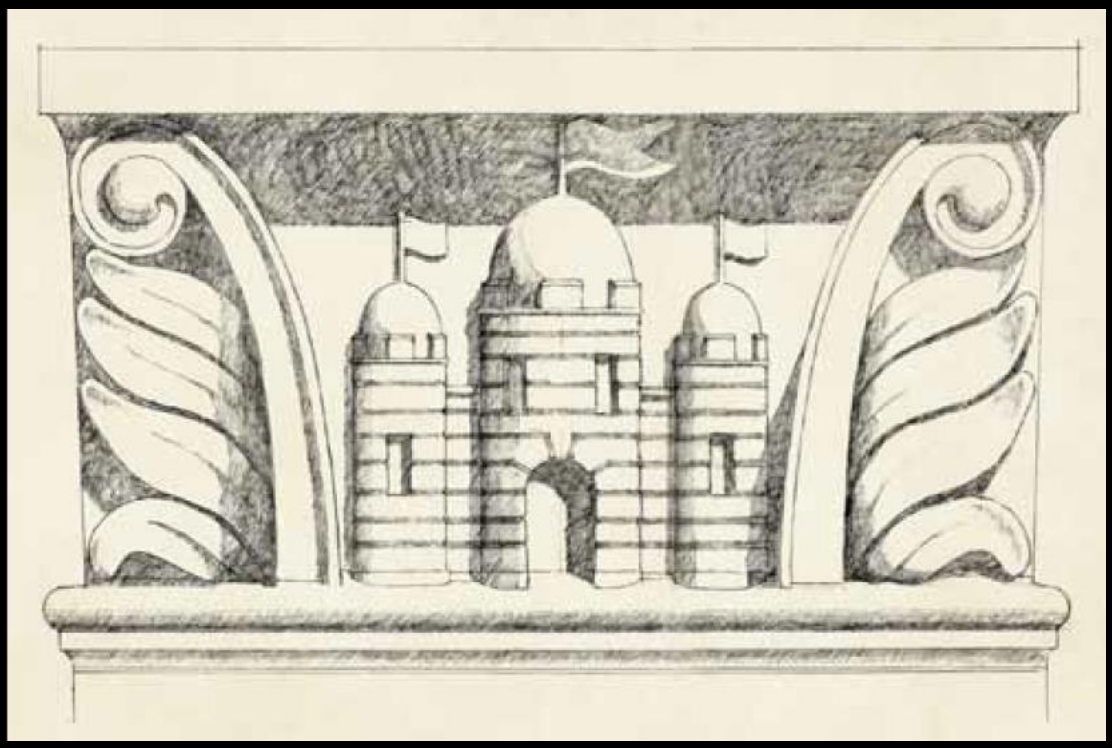

EAGLE QUARTER II
NEWBURY

INTERNAL DAYLIGHT REPORT

September 2023

LOCHAILORT

EAGLE QUARTER II
NEWBURY

INTERNAL DAYLIGHT REPORT

DIRECTOR: LIAM DUNFORD
CLIENT: LOCHAILORT INVESTMENTS
DATE: SEPTEMBER 2023
VERSION: REL-2 FINAL-3
PROJECT: P3427

Contents

Appendices

1 Introduction

1.1 This report considers the CBDM daylight and sunlight amenity of the proposed redevelopment at the Kennet Centre, Newbury. As requested by the local planning authority, this report considers Block S only and includes the communal garden areas.

1.2 Through the planning process the local authority will wish to be reassured that the construction of the new scheme will benefit from acceptable levels of internal daylight amenity within BRE and British Standard Guidance.

1.3 The Local Authority will be informed in this by the BRE document entitled Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice 2022 (the BRE guidelines). This document is the principal guidance in this area and sets out the methodology for measuring light.

1.4 The BRE guidelines are not mandatory, though local planning authorities and planning inspectors will consider the suitability of a proposed scheme for a site within the context of BRE guidance. Consideration will be given to the urban context within which a scheme is located and the internal daylight amenity will be one of several planning considerations which the local authority will weigh.

