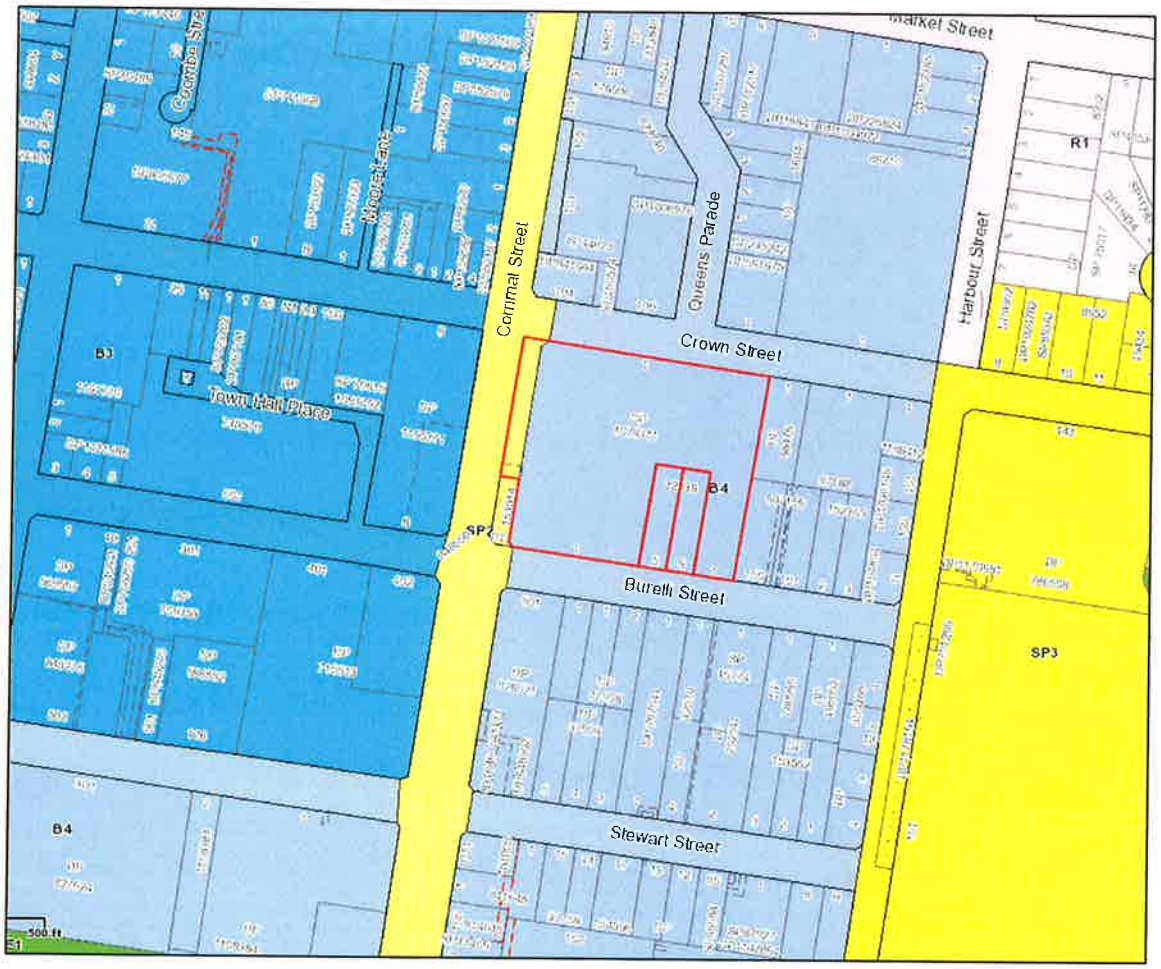
ATTACHMENT 1

ATTACHMENT 1 – Aerial Photograph

ATTACHMENT 2

ATTACHMENT 2 – Wollongong Local Environmental Plan 2009



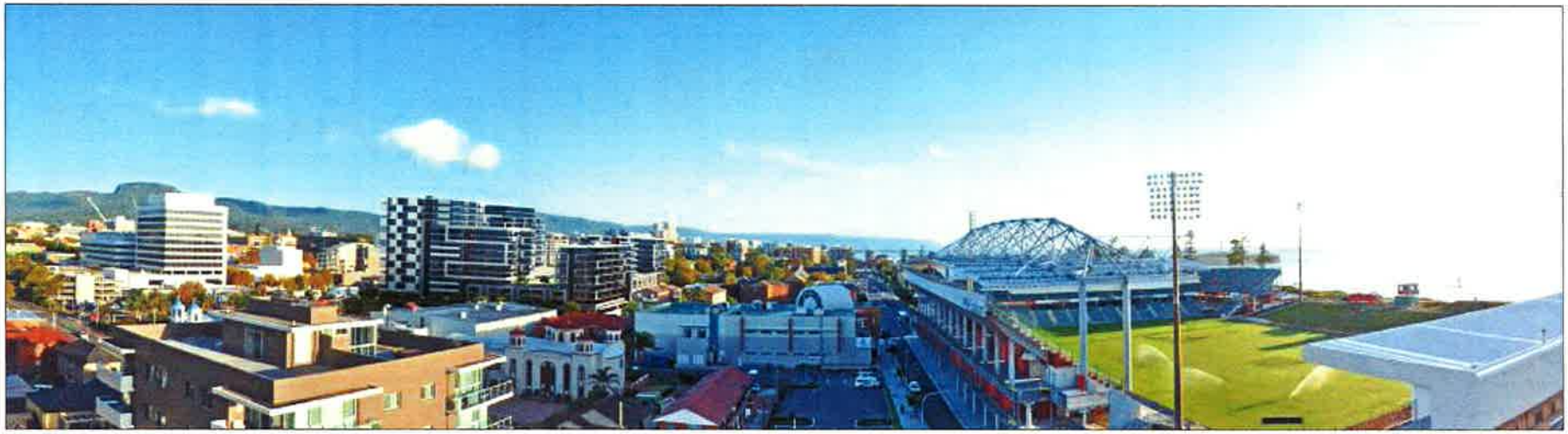
ATTACHMENT 3

Attachment 3 - Plans

PROPOSED FIVE STAGE MIXED USE DEVELOPMENT COMPRISING OF 317 UNITS ABOVE RETAIL SPACES AND 4 LEVELS OF PARKING

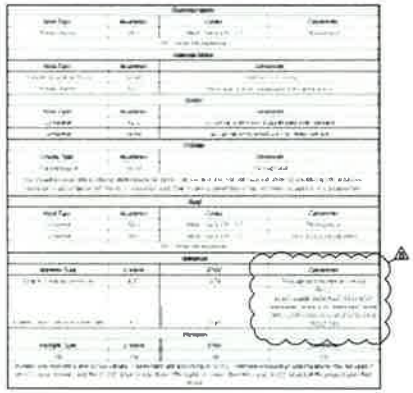
AT

LOT 1 D.P. 1078311 & LOTS 5 & 6 D.P. 32538
31 CROWN STREET, WOLLONGONG



PHOTOMONTAGE

NaTHERS THERMAL PERFORMANCE SPECIFICATION



FOR

NICOLAS DAOUD PTY. LTD.

BY

adm ARCHITECTS
94 Kembla St. Wollongong NSW 2500 PO Box 7061 Wollongong
ph 02 4228 6400 fax 02 4228 6455 www.admarchitects.com.au

DEVELOPMENT SUMMARY

SITE AREA	[illegible]
PERMISSIBLE RESIDENTIAL FSR	2.5:1
PERMISSIBLE COMMERCIAL FSR	3.5:1
PERMISSIBLE COMBINED FSR	2.61:1
PERMISSIBLE GFA	[illegible]
PROPOSED GFA	[illegible]
PROPOSED FSR	2.61:1
GROSS FLOOR AREA	
RETAIL	[illegible]
RESIDENTIAL BUILDING A	[illegible]
RESIDENTIAL BUILDING B	[illegible]
RESIDENTIAL BUILDING C	[illegible]
RESIDENTIAL BUILDING D	[illegible]
TOTAL	[illegible]
UNIT MIX (including all buildings)	
1 BED	97 UNITS
2 BED TOWNHOUSE	23 UNITS
2 BED	170 UNITS
3 BED	29 UNITS
TOTAL	317 UNITS

CARPARKING	
RESIDENTIAL	254 SPACES
RESIDENTIAL VISITORS	64 SPACES
RETAIL	203 SPACES
TOTAL	631 SPACES
BICYCLE PARKING	
RESIDENTIAL	106 SPACES
RESIDENTIAL VISITORS	32 SPACES
COMMERCIAL STAFF	5 SPACES
COMMERCIAL VISITORS	9 SPACES
TOTAL	142 SPACES
MOTORBIKE PARKING	
RESIDENTIAL	9 SPACES
COMMERCIAL	22 SPACES
TOTAL	31 SPACES

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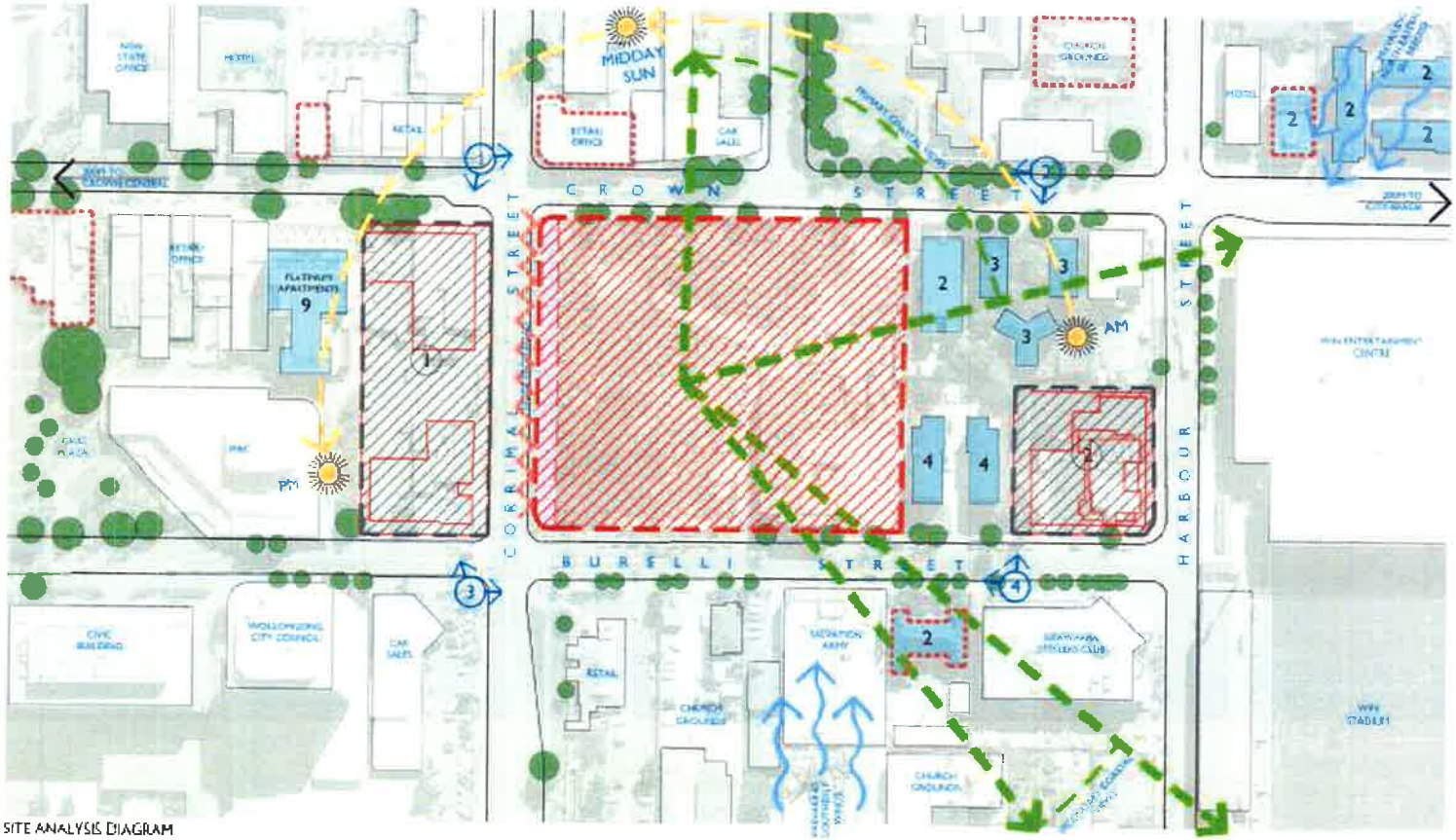
LEGEND

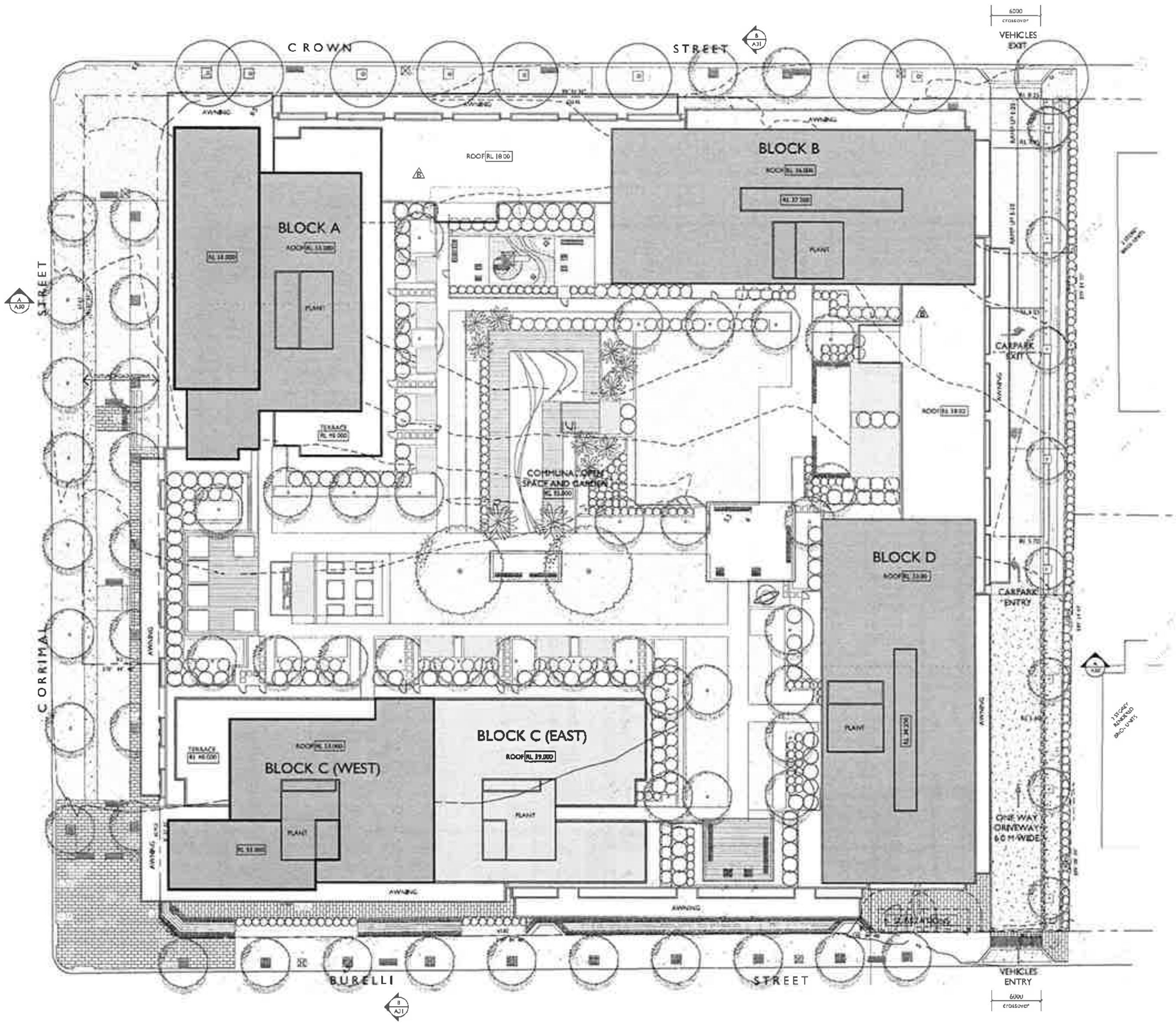


SITE ANALYSIS DIAGRAM

adm

NICOLAS DAOUD & CO. PTY. LTD.

DEVELOPMENT APPLICATION
SITE ANALYSIS DIAGRAM



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BUILDING LEVELS (AHD)

BASEMENT	RL 3.000
GROUND	RL 6.000
LEVEL 1	RL 9.000
LEVEL 2	RL 12.000
LEVEL 3	RL 15.000
LEVEL 4	RL 18.000
LEVEL 5	RL 21.000
LEVEL 6	RL 24.000
LEVEL 7	RL 27.000
LEVEL 8	RL 30.000
LEVEL 9	RL 33.000
LEVEL 10	RL 36.000
LEVEL 11	RL 39.000
LEVEL 12	RL 42.000
LEVEL 13	RL 45.000
LEVEL 14	RL 48.000

NOTE:
REFER TO CIVIL ENGINEER'S DOCUMENTATION FOR STORMWATER COLLECTION & ALL EXTERNAL SURFACE LEVELS.
REFER TO LANDSCAPE ARCHITECTS DOCUMENTATION FOR ALL PAVING & PLANTING DETAILS.

adm ARCHITECTS

Project
FIVE STAGE MIXED USE DEVELOPMENT COMPRISING OF 317 UNITS ABOVE RETAIL SPACES AND FOUR LEVELS OF PARKING

At
LOT 1 D.P.1078311 & LOTS 5 & 6 D.P.32538
31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
SITE PLAN

Scale	Date
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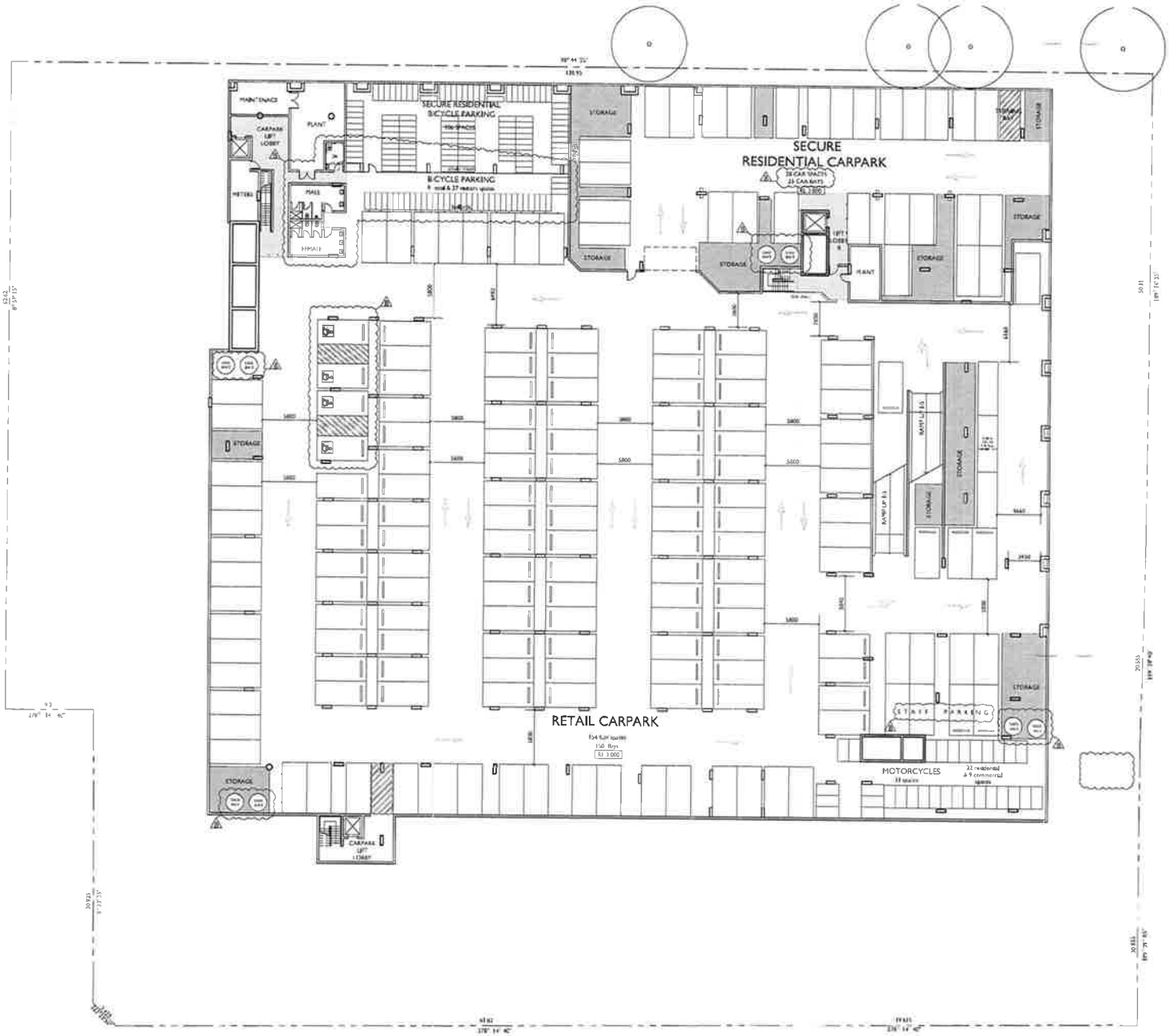
Drawn	LD, SP
Checked	ADM

Project No	Drawing No	Issue
2013-36	A05	B



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C	28.08.2014	AMENDED FOR DA

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Project
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At
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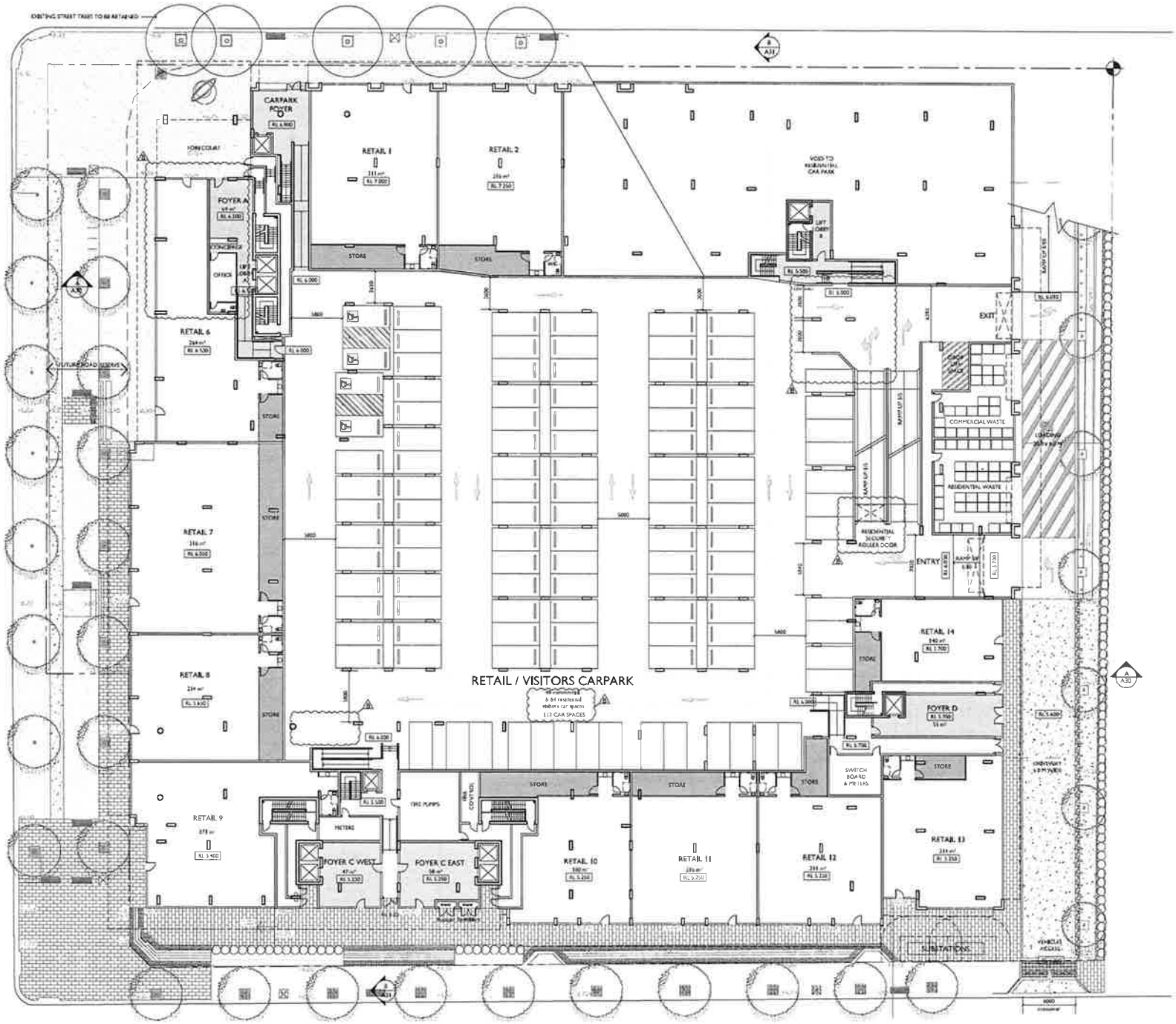
31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
BASEMENT FLOOR PLAN

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A06	C



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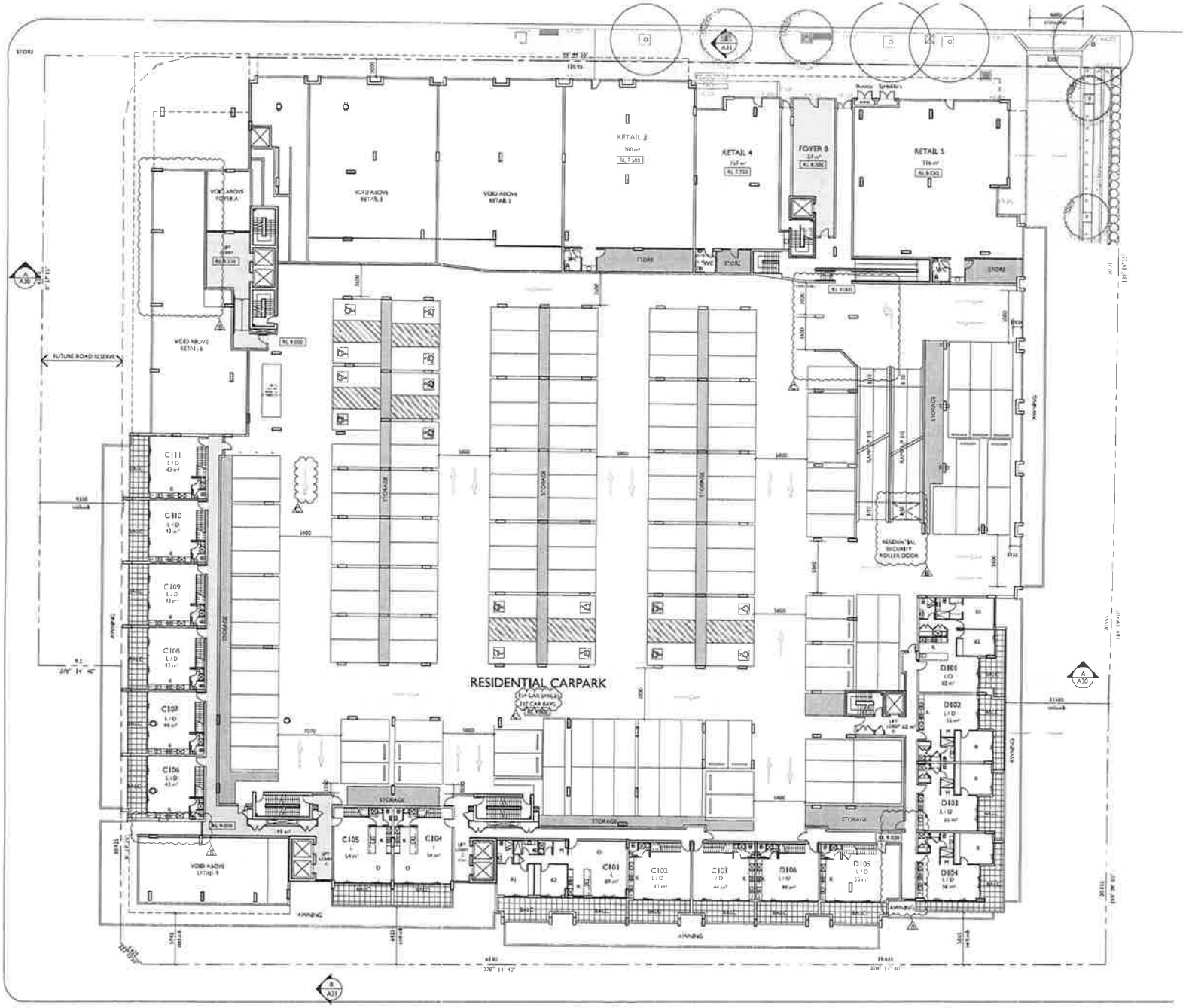
for
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
GROUND FLOOR PLAN

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SF
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A07	B



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For
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Title
DEVELOPMENT APPLICATION
LEVEL 1 FLOOR PLAN

Scale	Date
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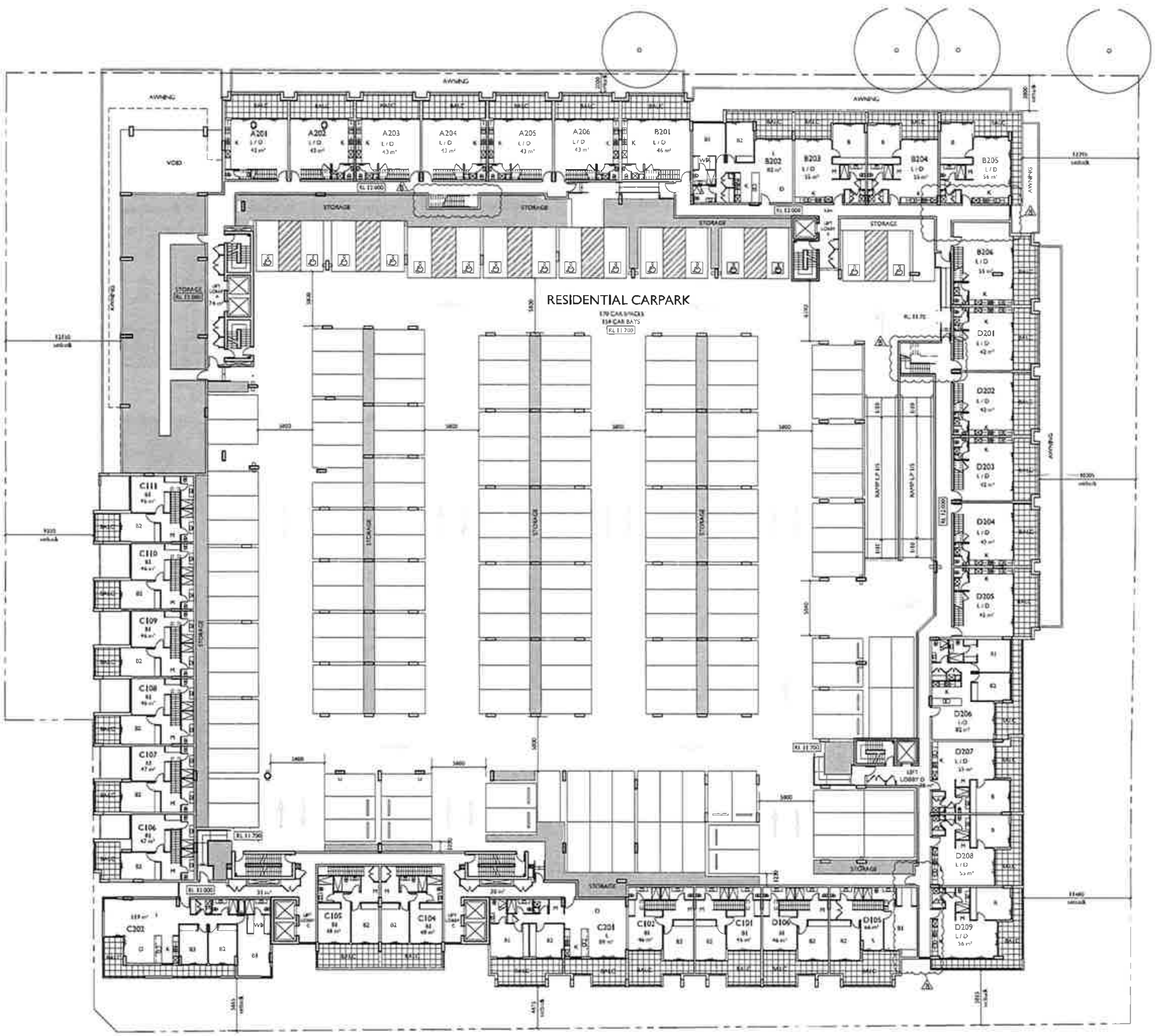
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A06	C



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Project
FIVE STAGE MIXED USE DEVELOPMENT
COMPRISING OF 317 UNITS ABOVE
RETAIL SPACES AND FOUR LEVELS
OF PARKING

At
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31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
LEVEL 2 FLOOR PLAN

Scale	Date
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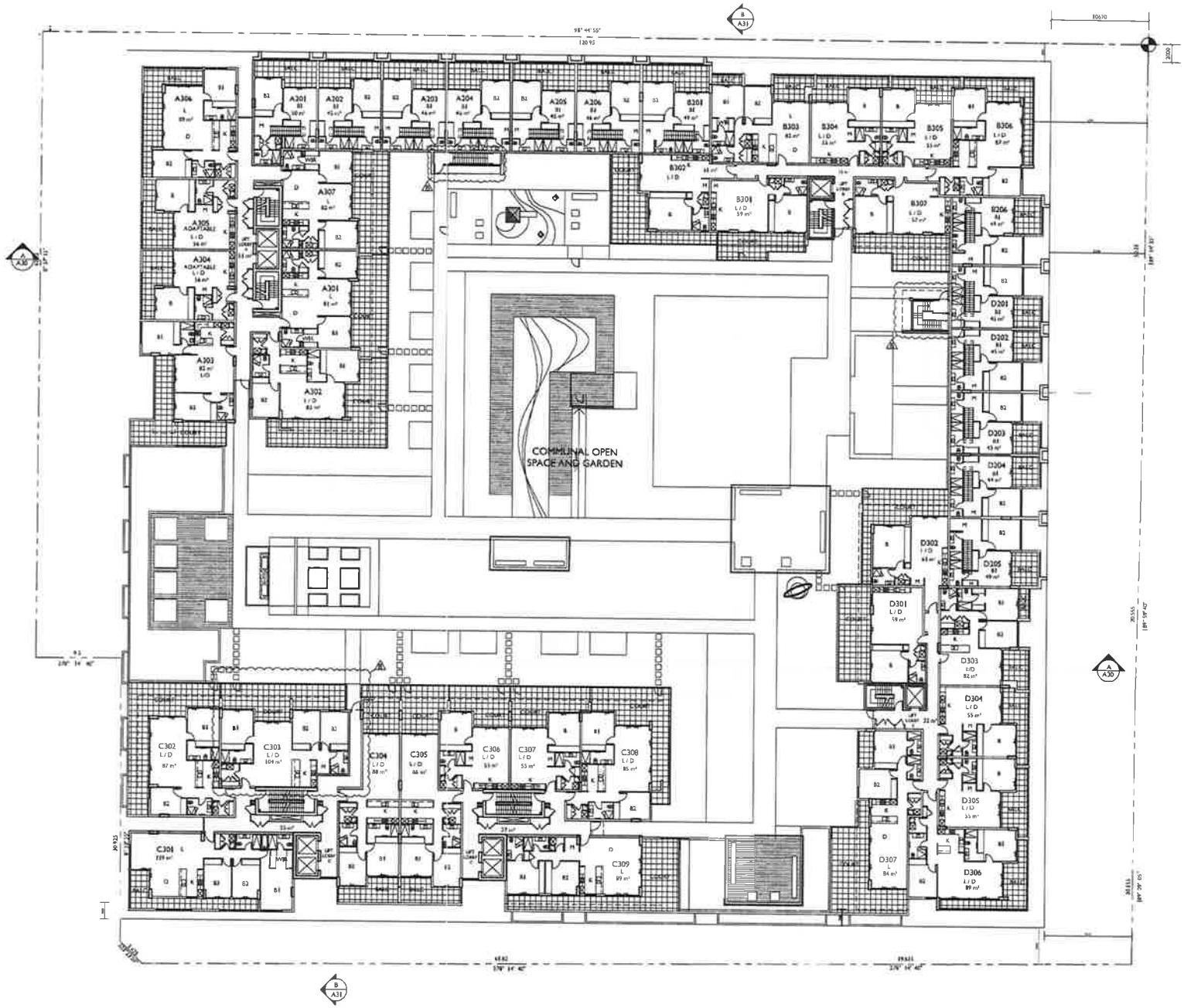
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A09	B



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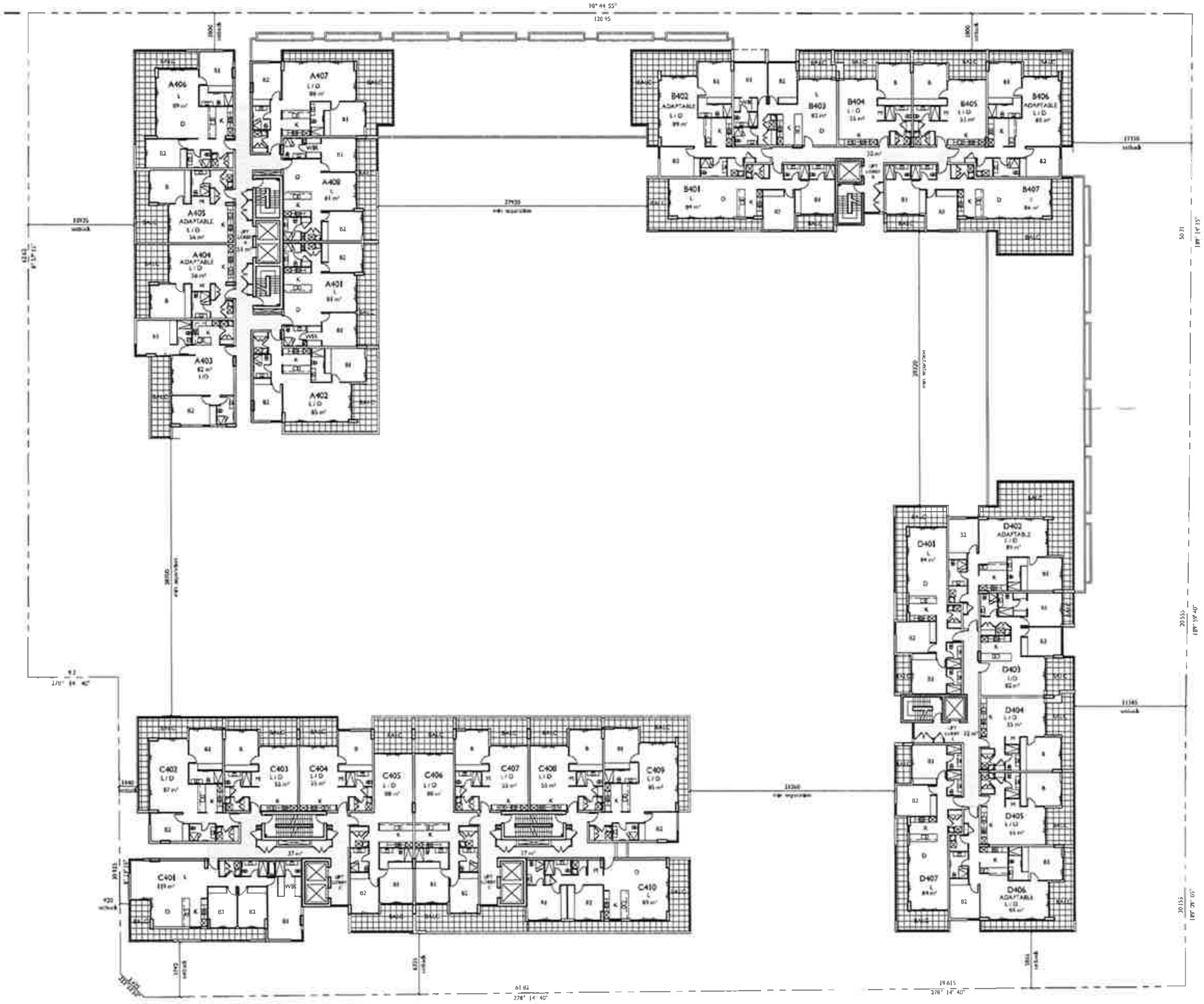
For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
LEVEL 3 FLOOR PLAN

