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Katherine Jones
Barton Willmore
The Blade
Abbey Square
Reading
RG1 3BE

20 April 2018

Dear Katherine,

Re: Cox & Wyman, Cardiff Road, Reading – Internal Daylight / Sunlight
Local Authority Planning Reference: 171814

Introduction

We refer to the planning application at Cox & Wyman Ltd, Cardiff Road, Reading under planning reference 171814. As part of the planning application, EB7 Ltd provided a report with regard to the daylight / sunlight levels within the surrounding properties and sunlight amenity within the proposed scheme.

We understand that following the submission of the planning application, an assessment of the daylight / sunlight levels within the proposed accommodation has been requested.

Guidance

Daylight & sunlight for planning

Site layout planning for daylight and sunlight: a guide to good practice, BRE 2011

This document follows from previous guidance produced by Her Majesty's Stationary Office (HMSO) on daylight and sunlight in the built environment and is now the accepted methodology used by local authorities for assessing daylight and sunlight in relation to new developments. It provides methods for the calculation of daylight and sunlight impacts of development upon existing surrounding properties and within proposed new dwellings.

Daylight Assessment

The Average Daylight Factor (ADF) method calculates the average illuminance within a room as a proportion of the illuminance available to an unobstructed point outdoors under a sky of known

luminance and luminance distribution. This is the most detailed of the daylight calculations and considers the physical nature of the room behind the window, including; window transmittance, and surface reflectivity. The BRE guidelines / British Standard sets the following recommended ADF levels for habitable room uses:

- 1% Bedrooms
- 1.5% Living Rooms
- 2.0% Kitchens

Policy Context

It is important to note that within urban centres achieving good levels of daylight and sunlight in accordance with the BRE guidelines, can be weighed in the balance against other beneficial design factors.

The opening paragraphs of the BRE guidelines state: -

"The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and the document should not be seen as an instrument of planning policy. Its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly because natural lighting is only one of many factors in site layout design. In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings".

Daylight results

The full results of the further technical analysis, together with the corresponding drawings are appended to this letter.

The results of the ADF assessment have shown that 76 (95%) of 80 rooms assessed achieve ADF levels meeting or exceeding the targets for their specific room use.

The remaining 4 rooms are Living / Kitchen / Dining (L/K/D) rooms situated within the apartments. These rooms can be identified as R5, R6, R14 and R14 and indicate ADF levels of between 1.1% - 1.7%.

These multi-use rooms are inherently deeper than standalone kitchens or living rooms and this should be considered when applying the BRE targets. Within each of these rooms, the kitchen is situated to rear of the room, with the main living room being situated by the windows. Whilst these rooms indicate levels below the suggested target for a kitchen, these rooms show daylight levels close to or in excess of the living room target.

In addition, each of these windows are situated beneath an overhanging balcony. Balconies provide the occupiers with private external amenity, however do directly limit the daylight potential to the room set

beneath. As mentioned above, the BRE guidelines provides a degree of flexibility where other factors are to be considered. The use and enjoyment of a balcony over daylight levels marginally below those suggested can therefore act as trade-off which may be considered acceptable under the flexibility recommended in the BRE criteria where there are conflicting considerations.

Given the nature of the rooms, coupled with the overhanging balconies, the results should be considered to be isolated daylight breaches and as such should be considered acceptable and in line with the overall intentions of the BRE criteria.

Sunlight results

The BRE guidelines suggests that windows orientated towards due south will in general in receive the most sunlight. In addition, the BRE guidelines provides that main living spaces are the most important when considering sunlight, with secondary rooms such as bedrooms as being less important. As such, the rooms orientated towards 90° of due south have been considered within our technical analysis.

The results of the APSH sunlight assessment have shown that 20 of the 26 rooms orientated towards 90° of due south achieve APSH levels on or in excess of the BRE targets.

Of the remaining 6 rooms, 4 are bedrooms (identified as R2, R4, R7 within the apartments and R7 within House Type D.02 within the townhouses) and 2 are L/K/D's (identified as R5 and R6 within the apartments).

Each of these rooms are principally east facing and this orientation directly causes a lower potential for direct sunlight (only 50% of total sunlight is available). In addition the L/K/D's also have windows situated beneath overhanging balconies and this further limits direct sunlight levels.

Whilst these rooms indicate deviations from the suggested targets, given the orientation, coupled with the constraining balconies, the results should be considered acceptable when considering the site wide constraints.

Conclusions

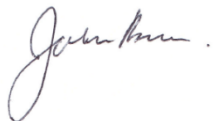
The daylight / sunlight levels within the proposed scheme at Cox & Wyman, Cardiff Road have been assessed using the ADF / APSH assessment as recommend within the BRE document 'Site layout planning for daylight and sunlight' and the British Standard document BS8206 pt2.

The results of the technical analysis show the vast majority of rooms are compliant with the ADF targets. There are small number of L/K/D's that indicate levels below the suggested targets, however these rooms are situated beneath self-limiting balconies. The BRE guidelines allows a degree of flexibility where other factors are to be considered and as such, the results should be considered acceptable and in line with the overall intentions of the BRE guidelines.

In addition, the results of the APSH sunlighting assessment have shown that the vast majority of rooms relevant for assessment indicate sunlight levels in line with the suggested targets. The remaining rooms below the targets, show these levels principally due to the orientation and further constraints. As such, these isolated incidences should be considered in line with the overall intentions of the BRE criteria.

I trust the above is useful, please feel free to contact us if you have any further questions regarding this letter.

