Your ref
Our ref 229734/TE
File ref

ARUP

Level 10 201 Kent Street
PO Box 76 Millers Point
Sydney 2000
Australia

t +61 2 9320 9320
d +61 2 9320 9982
f +61 2 9320 9321

tim.elgood@arup.com
www.arup.com

Michael Azar
Ecove Group

21 July 2016

Dear Michael

Site 9 Sydney Olympic Park, 3 Olympic Boulevard proposed residential development. Expert Judgement related to BASIX alterations

The BASIX certificates for the proposed residential development at 3 Olympic Boulevard were provided in the Arup ESD report dated 2nd March 2016 submitted as part of the DA submission. The project fully complied with the BASIX requirements for water, energy and comfort with stamped BASIX plans and certificates. There have recently been a number of minor alterations for the proposed residential tower and this correspondence provides a review of these alterations and an expert judgement on the compliance of these alterations with BASIX.

An Expert Judgment as defined by the National Construction Code as the judgement of an expert who has the qualifications and experience to determine whether a building solution complies with the performance requirements. This expert judgement can also relate to opinions related to BASIX performance for energy, water and comfort for residential class 2 apartments.

The following alterations have been made to the proposed residential development that could potentially have an impact on the BASIX certification.

1. **Level 39 penthouse** – A new 270m^2 four bedroom apartment accessed via stairs off Level 38.
2. **Level 9** – Deleted 1 north-facing 2-Bedroom facing communal garden to accommodate bicycle store (relocated from Ground Floor).

It is our opinion that although the BASIX certificates will need to be revised to represent the changes the BASIX performance of the building will still be able to be achieved. The following points clarify our support of this statement:

- The key issue is that the Penthouse BASIX thermal comfort performance. The level 39 Penthouse apartment is large but the glass/ area to floor area in similar to the other apartments at approximately 30% glass area ratio to floor area.
- The main north east elevation and the narrow living room is favourable to passive winter heating which with reduce the BASIX winter energy requirements.

- The large overhang shade on the north evaluation will allow the penetration of welcome winter sun but will eliminate summer sun.
- The glazing for the façade will need to be a low *e* double glazing potentially with thermal breaks to improve the overall *U* value of the façade system. The solar performance (SHGC) of the glass will need to be assessed but we believe it will be a realistic range of SHCGC 0.3 to 0.5.
- The deletion of the one north facing apartment to accommodate bicycle storage will not impact the overall BASIX performance.

Overall the alterations will not impact the BASIX energy and water performance and the glass to the Penthouse will have to be assessed using the comfort tool to select the appropriate *U* value and SHGC performances required for BASIX complacence. The BASIX certificates will need to be revised prior to the Construction Certification stage of the project.

The architectural drawings that were reviewed as part of amendment are the Bates Smart Architectural drawing series DA.01 Revision B. These drawings have been attached to this letter.

Yours sincerely

Tim Elgood
Principal

Attachment- Bates Smart Architectural drawing series DA.01 Revision B

DA Drawing List

Drawing Number	Drawing Title		Current Revision
_DA00 TITLES			
DA00.000		Cover Sheet and Drawing List	B
_DA01 SITE			
DA01.001		Site Plan	B
DA01.002	Proximity to Rail Corridor	Site Plan + Building Envelope	B
DA01.003	Proximity to Rail Corridor	Aerial Photograph	B
_DA02 KEY			
DA02.001	General Arrangement Plan	Ground	B
DA02.002	General Arrangement Plan	Level 02	B
DA02.003	General Arrangement Plan	Level 03	B
DA02.004	General Arrangement Plan	Level 04	B
DA02.005	General Arrangement Plan	Level 05	B
DA02.006	General Arrangement Plan	Level 06	B
DA02.007	General Arrangement Plan	Level 07	B
DA02.008	General Arrangement Plan	Level 08	B
DA02.009	General Arrangement Plan	Level 09	B
DA02.010	General Arrangement Plan	Level 10, 12, 14	B
DA02.011	General Arrangement Plan	Level 11, 13	B
DA02.015	General Arrangement Plan	Level 15, 17, 19	B
DA02.016	General Arrangement Plan	Level 16, 18	B
DA02.020	General Arrangement Plan	Level 20, 22, 24, 26	B
DA02.021	General Arrangement Plan	Level 21, 23, 25	B
DA02.027	General Arrangement Plan	Level 27, 29, 31, 33, 35	B
DA02.028	General Arrangement Plan	Level 28, 30, 32, 34	B
DA02.036	General Arrangement Plan	Level 36-37	B
DA02.038	General Arrangement Plan	Level 38	B
DA02.039	General Arrangement Plan	Level 39	B
DA02.040	General Arrangement Plan	Roof Plan	A
_DA07 ELEVATIONS			
DA07.001	Building Elevations	Southwest	B
DA07.002	Building Elevations	NorthEast	B
DA07.003	Building Elevations	Northwest & Southeast	B
_DA08 SECTIONS			
DA08.001	Building Sections	A-A	B
DA08.002	Building Sections	B-B, C-C	B
_DA10 FACADE DETAILS			
DA10.001	Tower Facade	Conditions 01-04 - Indicative Detail Sections	B
_DA50 SHADOW STUDY			
DA50.001	Shadow Diagrams	Winter Solstice June 21	B

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Site 9, Sydney Olympic Park

S11890

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Notes - Construction General (BASIX)

Glazing
Doors / windows:
- Aluminium framed **single clear** glazing to internal windows that open to wintergardens
U-Value: 6.6 (equal to or lower than)
SHGC: 0.69 (+ or – 10%)

- Aluminium framed **double clear** glazing to curtain walls & glazing to balcony edge.
U-Value: 4.4 (equal to or lower than)
SHGC: 0.5 (+ or – 10%)

Given values are NFRC, total window values

Roof / ceiling insulation
Roof:
Concrete roof - No insulation

Default Colour modelled

Ceiling:
Plasterboard ceiling - R3.0 bulk insulation to selected units (34.01 and 34.07) with balconies above.

Plasterboard ceiling - R2.0 bulk insulation to all units to top floor, balconies above & slot areas above to all other units.

Note: It has been assumed at DA stage that the area of all ceiling penetrations is less than 0.5% of the total ceiling area. If down lights are proposed at a later stage, BCA loss of insulation calculations will be required.

Wall / floor insulation
External Wall:
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No colour nominated

Internal walls within units:
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Inter-tenancy walls / corridor:
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Floors:
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Concrete – no insulation required between units

Floor coverings:
1 & 2 bed apartments - tiles to wets areas, carpet to bedrooms and living areas as per plans
All 3 & 4 bed apartments tiled throughout

Central hot water system
Central gas-fired boiler with R1.0 (~38mm) insulation to ringmain and supply risers.