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM
Project No.	Drawing No. / Issue
2013-36	A10 / B



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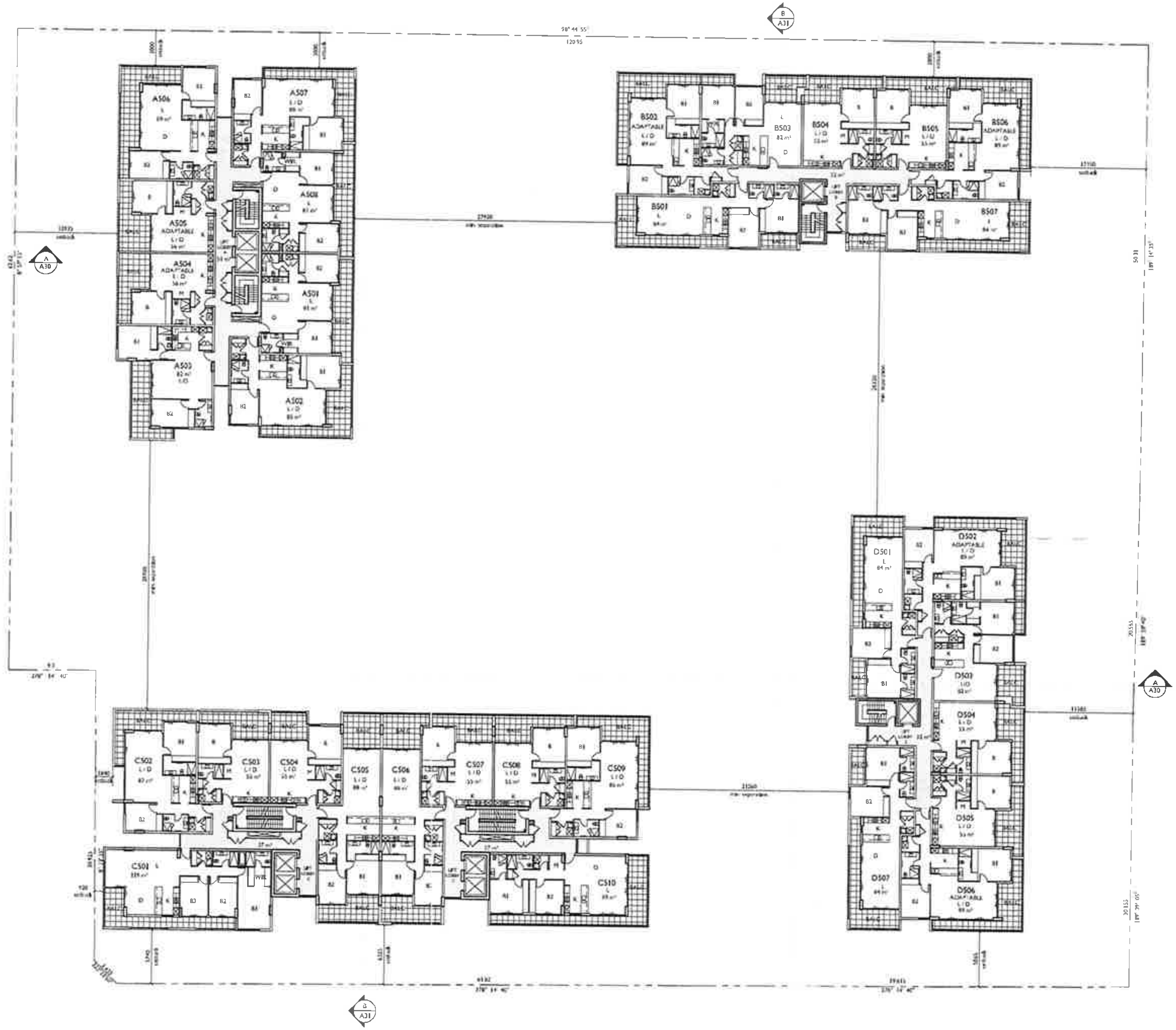
For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
LEVEL 4 FLOOR PLAN

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No	Drawing No	Issue
2013-36	A11	B



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For
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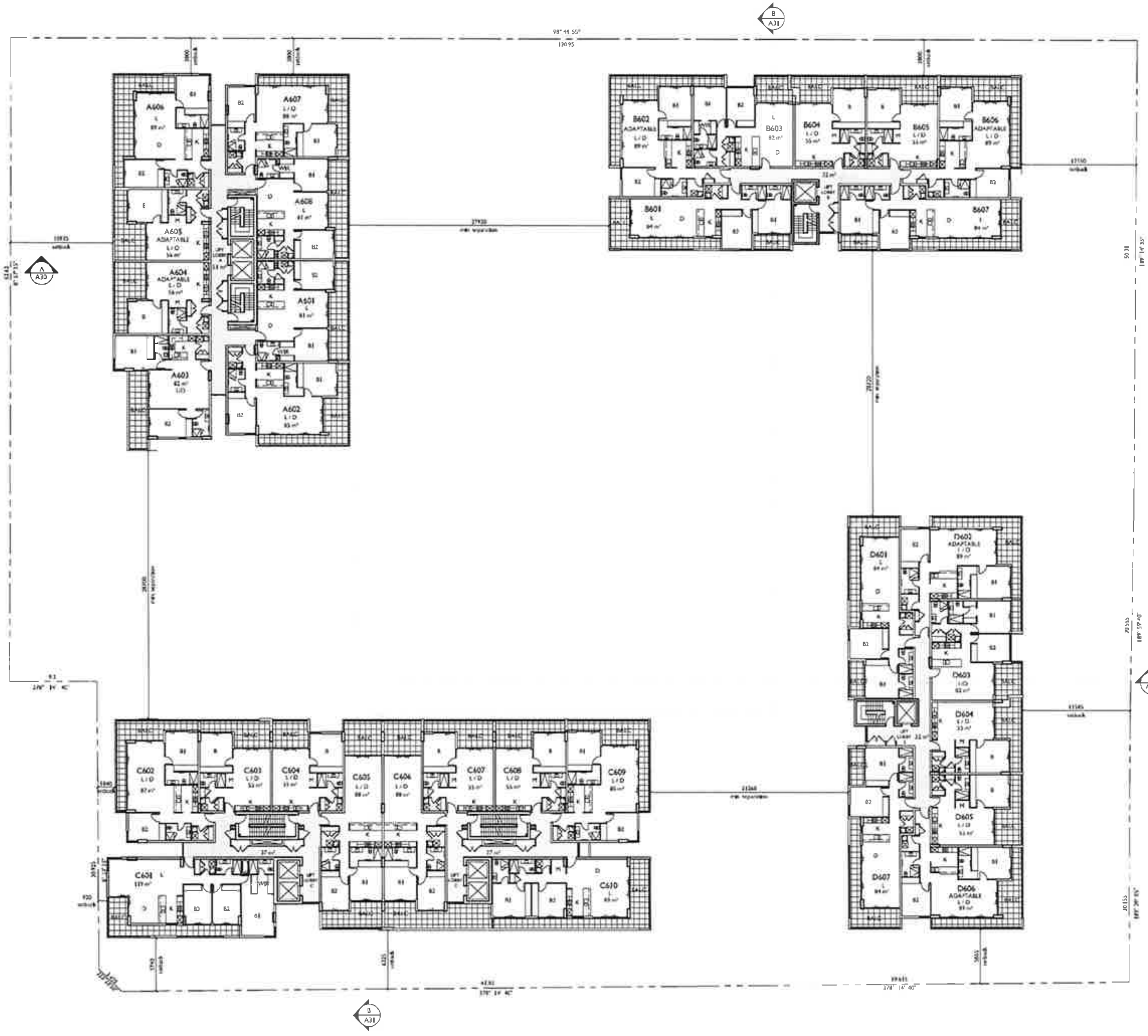
Title
DEVELOPMENT APPLICATION
LEVEL 5 FLOOR PLAN

Scale: 1:200 @ A1, 1:400 @ A3
Date: APRIL 2014
Drawn: LD, SP
Checked: ADM
Project No: 2013-36
Drawing No: A12
Issue: B



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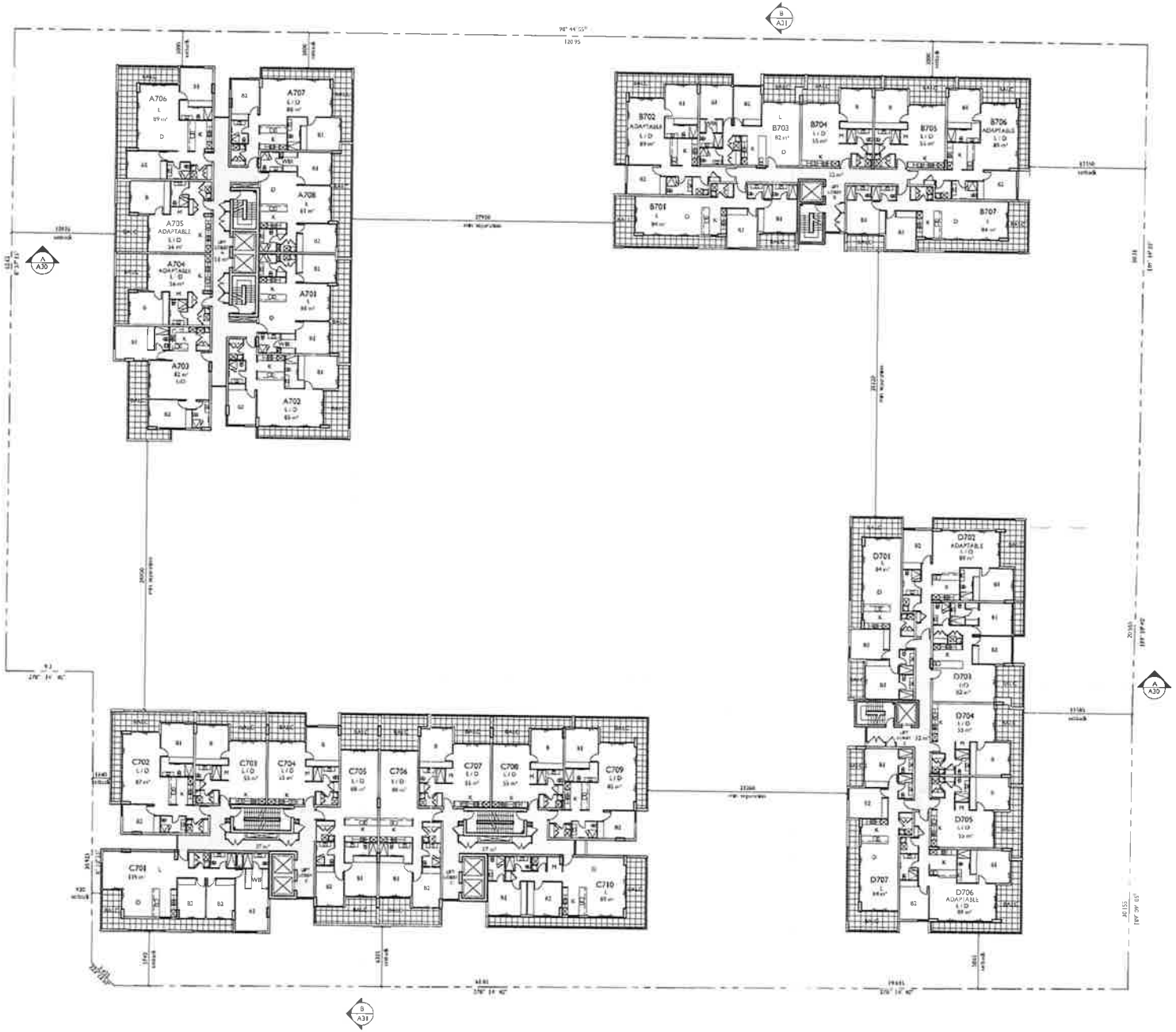
For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
LEVEL 6 FLOOR PLAN

Scale: 1:200 @ A1, 1:400 @ A3	Date: APRIL 2014
	Drawn: LD, SP
	Checked: ADM
Project No: 2013-36	Drawing No: A13
Issue: B	



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Title
DEVELOPMENT APPLICATION
LEVEL 7 FLOOR PLAN

Scale	Date
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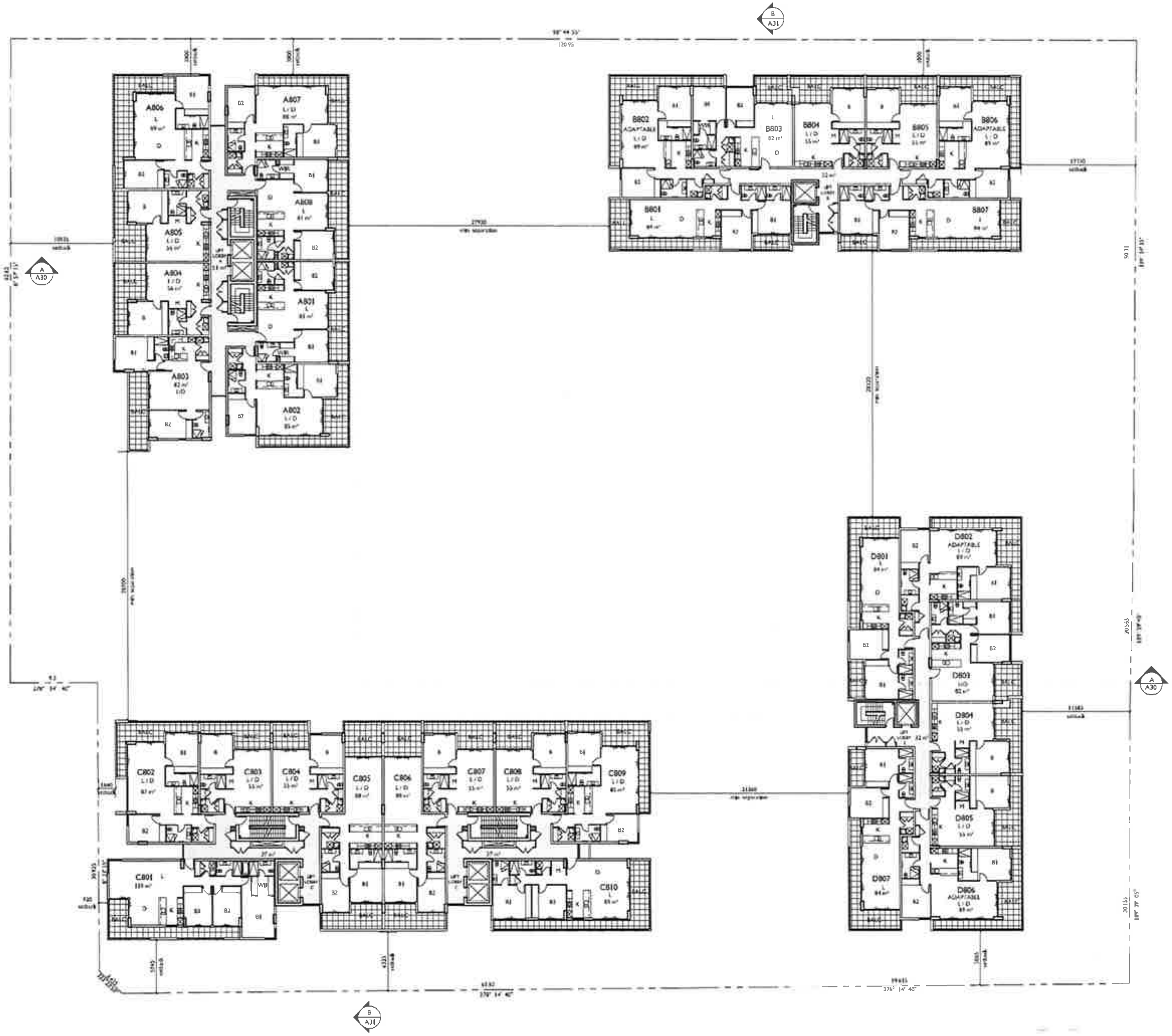
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A14	B



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For
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Title
DEVELOPMENT APPLICATION
LEVEL 8 FLOOR PLAN

Scale	Date
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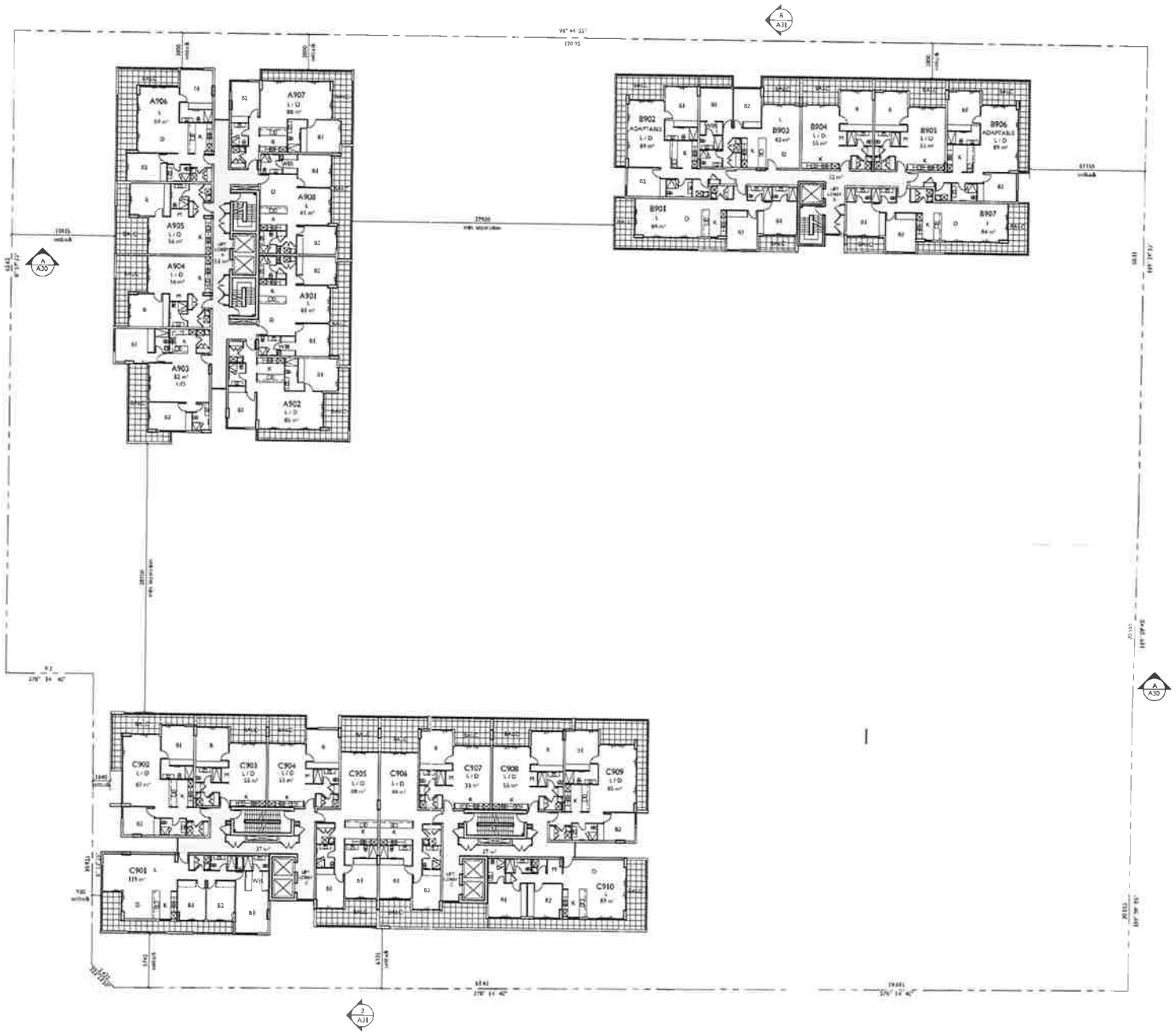
	Drawn: LD, SP
	Checked: ADM

Project No	Drawing No	Issue
2013-36	A15	B



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RETAIL SPACES AND FOUR LEVELS
OF PARKING

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31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
LEVEL 9 FLOOR PLAN

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A16	B

ISSUE	DATE	DESCRIPTION
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For
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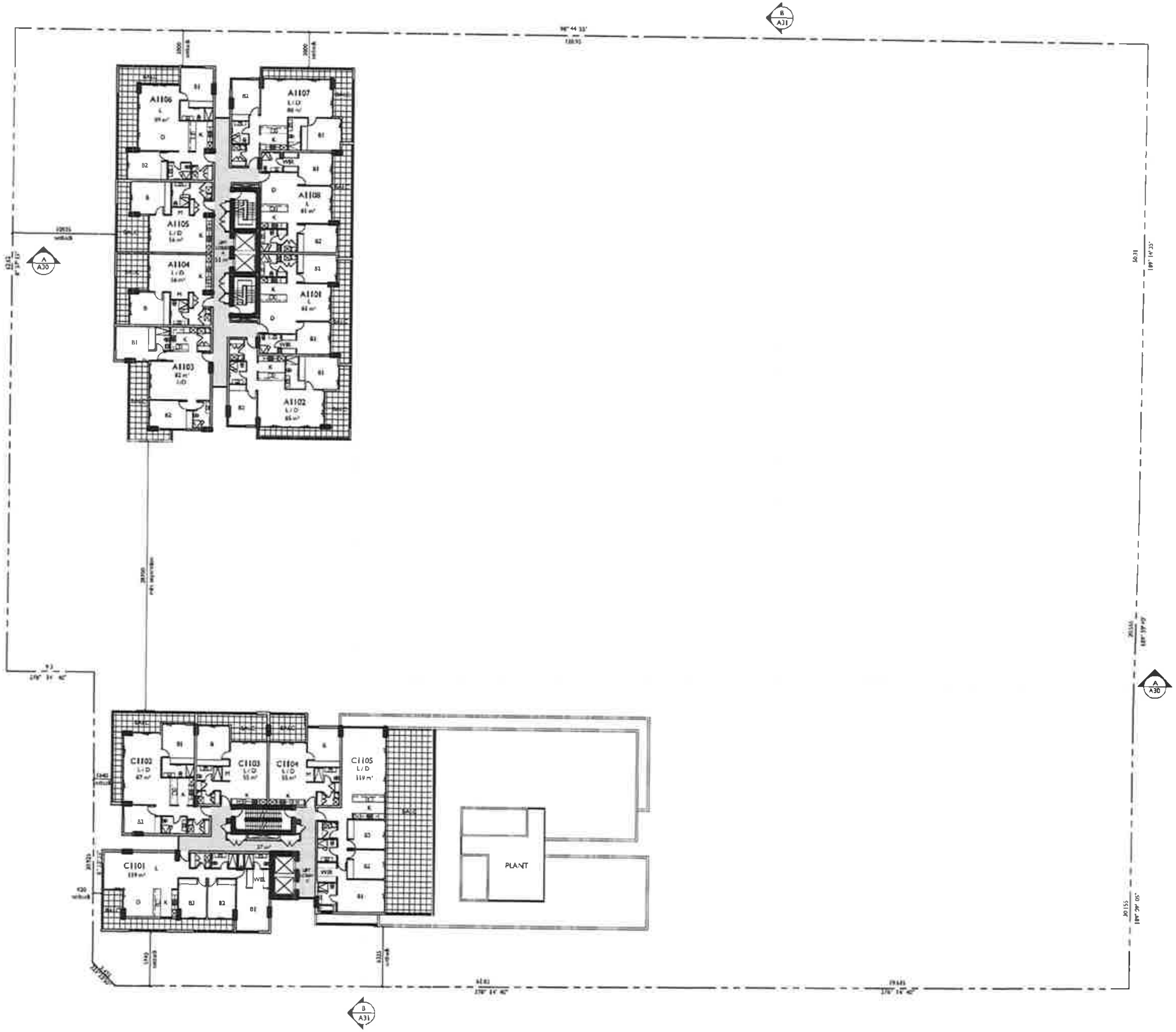
Title
DEVELOPMENT APPLICATION
LEVEL 10 FLOOR PLAN

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A17	B



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For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
LEVEL 11 FLOOR PLAN

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A18	B

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For
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Title
DEVELOPMENT APPLICATION
LEVEL 12 FLOOR PLAN

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No	Drawing No	Issue
2013-36	A19	B

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31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
LEVEL 13 FLOOR PLAN

Scale	Date
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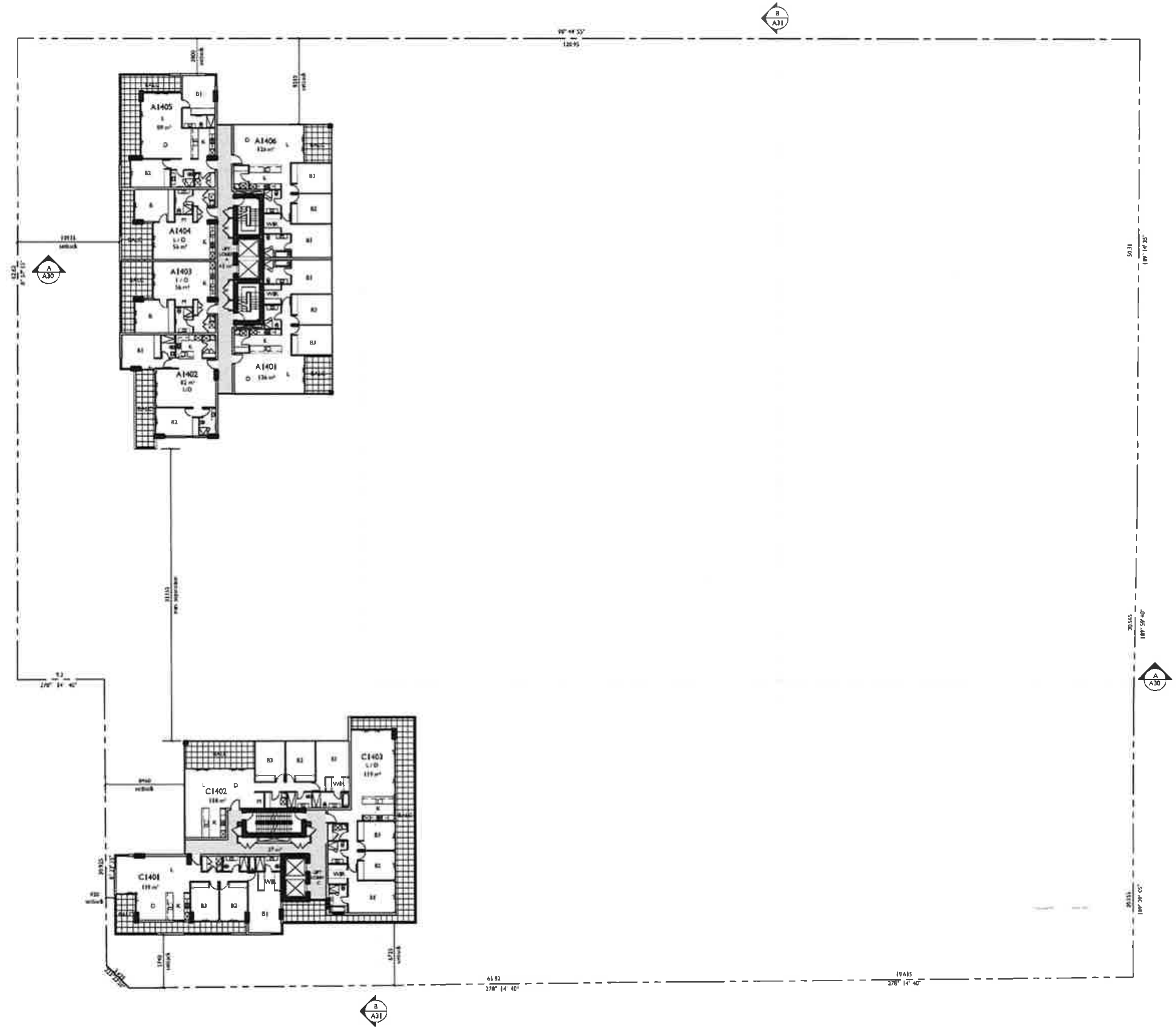
	Drawn: LD, SP
	Checked: ADM

Project No	Drawing No	Issue
2013-36	A20	B



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For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
LEVEL 14 FLOOR PLAN

Scale	Date
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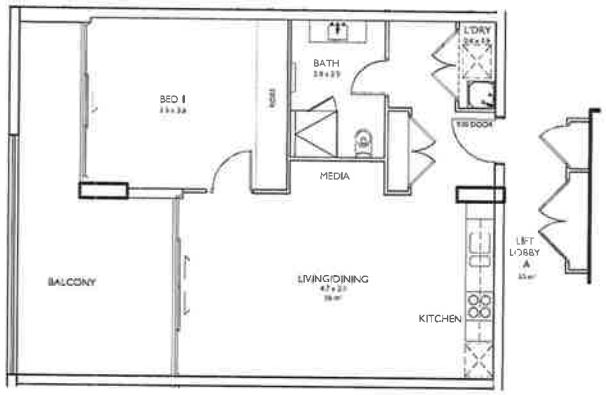
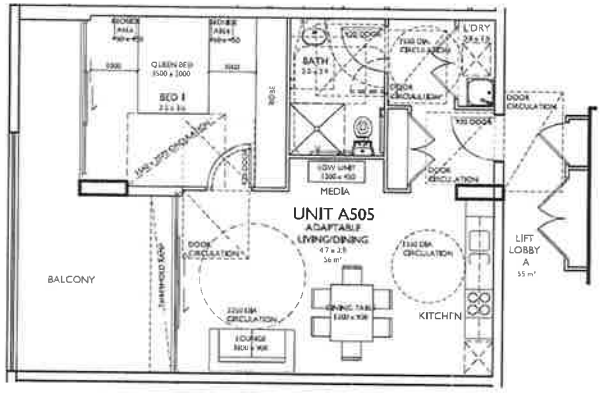
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A21	B



PRE- ADAPTATION PLAN

UNITS A305, A405, A505, A605 AND A705 AS INDICATED
UNITS A304, A404, A504, A604 AND A 704 MIRRORED
CLASS C ADAPTABLE UNIT TO AS 4299



POST- ADAPTATION PLAN

UNITS A305, A405, A505, A605 AND A705 AS INDICATED
UNITS A304, A404, A504, A604 AND A 704 MIRRORED
REFER TO ACCESS CONSULTANTS REPORT

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
B	07.07.2014	AMENDED FOR DA

NOT FOR CONSTRUCTION

adm ARCHITECTS
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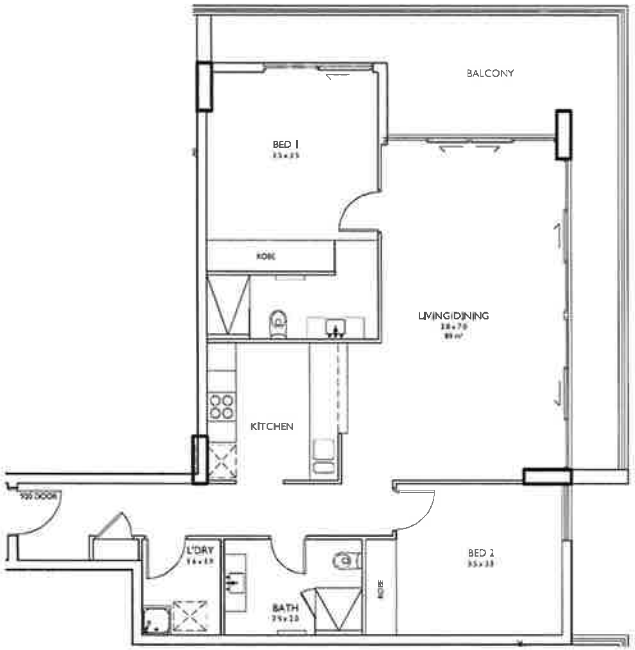
Project:
FIVE STAGE MIXED USE DEVELOPMENT COMPRISING OF 317 UNITS ABOVE RETAIL SPACES AND FOUR LEVELS OF PARKING

LOT 1 D.P.107831 & LOTS 5 & 6 D.P.32538
31 CROWN STREET, WOLLONGONG

For:
NICOLAS DAOUD & CO. PTY. LTD.

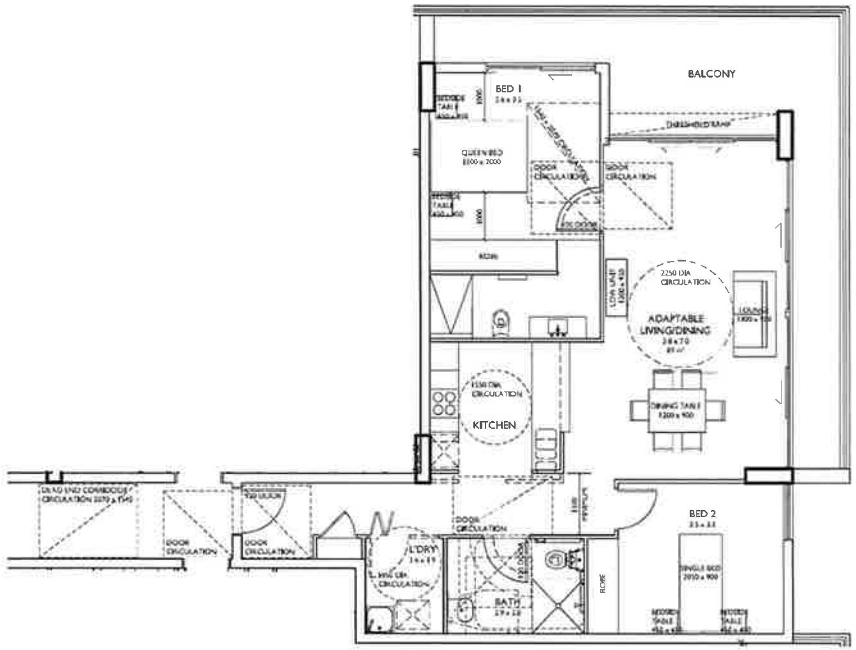
Title:
DEVELOPMENT APPLICATION
BLOCK A -
PRE AND POST ADAPTION FLOOR PLANS

Scale: 1:50 @ A1, 1:100 @ A3	Date: APRIL 2014
	Drawn: LD, SP, LW
	Checked: ADM
Project No: 2013-36	Drawing No: A32
	Issue: B



PRE- ADAPTATION PLAN

UNITS B406, B506, B606, B706, B806 AND B906 AS INDICATED
UNITS B402, B502, B602, B702, B802 AND B902 MIRRORED
UNITS D406, D506, D606, D706 AND D806 ROTATED
UNITS D402, D502, D602, D702 AND D802 ROTATED AND MIRRORED
CLASS C ADAPTABLE UNIT TO AS 4299



POST- ADAPTATION PLAN

UNITS B406, B506, B606, B706, B806 AND B906 AS INDICATED
UNITS B402, B502, B602, B702, B802 AND B902 MIRRORED
UNITS D406, D506, D606, D706 AND D806 ROTATED
UNITS D402, D502, D602, D702 AND D802 ROTATED AND MIRRORED
REFER TO ACCESS CONSULTANTS REPORT

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Project
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At
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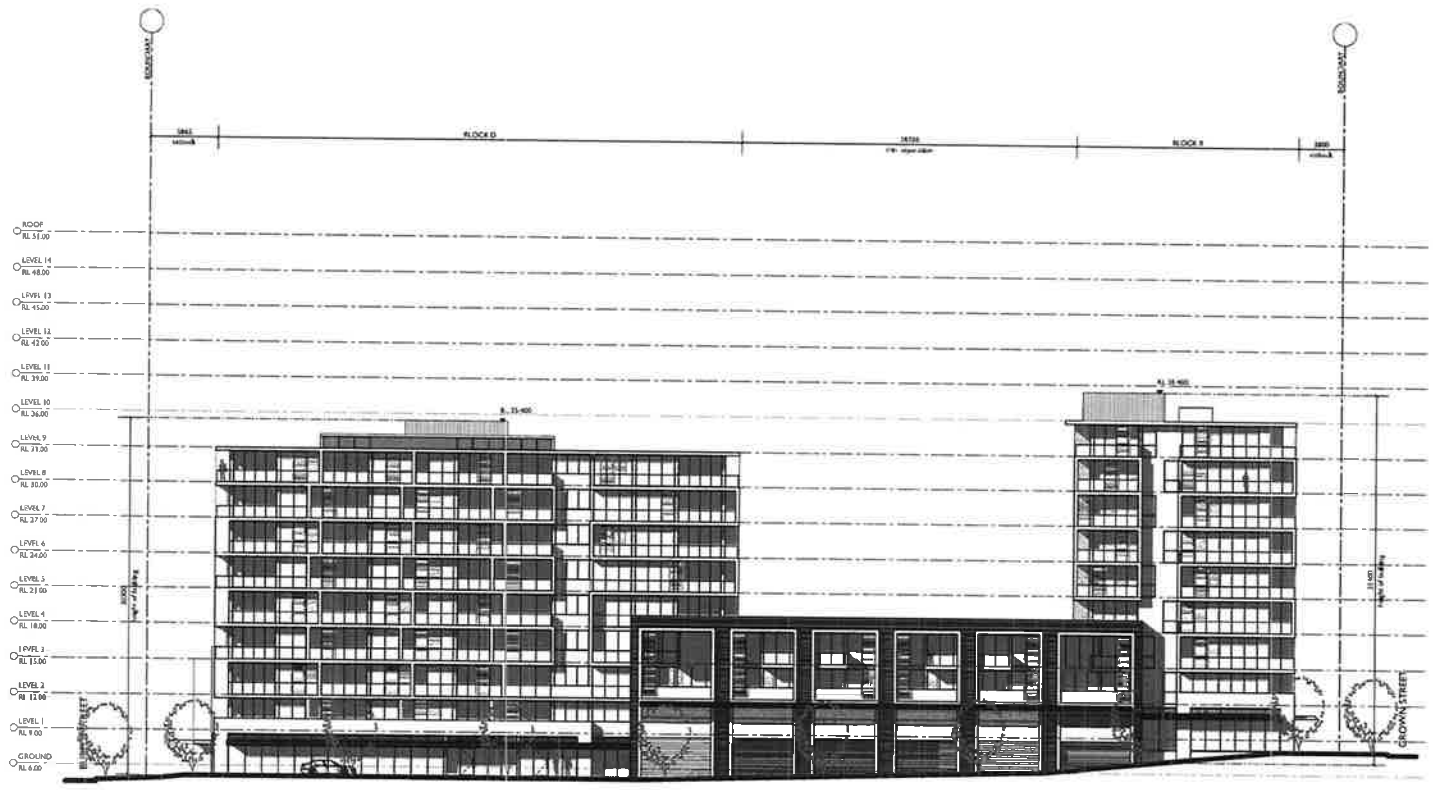
31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
BLOCKS B AND D -
PRE AND POST ADAPTION FLOOR PLANS