Yours sincerely,

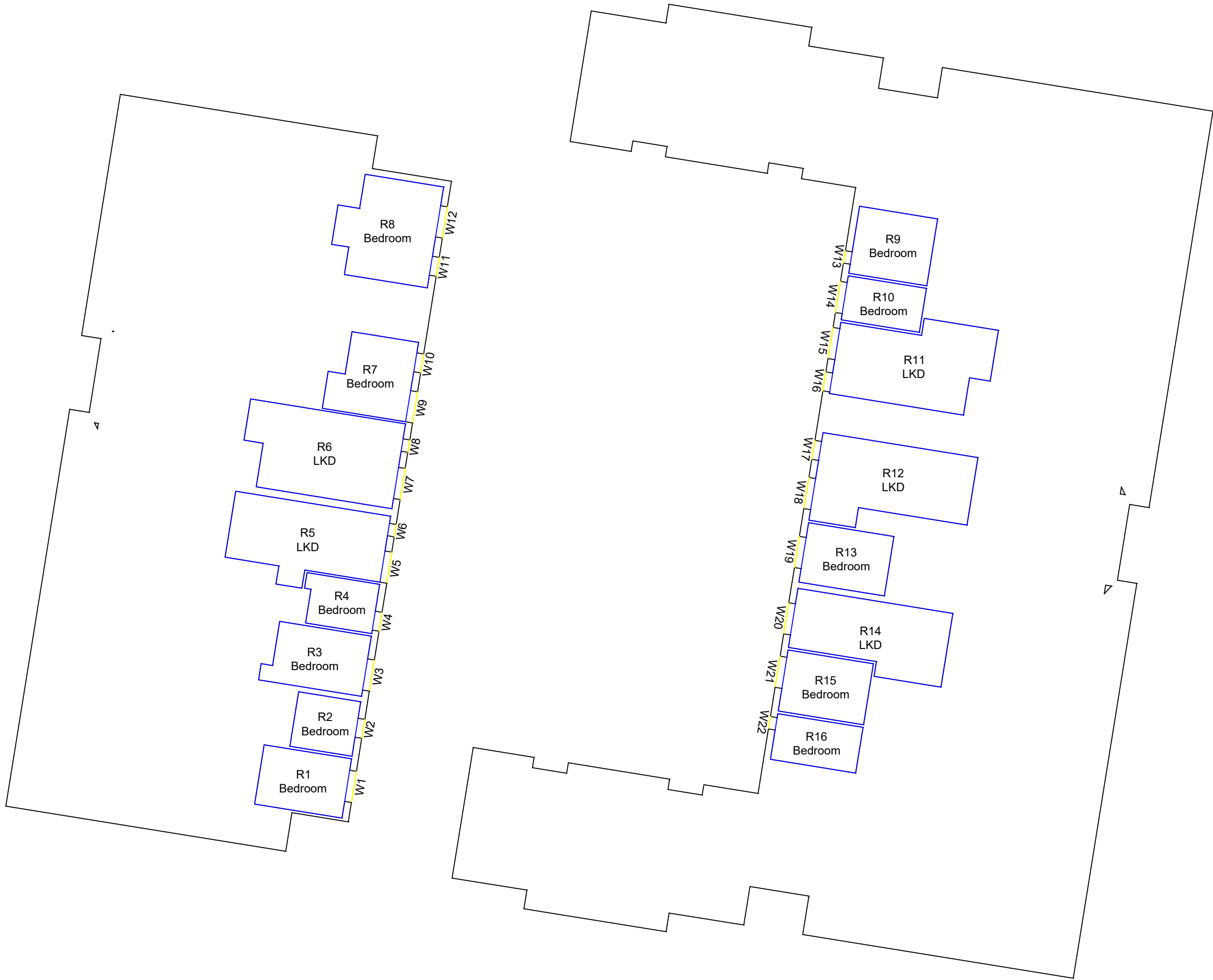
A handwritten signature in dark ink, appearing to read 'John Barnes' followed by a period.

John Barnes
EB7 LIMITED



Appendix 1

Drawings (internal layouts with window and room labels)



Sources of information

Barton Willmore
24325_A-PP-P11-14 - Apartments - Roof Plan.dwg
24325_A-PP-P11-31 - House Type D-01.dwg
24325_A-PP-P11-32 - House Type D-02.dwg
24325_A-PP-P11-41 - House Type E-01.dwg
24325_A-PP-P11-42 - House Type E-02.dwg
24325_A-PP-P11-43 - House Type E-03.dwg
24325_A-PP-P11-44 - House Type E-04.dwg
24325_3D Export_050418.dwg
24325_A-PP-P11-10 - Apartments - Ground Floor Plan.dwg
24325_A-PP-P11-11 - Apartments - First Floor Plan.dwg
24325_A-PP-P11-12 - Apartments - Second Floor Planr.dwg
24325_A-PP-P11-13 - Apartments - Third Floor Planr.dwg
Received 12/04/2018

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Site Photographs
Ordnance Survey

EB7 Immersive
Master.dwg
Received 24/04/2017



Project Cox and Wyman Building
Reading

Title Apartments
First Floor
Room Layout

Drawn	ID	Checked	--
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Date	18/04/2018	Rel no.	02
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Drawing no. 2407-R02-ID01-01

Sources of information

Barton Willmore
24325_A-PP-P11-14 - Apartments - Roof Plan.dwg
24325_A-PP-P11-31 - House Type D-01.dwg
24325_A-PP-P11-32 - House Type D-02.dwg
24325_A-PP-P11-41 - House Type E-01.dwg
24325_A-PP-P11-42 - House Type E-02.dwg
24325_A-PP-P11-43 - House Type E-03.dwg
24325_A-PP-P11-44 - House Type E-04.dwg
24325_3D Export_050418.dwg
24325_A-PP-P11-10 - Apartments - Ground Floor Plan.dwg
24325_A-PP-P11-11 - Apartments - First Floor Plan.dwg
24325_A-PP-P11-12 - Apartments - Second Floor Planr.dwg
24325_A-PP-P11-13 - Apartments - Third Floor Planr.dwg
Received 12/04/2018