Reticulated alternative water
Alternative water supply available from Sydney Olympic Park Authority to be used for the irrigation of all landscaping & all toilets within the building
(No rainwater tank required for BASIX compliance)

Alternative energy
Not required by BASIX

Revision	Date	Description	Initial	Checked
B	20.07.16	Amended DA Issue	JS	CP
A	01.03.16	Development Application	JS	CP

Client: Ecove

ecove

Site 9, Sydney Olympic Park
3 Olympic Boulevard

Site Plan

Status	Development Application
Scale	1 : 300 @ A1
Drawn	Author
Checked	Checker
Project No.	S11890
Plot Date	20/07/2016 2:54:48 PM
Plot File	
Drawing no.	DA01.001
Revision	B

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
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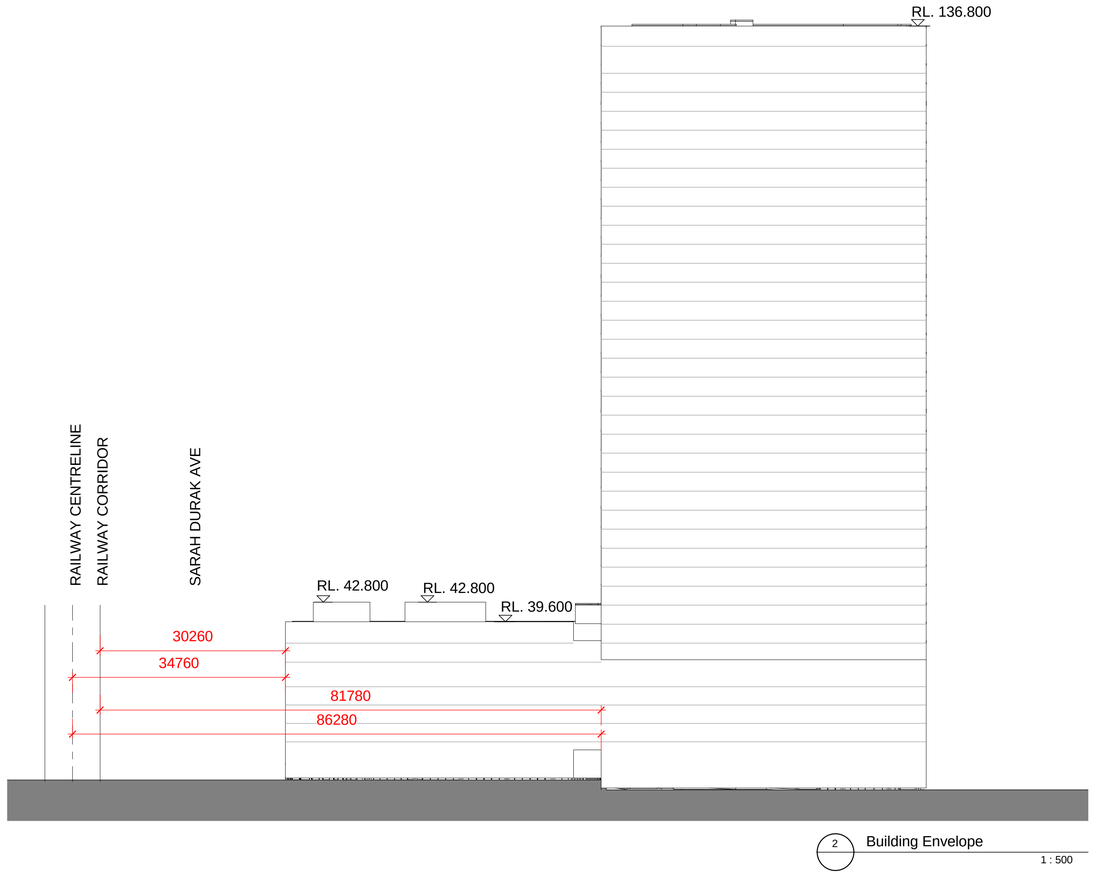
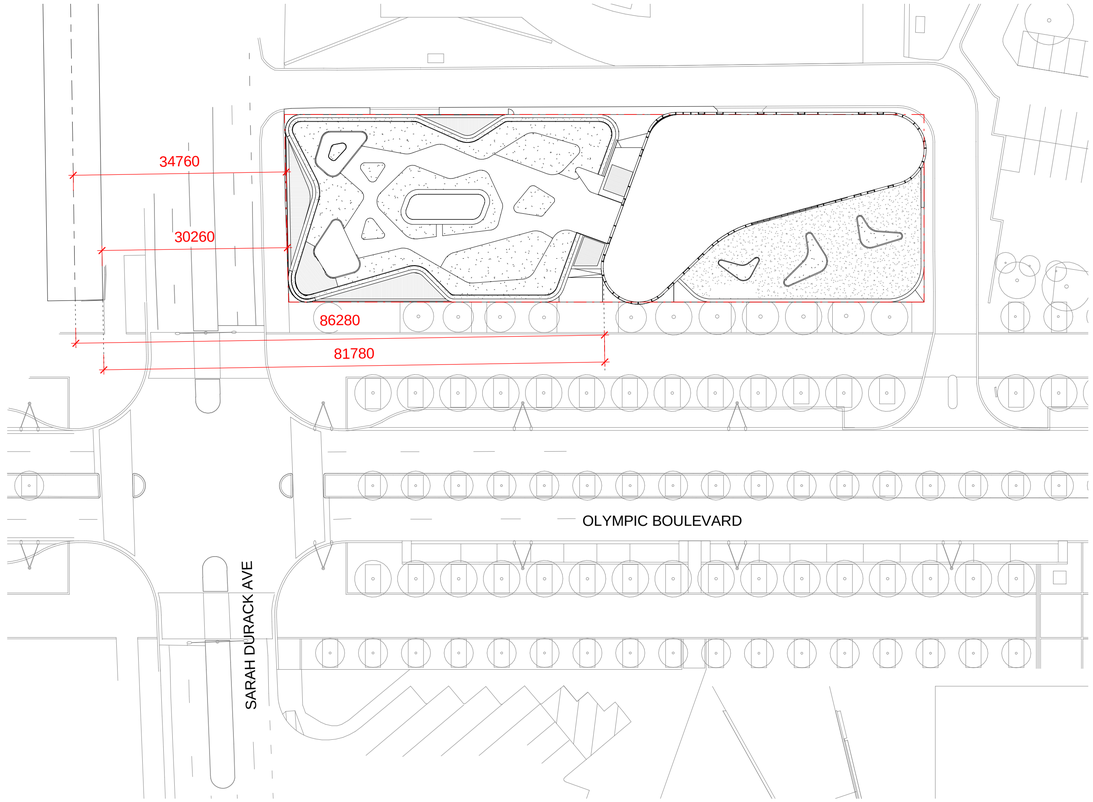


2 Building Envelope

1 : 500



1 Site Plan

1 : 500

C:\temp\59_BIS_ARCH_DA_PAN.rvt

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B	20.07.16	Amended DA Issue	JS	CP
A	01.03.16	Development Application	JS	CP

Client: Ecove

Site 9, Sydney Olympic Park
3 Olympic Boulevard

Proximity to Rail Corridor
Site Plan + Building Envelope

Status	Development Application
Scale	As indicated @ A1
Drawn	Author
Checked	Checker
Project No.	S11890
Plot Date	20/07/2016 2:55:40 PM
Plot File	
Drawing no.	DA01.002
Revision	B