Scale	Date	Drawn	Checked
1:50 @ A1, 1:100 @ A3	APRIL 2014	LD, SP, LW	ADM

Project No.	Drawing No.	Issue
2013-36	A33	B



EAST ELEVATION

LANEWAY ASPECT

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
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Project
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At
LOT 1 D.P.1078311 & LOTS 5 & 6 D.P.32538
31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

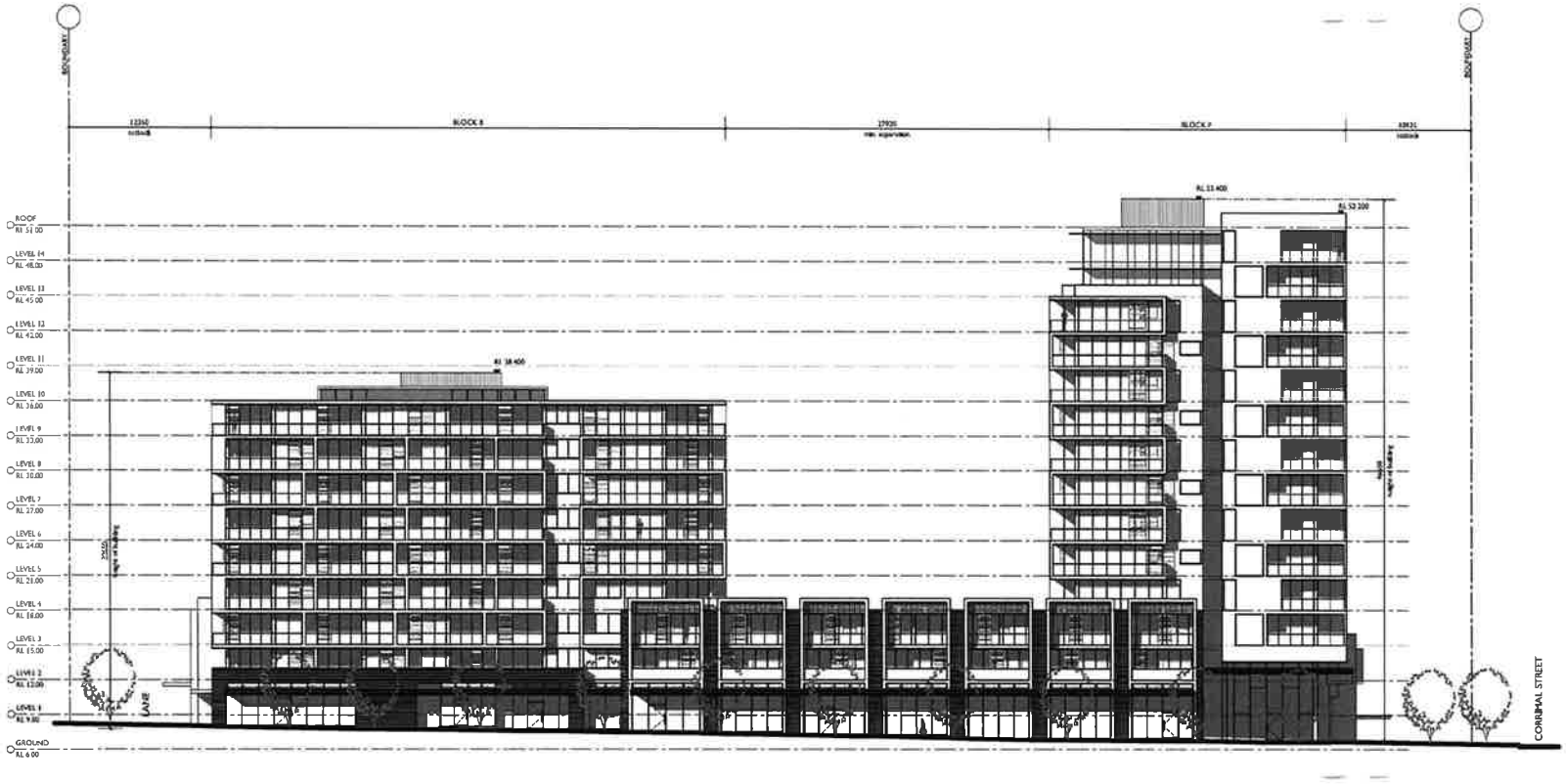
Title
DEVELOPMENT APPLICATION
EAST ELEVATION

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A25	B

ISSUE	DATE	DESCRIPTION
A	23.04.2014	ISSUED FOR DA
B	07.07.2014	AMENDED FOR DA

NOT FOR CONSTRUCTION



NORTH ELEVATION

CROWN STREET ASPECT

adm ARCHITECTS
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Project
FIVE STAGE MIXED USE DEVELOPMENT COMPRISING OF 317 UNITS ABOVE RETAIL SPACES AND FOUR LEVELS OF PARKING

At
LOT 1 D.P.1078211 & LOTS 5 & 6 D.P.32538
31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

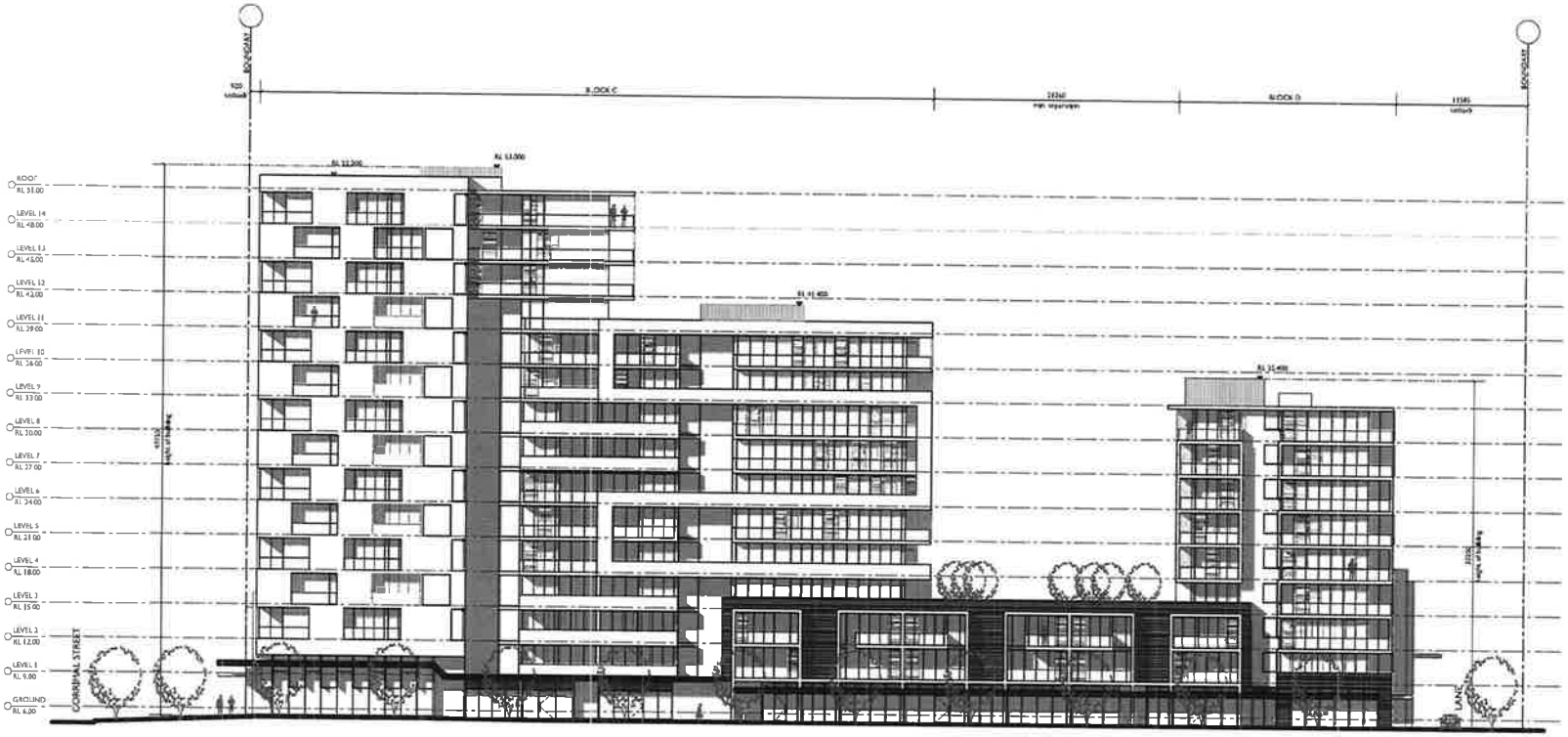
Title
DEVELOPMENT APPLICATION
NORTH ELEVATION

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A22	B

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
B	07.07.2014	AMENDED FOR DA

NOT FOR CONSTRUCTION



SOUTH ELEVATION

BURELLI STREET ASPECT

adm ARCHITECTS
94 Kembla St, Wollongong NSW 2500 PO Box 3061 Wollongong
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Project
FIVE STAGE MIXED USE DEVELOPMENT COMPRISING OF 317 UNITS ABOVE RETAIL SPACES AND FOUR LEVELS OF PARKING

At
LOT 1 D.P.1078311 & LOTS 5 & 6 D.P.32538
31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

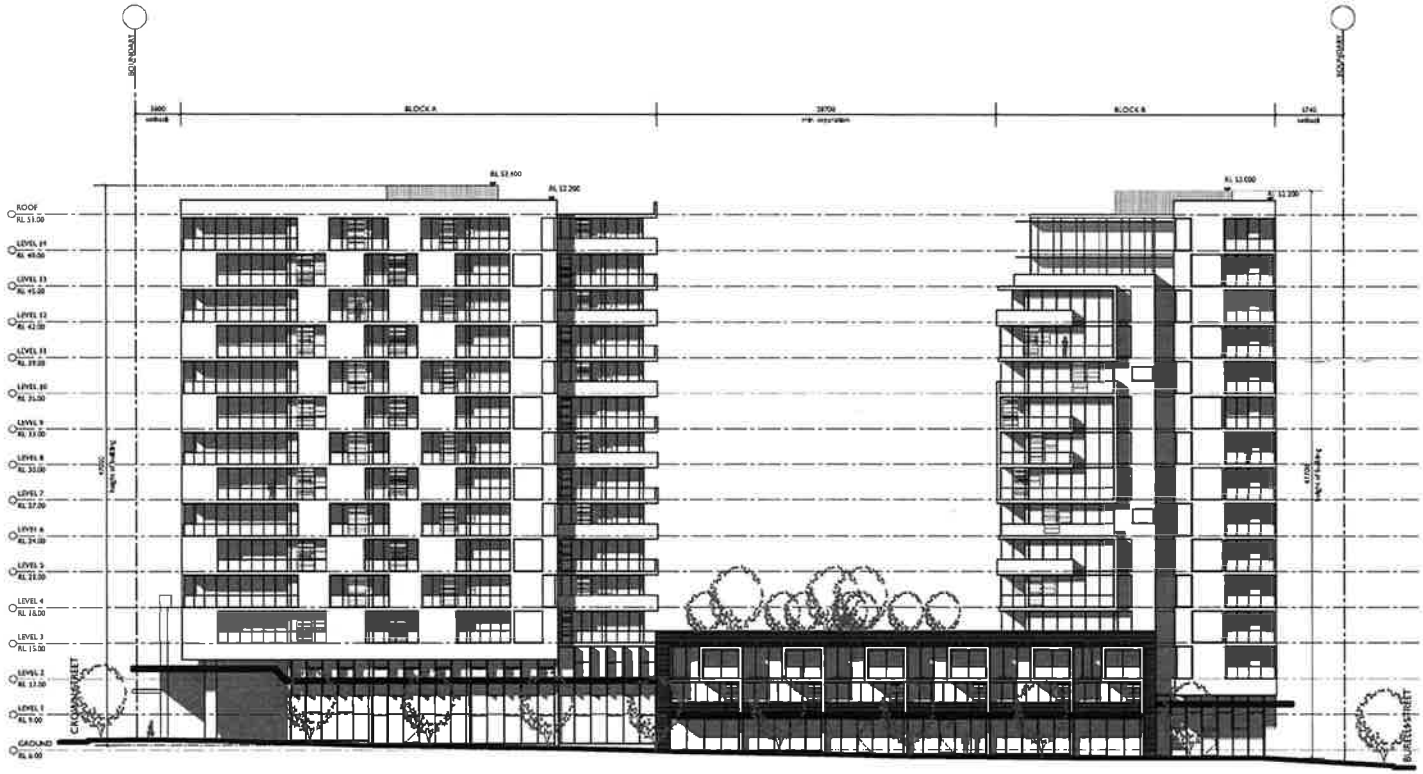
Title
DEVELOPMENT APPLICATION
SOUTH ELEVATION

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A24	B

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
B	07.07.2014	AMENDED FOR DA

NOT FOR CONSTRUCTION



WEST ELEVATION

CORRIMAL STREET ASPECT

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Project
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At
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For
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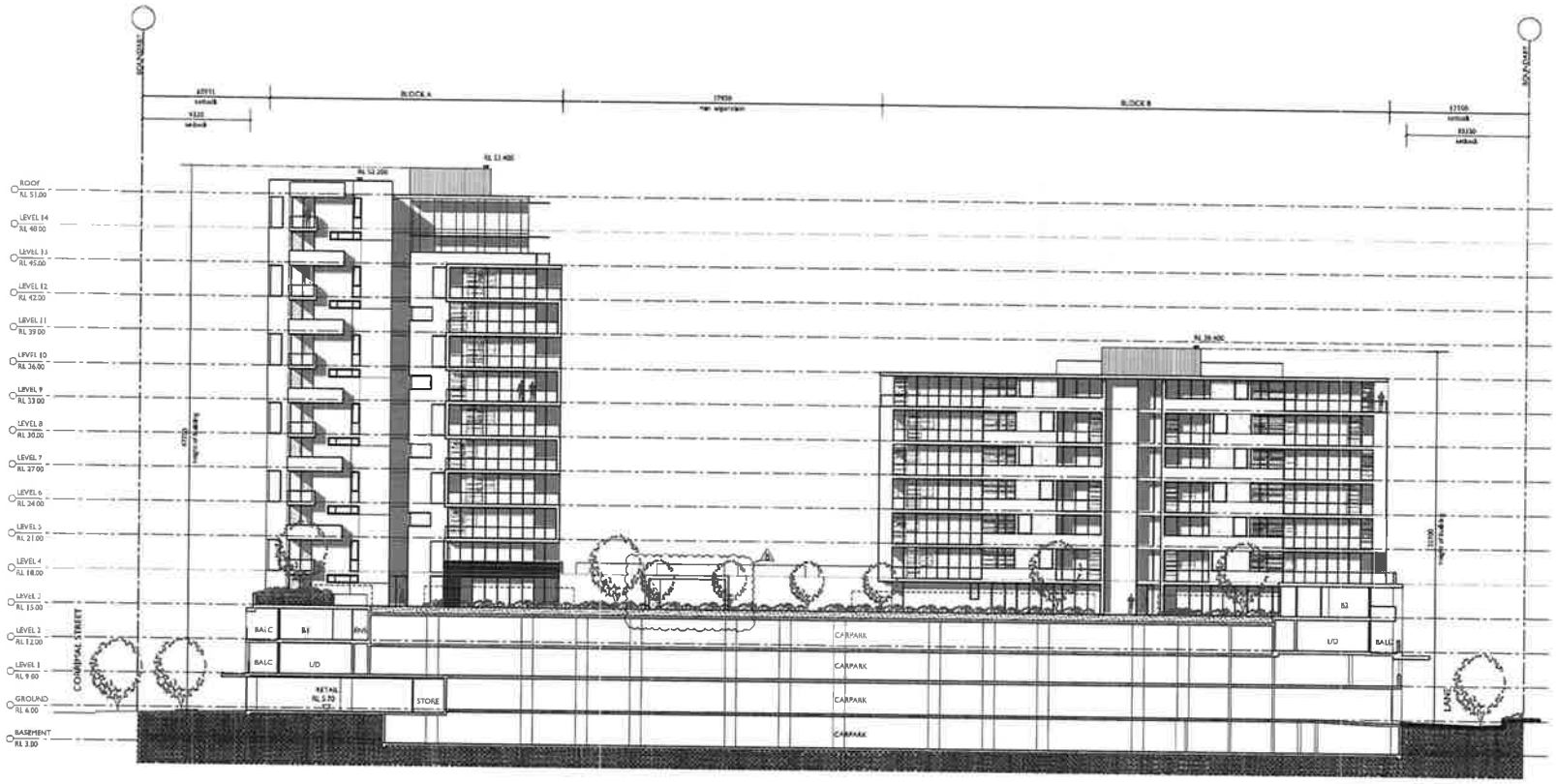
Title
DEVELOPMENT APPLICATION
WEST ELEVATION

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A23	B



BLOCK A & B INTERNAL ELEVATION / SECTION

SOUTH ASPECT

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
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At
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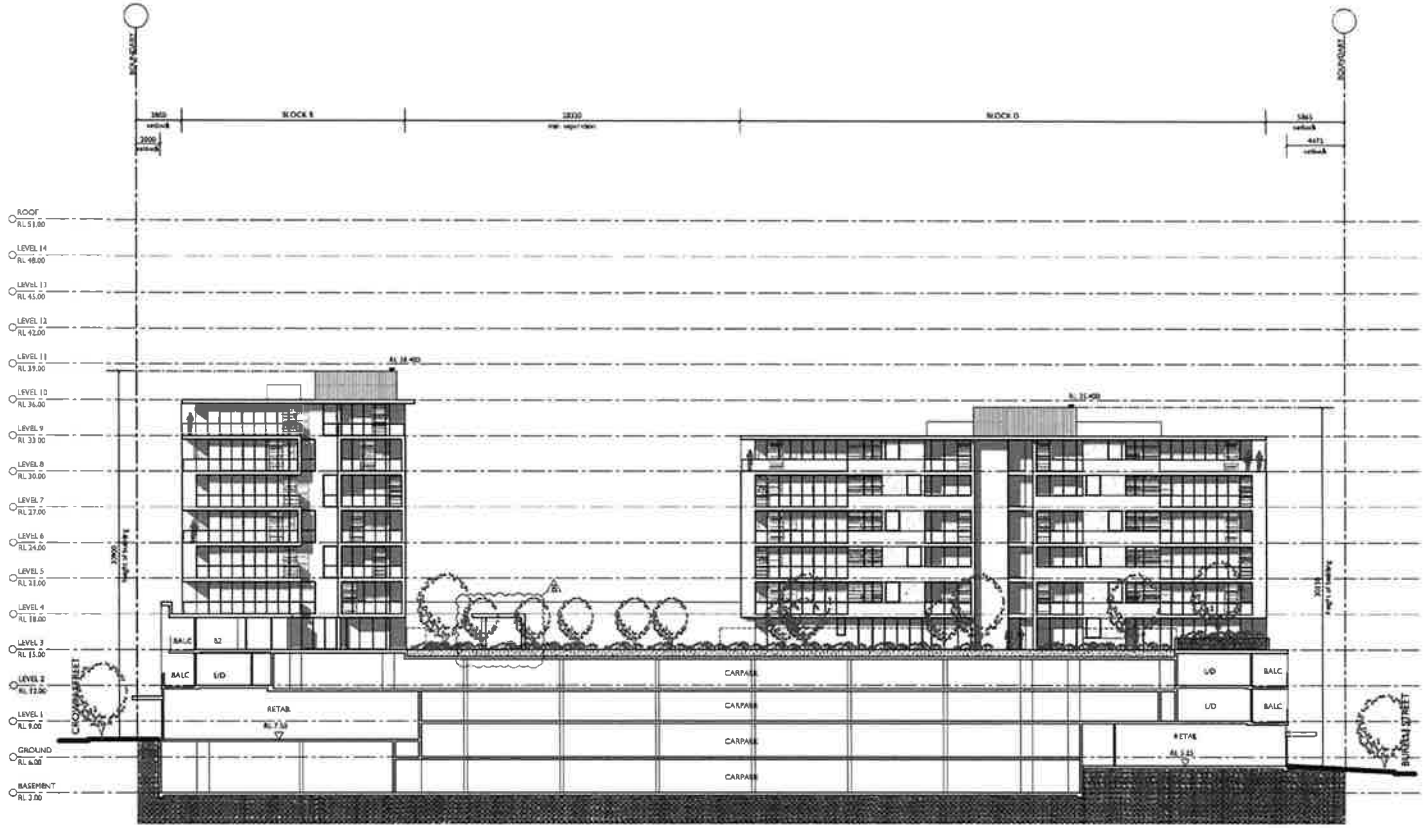
Title
DEVELOPMENT APPLICATION
BLOCK A & B INTERNAL ELEVATION

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A26	B

ISSUE	DATE	DESCRIPTION
A	23.04.2014	ISSUED FOR DA
B	07.07.2014	AMENDED FOR DA

NOT FOR CONSTRUCTION



BLOCK B & D INTERNAL ELEVATION / SECTION

WEST ASPECT

adm ARCHITECT
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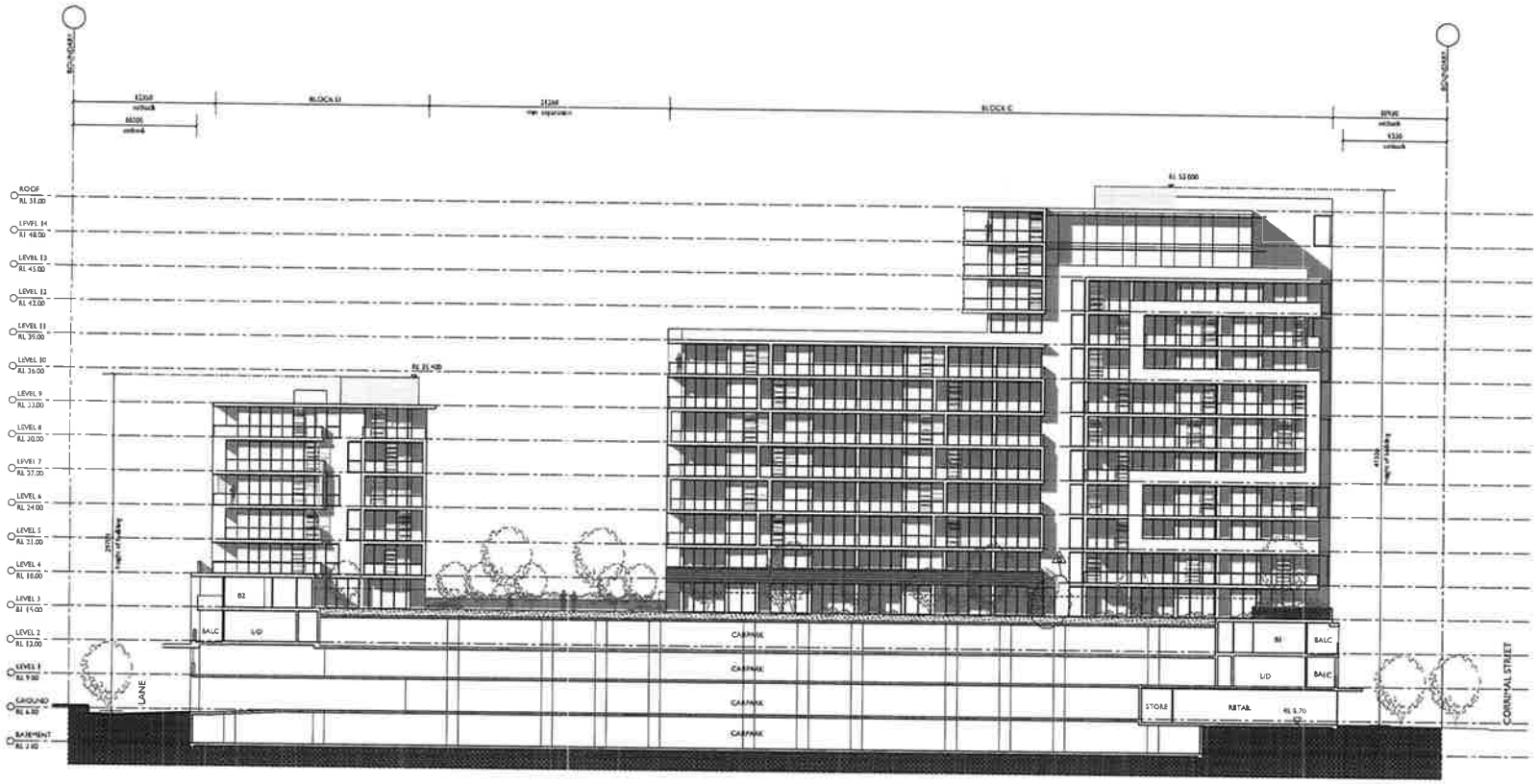
Title
DEVELOPMENT APPLICATION
BLOCK B & D INTERNAL ELEVATION

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A27	B

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
B	07.07.2014	AMENDED FOR DA

NOT FOR CONSTRUCTION



BLOCK C & D INTERNAL ELEVATION / SECTION

NORTH ASPECT

adm ARCHITECTS

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Project
FIVE STAGE MIXED USE DEVELOPMENT
COMPRISING OF 317 UNITS ABOVE
RETAIL SPACES AND FOUR LEVELS
OF PARKING

At
LOT 1 D.P.107831 & LOTS 5 & 6 D.P.32538
31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

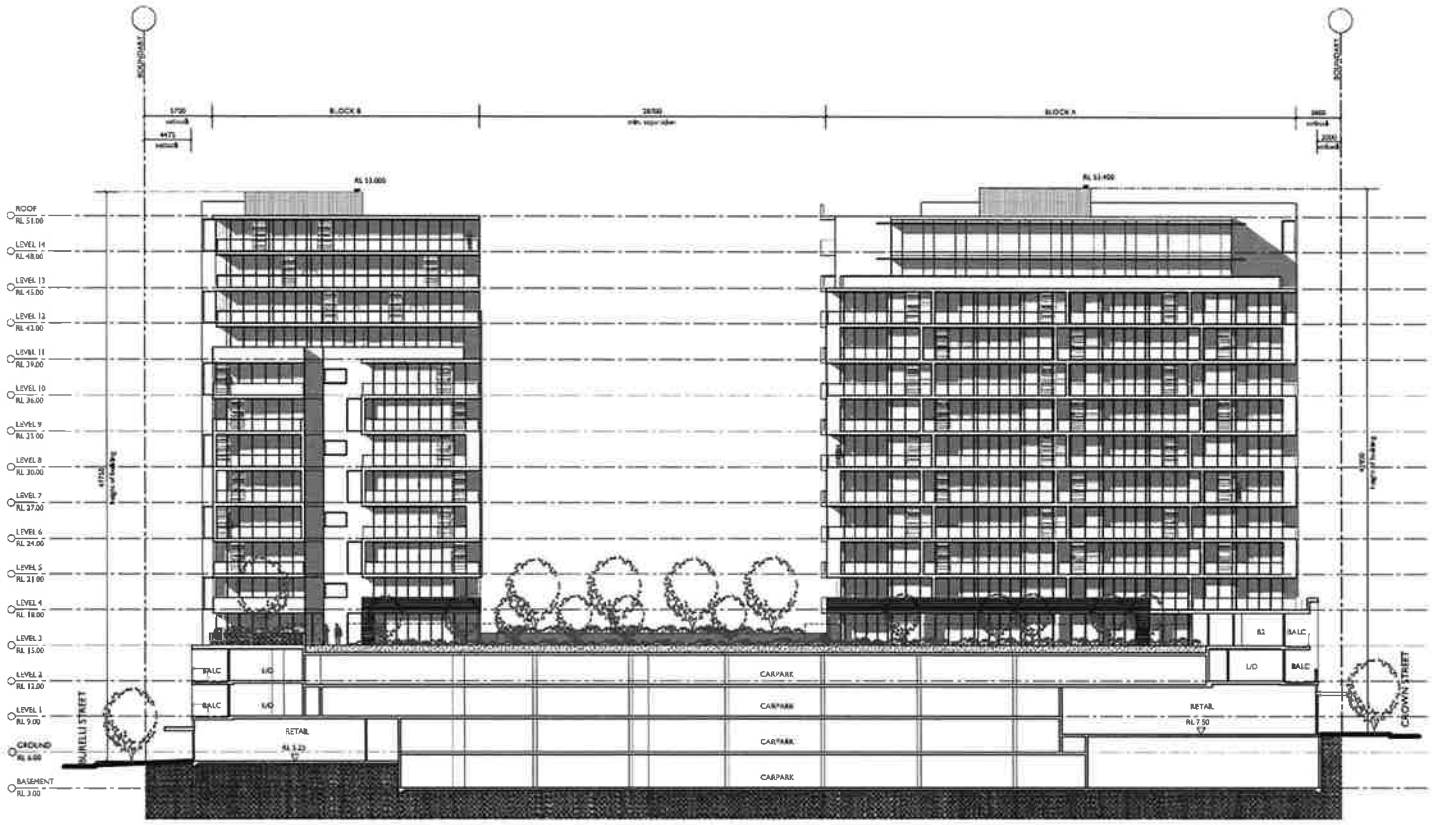
Title
DEVELOPMENT APPLICATION
BLOCK C & D INTERNAL ELEVATION

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A28	B

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
B	07.07.2014	AMENDED FOR DA

NOT FOR CONSTRUCTION



BLOCK A & C INTERNAL ELEVATION / SECTION

EAST ASPECT

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At
LOT 1 D.P.1078311 & LOTS 5 & 6 D.P.32538
31 CROWN STREET, WOLLONGONG

For
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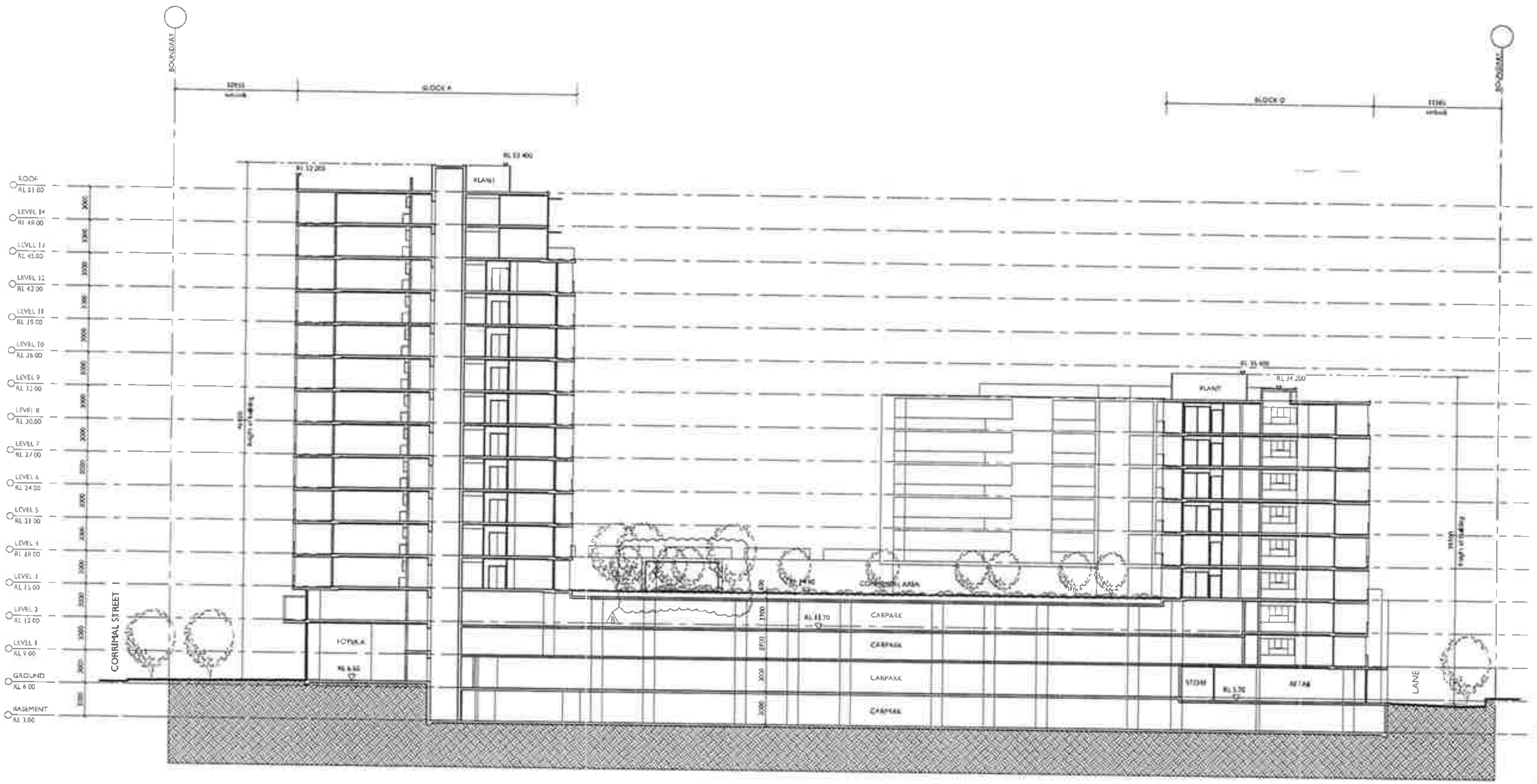
Title
DEVELOPMENT APPLICATION
BLOCK A & C INTERNAL ELEVATION

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A29	B



SECTION A-A

THROUGH BLOCKS A & D

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
B	07.07.2014	AMENDED FOR DA

NOT FOR CONSTRUCTION

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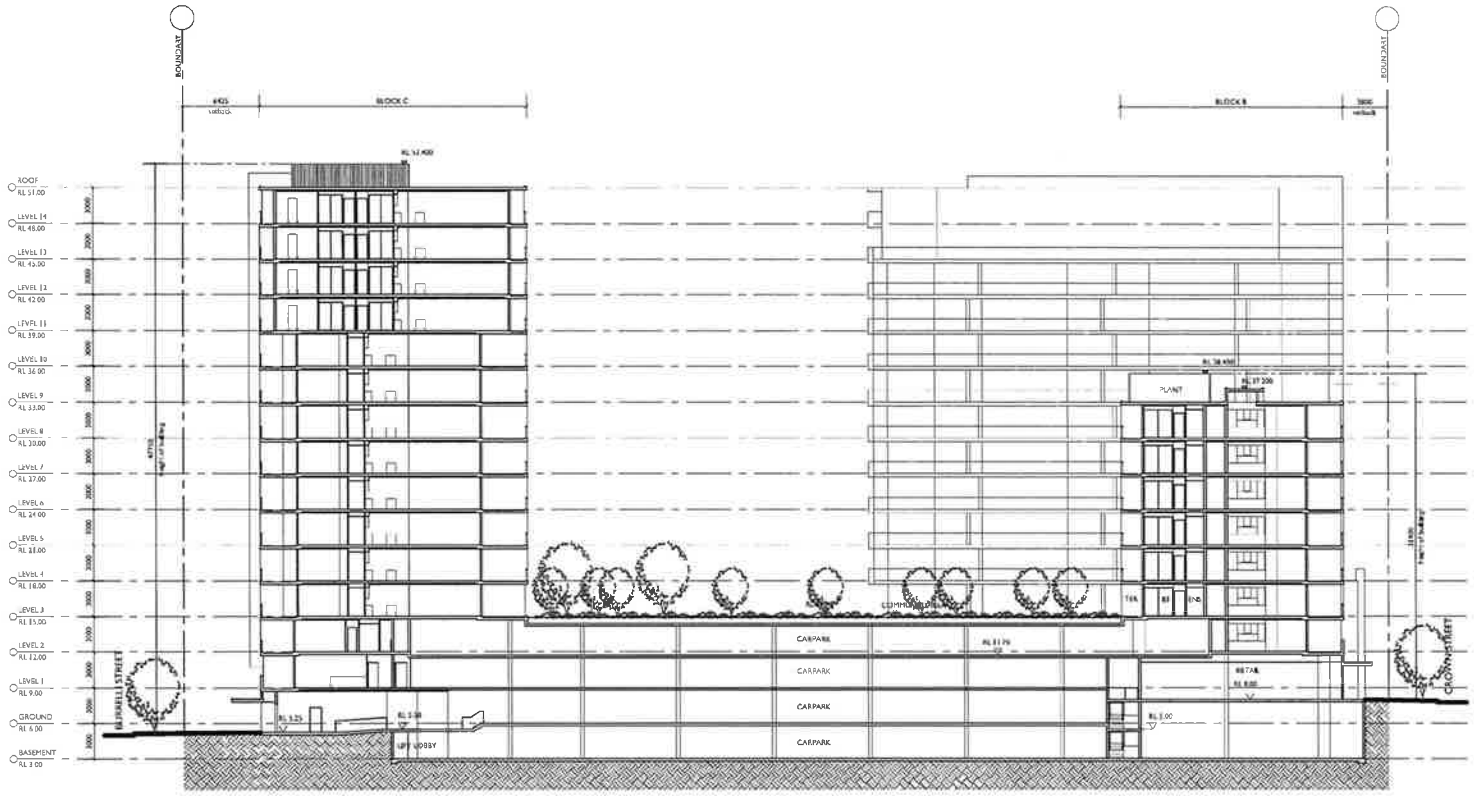
At
LOT 1 D P 1078311 & LOTS 5 & 6 D P 32538
31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
SECTION A - A

Scale	Date
1:200 @ A1 1:400 @ A3	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No	Drawing No	Issue
2013-36	A30	B



SECTION B-B

THROUGH BLOCKS B & C

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
B	07.07.2014	AMENDED FOR DA

NOT FOR CONSTRUCTION

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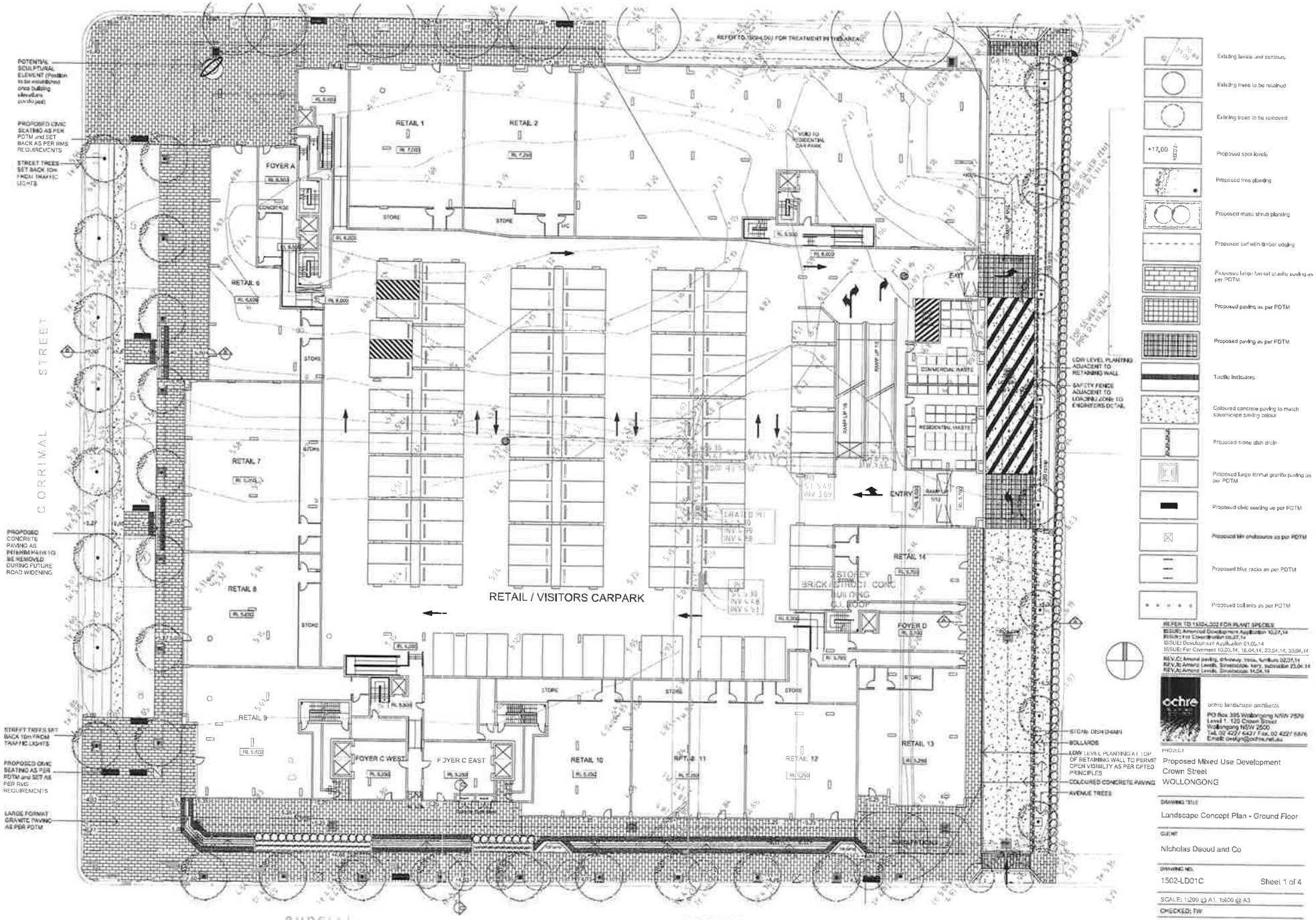
At: LOT 1 D.P.1078311 & LOTS 5 & 6 D.P.32538 31 CROWN STREET, WOLLONGONG

For: NICOLAS DAOUD & CO. PTY. LTD.

