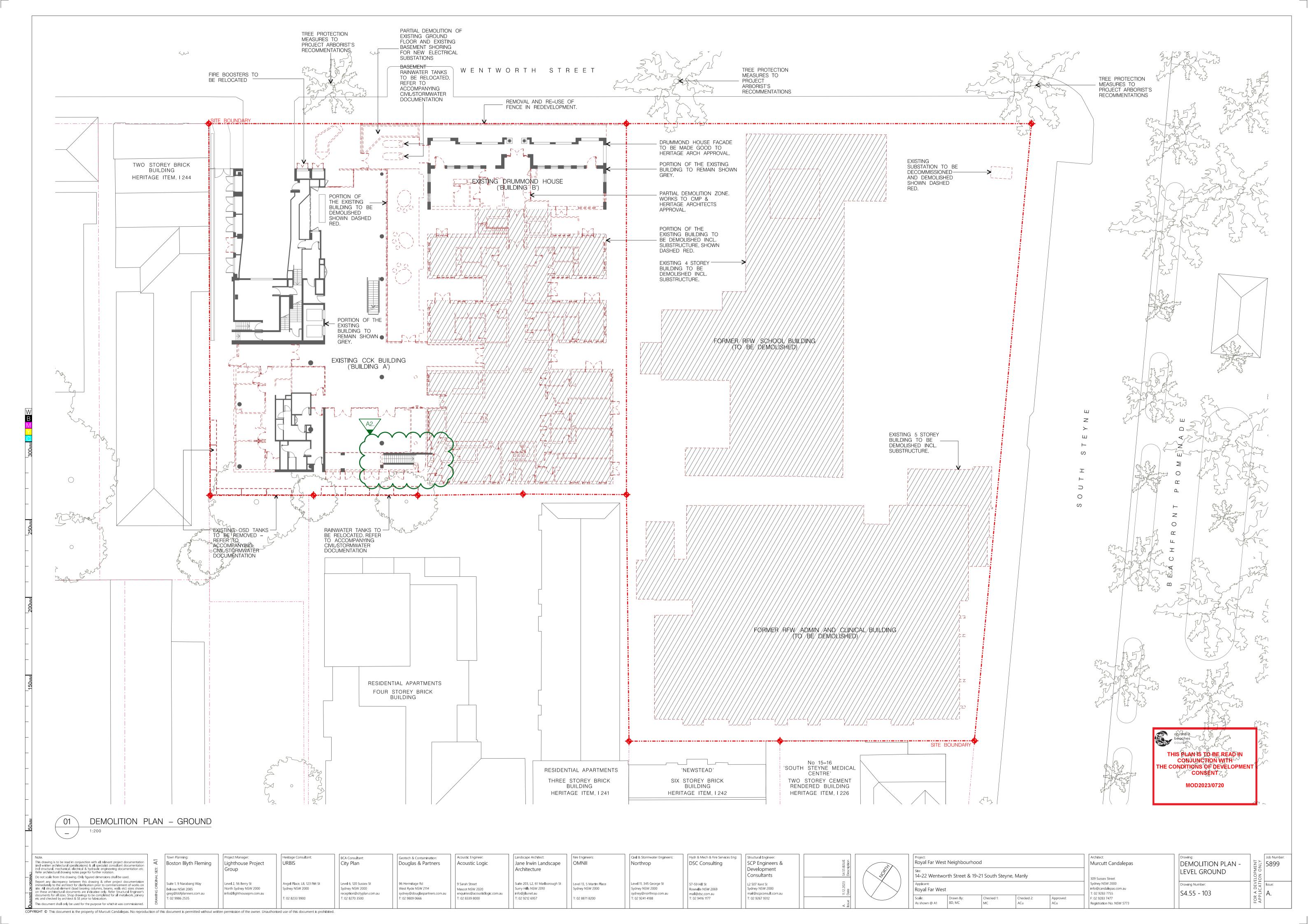
14-22 Wentworth Street & 19-21 South Steyne, Manly Royal Far West Drawn By: BD, MC

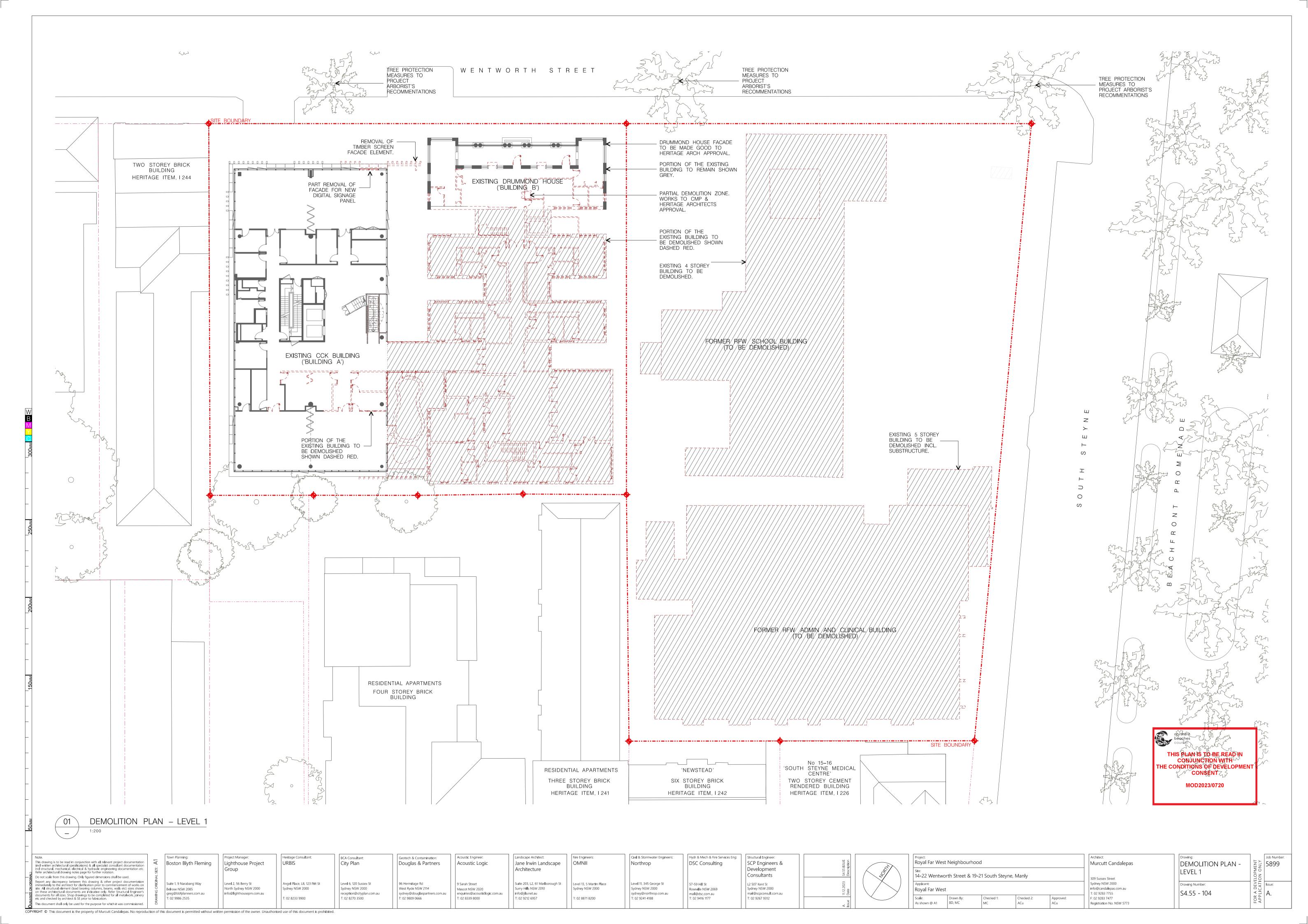
Murcutt Candalepas Sydney NSW 2000 Drawing Number: info@candalepas.com.au T: 02 9283 7755 F: 02 9283 7477 Registration No. NSW 5773

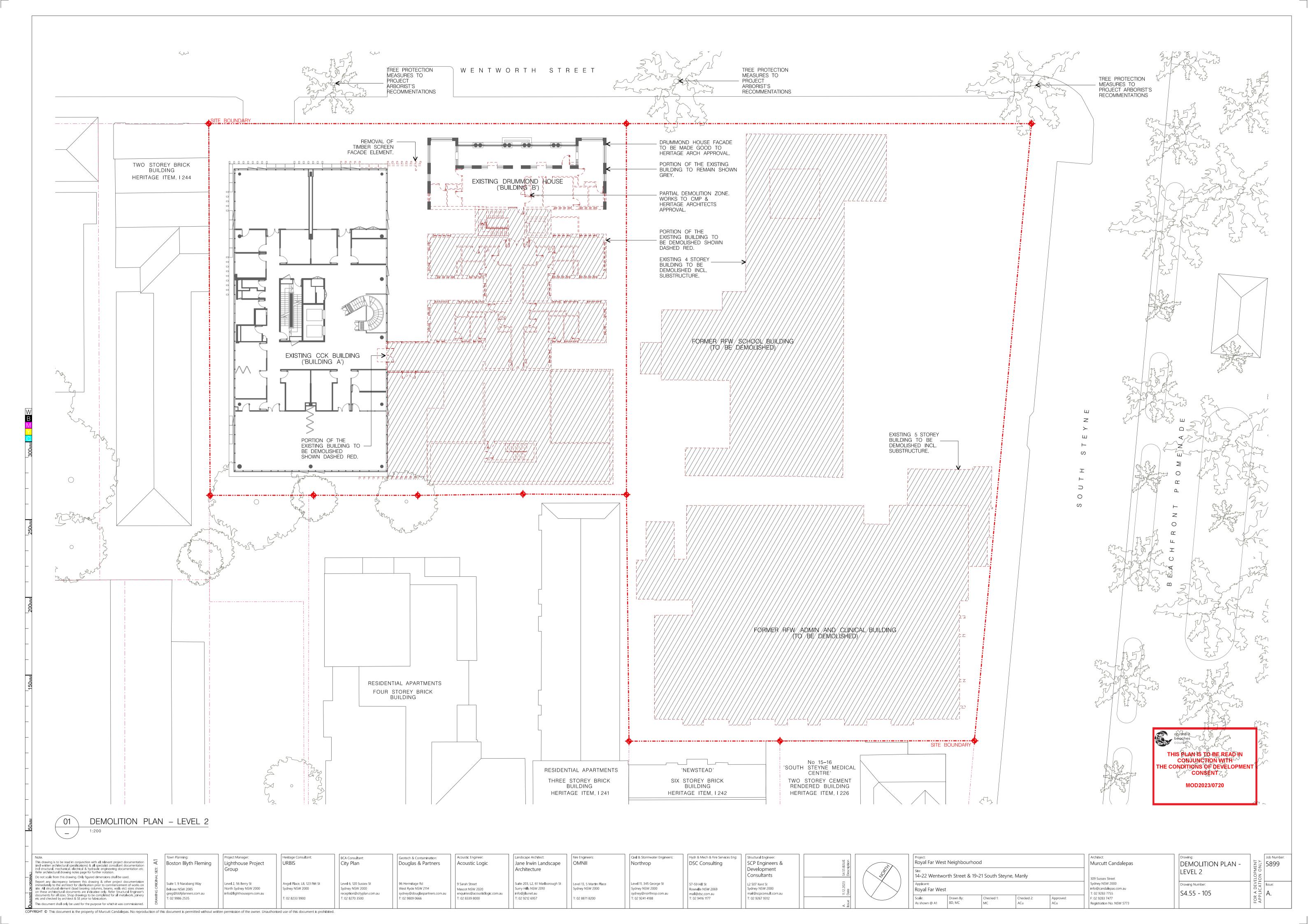
5899 5899 COVER SHEET FOR A DEVEL APPLICATIO S4.55 - 100