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Site Photographs
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EB7 Immersive
Master.dwg
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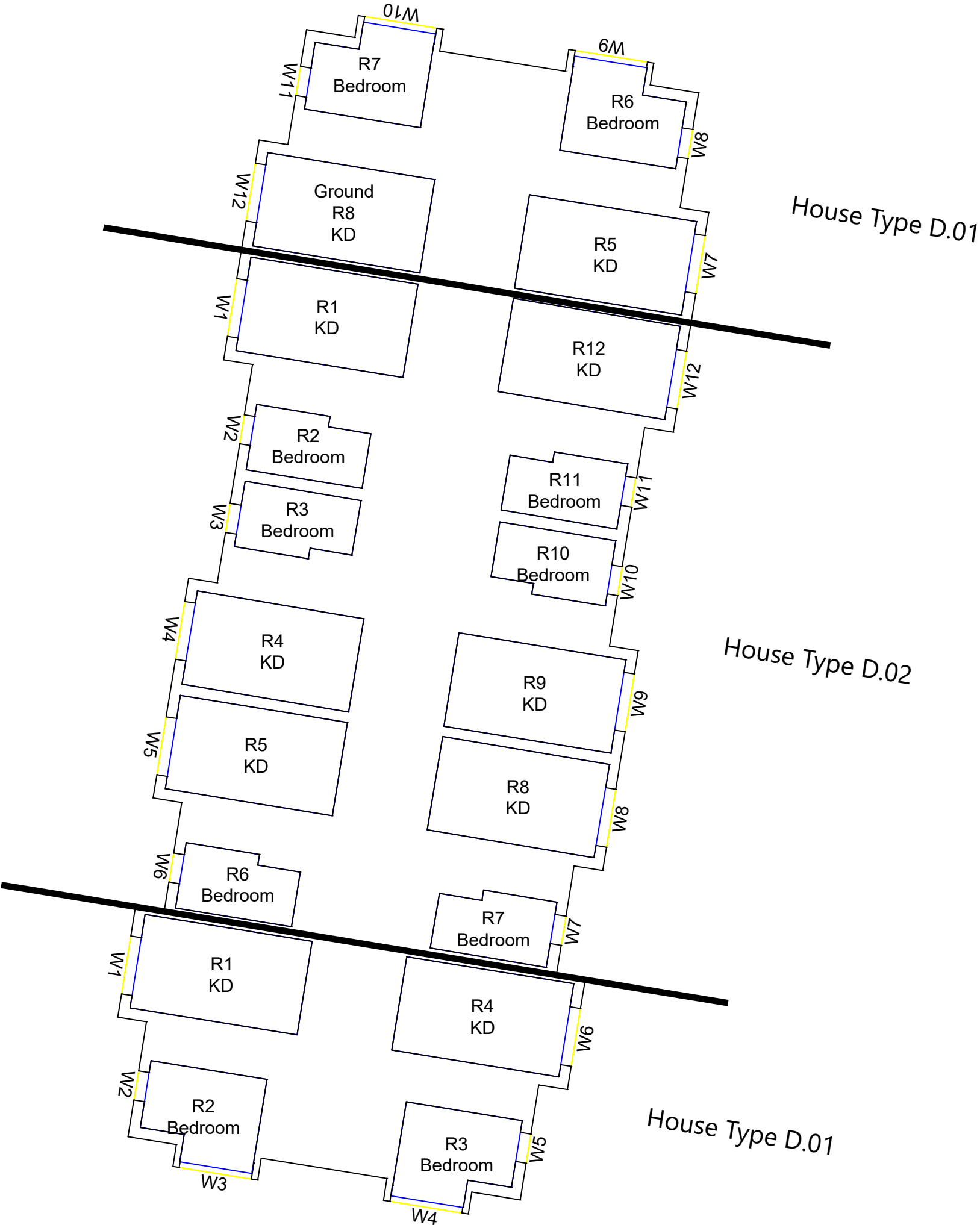
Project Cox and Wyman Building
Reading

Title House Type D.01 and D.02
Ground Floor
Room Layout

Drawn	ID	Checked	--
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Date	18/04/2018	Rel no.	02
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Drawing no. 2407-R02-ID01-02



Sources of information

Barton Willmore
24325_A-PP-P11-14 - Apartments - Roof Plan.dwg
24325_A-PP-P11-31 - House Type D-01.dwg
24325_A-PP-P11-32 - House Type D-02.dwg
24325_A-PP-P11-41 - House Type E-01.dwg
24325_A-PP-P11-42 - House Type E-02.dwg
24325_A-PP-P11-43 - House Type E-03.dwg
24325_A-PP-P11-44 - House Type E-04.dwg
24325_3D Export_050418.dwg
24325_A-PP-P11-10 - Apartments - Ground Floor Plan.dwg
24325_A-PP-P11-11 - Apartments - First Floor Plan.dwg
24325_A-PP-P11-12 - Apartments - Second Floor Planr.dwg
24325_A-PP-P11-13 - Apartments - Third Floor Planr.dwg
Received 12/04/2018