Title: DEVELOPMENT APPLICATION SECTION B-B

Scale: 1:200 @ A1, 1:400 @ A3	Date: APRIL 2014
	Drawn: LD, SP
	Checked: ADM
Project No. 2013-36	Drawing No. A31 / Issue B



REFER TO 1502-LD02 FOR PLANT SPECIES

ISSUE: Amended Development Application 10.07.14
ISSUE: For Coordination 09.07.14
ISSUE: Development Application 01.05.14
ISSUE: For Comment 10.03.14, 16.04.14, 23.04.14, 30.04.14

REV.C: Amend paving, driveway, trees, furniture 02.07.14
REV.B: Amend Levels, Streetscape, Keys, Substation 23.04.14
REV.A: Amend Levels, Streetscape 14.04.14

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PROJECT
Proposed Mixed Use Development
Crown Street
WOLLONGONG

DRAWING TITLE
Landscape Concept Plan - Ground Floor

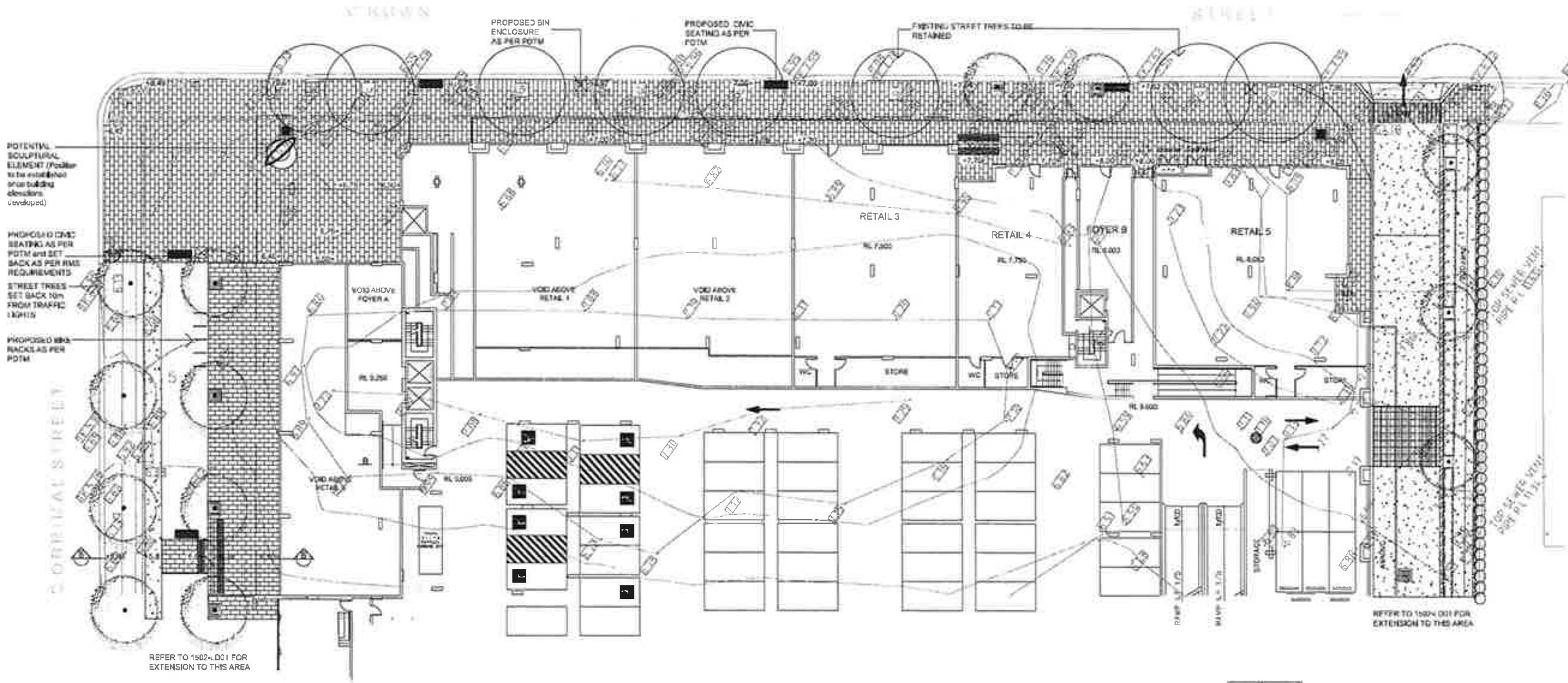
CLIENT
Nicholas Deoud and Co

DRAWING NO.
1502-LD01C Sheet 1 of 4

SCALE: 1:200 @ A1, 1:400 @ A3

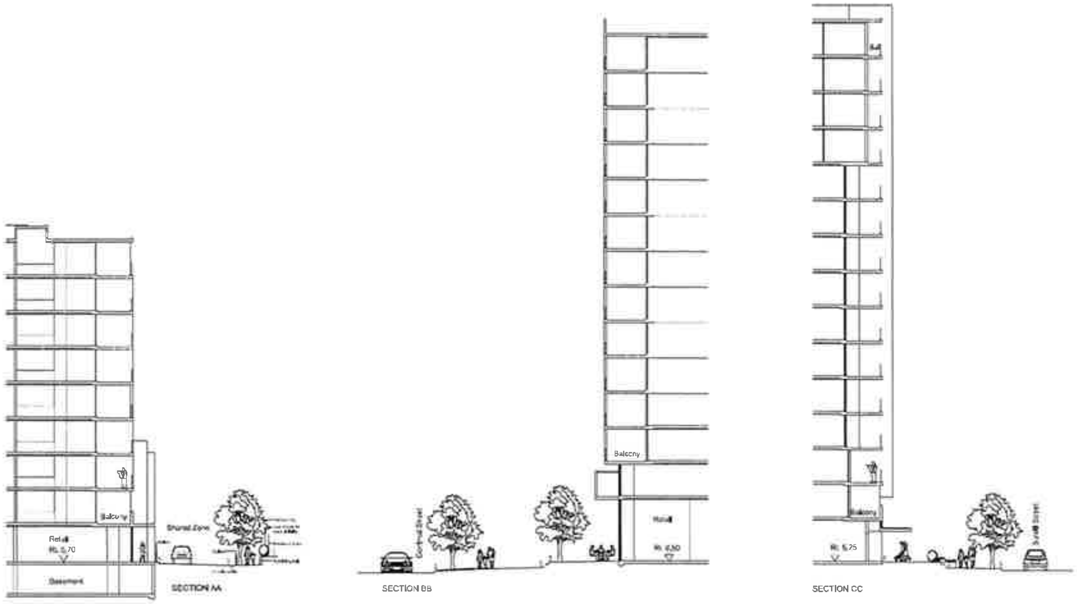
CHECKED: TW

DATE: 05.03.14



RECOMMENDED PLANT SPECIES

BOTANIC NAME	COMMON NAME
STREET TREES	
Brachychiton acerifolius	Illawarra Flame
Podocarpus elatus	Plumb Pine
Tristaniopsis laurina 'Luscious'	Water Gum
Waterhousia floribunda	Waterhousia
TREES	
Alphitonia excelsa	Red Ash
Polyscias elegans	Celerywood
Stenocarpus sinuatus	Firewheel Tree
Syzigium smithii	Lilly Pilly
Syzigium luehmannii	Weeping Lilly Pilly
Ceratopetalum gummiferum	NSW Xmas Bush
Tristaniopsis laurina 'Luscious'	Water Gum
PALMS & TALL ACCENTS (Level 3)	
Archontophoenix cunninghamiana	Bangalow Palm
Cordyline stricta	Stream Lilly
Cyathea australis	Rough Tree Fern
Dicksonia antarctica	Soft Tree Fern
Livistona australis	Cabbage Palm
Polyscias murrayi	Pencil Cedar
TALL SHRUBS (Level 3)	
Acmena smithii 'Minor'	Dwarf Lilly Pilly
Backhousia citriodora	Lemon Myrtle
Banksia spinulosa	Hairpin Banksia
Callistemon viminalis 'Slim'	Bottlebrush
Metrosideros 'Springfire'	NZ Xmas Bush
Metrosideros 'Fiji Fire'	NZ Xmas Bush
Syzigium 'Resistance'	Dwarf Lilly Pilly
Syzigium 'Cascade'	Weeping Lilly Pilly
Syzigium 'Pinnacle'	Narrow Lilly Pilly
Syzigium oleosum	Blue Lilly Pilly
SMALL TO MEDIUM SHRUBS & ACCENTS	
Acmena 'Pathfinder'	Dwarf Lilly Pilly
Acmena 'Allyn Magic'	Dwarf Lilly Pilly
Correa alba	White Correa
Crinum pedunculatum	Swamp Lily
Doryanthes excelsa	Gymea Lily
Philotheca myoporoides	Wax Flower
Strelitzia reginae	Bird of Paradise
Westringia 'Grey Box'	Dwarf Coastal Rosemary
Westringia 'Jervis Gem'	Coastal Rosemary
Grevillea [illegible]	Spider Flower
GROUND COVERS, SMALL ACCETNS & NATIVE GRASSES	
Alternanthera 'Little Ruby'	Alternanthera
Arthropodium 'Matapouri Bay'	Renga Lily
Dianella 'Little Rev'	Flax Lily
Dianella 'Streetscape'	Flax Lily
Ficinia nodosa	Club Rush
Lomandra 'Tanika'	Fine Leaved Mat Rush
Myoporum parvifolium	Creeping Boobialla
Phormium cookianum	NZ Flax
Plectranthus 'Mona Lavender'	Spur Flower
Scaevola 'Mauve Clusters'	Fan Flower
Trachelospermum jasminoides	Star Jasmine



LEGEND

- Existing levels and contours
- Existing trees to be retained
- Existing trees to be removed
- Proposed spot levels
- Proposed tree planting
- Proposed mass shrub planting
- Proposed turf with timber edging
- Proposed large format granite paving as per PDTM
- Proposed paving as per PDTM
- Proposed paving as per PDTM
- Tactile indicators
- Coloured concrete paving to match streetscape paving colour
- Proposed large format granite paving as per PDTM
- Proposed civic seating as per PDTM
- Proposed bin enclosures as per PDTM
- Proposed bike racks as per PDTM
- Proposed bollards as per PDTM

ISSUE: Amended Development Application 10.07.14
ISSUE: For Coordination 08.07.14, 09.07.14
ISSUE: Development Application 01.05.14
ISSUE: For Comment 10.03.14, 10.04.14, 23.04.14, 29.04.14 30.04.14
REV.C: Amend paving, driveway, trees, furniture 02.07.14
REV.B: Amend streetscape, kerb 23.04.14
REV.A: Amend Levels, Streetscape 14.04.14

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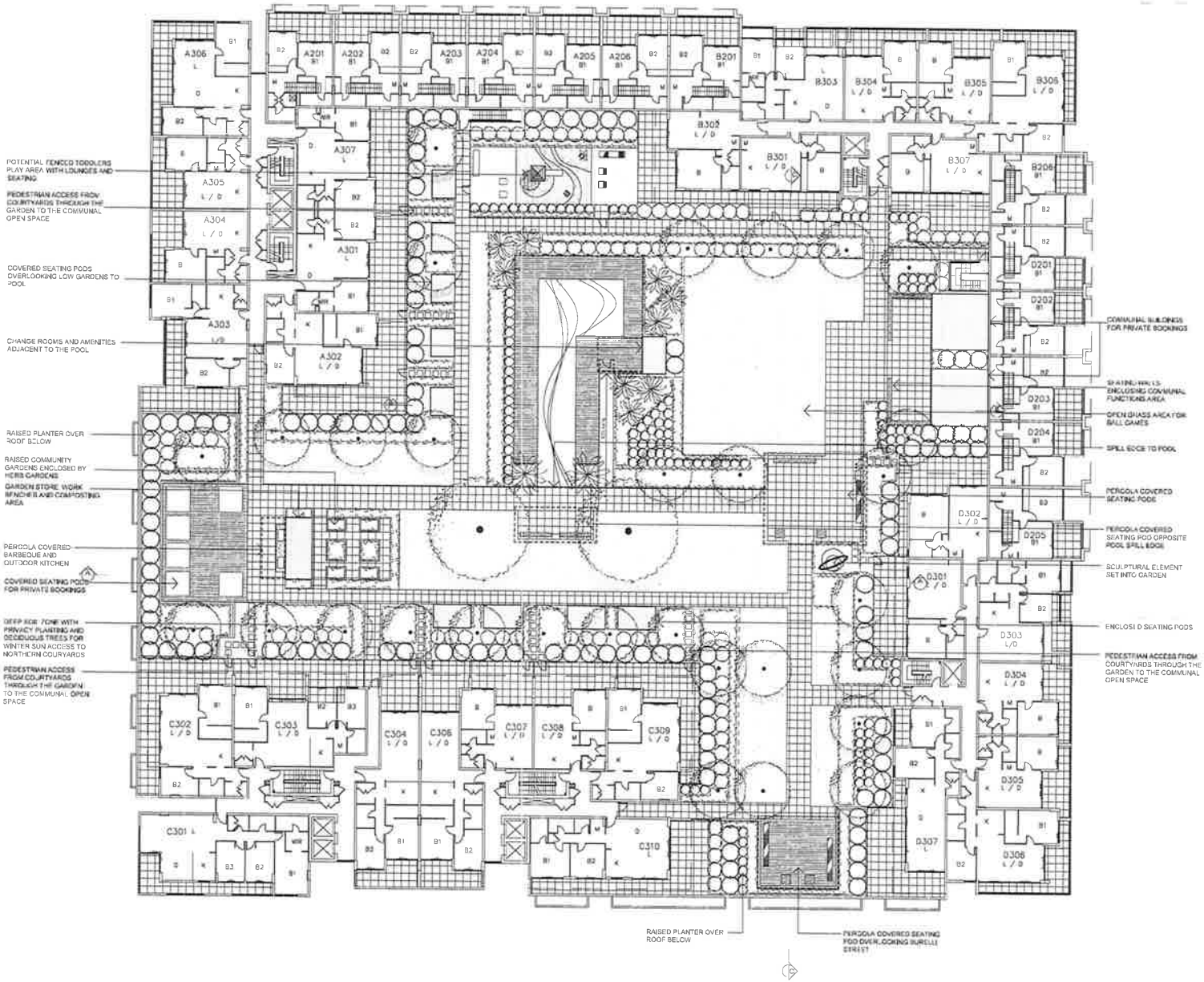
PROJECT
Proposed Mixed Use Development
Crown Street
WOLLONGONG

DRAWING TITLE
Landscape Concept Plan - Level One

CLIENT
Nicholas Daoud and Co

DRAWING NO.
1502-LD02C Sheet 2 of 4

SCALE: 1:200 @ A1, 1:400 @ A3
CHECKED: TW
DATE: 05.03.14



LEGEND

- Proposed tree planting
- Proposed mass shrub planting
- Proposed turf
- Proposed lilu paving
- Proposed timber deck
- 1800mm high courtyard fence
- 1200mm high glazed pool fence
- Proposed BBQ and outdoor kitchen
- Proposed seating plinths
- Proposed pergola
- Proposed sculpture
- Proposed wet poured rubber softfall to playground
- Raised planters to underhang detail

REFER TO 1502-LD04 FOR SECTIONS

ISSUE: Amended development Application 16.07.14
REV B: Pre Development 03.07.14
REV A: Amended layout 03.07.14

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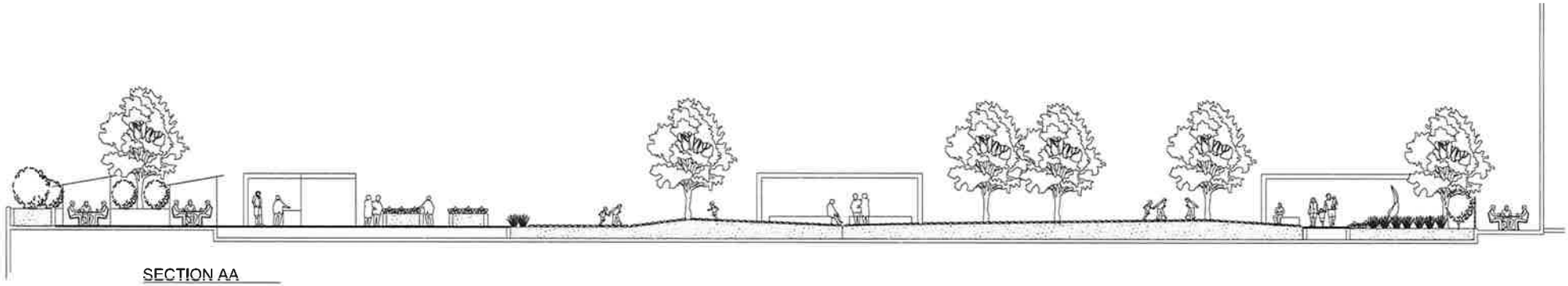
PROJECT
Proposed Mixed Use Development
Crown Street
WOLLONGONG

DRAWING TITLE
Landscape Concept Plan - Level 3

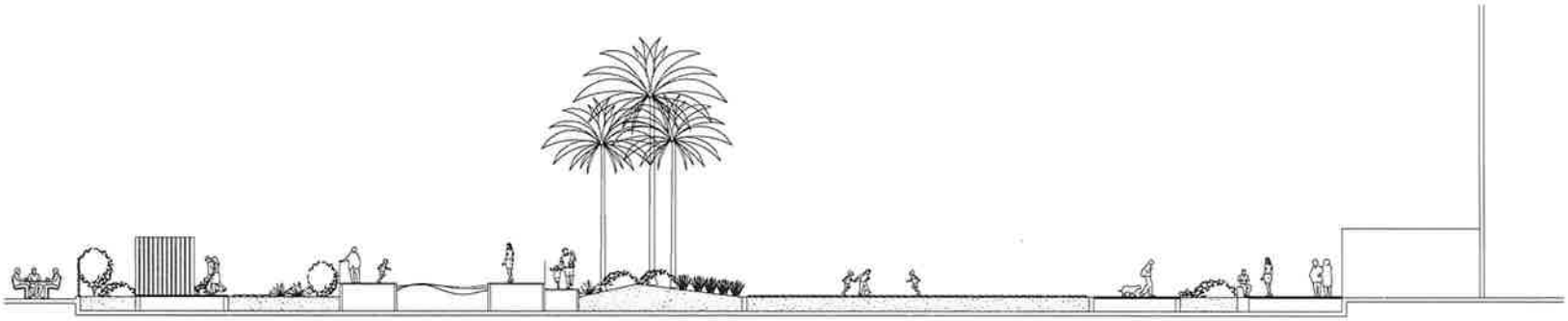
CLIENT
Nicholas Daoud and Co

DRAWING NO.
1502-LD03A
Sheet 3 of 4

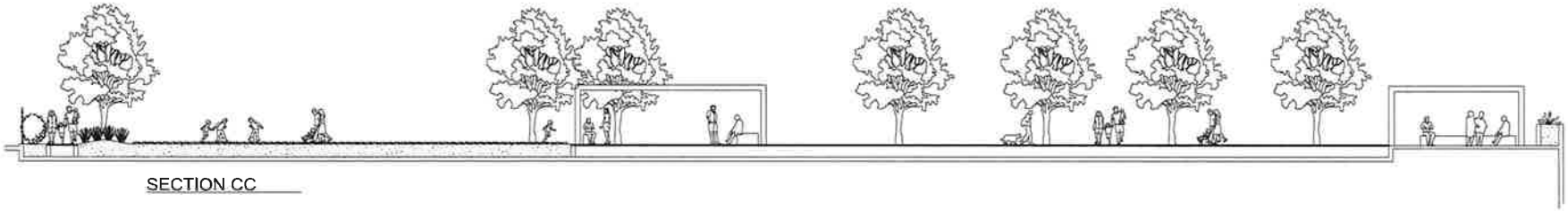
SCALE: 1:200 @ A1 1:400 @ A3
CHECKED: TW
DATE: 16.07.14



SECTION AA



SECTION BB



SECTION CC

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PROJECT
Proposed Mixed Use Development
Crown Street
WOLLONGONG

DRAWING TITLE
Landscape Sections - Level 3

CLIENT
Nicholas Daoud and Co

DRAWING NO.
1502-LD04A Sheet 4 of 4

SCALE: 1:100 @ A1, 1:200 @ A3
CHECKED: BW
DATE: 03.03.14

PLAN 9 AM

PLAN 10 AM

NORTH EAST 9 AM

NORTH EAST 10 AM

SHADOW ANALYSIS STUDY

21ST OF JUNE

ISSUE	DATE	DESCRIPTION
A	23.04.2014	ISSUED FOR DA
B	20.06.2014	ISSUED FOR DA
C	07.07.2014	ISSUED FOR DA

NOT FOR CONSTRUCTION

adm ARCHITECTS

94 Kembla St, Wollongong NSW 2500 PO Box 3062 Wollongong ph 02 4228 6400 fax 02 4228 6455 www.admarchitects.com.au

Project
FIVE STAGE MIXED USE DEVELOPMENT COMPRISING OF 317 UNITS ABOVE RETAIL SPACES AND FOUR LEVELS OF PARKING

At
LOT 1 D.P.1078311 & LOTS 5 & 6 D.P.32538
31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
SHADOW ANALYSIS STUDY 1 OF 3

Scale	Date	Drawn	Checked
NTS	APRIL 2014	LD, SP, JC	ADM

Project No	Drawing No	Issue
2013-36	A35	C

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
B	20.06.2014	ISSUED FOR DA
C	07.07.2014	ISSUED FOR DA

NOT FOR CONSTRUCTION

PLAN 11 AM

PLAN 12 NOON

PLAN 1 PM

NORTH EAST 11 AM

NORTH EAST 12 NOON

NORTH WEST 1 PM

SHADOW ANALYSIS STUDY
21ST OF JUNE

adm ARCHITECT
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Project
FIVE STAGE MIXED USE DEVELOPMENT
COMPRISING OF 317 UNITS ABOVE
RETAIL SPACES AND FOUR LEVELS
OF PARKING

At
LOT 1 D P.107831 & LOTS 5 & 6 D P.32538
31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
SHADOW ANALYSIS STUDY 2 OF 3

Scale	Date
NTS	APRIL 2014
	Drawn: LD, SP, JC
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A36	C

PLAN 2 PM

PLAN 3 PM

NORTH WEST 2 PM

NORTH WEST 3 PM

SHADOW ANALYSIS STUDY

21ST OF JUNE

ISSUE	DATE	DESCRIPTION
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Title
DEVELOPMENT APPLICATION
SHADOW ANALYSIS STUDY 3 OF 3

Scale	Date	
NTS	APRIL 2014	
	Drawn: LD, SP, JC	
	Checked: ADM	
Project No. 2013-36	Drawing No. A37	Issue C

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
B	07.07.2014	AMENDED FOR DA

NOT FOR CONSTRUCTION

CNR OF CROWN AND CORRIMAL STREETS
FACING SOUTH EAST

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Project
FIVE STAGE MIXED USE DEVELOPMENT
COMPRISING OF 317 UNITS ABOVE
RETAIL SPACES AND FOUR LEVELS
OF PARKING

At
LOT 1 D.P.1078311 & LOTS 5 & 6 D.P.32538
31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
ARTIST IMPRESSION 1 OF 3

Scale	Date
NTS	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-36	A38	B

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
B	07.07.2014	AMENDED FOR DA

NOT FOR CONSTRUCTION

CNR OF BURELLI AND CORRIMAL STREETS
FACING NORTH EAST

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Project
FIVE STAGE MIXED USE DEVELOPMENT
COMPRISING OF 317 UNITS ABOVE
RETAIL SPACES AND FOUR LEVELS
OF PARKING
At
LOT 1 D.P.1078311 & LOTS 5 & 6 D.P.32538
31 CROWN STREET, WOLLONGONG
For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
ARTIST IMPRESSION 2 OF 3

Scale	Date
NTS	APRIL 2014
	Drawn: LD, SP
	Checked: ADM

Project No.	Drawing No.	Issue
2013-35	A39	B

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
B	07.07.2014	AMENDED FOR DA

NOT FOR CONSTRUCTION

CROWN STREET ASPECT
FACING SOUTH WEST

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Project
FIVE STAGE MIXED USE DEVELOPMENT
COMPRISING OF 317 UNITS ABOVE
RETAIL SPACES AND FOUR LEVELS
OF PARKING

At
LOT 1 D.P.1078311 & LOTS 5 & 6 D.P.32538
31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
ARTIST IMPRESSION 3 OF 3

Scale	Date	
NTS	APRIL 2014	
	Drawn: LD, SP	
	Checked: ADM	
Project No.	Drawing No.	Issue
2013-36	A40	B

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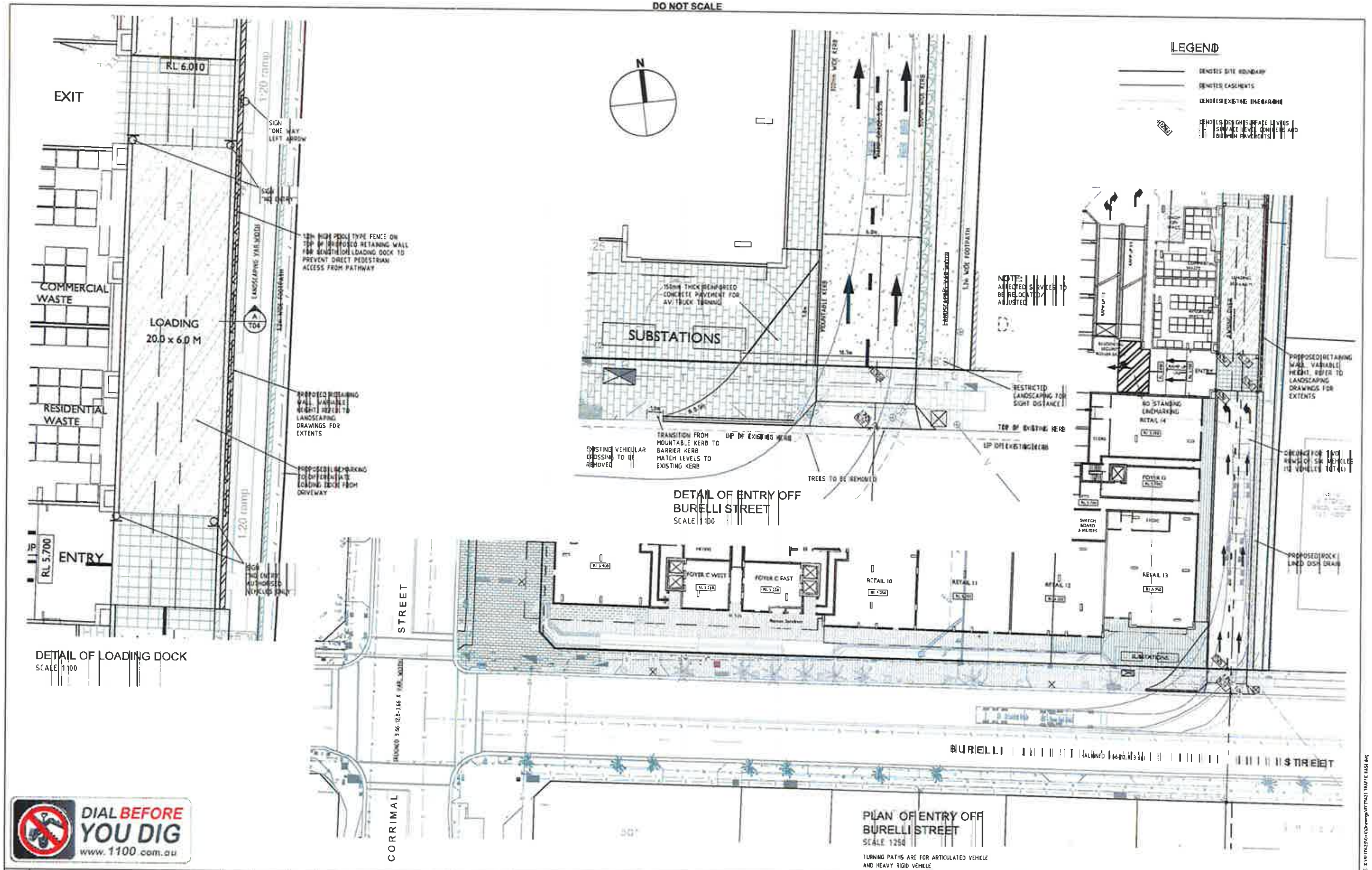

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www.1100.com.au

Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised
B			A.P.	
A			A.P.	

KFW
INFRASTRUCTURE PROFESSIONALS

K.F. Williams & Associates Pty Ltd
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Wollongong NSW 2500
A.C.N 008 664 417
Project Management, Surveying, Civil, Structural, Water & Sewer

p (07) 4228 7044
f (02) 4226 2004
e mail@kfw.net.au
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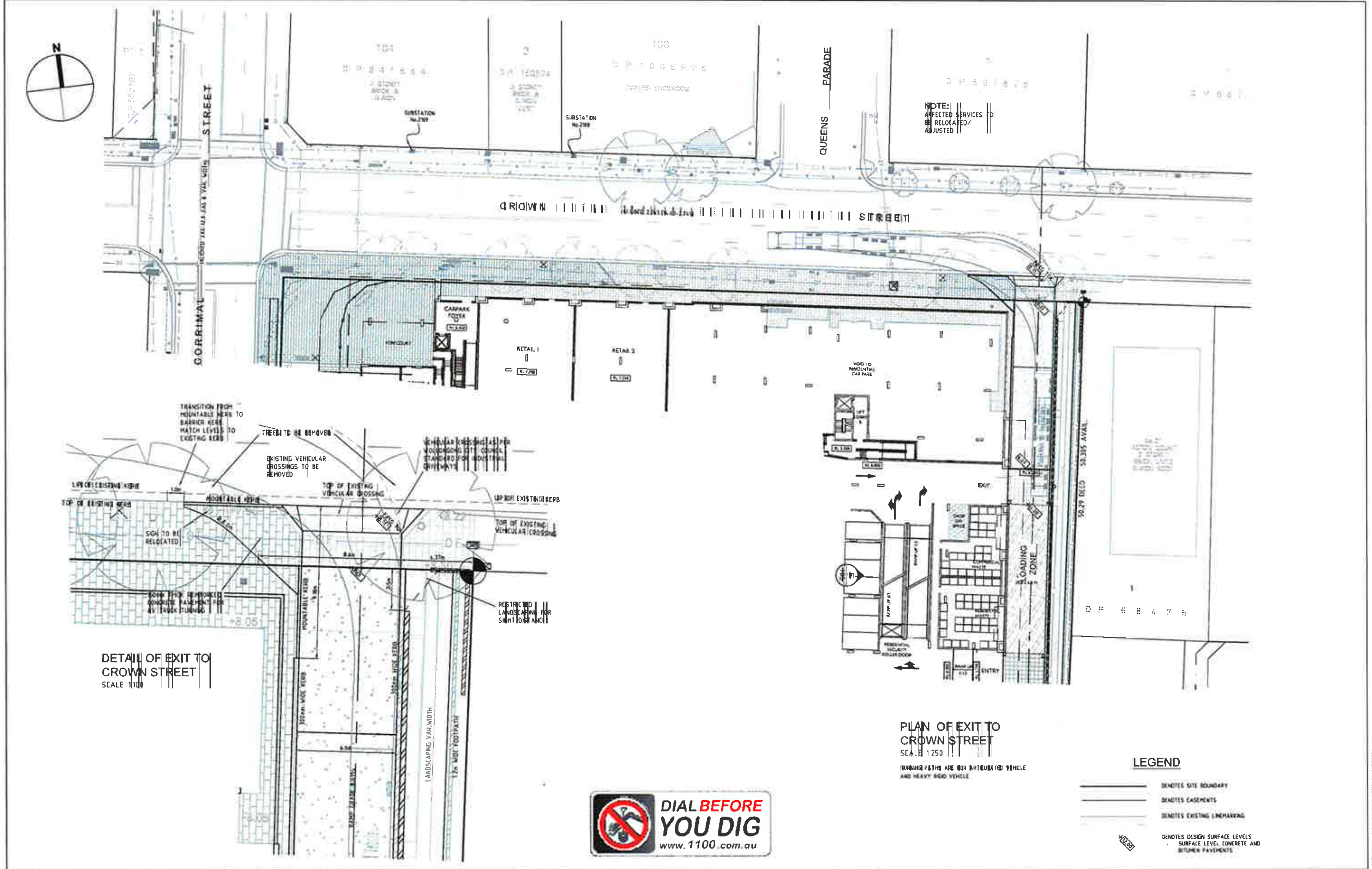
Surveyor	KFW
Date	DEC, 2013
Drawn	A.PROUDLOVE
Designed	A.PROUDLOVE
Checked	D.DOWLY

Drawing Title: PROPOSED MIXED USE DEVELOPMENT
23-37 CROWN STREET
WOLLONGONG
BURELLI STREET ENTRY

Drawing Status: ISSUED FOR DA APPROVAL

Project No. KF111423
Drawing No. T03
Sheet 3 of 5
Revision B

DO NOT SCALE



Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised
B			A.P.	
A		24-06-2014	A.P.	

KFW
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Surveyor	KFW	Date	DEC. 2013
Date of Survey	VARI.	Drawn	A.PROUDLOVE
Height Datum	AHD	Designed	A.PROUDLOVE
Origin		Checked	D.GOVEY
Horiz. Datum		Approved	

Drawing Title: PROPOSED MIXED USE DEVELOPMENT
23-37 CROWN STREET
WOLLONGONG
CROWN STREET EXIT

Scale: 1:250 @ A1, 1:500 @ A3
Drawing Status: ISSUED FOR DA APPROVAL

Project No. KF111423
Drawing No. T02
Sheet 2 of 5
Revision B

MATERIAL AND COLOURS SCHEDULE

1 DULUX LEXICON
WALLING AND SLAB EDGES

2 BRITISH PAINTS EXOTIC TERRACOTTA

3 BRITISH PAINTS GLAZED RUBY RED

4 BRITISH PAINTS COLORBOND MONUMENT
WALLING AND ALUMINIUM PRODUCTS

5 BRITISH PAINTS COLD METAL
WALLING

6 BOWRAL BRICKS BOWRAL BLUE
FACEBRICK WALLS

7 VITRABOND ALUMINIUM COMPOSITE PANEL
CLADDED AWNINGS AND WALLS

8 TIMBER RED MAHOGANY
SOFFIT CLADDING AND SUNSHADES

9 GREY TINTED GLASS
ALL GLAZING

ISSUE	DATE	DESCRIPTION
A	22.04.2014	ISSUED FOR DA
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FIVE STAGE MIXED USE DEVELOPMENT COMPRISING OF 317 UNITS ABOVE RETAIL SPACES AND FOUR LEVELS OF PARKING

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31 CROWN STREET, WOLLONGONG

For
NICOLAS DAOUD & CO. PTY. LTD.

Title
DEVELOPMENT APPLICATION
MATERIAL AND COLOURS SCHEDULE

Scale	Date
NTS	APRIL 2014
	Drawn: LD, SP, JC
	Checked: ADM

Project No	Drawing No	Issue
2013-36	A34	B

ATTACHMENT 4

wollongong
city of innovation

WOLLONGONG CITY COUNCIL

Address 41 Burelli Street Wollongong **Post** Locked Bag 8821 Wollongong DC NSW 2500
Phone (02) 4227 7111 • **Fax** (02) 4227 7277 **Email** council@wollongong.nsw.gov.au
Web www.wollongong.nsw.gov.au **ABN** 63 139 525 939 • GST Registered

ATTACHMENT 4 – DRAFT CONDITIONS

Consent has been granted subject to the following conditions:

Approved Plans and Specifications

1. The development shall be implemented substantially in accordance with the details and specifications set out on the following drawings

   To be inserted by Council.

General Matters

2. This strip of land zoned SP1 Infrastructure must be dedicated as public road at no cost to RMS. The strip of land must be dedicated either before or at the same time that the strata plan is finalised.

3. **Building Work - Compliance with the Building Code of Australia**
   All building work must be carried out in compliance with the provisions of the Building Code of Australia.

4. **Construction Certificate**
   A Construction Certificate must be obtained from Council or an Accredited Certifier prior to work commencing.

   A Construction Certificate certifies that the provisions of Clauses 139-148 of the Environmental Planning and Assessment Amendment Regulations, 2000 have been satisfied, including compliance with all relevant conditions of Development Consent and the Building Code of Australia.

   Note: The submission to Council of two (2) copies of all stamped Construction Certificate plans and supporting documentation is required within **two (2)** days from the date of issue of the Construction Certificate, in the event that the Construction Certificate is not issued by Council.

5. **Occupation Certificate**
   A final Occupation Certificate must be issued by the Principal Certifying Authority prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifying Authority must be satisfied that the requirements of Section 109H of the Environmental Planning and Assessment Act 1979, have been complied with as well as all of the conditions of the Development Consent.

6. **Disability Discrimination Act 1992**
   This consent does not imply or confer compliance with the requirements of the Disability Discrimination Act 1992.

   It is the responsibility of the applicant to guarantee compliance with the requirements of the Disability Discrimination Act 1992. The current Australian Standard AS1428.1 – Design for Access and Mobility is recommended to be referred for specific design and construction requirements, in order to provide appropriate access to all persons within the building.

7. **Protection of Public Infrastructure**
   Council must be notified in the event of any existing damage to any of its infrastructure such as the road, kerb and gutter, road shoulder, footpath, drainage structures and street trees fronting the development site, prior to commencement of any work.

Adequate protection must be provided for Council infrastructure prior to work commencing and during building operations.

Any damage to Council's assets shall be made good, prior to the issue of any Occupation Certificate or commencement of the operation.

8. **Maintenance of Access to Adjoining Properties**
Access to all properties not the subject of this approval must be maintained at all times and any alteration to access to such properties, temporary or permanent, must not be commenced until such time as written evidence is submitted to Council or the Principal Certifying Authority indicating agreement by the affected property owners.