1.5 With regards to the National Planning Policy Framework 2023 (NPPF), the framework notes the Government's objective of significantly boosting the supply of homes [1]. The NPPF provides that local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards)[2].

[1] NPPF 2023 para 60
[2] NPPF 2023 para 125C

2 Sources of Information

2.1 In the process of compiling this report, the following sources of information have been used:

Zmapping Ltd

3D Massing Model (received 21/08/23)

ColladoCollins Architects

Proposed Info (received 01/09/23)

20011_Newbury_Eagle Qarter_P1-301_P17_Block S & Car Park Proposed Plan.dwg

20011_Newbury_Eagle Qarter_P1-202_P17_Blocks B, E, F, G and H Proposed Plan.dwg

3 Methodology

Daylight within Proposed Developments

3.1 The 2022 revision of the BRE guidelines provides that Climate Based Daylight Modelling ("CBDM") can be used to assess internal daylight and sunlight. The new methodology is more complex versus the previous ADF assessment and has targets that are generally more difficult to achieve in an urban context.

Climate Based Daylight Modelling (CBDM)

3.2 The new CBDM methodology is based on the British Standard 'Daylight in Buildings' (BS EN17037). This contains advice and guidance on interior daylighting for all buildings across Europe but also has a UK National Annex which provides suggested targets for dwellings in the UK.

3.3 BS EN17037 supersedes BS 8206 Part 2 which was based on Average Daylight Factor ("ADF") and is no longer recommended.

3.4 The CBDM methodology is based on target illuminances from daylight. This is the Daylight Illuminance (DI) to be achieved over half the area of the room (measured on a reference plane at tabletop level) for at least half of the daylight hours in a typical year. The calculations are based on weather data files which cover different regions of the UK. The calculations are done for each hour of the day for every day of the year. There are 8760 hours in the year, of which 4380 are daylight hours, and therefore the targets should be achieved for 2190 hours in the year. The methodology uses a more accurate sky model which simulates the movement of the sun throughout the day and accounts for the weather conditions at the time. As a result, CBDM accounts for the presence of sunlight and therefore the orientation of the rooms/windows is accounted for. A south facing room is likely to have access to higher levels of natural light than a north facing room and as a result, a north facing room would typically need larger windows to comply.

3.5 The UK National Annex provides illuminance recommendations of:

- 100 Lux in bedrooms;
- 150 Lux in living rooms; and
- 200 Lux in kitchens.

3.6 These are median illuminances to be achieved over 50% of the assessment grid for at least half of the daylight hours.

3.7 Where a room has a shared use, the highest target should apply. However, it also says that Local Authorities could use discretion here and that a living room target of 150 Lux could be used for combined living/kitchen/dining rooms if the kitchens are not treated as habitable spaces, as it may avoid small separate kitchens in the design.

3.8 There is a further simplistic methodology based on daylight factors (not the same as the old ADF methodology), which does not use climate-based data but uses a simple fixed sky model. However, since this alternative simplistic methodology does not account for the effect of sunlight, or the orientation of the room, it has not been used in our assessment.

Sunlight within Proposed Developments

3.9 For new buildings, the BRE guidelines refer to BS EN 17037 which says that a space should receive a minimum of 1.5 hours of sunlight on a selected date between 1st February and 21st March with cloudless conditions. The BRE guidelines suggests 21st March be used. For dwellings, at least one habitable room, preferably a main living room, should achieve at least this minimum criterion and that at least one main window faces within 90° of south. Whilst BS EN 17037 applies to all orientations, the BRE guidelines say that if the room faces significantly north of due east or west, the criterion is unlikely to be met.

Overshadowing

3.10 The BRE guidelines describe the method for assessment of the availability of sunlight within garden/amenity spaces. Sunlight in the spaces between buildings also has an important impact on the overall appearance and ambience of either a proposed development or existing property affected by new developments.