EB7 Ltd
Site Photographs
Ordnance Survey

EB7 Immersive
Master.dwg
Received 24/04/2017



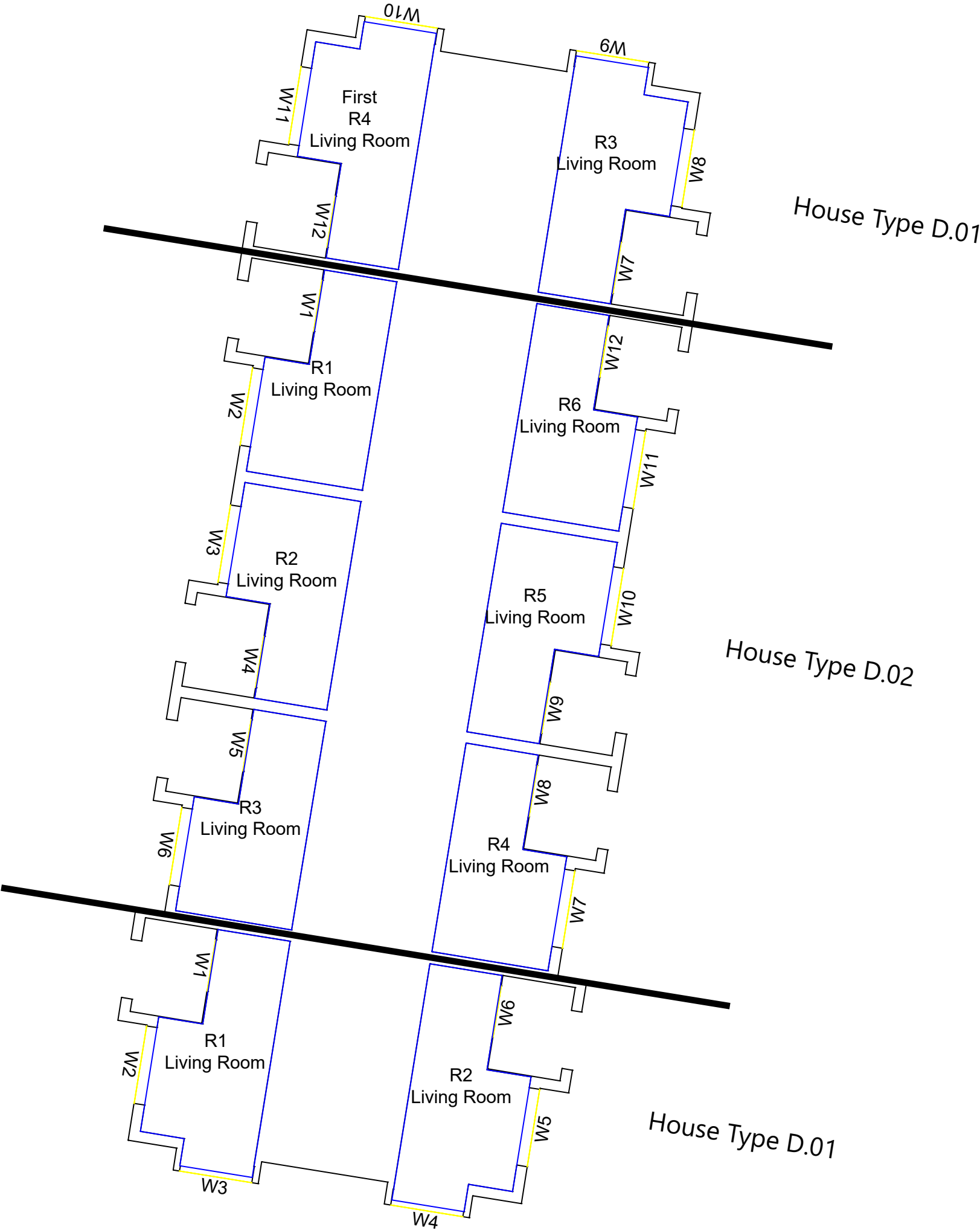
Project Cox and Wyman Building
Reading

Title House Type D.01 and D.02
First Floor
Room Layout

Drawn	ID	Checked	--
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Date	18/04/2018	Rel no.	02
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Drawing no. 2407-R02-ID01-03



Sources of information

Barton Willmore
24325_A-PP-P11-14 - Apartments - Roof Plan.dwg
24325_A-PP-P11-31 - House Type D-01.dwg
24325_A-PP-P11-32 - House Type D-02.dwg
24325_A-PP-P11-41 - House Type E-01.dwg
24325_A-PP-P11-42 - House Type E-02.dwg
24325_A-PP-P11-43 - House Type E-03.dwg
24325_A-PP-P11-44 - House Type E-04.dwg
24325_3D Export_050418.dwg
24325_A-PP-P11-10 - Apartments - Ground Floor Plan.dwg
24325_A-PP-P11-11 - Apartments - First Floor Plan.dwg
24325_A-PP-P11-12 - Apartments - Second Floor Planr.dwg
24325_A-PP-P11-13 - Apartments - Third Floor Planr.dwg
Received 12/04/2018