9. **Street Tree Removal**
The developer has consent to remove the existing street trees on 1 Plane Tree on Crown Street and 9 Cocos Palms Burelli Street.

Tree removal costs are to be borne by developer. The removal of trees, including stumps, is to be carried out by suitably qualified tree contractor. This contractor must be appropriately insured to indemnify Council against any loss or damage incurred during the above works. They must also have appropriate OH&S policies and procedures (including traffic control) to ensure that works are carried out in a safe manner and in accordance in Council's own OH&S policies.

The developer must apply for (and be granted) permission under section 138 of the roads act to work within the road reserve. Tree removal must be carried out to the satisfaction of WCC Manager of Works.

10. **Geotechnical**
   a. A detailed geotechnical investigation is required to support the design of site preparation earthworks including advice on soil and rock excavation, management of ground water, site drainage, support of exposed soil and rock faces, construction of retaining walls and footings.
   b. All recommendations of the geotechnical consultant in their report for Geotechnical Condition 1 are to be accommodated in an earthworks plan for the development.
   c. There is to be no unsupported excavations with all cuts to be immediately supported by retaining wall construction.
   d. Hard bedrock where encountered will be difficult to excavate. Alternative excavation methods should be considered to minimise noise and vibration.
   e. The earthworks plan may require modification in light of any subsequent geotechnical reports commissioned to address unforseen geotechnical conditions encountered during the earthworks.
   f. Due to the sensitivity of the site to changing geotechnical conditions, the implementation of the earthworks plan must be undertaken with Level 1 geotechnical supervision as defined in Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Developments.
   g. At the completion of the site preparation earthworks, the geotechnical consultant is to prepare a works-as-executed report detailing encountered geotechnical conditions and how the works addressed these conditions so that the residual geotechnical constraints can be accommodated within the structural designs for the development. These structural designs are to be confirmed or amended by the structural engineer based on the works-as-executed geotechnical report.

11. All retail premises that are to be used as food premises are required to submit a separate Development Application showing the designs, constructions and fit out of the food premises comply with AS 4674-2004.

12. Any proposal for outdoor dining on Corrimal Street must be submitted to RMS for concurrence under Section 125 of the Roads Act,1993. A design showing the proposed arrangements would need to be submitted to RMS. The outdoor dining must be setback a minimum of 9.0m form the existing face of kerb on Corrimal Street or as otherwise agreed to by RMS.

13. **Separate Consent Required for Advertising Signage**
This consent does not authorise the erection of any advertising signage. Any such advertising signage will require separate Council approval, in the event that such signage is not exempt development, under Schedule 2 of Wollongong Local Environmental Plan 2009/Wollongong (West Dapto) Local Environmental Plan 2010.

Any new application for advertising signage must be submitted to Council in accordance with Chapter C1 – Advertising and Signage Structure of Wollongong Development Control Plan 2009.

Prior to the Issue of the Construction Certificate

14. **Heritage Excavation Permit**
The development site is known to include the site of the former Cricketer's Arms Hotel (1859), situated on the south east corner of Crown and Corrimal Street Wollongong. It is considered likely that the site may contain archaeological evidence of this period of occupation and that this archaeology will have significance that would identify these remains as 'Relics' under the NSW Heritage Act 1977. Given this, the developer is required to obtain an Excavation Permit, under the NSW Heritage Act 1977, prior to the commencement of any works on site. The developer must then ensure full compliance with any conditions and other requirements of the Excavation Permit. The developer is to provide a copy of any and all correspondence, reports, and other documentation, relating to the obtaining of, and compliance with, the Heritage Excavation Permit, to Wollongong City Council.

15. **Amended Plans**
As required by RMS, the awning between the ground floor and level 1 which encroached on the road widening strip must be freestanding and must not extend into the road widening strip by more than 3.0m. Amended plans reflecting matter is required to be submitted to the PCA prior to the issue of the Construction Certificate

16. **Section 73 Compliance Certificate**
A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water Corporation. Application must be made through an authorised Water Servicing Coordinator. Please refer to the Building Developing and Plumbing section of the web site www.sydneywater.com.au then refer to "Water Servicing Coordinator" under "Developing Your Land" or telephone 13 20 92 for assistance.

Following application, a "Notice of Requirements" will advise of water and sewer infrastructure to be built and charges to be paid. Please make early contact with the Coordinator, since building of water/sewer infrastructure can be time consuming and may impact on other services and building, driveway or landscape design.

The Notice of Requirements must be submitted to the Principal Certifying Authority prior to issue of the construction certificate.

17. **Integral Energy Requirements**
The submission of documentary evidence from Integral Energy to the Principal Certifying Authority is required confirming that satisfactory arrangements have been made with Integral Energy for the provision of electricity supplies to the development, prior to the release of the Construction Certificate.

Note: Applications should be made to Customer Connections – South Coast, Integral Energy PO Box 6366, Blacktown 2148.

18. **Telecommunications**
The submission of documentary evidence from an approved telecommunications carrier to the Principal Certifying Authority confirming that underground telecommunication services are available for this development is required prior to the issue of the Construction Certificate.

19. **Low Reflective External Finishes**
Any outbuildings or other ancillary structures are to be finished in colours and materials of natural earthy tones and low reflective quality to blend with the surroundings. The driveway is to be finished in dark earth tones.

20. **Site Contamination Validation Report and Site Auditor's Statement**

The submission of a site contamination validation report is required, prior to the issue of construction certificate or commencement of work for commercial and residential units. This validation report shall verify that:

- all site contamination remediation works have been satisfactorily completed;
- the site is not affected by any soil strata and/or groundwater table contamination, above NSW EPA threshold limit criteria; and
- the site is rendered suitable for the proposed development.

The submission of a site audit statement is also required from an accredited independent auditor pursuant to the provisions of Part 4 of the Contaminated Land Management Act 1997 confirming that the site has been satisfactorily remediated and is suitable for the proposed development. This statement/certificate must be obtained prior to the commencement of construction work.

21. **Water Sensitive Urban Design specification**
Submit detail water sensitive urban design concept stated in WSUD Design plan by KFW ref. no KF111423 dated 10 July 2014 to PCA.

22. **Dilapidation Report Prior to Construction**
A Dilapidation Report detailing the current structural condition of adjoining buildings, infrastructure and roads shall be prepared and endorsed by a qualified structural engineer. The report shall be submitted to the satisfaction of the certifying authority prior to issue of the Construction Certificate.

A copy of the report is to be forwarded to Council and the owners of adjoining properties prior to the issue of a Construction Certificate.

23. **Burelli Street, Corrimal Street – Detailed Civil Engineering Design**
A detailed civil engineering design shall be provided for the proposed footpath works in Burelli Street and Corrimal Street. The detailed civil engineering design shall be prepared by a suitably qualified practicing civil engineer in accordance with the relevant Council engineering standards. The design plans shall include:

a. Levels and details of existing and proposed infrastructure such as kerb and gutter, public utility, pits, poles, fencing, stormwater drainage, adjacent road carriageway and footpath levels, and shall extend a minimum of 10 metres beyond the limit of works.

b. Footpath longitudinal sections, and cross-sections at regular intervals including building entrance points demonstrating compliance with the latest versions of AS 1428.1, AS/NZS 2890.1, the Disability Discrimination Act and the AUSTROAD road design standards.

c. Cross sections of the design must be from the crown of the road and continue past the property boundary with a maximum chainage of 10m per cross section.

d. Where any adjustments to public utilities are proposed the applicant shall submit documentary evidence that they have the consent of the owner of the public utility authority.

e. All construction must be in accordance with the requirements of Council's Subdivision Code and the Wollongong City Council Public Domain Technical Manual. Evidence that this requirement has been met must be detailed on the engineering drawings.

The detailed civil engineering design and supporting documentation shall be submitted to Wollongong City Council's Development Engineering Manager for approval prior to the issue of the construction certificate.

24. **Permit to Enter and Exit Construction Site**
Any use of the footpath or road reserve for construction purposes requires Council approval under the Roads Act 1993. Where it is proposed to carry out activities such as construction vehicles entering and leaving the site from a public road reserve and/or installation of a fence or hoarding, a permit must be obtained from Council's Development Assessment and Certification Division prior to the issue of the Construction Certificate.

25. **Detailed Drainage Design**
A detailed drainage design shall be submitted with the Construction Certificate documentation for the proposed development. This detailed drainage design shall be prepared by a suitably qualified civil engineer in accordance with Chapter E14 of Wollongong City Council's Development Control Plan 2009, conditions listed under this consent, and generally in accordance with the concept drainage plan by KFW Infrastructure Professionals, Project No. KF111423, issue B, Sheets C01 to C06, dated Dec 2013.

26. **Existing/Proposed Levels**
Existing and proposed levels to Australian Height Datum (AHD), including floor, ground, grate, pipe inverts and pavement levels shall be shown on the detailed drainage design. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.

27. **Roofwater Drainage**
All roof gutters/sumps and downpipes shall be designed to cater for a 1 in 100 year ARI storm event in accordance with AS 3500.3 (2003) – Plumbing and Drainage (Stormwater Drainage). Details of gutter/downpipe sizes and downpipe locations shall be reflected on the Construction Certificate plans.

28. **Basement Waterproofing**
Full engineering details of the proposed wall around the basement car park shall be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate. This shall include construction details indicating that no ingress of stormwater is possible into the basement levels. This applies to any proposed opening such as doors or ventilation louvres. All vehicular access points (i.e. driveway crest), doors, and ventilation points to the basement car park shall be a minimum of 0.2 metres above the adjacent 100 year ARI flood level. These requirements shall be reflected on the Construction Certificate plans and supporting documentation.

29. **Pump System**
A pump system shall be provided in association with the detailed drainage design for the site to cater for stormwater from a prolonged/extreme storm event entering the basement. The pump system shall be designed by a suitably qualified and experienced civil engineer and reflected on the Construction Certificate plans and supporting documentation.

30. **Corrimal Street – Detailed Civil Engineering Design**
A detailed civil engineering design shall be provided for the proposed works within the Corrimal Street road reserve. The detailed civil engineering design shall be prepared by a suitably qualified practicing civil engineer in accordance with the relevant Council engineering standards. The design plans shall include:

a. Levels and details of existing and proposed infrastructure such as kerb and gutter, public utility, pits, poles, fencing, stormwater drainage, adjacent road carriageway and footpath levels, and shall extend a minimum of 10 metres beyond the limit of works.

b. Footpath longitudinal sections, and cross-sections at regular intervals including building entrance points demonstrating compliance with the latest versions of AS 1428.1, AS/NZS 2890.1, the Disability Discrimination Act and the AUSTROAD road design standards.

c. Cross sections of the design must be from the crown of the road and continue past the property boundary with a maximum chainage of 10m per cross section.

d. Where any adjustments to public utilities are proposed the applicant shall submit documentary evidence that they have the consent of the owner of the public utility authority.

e. All construction must be in accordance with the requirements of Council's Subdivision Code and the Wollongong City Council Public Domain Technical Manual. Evidence that this requirement has been met must be detailed on the engineering drawings.

The detailed civil engineering design and supporting documentation shall be submitted to Wollongong City Council's Development Engineering Manager for approval prior to the issue of the construction certificate.

31. **Footpath Levels**
Footpath levels must be obtained from Council's Development Assessment and Certification Division prior to the issue of the Construction Certificate. The approved footpath levels shall be reflected on the Construction Certificate plans. All such structures and internal driveways shall be constructed to these approved levels.

32. **Road Reserve – Footpath Levels/Gradients**
Entry point floor levels of the development shall be designed to match Council's footpath levels at the property boundary. Footpath crossfalls from the back of the kerb to the property boundary shall be maintained at 2.5% for the full frontage of the development to Council's road reserve. This requirement shall be reflected on the construction certificate plans and associated documentation and submitted to Council's Development Engineering Manager prior to the issue of the construction certificate.

33. The development shall make provision for a total of:

621 Car Parking Spaces (including 40 disabled car parking spaces)

- 354 Resident car spaces
- 64 Visitor car spaces
- 203 Commercial car spaces

151 Bicycle Spaces

- 9 Commercial bicycle spaces (5 staff, 4 visitors)
- 142 Residential bicycle spaces (106 residents, 27 visitors)

31 Motorbike Spaces

- 9 Commercial motorbike spaces
- 22 Resident motorbike spaces

This requirement shall be reflected on the Construction Certificate plans. Any change in above parking numbers shown on the approved DA plans shall be dealt with via a section 96 modification to the development. The approved parking spaces shall be maintained to the satisfaction of Council, at all times.

34. Bicycle parking must have adequate weather protection and provide the appropriate level of security as required by Table 3.1 of AS2890.3 (1993) - Bicycle Parking facilities and Austroads Guide to Traffic Management Part 11: Parking (Commentary 9: C9.2). This requirement shall be reflected on the Construction Certificate plans.

35. The parking dimensions, internal circulation, aisle widths, kerb splay corners, head clearance heights, ramp widths and grades of the car parking areas are to be in conformity with the current relevant Australian Standard AS2890.1, except where amended by other conditions of this consent. Details of such compliance are to be reflected on the Construction Certificate plans.

36. Each disabled person's parking space must comply with the current relevant Australian Standard AS2890.6 – Off-street parking for people with disabilities. This requirement shall be reflected on the Construction Certificate plans.

37. The main entry point to the building shall be in accordance with the current relevant Australian Standard 1428.1 - 2001 Design for Access and Mobility - Part 1 General Requirements for Access - Buildings. The proposed pedestrian ramps within the car parking areas shall incorporate gradients (with suitable landing intervals) in accordance with the Australian Standard. The final design of the pedestrian ramps, including ramp gradients shall be reflected on the Construction Certificate plans.

38. The designated loading/unloading facility shall be kept clear for that purpose at all times. The designated loading/unloading facility shall be shown on the Construction Certificate plans.

39. The provision of suitable barriers, line-marking and painted signage delineating vehicular flow movements within the car parking areas. These details shall be reflected on the Construction Certificate plans.

40. **Security Roller Shutters for Basement Car Parking Areas**
The installation of any security roller shutter for the basement car parking area shall not restrict access to any designated visitor car parking space. In the event that the approved visitor car parking spaces are located behind any proposed security roller shutter, an intercom system is required to be installed to enable visitor access into the basement car parking area. This requirement is to be reflected on the Construction Certificate plans and any supporting documentation for the endorsement of the Principal Certifying Authority prior to the release of the Construction Certificate.

41. A change in driveway paving is required at the entrance threshold to clearly show motorists they are crossing a pedestrian area. The developer must construct the paving in accordance with the conditions, technical specifications and levels to be obtained from Council's Manager Works. This requirement shall be reflected on the Construction Certificate plans and any supporting documentation.

42. Any proposed structures adjacent to the driveway shall comply with the requirements of the current relevant Australian Standard AS2890.1 to provide for adequate sight distance. This includes, but is not limited to, structures such as signs, letterboxes, retaining walls, dense planting etc. This requirement shall be reflected on the Construction Certificate plans.

43. The ground floor levels of the proposed building shall be constructed no lower than 0.2m above the 100 year ARI (Average Recurrence Interval) flood level. This requirement shall be reflected on the Construction Certificate plans, prior to the release of the Construction Certificate.

44. **Construct from Flood Compatible Material**
Any portion of the building or structure below the 1 in 100 year ARI (Average Recurrence Interval) flood level plus 0.5m freeboard shall be built from flood compatible materials. Where alternative materials are proposed and not shown in Chapter E13 of the Wollongong DCP 2009, relevant documentation from the manufacturer shall be provided to ensure the materials satisfy the definition of 'flood compatible materials' as stated in Chapter E13. This requirement shall be reflected on the Construction Certificate plans prior to the release of the Construction Certificate.

45. Overflow paths must be provided to allow for flows of water in excess of the capacity of the pipe/drainage system draining the land. Blocked pipe situations with 1 in 100 year ARI events must be incorporated in the design. Overflow paths must also be provided in low points and depressions. This requirement shall be reflected on the Construction Certificate plans prior to the release of the Construction Certificate.

46. The depth and location of all services (ie gas, water, sewer, electricity, telephone, stormwater etc) must be ascertained and reflected on the Construction Certificate plans and supporting documentation.

47. The submission of certification from a suitably qualified and experienced landscape designer and drainage consultant to the Principal Certifying Authority prior to the release of the Construction Certificate, confirming that the landscape plan and the drainage plan are compatible.

48 **Landscape plans to be submitted to RMS**
Detailed plans of any landscaping adjacent to Corrimal Street within the existing road reserve land affected by road widening must be submitted to RMS for concurrence prior to any works

being undertaken. All landscaping structures and non frangible tree plantings (ie large trees) must be setback a minimum of 9.0m form the existing face o kerb on Corrimal Street or as otherwise agreed to with RMS.

Note: A frangible planting being defined as planting which breaks under the impact of a motor vehicle.

49. **Street Trees**
The developer must address all three street frontages by installing street tree planting. The number and species for this development are as follows:

Corrimal Street
Double row of trees being a total of 16 *Cupaniopsis anacardioides* (Tuckeroo), 200 litre size

Burelli Street
10 x 200 litre size *Brachychiton acerifolius*

Crown Street
Retention of 8 existing street trees and the integration of an additional 2 x 200 litre size *Brachychiton acerifolius*

Tree pit detailing is to be in accordance with the City Centre Public Domain Technical Manual. Dial Before You Dig must be consulted prior to any excavation on site. Pot holing must be carried out to determine service location. Location of street tree plantings to be sited to ensure no conflict occurs with street light poles.

Tree pits must be installed to the satisfaction of WCC Manager Design and Technical Services.

These requirements shall be reflected on the Construction Certificate plans and any supporting documentation.

50. **Footpath Paving**
The developer is responsible for the construction of footpath paving for the entire frontage (Corrimal, Crown and Burelli Streets) of the development for the full width of the verge. The paving for this development is to be in accordance with the City Centre Public Domain Technical Manual.

A nominal two percent (2%) minimum one percent (1%), maximum two and a half percent (2.5%) cross fall to be provided from property line to back of kerb.

Driveway entry threshold finish from property boundary line to face of kerb: To match footpath and be designed to withstand predicted traffic loadings.
Driveway threshold finish within property boundary line: To contrast with driveway entry.

Footpath must be installed to the satisfaction of WCC.

A Landscape Plan is to be submitted to Council prior to the issue of the Construction Certificate showing proposed paving and location of all services.

51. The submission of a final Landscape Plan to the Principal Certifying Authority, prior to the release of the Construction Certificate. The final Landscape Plan shall address the following requirements:

51.1 Full width footpath paving along the Corrimal Street frontage with the removal of the grassed area.
51.2 Any requirements of RMS

The completion of the landscaping works as per the final approved Landscape Plan is required, prior to the issue of Occupation Certificate.

52. **Podium Planting**
All podium planting areas to have a waterproofing membrane that can provide a minimum 10 year warranty on product. Protective boarding to be installed to protect membrane from damage. All podium planting areas to be provided with an adequate drainage system connected to stormwater drainage system. Planter box to be backfilled with free draining planter box soil mix. If selected mulch is decorative pebbles/gravel, the maximum gravel pebble size is 10mm diameter.

This requirement shall be reflected on the Construction Certificate plans and any supporting documentation.

53. The provision of common tap(s) and/or an irrigation system is required to guarantee that all landscape works are adequately watered. The location of common taps and/or irrigation system must be indicated on the Landscape Plan for the Construction Certificate, as detailed in the Wollongong City Council Landscape Technical Policy No 98/4. This requirement shall be reflected on the Landscape Plan prior to the release of the Construction Certificate.

54. The implementation of a landscape maintenance program in accordance with the approved Landscape Plan for a minimum period of 12 months to ensure that all landscape work becomes well established by regular maintenance. Details of the program must be submitted with the Landscape Plan to the Principal Certifying Authority prior to release of the Construction Certificate.

55. **Engineering Plans and Specifications - Retaining Wall Structures**
The submission of engineering plans and supporting documentation of all proposed retaining walls to the Principal Certifying Authority for approval prior to the issue of the Construction Certificate. The retaining walls shall be designed by a suitably qualified and experienced civil and/or structural engineer. The required engineering plans and supporting documentation shall include the following:

55.1 A plan of the wall showing location and proximity to property boundaries;
55.2 an elevation of the wall showing ground levels, maximum height of the wall, materials to be used and details of the footing design and longitudinal steps that may be required along the length of the wall;
55.3 details of fencing or handrails to be erected on top of the wall;
55.4 sections of the wall showing wall and footing design, property boundaries and backfill material. Sections shall be provided at sufficient intervals to determine the impact of the wall on existing ground levels. The developer shall note that the retaining wall and footing structure must be contained wholly within the subject property;
55.5 the proposed method of subsurface and surface drainage, including water disposal;
55.6 reinforcing and joining details of the bends in the wall at the passing bay of the accessway;
55.7 the assumed traffic loading used by the engineer for the wall design.

56. **Crime Prevention through Environmental Design (CPTED) – Lighting**
All areas of the subject site which can be accessed by the public (including building entry points, communal open space areas, car parking areas and vehicle and pedestrian entrances) must have lighting provided in accordance with AS1158 (1999). This requirement shall be reflected on the Construction Certificate plans.

57. **Crime Prevention through Environmental Design (CPTED) – Basement Ceiling**
In order to maximise visibility in the basement carpark, the ceiling shall be painted white. This requirement shall be reflected on the Construction Certificate plans.

58. The submission of final design details of proposed security systems to be installed within the development to the Principal Certifying Authority, in order to minimise crime and vandalism related matters is required, prior to the release of the Construction Certificate.

59. **Section 94A Levy Contribution**
The following Section 94A Levy Contribution is required towards the provision of public amenities and services in accordance with the Wollongong City Council Section 94A Development Contributions Plan.

Pursuant to Section 80A(1) of the Environmental Planning and Assessment Act 1979, and the Wollongong City Council Section 94A Development Contributions Plan, a contribution of 1% of the cost of development (Contribution may be increased to 2% within the City Centre in accordance with Clause 1 of the Plan) amounting to $700,630.00 shall be paid to Council prior to the release of any associated Construction Certificate.

The amount to be paid will be adjusted at the time of actual payment, in accordance with the provisions of the Wollongong City Council Section 94A Development Contributions Plan. The

Consumer Price Index All Group Index Number for Sydney at the time of the development application determination is 105.6. The following formula for indexing contributions is to be used:

Contribution at time of payment = **$C x (CP2/CP1)**

Where

$C is the original contribution as set out in the Consent

CP1 is the Consumer Price Index (all groups index for Sydney) used in the proceeding indexation calculation

CP2 is the Consumer Price Index (all groups index for Sydney) at the time of indexation

Details of CP1 and CP2 can be found in the Australian Bureau of Statistics website Catalog No. 6401.0 - Consumer Price Index, Australia.

METHOD	HOW	PAYMENT TYPE
Online	http://www.wollongong.nsw.gov.au/applicationpayments Your Payment Reference: 613726	• Credit Card
In Person	Wollongong City Council Administration Building Customer Service Centre Ground Floor 41 Burelli Street WOLLONGONG	• Cash • Credit Card • Bank Cheque
PLEASE MAKE CHEQUES PAYABLE TO: Wollongong City Council (Personal Cheques not accepted)		

A copy of the Wollongong City Council Section 94A Development Contributions Plan and accompanying Fact Sheet may be inspected or obtained from the Wollongong City Council Administration Building, 41 Burelli Street, Wollongong during business hours or on Council's web site at www.wollongong.nsw.gov.au

The reason for Section 94A is to provide high quality and diverse public amenities and services to meet the expectations of the existing and new residents of Wollongong City Council.

Prior to the Commencement of Works

60. **Sign – Supervisor Contact Details**
Before commencement of any work, a sign must be erected in a prominent, visible position:

60.1 stating that unauthorised entry to the work site is not permitted;
60.2 showing the name, address and telephone number of the Principal Certifying Authority for the work; and
60.3 showing the name and address of the principal contractor in charge of the work site and a telephone number at which that person can be contacted at any time for business purposes.

This sign shall be maintained while the work is being carried out and removed upon the completion of the construction works.

61. **Temporary Toilet/Closet Facilities**
Toilet facilities are to be provided at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

Each toilet provided must be:

61.1 a standard flushing toilet; and
61.2 connected to either:
- 61.2.1 the Sydney Water Corporation Ltd sewerage system or
- 61.2.2 an accredited sewage management facility or
- 61.2.3 an approved chemical closet.

The toilet facilities shall be provided on-site, prior to the commencement of any works.

62. **Hoardings (within any Public Road Reserve)**
The site must be enclosed with a suitable hoarding (type A or B) or security fence of a type in accordance with the Works and Services Division Design Standard, and must satisfy the requirements of the Occupational Health and Safety Act, the Occupational Health and Safety Regulations and Australian Standard AS 2601. This application must be submitted to Council's Works and Services Division, and a permit obtained, before the erection of any such hoarding or fence.

63. **Enclosure of the Site**
The site must be enclosed with a suitable security fence to prohibit unauthorised access, to be approved by the Principal Certifying Authority. No building work is to commence until the fence is erected.

64. **Demolition Works**
The demolition of the existing building and associated structure shall be carried out in accordance with Australian Standard AS2601 (2001): The Demolition of Structures or any other subsequent relevant Australian Standard and the requirements of the NSW WorkCover Authority.

No demolition materials shall be burnt or buried on-site. The person responsible for the demolition works shall ensure that all vehicles leaving the site carrying demolition materials have their loads covered and do not track soil or waste materials onto the road. Any unforeseen hazardous and/or intractable wastes shall be disposed of to the satisfaction of the Principal Certifying Authority. In the event that the demolition works may involve the obstruction of any road reserve/footpath or other Council owned land, a separate application shall be made to Council to enclose the public place with a hoarding or fence over the footpath or other Council owned land.

65. **Consultation with NSW WorkCover Authority**
Prior to any work commencing on the site it is the responsibility of the owner to contact NSW WorkCover Authority in writing in respect to any demolition or use of any crane, hoist, plant or scaffolding.

66. **Construction Environmental Management Plan**
a. Submit a construction environmental management to PCA, the plan shall address as minimum, the vehicle traffic, odour and vapour, dust, plant and machinery noise, water and sediment management, surface water, subsurface seepage and accumulated excavation water, sediment from equipment and cleaning operations, site security, working hours, contact information, incident response and contingency management.

b. Submit an excavated soil material disposal plan to PCA, with the batching, sampling and analysis procedures as per the DECCW (2009) *Waste Classification Guidelines*. The plan shall be prepared by a suitably qualified and experienced consultant. A copy of the plan shall be forwarded to council.

67. **Demolition Notification to Surrounding Residents**
Demolition must not commence unless at least 2 days written notice has been given to adjoining residents of the date on which demolition works will commence.

68. **Consultation with WorkCover NSW – Prior to Asbestos Removal**
A licensed asbestos removalist must give written notice to WorkCover NSW at least five (5) days before licensed asbestos removal work is commenced.

69. **Hazardous Material Survey**

At least one week prior to demolition, the applicant must prepare a hazardous materials survey of the site and submit to Council a report of the results of the survey. **Hazardous materials** includes, but are not limited to, asbestos materials, synthetic mineral fibre, roof dust, PCB materials and lead based paint. The report must include at least the following information:

69.1 the location of hazardous materials throughout the site;
69.2 a description of the hazardous material;
69.3 the form in which the hazardous material is found, eg AC sheeting, transformers, contaminated soil, roof dust;
69.4 an estimation (where possible) of the quantity of each particular hazardous material by volume, number, surface area or weight;
69.5 a brief description of the method for removal, handling, on-site storage and transportation of the hazardous materials, and where appropriate, reference to relevant legislation, standards and guidelines;
69.6 identification of the disposal sites to which the hazardous materials will be taken.

70. **Asbestos Hazard Management Strategy**

An appropriate hazard management strategy shall be prepared by a suitably qualified and experienced licensed asbestos assessor pertaining to the removal of contaminated soil, encapsulation or enclosure of any asbestos material. This strategy shall ensure any such proposed demolition works involving asbestos are carried out in accordance with WorkCover NSW's requirements (http://www.workcover.nsw.gov.au). The strategy shall be submitted to the Principal Certifying Authority and Council (in the event that Council is not the Principal Certifying Authority), prior to the commencement of any works.

The approved strategy shall be implemented and a clearance report for the site shall be prepared by a licensed asbestos assessor and submitted to the Principal Certifying Authority and Council (in the event that Council is not the Principal Certifying Authority), prior to the issue of an Occupation Certificate or commencement of the development. The report shall confirm that the asbestos material has been removed or is appropriately encapsulated based on visual inspection plus sampling if required and/or air monitoring results and that the site is rendered suitable for the development.

71. **Contaminated Roof Dust**

Any existing accumulations of dust in ceiling voids and wall cavities must be removed prior to any demolition work commencing. Removal must take place by the use of an industrial vacuum fitted with a high efficiency particulate air (HEPA) filter.

72. **Support for Neighbouring Buildings**

This consent requires the preservation and protection of neighbouring buildings from any damage and if necessary, requires the underpinning and support of any neighbouring building in an approved manner. The applicant or the contractor carrying out the work must at least seven days in advance of any excavation works below the level of the base of the footings of a building on an adjoining allotment, including a public road or place, give written notice of intention to carry out such works to the property owner of the affected adjoining building and furnish specific written details and supporting plans or other documentation of the proposed work.

The adjoining property owner of land is not liable for any part of the cost of work carried out for the purposes of this condition, whether carried out on the allotment of land being excavated or on the adjoining allotment of land.

73. **Site Management, Pedestrian and Traffic Management (Where Works are Proposed in or from a Public Road Reserve)**

The submission, as part of an application for a permit under Section 138 of the Roads Act 1993, of a Site Management, Pedestrian and Traffic Management Plan to Council's Manager Development Engineering for approval is required, prior to works commencing on the site. This plan shall address what measures will be implemented for the protection of adjoining properties, pedestrian safety and traffic management and shall be in compliance with the requirements of the latest versions of Australian Standard AS1742 - Traffic Control Devices for Works on Roads and the RMS Traffic Control at Worksites Manual.

This plan is required to maintain public safety, minimise disruption to pedestrian and vehicular traffic within this locality and to protect services, during demolition, excavation and construction phases of the development. This plan shall include the following aspects:

a. proposed ingress and egress points for vehicles to/from the construction site;
b. proposed protection of pedestrians, adjacent to the construction site;
c. proposed pedestrian management whilst vehicles are entering/exiting the construction site;
d. proposed measures to be implemented for the protection of all roads and footpath areas surrounding the construction site from building activities, crossings by heavy equipment, plant and materials delivery and static load from cranes, concrete pumps and the like;
e. proposed method of loading and unloading excavation machines, building materials formwork and the erection of any part of the structure within the site;
f. proposed areas within the site to be used for the storage of excavated material, construction materials and waste containers during the construction period;
g. proposed traffic control measures such as advanced warning signs, barricades, warning lights, after hours contact numbers etc. are required to be displayed where works are in progress in any road reserve and shall be in accordance the latest versions of the NSW Roads and Maritime Services Specification - "Traffic Control at Work Sites Manual" and the Australian Standard AS1742. – "Manual of Uniform Traffic Control Devices" and accompanying field handbooks (SAA HB81);
h. proposed method of support of any excavation, adjacent to adjoining buildings or the road reserve. The proposed method of support is to be certified by an accredited certifier in Civil Engineering; and
i. proposed measures to be implemented, in order to ensure that no soil/excavated material is transported on wheels or tracks of vehicles or plant and deposited on the roadway.

The approved plan shall be implemented, prior to the commencement of any works upon the construction site.

Note: Any proposed works or placement of plant and equipment and/or materials within any road reserve will require the separate approval of Council, prior to the commencement of such works, pursuant to the provisions of the Roads Act 1993.

74. **Dilapidation Report**
The developer shall provide Wollongong City Council's Development Engineering Manager with a dilapidation report, identifying the condition of Council assets and all land in the vicinity of the proposed works prior to the commencement of works.

75. **Supervision of Works within Road Reserve**
The works within Council's road reserve shall be supervised by a suitably qualified and experienced Civil Engineer or Civil Engineering Foreman. The supervisor's name, address and contact details (including telephone number), together with a written construction program and anticipated duration of the construction works shall be submitted to Council's Development Engineering Manager prior to the commencement of works within the road reserve.

76. **RMS - ROL**
The developer shall apply for, and obtain a Road Occupancy Licence (ROL) from the RMS Traffic Operations Unit (TOU) prior to commencing roadwork's on a State Road or any other works that impact a travel lane of a State Road. The application will require a Traffic Management Plan (TMP) to be prepared by a person who is certified to prepare Traffic Control Plans. Should the TMP require a reduction of the speed limit, a Speed Zone Authorisation will also be required from the TOU. The developer shall submit the ROL application 10 business days prior to the commencing work. It should be noted that receiving an approval for the ROL within this 10 business day period is dependent upon RMS receiving an accurate and compliant TMP.

77. **Application for Occupation, Use, Disturbance or Work on Footpath/Roadway**
Any occupation, use, disturbance or work on the footpath or road reserve for construction purposes, which is likely to cause an interruption to existing pedestrian and / or vehicular traffic flows requires Council consent under Section 138 of the Roads Act 1993. An application must be

submitted and approved by Council prior to the works commencing where it is proposed to carry out activities such as, but not limited to, the following:

a. Digging or disruption to footpath/road reserve surface;
b. Loading or unloading machinery/equipment/deliveries;
c. Installation of a fence or hoarding;
d. Stand mobile crane/plant/concrete pump/materials/waste storage containers;
e. Pumping stormwater from the site to Council's stormwater drains;
f. Installation of services, including water, sewer, gas, stormwater, telecommunications and power;
g. Construction of new vehicular crossings or footpaths;
h. Removal of street trees;
i. Carrying out demolition works.

78. **Erosion and Sediment Control Measures**
Erosion and sediment control devices are to be installed prior to the commencement of any demolition, excavation or construction works upon the site. These devices are to be maintained throughout the entire demolition, excavation and construction phases of the development and for a minimum three (3) month period after the completion of the project, where necessary.

79. **Temporary Sediment Fences**
Temporary sediment fences (eg haybales or geotextile fabric) must be installed on the site, prior to the commencement of any excavation, demolition or construction works in accordance with Council's guidelines. Upon completion of the development, sediment fencing is to remain until the site is grassed or alternatively, a two (2) metre strip of turf is provided along the perimeter of the site, particularly lower boundary areas.

80. **All-weather Access**
An all-weather stabilised access point must be provided to the site to prevent sediment leaving the site as a result of vehicular movement. Vehicular movement should be limited to this single accessway.

During Demolition, Excavation or Construction

81. **Acoustic requirement**
The noise assessment report prepared by Day Design Acoustic Consultants has recommended the construction material to be used for retail/commercial spaces and glazing for residential unit to comply with the various noise criteria and they are:

Proposed Retail / Commercial Spaces Noise Controls
Retail/commercial spaces establishment may be located on the ground floor or Level 1 with residential apartments directly above shall have:

- Acoustical absorptive treatment to the cafe interior and underside of the soffit /awning, for example, as follows:-
- The underside of the slab or awning above the retail premises and forecourt, where appropriate, should be lined with acoustical absorptive material such as 50 mm thick polyester (minimum density 32 kg/m3) fixed between 50 mm timber battens; and
- The facing fixed to the battens should consist of either dressed hardwood slats 60 mm wide and spaced a minimum 20 mm apart, or perforated fibre cement sheet with a minimum 20% open area;

Consideration should also be given to minimising the reverberant build-up of sound within the retail tenancies that are likely to be cafes, restaurants, etc, by fitting each with acoustic ceilings for example;

- Acoustic ceilings should comprise perforated plasterboard (minimum 10 % open area) fixed to timber ceiling joists, or furring channel) with minimum 50 mm thick glasswool insulation (min density 32 kg/m3) between joists; or
- Acoustic ceiling tiles with a minimum NRC of 0.7.

82. **Mechanical Plants and Exhaust Ventilation system**

a. Mechanical Exhaust
Centralised mechanical exhaust ventilation must be provided to the building and all commercial kitchens such as cafes and restaurants cooking appliances installation as per AS4674-2004, AS1668.2-1991 and the grease filters to comply with AS1530.1.

b. Outdoor Air Conditioning or refrigeration units
The outdoor units for refrigeration system including air conditioners shall have suitable acoustic enclosure to comply with the noise guidelines.

c. Duct system
The ducting within the building must be mounted on vibration reducing pads to minimise vibration effect for residential and commercial spaces to comply with the vibration guidelines.

83. **Façades Glazing for acoustic requirement**
Based on the measured traffic noise levels the acoustic consultant has modelled various façades of indicative residential apartments across all four (4) blocks of the proposed development. This is in order to determine the likely type of construction required to meet the internal noise level requirements.

A final assessment, particularly of individual glazing requirements, should be carried out prior to issue of a Construction Certificate, once construction floor plans are finalised.

Walls
All external walls are proposed to be of "Hebel" construction with standard 13 mm thick plasterboard fixed to studs on the internal side of the wall and the cavity lined with R1.5 insulation. This construction will be acoustically acceptable.

Roof / Ceiling
All roofs are proposed to be of concrete slab construction with standard plasterboard ceilings below, which will be acceptable.

Glazing
Unless otherwise specified, window and door frames may be either sliding or awning style and be of robust sound-barrier construction having interlocking stiles and neoprene (Q-lon or similar) or vinyl finned seals to minimise sound leakage.

Table below specifies minimum sound reduction index (Rw) ratings required for a sample of various units and rooms across the development.

Table Schedule of Typical Glazed Windows and Door Constructions

Unit/room description	Min Rw
BLOCK A *Example – Unit A304, Level 3 Typical for all levels – Western facades facing Corrimal Street*	
Living / Dining Bedroom	45
Example – Unit A402 & A407, Level 4 Typical for all units above	
Living / Dining Bedroom	45
Bedroom 1	43
Bedroom 2	36
Example – Unit A401 & A408, Level 4 Typical for all units directly above	
Living / Dining	43
Bedrooms 1 & 2	36
BLOCKS B & D *Example – Unit B202, Level 2 Typical for all units above and adjacent facing Crown Street & D Block facing Burelli Street*	
Living / Dining Bedrooms 1 & 2	36

Example – Unit B407, Level 4 Typical for all units above and below facing south and all those in B and D block facing east	
Living / Dining Bedrooms 1 & 2	32
BLOCK C *Example – Units C106 to C111, Levels 1 & 2*	
Living / Dining	45
Bedrooms 1 & 2(fixed glazing)	43
Bedrooms 1 & 2 (operable glazing)	43
Example – C402 Typical for all levels	
Living / Dining	45
Bedrooms 1 & 2	43
Example – C202 and all above	
Living / Dining (fixed glazing)	43
Living / Dining (operable glazing)	43
Bedrooms 1, 2 & 3	43
Example – C405 & C406	36
Living / Dining Bedroom 1 & 2	

84. **Stormwater Connections**
All stormwater connections to Council's existing stormwater drainage system shall be constructed in accordance with good engineering practice. The developer shall ensure that the condition of the existing stormwater drainage system is not compromised and that the service life of the existing stormwater drainage system is not reduced as a result of the connection.

85. **Protection of Council Infrastructure**
The developer shall provide adequate protection to all Council assets prior to work commencing and during construction. Wollongong City Council's Development Engineering Manager shall be notified immediately in the event of any damage to Council's assets. Any damage to Council's assets shall be made good to the satisfaction of Council, with all associated costs borne by the developer.

86. **Notification to Adjoining Property Owners Prior to Commencement of Works**
The contractor shall maintain access to existing properties fronting the works. Notification shall be made to the affected properties prior to commencement of works. This is particularly the case if any disruption to access will be required as a consequence of the works

87. **Survey Report for Floor Levels**
A Survey Report must be submitted to the Principal Certifying Authority verifying that each floor level accords with the floor levels as per the approved plans under this consent. The survey shall be undertaken after the formwork has been completed and prior to the pouring of concrete for each respective level of the building (if the building involves more than one level). All levels shall relate to Australian Height Datum.