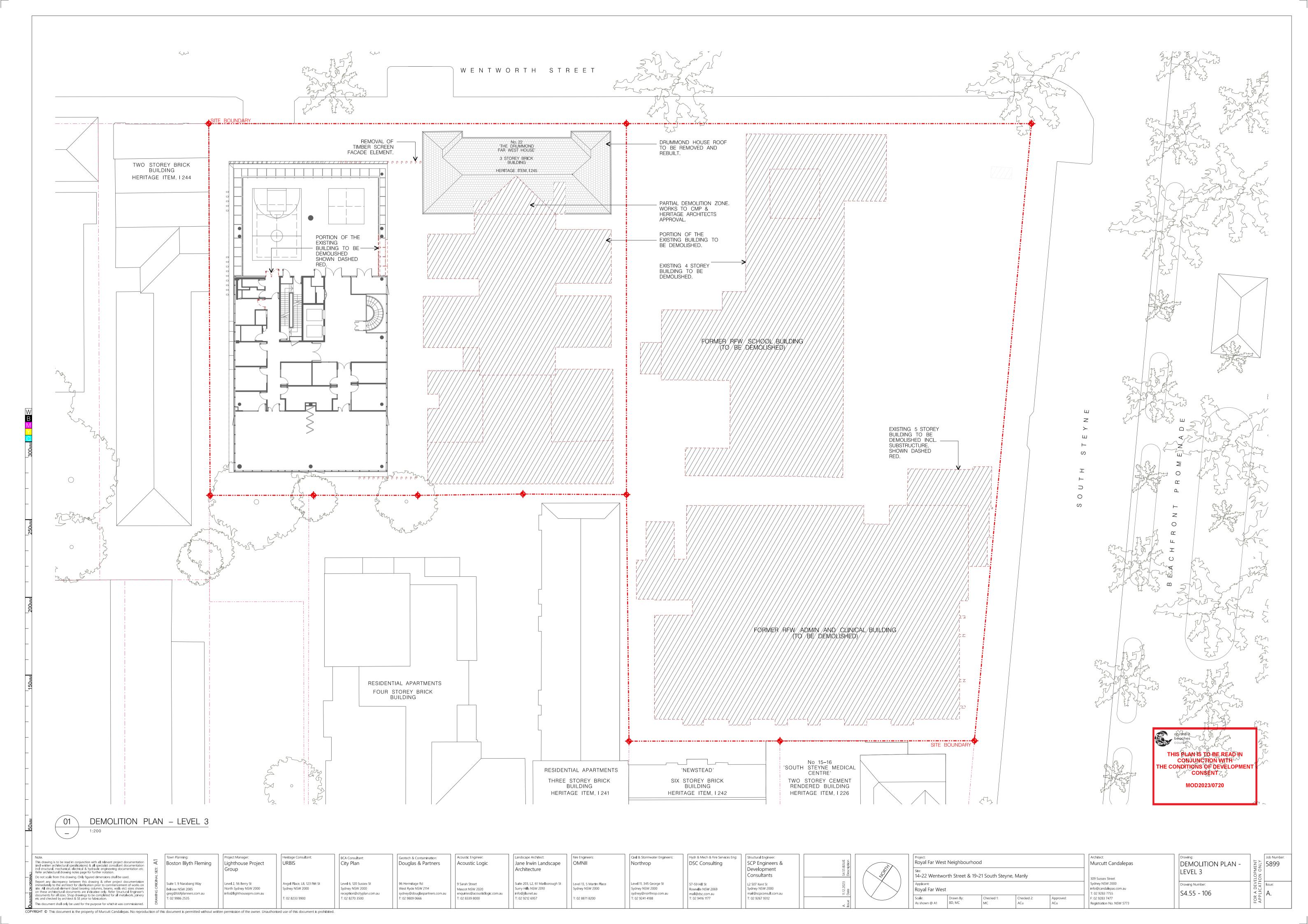


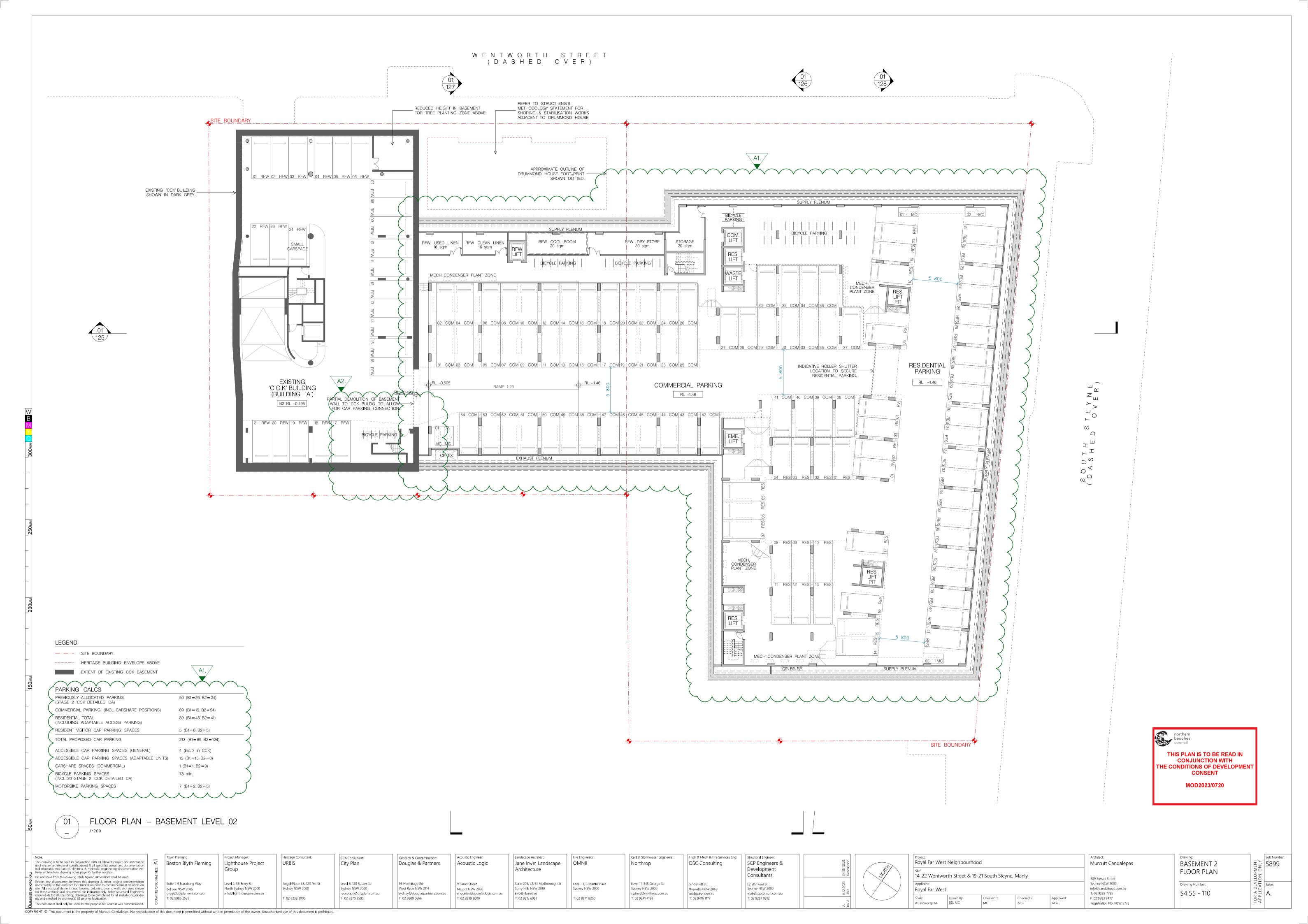


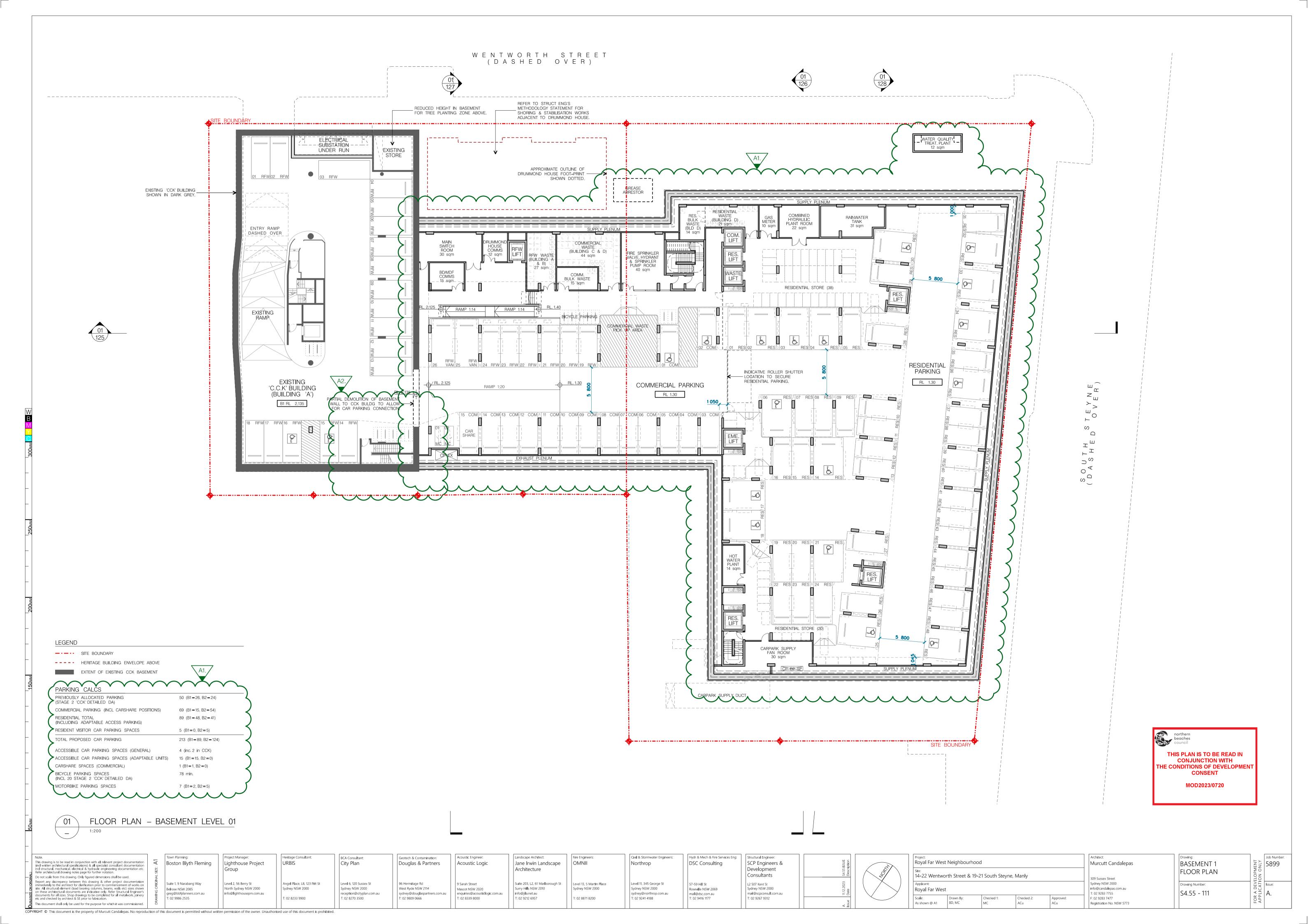


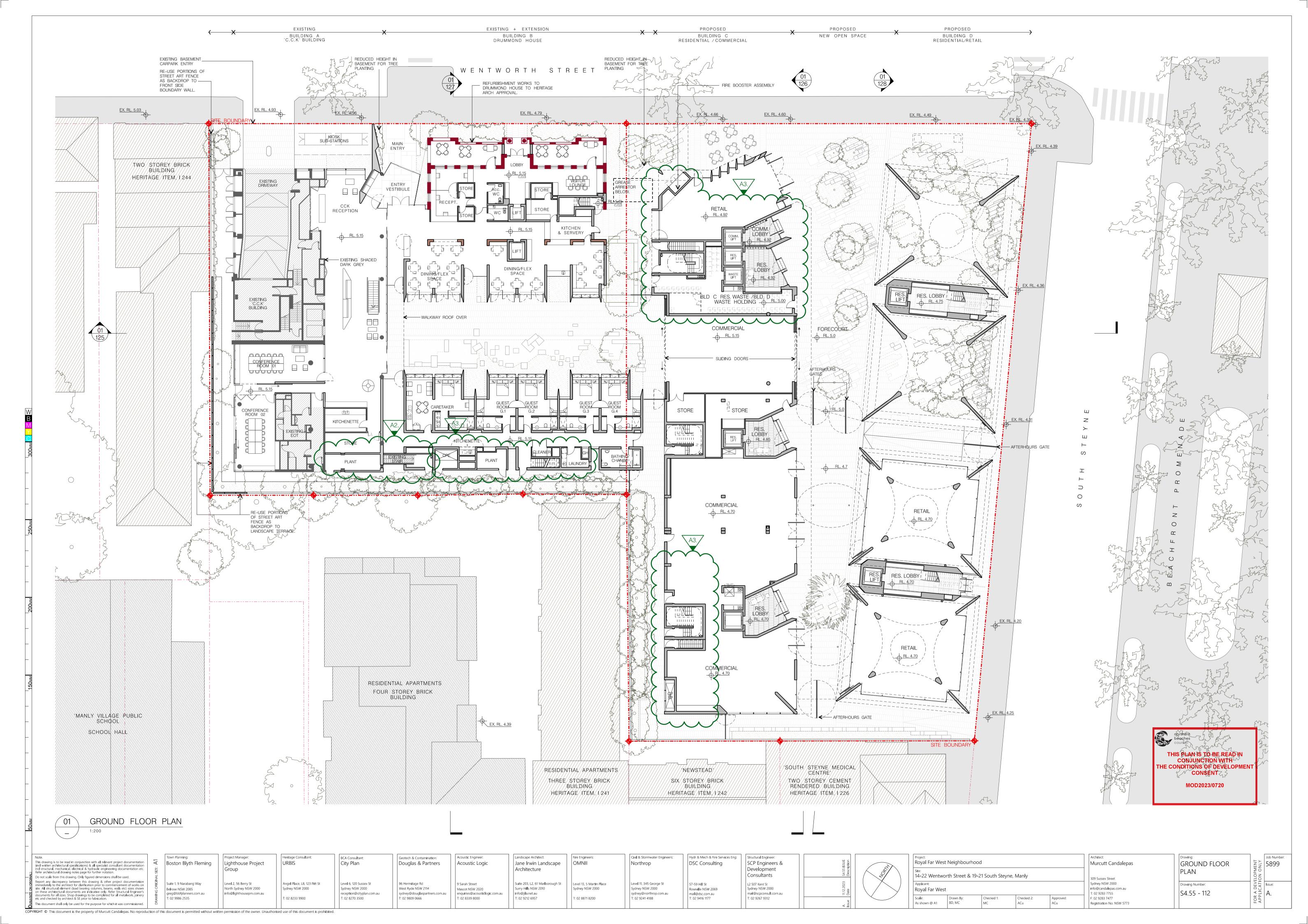




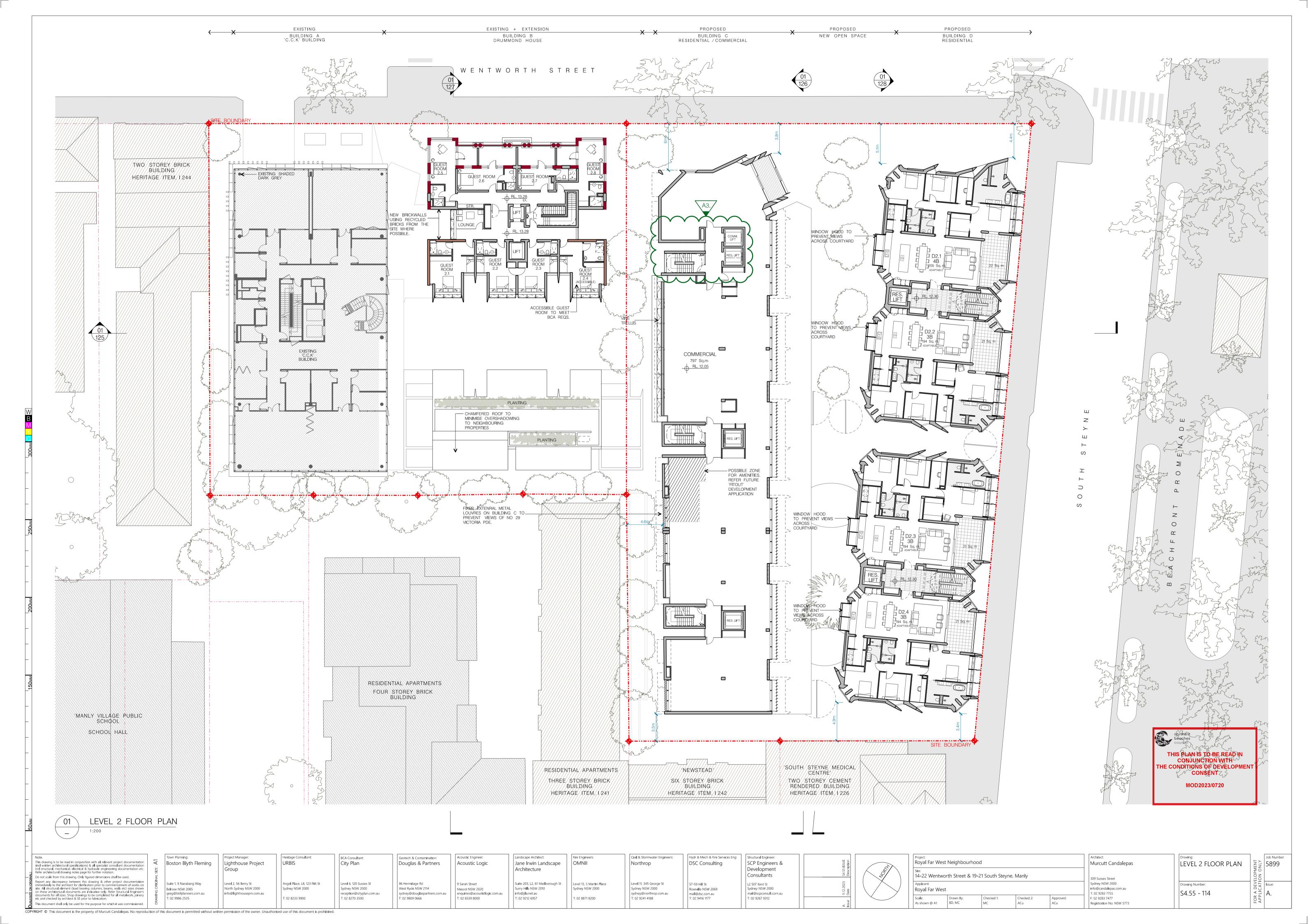


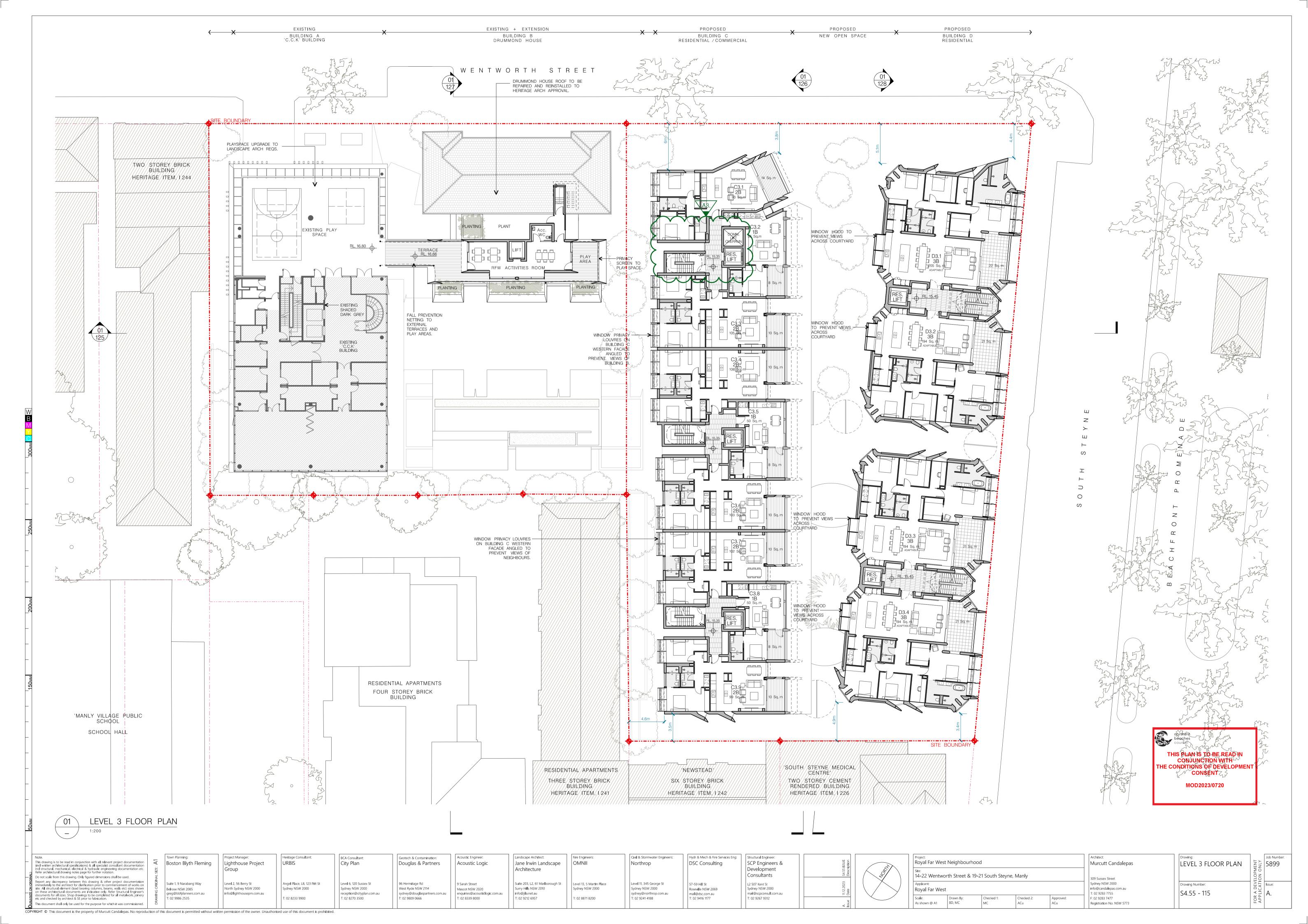


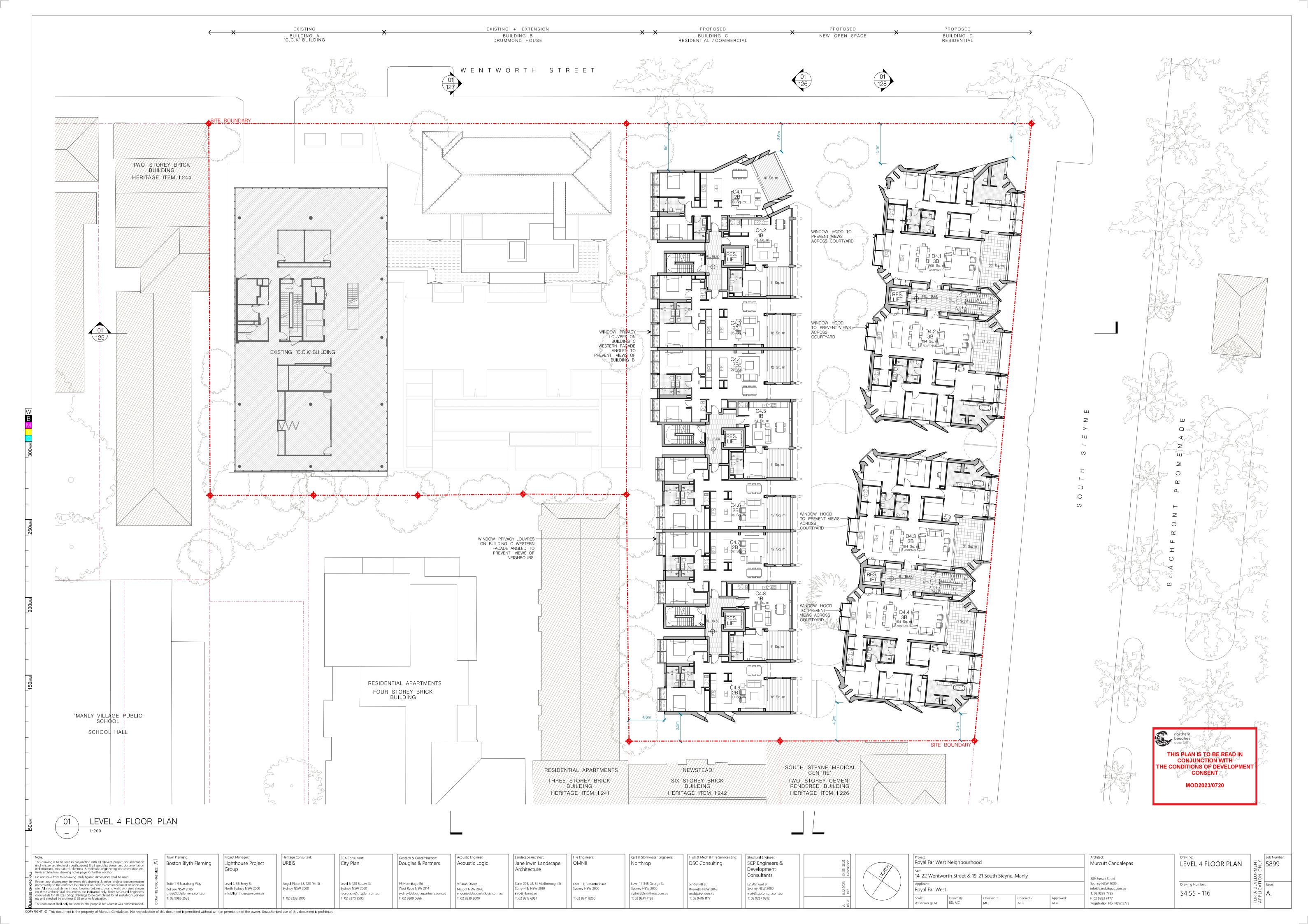


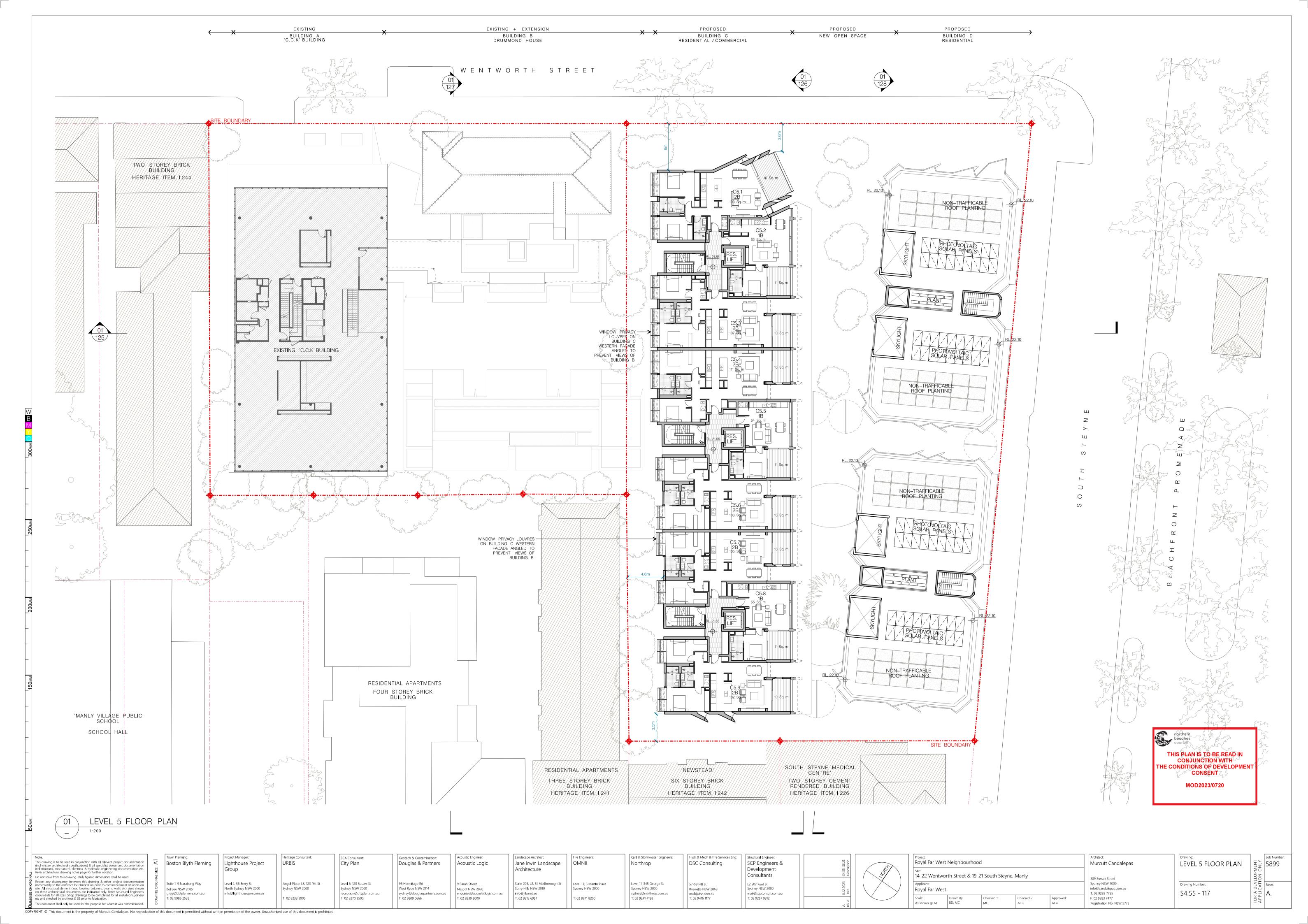


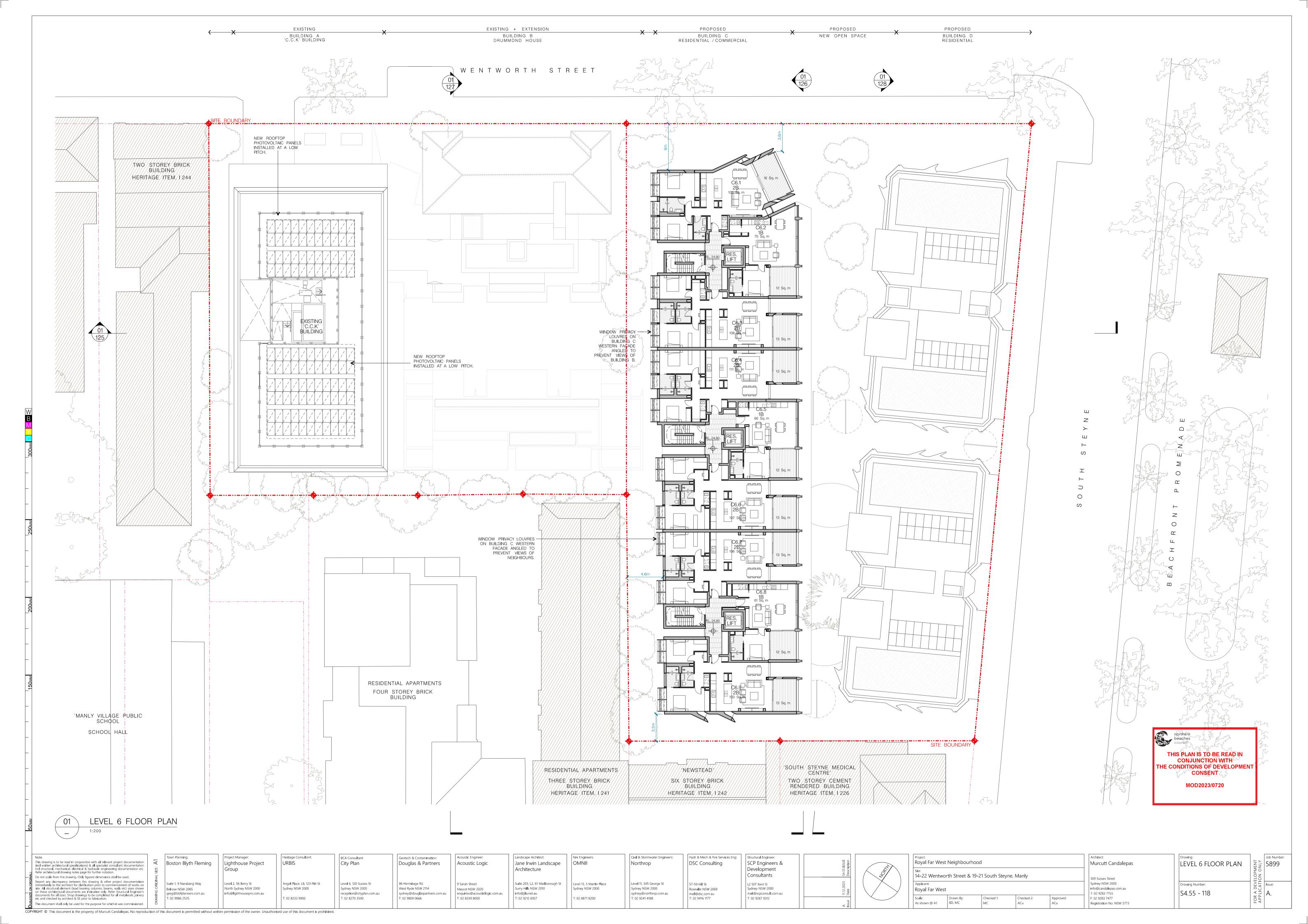


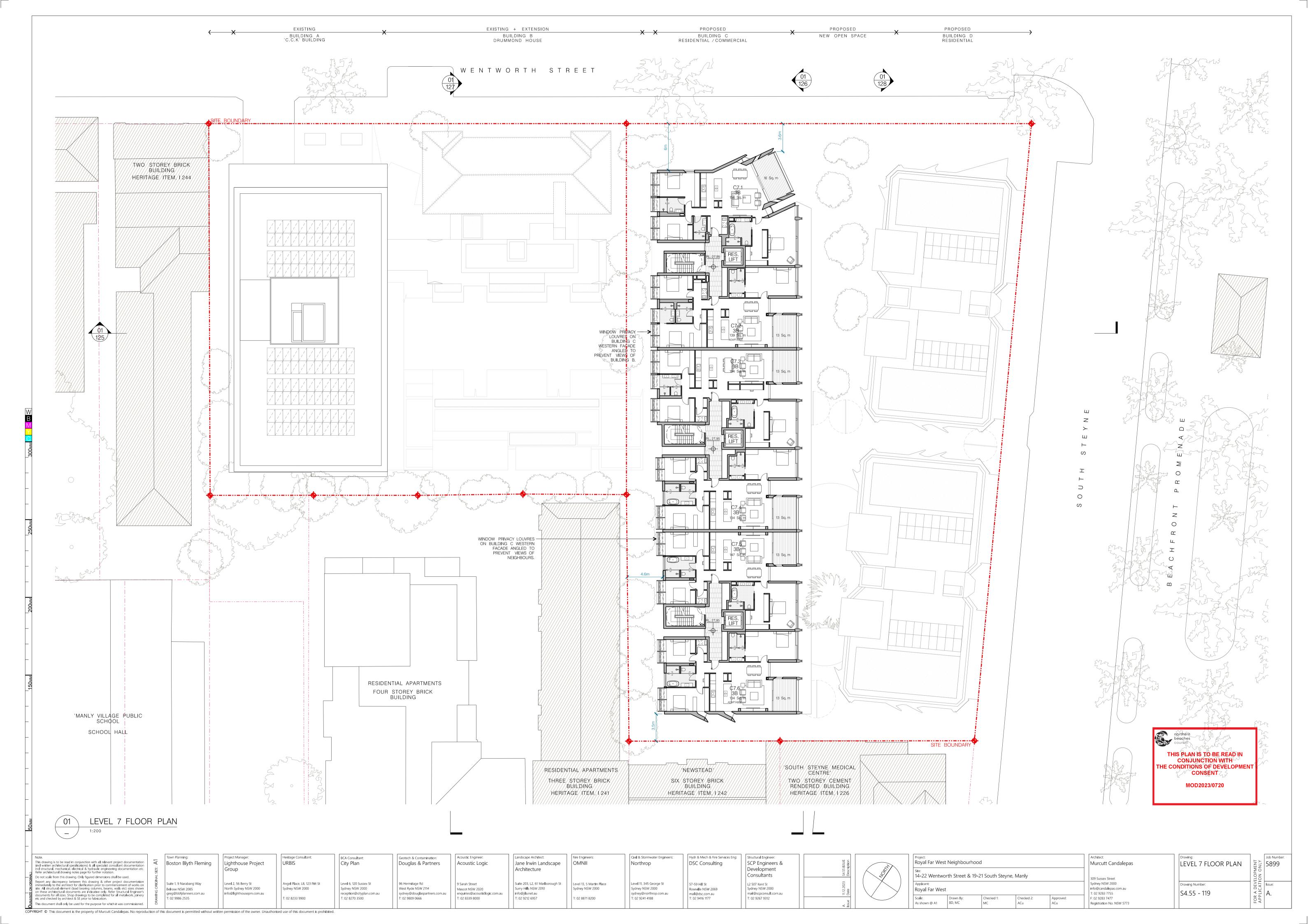


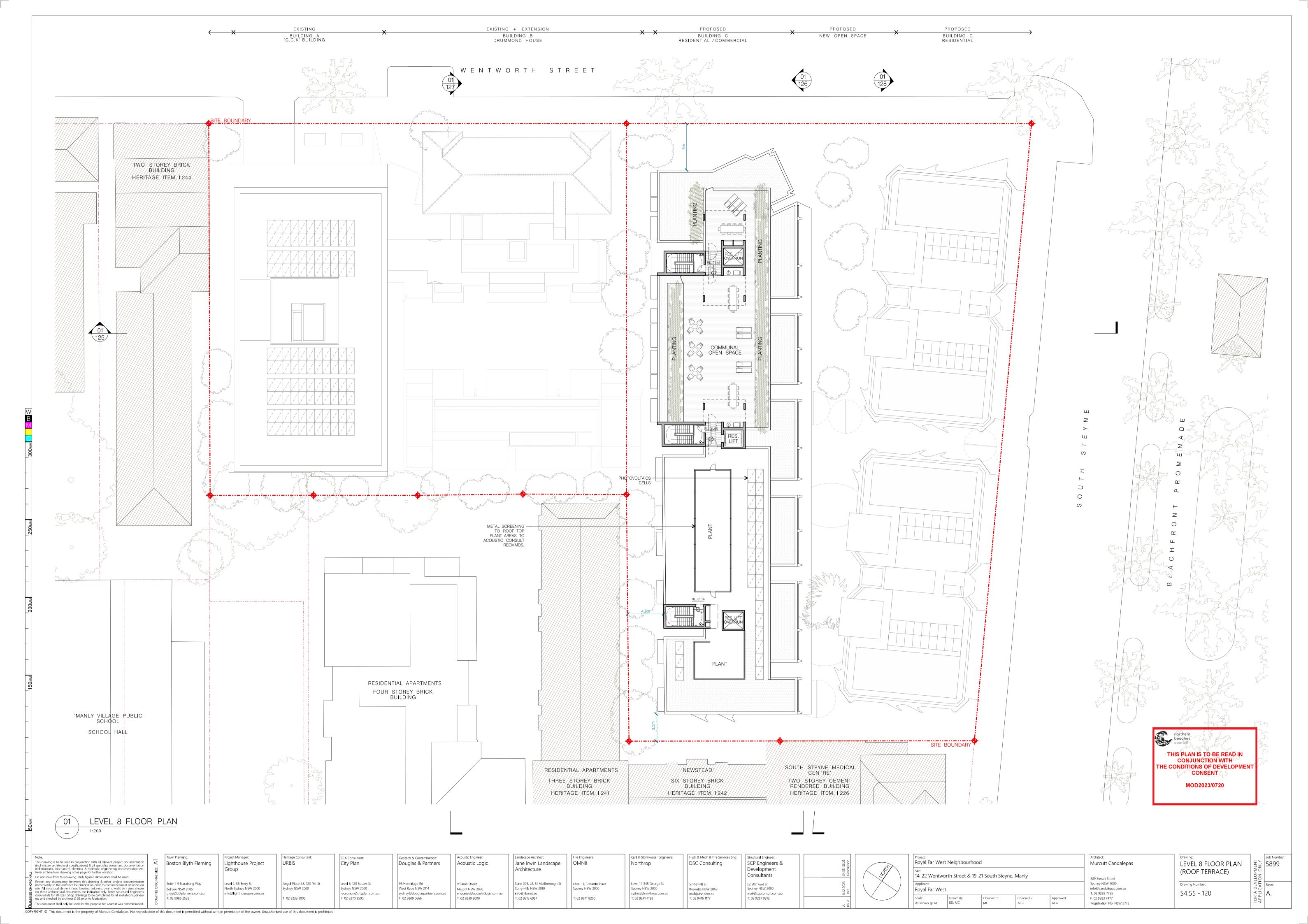


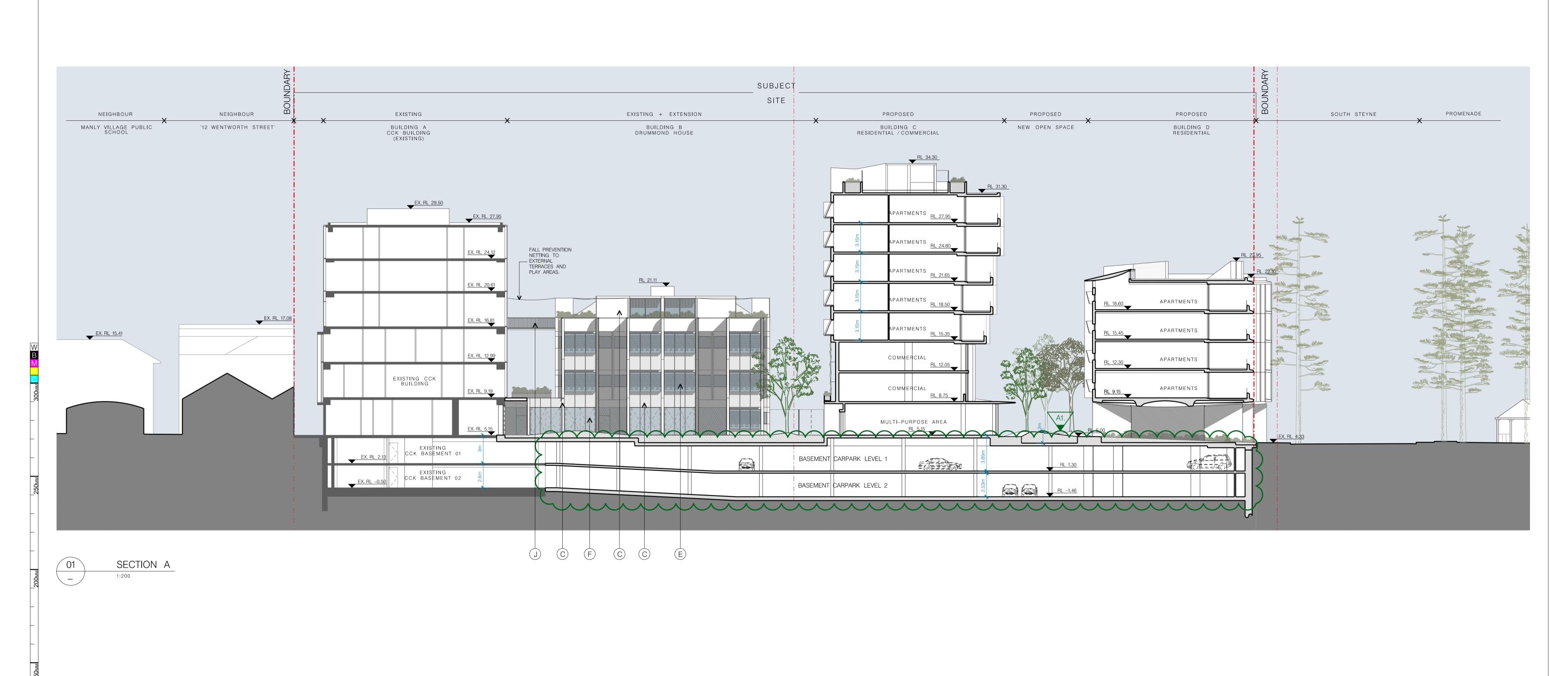










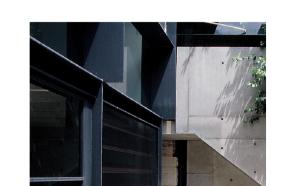








C – WHITE CONCRETE CANDALEPAS ASSOCIATES – BOTANY RD, ZETLAND.



D – METAL FRAMED WINDOWS GLENN MURCUTT & WENDY LEWIN – MOSMAN HOUSE.









H – FACADE TRELLIS PLANTING FINK + JOCHER – STUDENT HOUSING GARCHING.



i– Security gate Luis Barragan – Jardins d'el Pedregal



This drawing is to be read in conjunction with all relevant project documentation (incl written architectural specifications) & all specialist consultant documentation incl structural, mechanical, electrical & hydraulic engineering documentation etc.

Refer architectural drawing notes page for further notation. Do not scale from this drawing. Only figured dimensions shall be used. Report any discrepancy between this drawing & other project documentation immediately to the architect for clarification prior to commencement of works on site. All structural element (load bearing columns, beams, walls etc) sizes shown on these architectural documents are indicative only. Refer Structural Engineer's documents for all sizes. Shop drawings to be completed for all metalwork, joinery etc and checked by architect & SE prior to fabrication.

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Group

B – CERAMIC TILE CLADDING. ALVAR AALTO – JYVASKYLA THEATRE

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Acoustic Engineer:

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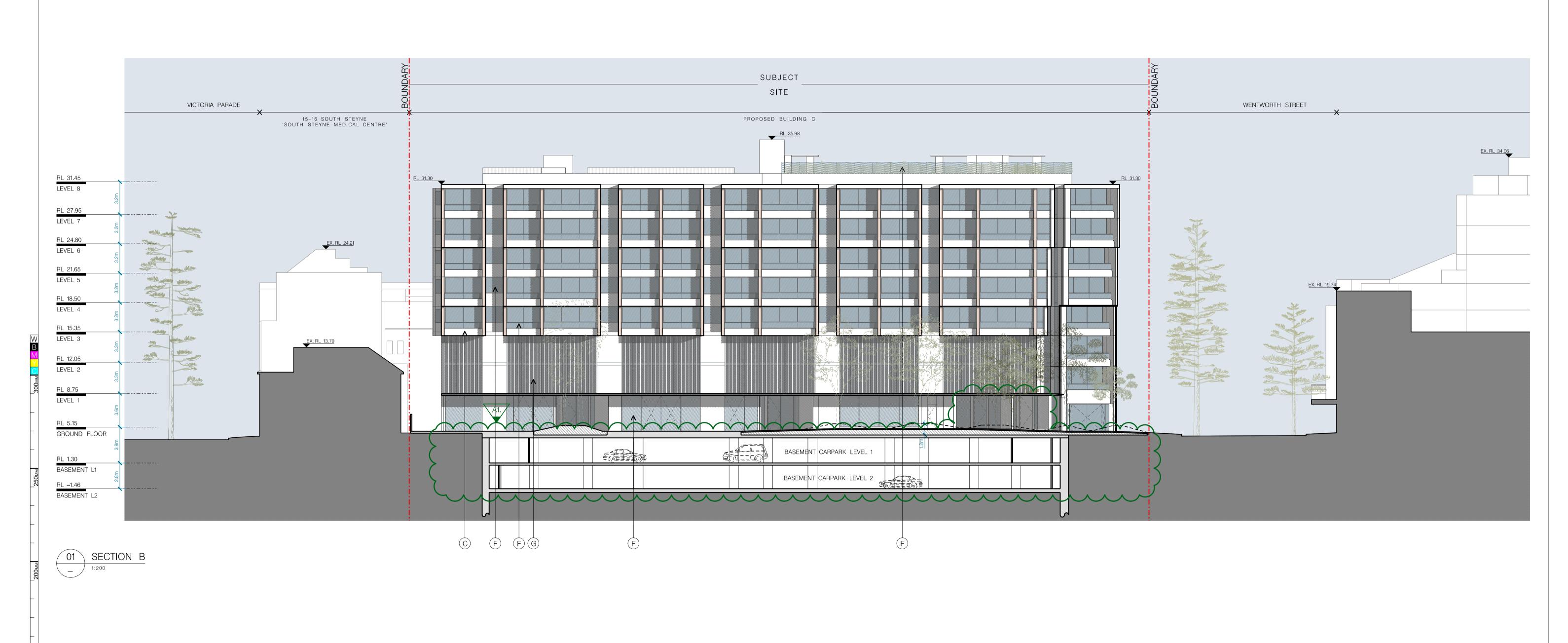
Hydr & Mech & Fire Services Eng: DSC Consulting 57-59 Hi**l**l St Roseville NSW 2069 mail@dsc.com.au T: 02 9416 1177

Structural Engineer: SCP Engineers & Development Consultants L2 507 Kent St Sydney NSW 2000 mail@scpconsult.com.au T: 02 9267 9312