EB7 Ltd
Site Photographs
Ordnance Survey

EB7 Immersive
Master.dwg
Received 24/04/2017



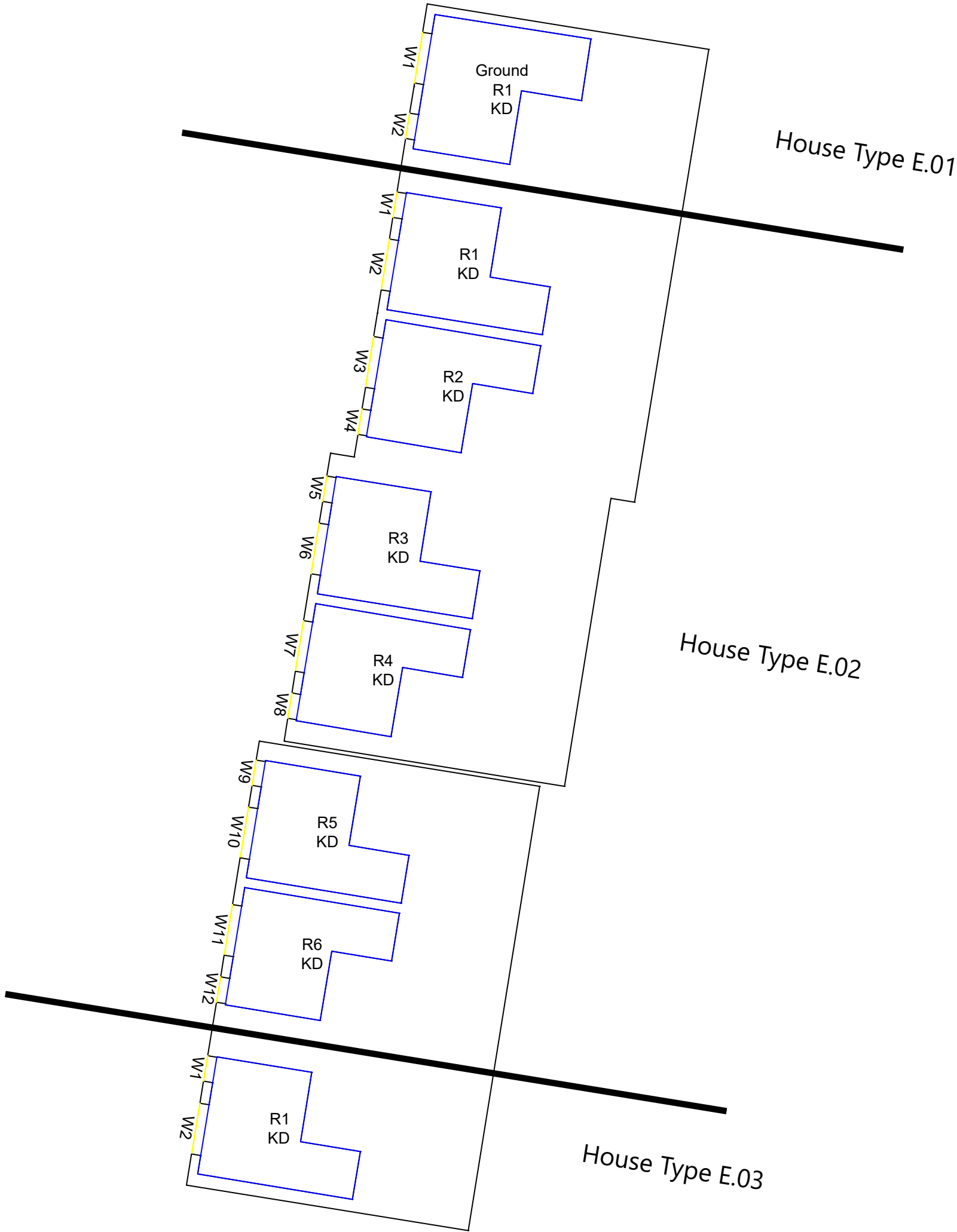
Project Cox and Wyman Building
Reading

Title House Type E.01, E.02 and E.03
Ground Floor (Eastern Block)
Room Layout

Drawn	ID	Checked	--
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Date	18/04/2018	Rel no.	02
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Drawing no.	2407-R02-ID01-04
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Sources of information

Barton Willmore
24325_A-PP-P11-14 - Apartments - Roof Plan.dwg
24325_A-PP-P11-31 - House Type D-01.dwg
24325_A-PP-P11-32 - House Type D-02.dwg
24325_A-PP-P11-41 - House Type E-01.dwg
24325_A-PP-P11-42 - House Type E-02.dwg
24325_A-PP-P11-43 - House Type E-03.dwg
24325_A-PP-P11-44 - House Type E-04.dwg
24325_3D Export_050418.dwg
24325_A-PP-P11-10 - Apartments - Ground Floor Plan.dwg
24325_A-PP-P11-11 - Apartments - First Floor Plan.dwg
24325_A-PP-P11-12 - Apartments - Second Floor Planr.dwg
24325_A-PP-P11-13 - Apartments - Third Floor Planr.dwg
Received 12/04/2018