88. **Supervision of Engineering Works**
All engineering works associated with the development are to be carried out under the supervision of a suitably qualified and experienced practicing engineer.

89. **No Adverse Run-off Impacts on Adjoining Properties**
The design of the development shall ensure there are no adverse effects to adjoining properties or upon the land as a result of flood or stormwater run-off. Attention must be paid to ensure adequate protection for buildings against the ingress of surface run-off.

90. **Re-direction or Treatment of Stormwater Run-off**
Allowance must be made for surface run-off from adjoining properties. Any redirection or treatment of that run-off must not adversely affect any other property.

91. **Prior approval from Council for any works in Road Reserve**
Approval, under Section 138 of the Roads Act must be obtained from Wollongong City Council's Development Engineering Team prior to any works commencing or any proposed

interruption to pedestrian and/or vehicular traffic within the road reserve caused by the construction of this development. A traffic control plan prepared and implemented by a suitably qualified person must be submitted for approval and the appropriate fees paid a minimum of five working days prior to the expected implementation. The traffic control plan shall satisfy the requirements of the latest versions of Australian Standard AS1742 – Traffic Control Devices for Works on Roads and the RTA Traffic Control at Worksites Manual.

Note: This includes temporary road closures for the delivery of materials, plant and equipment, concrete pours etc.

92. **Copy of Consent to be in Possession of Person carrying out Tree Removal**
The applicant/developer must ensure that any person carrying out tree removal/vegetation clearance is in possession of this development consent and/or the approved landscape plan, in respect to the trees/vegetation which have/has been given approval to be removed in accordance with this consent.

93. **Restricted Hours of Work (domestic residential scale ie single dwellings)**
The developer must not carry out any work other than emergency procedures to control dust or sediment laden runoff outside the normal working hours, namely, 7.00 am to 5.00 pm, Monday to Friday and 8.00 am to 4.00 pm Saturday, without the prior written consent of the Principal Certifying Authority and Council.

No work is permitted on public holidays or Sundays.

Any request to vary these hours shall be submitted to the **Council** in writing detailing:

a the variation in hours required;
b the reason for that variation;
c the type of work and machinery to be used.

Note: The developer is advised that other legislation may control the activities for which Council has granted consent including but not limited to the Protection of the Environment Operations Act 1997. Developers must note that consistent with the Environment Protection Authority's Interim Construction Noise Guideline (July, 2009), the noise from construction ($L_{Aeq\ (15\ min)}$) must not exceed the background noise level ($L_{A90\ (15\ min)}$) plus 10 dB(A), and a $L_{Aeq\ (15\ min)}$ of 75 dB(A) when measured at the residential property boundary that is most exposed to construction noise, and at a height of 1.5 metres above ground level. If the property boundary is more than 30 metres from the residence, the location for measuring noise levels is at the most noise-affected point within 30 metres of the residence.

94. The developer must carry out work at all times in a manner which will not cause a nuisance, by the generation of unreasonable noise, dust or other activity, to the owners and/or occupiers of adjoining and adjacent land.

95. The lighting of the premises must be directed so as not to cause nuisance to the owners or occupiers of adjoining premises or to motorists on adjoining or nearby roads.

96. Vehicle access is to be controlled so as to prevent tracking of sediment onto adjoining roadways, particularly during wet weather or when the site has been affected by wet weather.

97. Building operations such as brick cutting, the washing of tools or paint brushes, or other equipment and the mixing of mortar must not be carried out on the roadway or public footpath or any other locations which could lead to the discharge of materials into the stormwater drainage system or natural watercourse.

98. **Asbestos – Removal, Handling and Disposal Measures/Requirements Asbestos Removal by a Licensed Asbestos Removalist**
The removal of any asbestos material must be carried out by a licensed asbestos removalist if over 10 square metres in area of non-friable asbestos, or if any type of friable asbestos in strict accordance with WorkCover NSW requirements (http://www.workcover.nsw.gov.au).

99. **Asbestos Waste Collection, Transportation and Disposal**
Asbestos waste must be prepared, contained, transported and disposed of in accordance with WorkCover NSW and NSW Environment Protection Authority requirements. Asbestos waste

must only be disposed of at a landfill site that can lawfully receive this this type of waste. A receipt must be retained and submitted to the Principal Certifying Authority, and a copy submitted to Council (in the event that Council is not the Principal Certifying Authority), prior to commencement of the construction works.

100. **Waste Classification of excavated soils**
Prior to disposal of excavated soils off site, these soils should be classified in accordance with the DECCW (2009) *Waste Classification Guidelines* and dispose accordingly to approved landfill facility.

101. **Importation soils to site**
Prior to importing any soils to site for the purpose of back-filling also requires validation testing following the EPA (1995) *Sampling Design Guidelines* to confirm suitability for the proposed land use.

102. **Provision of Waste Receptacle**
The developer must provide an adequate receptacle to store all waste generated by the development, pending disposal. The receptacle must be regularly emptied and waste must not be allowed to lie or accumulate on the property other than in the receptacle. Consideration should be given to the source separation of recyclable and re-usable materials.

103. The building site must be kept free of rubbish at all times. All refuse capable of being wind blown must be kept in a suitable waste container.

104. **BASIX**
All the commitments listed in each relevant BASIX Certificate for the development must be fulfilled in accordance with Clause 97A(2) of the Environmental Planning & Assessment Regulation 2000.

A relevant BASIX Certificate means:

- A BASIX Certificate that was applicable to the development when this development consent was granted (or, if the development consent is modified under section 96 of the Environmental Planning & Assessment Act 1979, a BASIX Certificate that is applicable to the development when this development consent is modified); or
- if a replacement BASIX Certificate accompanies any subsequent application for a construction certificate, the replacement BASIX Certificate; and
- BASIX Certificate has the meaning given to that term in the Environmental Planning & Assessment Regulation 2000."

105. **Water Sensitive Urban Design**
Water sensitive urban design concept stated in WSUD Design plan by KFW ref. no KF111423 dated 10 July 2014 it to be implemented.

Prior to the Issue of the Occupation Certificate

106. Prior to occupation, the internal access road between Burelli Street and Crown Street must be appropriately restricted, by signposting and line marking, to a one way road that requires entry to the development at Burelli Street and exit from the development at Crown Street.

107. Prior to occupation, the existing unused driveways on Corrimal Street between Burelli Street and Crown Street must be physically closed by reinstating the kerb and gutter to Council's Satisfaction.

Note: RMS issues its concurrence under Section 138 of the Roads Act,1993 for these works. The developer must obtain Council consent under Section 138 of the Roads Act, 1993 prior to any works.

108. **Post Dilapidation Report**
The developer shall provide Wollongong City Council's Development Engineering Manager with a post construction dilapidation report, identifying the condition of Council assets and all land in the vicinity of the proposed works at the completion of works.

109. **Drainage within Council Land WAE**
The developer shall obtain written verification from a suitably qualified civil engineer, stating that the construction of the drainage infrastructure works within Council land has been undertaken in accordance with the approved construction plans. In addition, a full works-as-executed plan, prepared and signed by a Registered Surveyor shall be submitted. This plan shall include the location and levels of the drainage lines, structures and finished surface levels. This information shall be approved by Wollongong City Council's Development Engineering Manager prior to the issue of the final Occupation Certificate.

110. **Completion of Engineering Works**
The completion of all engineering works within Council's road reserve or other Council owned or controlled land in accordance with the conditions of this consent and any necessary work to make the construction effective to the satisfaction of Council's Manager Development Engineering. The total cost of all engineering works shall be fully borne by the applicant/developer and any damage to Council's assets shall be restored in a satisfactory manner, prior to the issue of the Occupation Certificate.

111. **Works-as-Executed (WAE) Plans**
On completion of any civil infrastructure works, the applicant must submit, to Council's Manager Development Engineering, the Works-As-Executed plans for any works within any road reserve or other Council owned or controlled land. A certificate shall also be submitted by a registered surveyor confirming that the survey is a true and accurate record. The WAE plans shall also be certified by an accredited engineer indicating that construction works have been built in accordance with the conditions of development consent.

112. **Drainage Work As Executed**
The developer shall obtain written verification from a suitably qualified civil engineer, stating that all stormwater drainage and related work has been constructed in accordance with the approved plans. In addition, full works-as-executed plans, prepared and signed by a Registered Surveyor shall be submitted. These plans shall include levels and location for all drainage structures and works, buildings (including floor levels), and finished ground and pavement surface levels. This information shall be submitted to the Principal Certifying Authority prior to the issue of the final occupation certificate.

113. A sign and linemarking diagram must be endorsed by the Local Traffic Committee prior to the issue of the Occupation Certificate.

114. **Heritage Interpretation**
Prior to the release of the Occupation Certificate, the developer is to prepare a Heritage Interpretation Plan, which details a suitable strategy to incorporate interpretation of the history of the site into the completed works. This should provide interpretive information in relation to the past location on the site of both the Cricketer's Arms Hotel (1859 – 1943), and the Dwyer's Motor Vehicle enterprises. The interpretation plan is to be prepared by a suitably experienced heritage consultant and include consideration to the conservation, and display, of any archaeological finds, as interpretive devices. The interpretation outcomes should include on-site interpretive devices that are accessible to the public. A copy of the Interpretation plan is to be provided to Council for written approval prior to the implementation of recommended interpretive works. All agreed interpretive works and installations must also be completed prior to the release of the Occupation Certificate.

115. **Acoustic Compliance Report**
The developer shall submit a noise compliance report prepared by an acoustic consultant who is a member of the Australian Acoustic Society (AAS) or the Association of Australian Acoustic Consultants (AAAC) in relation to noise and vibration requirements stated in Condition….. A copy of the acoustic and vibration compliance report must be submitted to PCA and a copy forwarded to council.

116. **Retaining Wall Certification**
The submission of a certificate from a suitably qualified and experienced structural engineer or civil engineer to the Principal Certifying Authority is required, prior to the issue of the Occupation Certificate or commencement of the use. This certification is required to verify the

structural adequacy of the retaining walls and that the retaining walls have been constructed in accordance with plans approved by the Principal Certifying Authority.

117. A Section 73 Certificate must be submitted to the Principal Certifying Authority prior to occupation of the development/release of the plan of subdivision.

118. **BASIX**

A final occupation certificate must not be issued unless accompanied by the BASIX Certificate applicable to the development. The Principal Certifying Authority must not issue the final occupation certificate unless satisfied that selected commitments have been complied with as specified in the relevant BASIX Certificate. NOTE: Clause 154B of the Environmental Planning and Assessment Regulation 2000 provides for independent verification of compliance in relation to certain BASIX commitments.

ATTACHMENT 5

NSW GOVERNMENT | Planning & Environment

Contact: Louise Wells
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The General Manager
Wollongong City Council
Locked Bag 8821
Wollongong DC
NSW 2500

Dear Mr Farmer

SECRETARY'S CONCURRENCE
DA 2014/503 – Mixed Use Development comprising 318 units above retail spaces and 4 levels of parking plus demolition of existing structures – 31 Crown Street & 16 Burelli Street Wollongong

I refer to your request for the concurrence of the Secretary of the Department of Planning and Environment for the above application under clause 4.6 of Wollongong Local Environmental Plan 2009 in relation to a proposed variation to clause 4.4A Floor Space Ratio and clause 8.6 Building Separation.

I advise that the Secretary has decided to grant concurrence to the variation in this instance.

Should you have any further questions in relation to this matter, please contact Louise Wells on 4224 9463.

Yours sincerely

G Towers 6/8/14.

Graham Towers
Acting Local Planning Manager
Southern Region

ATTACHMENT 6

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10 July 2014

Dear Sir/Madam,

REVISED CLAUSE 4.6 EXCEPTIONS OT DEVELOPMENT STANDARDS VARIATION REPORT

FLOOR SPACE RATIO - 'The Crown'

Proposed Demolition of Existing Building/Structures and Construction of a Five-Staged Mixed Use Development comprising 318 Units above Retail Premises with 4 Levels of Parking at 31 Crown Street and 16 Burelli Street, Wollongong Lot 1 DP 1078311 and Lots 5 and 6 DP 32538

The following revised Clause 4.6 Variation Report is submitted in relation to Development Application 2014/503 for 'The Crown", to be constructed at 31 Crown St and 16 Burelli St, Wollongong. Specifically, the revised report has been prepared in response to Council's Additional Information Request of 24 June 2014 which notes that *"thought it can be said that the additional level of basement carpark will have minimal impact on the form or function of the proposal, the detrimental environmental impact of this addition must be considered*". Further, emailed advice from Rachael Harrison of Council on 26 June 2014 indicates that "*an amended clause 4.6 must be submitted including the additional GFA created by the car parking within the FSR calculation*".

The following Clause 4.6 Exceptions to Development Standards Report is submitted in response to this request.

WLEP 2009: Clause 4.6 'Exceptions to Development Standards' Statement

1. Introduction

Clause 4.6 'Exceptions to Development Standards' of Wollongong Local Environmental Plan 2009 provides the opportunity to contravene a development standard with approval of the consent authority and concurrence by the Director-General. A development standard is defined by the Environmental Planning and Assessment Act, 1979 as:

> *"Provisions of an environmental planning instrument or the regulations in relation to the carrying out of development, being provisions by or under which requirements are specified or standards are fixed in respect of any aspect of that development".*

The objectives of Clause 4.6 are as follows:

a) *to provide an appropriate degree of flexibility in applying certain development standards to particular development, and*
b) *to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*

This report is therefore provided in order to justify why a variation is required under the following provisions of WLEP 2009, in accordance with Clause 4.6 of that Plan, as the application of this requirement is considered unreasonable or unnecessary for this particular development:

- Clause 4.4: Floor space ratio

2. Variation to Clause 4.4 Floor Space Ratio

The objectives of Clause 4.4 Floor Space Ratio pursuant to Wollongong LEP 2009 are as follows:

(a) to provide effective control over the bulk of future development,
(b) to protect the environmental amenity and desired future character of an area,
(c) to minimise adverse environmental impacts on adjoining properties and the public domain,
(d) to optimise development density within easy walk of the railway stations and commercial centres.

Sub clause 4.4 (2) Floor space ratio states that:

(2) The maximum floor space ratio for a building on any land is not to exceed the floor space ratio shown for the land on the Floor Space Ratio Map.

Floor space ratio is defined under the Dictionary to WLEP 2009 as "the ratio of the gross floor area of all buildings within the site to the site area."

In determining the floor space ratio of the development it is noted that only those areas of the building which are captured by the definition of 'Gross Floor Area' as defined by Wollongong Local Environmental Plan (LEP) 2009 have been included within Table 2 (Floor Space Ratio Calculations). ***Gross floor area*** is defined under the Dictionary to WLEP 2009 as *"the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, and includes:*

(a) the area of a mezzanine, and
(b) habitable rooms in a basement or an attic, and
(c) any shop, auditorium, cinema, and the like, in a basement or attic,
but excludes:
(d) any area for common vertical circulation, such as lifts and stairs, and
(e) any basement:
(i) storage, and
(ii) vehicular access, loading areas, garbage and services, and
(f) plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and
(g) car parking to meet any requirements of the consent authority (including access to that car parking), and
(h) any space used for the loading or unloading of goods (including access to it), and
(i) terraces and balconies with outer walls less than 1.4 metres high, and
(j) voids above a floor at the level of a storey or storey above."

Subclause (g) of the GFA definition allows for the exclusion of carparking from the GFA calculation where such carparking is provided to meet "any requirements of the consent authority". This definition does not provide clarity as to the interpretation of "any requirements of the consent authority". However, typically Council has referenced Wollongong Development Control Plan 2009 to determine parking requirements. With respect to the 'The Crown" Table 1 confirms the level of parking which is provided on the site.

Table 1: Carparking Provision - The Crown

CARS			
	SPACES REQUIRED	**SPACES PROVIDED**	**CALCULATION**
RESIDENTIAL	299	354	.75 per < 70m² / 1 per 70-110m² / 1.25 per > 110m²
VISITORS	64	64	1 space per 0.2 dwellings
COMMERCIAL	57	203	1 space per 60m² of commercial
OVERALL	420	621	total residential + total visitors + total commercial

This table confirms that there are 201 car parking spaces which are surplus to the DCP parking requirements, with 55 of such spaces allocated for residential parking and 146 of such spaces allocated as commercial parking. Whilst the proposed development provides an excess to this standards specified in WDCP 2009, it is noted that this DCP sets the minimum level of parking which should be provided and does not exclude the provision of additional parking above this rate. However, for the purpose of this Clause 4.6 report the additional 201 spaces have been addressed in terms of their potential amenity, streetscape and environmental impacts.

Table 2 below confirms the gross floor area of the surplus carparking and associated access which has been utilised for the purpose of this Clause 4.6 report.

Table 2: GFA of Surplus Parking and Access Thereto

Car Parking Surplus				
	Spaces Required	**Spaces Provided**	**Surplus**	**Additional Area**
Residential	299	354	55	1201.75m²
Visitors	64	64	0	-
Commercial	57	203	146	3190.1m²
Overall	**420**	**621**	**201**	**4391.85m²**
Area Used for Parking Space & Driveway Calculations=			**21.85m²**	

Clause 4.4 - Floor Space Ratio

The ***floor space ratio*** of buildings on a site is a ratio of the gross floor area of all buildings within the site to the site area. This clause specifies that the maximum floor space ratio of a site is not to exceed the floor space ratio identified within the Floor Space Ratio Map. This map specifies a maximum floor space ratio of 1.5:1 for the subject site, however Clause 4.4 of WLEP 2009 applies, as discussed below.

Clause 4.4 - Floor Space Ratio- Wollongong City Centre

Clause 4.4A specifies the maximum permitted floor space ratio for development within the Wollongong City Centre. However, it is noted that the FSR provisions contained in Clause 4.4A of WLEP 2009 only apply to land within the B3 Commercial Core, B4 Mixed Use, B6 Enterprise Corridor and SP1 Special Activities and hence are applicable to the development site which is located in the B4 Mixed Use zone.

The provisions of Chapter D13 (Wollongong City Centre) of WDCP 2009 specity that a maximum FSR of 2.5:1 applies to development which is only for residential purposes or 3.5:1 where the development is only used for purposes other than residential purposes (ie as the site has a frontage of greater than 20m). Where the site is used for a combination of uses the following max FSR will apply.

(4)The maximum floor space ratio for a building on land within a business zone under this Plan, that is to be used for a mixture of residential purposes and other purposes, is:

(NRFSR x NR/100) + (RFSR x R/100): 1
where:
***NR** is the percentage of the floor space of the building used for purposes other than residential purposes.*
***NRFSR** is the maximum floor space ratio determined in accordance with this clause if the building was to be used only for purposes other than residential purposes.*
***R** is the percentage of the floor space of the building used for residential purposes.*

Clause 4.5 Calculation of Floor Space Ratio and Site Area

In determining land which may be used for the purpose of calculating floor space ratio Clause 4.5 states:

*(3) **Site area***
*In determining the site area of proposed development for the purpose of applying a floor space ratio, the **site area** is taken to be:*
(a)if the proposed development is to be carried out on only one lot, the area of that lot, or
(b) if the proposed development is to be carried out on 2 or more lots, the area of any lot on which the development is proposed to be carried out that has at least one common boundary with another lot on which the development is being carried out.

In addition, subclauses (4)–(7) apply to the calculation of site area for the purposes of applying a floor space ratio to proposed development.

*(4) **Exclusions from site area***
The following land must be excluded from the site area:
***(a) land on which the proposed development is prohibited,** whether under this Plan or any other law,*
(b) community land or a public place (except as provided by subclause (7)).

The subject site contains three (3) allotments, one of which (Lot 1 DP 1078311) is primarily sited within the B4 Mixed Use zone but also contains a section of land in the north-western corner which is sited within the SP2 Infrastructure zone. Whilst the development will be wholly sited within the B4 Mixed Use zone, the development seeks to utilise the floor space ratio commensurate with the area of the site which is located within the SP2 Infrastructure zone, being 11,913m^2. The western portion of Lot 1 DP 107311 (fronting Corrimal Street and zoned SP2 Infrastructure) to be dedicated for road widening purposes is 635.7m^2 in area. The remaining site area (zoned B4 Mixed Use) will be consolidated and will comprise 11,277.3m^2.

Clause 4.5 (4)(a) prevents the inclusion of that area of the site on which the development is prohibited. Hence, as shop top housing is prohibited in the SP2 Infrastructure zone, this portion of the site cannot ordinarily be included in the site area for the purpose of calculating floor space ratio. **If the surplus carparking is not included in the FSR calculations**, using the FSR calculation formula within Clause 4.4(4), the resultant overall permissible FSR is 2.61:1 [(2.5 x 0.89) + (3.5 x 0.11)]. Table 4 below indicates the FSR of the proposed development, which is 2.76:1 (if the land zoned SP2 is deleted from the site area calculation), which exceeds the allowable FSR of 2.61:1.

Further, if the **surplus carparking (including any access to that parking) is included in the FSR calculations**, then the resultant overall permissible FSR is 2.69:1. It is noted that the permissible FSR has increased, as 146 of

the surplus carparks are defined as commercial for the purpose of determining FSR, whilst the remaining 55 are classed as residential. Table 4 below indicates that the FSR of the proposed development, inclusive of this carparking is 3.15:1. Accordingly, this Clause 4.6 Variation Statement is submitted seeking support for the departure from the permissible FSR of 2.69:1.

Table 5A: Floor Space Ratio Calculations **Exclusive** of Surplus Carparking

GFA Calculations						
Level	**Block A Floor Area (m²)**	**Block B Floor Area (m²)**	**Block C Floor Area (m2)**	**Block D Floor Area (m²)**	**Block E Floor Area (m²)**	**Total (m²)**
Residential	8575	4212	5936	4130	4854	27,692 (89%)
Commercial						3,386 (11%)
Total						31,078
Total GFA (m2)	**31,073**					
Calculation using Existing Site Area (including road widening area)	**Site Area**	11,913m²				
	Permissible FSR	2.61:1				
	Permissible GFA	31,080m²				
	Proposed FSR	**2.61:1**				
Calculation using Proposed Site Area (excluding SP2 zoned road widening area in accordance with Clause 4.5)	**Site Area**	11,277m²				
	Permissible FSR	2.61:1				
	Permissible GFA	**29,421m²**				
	Proposed FSR	**2.76:1** (exceeds by 1657m²)				

Table 5B: Floor Space Ratio Calculations **Inclusive** of Surplus Carparking

GFA Calculations						
Level	**Block A Floor Area (m²)**	**Block B Floor Area (m²)**	**Block C Floor Area (m2)**	**Block D Floor Area (m²)**	**Block E Floor Area (m²)**	**Total (m²)**
Surplus Carparking and Access						4391.85
Residential	8575	4212	5936	4130	4854	28,893 (81.5%)
Commercial						6,576 (18.5%)
Total						35,469
Total GFA (m2)	**35,469**					
Calculation using Existing Site Area (including road widening area)	**Site Area**	11,913m²				
	Permissible FSR	2.69:1				
	Permissible GFA	31,991m²				
	Proposed FSR	**2.98:1**				
Calculation using Proposed Site Area (excluding SP2 zoned road widening area in accordance with Clause 4.5)	**Site Area**	11,277m²				
	Permissible FSR	2.69:1				
	Permissible GFA	**30,283m²**				
	Proposed FSR	**3.15:1** (exceeds by 5186m²)				

For the reasons outline in Table 6 the gross floor area sought by the development seeks to utilise the permissible FSR if the existing total site area (ie. including the area required to be dedicated for road widening) was used to determine the floor space ratio. Further, Table 6 also confirms that the additional carparking, whilst contributing numerically to FSR, will have no visual impact on the bulk and scale of the building.

Clause 4.6 - Exceptions to Development Standards

Clause 4.4(2) of WLEP 2009 contains a development standard in the form of a maximum permissible floor space ratio. A written justification for the proposed variation to the floor space ratio is required in accordance with Clause 4.6. Table 6 below outlines how the proposal relates to the provisions of Clause 4.6 as it applies to the contravened development standards in Clause 4.4 of the WLEP:

Table 6: Compliance with WLEP 2009 - Contravention of Clause 4.4 Floor Space Ratio		
Clause 4.6 Exceptions to Development Standards	**Response/Justification**	**Consistent/ Complies**
(1) Objectives *a) to provide an appropriate degree of flexibility in applying certain development standards to particular development, and* *b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*	Flexibility is sought for the application of the FSR for the proposed development so that a better outcome is achieved for the site. The particular circumstances for this are as follows: ▪ The subject site is effectively a 'semi island' site with no directly adjoining privately owned lands and buffered by roads on three frontages. ▪ The variation to the FSR is partly a result of the SP2 Infrastructure zoning of a portion of the subject site, which has precluded the use of this land for the purpose of calculating site area. ▪ The balance of the variation is a result of the inclusion of 621 carparking spaces, rather than the 420 required by WDCP 2009. The additional 201 spaces are provided at the basement level and will have not be visually apparent and will have no impact on the bulk, scale or height of the development. Further, the inclusion of the additional level will have no greater environmental impacts, subject to suitable engineering design. ▪ The site is a "super-amalgamated" site and is a major site, which has gone beyond council's amalgamation plan for the precinct. This has enabled the site to accommodate optimum FSR utilisation which still meeting the design intent and outcomes for the site.	Justified
(2) Consent may, subject to this clause, be granted for development even though the development may contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.	This subclause is not relevant to the subject proposal.	N/A
(3) Consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:	This table comprises the written request seeking to justify the contravention of the FSR development standard.	Provided
(a) that compliance with the development standard is	Compliance with the applicable FSR is considered to be unreasonable and unnecessary in the circumstances of the	Justified

Table 6: Compliance with WLEP 2009 - Contravention of Clause 4.4 Floor Space Ratio		
Clause 4.6 Exceptions to Development Standards	**Response/Justification**	**Consistent/ Complies**
unreasonable or unnecessary in the circumstances of the case, and	case as the consolidation of all allotments on the site provide the opportunity for an alternative (and satisfactory) site planning and built form outcome to that anticipated by the formal planning controls (as demonstrated below).	
(b) that there are sufficient environmental planning grounds to justify contravening the development standard.	As demonstrated in this Statement of Environmental Effects, the proposed development is satisfactory having regard to environmental planning grounds, including: ▪ State Environmental Planning Policies (refer Section 5); ▪ Other provisions of the WLEP 2009 (refer Section 6); ▪ The relevant Chapters of WDCP 2009 (refer Section 7 - see also below in relation to DCP Control 3.2.6); ▪ Section 79C of the Environmental Planning and Assessment Act 1979 (refer Section 9). The increased FSR does not create any additional impacts on adjoining sites in terms of visual impact, disruption of views, loss of privacy or any other impacts than if the maximum allowable FSR was met.	Justified
(4) Consent must not be granted for development that contravenes a development standard unless: *(a) the consent authority is satisfied that:*		
(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and	This Variation statement provides a discussion in support of the justification for varying the development standards as indicated in (3) above. In our opinion, there is sufficient justification provided to support a variation to the floor space ratio requirements.	Satisfied
(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and ***Wollongong LEP 2009:*** Objectives of the Standard *(a) to provide effective control over the bulk of future development,* *(b) to protect the environmental amenity and desired future character of an area,* *(c) to minimise adverse environmental impacts on adjoining properties and the public domain,* *(d) to optimise development density within easy walk of the railway stations and commercial centres.* Objectives of the B4 Zone ▪ *To provide a mixture of compatible land uses.* ▪ *To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.*	Despite the exceedence of the allowable FSR, the proposed development will be in the public interest as it still meets the objectives of the FSR development standard as it: ▪ Provides a suitable built form to the consolidated block site by transferring the majority of the floor area to the perimeter of the site (principally adjoining Corrimal Street and to a lesser extent Crown and Burelli Streets) - providing a "street edge" development. The development incorporates design measures (including setbacks and stepping down levels) to minimise the impacts of scale and bulk. ▪ While the bulk of the development is concentrated to the perimeter, this enables a suitable urban massing along the Corrimal Street road corridor (desired character); ▪ As a result, this built form protects the environmental amenity and reduces impacts to the public domain. ▪ Importantly, the development provides a range of apartment types in immediate/very close proximity to the commercial/retail centre of Wollongong, with good access to bus services. This will achieve a suitable density for this locality and will assist in the achievement of affordability and sustainability objectives. ▪ Incorporates additional carparking which will not contribute to the bulk and scale of the building as parking is either provided within a basement level or centrally on the site, behind the commercial units and perimeter townhouses. Hence, the inclusion of this additional parking level will not impact on the character of the area nor will it adversely affect the public domain or environmental/resident amenity.	Justified

Table 6: Compliance with WLEP 2009 - Contravention of Clause 4.4 Floor Space Ratio		
Clause 4.6 Exceptions to Development Standards	**Response/Justification**	**Consistent/ Complies**
▪ *To support nearby or adjacent commercial centres without adversely impacting on the viability of those centres.*	Hence the proposed development achieves ALL of the objectives of the FSR development standard. The proposed development is also consistent with the objectives of both the B4 Mixed Use zone as it will: ▪ Provide ground floor retail uses to meet the needs of residents and visitors to the locality, and provide employment opportunities for the tenants and employees of these tenancies; ▪ Provides retail uses in close proximity to the existing transport infrastructure; ▪ Provides a suitable built form and land use development for this important gateway location to the Wollongong City Centre; ▪ The development provides range of apartment types in immediate close proximity to the commercial centre. ▪ Provide additional carparking to support staff and visitors in the eastern Crown Street precinct where there is currently a shortfall of parking. Overall, the development of the site as proposed will facilitate the ongoing viability and economic development of the Wollongong regional centre and hence is in the public interest with development of a landmark strategic site. Furthermore, it is considered that the proposed development meets the majority of the Aims of WLEP 2009 [Clause 1.2 as it will: *(b) encourage economic and business development to increase employment opportunities,* *(c) encourage a range of housing choices consistent with the capacity of the land,* *(f) conserve and enhance heritage,* *(g)ensure that development is consistent with the constraints of the land and can be appropriately serviced by infrastructure,*	
(c) the concurrence of the Director-General has been obtained.	Council will need to consult with the Department of Planning and Infrastructure as to whether the concurrence of the DG can be assumed in accordance with Planning Circular PS 08-003-Variations to Development Standards (Department of Planning, May 2008).	Addressed
(5) In deciding whether to grant concurrence, the Director-General must consider:		
(a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and	The contravention of this development standard does not raise any matter of significance for state or regional environmental planning. Refer to further discussion below in this table.	
(b) the public benefit of maintaining the development standard, and	The development is located on a semi island site which could be considered a key development site in the Wollongong City Centre. The profile of this site lends itself to ensuring the development which occurs is consistent with the Vision for this regional city. Whilst variation to the FSR is sought if the area of the SP2 Infrastructure zoned land is excluded from the calculation, it is noted that if this land was technically able to be included in the site area, then the FSR of the development would be compliant. It is merely the zoning of the SP2 Infrastructure land which has technically required its exclusion from the FSR calculations. In comparison if the land retained a zone comparable with the bulk of the site,	

Table 6: Compliance with WLEP 2009 - Contravention of Clause 4.4 Floor Space Ratio		
Clause 4.6 Exceptions to Development Standards	**Response/Justification**	**Consistent/ Complies**
	then Council has in numerous instances allowed the land identified for road widening purposes to be included in the site area calculation, prior to its dedication. Further, the proposed surplus carparking will provide a substantial public benefit. This is apparent having regard to the range of strategies which have been prepared by Wollongong Council in recent years in acknowledgement of the limited availability of parking in the Wollongong City Centre and the inability of the current level of parking to accommodate the future growth predictions of this regional city. Such documents include, but are not limited to: • The Inner City Parking Strategy adopted by Council in March 2009, which contains the following actions with respect to future parking stations: – Encourage developers to provide parking in consolidated off street facilities; – Investigate potential sites for the provision 1,700 spaces in future major off street parking facilities. • The Wollongong City Council Access and Movement Strategy, amended in 2013. – This strategy notes that future economic growth will result in an increased parking demand which, over the next 25 years, could "necessitate the provision of significant additional public carparking based on land use projections and current travel trends." Both strategies confirm that a number of additional major public carparks will be required to be developed at a future date. However, the majority of carparking stations are concentrated in the central and western precincts, with only one parking station located to the east of Kembla Street, in the vicinity of 'The Crown' development. This restricted level of parking both at the current time and in the future has been acknowledged by the developer of 'The Crown' in determining the number of carparking spaces to be provided on the site. The breakdown of the surplus parking which is proposed to be provided for the Crown development is as follows; • 146 additional commercial parking spaces which will be available for public use, clearly meeting the shortfall in public parking stations in the Wollongong City Centre and the requirements of Council. Further, the additional parking provided on the site will accommodate a range of potential uses such as a medical centre which would necessitate the provision of a significantly higher level of parking than that required by a commercial use. The intended occupants of the commercial spaces are yet to be defined. • 55 additional spaces for residential parking which will ensure that all units are provided with at least one parking space and that all 3 bedroom units and a number of the 2 bedroom units are provided with 2 parking spaces. This is an appropriate level of parking based on the anticipated demands of residents within the larger units and the limited level of on street parking available in this inner city location. The level of parking provided on the site has been determined based a site specific analysis of parking requirements which confirms that the Eastern precinct of the City of Wollongong has limited parking availability. This is also supported by Wollongong Council's recent	

Table 6: Compliance with WLEP 2009 - Contravention of Clause 4.4 Floor Space Ratio		
Clause 4.6 Exceptions to Development Standards	**Response/Justification**	**Consistent/ Complies**
	construction of an 'at grade carpark' on this site, to accommodate immediate parking demands in this precinct which were not previously catered for by parking stations or on street parking. This site currently accommodates approximately 147 'at grade' parking spaces which will be lost following the development of 'The Crown', in the event that additional parking (above the typical WDCP 2009 controls) are not provided to compensate for this loss. The surplus carparking which is proposed provides an undeniable public benefit with resultant impact on environmental or residential amenity. On this basis it is considered that there would be a considerable reduction in the measurable public benefit achieved by adhering to an FSR. Under the proposed scheme the viability of the development is retained, additional public carparking is provided and dedication of the land to Council for the purpose of road widening will be facilitated. Whilst it is acknowledged that the increase in FSR which is achieved due to the inclusion of the site area of the SP2 zoned land will increase the amount of residential floor space which is achieved on the site, it is noted that there will be no recognisable additional public benefit nor a varied impact on the overall character of the Wollongong city centre if the FSR was strictly adhered to. The increased FSR and concentration of floor area at the perimeter of the large consolidated site provides significant improvements to the three adjacent street frontages, through the provision of paving, street trees and public infrastructure and the variation proposed will not change this fact. Further, it is noted that despite the building technically exceeding the FSR, the building compiles with the overall height established by WLEP 2009; is complaint with the separation distance requirements of WDCP 2009 and complies with the setback requirements of WDCP 2009 indicating that the three dimensional building envelope is appropriate. It is this building envelope which should be considered for the purpose of determining bulk and scale, rather than merely relying on the numerical GFA calculations. Hence, the proposed development will not raise any matter of state or regional planning significance.	
(c) any other matters required to be taken into consideration by the Director-General before granting concurrence.	It is considered that there are no environmental planning considerations that would hinder the Director-General from providing concurrence.	Addressed

10.4 Conclusion

This Statement has addressed the provisions of Clause 4.6 of Wollongong LEP 2009 and demonstrates that the variation sought to the development standard of the LEP (Floor Space Ratio) is justifiable and should be given concurrence to, on the basis of the unique site circumstances (a large consolidated site), the provision of additional public carparking and achievement of environmental planning outcomes. The increased FSR does not create any unreasonable impacts on adjoining sites in terms of visual impact and will not have a detrimental impact on streetscape character or the public domain. The proposed development is consistent with Council's vision for the Wollongong City Centre and adheres to the three dimensional building envelope controls established by WLEP 2009 (height); the Residential Flat Design Code (separation distances) and WDCP 2009 (setbacks). On this basis, strict compliance with the FSR controls of WLEP 2009 is considered unnecessary.

Yours Faithfully,

Elaine Treglown

Elaine Treglown
Director
TCG Planning

10 WLEP 2009: Clause 4.6 'Exceptions to Development Standards' Statement

10. 1 Introduction

Clause 4.6 'Exceptions to Development Standards' of Wollongong Local Environmental Plan 2009 provides the opportunity to contravene a development standard with approval of the consent authority and concurrence by the Director-General.

A development standard is defined by the Environmental Planning and Assessment Act, 1979 as:

> *"Provisions of an environmental planning instrument or the regulations in relation to the carrying out of development, being provisions by or under which requirements are specified or standards are fixed in respect of any aspect of that development".*

The objectives of Clause 4.6 are as follows:

a) *to provide an appropriate degree of flexibility in applying certain development standards to particular development, and*
b) *to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*

This Section is therefore provided in order to justify why a variation is required under the following provisions of WLEP 2009, in accordance with Clause 4.6 of that Plan, as the application of these requirements is considered unreasonable or unnecessary for this particular development:

- Clause 4.4: Floor space ratio
- Clause 8.6: Building separation within Zone B3 Commercial Core or Zone B4 Mixed Use

10.2 Variation to Clause 4.4 Floor Space Ratio

The objectives of Clause 4.4 Floor Space Ratio pursuant to Wollongong LEP 2009 are as follows:

(a) to provide effective control over the bulk of future development,
(b) to protect the environmental amenity and desired future character of an area,
(c) to minimise adverse environmental impacts on adjoining properties and the public domain,
(d) to optimise development density within easy walk of the railway stations and commercial centres.

Sub clause 4.4 (2) Floor space ratio states that:

> *(2) The maximum floor space ratio for a building on any land is not to exceed the floor space ratio shown for the land on the Floor Space Ratio Map.*

Floor space ratio is defined under the Dictionary to WLEP 2009 as "the ratio of the gross floor area of all buildings within the site to the site area."

Gross floor area is defined under the Dictionary to WLEP 2009 as *"the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, and includes:*

(a) the area of a mezzanine, and
(b) habitable rooms in a basement or an attic, and
(c) any shop, auditorium, cinema, and the like, in a basement or attic,
but excludes:
(d) any area for common vertical circulation, such as lifts and stairs, and
(e) any basement:
(i) storage, and
(ii) vehicular access, loading areas, garbage and services, and
(f) plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and

(g) car parking to meet any requirements of the consent authority (including access to that car parking), and
(h) any space used for the loading or unloading of goods (including access to it), and
(i) terraces and balconies with outer walls less than 1.4 metres high, and
(j) voids above a floor at the level of a storey or storey above."

Clause 4.4 - Floor Space Ratio

The ***floor space ratio*** of buildings on a site is a ratio of the gross floor area of all buildings within the site to the site area. This clause specifies that the maximum floor space ratio of a site is not to exceed the floor space ratio identified within the Floor Space Ratio Map. This map specifies a maximum floor space ratio of 1.5:1 for the subject site, however Clause 4.4 of WLEP 2009 applies, as discussed below.

Clause 4.4 - Floor Space Ratio- Wollongong City Centre

Clause 4.4A specifies the maximum permitted floor space ratio for development within the Wollongong City Centre. However, it is noted that the FSR provisions contained in Clause 4.4A of WLEP 2009 only apply to land within the B3 Commercial Core, B4 Mixed Use, B6 Enterprise Corridor and SP1 Special Activities and hence are applicable to the development site which is located in the B4 Mixed Use zone.

The provisions of Chapter D13 (Wollongong City Centre) of WDCP 2009 specify that a maximum FSR of 2.5:1 applies to development which is only for residential purposes or 3.5:1 where the development is only used for purposes other than residential purposes (ie as the site has a frontage of greater than 20m). Where the site is used for a combination of uses the following max FSR will apply.