Royal Far West Scale: Drawn By: As shown @ A1 BD, MC

Royal Far West Neighbourhood Murcutt Candalepas 14-22 Wentworth Street & 19-21 South Steyne, Manly 309 Sussex Street Sydney NSW 2000 info@candalepas.com.au T: 02 9283 7755 F: 02 9283 7477 Registration No. NSW 5773

SECTION A 5899 5899 FOR A DEVEL APPLICATION Drawing Number: S4.55 - 125



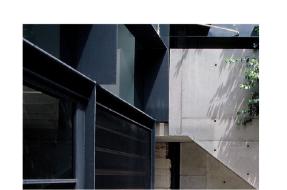




B – CERAMIC TILE CLADDING. ALVAR AALTO – JYVASKYLA THEATRE



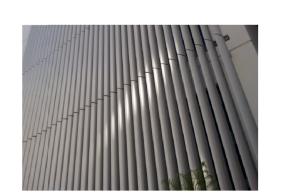
C – WHITE CONCRETE CANDALEPAS ASSOCIATES – BOTANY RD, ZETLAND.



D – METAL FRAMED WINDOWS GLENN MURCUTT & WENDY LEWIN – MOSMAN HOUSE.







G - METAL FIXED FACADE LOUVRES





i– Security gate Luis Barragan – Jardins d'el Pedregal



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₩ Boston Blyth Fleming Belrose NSW 2085 T: 02 9986 2535

Lighthouse Project Group Level 2, 56 Berry St North Sydney NSW 2000 info@lighthousepm.com.au

URBIS Angel Place, L8, 123 Pitt St Sydney NSW 2000 T: 02 8233 9900

BCA Consultant: Geotech & Contamination: City Plan Level 6, 120 Sussex St Sydney NSW 2000 reception@cityplan.com.au T: 02 8270 3500

Douglas & Partners 96 Hermitage Rd West Ryde NSW 2114 sydney@douglaspartners.com.au T: 02 9809 0666

Acoustic Logic 9 Sarah Street Mascot NSW 2020 enquiries@acousticlogic.com.au T: 02 8339 8000

Acoustic Engineer:

T: 02 9212 6957

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OMNII Level 13, 5 Martin Place Sydney NSW 2000 T: 02 8871 8200

DSC Consulting Northrop Level 11, 345 George St 57-59 Hi**l**l St Sydney NSW 2000 sydney@northrop.com.au T: 02 9241 4188 Roseville NSW 2069 mail@dsc.com.au

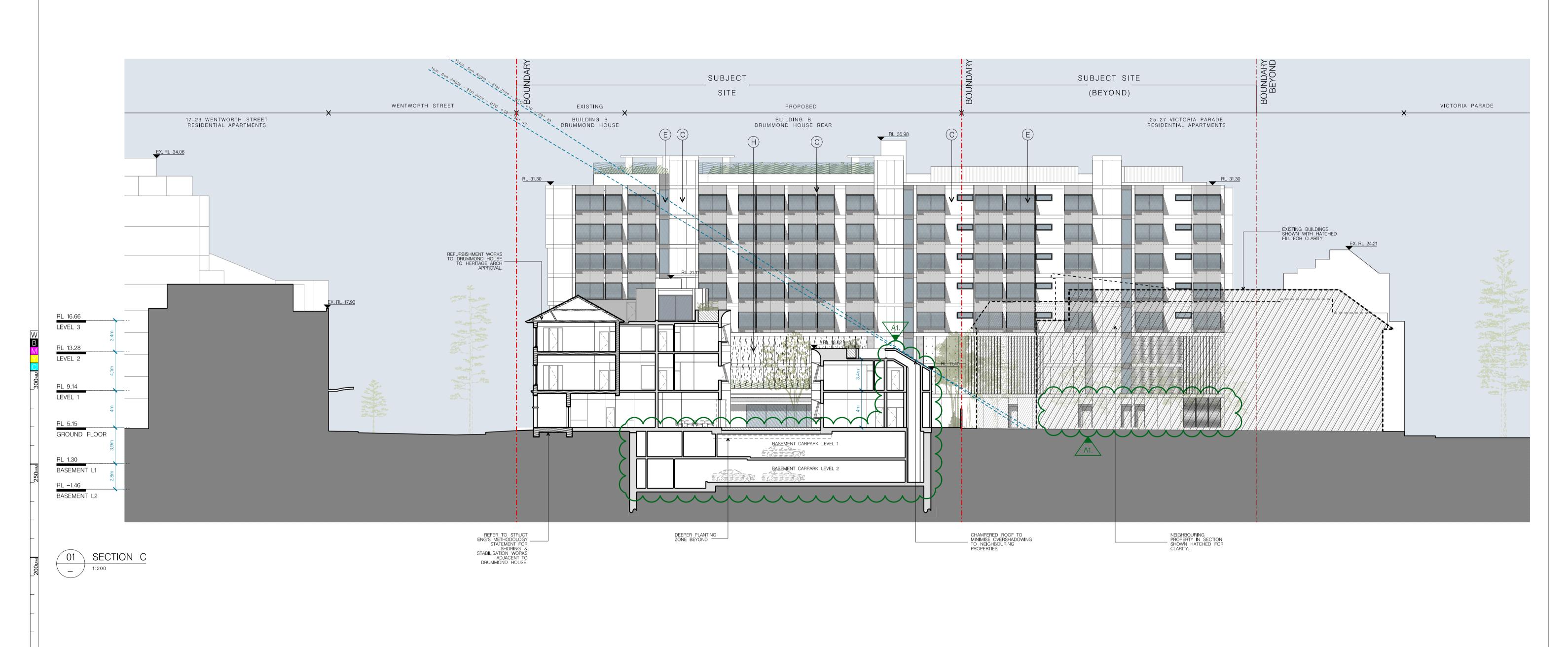
T: 02 9416 1177

Hydr & Mech & Fire Services Eng: Structural Engineer: SCP Engineers & Development Consultants L2 507 Kent St Sydney NSW 2000 mail@scpconsult.com.au T: 02 9267 9312

Royal Far West

Royal Far West Neighbourhood Murcutt Candalepas 14-22 Wentworth Street & 19-21 South Steyne, Manly 309 Sussex Street Sydney NSW 2000 info@candalepas.com.au T: 02 9283 7755 Scale: Drawn By: As shown @ A1 BD, MC F: 02 9283 7477