EB7 Ltd
Site Photographs
Ordnance Survey

EB7 Immersive
Master.dwg
Received 24/04/2017



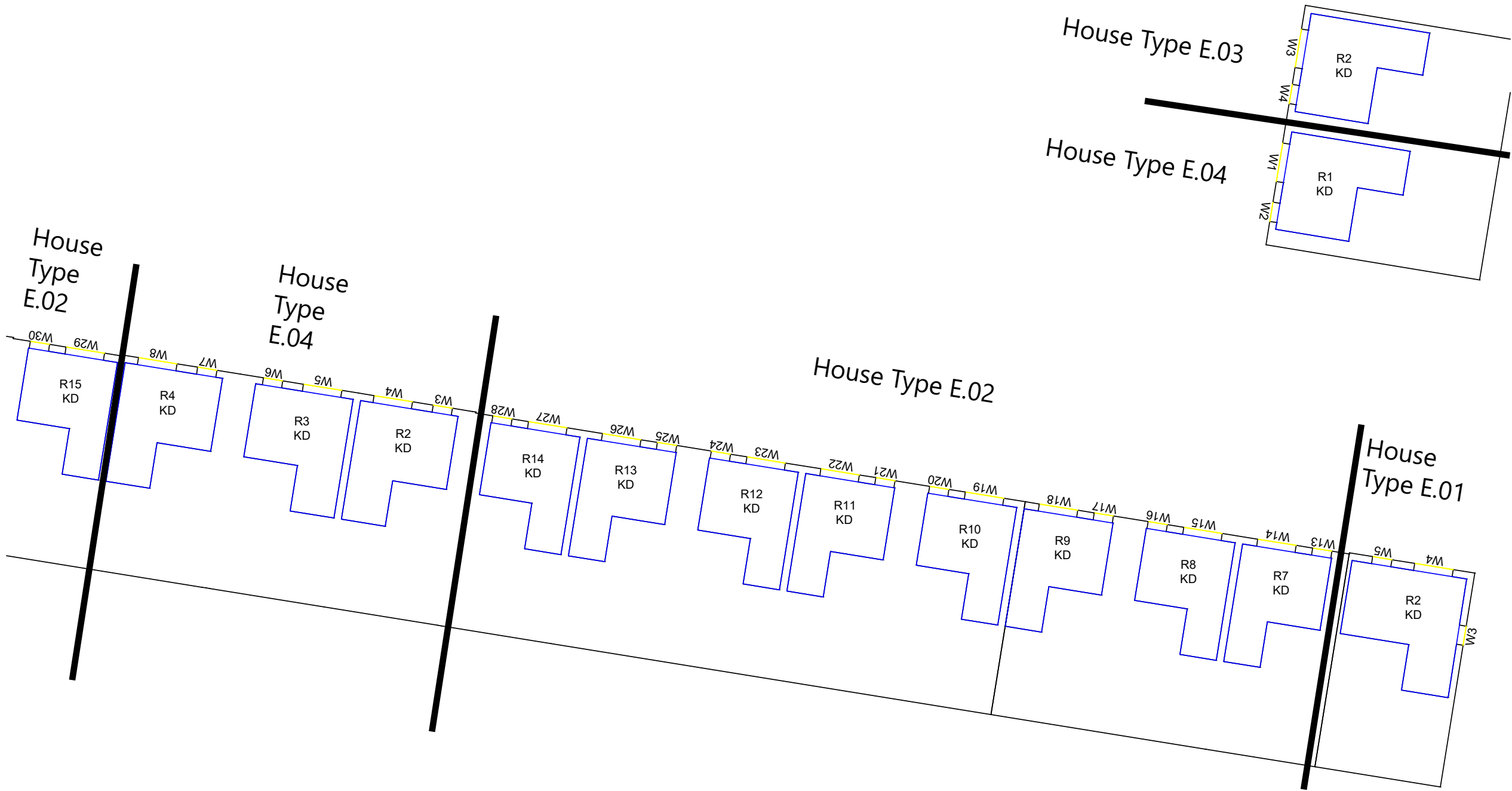
Project Cox and Wyman Building
Reading

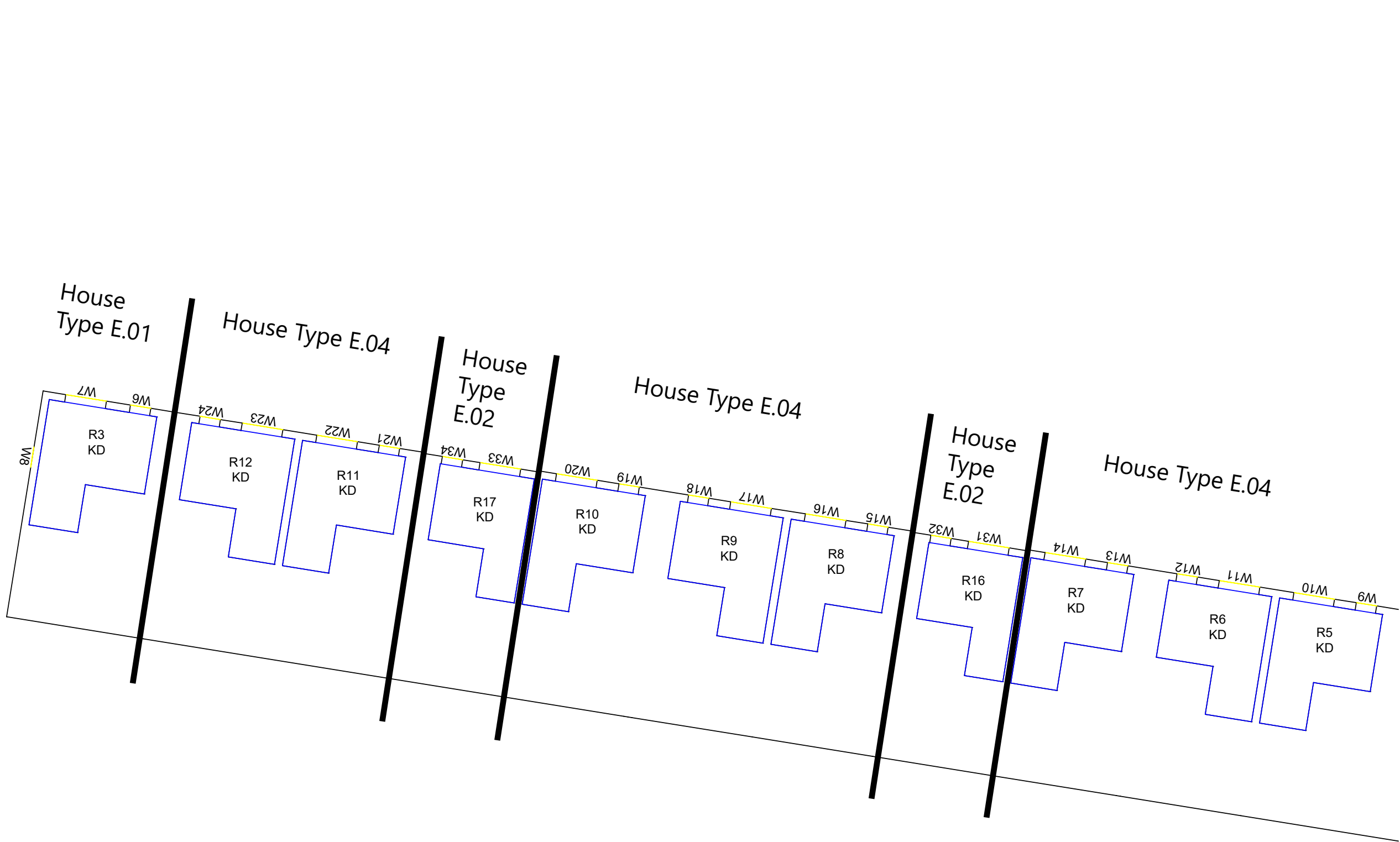
Title House Type E.02, E.03 and E.04
Ground Floor (Southern Terrace
and Town Houses) Room Layout

Drawn	ID	Checked	--
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Date	18/04/2018	Rel no.	02
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Drawing no.	2407-R02-ID01-05
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Sources of information

Barton Willmore
24325_A-PP-P11-14 - Apartments - Roof Plan.dwg
24325_A-PP-P11-31 - House Type D-01.dwg
24325_A-PP-P11-32 - House Type D-02.dwg
24325_A-PP-P11-41 - House Type E-01.dwg
24325_A-PP-P11-42 - House Type E-02.dwg
24325_A-PP-P11-43 - House Type E-03.dwg
24325_A-PP-P11-44 - House Type E-04.dwg
24325_3D Export_050418.dwg
24325_A-PP-P11-10 - Apartments - Ground Floor Plan.dwg
24325_A-PP-P11-11 - Apartments - First Floor Plan.dwg
24325_A-PP-P11-12 - Apartments - Second Floor Planr.dwg
24325_A-PP-P11-13 - Apartments - Third Floor Planr.dwg
Received 12/04/2018

EB7 Ltd
Site Photographs
Ordnance Survey

EB7 Immersive
Master.dwg
Received 24/04/2017



Project Cox and Wyman Building
Reading

Title House Type E.02 and E.04
Ground Floor (Southern Terrace)
Room Layout

Drawn	ID	Checked	--
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Date	18/04/2018	Rel no.	02
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Drawing no.	2407-R02-ID01-06
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Appendix 2