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

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1 Aerial Photograph

1 : 500

C:\temp\59_BS_ARCH_DA_PAN.rvt

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B	20.07.16	Amended DA Issue	JS	CP
A	01.03.16	Development Application	JS	CP

Client: Ecove

ecove

Site 9, Sydney Olympic Park
3 Olympic Boulevard

Proximity to Rail Corridor
Aerial Photograph

Status	Development Application
Scale	As indicated @ A1
Drawn	Author
Checked	Checker
Project No.	S11890
Plot Date	20/07/2016 2:56:14 PM
Plot File	
Drawing no.	DA01.003
Revision	B

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

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Alternative energy
Not required by BASIX

Revision	Date	Description	Initial	Checked
B	20.07.16	Amended DA Issue	JS	CP
A	01.03.16	Development Application	JS	CP

Client: Ecove

ecove®

Site 9, Sydney Olympic Park
3 Olympic Boulevard

General Arrangement Plan
Ground

Status	Development Application
Scale	1 : 200 @ A1
Drawn	JS
Checked	CP
Project No.	S11890
Plot Date	20/07/2016 2:56:40 PM
Plot File	
Drawing no.	DA02.001
Revision	B

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
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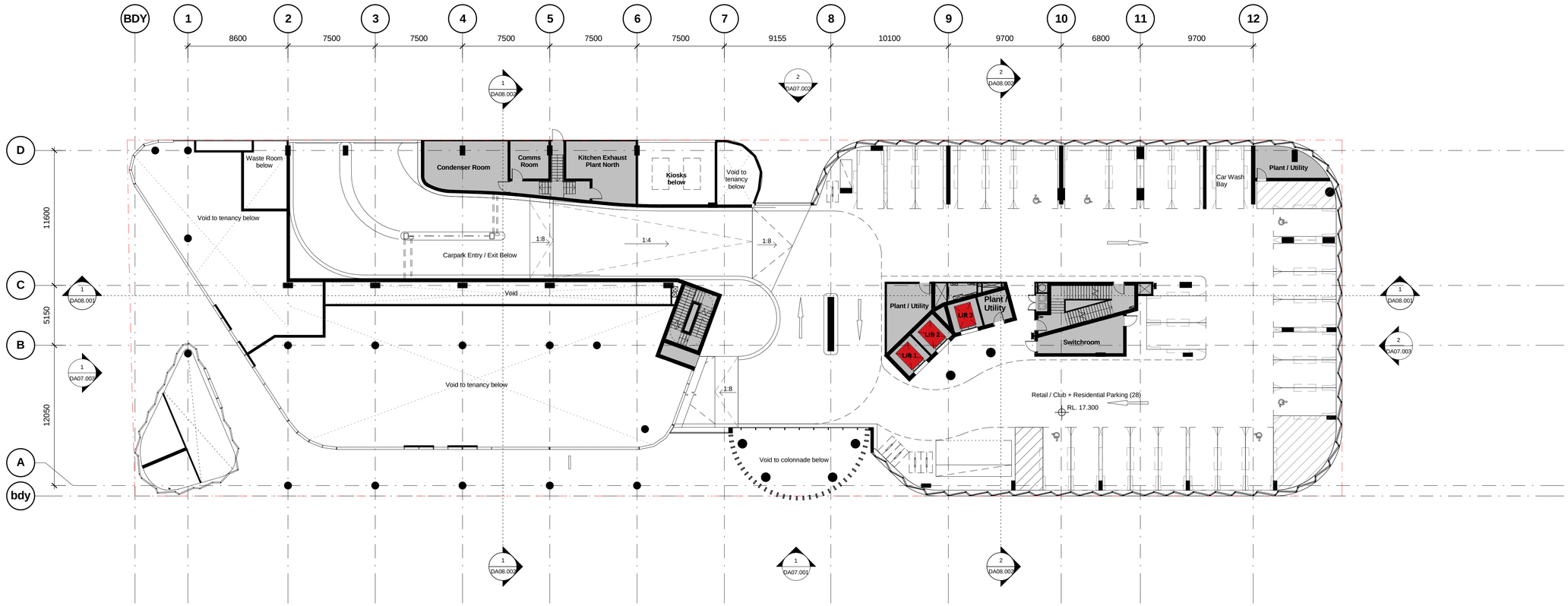

Legend - General

BG	Bulky Goods
	Storage Cage

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Reticulated alternative water
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(No rainwater tank required for BASIX compliance)

Alternative energy
Not required by BASIX

Revision	Date	Description	Initial	Checked
B	20.07.16	Amended DA Issue	JS	CP
A	01.03.16	Development Application	JS	CP

Client: Ecove

Site 9, Sydney Olympic Park
3 Olympic Boulevard

General Arrangement Plan
Level 02

Status	Development Application
Scale	1 : 200 @ A1
Drawn	Author
Checked	Checker
Project No.	S11890
Plot Date	20/07/2016 2:57:01 PM
Plot File	
Drawing no.	DA02.002
Revision	B

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
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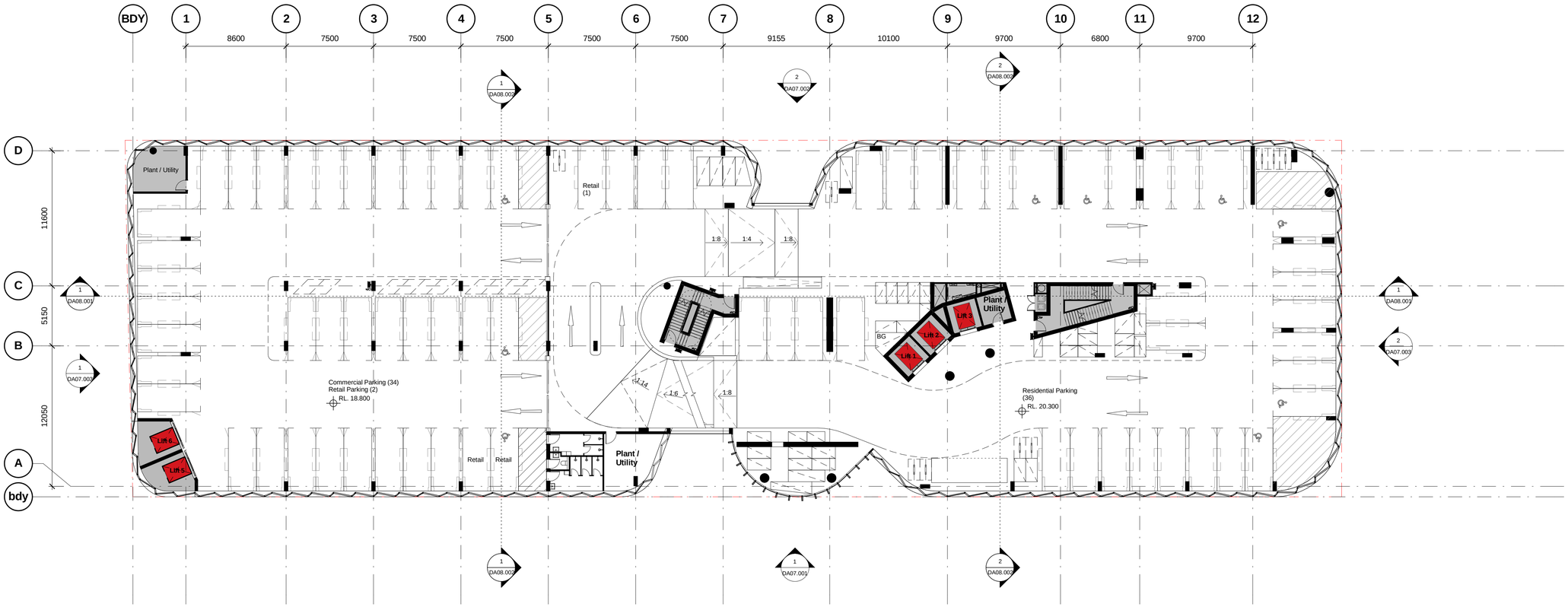