SECTION B 5899 5899 FOR A DEVEL APPLICATION Drawing Number: S4.55 - 126 Registration No. NSW 5773



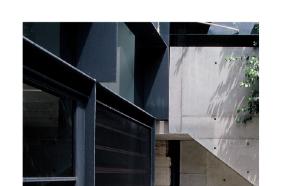




B – CERAMIC TILE CLADDING. ALVAR AALTO – JYVASKYLA THEATRE



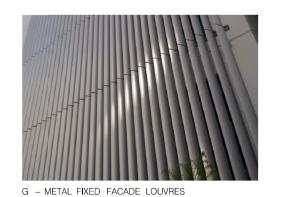
C – WHITE CONCRETE CANDALEPAS ASSOCIATES – BOTANY RD, ZETLAND.



D – METAL FRAMED WINDOWS GLENN MURCUTT & WENDY LEWIN – MOSMAN HOUSE.











i– Security gate Luis Barragan – Jardins d'el Pedregal



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₹ Boston Blyth Fleming Suite 1, 9 Narabang Way Belrose NSW 2085 T: 02 9986 2535

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URBIS Angel Place, L8, 123 Pitt St Sydney NSW 2000 T: 02 8233 9900

BCA Consultant: City Plan Level 6, 120 Sussex St Sydney NSW 2000 reception@cityplan.com.au T: 02 8270 3500

Douglas & Partners 96 Hermitage Rd West Ryde NSW 2114 sydney@douglaspartners.com.au T: 02 9809 0666

Geotech & Contamination:

Acoustic Logic 9 Sarah Street Mascot NSW 2020 T: 02 8339 8000

Acoustic Engineer:

enquiries@acousticlogic.com.au

Jane Irwin Landscape Architecture Suite 203, L2, 61 Marlborough St Surry Hills NSW 2010 info@jila.net.au T: 02 9212 6957

OMNII Level 13, 5 Martin Place Sydney NSW 2000 T: 02 8871 8200

Northrop Level 11, 345 George St Sydney NSW 2000 sydney@northrop.com.au T: 02 9241 4188

Civil & Stormwater Engineers:

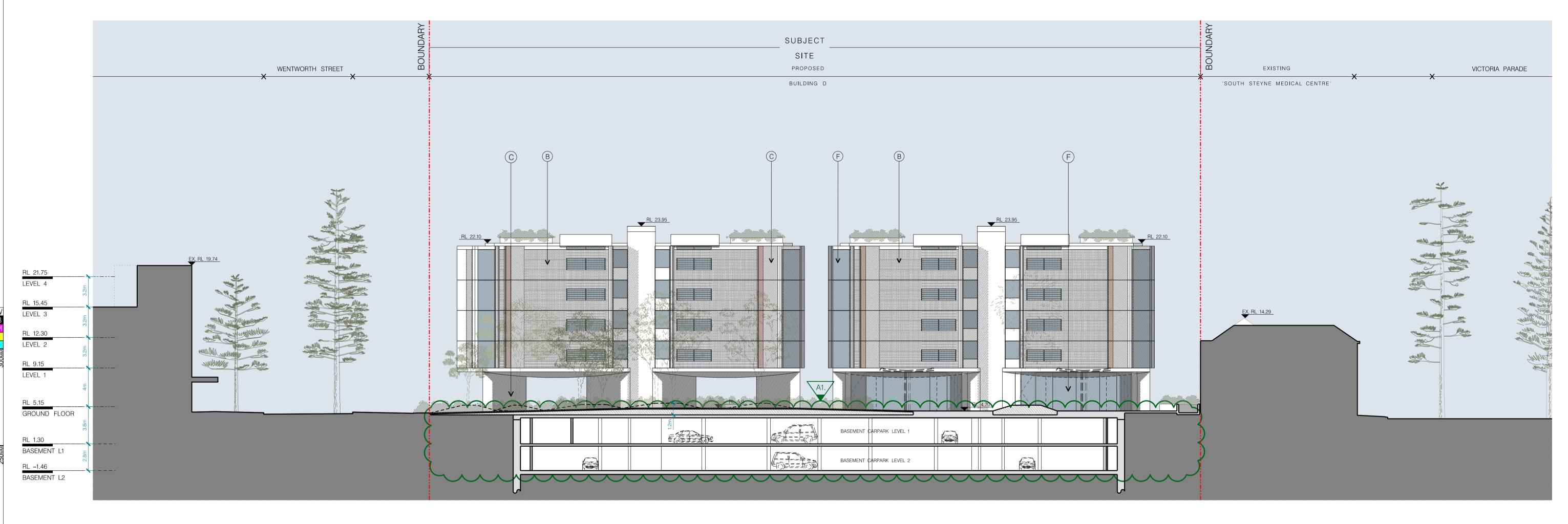
Hydr & Mech & Fire Services Eng: DSC Consulting 57-59 Hi**l**l St Roseville NSW 2069 mail@dsc.com.au T: 02 9416 1177

Structural Engineer: SCP Engineers & Development Consultants L2 507 Kent St Sydney NSW 2000 mail@scpconsult.com.au T: 02 9267 9312

Royal Far West Neighbourhood 14-22 Wentworth Street & 19-21 South Steyne, Manly Royal Far West Scale: Drawn By: As shown @ A1 BD, MC

Murcutt Candalepas 309 Sussex Street Sydney NSW 2000 info@candalepas.com.au T: 02 9283 7755 F: 02 9283 7477 Registration No. NSW 5773

SECTION C 5899 5899 FOR A DEVEL APPLICATION Drawing Number: S4.55 - 127











Group

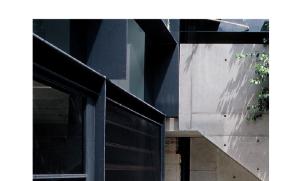
Level 2, 56 Berry St

North Sydney NSW 2000

info@lighthousepm.com.au



C – WHITE CONCRETE CANDALEPAS ASSOCIATES – BOTANY RD, ZETLAND.