Results of the Daylight & Sunlight assessment

Floor	Room ID	Window ID	Room Use	ADF	TOTAL ADF	ROOM TOTAL APSH	ROOM WINTER APSH
Apartments							
First	R1	W1-L	Bedroom	0.6			
		W1-U	Bedroom	2.8	3.4	25	8
First	R2	W2-L	Bedroom	0.5			
		W2-U	Bedroom	2.3	2.7	20	4
First	R3	W3-L	Bedroom	0.5			
		W3-U	Bedroom	2.5	3.0	28	5
First	R4	W4-L	Bedroom	0.4			
		W4-U	Bedroom	1.8	2.3	24	2
First	R5	W5-L	LKD	0.3			
		W5-U	LKD	0.8			
		W6-L	LKD	0.1			
		W6-U	LKD	0.3	1.5	16	5
First	R6	W7-L	LKD	0.2			
		W7-U	LKD	0.7			
		W8-L	LKD	0.1			
		W8-U	LKD	0.3	1.4	18	3
First	R7	W9-L	Bedroom	0.5			
		W9-U	Bedroom	2.1			
		W10-L	Bedroom	0.3			
		W10-U	Bedroom	1.5	4.4	25	4
First	R8	W11-L	Bedroom	0.2			
		W11-U	Bedroom	1.1			
		W12-L	Bedroom	0.4			
		W12-U	Bedroom	1.8	3.6	31	8
First	R9	W13-L	Bedroom	0.2			
		W13-U	Bedroom	0.8	1.0	N/A	N/A
First	R10	W14-L	Bedroom	0.7			
		W14-U	Bedroom	1.8	2.5	N/A	N/A
First	R11	W15-L	LKD	0.3			
		W15-U	LKD	0.8			
		W16-L	LKD	0.2			
		W16-U	LKD	0.7	2.0	N/A	N/A
First	R12	W17-L	LKD	0.2			
		W17-U	LKD	0.5			
		W18-L	LKD	0.3			
		W18-U	LKD	0.8	1.7	N/A	N/A
First	R13	W19-L	Bedroom	0.6			
		W19-U	Bedroom	2.7	3.3	N/A	N/A

Floor	Room ID	Window ID	Room Use	ADF	TOTAL ADF	ROOM TOTAL APSH	ROOM WINTER APSH
First	R14	W20-L W20-U	LKD LKD	0.3 0.8	1.1	N/A	N/A
First	R15	W21-L W21-U	Bedroom Bedroom	0.5 1.4	1.9	N/A	N/A
First	R16	W22-L W22-U	Bedroom Bedroom	0.3 1.1	1.4	N/A	N/A
House Type D-01							
Ground	R1	W1-L W1-U	KD KD	0.6 2.5	3.1	N/A	N/A
Ground	R2	W2 W3-L W3-U	Bedroom Bedroom Bedroom	1.4 1.5 5.7	8.5	74	26
Ground	R3	W4-L W4-U W5	Bedroom Bedroom Bedroom	1.5 5.7 1.6	8.7	88	27
Ground	R4	W6-L W6-U	KD KD	0.7 3.0	3.7	42	10
Ground	R5	W7-L W7-U	KD KD	0.7 3.0	3.7	43	10
Ground	R6	W8 W9-L W9-U	Bedroom Bedroom Bedroom	1.7 1.4 5.3	8.4	34	6
Ground	R7	W10-L W10-U W11	Bedroom Bedroom Bedroom	1.4 5.3 1.5	8.2	N/A	N/A
Ground	R8	W12-L W12-U	KD KD	0.6 2.8	3.4	N/A	N/A
First	R1	W1-L W1-U W2 W3-L W3-U	Living Room Living Room Living Room Living Room Living Room	0.1 0.0 2.0 0.8 3.0	5.9	78	29
First	R2	W4-L W4-U W5 W6-L W6-U	Living Room Living Room Living Room Living Room Living Room	0.8 3.0 2.3 0.2 0.3	6.6	92	30
First	R3	W7-L W7-U	Living Room Living Room	0.2 0.4			

Floor	Room ID	Window ID	Room Use	ADF	TOTAL ADF	ROOM TOTAL APSH	ROOM WINTER APSH
First	R4	W8	Living Room	2.4	6.6	33	5
		W9-L	Living Room	0.7			
		W9-U	Living Room	2.9			
		W10-L	Living Room	0.7	6.3	N/A	N/A
		W10-U	Living Room	2.9			
		W11	Living Room	2.2			
		W12-L	Living Room	0.2			
		W12-U	Living Room	0.3			
House Type D-02							
Ground	R1	W1-L	KD	0.6	3.3	N/A	N/A
		W1-U	KD	2.7			
Ground	R2	W2	Bedroom	1.8	1.8	N/A	N/A
Ground	R3	W3	Bedroom	1.7	1.7	N/A	N/A
Ground	R4	W4-L	KD	0.6	3.1	N/A	N/A
		W4-U	KD	2.5			
Ground	R5	W5-L	KD	0.6	3.1	N/A	N/A
		W5-U	KD	2.5			
Ground	R6	W6	Bedroom	1.6	1.6	N/A	N/A
Ground	R7	W7	Bedroom	1.9	1.9	31	4
Ground	R8	W8-L	KD	0.7	3.7	43	10
		W8-U	KD	3.0			
Ground	R9	W9-L	KD	0.7	3.7	43	10
		W9-U	KD	3.0			
Ground	R10	W10	Bedroom	2.0	2.0	34	7
Ground	R11	W11	Bedroom	2.0	2.0	32	5
Ground	R12	W12-L	KD	0.7	3.7	40	10
		W12-U	KD	3.0			
First	R1	W1-L	Living Room	0.1	2.4	N/A	N/A
		W1-U	Living Room	0.0			
		W2	Living Room	2.3			
First	R2	W3	Living Room	2.2	2.4	N/A	N/A
		W4-L	Living Room	0.1			
		W4-U	Living Room	0.0			
First	R3	W5-L	Living Room	0.1	2.3	N/A	N/A
		W5-U	Living Room	0.0			
		W6	Living Room	2.1			

Floor	Room ID	Window ID	Room Use	ADF	TOTAL ADF	ROOM TOTAL APSH	ROOM WINTER APSH
First	R4	W7	Living Room	2.5	3.0	37	8
		W8-L	Living Room	0.2			
		W8-U	Living Room	0.3			
First	R5	W9-L	Living Room	0.2	3.1	32	5
		W9-U	Living Room	0.3			
		W10	Living Room	2.6			
First	R6	W11	Living Room	2.6	3.1	40	11
		W12-L	Living Room	0.2			
		W12-U	Living Room	0.3			
House Type E-01							
Ground	R1	W1-L	KD	0.5	4.2	N/A	N/A
		W1-U	KD	2.3			
		W2-L	KD	0.2			
		W2-U	KD	1.1			
Ground	R2	W3	KD	0.9	4.9	31	5
		W4-L	KD	0.5			
		W4-U	KD	2.2			
		W5-L	KD	0.2			
		W5-U	KD	1.1			
Ground	R3	W6-L	KD	0.2	5.0	N/A	N/A
		W6-U	KD	1.1			
		W7-L	KD	0.5			
		W7-U	KD	2.3			
		W8	KD	0.9			
House Type E-02							
Ground	R1	W1-L	KD	0.2	4.7	N/A	N/A
		W1-U	KD	1.3			
		W2-L	KD	0.6			
		W2-U	KD	2.6			
Ground	R2	W3-L	KD	0.6	4.5	N/A	N/A
		W3-U	KD	2.6			
		W4-L	KD	0.2			
		W4-U	KD	1.2			
Ground	R3	W5-L	KD	0.3	4.7	N/A	N/A
		W5-U	KD	1.3			
		W6-L	KD	0.6			
		W6-U	KD	2.6			
Ground	R4	W7-L	KD	0.6	4.6	N/A	N/A
		W7-U	KD	2.6			
		W8-L	KD	0.2			
		W8-U	KD	1.2			