Legend - General

BG	Bulky Goods
	Storage Cage

Notes - Construction General (BASIX)

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Alternative energy
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Revision	Date	Description	Initial	Checked
B	20.07.16	Amended DA Issue	JS	CP
A	01.03.16	Development Application	JS	CP

Client: Ecove

Site 9, Sydney Olympic Park
3 Olympic Boulevard

General Arrangement Plan
Level 03

Status	Development Application		
Scale	1 : 200	@ A1	
Drawn	Author	Checked	Checker
Project No.	S11890		
Plot Date	20/07/2016 2:57:20 PM		
Plot File			
Drawing no.	DA02.003	Revision	B

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
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Bates Smart Pty Ltd ABN 70 004 999 400

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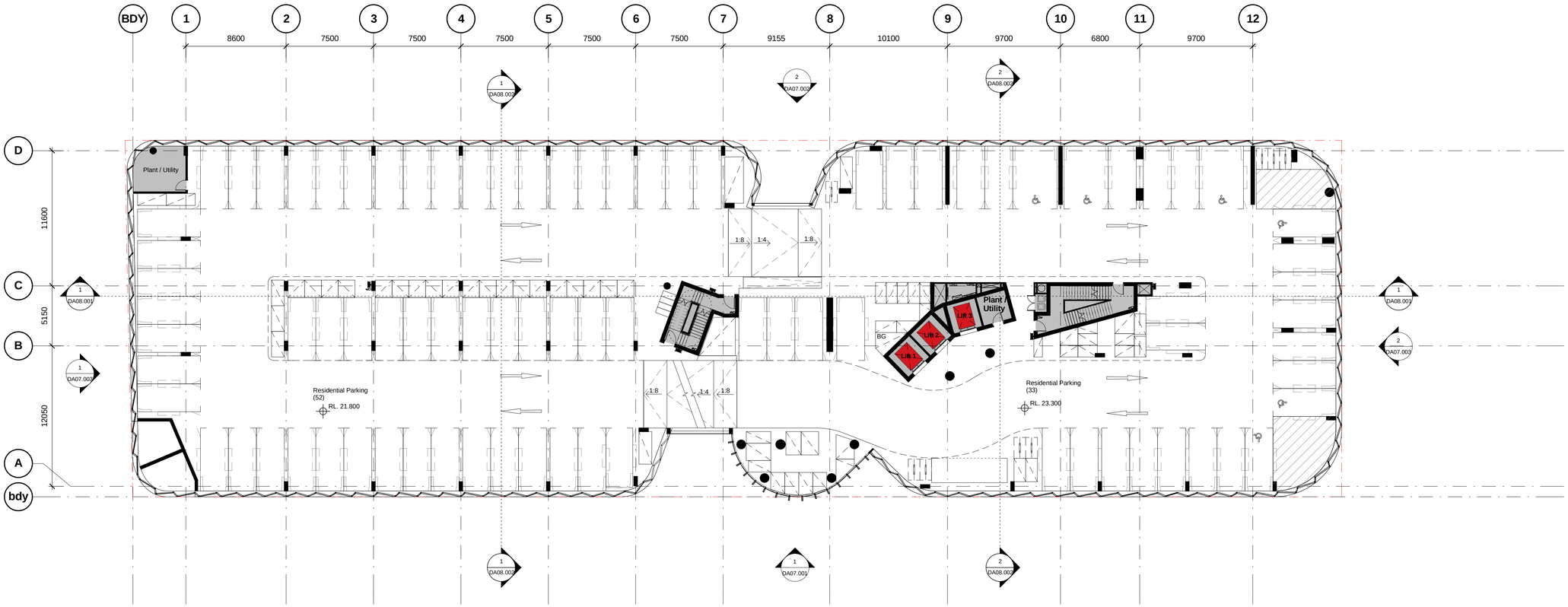
Legend - General

BG	Bulky Goods
	Storage Cage



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Revision	Date	Description	Initial	Checked
B	20.07.16	Amended DA Issue	JS	CP
A	01.03.16	Development Application	JS	CP

Client: Ecove

Site 9, Sydney Olympic Park
3 Olympic Boulevard

General Arrangement Plan
Level 04

Status	Development Application
Scale	1 : 200 @ A1
Drawn	Author
Checked	Checker
Project No.	S11890
Plot Date	20/07/2016 2:57:39 PM
Plot File	
Drawing no.	DA02.004
Revision	B

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Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Pty Ltd ABN 70 004 999 400

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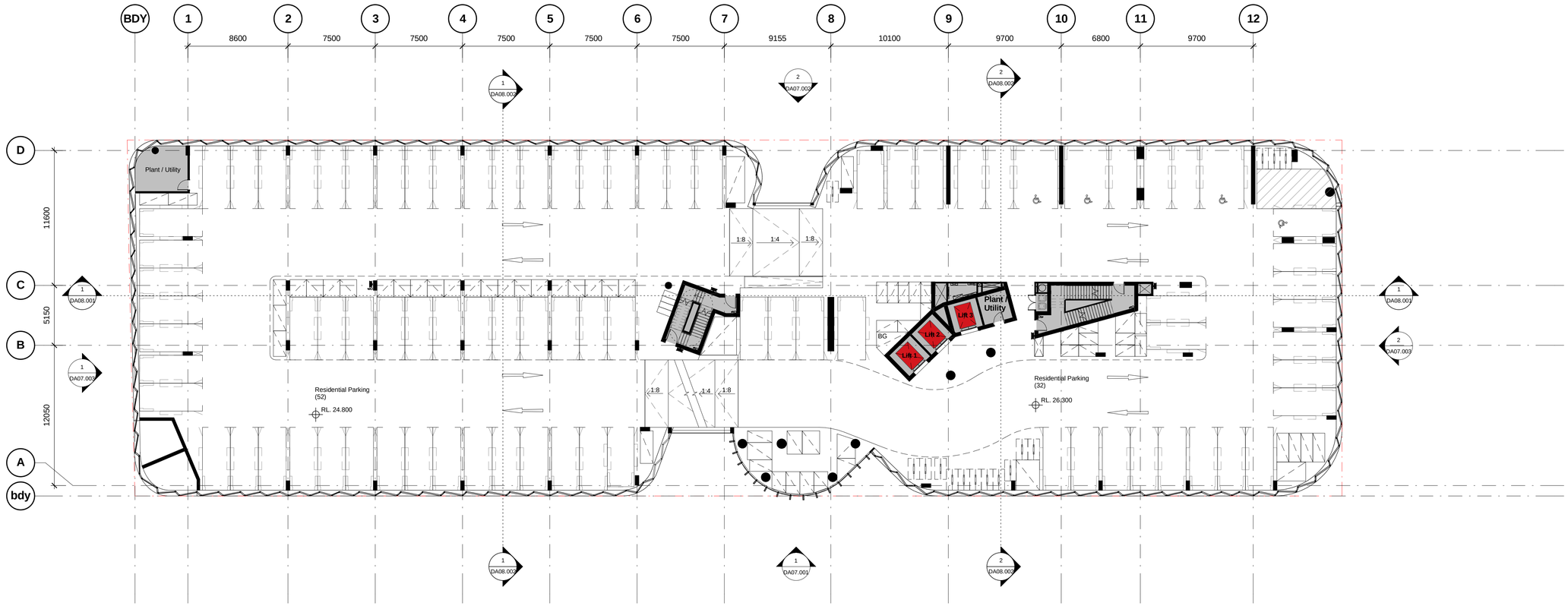