(4)The maximum floor space ratio for a building on land within a business zone under this Plan, that is to be used for a mixture of residential purposes and other purposes, is:

(NRFSR x NR/100) + (RFSR x R/100): 1
where:
***NR** is the percentage of the floor space of the building used for purposes other than residential purposes.*
***NRFSR** is the maximum floor space ratio determined in accordance with this clause if the building was to be used only for purposes other than residential purposes.*
***R** is the percentage of the floor space of the building used for residential purposes.*

Clause 4.5 Calculation of Floor Space Ratio and Site Area

In determining land which may be used for the purpose of calculating floor space ratio Clause 4.5 states:

(3) ***Site area***
*In determining the site area of proposed development for the purpose of applying a floor space ratio, the **site area** is taken to be:*
(a)if the proposed development is to be carried out on only one lot, the area of that lot, or
(b) if the proposed development is to be carried out on 2 or more lots, the area of any lot on which the development is proposed to be carried out that has at least one common boundary with another lot on which the development is being carried out.

In addition, subclauses (4)–(7) apply to the calculation of site area for the purposes of applying a floor space ratio to proposed development.

(4) ***Exclusions from site area***
The following land must be excluded from the site area:
***(a) land on which the proposed development is prohibited,** whether under this Plan or any other law,*
(b) community land or a public place (except as provided by subclause (7)).

The subject site contains three (3) allotments, one of which (Lot 1 DP 1078311) is primarily sited within the B4 Mixed Use zone but also contains a section of land in the north-western corner which is sited within the SP2 Infrastructure zone. Whilst the development will be wholly sited within the B4 Mixed Use zone, the development seeks to utilise the floor space ratio commensurate with the area of the site which is located within the SP2 Infrastructure zone, being 11,913m². The western portion of Lot 1 DP 107311 (fronting Corrimal Street and zoned SP2 Infrastructure) to be dedicated for road widening purposes is 635.7m² in area. The remaining site area (zoned B4 Mixed Use) will be consolidated and will comprise 11,277.3m².

Clause 4.5 (4)(a) prevents the inclusion of that area of the site on which the development is prohibited. Hence, as shop top housing is prohibited in the SP2 Infrastructure zone, this portion of the site cannot ordinarily be included in the site area for the purpose of calculating floor space ratio. Using the FSR calculation formula within Clause 4.4(4), the resultant overall permissible FSR is 2.61:1 [(2.5 x 0.89) + (3.5 x 0.11)]. Table 4 below indicates the FSR of the proposed development, which is 2.756:1 (if the land zoned SP2 is deleted from the site area calculation), which exceeds the allowable FSR of 2.61:1. Accordingly, this Clause 4.6 Variation Statement is submitted seeking support for this departure.

The gross floor area sought by the development seeks to utilise the permissible FSR if the existing total site area (ie. including the area required to be dedicated for road widening) was used to determine the floor space ratio for the reasons outlined in Table 6 later in this Section.

Table 5: Floor Space Ratio Calculations

GFA Calculations						
Level	**Block A Floor Area (m²)**	**Block B Floor Area (m²)**	**Block C Floor Area (m2)**	**Block D Floor Area (m²)**	**Block E Floor Area (m²)**	**Total (m²)**
Residential	8575	4212	5936	4130	4854	27,707 (89%)
Commercial						3,376 (11%)
Total						31,093
Total GFA (m2)	**31,083**					
Calculation using Existing Site Area (including road widening area)	**Site Area**	11,913m²				
	Permissible FSR	2.61:1				
	Permissible GFA	31,093m²				
	Proposed FSR	**2.61:1**				
Calculation using Proposed Site Area (excluding SP2 zoned road widening area in accordance with Clause 4.5)	**Site Area**	11,277.3m²				
	Permissible FSR	2.61:1				
	Permissible GFA	**29,433.7m²**				
	Proposed FSR	**2.756:1** (exceeds by 1649.3m²; or 5.6%)				

Clause 4.6 - Exceptions to Development Standards

Clause 4.4(2) of WLEP 2009 contains a development standard in the form of a maximum permissible floor space ratio. A written justification for the proposed variation to the floor space ratio is required in accordance with Clause 4.6. Table 6 below outlines how the proposal relates to the provisions of Clause 4.6 as it applies to the contravened development standards in Clause 4.4 of the WLEP:

Table 6: Compliance with WLEP 2009 - Contravention of Clause 4.4 Floor Space Ratio		
Clause 4.6 Exceptions to Development Standards	**Response/Justification**	**Consistent/ Complies**
(1) Objectives *a) to provide an appropriate degree of flexibility in applying certain development standards to particular development, and* *b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*	Flexibility is sought for the application of the FSR for the proposed development so that a better outcome is achieved for the site. The particular circumstances for this are as follows: ▪ The subject site is effectively a 'semi island' site with no directly adjoining privately owned lands and buffered by roads on three frontages. ▪ The variation to the FSR is predominantly a result of the SP2 Infrastructure zoning of a portion of the subject site, which has precluded the use of this land for the purpose of calculating site area. ▪ The site is a "super-amalgamated" site and is a major site, which has gone beyond council's amalgamation plan for the precinct. This has enabled the site to accommodate optimum FSR utilisation which still meeting the design intent and outcomes for the site.	Justified
(2) Consent may, subject to this clause, be granted for development even though the development may contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.	This subclause is not relevant to the subject proposal.	N/A
(3) Consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:	This table comprises the written request seeking to justify the contravention of the FSR development standard.	Provided
(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and	Compliance with the applicable FSR is considered to be unreasonable and unnecessary in the circumstances of the case as the consolidation of all allotments on the site provide the opportunity for an alternative (and satisfactory) site planning and built form outcome to that anticipated by the formal planning controls (as demonstrated below).	Justified
(b) that there are sufficient environmental planning grounds to justify contravening the development standard.	As demonstrated in this Statement of Environmental Effects, the proposed development is satisfactory having regard to environmental planning grounds, including: ▪ State Environmental Planning Policies (refer Section 5); ▪ Other provisions of the WLEP 2009 (refer Section 6); ▪ The relevant Chapters of WDCP 2009 (refer Section 7 - see also below in relation to DCP Control 3.2.6); ▪ Section 79C of the Environmental Planning and	Justified

Table 6: Compliance with WLEP 2009 - Contravention of Clause 4.4 Floor Space Ratio		
Clause 4.6 Exceptions to Development Standards	**Response/Justification**	**Consistent/ Complies**
	Assessment Act 1979 (refer Section 9). The increased FSR does not create any additional impacts on adjoining sites in terms of visual impact, disruption of views, loss of privacy or any other impacts than if the maximum allowable FSR was met.	
(4) Consent must not be granted for development that contravenes a development standard unless: *(a) the consent authority is satisfied that:*		
(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and	This Variation statement provides a discussion in support of the justification for varying the development standards as indicated in (3) above. In our opinion, there is sufficient justification provided to support a variation to the floor space ratio requirements.	Satisfied
(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and ***Wollongong LEP 2009:*** Objectives of the Standard *(a) to provide effective control over the bulk of future development,* *(b) to protect the environmental amenity and desired future character of an area,* *(c) to minimise adverse environmental impacts on adjoining properties and the public domain,* *(d) to optimise development density within easy walk of the railway stations and commercial centres.* Objectives of the B4 Zone ▪ *To provide a mixture of compatible land uses.* ▪ *To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.* ▪ *To support nearby or adjacent commercial centres without adversely impacting on the viability of those centres.*	Despite the exceedence of the allowable FSR, the proposed development will be in the public interest as it still meets the objectives of the FSR development standard as it: ▪ Provides a suitable built form to the consolidated block site by transferring the majority of the floor area to the perimeter of the site (principally adjoining Corrimal Street and to a lesser extent Crown and Burelli Streets) - providing a "street edge" development. The development incorporates design measures (including setbacks and stepping down levels) to minimise the impacts of scale and bulk. ▪ While the bulk of the development is concentrated to the perimeter, this enables a suitable urban massing along the Corrimal Street road corridor (desired character); ▪ As a result, this built form protects the environmental amenity and reduces impacts to the public domain. ▪ Importantly, the development provides a range of apartment types in immediate/very close proximity to the commercial/retail centre of Wollongong, with good access to bus services. This will achieve a suitable density for this locality and will assist in the achievement of affordability and sustainability objectives. Hence the proposed development achieves ALL of the objectives of the FSR development standard. The proposed development is also consistent with the objectives of both the B4 Mixed Use zone as it will: ▪ Provide ground floor retail uses to meet the needs of residents and visitors to the locality, and provide employment opportunities for the tenants and employees of these tenancies; ▪ Provides retail uses in close proximity to the existing transport infrastructure; ▪ Provides a suitable built form and land use development for this important gateway location to the Wollongong City Centre; ▪ The development provides range of apartment types in immediate close proximity to the commercial centre. Overall, the development of the site as proposed will facilitate the ongoing viability and economic	Justified

Table 6: Compliance with WLEP 2009 - Contravention of Clause 4.4 Floor Space Ratio		
Clause 4.6 Exceptions to Development Standards	**Response/Justification**	**Consistent/ Complies**
	development of the Wollongong regional centre and hence is in the public interest with development of a landmark strategic site. Furthermore, it is considered that the proposed development meets the majority of the Aims of WLEP 2009 [Clause 1.2 as it will: *(b) encourage economic and business development to increase employment opportunities,* *(c) encourage a range of housing choices consistent with the capacity of the land,* *(f) conserve and enhance heritage,* *(g)ensure that development is consistent with the constraints of the land and can be appropriately serviced by infrastructure,*	
(c) the concurrence of the Director-General has been obtained.	Council will need to consult with the Department of Planning and Infrastructure as to whether the concurrence of the DG can be assumed in accordance with Planning Circular PS 08-003-Variations to Development Standards (Department of Planning, May 2008).	Addressed
(5) In deciding whether to grant concurrence, the Director-General must consider:		
(a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and	The contravention of this development standard does not raise any matter of significance for state or regional environmental planning. Refer to further discussion below in this table.	
(b) the public benefit of maintaining the development standard, and	The development is located on a semi island site which could be considered a key development site in the Wollongong City Centre. The profile of this site lends itself to ensuring the development which occurs is consistent with the Vision for this regional city. Whilst variation to the FSR is sought if the area of the SP2 Infrastructure zoned land is excluded from the calculation, it is noted that if this land was technically able to be included in the site area, then the FSR of the development would be compliant. It is merely the zoning of the SP2 Infrastructure land which has technically required its exclusion from the FSR calculations. In comparison if the land retained a zone comparable with the bulk of the site, then Council has in numerous instances allowed the land identified for road widening purposes to be included in the site area calculation, prior to its dedication. On this basis it is considered that there is no change in the measurable public benefit achieved by adhering to an FSR which excludes the SP2 zoned land. Under the proposed scheme the viability of the development is retained and dedication of the land to Council for the purpose of road widening will be facilitated. Whilst it is acknowledged that the increase in FSR which is achieved will increase the amount of residential floor space which is achieved on the site, it is noted that there will be no recognisable additional public benefit nor a varied impact on the overall character of the Wollongong city centre if the FSR was strictly adhered to. The increased FSR and concentration of floor area at	

Table 6: Compliance with WLEP 2009 - Contravention of Clause 4.4 Floor Space Ratio		
Clause 4.6 Exceptions to Development Standards	**Response/Justification**	**Consistent/ Complies**
	the perimeter of the large consolidated site provides significant improvements to the three adjacent street frontages, through the provision of paving, street trees and public infrastructure and the variation proposed will not change this fact. Further, it is noted that despite the building technically exceeding the FSR, the building compiles with the overall height established by WLEP 2009; is complaint with the separation distance requirements of WDCP 2009 and complies with the setback requirements of WDCP 2009 indicating that the three dimensional building envelope is appropriate. It is this building envelope which should be considered for the purpose of determining bulk and scale, rather than merely relying on the numerical GFA calculations. Hence, the proposed development will not raise any matter of state or regional planning significance.	
(c) any other matters required to be taken into consideration by the Director-General before granting concurrence.	It is considered that there are no environmental planning considerations that would hinder the Director-General from providing concurrence.	Addressed

10.3 Variation to Clause 8.6 Building Separation within B4 Mixed Use Zone

8.6 Building separation within Zone B3 Commercial Core or Zone B4 Mixed Use

The objective of this clause is to *"ensure sufficient separation of buildings for reasons of visual appearance, privacy and solar access".*

(2) Buildings on land within Zone B3 Commercial Core or B4 Mixed Use must be erected so that:

(a) there is no separation between neighbouring buildings up to the street frontage height of the relevant building or up to 24 metres above ground level whichever is the lesser, and

(b) there is a distance of at least 12 metres from any other building above the street frontage height and less than 45 metres above ground level, and

(c) there is a distance of at least 28 metres from any other building at 45 metres or higher above ground level.

(3) Despite subclause (2), if a building contains a dwelling, all habitable parts of the dwelling including any balcony must not be less than:

(a) 20 metres from any habitable part of a dwelling contained in any other building, and

(b) 16 metres from any other part of any other building.

(4) For the purposes of this clause, a separate tower or other raised part of the same building is taken to be a separate building.

(5) In this clause:

street frontage height means the height of that part of a building that is built to the street alignment.

Proposal:

Separation Distances Within the Site:

Separation distances within the development site comply with the provisions of clause 8.6.

Separation Distances at Ground Floor Level:

At the lower ground and ground floor level of the building, in the position of the retail spaces and carparking, subclause (2) will apply. This clause requires that there be no separation between neighbouring buildings at this level (ie. up to street frontage height). The proposed development contains the vehicular access point on the eastern boundary at this level, which is an integral part of the development and hence it is considered that the intent of subclause (2) is met at this level.

Separation Distances to Adjacent Dwellings at Upper Ground level and Above:

As the proposed development contains a number of dwellings the provisions of subclause (3) will apply which require all habitable parts or balcony of any dwelling within The Crown to be a minimum of 20m from a dwelling contained in another building or 16m from any other part of any other building. To the east at No. 21 Crown Street is a two storey residential flat building, whilst to the east at No. 10 Burelli Street is a four storey residential flat building. Hence, as the adjacent sites to the east contain dwellings, the 20m separation requirement will apply.

North-eastern portion of site (to existing two storey units at 21 Crown Street): A 12.395m setback to provided from the Level 2 and above units of the north-eastern tower to the adjacent eastern boundary. A 10.305m setback to the two storey townhouses facing the eastern boundary is also proposed at Level 2. Combined with the approximate setback of 5m the adjacent two storey residential flat building, a total building separation of approximately 15.305m to 17.395m is provided between Level 2 of The Crown and the second level of the adjacent residential flats. Hence, a Clause 4.6 Exceptions to Development Standards Report is contained below seeking variation to the separation distances at one level of the building (ie. Level 2) where dwellings are sited within 20m. There are no adjacent residences at level 3 and above of the Crown in this position of the site and hence this clause is not applicable to the upper levels of the building.

South-eastern portion of the site (to existing four storey units at 10 Burrelli Street): A 11.585m setback is provided from the south-eastern tower to the adjacent boundary (Levels 1, 3 and 4) and a 11.48m setback at Level 2. Combined with the approximate 4m setback of the adjacent four storey residential flat building, a total building separation of approximately 15.48-15.585m is provided between the Level 1 and Levels 2 and above to the three levels of the adjacent residential flat building (above the ground level parking). Hence, a Clause 4.6 Exceptions to Development Standards Report is contained below seeking variation to the separation distances at three levels of the building (ie. Upper ground to Level 2) where dwellings are sited within 20m. There are no adjacent residences at level 4 and above of the Crown in this position of the site and hence this clause is not applicable to the upper levels of the building.

Clause 4.6 - Exceptions to Development Standards

Clause 8.6 of WLEP 2009 contains development standards in the form of minimum separation distances adjoining buildings. A written justification for the proposed variation to the floor space ratio is therefore required in accordance with Clause 4.6. Table 7 below outlines how the proposal relates to the provisions of Clause 4.6 as it applies to the contravened development standards in Clause 8.6 of the WLEP:

Table 7: Compliance with WLEP 2009 - Contravention of Clause 8.6 Building Separation in the B4 Mixed Use Zone		
Clause 8.6 Exceptions to Development Standards	**Response/Justification**	**Consistent/ Complies**
(1) Objectives *a) to provide an appropriate degree of flexibility in applying certain development standards to particular development, and* *b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances..*	Flexibility is sought for the application of the building separation requirements for one Level of Block B and three levels of Block D so that a better outcome is achieved for the site The particular circumstances for this are as follows: ▪ The subject site is bounded by adjoining privately owned lands on one side and is bounded by roads on all other frontages. The tower elements have been sited adjacent to the perimeter of the site to provide an effective central communal open space area and to promote a street character commensurate with the hierarchy of streets within the city centre. This has resulted in the placement of Block B and D in proximity to the eastern boundary of the site. ▪ Whilst the building separation requirements have not been adhered to for one level in the position of Block B and three levels in the position of Block D, it is noted that the variation is concentrated in the corner positions of the site adjacent to existing 2 and 4 storey residential flat developments to the east. ▪ It is noted that the form of the building, which incorporates four tower elements, provides for a development which visually creates the appearance of separation from adjacent building and this would not have been achieved if one 'block' with increased setbacks was provided on the site. ▪ The variation which is sought equates to between 2.605m (13%) and 4.605m (23%), which is not numerically significant. A separation distance of between 15.305m to 17.395m will be provided, which is considered to be adequate to ensure that privacy is maintained, Further, the Shadow Analysis prepared by ADM Architects demonstrates that the adjacent units will continue to maintain access to natural sunlight. Hence, coupled with the minor numerical variation which is sought in terms of distance and number of storeys, it s considered that the objective of this clause is addressed.	Justified
(2) Consent may, subject to this clause, be granted for development even though the development may contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.	This subclause is not relevant to the subject proposal.	N/A
(3) Consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:	This table comprises the written request seeking to justify the contravention of the building separation development standard.	Provided

Table 7: Compliance with WLEP 2009 - Contravention of Clause 8.6 Building Separation in the B4 Mixed Use Zone		
Clause 8.6 Exceptions to Development Standards	**Response/Justification**	**Consistent/ Complies**
(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and	Compliance with the applicable building separation distances are considered to be unreasonable and unnecessary in the circumstances of the case as the consolidation of all allotments on the site provide the opportunity for an alternative (and satisfactory) site planning and built form outcome to that anticipated by the formal planning controls (as demonstrated below). Further, it is considered that the building separation requirements are excessive and conflict with the recommendations of the Residential Flat Design Code which is referenced within State Environmental Planning Policy No. 65 (Design Quality of Residential Flat Development) and which should be considered as the relevant planning document when measuring design outcomes of residential development. The recommendations of the Residential Flat Design Code require separation distances of only 12m between habitable rooms, for up to 4 storeys. Both Block B and D are fully compliant with this requirement providing separation distance of in excess of 15m. Further, the setbacks provided are also compliant with the provisos of Chapter D13:Wollonogng City Centre of WDCP 2009.	Justified
(d) that there are sufficient environmental planning grounds to justify contravening the development standard.	As demonstrated in this Statement of Environmental Effects, the proposed development is satisfactory having regard to environmental planning grounds, including: ▪ State Environmental Planning Policies (refer Section 5); ▪ Other provisions of the WLEP 2009 (refer Section 6); ▪ The relevant Chapters of WDCP 2009 (refer Section 7 - see also below in relation to DCP Control 3.2.6); ▪ Section 79C of the Environmental Planning and Assessment Act 1979 (refer Section 9). The reduced separation distances continue to adhere to the recommendations of the Residential Flat Design Code which have been specifically prepared to ensure that new development provides visual and acoustic privacy for existing and new residents; controls overshadowing of adjacent properties; and provides appropriate massing and spaces between buildings.	Justified
(4) Consent must not be granted for development that contravenes a development standard unless: *(a) the consent authority is satisfied that:*		
(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and	This Variation statement provides a discussion in support of the justification for varying the development standards as indicated in (3) above. In our opinion, there is sufficient justification provided to support a variation to the floor space ratio requirements.	Satisfied
(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is	Despite the exceedence of the allowable separation distances, the proposed development will be in the public interest as it still meets the objectives of the clause 8.6 as it: ▪ Provides a suitable built form to the consolidated	Justified

Table 7: Compliance with WLEP 2009 - Contravention of Clause 8.6 Building Separation in the B4 Mixed Use Zone		
Clause 8.6 Exceptions to Development Standards	**Response/Justification**	**Consistent/ Complies**
proposed to be carried out, and ***Wollongong LEP 2009:*** Objectives of the Standard *"to ensure sufficient separation of buildings for reasons of visual appearance, privacy and solar access".* Objectives of the Zones ▪ *To provide a mixture of compatible land uses.* ▪ *To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.* ▪ *To support nearby or adjacent commercial centres without adversely impacting on the viability of those centres.*	block site by transferring the majority of the floor area to the perimeter of the site thereby providing a "street edge" development. The development incorporates design measures (including setbacks and stepping down levels) to minimise the impacts of scale and bulk. ▪ While the bulk of the development is concentrated to the perimeter, this enables a suitable urban massing particularly along the Corrimal Street road corridor; ▪ The development will continue to provide appropriate separation to adjacent buildings, with separation of in excess of 15m. This separation distance will continue to provide privacy for existing and new residents; will not impact on overshadowing as depicted within the Shadow Analysis; and will continue to provide acceptable spatial separation between building. Hence the proposed development achieves the objective of the building separation development standard. The proposed development is also consistent with the objectives of both the B4 Mixed Use zone as it will: ▪ Provide ground floor retail/commercial uses to meet the needs residents and visitors to the locality, and provide employment opportunities for the tenants and employees of these tenancies, in addition to the building management services for the residential apartments; ▪ Provides retail/commercial uses in close proximity to the existing transport infrastructure (bus, rail, cycling); ▪ Provides a suitable built form and land use development for this important gateway location to the Wollongong city centre; ▪ provide a range of apartment types in immediate/very close proximity to the commercial centre and public transport. Overall, the development of the site as proposed will facilitate the ongoing viability and economic development of the Wollongong City Centre and hence is in the public interest with development of a landmark strategic site. Furthermore, it is considered that the proposed development meets the majority of the Aims of WLEP 2009 [Clause 1.2(2)] as follows: *(b) encourage economic and business development to increase employment opportunities,* *(c) encourage a range of housing choices consistent with the capacity of the land,* *(f) conserve and enhance heritage,* *(g)ensure that development is consistent with the constraints of the land and can be appropriately serviced by infrastructure.*	
(e) the concurrence of the Director-General has been obtained.	Council will need to consult with the Department of Planning and Infrastructure as to whether the concurrence of the DG can be assumed in accordance with Planning Circular PS 08-003-Variations to Development Standards (Department of Planning, May 2008).	Addressed

Table 7: Compliance with WLEP 2009 - Contravention of Clause 8.6 Building Separation in the B4 Mixed Use Zone		
Clause 8.6 Exceptions to Development Standards	**Response/Justification**	**Consistent/ Complies**
(5) In deciding whether to grant concurrence, the Director-General must consider:		
(c) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and	The contravention of this development standard does not raise any matter of significance for state or regional environmental planning. Refer to further discussion below in this table.	
(d) the public benefit of maintaining the development standard, and	The development is located on a semi isolated site which is only bounded by development to the east and which has been acknowledged by the Design Review Panel as a key development site in the Wollongong City Centre. The profile of this site lends itself to ensuring the development which occurs is consistent with the Vision for the City Centre. The subject development, while varying the separation distances required by clause 8.6 of WLEP 2009 on some parts of the site will not result in any increase in unreasonable privacy impacts on nearby residents , particularly having regard to its level of compliance with the separation distances of the RFDC and setback requirements of WDCP 2009. There will be no measurable public benefit by adhering to the separation distance requirements of Clause 8.6, particularly as they place a more onerous, and arguably excessive, separation requirement on the development. The proposed separation distance which is in the order of 15m to 17m is considered to be acceptable to provide the desired level of privacy and sunlight in this inner city context. Hence, the proposed development will not raise any matter of state or regional planning significance.	
(c) any other matters required to be taken into consideration by the Director-General before granting concurrence.	It is considered that there are no environmental planning considerations that would hinder the Director-General from providing concurrence.	Addressed

10.4 Conclusion

This Statement has addressed the provisions of Clause 4.6 of Wollongong LEP 2009 and demonstrates that the variation sought to the development standards of the LEP (Floor Space Ratio and Building Separation) are justifiable and should be given concurrence to, on the basis of the unique site circumstances (a large consolidated site), and achievement of environmental planning outcomes. The increased FSR and non-compliant building separation to the existing neighbouring buildings to the east does not create any unreasonable impacts on adjoining sites in terms of visual impact, disruption of views, loss of privacy having regard to design outcomes in an inner city context. The proposed development is consistent with Council's vision for the Wollongong City Centre and adheres to the three dimensional building envelope controls established by WLEP 2009 (height); the Residential Flat Design Code (separation distances) and WDCP 2009 (setbacks). On this basis, strict compliance with the FSR and building separation controls of WLEP 2009 is considered unnecessary.

ATTACHMENT 7

Residential Flat Design Code

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
PART 1.0 LOCAL CONTEXT		
Residential Flat Building Type	Suitable for site context	Residential Flat Building (mixed use building). Configuration enables solar access and natural cross ventilation to units and provides opportunity for a large central communal open space area.
Amalgamation and Subdivision	Encouraged	Amalgamation recommended; currently three (3) allotments. If development approved, a condition should be imposed requiring consolidation of the allotments.
Building Envelopes Height	Test height against FSR to ensure good fit.	Proposed building height is within the maximum permitted in the zone.
Building Envelopes – Building Depth	In general, an apartment building depth of 10-18 metres is appropriate. Developments that propose wider than 18 metres must demonstrate how satisfactory daylighting and natural ventilation are to be achieved.	Block A: 18m/22m (East – West axis) Does not achieve the required maximum. However the floor is divided through the middle with a central corridor and as such all apartments have good access to natural light and ventilation with the maximum depth of largest apartment is 10m to a window is. Satisfactory daylight access available to all units. Block B: 14m – 17m (North – South axis) Achieves the required maximum. Satisfactory daylight access available to all units. Block C: 15m - 19m (North – South axis) Does not achieve the required maximum. However all apartments have good access to natural light and ventilation with the maximum depth of largest apartment is 10m. Satisfactory daylight access available to all units. Block D 14m – 17m (East – West axis) Achieves the required maximum. Satisfactory daylight access available to all

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
		units. The proposal considered acceptable.
Building Envelopes – Building Separation	*Objectives* • To ensure that new development is scaled to support the desired area character with appropriate massing and spaces between buildings. • To provide visual and acoustic privacy for existing and new residents. • To control overshadowing of adjacent properties and private or shared open space. • To allow for the provision of open space with appropriate size and proportion for recreational activities for building occupants. • To provide deep soil zones for stormwater management and tree planting, where contextual and site conditions allow. Developments that propose less than the recommended distances apart must demonstrate that daylight access, urban form and visual and acoustic privacy has been satisfactorily achieved. Up to four storeys/12 metres - 12 metres between habitable rooms/balconies - 9 metres between habitable/balconies and non-habitable rooms - 6 metres between non-habitable rooms Five to eight storeys: - 18m between habitable rooms/balconies - 13m between habitable rooms/balconies and non-habitable rooms - 9m between non-habitable rooms Nine storeys plus - 24m between habitable rooms/balconies - 18m between habitable rooms/balconies and non-habitable rooms - 12m between non-habitable rooms	<u>Between buildings</u> The ground floor comprises a continuous retail frontage and no separation required. The 2 and 3 floor create a continuous frontage of residential apartment around the perimeter of the block and as such no separation is required. <u>Blocks A & B</u> Between bblocks A and B the buildings achieve the required separation as they have a setback of 27.9m up to the 10 storey. Block B does not extend above the 10 storey. The proposal considered acceptable. <u>Block A and C</u> Between blocks A and C on the 4 storey the buildings achieve the required separation as there is a distance of 25m From the 5 storey to the 13 storey buildings achieve the required separation as there is a distance of 28.7m. From the 14 and 15 storey the buildings have separation of 30.1m and as such achieves the required minimum separation distance. <u>Block C and D</u> On the 4 storey blocks C and D have a separation distance of 16m and achieves the minimum. From the 5 storey to the 9 storey there is a separation distance of 21.2m and as such achieves the required minimum. <u>Blocks D and B</u> From the 5 storey to the 9 storey there is a separation of 28.3m and as such achieves the required minimum separation distance

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
		Between adjoining sites Western, Northern and Southern Boundary The western, northern and southern boundary adjoins a road and as such separation is considered suitable. Eastern boundary and Block B The building is setback 17m to the adjoining building fronting Crown Street. This complies with the minimum required setback between buildings Eastern boundary and Block D The building is setback 15m to the adjoining building. This complies with the minimum required setbacks between buildings.
Street Setbacks	Identify the desired streetscape character, the common setback of buildings in the street, the accommodation of street tree planting and the height of buildings and daylight access controls. Relate setbacks to the area's street hierarchy. Identify the quality, type and use of gardens and landscaped areas facing the street.	The building complies with the required 2m front setback identified with the WDCP2009 to Crown Street, 0m to Corrimal Street and 4m to Burelli Street. The proposal complies.
Side + Rear Setbacks	*Objectives* • To minimise the impact of development on light, air, sun, privacy, views and outlook for neighbouring properties, including future buildings. • Maintain deep soil zones • Maximise building separation to provide visual and acoustic privacy Where setbacks are limited by lot size and adjacent buildings, "step in" the plan to provide internal courtyards and limit the length of walls facing boundaries Test side and rear setback with building	The setbacks are generally reasonable. Complies with the WDCP2009 and is further discussed within this section.

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
	separation, open space and deep soil zone requirements. Test side and rear setbacks for overshadowing of other parts of the development and/or adjoining properties, and of private open space	
Floor Space Ratio	Test the desired built form outcome against FSR to ensure consistency with other building envelope controls	The maximum permitted FSR within WLEP 2009 is 2.61:1 the proposed development provides for an FSR of 2.61:1 The proposal complies.
PART 2.0 SITE DESIGN		
Deep Soil Zones	A minimum of 25% of the open space area of the site should be a deep soil zone; more is desirable.	The site is located within the mixed use zone and as such allows for boundary to boundary commercial development. Deep soil zones within the commercial core are not required. Podium planting is required and been provided.
Fences and Walls	Compatible with existing street character. Delineate public and private domain. Select durable materials. Enhance open spaces by incorporating planter boxes, seats, BBQs etc.	The subject site is located within the mixed use zone which supports to adjoin commercial core zone. The ground floor is to be used entirely for commercial/retail activities and car parking. At this level there is no delineation of public and private domains required. The proposal complies.
Landscape Design	Improve amenity of open space. Contribute to streetscape character and public domain. Improve energy efficiency & solar efficiency of dwellings and private open spaces. Landscape to contribute to site's characteristics. Contribute to water and stormwater efficiency. Provide sufficient depth of soil above slabs to enable growth of mature trees. Minimise maintenance.	Landscape plan has been provided, and reviewed by Council's Landscape Officer. It is satisfactory and provides for dense planting within podium. However the matter of the public domain is further discussed with the report
Open Space	The area of communal open space (includes landscaping) should generally be	**Communal open space:** The site is located within the mixed use

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
	at least between 25 and 30% of the site area. Larger sites and brownfield sites may have potential for more than 30%. Where developments are unable to achieve the recommended communal open space, such as those in dense urban areas, they must demonstrate that residential amenity is provided in the form of increased private open space and/or in a contribution to public open space. The minimum recommended area of private open space for each apartment at ground level or similar space on a structure, such as a podium or car park, is 25m^2; the minimum preferred dimension in one direction is 4 metres	zone supporting the adjoining commercial core and as such 25% of the site being 2,819sq.m is unachievable. The landscaping and Common open space has been provided on the podium level landscaping and has a total of 2,101sq.m This is considered acceptable and achieves the desired outcome of the objectives of this clause. **Private open space:** The units have allocated balconies also achieve a minimum of 4m dimension in one direction.
Orientation	Plan the site to optimise solar access by: ▪ positioning and orienting buildings to maximise north facing walls where possible ▪ providing adequate separation within the development and to adjacent buildings Select building types or layouts which respond to the streetscape while optimising solar access. Where streets are to be edged and defined by buildings, design solutions include: ▪ align buildings to the street on east-west streets ▪ use courtyards, L-shaped configurations and increased setbacks to northern (side) boundaries on north-south streets. ▪ Optimise solar access to living spaces and associated private open spaces by orienting them to the north. ▪ Detail building elements to modify environmental conditions, as required, to maximise sun access in winter and sun shading in summer.	Each building has been designed to obtain the required amount to sunlight to the apartments within. The development has also been designed to allow for sufficient sunlight access to the landscaped communal open space. A minimum number of units have single aspects. Building is aligned in accordance with the RFDC. The proposal complies.
Planting on Structures	Recommended plant sizes are provided for varying situations.	Podium planting proposed in planter beds. Council's Landscape Officer has reviewed the landscape plan and has no objection in relation to this aspect of the

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
		landscaping works. The proposal complies.
Stormwater Management	• To minimise the impacts of residential development and associated works on the health and amenity of natural waterways. • To preserve existing topographic and natural features, including watercourses and wetlands. • To minimise the discharge of sediment and other pollutants to the urban stormwater drainage system during construction activity	Stormwater plan provides for on-site detention and rainwater collection and reuse. Stormwater plan appears to be consistent with the landscape plan. The proposal complies.
Safety	Carry out a formal crime risk assessment for all residential developments of more than 20 new dwellings	The proposal has been reviewed by Council's SCAT and conditions have been provided. The proposal complies.
Visual Privacy	• To provide reasonable levels of privacy externally and internally, during the day and at night • To maximise outlook and views from principal rooms and private open space without compromising visual privacy.	Building layout has been designed to minimise opportunities for direct overlooking. Balconies are sited such that overlooking between balconies is not possible. The proposal is considered acceptable.
Building Entry	Provide as direct a physical and visual connection as possible between street and building entry. Provide safe and secure access Provide equal access Provide separate entries for vehicles and pedestrians Appropriate design and location of mail boxes	Proposed building entry is located on the ground level. Entries is reasonably well defined between retail and commercial tenancies. Entries are safe. It is assumed that key control will be required. Access is level. Access from adaptable parking spaces within the basement will be via the lift. Conditions will be required to be imposed in relation to compliance with AS 4299. Ramp to basement is separate to pedestrian entry. Mail boxes are appropriately located adjacent to the main pedestrian entry and close to the frontage.

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
		The proposal complies.
Parking	• To minimise car dependency for commuting and recreational transport use and to promote alternative means of transport-public transport, bicycling and walking. • To provide adequate car parking for the building's users and visitors, depending on building type and proximity to public transport	All parking is provided within basement parking or above ground but sleeved behind the building. A total of 621 parking spaces have been provided. The parking complies with the WDCP 2009.
Pedestrian Access	Identify the access requirements from the street or car parking area to the apartment entrance. Follow the accessibility standard set out in AS1428 (part 1 and 2), as a minimum Provide barrier free access to at least 20% of dwellings in the development	Pedestrian access available from the street. Pedestrian access between car parking level and the rest of the building is via the fire stairs or lift. Barrier free access appears to be available to all units. The proposal complies.
Vehicle Access	Generally limit the width of driveways to a maximum of 6 metres Locate vehicle entries away from main pedestrian entries and on secondary street frontages	Proposed driveway width 6.0 metres from Burreli Street and 6m to Crown Street. The proposal complies.
PART 3.0 BUILDING DESIGN		
Apartment Layout	Single aspect apartments should be limited in depth to 8 metres from a window The back of a kitchen should be no more than 8 metres from a window The width of cross-over or cross-through apartments over 15 metres deep should be 4 metres or greater to avoid deep narrow apartment layouts Buildings not meeting the minimum standards listed above, must demonstrate how satisfactory daylighting and natural ventilation should be achieved, particularly in relation to habitable rooms (see Daylight Access and Natural Ventilation)	The maximum depth of the sign aspect apartment is 8.0m which is compliant. All kitchens comply with 25%(81 units) with the kitchen located on the elevation with direct access to the window. Units all have a width greater than 4m. All units have appropriate dimensions 70% of all units (223 units) and their appurtenant private open space areas will receive sufficient sunlight access. 60% (191 units) of the development will be cross ventilated; this is compliant

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
		POS adjacent main living areas The proposal complies.
Apartment Mix	Provide a variety of apartment types between studio-, one-two-, three- and three plus-bedroom apartments, particularly in large apartment buildings. Variety may not be possible in small apartment buildings, for example, up to six units. Refine the appropriate apartment mix for a location by: ▪ Considering population trends in the future as well as present market demands ▪ Noting the apartments' location in relation to public transport, public facilities, employment areas, schools and universities ▪ Locate a mix of one- and three bedroom apartments on the ground level where accessibility is more easily achieved for disabled, elderly people or families with children. ▪ Optimise the number of accessible and adaptable apartments and cater for a wide range of occupants. Australian Standards are only a minimum. ▪ Investigate the possibility of flexible apartment configurations, which support change in the future (see Flexibility).	The proposed apartment mix: Total 317 units • 97 x 1 bedroom units • 196 x 2 bedroom units • 24 x 3 bedroom units The mix in this location is considered to be appropriate All apartments accessible via lift. 32 units identified as adaptable. No units are nominated as being specifically 'affordable housing'. The proposal complies.
Balconies	Provide primary balconies for all apartments with a minimum depth of 2 metres. Developments which seek to vary from the minimum standards must demonstrate that negative impacts from the context - noise, wind - cannot be satisfactorily mitigated with design solutions. Require scale plans of balcony with furniture layout to confirm adequate, usable space when an alternate balcony depth is proposed.	All units comply.
Ceiling Heights	The following recommended dimensions are measured from finished floor level (FFL) to finished ceiling level (FCL).	Ceiling heights are 2.7m or more to all rooms. Complies

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
	These are minimums only and do not preclude higher ceilings, if desired. -in mixed use buildings: 3.3m minimum for ground floor retail or commercial and for first floor residential, retail or commercial to promote future flexibility of use -in residential flat buildings in mixed use areas: 3.3m minimum for ground floor to promote future flexibility of use -in residential flat buildings or other residential floors in mixed use buildings: - in general, 2.7m minimum for all habitable rooms on all floors, 2.4 metres is the preferred minimum for all non-habitable rooms, however 2.25m is permitted. -for two storey units 2.4m minimum for second storey if 50 percent or more of the apartment has 2.7m minimum ceiling heights -for two-storey units with a two-storey void space, 2.4 metre minimum ceiling heights -attic spaces, 1.5 metre minimum wall height at edge of room with a 30 degree minimum ceiling slope. Developments which seek to vary the recommended ceiling heights must demonstrate that apartments will receive satisfactory daylight (eg. shallow apartments with large amount of window area).	
Flexibility	Provide robust configurations which use multiple entries and circulation cores, especially in buildings with 15m+ length Provide apartment layouts which accommodate changing use of rooms Use structural systems which support a degree of future change in building use	Single entry and single lift core for blocks A, B and D. Two entries and two lifts cores for building C. This is considered appropriate having regard to the size of the development. All units are physically accessed via lifts. Minimal flexibility built into design. This is considered to be appropriate having

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
	Promote accessibility and adaptability.	regard to the zoning of the site and the character of the neighbourhood. 32 adaptable units are proposed and all units should be accessible.
Ground Floor Apartments	Optimise the number of ground floor apartments with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography of the site. Provide ground floor apartments with access to private open space, preferably as a terrace or garden.	No ground floor units are proposed as the site is located with the commercial core and as such it is not encouraged to place residential on the ground floor as active street frontages are required. Complies
Internal Circulation	In general, where units are arranged off a double loaded corridor, the number of units accessible from a single core/corridor should be limited to eight. Exceptions may be allowed: • For adaptive re-use buildings • Where developments can demonstrate the achievement of the desired streetscape character and entry response • Where developments can demonstrate a high level of amenity for common lobbies, corridors and units (cross over, dual aspect apartments)	Lift services maximum 7 units or less on each floor. Complies.
Mixed Use	Complementary uses Consider building depth and form in relation to each uses requirements for servicing and amenity Design legible circulation systems which ensure safety Ensure building positively contributes to public domain Address acoustic requirements Recognise ownership/lease patterns and	The commercial use is separate to the residential uses. The operation of the commercial component should not interfere with the residential. Satisfactory

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
	separate requirements for BCA assessment	
Storage	In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates: ▪ studio apartments 6m³ ▪ one-bedroom apartments 6m³ ▪ two-bedroom apartments 8m³ ▪ three-plus bedroom apartments 10m³	All units have been provided with a storage area within the basement car park. Each of the storage areas has sufficient capacity. Complies
Acoustic Privacy	Use site and building layout to maximise potential for acoustic privacy by providing adequate building separation within the development and from neighbouring buildings. Arrange apartments within a development to minimise noise transition between flats. Design internal apartment layout to separate noisier spaces from quieter spaces. Resolve conflicts between noise, outlook and views. Reduce noise transmission from common corridors or outside the building by providing seals at entry doors.	Suitable separation distances provided Like areas within units generally abut. Most units appear to be reasonably well designed with regard to acoustic privacy. As above. Details of entry seals are not provided. This could be dealt with by a condition of consent is the proposal is approved. Complies.
Daylight Access	Living Rooms and private open spaces for at least 70% of apartments in a development should receive a minimum of three hours direct sunlight between 9.00am and 3.00pm in mid winter. In dense urban areas a minimum of two hours may be acceptable Limit the number of single aspect apartments with a southerly aspect (SW-SE) to a maximum of 10 percent of the total units proposed. Developments which seek to vary from the minimum standards must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed (see Orientation and Energy Efficiency).	70% of units receive a minimum 3 hours direct sunlight 9am and 3pm. A total of 10 units representing 3% are single aspect unit facing south. Complies

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
Natural Ventilation	Building depths, which support natural ventilation typically range from 10 to 18 metres. 60% of residential units should be naturally cross-ventilated. 25% percent of kitchens within a development should have access to natural ventilation. Developments, which seek to vary from the minimum standards, must demonstrate how natural ventilation can be satisfactorily be achieved, particularly in relation to habitable rooms.	Building depth measured from front to rear exceeds 18m. However the maximum depth of the single aspect units are 8m and therefore achieves the natural; ventilation requirements. A total of 191 units equating to 60% of the development will be cross ventilated; this is compliant 81 kitchen have direct access to a window equating to 25% which is compliant. Single aspect apartments are limited to a maximum depth of 8m All units will receive sufficient solar access and are all naturally ventilated. The proposal complies.
Awnings and Signage	*Objectives:* Provide shelter for public streets Ensure signage is in keeping with desired streetscape character and with scale, detail and design of the development.	Awnings are required over the footpath. No signage is proposed at this stage.
Facades	Consider the relationship between the whole building form and the façade and/or building elements. Compose facades with appropriate scale, rhythm and proportion, which respond to the building's use and the desired contextual character.	Design is of a reasonably high standard. External finishes appear to be of a high standard. All elevations are reasonably well treated with regard to modulation, articulation and fenestration. This assists in reducing the perception of bulk. Appropriate materials will be used. The proposal complies.
Roof Design	Relate roof design to the desired built form. Design the roof to relate to the size and scale of the building, the building elevations and three dimensional building form. Design roofs to respond to the orientation of the site, eg. by using eaves and skillion roofs to respond to sun	Most of the proposed roof is angled, and complies with the maximum height limits. This is considered to be appropriate with regard to the design of other buildings within with precinct. Service elements are not incorporated into the roof design.