D – METAL FRAMED WINDOWS GLENN MURCUTT & WENDY LEWIN – MOSMAN HOUSE.











i– Security gate Luis Barragan – Jardins d'el Pedregal

Registration No. NSW 5773



A - OFF-FORM CONCRETE GLENN MURCUTT, WENDY LEWIN AND REG LARK -ARTHUR & YVONNE BOYD CENTRE.

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Refer architectural drawing notes page for further notation.

Do not scale from this drawing. Only figured dimensions shall be used.

URBIS Lighthouse Project

Angel Place, L8, 123 Pitt St Sydney NSW 2000 T: 02 8233 9900

BCA Consultant: City Plan Level 6, 120 Sussex St Sydney NSW 2000 reception@cityplan.com.au T: 02 8270 3500

Geotech & Contamination: Douglas & Partners 96 Hermitage Rd West Ryde NSW 2114 sydney@douglaspartners.com.au T: 02 9809 0666

Acoustic Engineer: Acoustic Logic 9 Sarah Street Mascot NSW 2020 enquiries@acousticlogic.com.au T: 02 8339 8000

Architecture Surry Hills NSW 2010 info@jila.net.au T: 02 9212 6957

OMNII Jane Irwin Landscape Suite 203, L2, 61 Marlborough St

Northrop Level 13, 5 Martin Place Level 11, 345 George St Sydney NSW 2000 sydney@northrop.com.au T: 02 9241 4188 Sydney NSW 2000 T: 02 8871 8200

Hydr & Mech & Fire Services Eng: DSC Consulting 57-59 Hi**l**l St Roseville NSW 2069 mail@dsc.com.au T: 02 9416 1177

Structural Engineer: SCP Engineers & Development Consultants L2 507 Kent St Sydney NSW 2000 mail@scpconsult.com.au T: 02 9267 9312

Royal Far West Scale: Drawn By: As shown @ A1 BD, MC

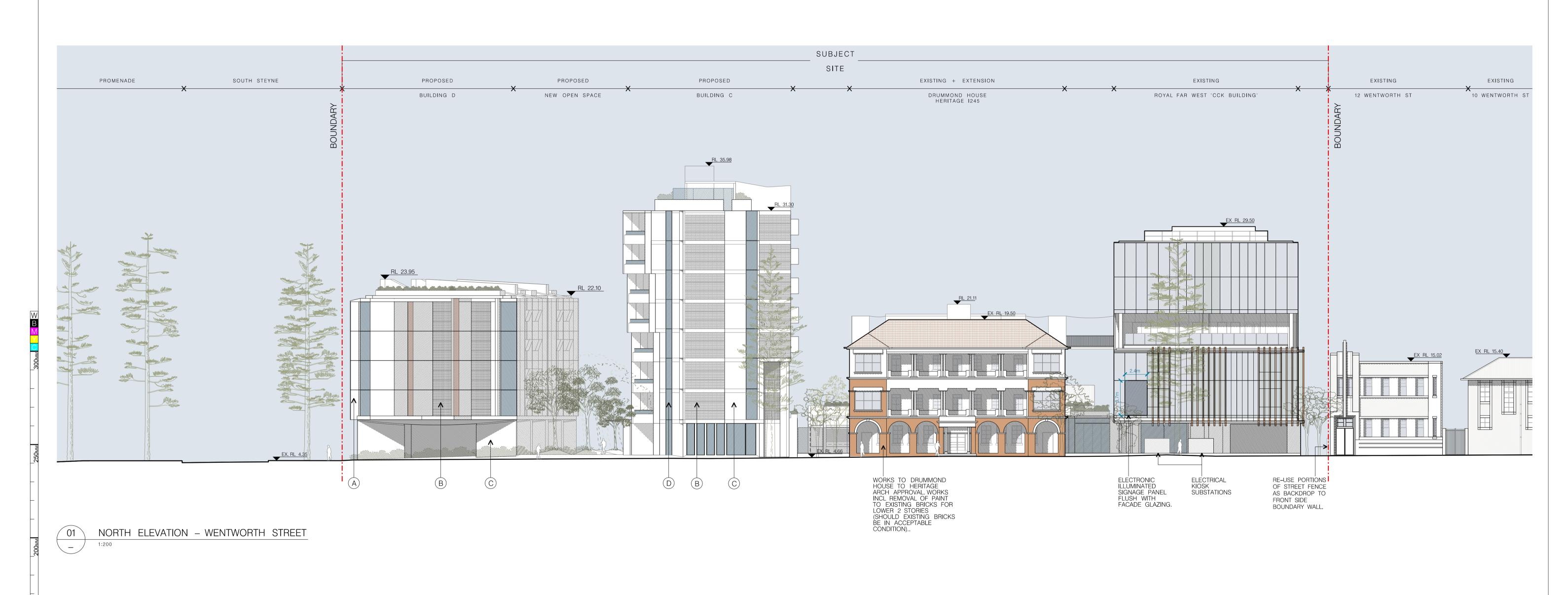
Royal Far West Neighbourhood Murcutt Candalepas 14-22 Wentworth Street & 19-21 South Steyne, Manly 309 Sussex Street Sydney NSW 2000 info@candalepas.com.au T: 02 9283 7755 F: 02 9283 7477

SECTION D 5899 5899 FOR A DEVEL APPLICATION Drawing Number: S4.55 - 128

Report any discrepancy between this drawing & other project documentation immediately to the architect for clarification prior to commencement of works on site. All structural element (load bearing columns, beams, walls etc) sizes shown on these architectural documents are indicative only. Refer Structural Engineer's documents for all sizes. Shop drawings to be completed for all metalwork, joinery etc and checked by architect & SE prior to fabrication. T: 02 9986 2535 This document shall only be used for the purpose for which it was commissioned. COPYRIGHT © This document is the property of Murcutt Candalepas. No reproduction of this document is permitted without written permission of the owner. Unauthorised use of this document is prohibited.

₩ Boston Blyth Fleming

Belrose NSW 2085





















i– Security gate Luis Barragan – Jardins d'el Pedregal



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BCA Consultant: City Plan Level 6, 120 Sussex St Sydney NSW 2000 reception@cityplan.com.au T: 02 8270 3500

C – WHITE CONCRETE CANDALEPAS ASSOCIATES – BOTANY RD, ZETLAND.

Douglas & Partners 96 Hermitage Rd West Ryde NSW 2114 sydney@douglaspartners.com.au T: 02 9809 0666

Geotech & Contamination:

9 Sarah Street Mascot NSW 2020 T: 02 8339 8000

Acoustic Engineer:

Acoustic Logic enquiries@acousticlogic.com.au

D – METAL FRAMED WINDOWS GLENN MURCUTT & WENDY LEWIN – MOSMAN HOUSE.

Jane Irwin Landscape Architecture Suite 203, L2, 61 Marlborough St Surry Hills NSW 2010 nfo@jila.net.au T: 02 9212 6957

OMNII Level 13, 5 Martin Place T: 02 8871 8200

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Structural Engineer: SCP Engineers & Development Consultants L2 507 Kent St Sydney NSW 2000 mail@scpconsult.com.au T: 02 9267 9312

Royal Far West Scale: Drawn By: As shown @ A1 BD, MC

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NORTH ELEVATION <del>`</del> 5899 FOR A DEVEL
APPLICATIO

We have the state of Drawing Number: S4.55 - 135



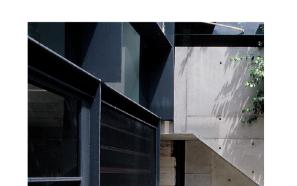




B – CERAMIC TILE CLADDING. ALVAR AALTO – JYVASKYLA THEATRE



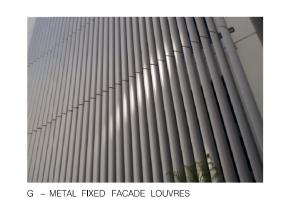
C – WHITE CONCRETE CANDALEPAS ASSOCIATES – BOTANY RD, ZETLAND.



D – METAL FRAMED WINDOWS GLENN MURCUTT & WENDY LEWIN – MOSMAN HOUSE.











i– Security gate Luis Barragan – Jardins d'el Pedregal



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Acoustic Engineer:

enquiries@acousticlogic.com.au

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Northrop Level 13, 5 Martin Place T: 02 8871 8200

Level 11, 345 George St Sydney NSW 2000 sydney@northrop.com.au T: 02 9241 4188

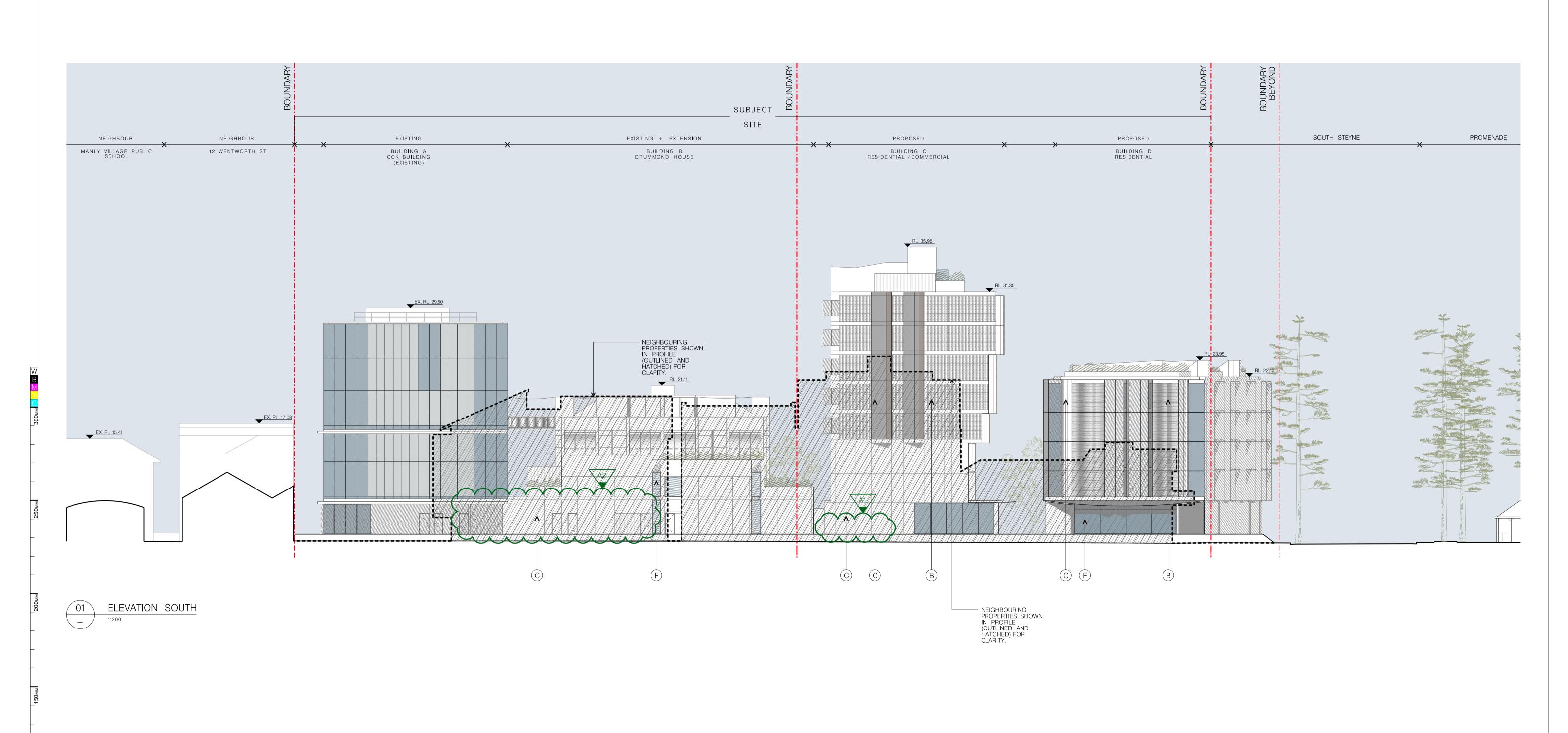
Hydr & Mech & Fire Services Eng: Structural Engineer: SCP Engineers & DSC Consulting Development Consultants L2 507 Kent St Sydney NSW 2000 57-59 Hill St Roseville NSW 2069 mail@dsc.com.au mail@scpconsult.com.au T: 02 9416 1177

T: 02 9267 9312

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EAST ELEVATION 5899 5899 FOR A DEVEL APPLICATION Drawing Number: S4.55 - 136

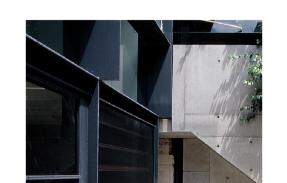








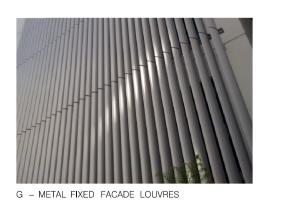
C — WHITE CONCRETE CANDALEPAS ASSOCIATES — BOTANY RD, ZETLAND.



D – METAL FRAMED WINDOWS GLENN MURCUTT & WENDY LEWIN – MOSMAN HOUSE.











i – Security gate Luis Barragan – Jardins d'el Pedregal



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BCA Consultant:

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Geotech & Contamination:

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Acoustic Engineer:

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Hydr & Mech & Fire Services Eng: DSC Consulting Consultants 57-59 Hi**l**l St L2 507 Kent St Sydney NSW 2000 Roseville NSW 2069 mail@dsc.com.au T: 02 9416 1177

Structural Engineer: SCP Engineers & Development mail@scpconsult.com.au T: 02 9267 9312

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SOUTH ELEVATION ≥ 5899 FOR A DEVEL APPLICATION Drawing Number: S4.55 - 137

# ROYAL FAR WEST MANLY

# 14-22 WENTWORTH STREET & 19-21 SOUTH STEYNE, MANLY NSW 2095 **CIVIL ENGINEERING PACKAGE - SECTION 4.55**



LOCALITY PLAN

#### CIVIL DRAWING SCHEDULE

DRAWING TITLE COVER SHEET, DRAWING SCHEDULE AND LOCALITY PLAN SPECIFICATION NOTES SEDIMENT AND SOIL EROSION CONTROL PLAN DETAILS - SEDIMENT AND SOIL EROSION CONTROL BULK EARTHWORKS PLAN STORMWATER MANAGEMENT PLAN DETAILS - ROAD CROSSING SECTION

WSUD CATCHMENT PLAN

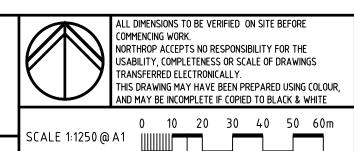
THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT

# **FOR APPROVAL**

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT
01	ISSUED FOR SECTION 4.55	AS		SS	06.12.23	
02	ISSUED FOR SECTION 4.55	MM		SS	18.12.23	_
						Royal Far West Children's health, country-wide
						Children's health, country-wide
						DRAWING NOT TO BE USED FOR CONSTRUCTION UNLES
						VERIFICATION SIGNATURE HAS BEEN ADDED



NORTHROP CONSULTING ENGINEERS PTY LTD



SOURCE: NEARMAPS (2022)



**ROYAL FAR WEST MANLY** 14-22 WENTWORTH STREET & 19-21 SOUTH STEYNE, **MANLY NSW 2095** 

DRAWING TITLE CIVIL EN COVER SHEET, DRAWING

	JOB NUMBER				
NGINEERING PACKAGE S4.55	200211				
34.33	DRAWING NUMBER	F			
ED CHEET DO AMINO					

SCHEDULE AND LOCALITY PLAN DRAWING SHEET SIZE = A1

#### ACCESS AND SAFETY

- THE CONTRACTOR SHALL COMPLY WITH ALL STATUTORY AND INDUSTRIAL REQUIREMENTS FOR PROVISION OF A SAFE WORKING ENVIRONMENT INCLUDING TRAFFIC CONTROL.
- THE CONTRACTOR SHALL PROVIDE TRAFFIC MANAGEMENT PLANS FOR THE PROPOSED WORKS COMPLETED BY A SUITABLY QUALIFIED PERSON AND APPROVED BY COUNCIL / REGULATORY AUTHORITY. WORK IS NOT TO COMMENCE ON SITE PRIOR TO APPROVAL OF TRAFFIC MANAGEMENT SCHEME.
- 3. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES ACCESS TO BUILDINGS ADJACENT THE WORKS IS NOT DISRUPTED.
- 4. WHERE NECESSARY THE CONTRACTOR SHALL PROVIDE SAFE PASSAGE OF VEHICLES AND/OR PEDESTRIANS THROUGH OR BY THE
- 5. THE CONTRACTOR SHALL ENSURE PUBLIC ACCESS EXTERNAL TO THE SITE IS IN ACCORDANCE WITH COUNCILS / AUTHORITY / SITE MANAGERS REQUIREMENTS.