Legend - General

BG	Bulky Goods
	Storage Cage

Notes - Construction General (BASIX)

Glazing
Doors / windows:
- Aluminium framed **single clear** glazing to internal windows that open to wintergardens
U-Value: 6.6 (equal to or lower than)
SHGC: 0.69 (+ or – 10%)

- Aluminium framed **double clear** glazing to curtain walls & glazing to balcony edge.
U-Value: 4.4 (equal to or lower than)
SHGC: 0.5 (+ or – 10%)

Given values are NFRC, total window values

Roof / ceiling insulation
Roof:
Concrete roof - No insulation

Default Colour modelled

Ceiling:
Plasterboard ceiling - R3.0 bulk insulation to selected units (34.01 and 34.07) with balconies above.

Plasterboard ceiling - R2.0 bulk insulation to all units to top floor, balconies above & slot areas above to all other units.

Note: It has been assumed at DA stage that the area of all ceiling penetrations is less than 0.5% of the total ceiling area. If down lights are proposed at a later stage, BCA loss of insulation calculations will be required.

Wall / floor insulation
External Wall:
Lightweight cladding to all external walls with R1.5 bulk insulation
No colour nominated

Internal walls within units:
Plasterboard on studs - no insulation

Inter-tenancy walls / corridor:
75mm hebel power panel plasterboard lined with R2.0 acoustic insulation **to selected units only (7.01 and 8.01)**

75mm hebel power panel plasterboard lined with R1.5 acoustic insulation to all other units.

Floors:
Concrete – R2.1 insulation to all units in level 7 with car park below
Concrete – no insulation required between units

Floor coverings:
1 & 2 bed apartments - tiles to wets areas, carpet to bedrooms and living areas as per plans
All 3 & 4 bed apartments tiled throughout

Central hot water system
Central gas-fired boiler with R1.0 (~38mm) insulation to ringmain and supply risers.

Reticulated alternative water
Alternative water supply available from Sydney Olympic Park Authority to be used for the irrigation of all landscaping & all toilets within the building
(No rainwater tank required for BASIX compliance)

Alternative energy
Not required by BASIX

Revision	Date	Description	Initial	Checked
B	20.07.16	Amended DA Issue	JS	CP
A	01.03.16	Development Application	JS	CP

Client: Ecove

Site 9, Sydney Olympic Park
3 Olympic Boulevard

General Arrangement Plan
Level 05

Status	Development Application
Scale	1 : 200 @ A1
Drawn	Author
Checked	Checker
Project No.	S11890
Plot Date	20/07/2016 2:57:58 PM
Plot File	
Drawing no.	DA02.005
Revision	B

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

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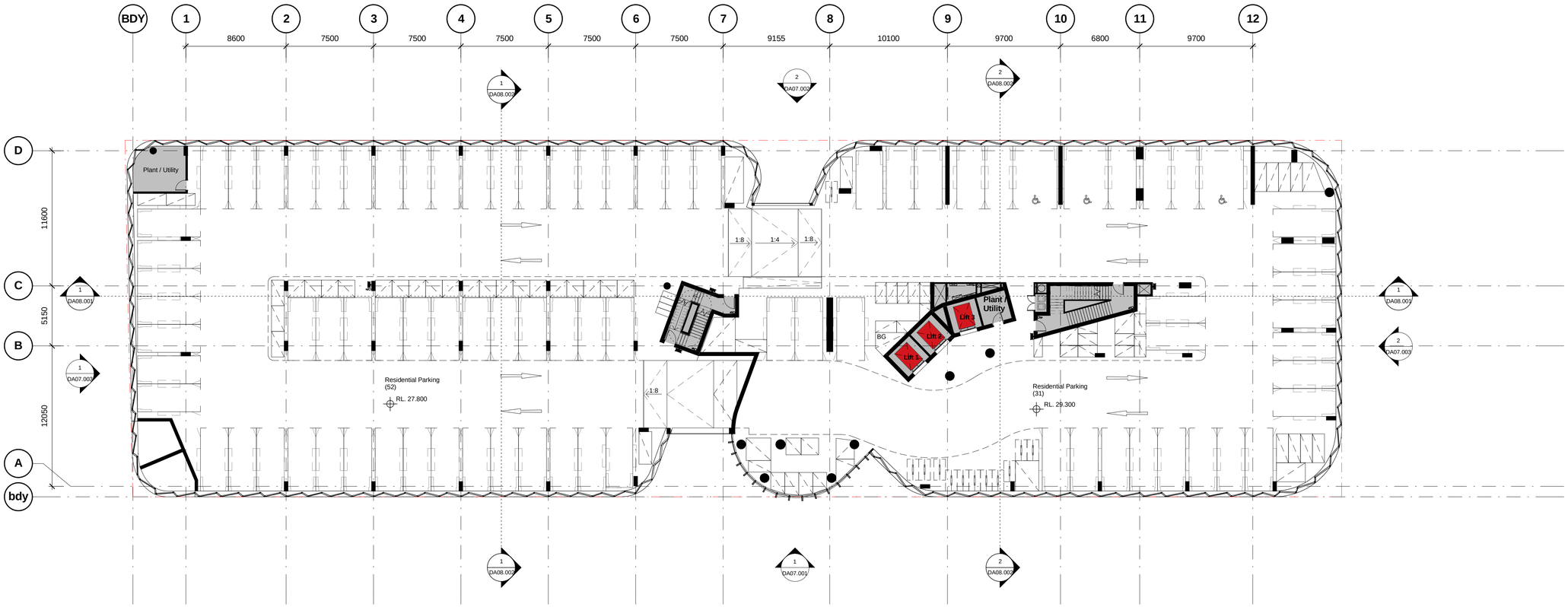
Legend - General

BG	Bulky Goods
	Storage Cage



Notes - Construction General (BASIX)

Glazing
Doors / windows:
- Aluminium framed **single clear** glazing to internal windows that open to wintergardens
U-Value: 6.6 (equal to or lower than)
SHGC: 0.69 (+ or – 10%)

- Aluminium framed **double clear** glazing to curtain walls & glazing to balcony edge.
U-Value: 4.4 (equal to or lower than)
SHGC: 0.5 (+ or – 10%)

Given values are NFRC, total window values

Roof / ceiling insulation
Roof:
Concrete roof - No insulation

Default Colour modelled

Ceiling:
Plasterboard ceiling - R3.0 bulk insulation to selected units (34.01 and 34.07) with balconies above.