3.11 If a space is used all year round, the equinox (21st March) is the best date for which to prepare shadow plots as it gives the average level of shadowing, however if a particular space is used only at certain times of the year, it is instructive to plot shadows for those specific times.

3.12 The BRE criteria for gardens or amenity areas state that, 'It is recommended that for it to appear adequately sunlit throughout the year, at least half of a garden or amenity space should receive at least two hours of sunlight on 21st March.' If as a result of new developments an existing garden or amenity area does not meet the criteria, and the area which can receive 2 hours of sun on 21 March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable.

4 Internal Daylight & Sunlight and Scheme Overshadowing Assessment

4.1 Full and detailed analysis can be found within Appendix 1. The analysis considers the proposed properties on the first to the seventh floors. A total of 188 rooms have been assessed, these comprise 73 living/kitchen/dining rooms (LKDs), 104 bedrooms, 10 Studios and 1 living/dining room (LD) within two blocks.

Internal Daylight Amenity

4.2 Stand-alone kitchens ordinarily require a 200 lux or above to be fully BRE compliant. There are no standalone kitchens material for assessment and within this development, kitchens form part of a broader room use which includes an additional living space such as living rooms and dining rooms. The kitchens tend to be located to the rear of the room where less daylight will penetrate, as a result supplementary electrical lighting will most likely be in use whenever the kitchen is in occupation. In accordance with the BRE Guidance (para 2.1.15) non-daylit internal kitchens should be avoided wherever possible, especially if the kitchen is also used as a dining area too. Noting the above it is appropriate to establish that where kitchens form part of a broader room use, a 150 lux target is most appropriate.

4.3 Of the 188 rooms assessed, 133 achieve the required median lux levels for their rooms use. This provides an overall compliance rate of 71% which is commensurate with an urban location where the taller nature of the surrounding properties will naturally have an impact upon the proposed daylight levels within the property. Derogations from the recommended median levels of lux (which is more prevalent at the lower levels), occur as the rooms are deep, that said, closer investigation of the daylight levels within the primary rooms (LKDs, Studios and LD) provides that all of these rooms will enjoy over 200 lux at the front of the rooms where the primary living spaces are located. As a result of this, we consider that the future occupants will enjoy sufficient levels of internal daylight throughout the proposal.

Internal Sunlight Amenity

4.4 Eighty-one apartments have been analysed to establish their respective sunlight hours. Forty-six dwellings (57%) exceed the suggested target minimum level of sunlight and the occupants of each unit will have access to very good levels of sunlight.

Scheme Overshadowing Assessment

4.5 Two amenity spaces are material for consideration. The results can be found within drawing P3427/SHA/01, the left hand drawing depicts the overshadowing on the 21st March equinox. An assessment of the amenity spaces has also been conducted for the summer months when the spaces are most likely to be in use, these results can be found within the right hand drawing (21st June Solstice).

4.6 The amenity spaces fall short of the recommendations during the March equinox with the spaces enjoying 2 hours of direct sunlight to 21% and 14% of the amenity area. During the summer months when it is envisaged that the amenity spaces will be used by the occupants, the two areas each enjoy 86% of direct sunlight which is a high level of direct sunlight. We conclude there is sufficient access to well-lit amenity and overshadowing performance levels are considered good.

5 Conclusion

5.1 The appended results tables to this report show that the Proposed Development demonstrates a good level of compliance with BRE Guidance in terms of internal daylight amenity as 71% of rooms meet the recommendations for daylight amenity. This is a good compliance rate and many of the rooms achieve considerably more than the required minimum. Similarly the scheme experiences adequate levels of sunlight exposure.

5.2 Where derogations from median lux levels are present, the rooms achieve 200 lux or more at the front of the room where the main living area is located, thus it is considered that the properties will enjoy sufficient daylight.

5.3 In addition, the outdoor amenity areas enjoy sufficient levels of direct sunlight to the users of these spaces when they are most likely to be in use during the summer months.