#### SEDIMENT AND SOIL EROSION

- THE SEDIMENT & EROSION CONTROL PLAN PRESENTS CONCEPTS ONLY. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE ESTABLISHMENT & MANAGEMENT OF A DETAILED SCHEME MEETING COUNCILS AND OTHER REGULATORY AUTHORITY REQUIREMENTS AND MAKE PAYMENT OF ALL FEES.
- THE CONTRACTOR SHALL INSTIGATE ALL SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH STATUTORY REQUIREMENTS AND IN PARTICULAR THE 'BLUE BOOK' (MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION), PRODUCED BY LANDCOM AND COUNCILS POLICIES. THESE MEASURES ARE TO BE INSPECTED AND MAINTAINED ON A DAILY BASIS.
- THE CONTRACTOR SHALL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS INSTRUCTED IN THE DRAWINGS AND ADHERE TO ALL REGULATORY AUTHORITY REQUIREMENTS.
- 4. THE CONTRACTOR SHALL INFORM ALL SUB CONTRACTORS OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSTREAM LANDS AND WATERWAYS.
- 5. WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE SHALL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE;
- 5.1. CONSTRUCT TEMPORARY STABILISED SITE ACCESS INCLUSIVE OF SHAKE DOWN / WASH PAD. 5.2. INSTALL ALL TEMPORARY SEDIMENT FENCES AND BARRIER
- FENCES. WHERE FENCES ADJACENT EACH OTHER, THE SEDIMENT FENCE CAN BE INCORPORATED INTO THE BARRIER FENCE. 5.3. INSTALL SEDIMENT CONTROL MEASURES AS OUTLINED ON THE APPROVED PLANS.
- 6. UNDERTAKE SITE DEVELOPMENT WORKS SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF MINIMUM WORKABLE SIZE.
- AT ALL TIMES AND IN PARTICULAR DURING WINDY AND DRY WEATHER, LARGE UNPROTECTED AREAS WILL BE STABILISED / KEPT MOIST (NOT WET) TO KEEP DUST UNDER CONTROL ENSURING CONFORMITY TO REGULATORY AUTHORITY REQUIREMENTS.
- 8. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) SHALL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
- 9. WATER SHALL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS THE CATCHMENT AREA HAS BEEN STABILISED AND/OR ANY LIKELY SEDIMENT BEEN FILTERED OUT.
- 10. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES SHALL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE STABILISED / REHABILITATED.
- 11. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIRS AND/OR MAINTENANCE SHALL BE UNDERTAKEN REGULARLY AND AS REQUIRED. PARTICULARLY FOLLOWING RAIN EVENTS.
- RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER SHALL BE DISPOSED OF IN ACCORDANCE WITH REGULATORY AUTHORITY REQUIREMENTS. CONTRACTOR TO PAY ALL FEES AND PROVIDE EVIDENCE OF SAFE DISPOSAL
- 13. IF A TEMPORARY SEDIMENT BASIN IS REQUIRED, ENSURE SAFE BATTER SLOPES IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. MAINTAIN ADEQUATE STORAGE VOLUME IN ACCORDANCE WITH PLANS. TEMPORARY PUMP 'CLEAN FLOCCULATED' WATER TO AUTHORITIES STORMWATER SYSTEM. ENSURE WHOLE DISTURBED SITE RUN-OFF IS DIRECTED TO TEMPORARY SEDIMENT BASIN.

#### EXISTING SERVICES

- 1. ALL UTILITY SERVICES INDICATED ON THE DRAWINGS ORIGINATE FROM SUPPLIED DATA OR DIAL BEFORE YOU DIG SEARCHES, THEREFORE THEIR ACCURACY AND COMPLETENESS IS NOT GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE AND CONFIRM THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY. NOTE SERVICE AUTHORITY REQUIREMENTS FOR LOCATING OF SERVICES PRIOR TO COMMENCEMENT OF WORKS.
- 2. CARE TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER COMMUNICATION, GAS OR ELECTRICAL SERVICES. HAND EXCAVATION ONLY IN THESE AREAS.
- THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING SERVICES THAT ARE TO BE RETAINED IN THE VICINITY OF THE PROPOSED WORKS. ANY AND ALL DAMAGE TO THESE SERVICES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE SUPERINTENDENT AT THE CONTRACTORS EXPENSE.
- 4. THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE ADJUSTMENT (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS.
- THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS UNLESS DIRECTED OTHERWISE ON THE DRAWINGS OR BY THE SUPERINTENDENT.
- 6. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS ARE NOT AFFECTED BY THE WORKS AND ARE MAINTAINED AND NOT DISRUPTED.
- PRIOR TO COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL GAIN APPROVAL OF THE PROGRAM FOR THE RELOCATION AND/OR CONSTRUCTION OF TEMPORARY SERVICES AND FOR ANY ASSOCIATED INTERRUPTION OF SUPPLY.
- 8. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING IN OPERATION DURING WORKS TO THE SATISFACTION AND APPROVAL OF THE SUPERINTENDENT. ONCE DIVERSION IS COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT.
- 9. THE CONTRACTOR IS TO ALLOW TO POTHOLE ANY SERVICES WITHIN A PUBLIC RESERVE WITHIN THE EXTENT OF WORKS (E.G. STORMWATER CROSSINGS).

#### **FARTHWORKS**

- AT THE COMMENCEMENT OF FILLING OPERATIONS FOR BULK EARTHWORKS A GEOTECHNICAL ENGINEER IS TO VISIT THE SITE & CONFIRM THE SUITABILITY OF THE METHODOLOGY OF ACHIEVING THE REQUIRED COMPACTION EARTHWORKS REQUIREMENTS. THIS WILL APPLY FOR FILLING OF BASINS AND ANY REQUIRED LEVELLING TO BRING LEVELS TO BULK LEVELS.
- 2. STRIP TOPSOIL, VEGETABLE MATTER AND RUBBLE TO EXPOSE NATURALLY OCCURRING MATERIAL AND STOCKPILE ON SITE AS DIRECTED BY THE SUPERINTENDENT.
- THE CONTRACTOR IS TO ALLOW FOR A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER TO PROVIDE ADVICE AND CERTIFICATION OF ANY WORKS ASSOCIATED WITH TREATING OR MANAGING UNSUITABLE GROUND CONDITIONS THROUGHOUT THE CONTRACT (e.g. STABILITY OF EXCAVATIONS, POOR SUBGRADE etc).
- 4. ALL SOFT, WET OR UNSUITABLE MATERIAL IS TO BE REMOVED AS DIRECTED BY THE SUPERINTENDENT AND REPLACED WITH APPROVED MATERIAL SATISFYING THE REQUIREMENTS BELOW.
- PROVIDE CERTIFICATES VERIFYING THE QUALITY OF IMPORTED MATERIAL FOR THE SUPERINTENDENTS APPROVAL
- 6. ALL FILL MATERIAL SHALL BE PLACED IN MAXIMUM 200mm THICK LAYERS (LOOSE) AND COMPACTED AT OPTIMUM MOISTURE CONTENT (+ OR - 2%) TO ACHIEVE A DRY DENSITY DETERMINED IN ACCORDANCE WITH AS1289.2.1.1, AS1289.5.7.1 AND AS1289.5.8.8 OF NOT LESS THAN THE FOLLOWING STANDARD MINIMUM DRY DENSITY
- ALLOW FOR EXCAVATION IN ALL MATERIALS AS FOUND U.N.O. NO ADDITIONAL PAYMENTS WILL BE MADE FOR EXCAVATION IN WET OR HARD GROUND.
- WHERE THERE IS INSUFFICIENT EXCAVATED MATERIAL SUITABLE FOR FILLING OR SUBGRADE REPLACEMENT, THE CONTRACTOR IS TO ALLOW TO IMPORT FILL. IMPORTED FILL SHALL COMPLY WITH THE FOLLOWING:
- 8.1. BE OF VIRGIN EXCAVATED NATURAL MATERIAL OR 8.2. CONTRACTOR TO PROVIDE EVIDENCE IMPORT IS SUITABLE FOR
- 8.3. PLASTICITY INDEX BETWEEN 2-15% AND CBR > 8
- 8.4. FREE FROM ORGANIC AND PERISHABLE MATTER 8.5. MAXIMUM SIZE 50mm, PASSING 75 MICRON SIEVE (<25%)
- 9. THE CONTRACTOR SHALL PROGRAM THE EARTHWORKS OPERATION SO THAT THE WORKING AREAS ARE ADEQUATELY DRAINED DURING THE PERIOD OF CONSTRUCTION. THE SURFACE SHALL BE GRADED AND SEALED OFF TO REMOVE DEPRESSIONS, ROLLERS MARKS AND SIMILAR WHICH WOULD ALLOW WATER TO POND AND PENETRATE THE UNDERLYING MATERIAL. ANY DAMAGE RESULTING FROM THE CONTRACTOR NOT OBSERVING THESE REQUIREMENTS SHALL BE RECTIFIED AT THEIR COST.
- 10. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE AND MAINTAIN THE INTEGRITY OF ALL SERVICES, CONDUITS AND PIPES DURING CONSTRUCTION, SPECIFICALLY DURING THE BACKFILLING AND COMPACTION PROCEDURE. ANY AND ALL DAMAGE TO NEW OR EXISTING SERVICES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST.

#### DEEP EXCAVATIONS

- 11. PRIOR TO THE COMMENCEMENT OF EXCAVATION WORKS GREATER THAN 1.5m IN DEPTH. THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER TO DETERMINE THE STABILITY OF MATERIAL BEING EXCAVATED AND BENCHING REQUIREMENTS / MINIMUM BATTER SLOPES.
- 12. THE CONTRACTOR MUST PROVIDE THE SUPERINTENDENT AND OR THE DESIGN ENGINEER WITH A COPY OF THE GEOTECHNICAL ENGINEERS REPORT PRIOR TO PRACTICAL COMPLETION.
- 13. THE CONTRACTOR IS TO PROVIDE SAFETY BARRIERS, FENCING AND THE LIKE IN ACCORDANCE WITH OH&S AND REGULATORY AUTHORITY REQUIREMENTS AND TO ENSURE THE WORK SITE IS SAFE AT ALL

#### SITEWORKS

- ALL WORKS TO BE IN ACCORDANCE WITH SPECIFICATIONS AND AUSTRALIAN STANDARDS. CONFLICTS BETWEEN SAID DOCUMENTS SHALL BE REFERRED TO THE SUPERINTENDENT FOR DIRECTION.
- 2. THE CONTRACTOR IS TO REVIEW THE DRAWINGS PRIOR TO PRICING AND COMMENCEMENT AND REPORT ANY DISCREPANCIES TO
- ANY PRODUCTS SPECIFIED OR USED TO BE VERIFIED BY THE CONTRACTOR AS BEING SAFE AND APPROPRIATE FOR USE. NORTHROP DO NOT TAKE ANY RESPONSIBILITY FOR THE USE OF UNSAFE PRODUCTS
- . THE CONTRACTOR IS TO DESIGN, OBTAIN APPROVALS AND CARRY OUT REQUIRED TEMPORARY TRAFFIC CONTROL PROCEDURES DURING CONSTRUCTION IN ACCORDANCE WITH ALL REGULATORY AUTHORITIES, INCLUSIVE OF LOCAL COUNCIL REGULATIONS AND REQUIREMENTS.
- THE CONTRACTOR IS TO OBTAIN ALL AUTHORITY APPROVALS AS REQUIRED PRIOR TO COMMENCEMENT OF WORKS.
- ON COMPLETION OF ANY TRENCHING WORKS, ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR AS DIRECTED BY THE SITE SUPERINTENDENT.
- THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR PRIOR TO COMMENCEMENT OF WORKS.THE CONTRACTOR IS TO ENSURE THAT SURVEY BOUNDARIES ARE DERIVED FROM A CADASTRAL SURVEY RATHER THAN A DETAIL SURVEY.
- 8. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING LEVELS ONSITE PRIOR TO LODGMENT OF TENDER AND ONSITE WORKS. THE PRICE AS TENDERED SHALL BE INCLUSIVE OF ALL WORKS SHOWN ON THE TENDER PROJECT DRAWINGS. ADDITIONAL PAYMENTS FOR WORKS SHOWN ON THE TENDER PROJECT DRAWINGS WILL NOT BE APPROVED.
- 9. DO NOT OBTAIN DIMENSIONS BY SCALING DRAWINGS.
- 10. IN CASE OF DOUBT OR DISCREPANCY REFER TO SUPERINTENDENT FOR CLARIFICATION OR CONFIRMATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED. MAKE SMOOTH TRANSITION TO EXISTING FEATURES AND MAKE GOOD WHERE JOINED.
- 12. TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MIN 50mm IN BITUMINOUS PAVING.
- 13. NOTES ON DETAILS PROVIDED TAKE PRECEDENCE OVER SPECIFICATION NOTES UNLESS IN CONTRADICTION WITH COUNCIL/AUTHORITY SPECIFICATIONS/DETAILS. CONTRACTOR TO CONSULT WITH NORTHROP FOR ANY DISCREPANCIES.
- 14. IF THE CONTRACTOR DISCOVERS HAZARDOUS/CONTAMINATED MATERIAL THE CONTRACTOR SHALL CONSULT WITH AN ENVIRONMENTAL SPECIALIST.
- 15. THE CONTRACTOR IS RESPONSIBLE FOR DEALING WITH COMMUNITY COMPLAINTS ASSOCIATED WITH THE WORKS UNDER THE CONTRACT AND TO COMPENSATE FOR/RECTIFY ANY DAMAGE REASONABLY
- 16. THE TERM 'MAKE GOOD' OR 'MAKE NEAT' IS IN REFERENCE TO THE SATISFACTION OF NORTHROP OR CERTIFYING ENGINEER. THE CONTRACTOR IS TO SEEK CLARIFICATION FROM NORTHROP OR THE CERTIFYING ENGINEER IF NECESSARY

#### SERVICE TRENCHES

- 17. SAWCUT EXISTING SURFACES PRIOR TO EXCAVATION. BACKFILL ALL TRENCHES UNDER EXISTING ROADS, PAVEMENTS AND PATHS WITH STABILISED SAND 5% CEMENT OR DGS40 MATERIAL (5% CEMENT) COMPACTED IN 200mm THICK LAYERS TO 98% MMDD TO UNDERSIDE OF PAVEMENT.
- 18. BACKFILL ALL TRENCHES NOT UNDER ROADS, PAVEMENTS, PATHS AND BUILDINGS WITH APPROVED EXCAVATED OR IMPORTED MATERIAL COMPACTED TO 95% SMDD.

#### STORMWATER DRAINAGE

- ALL PIPES SHALL BE CLASS 2 RUBBER-RING JOINTED RCP U.N.O. WHERE uPVC PIPES HAVE BEEN SPECIFIED, THE FOLLOWING CLASS PIPEWORK IS TO BE ADOPTED U.N.O. Ø100mm OR LESS TO BE CLASS 'SN10' AND ABOVE Ø100mm TO BE CLASS 'SN8'. CLASS 4 PIPES ARE TO BE USED WHERE COVER OVER THE PIPE IS BELOW 600mm AND BENEATH A TRAFFICABLE PAVEMENT.
- 2. ALL PIPE ARE TO BE LAID AT 1.0% MIN GRADE U.N.O.

- 3.1. USE HOT DIPPED GALVANISED COVERS AND GRATES COMPLYING WITH RELEVANT COUNCIL AND AUSTRALIAN STANDARDS. ALL COVERS AND GRATES TO BE POSITIONED IN A FRAME AND
- MANUFACTURED AS A UNIT. 3.3. ALL COVERS AND GRATES TO BE FITTING WITH POSITIVE COVER
- LIFTING KEYS 3.4. OBTAIN SUPERINTENDENTS APPROVAL FOR THE USE OF CAST IRON SOLID COVERS AND GRATES. CAST IRON SOLID COVERS (IF APPROVED) TO CONSIST OF CROSS-WEBBED, CELLULAR
- PLASTIC PLUGS. UNLESS DETAILED OR SPECIFIED OTHERWISE. COVERS AND GRATES TO BE CLASS 'D' IN VEHICULAR PAVEMENTS AND CLASS 'B' ELSEWHERE.
- 3.6. ALL GRATED TRENCH DRAINS SHOULD BE 'CLASS D' CAST IRON WITHIN VEHICULAR PAVEMENTS AND CLASS 'B' HEEL SAFE WITHIN PEDESTRIAN PAVEMENTS.