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
	access. Minimise visual intrusiveness of service elements by integrating them into the design of the roof. Support use of roofs for quality open space in denser urban areas.	The proposal complies.
Energy Efficiency	Incorporate passive solar design techniques to optimise heat storage in winter and heat transfer in summer. Improve the control of mechanical space heating and cooling. Provide or plan for future installation of photovoltaic panels. Improve efficiency of hot water systems. Reduce reliance on artificial lighting. Maximise efficiency of household appliances.	BASIX certificate submitted in relation to the units. The development is complaint with the required amount of dual aspect, or minimum depth and so have solar access and cross ventilation. This will assist in reducing energy usage through mechanical heating and cooling. BASIX certificate requires use of efficient appliances. The proposal complies.
Maintenance	Design windows to enable cleaning from inside the building, where possible. Select manually operated systems, such as blinds, sunshades, pergolas and curtains in preference to mechanical systems. Incorporate and integrate building maintenance systems into the design of the building form, roof, and façade. Select appropriate landscape elements and vegetation and provide appropriate irrigation systems. For developments with communal open space, provide a garden maintenance and storage area, which is efficient and convenient to use and is connected to water and drainage.	Some of the windows will be accessible from either inside the building or from balconies. Council's Landscape Officer is satisfied generally with planting.. Conditions have been recommended in this regard. No details have been provided in relation to maintenance of the podium planting. If properly planted, these will not require significant maintenance works. The proposal considered acceptable.
Waste Management	Supply waste management plans as part of the development application submission as per the NSW Waste Board	Waste storage area is provided at ground floor level. Bins will be privately collected on site. The proposal complies.

SEPP 65 – Residential Flat Design Code		
	Required	**Comment**
Water Conservation	Rainwater is not to be collected from roofs coated with lead or bitumen based paints, or from asbestos-cement roofs. Normal guttering is sufficient for water collections provided that it is kept clear of leaves and debris.	Roofing materials – metal deck roof sheeting. BASIX certificate makes provision for rainwater collection and reuse on site. The proposal complies.

ATTACHMENT 8

CHAPTER D13 – WOLLONGONG CITY CENTRE

The site is located within the Wollongong City Centre, as defined in WLEP 2009 and WDCP 2009. Chapter D13 applies to the development and prevails over other parts of the DCP where there is any inconsistency.

2 Building form

Objectives/controls	*Comment*	*Compliance*
2.1 General		
Building form and character refers to the individual elements of building design that collectively contribute to the character and appearance of the built environment. The Wollongong City Centre LEP includes provisions for land use, building heights and sun access planes, floor space ratio and design excellence. The development provisions in this section of the DCP on building form are intended to encourage high quality design for new buildings, balancing character of Wollongong with innovation and creativity. The resulting built form and character of new development should contribute to an attractive public domain in central Wollongong and produce a desirable setting for its intended uses.	It is considered that the development complies with the objectives of the zone and complies with the height and FSR requirements contained within the WLEP 2009. It is considered that the application provides for appropriate built form within this location	Yes
2.2 Building to street alignment and street setbacks		
Mixed Use - Build to the 2m to Crown Street, build to street alignment for Corrimal Street and 4m to Burelli Street. 4m minimum further setback above street frontage height. Balconies may project up to 600 mm into front building setbacks, provided the cumulative width of all balconies at that particular level totals no more than 50% of the horizontal width of the building façade, measured at that level. Balconies are not permitted to encroach above the public road reserve. The Commercial Core, Mixed Use (city edge) and Enterprise Corridor zones are subject to requirement for corner properties to provide a 6m x 6m corner splay.	The building is setback 2m to Crown Street. The building is setback 0m to Corrimal Street. The building is setback 4m to Burelli Street The balconies do not project within the front setbacks.	Yes
2.3 Street frontage heights in commercial core		
The street frontage height of buildings in the Commercial Core are not to be less than 12m or greater than 24m above mean ground level on the street front as shown in Figure 2.3.	Not located within the city centre	N/A
2.4 Building depth and bulk		
The maximum floor plate sizes and depth of buildings are 900sq.m above 12m outside the commercial core Max building depth is 18m	Block A: 669sq.m Block B: 570sq.m Block C: 850sq.m Block D: 570sq.m The buildings comply with the maximum floor plates. The building depths do not comply as they are greater than 18m This is discussed within the RFDC compliance table	Yes No – Variation sought
2.5 Side and rear building setbacks and building separation		
Residential (up to 12m in height – Level 4): Habitable rooms with balconies: 6m min. side Habitable rooms with balconies: 6m min. rear	The eastern boundary is the only side setback in this development. The building is setback between 10.38 and 12.395 first floor residential and extends up to the 9 floor.	Complies

Objectives/controls	*Comment*	*Compliance*
Habitable rooms no openings 4.5m **Residential (12m to 24m in height – Level 9):** Habitable rooms with balconies: 9m min. side Habitable rooms with balconies: 9m min. rear		
2.6 Mixed used buildings		
Provide flexible building layouts which allow variable tenancies or uses on the first two floors of a building above the ground floor. Minimum floor to ceiling heights are 3.3 metres for commercial office and 3.6 metres for active public uses, such as retail and restaurants in the B3 Commercial Core zone. In the B4 Mixed Use zone, the ground floor and first levels of a building shall incorporate a minimum 3 metre floor to ceiling height clearance, to maximise the flexibility in the future use of the building. Separate commercial service requirements, such as loading docks, from residential access, servicing needs and primary outlook. Locate clearly demarcated residential entries directly from the public street.	The proposed development complies with the ceiling height requirement. The ground floor allows for a flexible layout and it is possible that commercial could be provided on the second floor of the development. Separate commercial loading dock has been provided Separate residential entry has been provided.	Yes
2.7 Deep soil zone		
All residential developments must include a deep soil zone (See Figure 2.14). The deep soil zone shall comprise no less than 15% of the total site area preferably provided in one continuous block and shall have a minimum dimension (width or length) of 6 metres. For residential components in mixed use developments in the Commercial Core, Mixed Use (city edge) and Enterprise zones, the amount of deep soil zone may be reduced commensurate with the extent of non-residential uses. Where non-residential components result in full site coverage and there is no capacity for water infiltration, the deep soil component must be provided on structure. Where deep soil zones are provided, they must accommodate existing mature trees as well as allowing for the planting of trees/shrubs that will grow to be mature trees.	Within the mixed use zone the deep soil cannot be provided on the ground floor as the commercial can be building boundary to boundary. A deep soil zone is being provided on the podium level by way of planter beds and landscaped grassed areas. The proposed development is providing 1,505sq.m of deep soil which whilst does not equate to 15% it is commensurate with the extent on non-residential uses within the development and as such is considered satisfactory.	Yes
2.8 Landscape design		
	Council's landscape section has assessed the application and raise no objection to the proposal and has provided conditions	Yes
2.9 Planting on structures		
Provide sufficient soil depth and area to allow for plant establishment and growth.	Council's landscape section has assessed the application and raise no objection to the proposal and has provided conditions	Yes
2.10 Sun access planes		
Relevant height and setback controls for development adjacent to key public spaces apply.	The subject site is not located adjoining or within the vicinity of a key site	N/A

Objectives/ controls	*Comment*	*Compliance*
2.11 Development on classified roads		
Consent must not be granted to the development of land that has a frontage to a classified road unless the consent authority is satisfied that: Where practicable, vehicular access to the land is provided by a road other than the classified road.	Corrimal Street is a classified road. All vehicular access is via Burreli and Crown Streets.	Yes

3 Pedestrian amenity

Objectives/ controls	*Comment*	*Compliance*
3.1 General		
Pedestrian amenity incorporates all those elements of individual developments that directly affect the quality and character of the public domain. The pedestrian amenity provisions are intended to achieve a high quality of urban design and pedestrian comfort in the public spaces of the city centre. The pedestrian environment provides people with their primary experience of and interface with the city. This environment needs to be safe, functional and accessible to all. It should provide a wide variety of opportunities for social and cultural activities. The pedestrian environment is to be characterised by excellence of design, high quality materials and a standard of finish appropriate to a regional city centre.	It is considered that the development contributes to high pedestrian amenity	Yes
3.2 Permeability		
Where possible, existing dead end lanes are to be extended through to the next street as redevelopment occurs. New through site links should be connected with existing and proposed through block lanes, shared zones, arcades and pedestrian ways and opposite other through site links.	The site is not identified as requiring permeability being by way of through links. However the development proses a mid-block pedestrian link between Burreli and Crown Street	Yes
3.3 Active street frontages		
In commercial and mixed use development, active street fronts are encouraged in the form of non-residential uses on ground level. Active street fronts in the form of non-residential uses on ground level are required along streets, lanes and through site links shown in Figure 3.4 for all buildings in the Commercial Core and Tourist zones, and for mixed use buildings in the Mixed Use (city edge) and Enterprise zones. Residential developments are to provide a clear street address and direct pedestrian access off the primary street front, and allow for residents to overlook all surrounding streets.	The development proposes an active street frontage by way of commercial/retail located on the ground floor. Clearly delineated residential entry points are proposed.	Yes
3.4 Safety and security		
Ensure that the building design allows for casual surveillance of accessways, entries and driveways. Avoid creating blind corners and dark alcoves that provide concealment opportunities in pathways, stairwells, hallways and carparks. Provide entrances which are in visually prominent positions and which are easily identifiable, with visible numbering.	Council's Safe Community Action Team assessed the application and provided conditions to the application.	Yes

Provide adequate lighting of all pedestrian access ways, parking areas and building entries. Such lighting should be on a timer or movement detector to reduce energy consumption and glare nuisance. Provide security access controls where appropriate..		
3.5 Awnings		
Continuous street frontage awnings are to be provided for all new developments as indicated in Figure 3.6. Awning design must match building facades and be complementary to those of adjoining buildings.	Awnings are required in this location.	Yes
3.6 Vehicular footpath crossings		
In all other areas, one vehicle access point only (including the access for service vehicles and parking for non-residential uses within mixed use developments) will be generally permitted. Where practicable, vehicle access is to be from lanes and minor streets rather than primary street fronts or streets with major pedestrian and cyclist activity. Where practicable, adjoining buildings are to share or amalgamate vehicle access points. Internal on-site signal equipment is to be used to allow shared access. Where appropriate, new buildings should provide vehicle access points so that they are capable of shared access at a later date.	One vehicle entry point is being proposed from Burreli Street with exit via Crown Street these being the minor of the two street frontages compared to Corrimal Street.	Yes
3.7 Pedestrian overpasses, underpasses and encroachments		
New overpasses over streets will generally not be approved. In exceptional circumstances, new overpasses over service lanes may be considered by the consent authority subject to assessment of impacts on safety and crime prevention, streetscape amenity and activation of the public domain. In such circumstances, overpasses are to be fully glazed, not greater than 6 metres wide or more than one level high. Refer to AS 5100.1 – 2004. Longitudinal development under the road reserve is not permitted. The siting of basement carparks beneath the road reserve is not permitted for private developments. Stratum road closures for this purpose will not be permitted. Underpasses may be considered by the consent authority for direct connection under adjacent streets to railway stations: i) Where they would substantially improve pedestrian safety and accessibility, and ii) Incorporate active uses, particularly at entry and exit points.	No encroachments are proposed	Yes
3.8 Building exteriors		
Articulate facades so that they address the street and add visual interest. External walls should be constructed of high quality and durable materials and finishes with 'selfcleaning' attributes, such as face brickwork, rendered brickwork, stone, concrete and glass. Finishes with high maintenance costs, those susceptible to	It is considered that the building exterior of the building provides for good design and interest. Building alignment and setbacks are appropriate Appropriate material and finishes selection The proportions are acceptable. Building is	Yes

degradation or corrosion from a coastal or industrial environment or finishes that result in unacceptable amenity impacts, such as reflective glass, are to be avoided. Limit opaque or blank walls for ground floor uses to 30% of the street frontage. Maximise glazing for retail uses, but break glazing into sections to avoid large expanses of glass. The design of roof plant rooms and lift overruns is to be integrated into the overall architecture of the building.	modulated and well articulated. Variety of materials are used	
3.9 Advertising and signage		
Signs are to be designed and located to: i) Relate to the use of the building, ii) Be visually interesting and exhibit a high level of design quality, iii) Be integrated and achieve a high degree of compatibility with the architectural design of the supporting building having regard to its composition, fenestration, materials, finishes, and colours, and ensure that architectural features of the building are not obscured, iv) Have regard to the view of the sign and any supporting structure, cabling and conduit from all angles, including visibility from the street level and nearby higher buildings and against the skyline, and v) Have only a minimal projection from the building.	No advertising is proposed at this point in time	N/A
3.10 Views and view corridors		
Existing views shown in located with the view corridor are to be protected to the extent that is practical in the planning and design of development.  	The subject site is located within the established view corridor The proposed buildings comply with the maximum height limits established for the area and are therefore considered to have a minimal impact on the established view corridor to the escarpment.	Yes

4 Access, parking and servicing

Objectives/ controls	*Comment*	*Compliance*
4.1 General		
This section contains detailed objectives and controls on pedestrian access, vehicular access, on-site parking and site facilities, including refuse collection and removal. To satisfy the aims and zoning objectives of the Wollongong LEP 2009, controls in this section aim to: a) Facilitate the development of building design excellence appropriate to a regional city; b) Require parking and servicing provisions to be contained within development sites to an amount and	It is considered that the application complies wit the requirements of this section of the DCP	Yes

rate adequate for the economic and sustainable growth of the city centre; c) Provide for safe and secure access; d) Minimise impacts on city amenity, the public domain and streetscape, and e) Ensure that access is provided for the disabled and mobility impaired.		
4.2 Pedestrian access and mobility		
Main building entry points should be clearly visible from primary street frontages and enhanced as appropriate with awnings, building signage or high quality architectural features that improve clarity of building address and contribute to visitor and occupant amenity. The development must provide at least one main pedestrian entrance with convenient barrier free access in all developments to at least the ground floor. The development must provide continuous access paths of travel from all public roads and spaces as well as unimpeded internal access. Building entrance levels and footpaths must comply with the longitudinal and cross grades specified in AS 1428.1:2001, AS/NZS 2890.1:2004 and the Disability Discrimination Act.	The building entry is clearly visible and unobstructed access is available. Design of facilities (including car parking requirements) for disabled persons compliant; can be conditioned All entry points compliant Continuous access paths of travel provided	Yes
4.3 Vehicular driveways and manoeuvring areas		
	One entry driveway 6m in width from Burreli Street and one exit driveway 6m in width from Crown Street is proposed. Council's traffic section have assessed the application and have raised no objection to the location of the driveway	Yes
4.4 On-site parking		
On-site parking must meet the relevant Australian Standard (AS2890.1 2004 – Parking facilities, or as amended). On-site vehicle, motorcycle and bicycle parking is to be provided in accordance with Part E of this DCP. To accommodate people with disabilities, provide a minimum of 1% of the required parking spaces, or minimum of 1 space per development, (whichever is the greater) as an appropriately designated and signed disabled parking space.	Discussed within the E3 chapter within the report. The proposed development provides for 621 parking spaces which comply with the minimum requirements.	Yes
4.5 Site facilities and services		
Mail boxes Provide letterboxes for residential building and/or commercial tenancies in one accessible location adjacent to the main entrance to the development. **Communication structures, air conditioners and service vents** a) Locate satellite dish and telecommunication antennae, air conditioning units, ventilation stacks and any ancillary structures: i) Away from the street frontage, ii) Integrated into the roof scape design and in a position where such facilities will not become a skyline feature at the top of any building, and	Mailboxes have been provided for within an appropriate location It will be conditioned for that these provisions are provided for in an appropriate location.	Yes

A master antennae must be provided for residential apartment buildings. This antenna shall be sited to minimise its visibility from surrounding public areas. **Waste (garbage) storage and collection** *General (all development)* All development is to adequately accommodate waste handing and storage on-site. The size, location and handling procedures for all waste, including recyclables, is to be determined in accordance with Council waste policies and advice from relevant waste handling contractors. **Service docks and loading/unloading areas** Provide adequate space within any new development for the loading and unloading of service/delivery vehicles. **Fire service and emergency vehicles** **Utility Services** Development must ensure that adequate provision has been made for all essential services including water, sewerage, electricity and telecommunications and stormwater drainage to the satisfaction of all relevant authorities.	The development provides for a garbage room of an appropriate size and location. Adequate service/loading dock has been provided within the development. Council's traffic section reviewed this aspect and raised no objections Adequate provision. Also required to comply with the BCA It will conditioned that the adequate arrangement and clearance certificates obtained from relevant utility authorities prior to the release of a construction certificate.	

5 Environmental management

Objectives/ controls	*Comment*	*Compliance*
5.1 General		
This section deals with energy efficiency requirements of buildings, water use and conservation, wind and solar impacts and waste management.	It is considered that the building achieves energy efficiency.	Yes
5.2 Energy efficiency and conservation		
Residential New dwellings, including multi-unit development within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX). **Non-Residential** Comply with the Building Code of Australia energy efficiency provisions.	BASIX Certificate has been submitted as part of this application The plans indicate that proposed building complies with Section J of the BCA. A construction certificate cannot be issued without such compliance	Yes
5.3 Water conservation		
Residential New dwellings, including a residential component within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX). ***Non-residential*** Water saving measures are to be incorporated into non-residential building.	A BASIX certificate has been issued for the application The plans indicate that proposed building complies with Section J of the BCA. A construction certificate cannot be issued without such compliance	Yes
5.4 Reflectivity		
New buildings and facades should not result in glare that causes discomfort or threatens safety of pedestrians or drivers.	A schedule of finishing external materials and colours was submitted with the application. If approved, material reflectivity will be limited	Yes

Visible light reflectivity from building materials used on facades of new buildings should not exceed 20%. Subject to the extent and nature of glazing and reflective materials used, a Reflectivity Report that analyses potential solar glare from the proposed development on pedestrians or motorists may be required.	to 20% as required by the DCP	
5.5 Wind mitigation		
	The development is not expected to have a significant impact on wind conditions in the area. A wind report has been submitted with the application and reviewed by Council's Environmental Officer who raised no objections	Satisfactory
5.6 Waste and recycling		
	Sufficient storage has been supplied within the building for garbage storage. Adequate arrangements for collection have been made that Council's Traffic section has raised no objection.	Yes

6 Residential development standards

Objectives/ controls	*Comment*	*Compliance*
6.1 SEPP 65 and residential flat design code		
	RFDC discussed earlier in a table of compliance	Yes
6.2 Housing choice and mix		
To achieve a mix of living styles, sizes and layouts within each residential development, comply with the following mix and size: i) Studio and one bedroom units must not be less than 10% of the total mix of units within each development, ii) Three or more bedroom units must not be less than 10% of the total mix of units within each development, and iii) For smaller developments (less than six dwellings) achieve a mix appropriate to locality. For residential apartment buildings and multi-unit housing, 10% of all dwellings (or at least one dwelling) must be designed to be capable of adaptation for disabled or elderly residents.	Total 317 units 97 x 1 bedroom units (30.6%) 196 x 2 bedroom units (61.8%) 24 x 3 bedroom units (7.6%) The 3 bedroom units does not equate to 10% and as such does not comply. Within the development 32 units are adaptable equating to 10%.	No- minor variation sought
6.3 Dwelling houses		
		N/A
6.4 Multi dwelling housing		
		N/A
6.5 Dual occupancy		
		N/A
6.6 Basement Carparks		
The scale and siting of the basement car park must not impact upon the ability of the development to satisfy minimum landscaping and deep soil zone requirements.	Whilst there is no deep soil on the ground floor as the site is located within the mixed use zone. The basement car park does not impact on the availability of deep soil planting if one were to have been provided as the	Yes

Objectives/ controls	*Comment*	*Compliance*
	basement does not extent boundary to boundary within the site.	
6.7 Communal open space		
Developments with more than 10 dwellings must incorporate communal open space. The minimum size of this open space is to be calculated at 5m2 per dwelling. Any area to be included in the communal open space calculations must have a minimum dimension of 5m.	The proposal is for 317 units requiring 5m2 per apartment the minimum communal open space is a total of 1,590sq.m. the proposed development provides for 2,101sq.m and as such complies. Easily accessible and reasonable distance from units (via central lifts) COS receives a minimum of 3 hours of direct sunlight between 9.00am and 3.00pm on June 21.	Yes
6.8 Private open space		
Private open space must be provided for each dwelling within a residential apartment building in the form of a balcony, courtyard, terrace and/or roof garden. Private open space for each dwelling within a residential apartment building must comply with the following: i) The balcony must have a minimum area of 12m2 open space a minimum depth of 2.4 metres. The primary private open area of at least 70% of the dwellings within a residential apartment building must receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm on June 21.	Each dwelling has been provided with a balcony, complying with the minimum size and depth. 70% of dwellings being 223 units achieves the required 3hours. This complies.	Yes
6.9 Overshadowing		
The design of the development must have regard to the existing and proposed level of sunlight which is received by living areas and private open space areas of adjacent dwellings. Sensitive design must aim to retain the maximum amount of sunlight for adjacent residents. Council will place greatest emphasis on the retention of sunlight within the lower density residential areas. Adjacent residential buildings and their public spaces must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on 21 June.	Whilst the development is large in scale it does not unreasonably overshadow building the south, east or west.	Yes
6.10 Solar access		
The living rooms and private open space of at least 70% of apartments should receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm. The number of single aspect apartments with a southerly aspect (south-westerly to south-easterly) is limited to a maximum of 10% of the total number of apartments proposed.	70% of units achieve the required amount of sunlight 10 (3%) single aspect units face southwards	Yes
6.11 Natural ventilation		
A minimum of sixty percent (60%) of all residential apartments shall be naturally cross ventilated. Twenty five percent (25%) of kitchens within a development must have access to natural ventilation. Where kitchens do not have direct access to a window, the back of the kitchen must be no more than 8m from a window. Single aspect apartments must be limited in depth to 8m from a window.	216 units cross-ventilated equating to 68% 80 kitchens access to natural ventilation being 25% Single aspect apartments are limited to a maximum depth of 8m from a window	Yes

Objectives/ controls	*Comment*	*Compliance*
6.12 Visual privacy		
The internal layout of buildings should be designed to minimise any direct overlooking impacts occurring upon habitable rooms and private balcony / open space courtyards, wherever possible by separating communal open space and public domain areas from windows of rooms, particularly sleeping room and living room areas.	It is considered that the application is suitable in regards to visual privacy.	Yes
6.13 Acoustic Privacy		
Residential apartments should be arranged in a mixed use building, to minimise noise transition between apartments by locating busy, noisy areas next to each other and quieter areas, next to other quieter areas (eg living rooms with living rooms and bedrooms with bedrooms);.	Like uses have been arranged in similar areas It is not anticipated that the development will generate significant noise.	Yes
6.14 Storage		
For residential apartment buildings provide a secure space to be set aside exclusively for storage as part of the basement.	Storage has been provided for all units at the rear of the car spaces	Yes

7 Planning controls for special areas

Objectives/ controls	*Comment*	*Compliance*
7.1 Special areas with heritage items		
	There are no special controls that relate to the site.	N/A
7.2 Special areas and Development Standards		
		N/A
7.3 Non-residential development in the enterprise corridor zone		
		N/A
7.4 Special area design guidelines		
		N/A
7.5 Design excellence		
	Discussed within the LEP	Yes

8 Works in the public domain

Any development requiring works to be carried out within the public domain in the Wollongong City Centre will be subject to compliance with the requirements of the Wollongong City Centre Public Domain Technical Manual at Appendix 2 to this DCP and any other specific Council requirements.	Council's landscape section has assessed the application and provided conditions in regards to the public domain.	Yes

CHAPTER E2: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

Control/ objective	*Comment*	*Compliance*
3.1 Lighting		
Areas intended to be used at night must provide appropriate lighting. Lighting must be provided to heavily used spaces such as car parks, major pedestrian routes and entries to	Lighting of the car-parking areas, pedestrian entrances and other public areas such as the communal open space area is likely. Conditions can be imposed requiring lighting of these areas	Yes, with conditions

buildings. Security lighting is to be consistent with AS4282 (1997) The Control of the Obtrusive Effect of Outdoor Lighting. In areas used by pedestrians, ensure that lighting shines on pedestrian pathways and possible entrapment spaces. Provide adequate illumination for directional signage and maps in locations used at night. Lighting must be designed to be vandal resistant, through measures such as high mounting.		
3.2 Natural surveillance and sightlines		
Avoid blind, sharp corners on pathways, stairs or corridors. Avoid or ameliorate sudden changes of grade on pathways which may reduce sightlines. Seating should be located in areas of active use. Avoid medium height vegetation with concentrated top to bottom foliage. Plants such as low hedges and shrubs (1 - 1.2m high), creepers, ground covers or high canopied vegetation are good for natural surveillance. Ensure where barriers are provide along paths that they are semi-transparent. Ensure that windows of activity rooms (e.g. kitchen windows not bathroom windows) rather than blank facades overlook pedestrian areas, car parks, parks and public spaces. Colocate pedestrian, cycle and vehicular movement systems to encourage maximum surveillance of public areas. Ensure that bus shelter location and design do not impede natural surveillance.	The landscape plan provides low level shrubs in combination with larger trees for screening and shading. There are no sudden footpath grade changes. Windows and balconies will overlook the main interior communal open space areas engendering passive surveillance. Lighting can encourage day and night uses of communal open space. The residential uses provide day and night usage of the building; the residential entrances will be utilised frequently. Units directly from the combined driveway and pedestrian access and benefits from significant natural surveillance.	Yes
3.3 Signage		
No signage proposed	Not applicable	N/A
3.4 Building design		
Ensure that entrances to buildings are clearly defined, secure, well lit and face the street. Blank walls should be avoided onto	The applicant indicates that appropriate lighting will be utilised. If approved, it is recommended conditions be imposed requiring details to be provided with the CC.	Yes

public streets, public open spaces and pedestrian traffic areas. Design the front entrances of public buildings so that they do not create entrapment spots or places where intruders may loiter. Clearly indicate closing hours at entrances to public areas which are closed off to access at night. Design lobbies to be highly visible. Avoid the location of ramps and elevator entrances in isolated areas. Use transparent, unbreakable materials in door and walls at major entry points to provide sightlines through the door or wall. Ensure that loading and storage areas are either well lit or can be locked after hours. Areas are to be illuminated so that occupants can see out some distance from the entry before leaving the building. Illuminate all external edges and access points to car parks. Where large expanses of car parks are proposed, consideration should be given to the provision of surveillance e.g. the installation of security cameras. Avoid hidden recesses. Ensure that enclosed or underground car parking can only be accessed from inside the building not by pedestrians passing.	Public access to the building will be secured; readily visible from the street. Surveillance of the front pedestrian entrances will be provided from the highly trafficked street, courtyards and balconies. Access to the internal lift and foyer will be secured. Landscaping design and building design will minimise opportunities for graffiti and vandalism. Main entrance is oriented towards the street; casual surveillance available from courtyards and terraces. Access to the resident carpark will be restricted through the use of security shutters. Adaptable car spaces are located near the lifts.	
<u>3.5 Landscaping</u>		
Shrubbery and low-level planting must be selected for footpaths that does not exceed 1m in height where abutting pavements. Avoid planting taller growing plants and trees in areas that screen doorways, entrances and windows. Select trees that do not have branches below 1.5m (for the trees protection it is recommended that they do not have branches below 2.4m above ground level)	Landscape plan submitted with the DA provides several street trees which will soften the footpath area without providing concealment opportunities. There will be no tree planting directly adjacent to the building entrances.	Yes

3.6 Public open space and parks.		
Not applicable	Not applicable	N/A
3.7 Community facilities and public amenities		
Not applicable	Not applicable	N/A
3.8 Bus stops and taxi ranks		
Ensure that the areas adjacent to major bus stops and taxi ranks are well lit and protected from the weather. Ensure that lighting within or around bus shelters is adequate. Ensure that people waiting at bus stops and taxi ranks are clearly visible from the street and adjacent buildings where possible. Ensure sightline are not blocked by walls, landscaping, fences or other structures to the bust stop or taxi rank. Avoid locating bus stops and taxi ranks adjacent to vacant land, alleys, car parks and buildings set back from the street or possible entrapment spots. Bus shelters should be designed to reduce the possibility of entrapment and to improve sightlines.	Bus stops are within walking distance of the site bit are not located along the frontage of the site.	Yes

CHAPTER E3: CAR PARKING, ACCESS, SERVICING/LOADING FACILITIES AND TRAFFIC MANAGEMENT

Applying the design criteria for on-site parking within Chapter E3, the following tables indicate the required car parking.

Category	Rate	Quantity	Requirement
Retail	1 space per 60m²	3,386m²	**57 spaces**
Residential < 70m²	0.75 space per unit	97 units	72.75 spaces
70m²/110m²	1 spaces per unit	196 units	196 spaces
> 110m²	1.25spaces per unit	24 units	34.5 Spaces
Residential Total -			**304 spaces**
Residential (visitors)	0.2sp per unit	317units	**63.4 spaces**
TOTAL REQUIRED			425 spaces
TOTAL PROVIDED			621 spaces

In regard to motorcycle and bicycle parking provision, the following applies:

Motorcycle:	Rate:	Calculation:	Requirement:	Provision:	Compliance:
Residential	1 space per 15 dwellings	317/15	21.2 spaces +	31 spaces	Yes

Retail	1 space per 25 car spaces	57/25	2.16 spaces = 24 spaces		
Bicycle:	**Rate:**	**Calculation:**	**Requirement:**	**Provision:**	**Compliance:**
Retail	1 per 750m² for staff I per 1,000m² for shoppers	3386/750 3386/1000	4.5 ports + 3.4 ports 7.9 ports	142	Yes
Residential	1 per 3 dwellings	317/3	105.6 ports		Yes
Visitor	1 per 12 dwellings	317/12	26.4 ports		Yes

ATTACHMENT 9

Attachment 9

Wollongong Design Review Panel Report.
For a proposed mixed development at 31 Crown Street
8th September 2014.

In response to revised architectural drawings (By ADM Architects dated April 2014 and landscape drawing (By Ochre Landscape Architects) Issued 10 July 2014.

Panel members:
Sue Hobley, Panel member
Brendan Randles, Panel member
David Jarvis, Panel member

Design Review Meetings were held on 19th December 2013 (Pre DA lodgement) and on the 27th May 2014. The following comments outline the status of the current documentation developed and issued in response to issues raised at these meetings:

Context
The distribution of built form across the site has been developed to concentrate more built form along the eastern lane way and reduce building bulk to Burelli Street. The reduced scale to Burelli Street is a positive development that will improve the amenity of future developments on the southern side of the street. However it must be noted that a significant level of overshadowing to the sites on the southern side of Burelli Street will still be inevitable.

Developments to the built form have provided an improved contextual response.

Scale and Density
Though an improved distribution of built form has been achieved, it is evident from the applicant's solar analysis that there remains a significant level of over-shadowing of Burelli Street. Given the permissible FSR and height for this site a level of over-shadowing to the south of the site is inevitable.

The treatment of the town house style apartments around the base of the building appears to be very successful in creating an appropriate scale at street level. The development of the eastern laneway also contributes positively to the urban quality of the proposal.

Built form
The treatment of the new laneway is generally well resolved, with a neat separation strategy for pedestrians that deals also with stormwater. The extent of the loading area is now clearly defined, it is also understood that a building management strategy has been adopted to limit potential conflict between pedestrians, vehicular movements and the buildings servicing requirements (*Note: Councils traffic engineer will provide comment on the suitability of this proposal).*

The proposal provides active edges to its three street frontages. Refinements made to retail tenancy 6 have created the opportunity for a prominent outdoor café with space for outdoor seating on the corner of Crown and Corrimal Street. The inclusion of bike racks in this area is strongly supported, but it should be noted that their final locations should ensure that the amenity of outdoor café area is not compromised.

The distribution of built form across the site is generally well resolved. The treatment of the base of the building and its interface at street level contribute to active and appropriately scaled streets.

Resource, energy and water efficiency

At the pre-DA meeting the panel was informed by the applicant that contamination and PASS issues should guide opinions about the proposal to provide above-ground car parking. This was accepted at the time. It is now proposed that additional parking be constructed below-ground and that testing has now shown that PASS are not present. The justification for the additional parking is that it will allow flexibility for various types of tenants that would otherwise not use the development. The introduction of the additional basement level of parking raises the following concerns:

- Require off-site disposal of contaminated material (rather that on-site containment).

- Generation of additional traffic, (the site is well-served by public transport and measures that increase traffic should therefore be kept to a minimum).

- Increased flooding that will result around the perimeters of the site will also be less of a concern if no basement is constructed and the predicted sea-level increases eventuate.

Though it can be said that the additional level of basement car park will have minimal impact on the form or function of the proposal, the detrimental environmental impacts of this addition must be considered.

Landscape

A revised level 3 podium landscape plan has been provided, The quality of the space provided has improved significantly, spaces are now clearly defined and more functional. However it is recommended that the species list is reviewed by Councils landscape officer to prevent the introduction of potential weed species (Metrosideros may be of concern).

Amenity

The proposal appears to meet the numerical requirements of the RFDC for apartments in terms of solar access, maximum number of south facing units and cross ventilation, which is commendable for such a large urban scheme. Apartment layouts are generally good but could be improved in places if more priority was given to solar access, outlook and privacy rather than building expression.

Access to the apartments in towers is via long access corridors; while this is not ideal, they are all given views out and potential for solar access and natural ventilation, which is positive.

Some developments have been made to the town house access corridors at levels 1 and 2 to improve the quality of these spaces, Corridors have been configured in a more rational manner and opportunities to connect with the podium level improved. However the length of these corridors, travel distance from lifts and the lack of natural light / ventilation remain a concern. Consideration should be given to the following recommendations to improve the quality of access to the town houses:

- Consideration should be given to providing access from foyer A to the corridor servicing the west facing town houses at level, to shorten travel distance from lift to

unit. The travel distance from the level 1 lobby C to unit C111 is in excess of 50m in length, through a narrow internalised corridor. However this unit is only 20m away from the lifts servicing the lift lobby A (north western corner).

- Consideration should also be given to providing double height corridors with high windows and even occasional stairs to courtyard above; instead of providing car park storage in space above, the entry corridor could be well scaled and brilliantly lit. This could radically lifting amenity.

- Provide access from the car park directly into lift lobby B, level 2.

Access from the street to the apartment is generally very good with well sized lobbies, sensibly located for street address and active use. Adequate accesses from the lobbies of each building to the podium are now also provided.

Safety and security
A building management strategy has been adopted to limit potential conflict between pedestrians, vehicular movements and the buildings servicing requirements (*Note: Councils traffic engineer will provide comment on the suitability of this proposal).*

Social dimensions
The mix of residential and retail / commercial uses is considered appropriate for this site. The treatment of the proposal at street level will create the opportunity for active interfaces with the street, contributing to an active link between the city's retail / civic precincts and city beach.

Developments to the landscaped podium have now provided legibility, functional spaces with good access, protection and spatial coherence.

Aesthetics
The distribution of built form across the site is generally well resolved. The treatment of the base of the building activates and interacts with streets positively, introducing a variety of materials and proportional devices at a number of scales. This is commendable.

There has been little development to the aesthetic treatment of the towers, previous criticism made highlighting a treatment driven to create a specific look, rather than a rationally composed expression of the building's function, performance or environmental response remain unaddressed.

However, the proposal has reached an acceptable level and issues raised relating to the buildings aesthetics should be treated as subjective issues, ultimately for the architect to judge.

Conclusion / recommendation

The distribution of built form across the site is generally well resolved. The treatment of the base of the building and its interface at street level contribute to active appropriately scaled streets. A well resolved podium design will now provide functional spaces for residents.

The aesthetic treatments of the towers are considered adequate.

Some significant improvements have made during the design review process, in general terms the proposal responds appropriately to its immediate context and will provide a reasonable level of amenity to its occupants.

Further development of the levels 1 and 2 corridors is recommended to reduce travel distances and provide more natural light / ventilation.