Plasterboard ceiling - R2.0 bulk insulation to all units to top floor, balconies above & slot areas above to all other units.

Note: It has been assumed at DA stage that the area of all ceiling penetrations is less than 0.5% of the total ceiling area. If down lights are proposed at a later stage, BCA loss of insulation calculations will be required.

Wall / floor insulation
External Wall:
Lightweight cladding to all external walls with R1.5 bulk insulation
No colour nominated

Internal walls within units:
Plasterboard on studs - no insulation

Inter-tenancy walls / corridor:
75mm hebel power panel plasterboard lined with R2.0 acoustic insulation **to selected units only (7.01 and 8.01)**

75mm hebel power panel plasterboard lined with R1.5 acoustic insulation to all other units.

Floors:
Concrete – R2.1 insulation to all units in level 7 with car park below
Concrete – no insulation required between units

Floor coverings:
1 & 2 bed apartments - tiles to wets areas, carpet to bedrooms and living areas as per plans
All 3 & 4 bed apartments tiled throughout

Central hot water system
Central gas-fired boiler with R1.0 (~38mm) insulation to ringmain and supply risers.

Reticulated alternative water
Alternative water supply available from Sydney Olympic Park Authority to be used for the irrigation of all landscaping & all toilets within the building
(No rainwater tank required for BASIX compliance)

Alternative energy
Not required by BASIX

Revision	Date	Description	Initial	Checked
B	20.07.16	Amended DA Issue	JS	CP
A	01.03.16	Development Application	JS	CP

Client: Ecove

Site 9, Sydney Olympic Park
3 Olympic Boulevard

General Arrangement Plan
Level 06

Status	Development Application
Scale	1 : 200 @ A1
Drawn	Author
Checked	Checker
Project No.	S11890
Plot Date	20/07/2016 2:58:17 PM
Plot File	
Drawing no.	DA02.006
Revision	B

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

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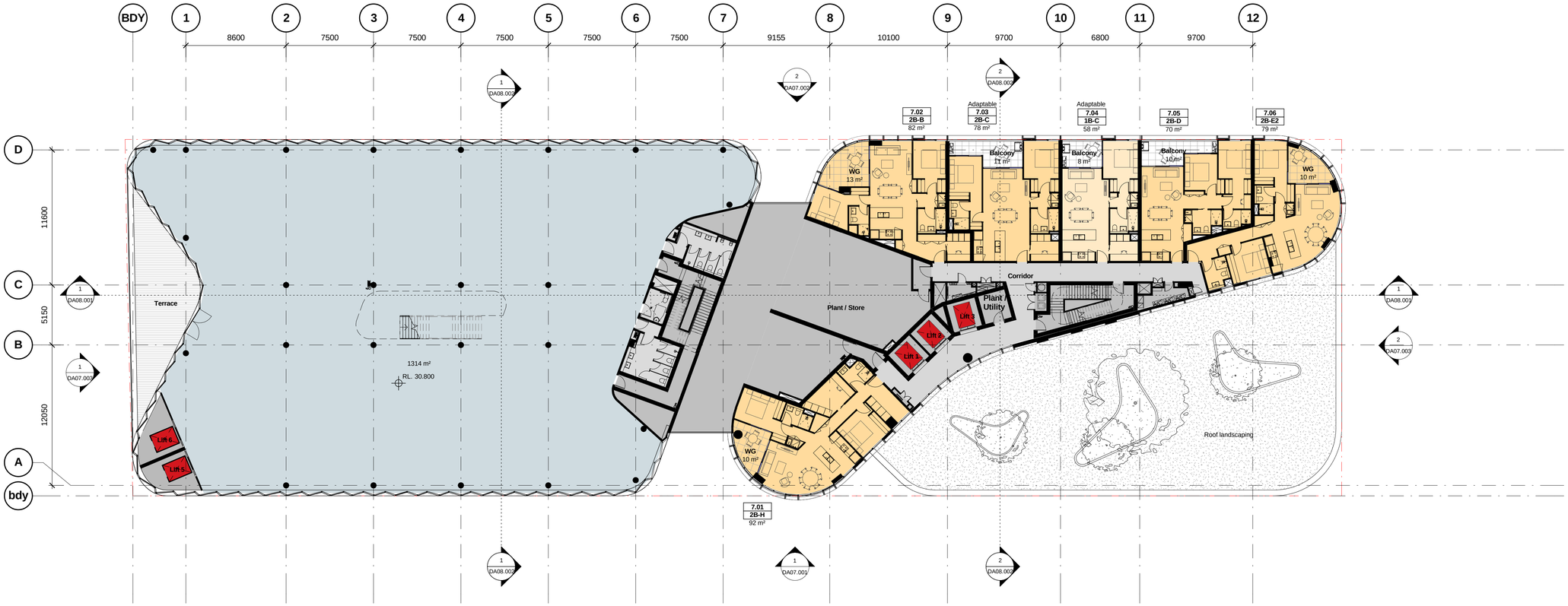

Notes - Construction General (BASIX)

Glazing
Doors / windows:
- Aluminium framed **single clear** glazing to internal windows that open to wintergardens
U-Value: 6.6 (equal to or lower than)
SHGC: 0.69 (+ or – 10%)

- Aluminium framed **double clear** glazing to curtain walls & glazing to balcony edge.
U-Value: 4.4 (equal to or lower than)
SHGC: 0.5 (+ or – 10%)

Given values are NFRC, total window values

Roof / ceiling insulation
Roof:
Concrete roof - No insulation

Default Colour modelled

Ceiling:
Plasterboard ceiling - R3.0 bulk insulation to selected units (34.01 and 34.07) with balconies above.

Plasterboard ceiling - R2.0 bulk insulation to all units to top floor, balconies above & slot areas above to all other units.

Note: It has been assumed at DA stage that the area of all ceiling penetrations is less than 0.5% of the total ceiling area. If down lights are proposed at a later stage, BCA loss of insulation calculations will be required.

Wall / floor insulation
External Wall:
Lightweight cladding to all external walls with R1.5 bulk insulation
No colour nominated

Internal walls within units:
Plasterboard on studs - no insulation

Inter-tenancy walls / corridor:
75mm hebel power panel plasterboard lined with R2.0 acoustic insulation **to selected units only (7.01 and 8.01)**

75mm hebel power panel plasterboard lined with R1.5 acoustic insulation to all other units.

Floors:
Concrete – R2.1 insulation to all units in level 7 with car park below
Concrete – no insulation required between units

Floor coverings:
1 & 2 bed apartments - tiles to wets areas, carpet to bedrooms and living areas as per plans
All 3 & 4 bed apartments tiled throughout

Central hot water system
Central gas-fired boiler with R1.0 (~38mm) insulation to ringmain and supply risers.