CONSTRUCTION WITH THE RIBS UPPERMOST TO ALLOW INFILLING

WITH CONCRETE. INSTALL POSITIVE COVER LIFTING KEYS AND

- 4. ALL PIPE BENDS, JUNCTIONS, ETC ARE TO BE PROVIDED USING PURPOSE MADE FITTINGS OR STORMWATER PITS.
- 5. ALL CONNECTIONS TO EXISTING DRAINAGE STRUCTURES SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND CEMENT RENDERED TO ENSURE A SMOOTH FINISH.
- ENSURE PIPEWORK DOES NOT PROTRUDE BEYOND THE INSIDE FACE OF THE PIT WALL, PIPEWORK IS TO FINISH FLUSH WITH INTERNAL WALL (UNLESS OTHERWISE NOTED OR DETAILED). CONNECTION TO BE RENDERED AND MADE NEAT ON THE INSIDE FACE OF THE PIT
- THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.
- U.N.O. MATERIAL USED FOR BEDDING OF PIPES SHALL BE APPROVED NON-COHESIVE GRANULAR MATERIAL HAVING HIGH PERMEABILITY AND HIGH STABILITY WHEN SATURATED AND FREE OF ORGANIC AND CLAY MATERIAL.
- BEDDING SHALL BE U.N.O TYPE HS2 UNDER ROADS AND H2 UNDER GENERAL AREAS IN ACCORDANCE WITH CURRENT RELEVANT INDUSTRY STANDARDS AND GUIDELINES.
- 10. THE CONTRACTOR SHALL ENSURE AND PROTECT THE INTEGRITY OF ALL STORMWATER PIPES DURING CONSTRUCTION, ANY AND ALL DAMAGE TO THESE PIPES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE SUPERINTENDENT AND AT NO EXTRA COST TO THE CONTRACT.
- 11. NOTE THAT THE PIT COVER LEVEL NOMINATED IN GUTTERS ARE TO THE INVERT OF THE GUTTER WHICH ARE 40mm LOWER THAN THE PAVEMENT LEVEL AT LIP OF GUTTER. REFER KERB DETAILS FOR CONFIRMATION.
- 12. SUBSOIL DRAINAGE
- 13.  $\phi$ 100mm SUBSOIL DRAINAGE LINES WITH NON-WOVEN GEOTEXTILE FILTER SOCK SURROUND SHALL BE CONNECTED TO A STORMWATER DRAINAGE PIT (AT MIN 1% LONGITUDINAL GRADE) AND PROVIDED IN THE FOLLOWING LOCATIONS:
- 13.1. ALL PLANTER AND TREE BEDS PROPOSED ADJACENT TO
- PAVEMENT AREAS. 13.2. BEHIND RETAINING WALLS (IN ACCORDANCE WITH RETAINING
- WALL DETAILS). 13.3. UPSTREAM OF STORMWATER PITS
- 13.4. ALL OTHER AREAS SHOWN ON DRAWINGS.
- 13.5. CONTRACTOR IS TO MAKE ALLOWANCE IN BOTH TENDER AND CONSTRUCTION COSTING TO ALLOW FOR SUBSURFACE DRAINAGE BEHIND ALL RETAINING WALLS / ABOVE LOCATIONS AND TO MAKE CONNECTION TO STORMWATER SYSTEM.
- 14. WHERE SUBSOIL DRAINAGE PASSES BENEATH BUILDINGS / PAVED AREAS AND/OR PAVEMENTS, CONTRACTOR TO ENSURE \$100mm CLASS 'SN10' uPVC DRAINAGE LINE IS USED AND THAT PROPRIETARY FITTINGS ARE USED TO RECONNECT SUBSOIL DRAINAGE LINE.
- 15. THE CONTRACTOR SHALL INSTALL INSPECTION OPENINGS / CLEAROUTS TO ALL SUBSOIL DRAINAGE LINES AND DOWNPIPE LINES AS SPECIFIED ON DRAWINGS AND IN ACCORDANCE WITH COUNCIL SPECIFICATIONS. HOWEVER AS A MINIMUM THEY ARE TO BE PLACED AT MAXIMUM 30m CENTRES AND AT ALL UPSTREAM ENDPOINTS.
- 16. PROVIDE 3.0m LENGTH OF  $\phi$ 100 SUBSOIL DRAINAGE LINE WRAPPED IN NON-WOVEN GEOTEXTILE FILTER FABRIC TO THE UPSTREAM SIDE OF STORMWATER PITS, LAID IN STORMWATER PIPE TRENCHES AND CONNECTED TO DRAINAGE PIT.
- 17. THE CONTRACTOR IS TO ENSURE THAT A MINIMUM 150mm CLEARANCE IS PROVIDED BETWEEN THE INTERNAL FACE OF PIPE AND ADJACENT INTERNAL PIT WALLS 18. WHERE TRENCHES ARE IN ROCK, THE PIPE SHALL BE BEDDED ON A

MIN 50mm CONCRETE BED (OR 75mm THICK BED OF 12mm BLUE METAL) UNDER THE BARREL OF THE PIPE. THE PIPE COLLAR AT NO POINT SHALL BEAR ON THE ROCK. (E.G. CLEAN 5-12mm AGGREGATE)

THIS PLAN IS TO BE READ IN **CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT** MOD2023/0720

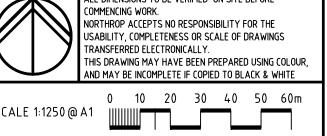
## FOR APPROVAL

DESCRIPTION ISSUED VER'D APP'D DATE 01 ISSUED FOR SECTION 4.55 AS SS 06.12.23 02 ISSUED FOR SECTION 4.55 MM SS 18.12.23 CLIENT **Royal Far West** VERIFICATION SIGNATURE HAS BEEN ADDED

Candalepas **Associates** 

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**ROYAL FAR WEST MANLY** 14-22 WENTWORTH STREET & 19-21 SOUTH STEYNE, **MANLY NSW 2095** 

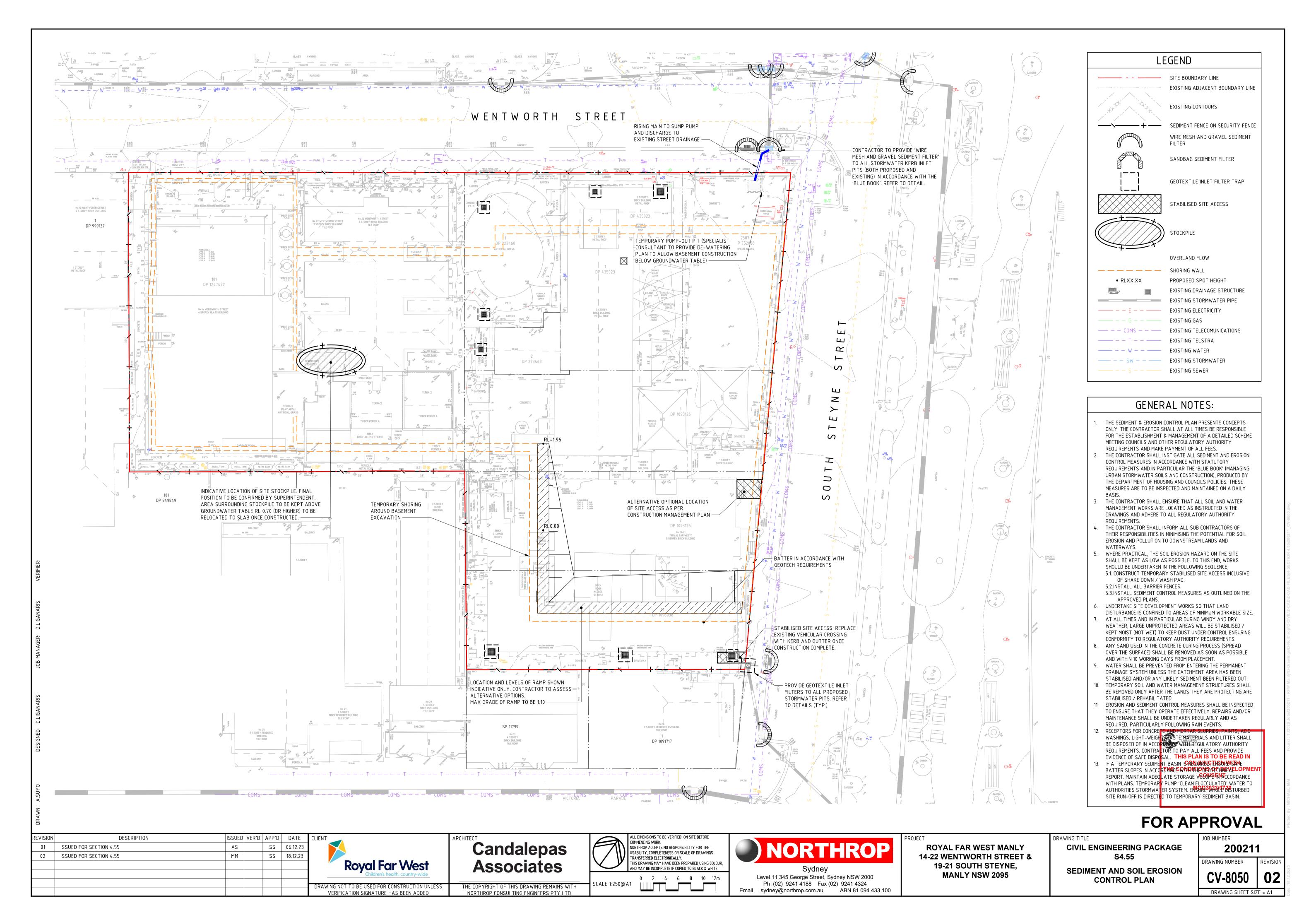
**CIVIL ENGINEERING PACKAGE SPECIFICATION NOTES** 

200211

DRAWING NUMBER

DRAWING SHEET SIZE = A1

REVISION



#### CONSTRUCTION NOTES

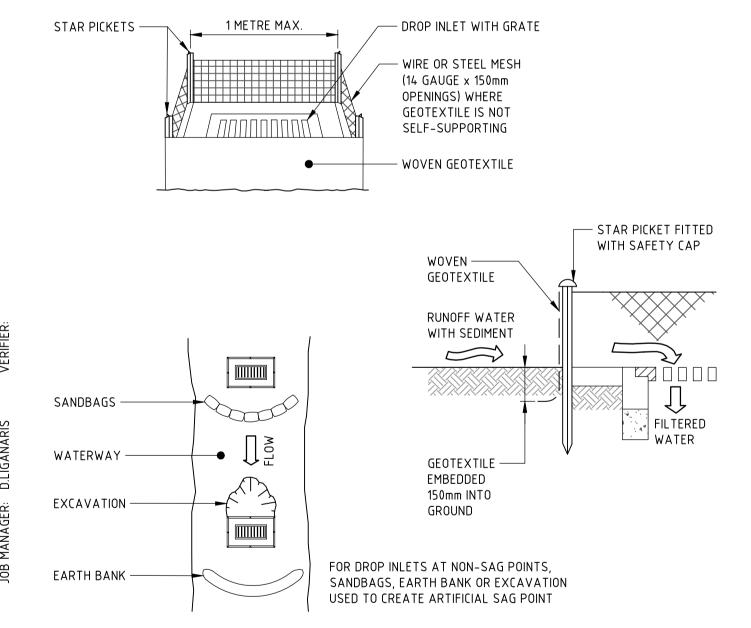
1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.

OR NEEDLE-PUNCHED PRODUCT WITH A MINIMUM

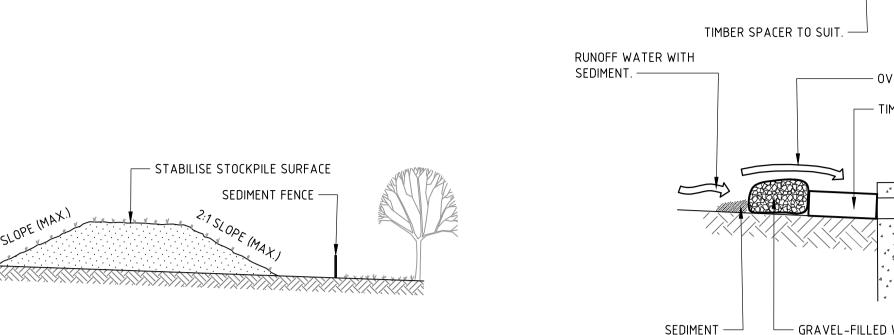
CBR BURST STRENGTH (AS3706.4-90) OF 2500 N

- 2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
- 3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
- 4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES
- 5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.

#### STABILISED SITE ACCESS (SD 6-14)



- 2. FOLLOW STANDARD DRAWING 6-7 AND STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR THE
- 3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN
- THE DRAWING.
- 4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS

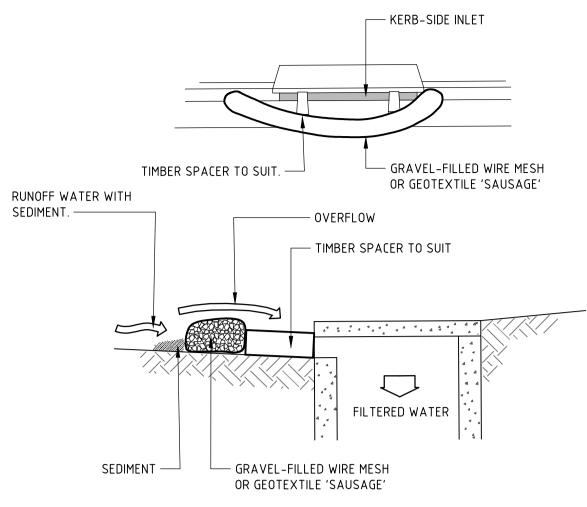


#### CONSTRUCTION NOTES

EARTH BANK

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

### STOCKPILE



#### CONSTRUCTION NOTES

- INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
- 2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
- 3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
- 4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET.

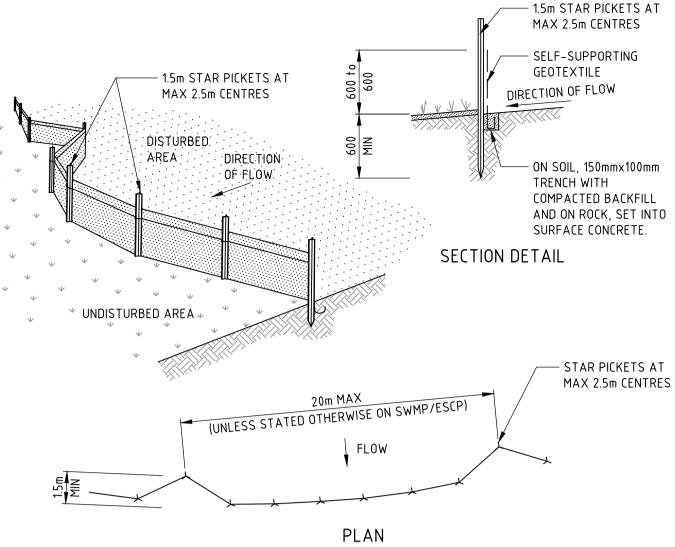
NOTE: THIS PRACTICE ONLY TO BE USED WHERE

SPECIFIED IN APPROVED SWMP/ESCP.

- MAINTAIN THE OPENING WITH SPACER BLOCKS.
- 5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER. 6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE

WIRE MESH AND GRAVEL INLET FILTER (SD 6-11)

PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.