Floor	Room ID	Window ID	Room Use	ADF	TOTAL ADF	ROOM TOTAL APSH	ROOM WINTER APSH
Ground	R5	W9-L	KD	0.3	4.7	N/A	N/A
		W9-U	KD	1.3			
		W10-L	KD	0.6			
		W10-U	KD	2.6			
Ground	R6	W11-L	KD	0.6	4.6	N/A	N/A
		W11-U	KD	2.6			
		W12-L	KD	0.2			
		W12-U	KD	1.3			
Ground	R7	W13-L	KD	0.2	4.4	N/A	N/A
		W13-U	KD	1.2			
		W14-L	KD	0.5			
		W14-U	KD	2.5			
Ground	R8	W15-L	KD	0.5	4.4	N/A	N/A
		W15-U	KD	2.5			
		W16-L	KD	0.2			
		W16-U	KD	1.2			
Ground	R9	W17-L	KD	0.2	4.5	N/A	N/A
		W17-U	KD	1.2			
		W18-L	KD	0.5			
		W18-U	KD	2.5			
Ground	R10	W19-L	KD	0.5	4.6	N/A	N/A
		W19-U	KD	2.6			
		W20-L	KD	0.2			
		W20-U	KD	1.2			
Ground	R11	W21-L	KD	0.2	4.7	N/A	N/A
		W21-U	KD	1.3			
		W22-L	KD	0.6			
		W22-U	KD	2.6			
Ground	R12	W23-L	KD	0.6	4.8	N/A	N/A
		W23-U	KD	2.7			
		W24-L	KD	0.2			
		W24-U	KD	1.3			
Ground	R13	W25-L	KD	0.2	4.7	N/A	N/A
		W25-U	KD	1.3			
		W26-L	KD	0.6			
		W26-U	KD	2.6			
Ground	R14	W27-L	KD	0.5	4.6	N/A	N/A
		W27-U	KD	2.6			
		W28-L	KD	0.2			
		W28-U	KD	1.2			
Ground	R15	W29-L	KD	0.5			
		W29-U	KD	2.4			

Floor	Room ID	Window ID	Room Use	ADF	TOTAL ADF	ROOM TOTAL APSH	ROOM WINTER APSH
Ground	R16	W30-L	KD	0.2	4.4	N/A	N/A
		W30-U	KD	1.2			
		W31-L	KD	0.5	4.4	N/A	N/A
		W31-U	KD	2.4			
		W32-L	KD	0.2			
		W32-U	KD	1.2			
Ground	R17	W33-L	KD	0.5	4.4	N/A	N/A
		W33-U	KD	2.5			
		W34-L	KD	0.2			
		W34-U	KD	1.2			
House Type E-03							
Ground	R1	W1-L	KD	0.3	4.7	N/A	N/A
		W1-U	KD	1.2			
		W2-L	KD	0.6			
		W2-U	KD	2.6			
Ground	R2	W3-L	KD	0.5	4.1	N/A	N/A
		W3-U	KD	2.3			
		W4-L	KD	0.2			
		W4-U	KD	1.1			
House Type E-04							
Ground	R1	W1-L	KD	0.5	3.9	N/A	N/A
		W1-U	KD	2.2			
		W2-L	KD	0.2			
		W2-U	KD	1.0			
Ground	R2	W3-L	KD	0.2	4.0	N/A	N/A
		W3-U	KD	1.1			
		W4-L	KD	0.5			
		W4-U	KD	2.2			
Ground	R3	W5-L	KD	0.5	3.9	N/A	N/A
		W5-U	KD	2.2			
		W6-L	KD	0.2			
		W6-U	KD	1.1			
Ground	R4	W7-L	KD	0.2	4.0	N/A	N/A
		W7-U	KD	1.1			
		W8-L	KD	0.5			
		W8-U	KD	2.2			
Ground	R5	W9-L	KD	0.2	4.0	N/A	N/A
		W9-U	KD	1.1			
		W10-L	KD	0.5			
		W10-U	KD	2.2			
Ground	R6	W11-L	KD	0.5			

Floor	Room ID	Window ID	Room Use	ADF	TOTAL ADF	ROOM TOTAL APSH	ROOM WINTER APSH
Ground	R7	W11-U	KD	2.2	3.9	N/A	N/A
		W12-L	KD	0.2			
		W12-U	KD	1.1			
	R7	W13-L	KD	0.2	4.0	N/A	N/A
		W13-U	KD	1.1			
		W14-L	KD	0.5			
		W14-U	KD	2.2			
	R8	W15-L	KD	0.2	4.0	N/A	N/A
		W15-U	KD	1.1			
		W16-L	KD	0.5			
		W16-U	KD	2.2			
	R9	W17-L	KD	0.5	4.0	N/A	N/A
		W17-U	KD	2.2			
		W18-L	KD	0.2			
		W18-U	KD	1.1			
Ground	R10	W19-L	KD	0.2	4.0	N/A	N/A
		W19-U	KD	1.1			
		W20-L	KD	0.5			
		W20-U	KD	2.2			
Ground	R11	W21-L	KD	0.2	4.0	N/A	N/A
		W21-U	KD	1.1			
		W22-L	KD	0.5			
		W22-U	KD	2.2			
Ground	R12	W23-L	KD	0.5	4.0	N/A	N/A
		W23-U	KD	2.3			
		W24-L	KD	0.2			
		W24-U	KD	1.1			