Reticulated alternative water
Alternative water supply available from Sydney Olympic Park Authority to be used for the irrigation of all landscaping & all toilets within the building
(No rainwater tank required for BASIX compliance)

Alternative energy
Not required by BASIX

Revision	Date	Description	Initial	Checked
B	20.07.16	Amended DA Issue	JS	CP
A	01.03.16	Development Application	JS	CP

Client: Ecove

Site 9, Sydney Olympic Park
3 Olympic Boulevard

General Arrangement Plan
Level 07

Status	Development Application
Scale	1 : 200 @ A1
Drawn	Author
Checked	Checker
Project No.	S11890
Plot Date	20/07/2016 4:17:43 PM
Plot File	
Drawing no.	DA02.007
Revision	B

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

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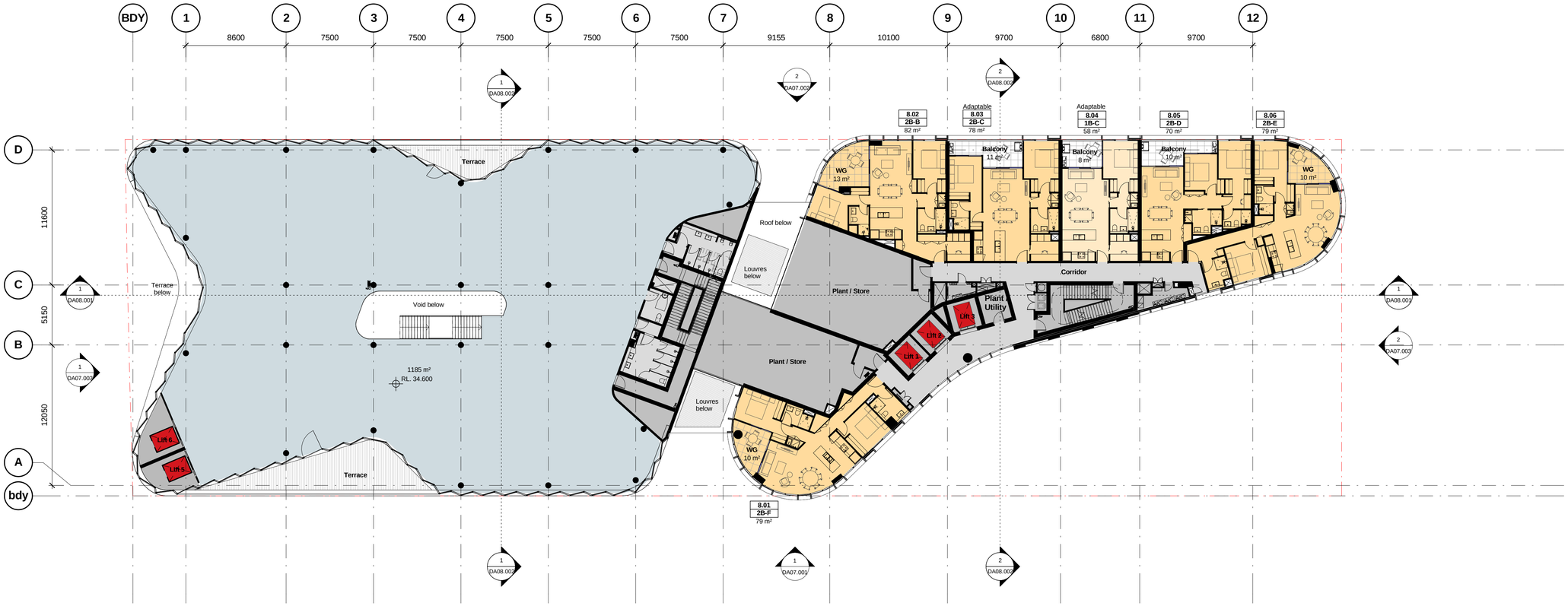

Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and or the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification.

Notes - Construction General (BASIX)

Glazing
Doors / windows:
- Aluminium framed **single clear** glazing to internal windows that open to wintergardens
U-Value: 6.6 (equal to or lower than)
SHGC: 0.69 (+ or – 10%)

- Aluminium framed **double clear** glazing to curtain walls & glazing to balcony edge.
U-Value: 4.4 (equal to or lower than)
SHGC: 0.5 (+ or – 10%)

Given values are NFRC, total window values

Roof / ceiling insulation
Roof:
Concrete roof - No insulation

Default Colour modelled

Ceiling:
Plasterboard ceiling - R3.0 bulk insulation to selected units (34.01 and 34.07) with balconies above.

Plasterboard ceiling - R2.0 bulk insulation to all units to top floor, balconies above & slot areas above to all other units.

Note: It has been assumed at DA stage that the area of all ceiling penetrations is less than 0.5% of the total ceiling area. If down lights are proposed at a later stage, BCA loss of insulation calculations will be required.

Wall / floor insulation
External Wall:
Lightweight cladding to all external walls with R1.5 bulk insulation
No colour nominated

Internal walls within units:
Plasterboard on studs - no insulation

Inter-tenancy walls / corridor:
75mm hebel power panel plasterboard lined with R2.0 acoustic insulation **to selected units only (7.01 and 8.01)**

75mm hebel power panel plasterboard lined with R1.5 acoustic insulation to all other units.

Floors:
Concrete – R2.1 insulation to all units in level 7 with car park below
Concrete – no insulation required between units

Floor coverings:
1 & 2 bed apartments - tiles to wets areas, carpet to bedrooms and living areas as per plans
All 3 & 4 bed apartments tiled throughout

Central hot water system
Central gas-fired boiler with R1.0 (~38mm) insulation to ringmain and supply risers.

Reticulated alternative water
Alternative water supply available from Sydney Olympic Park Authority to be used for the irrigation of all landscaping & all toilets within the building
(No rainwater tank required for BASIX compliance)

Alternative energy
Not required by BASIX

Revision	Date	Description	Initial	Checked
B	20.07.16	Amended DA Issue	JS	CP
A	01.03.16	Development Application	JS	CP

Client: Ecove

Site 9, Sydney Olympic Park
3 Olympic Boulevard

General Arrangement Plan
Level 08

Status	Development Application
Scale	1 : 200 @ A1
Drawn	Author
Checked	Checker
Project No.	S11890
Plot Date	20/07/2016 2:59:01 PM
Plot File	
Drawing no.	DA02.008
Revision	B