#### CONSTRUCTION NOTES

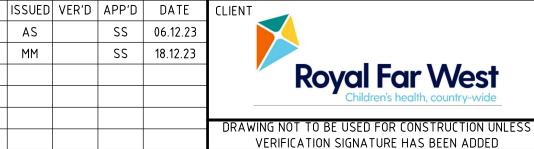
- CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE. BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
- 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 (SD 6-8)



## FOR APPROVAL

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIEN
01	ISSUED FOR SECTION 4.55	AS		SS	06.12.23	
02	ISSUED FOR SECTION 4.55	MM		SS	18.12.23	
						DRA
						DKA



Candalepas Associates

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**ROYAL FAR WEST MANLY** 14-22 WENTWORTH STREET & 19-21 SOUTH STEYNE, **MANLY NSW 2095** 

CIVIL ENGINEERING PACKAGE

**DETAILS - SEDIMENT AND SOIL EROSION CONTROL** 

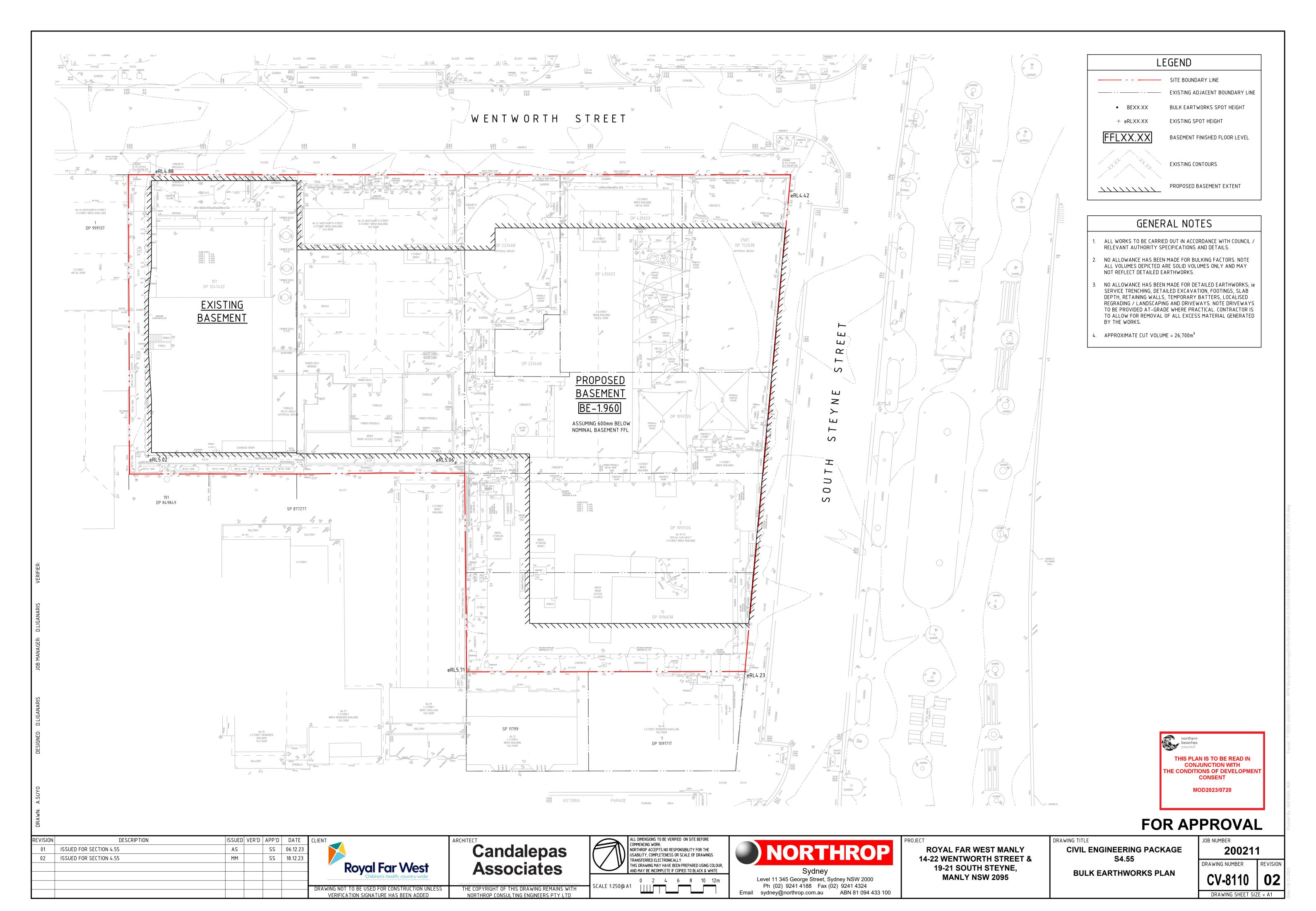
200211 DRAWING NUMBER CV-8051

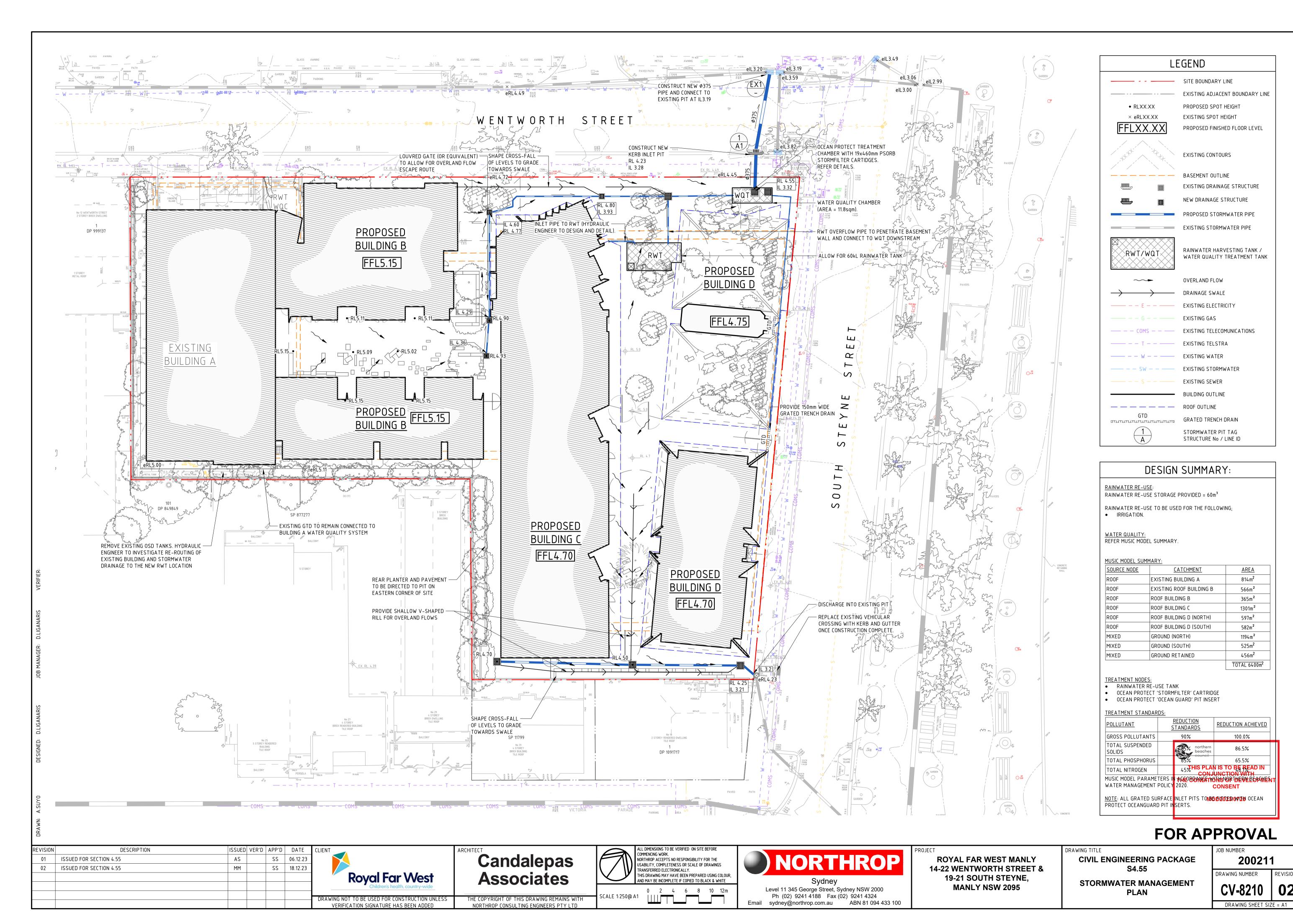
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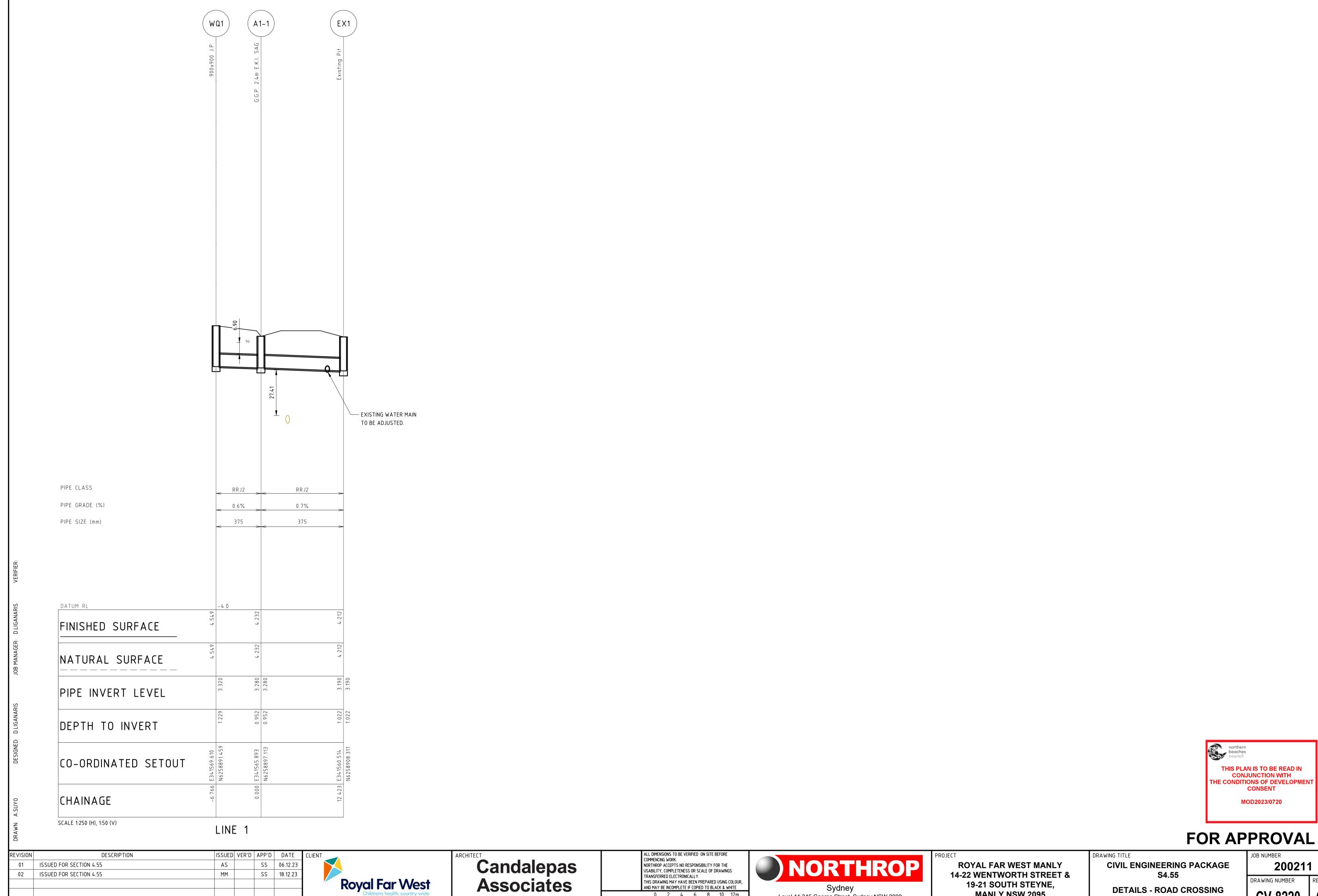
1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.

STRAW BALES OR GEOFABRIC. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.

GEOTEXTILE INLET FILTER TRAPS







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**DETAILS - ROAD CROSSING** SECTION

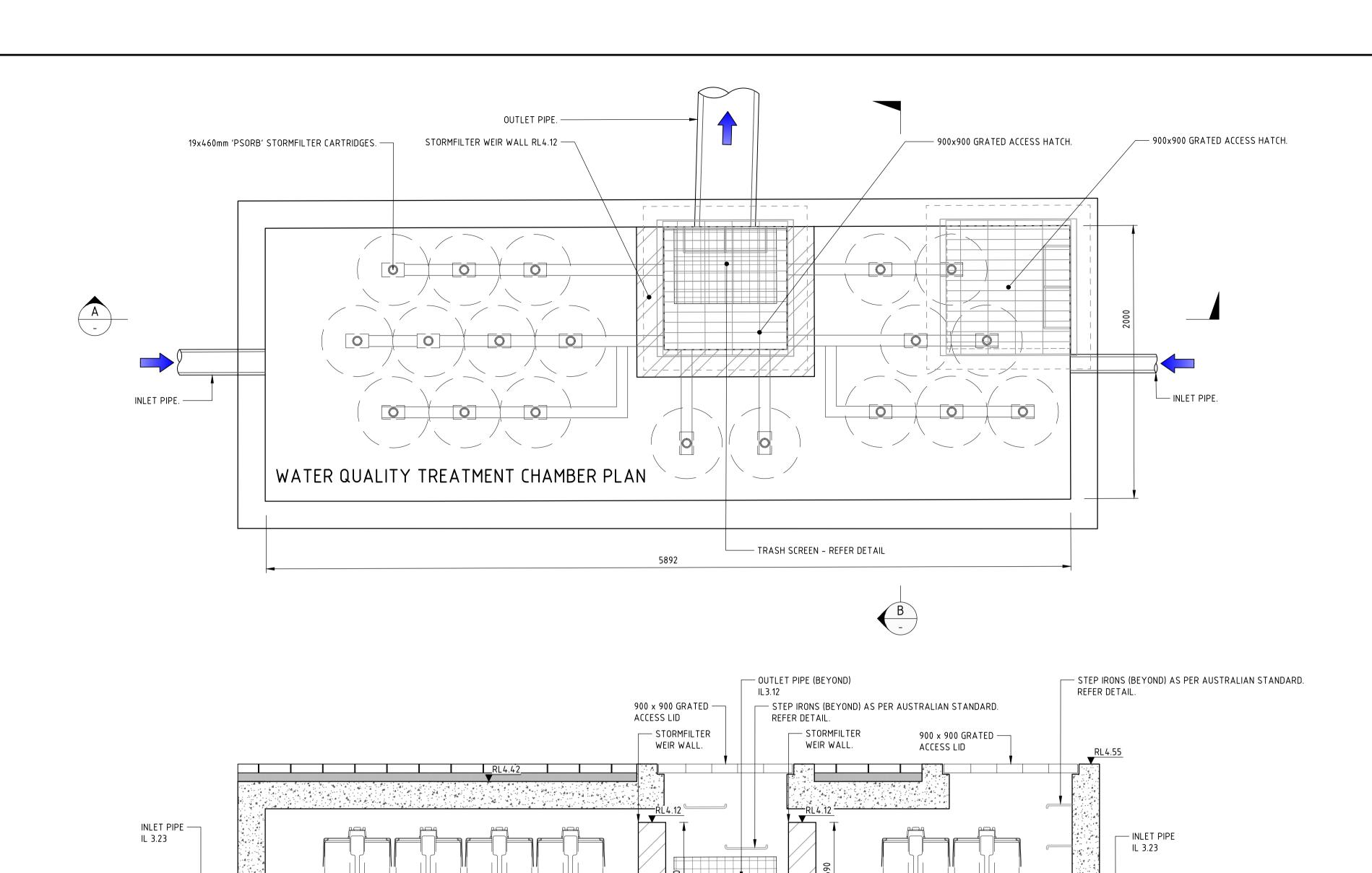
19-21 SOUTH STEYNE,

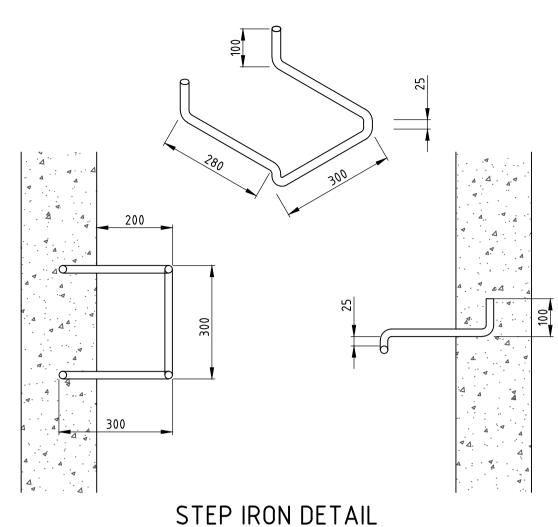
**MANLY NSW 2095** 

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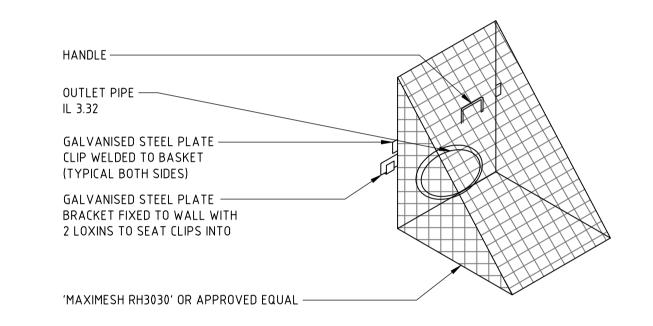
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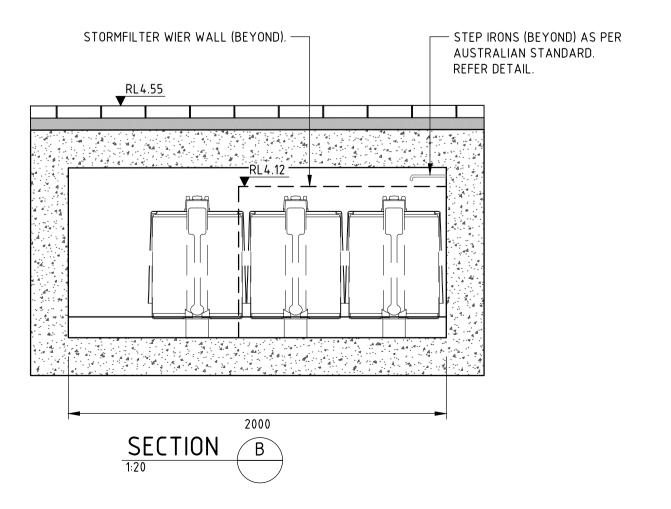




STEP IRON OF 20mm GALVANISED STEEL MADE TO SHAPE AND DIMENSIONS AS SHOWN, PLACED AT 300 CENTRES AND STAGGERED HORIZONTALLY FOR ALL PITS DEEPER THAN 1.0m. THE USE OF PROPRIETARY STEP IRONS ARE ACCEPTABLE PROVIDED THE PRODUCT IS IN ACCORDANCE WITH AUSTRALIAN STANDARDS



TRASH SCREEN DETAIL



SECTION A

TRASH SCREEN (BEYOND)

THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT MOD2023/0720

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT
01	ISSUED FOR SECTION 4.55	AS		SS	06.12.23	
02	ISSUED FOR SECTION 4.55	MM		SS	18.12.23	
						Royal Far West
						Children's health, country-wide

Royal Far West Children's health, country-wide	Candalepas Associates
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SCALE VARIES

FALSE FLOOR 110mm.



14-22 WENTWORTH STREET & 19-21 SOUTH STEYNE, **MANLY NSW 2095** 

**ROYAL FAR WEST MANLY S4.55 DETAILS** 

DRAWING TITLE CIVIL ENGINEERING PACKAGE

FOR APPROVAL 200211 DRAWING NUMBER

CV-8230 02

DRAWING SHEET SIZE = A1