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

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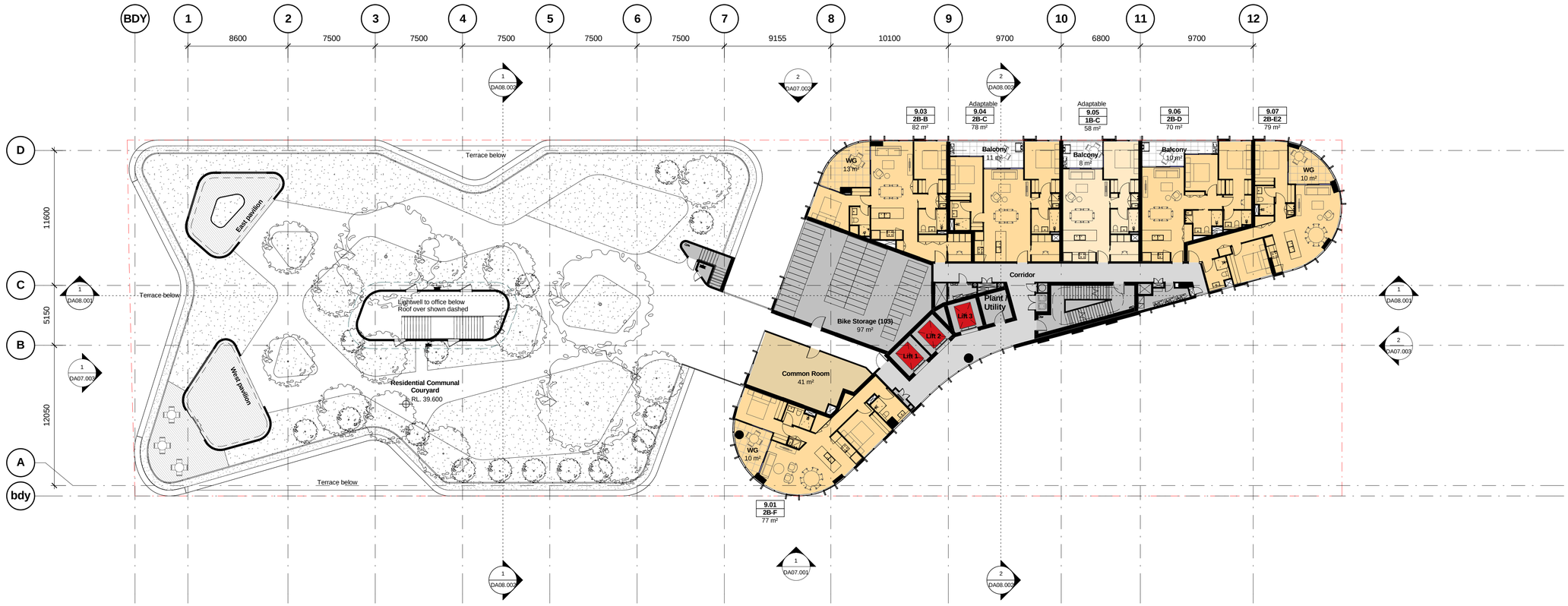

Notes - Construction General (BASIX)

Glazing
Doors / windows:
- Aluminium framed **single clear** glazing to internal windows that open to wintergardens
U-Value: 6.6 (equal to or lower than)
SHGC: 0.69 (+ or – 10%)

- Aluminium framed **double clear** glazing to curtain walls & glazing to balcony edge.
U-Value: 4.4 (equal to or lower than)
SHGC: 0.5 (+ or – 10%)

Given values are NFRC, total window values

Roof / ceiling insulation
Roof:
Concrete roof - No insulation

Default Colour modelled

Ceiling:
Plasterboard ceiling - R3.0 bulk insulation to selected units (34.01 and 34.07) with balconies above.

Plasterboard ceiling - R2.0 bulk insulation to all units to top floor, balconies above & slot areas above to all other units.

Note: It has been assumed at DA stage that the area of all ceiling penetrations is less than 0.5% of the total ceiling area. If down lights are proposed at a later stage, BCA loss of insulation calculations will be required.

Wall / floor insulation
External Wall:
Lightweight cladding to all external walls with R1.5 bulk insulation
No colour nominated

Internal walls within units:
Plasterboard on studs - no insulation

Inter-tenancy walls / corridor:
75mm hebel power panel plasterboard lined with R2.0 acoustic insulation **to selected units only (7.01 and 8.01)**

75mm hebel power panel plasterboard lined with R1.5 acoustic insulation to all other units.

Floors:
Concrete – R2.1 insulation to all units in level 7 with car park below
Concrete – no insulation required between units

Floor coverings:
1 & 2 bed apartments - tiles to wets areas, carpet to bedrooms and living areas as per plans
All 3 & 4 bed apartments tiled throughout

Central hot water system
Central gas-fired boiler with R1.0 (~38mm) insulation to ringmain and supply risers.

Reticulated alternative water
Alternative water supply available from Sydney Olympic Park Authority to be used for the irrigation of all landscaping & all toilets within the building
(No rainwater tank required for BASIX compliance)

Alternative energy
Not required by BASIX

Revision	Date	Description	Initial	Checked
B	20.07.16	Amended DA Issue	JS	CP
A	01.03.16	Development Application	JS	CP

Client: Ecove

Site 9, Sydney Olympic Park
3 Olympic Boulevard

General Arrangement Plan
Level 09

Status	Development Application
Scale	1 : 200 @ A1
Drawn	Author
Checked	Checker
Project No.	S11890
Plot Date	20/07/2016 2:59:31 PM
Plot File	
Drawing no.	DA02.009
Revision	B

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

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Notes - Construction General (BASIX)

Glazing
Doors / windows:
- Aluminium framed **single clear** glazing to internal windows that open to wintergardens
U-Value: 6.6 (equal to or lower than)
SHGC: 0.69 (+ or – 10%)

- Aluminium framed **double clear** glazing to curtain walls & glazing to balcony edge.
U-Value: 4.4 (equal to or lower than)
SHGC: 0.5 (+ or – 10%)

Given values are NFRC, total window values

Roof / ceiling insulation
Roof:
Concrete roof - No insulation

Default Colour modelled

Ceiling:
Plasterboard ceiling - R3.0 bulk insulation to selected units (34.01 and 34.07) with balconies above.

Plasterboard ceiling - R2.0 bulk insulation to all units to top floor, balconies above & slot areas above to all other units.

Note: It has been assumed at DA stage that the area of all ceiling penetrations is less than 0.5% of the total ceiling area. If down lights are proposed at a later stage, BCA loss of insulation calculations will be required.

Wall / floor insulation
External Wall:
Lightweight cladding to all external walls with R1.5 bulk insulation
No colour nominated

Internal walls within units:
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Inter-tenancy walls / corridor:
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75mm hebel power panel plasterboard lined with R1.5 acoustic insulation to all other units.

Floors:
Concrete – R2.1 insulation to all units in level 7 with car park below
Concrete – no insulation required between units

Floor coverings:
1 & 2 bed apartments - tiles to wets areas, carpet to bedrooms and living areas as per plans
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Central gas-fired boiler with R1.0 (~38mm) insulation to ringmain and supply risers.

Reticulated alternative water
Alternative water supply available from Sydney Olympic Park Authority to be used for the irrigation of all landscaping & all toilets within the building
(No rainwater tank required for BASIX compliance)

Alternative energy
Not required by BASIX

Revision	Date	Description	Initial	Checked
B	20.07.16	Amended DA Issue	JS	CP
A	01.03.16	Development Application	JS	CP

Client: Ecove

Site 9, Sydney Olympic Park
3 Olympic Boulevard

General Arrangement Plan
Level 10, 12, 14

Status	Development Application
Scale	1 : 100 @ A1
Drawn	Author
Checked	Checker
Project No.	S11890
Plot Date	20/07/2016 2:59:51 PM
Plot File	
Drawing no.	DA02.010
Revision	B

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

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