5.4 The development conforms to the NPPF 2023 guidelines as the development makes efficient use of land whilst at the same time the residents will benefit from good living standards in terms of daylight and sunlight amenity. Although it is acknowledged that there will be some derogations from the recommendation, these are minor, and in any case authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site.

5.5 We fully support this planning application for internal daylight and sunlight amenity assessment.

Appendix 1: Technical Analysis

Sources: Zmapping Ltd
3D Massing Model (received 21/08/23)

ColladoCollins Architects
Proposed Info (received 01/09/23)
20011_Newbury_Eagle Qarter_P1-301_P17_Block S & Car Park Proposed Plan.dwg
20011_Newbury_Eagle Qarter_P1-202_P17_Blocks B, E, F, G and H Proposed Plan.dwg

Key: Daylight Illuminance
(achieved for 50% of daylight hours)

- <50 Lux
- >50 Lux
- >100 Lux
- >150 Lux
- >200 Lux

Median Illuminance (Lux) Levels shown for each room.

Recommended Targets:

Bedroom	100 Lux
Living Room	150 Lux
Kitchen	200 Lux

Project: Kennet Centre
Newbury

Title: CBDM Assessment - Daylight illuminance
Proposed Scheme 01/09/23
First Floor

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
--	--	DK	1:250 @ A3	Sep 23	P3427/CBDM/08	02

Sources: Zmapping Ltd
3D Massing Model (received 21/08/23)

ColladoCollins Architects
Proposed Info (received 01/09/23)
20011_Newbury_Eagle Qarter_P1-301_P17_Block S & Car Park Proposed Plan.dwg
20011_Newbury_Eagle Qarter_P1-202_P17_Blocks B, E, F, G and H Proposed Plan.dwg

Key: Daylight Illuminance
(achieved for 50% of daylight hours)

- <50 Lux
- >50 Lux
- >100 Lux
- >150 Lux
- >200 Lux

Median Illuminance (Lux) Levels shown for each room.

Recommended Targets:

Bedroom	100 Lux
Living Room	150 Lux
Kitchen	200 Lux

Project: Kennet Centre
Newbury

Title: CBDM Assessment - Daylight illuminance
Proposed Scheme 01/09/23
Second Floor

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
--	--	DK	1:250 @ A3	Sep 23	P3427/CBDM/09	02

Sources: Zmapping Ltd
3D Massing Model (received 21/08/23)

ColladoCollins Architects
Proposed Info (received 01/09/23)
20011_Newbury_Eagle Qarter_P1-301_P17_Block S & Car Park Proposed Plan.dwg
20011_Newbury_Eagle Qarter_P1-202_P17_Blocks B, E, F, G and H Proposed Plan.dwg

Key: Daylight Illuminance
(achieved for 50% of daylight hours)

- <50 Lux
- >50 Lux
- >100 Lux
- >150 Lux
- >200 Lux

Median Illuminance (Lux) Levels shown for each room.

Recommended Targets:
Bedroom 100 Lux
Living Room 150 Lux
Kitchen 200 Lux

Project: Kennet Centre
Newbury

Title: CBDM Assessment - Daylight illuminance
Proposed Scheme 01/09/23
Third Floor

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
--	--	DK	1:250 @ A3	Sep 23	P3427/CBDM/10	02

Sources: Zmapping Ltd
3D Massing Model (received 21/08/23)

ColladoCollins Architects
Proposed Info (received 01/09/23)
20011_Newbury_Eagle Qarter_P1-301_P17_Block S & Car Park Proposed Plan.dwg
20011_Newbury_Eagle Qarter_P1-202_P17_Blocks B, E, F, G and H Proposed Plan.dwg

Key: Daylight Illuminance
(achieved for 50% of daylight hours)

- <50 Lux
- >50 Lux
- >100 Lux
- >150 Lux
- >200 Lux

Median Illuminance (Lux) Levels shown for each room.

Recommended Targets:
Bedroom 100 Lux
Living Room 150 Lux
Kitchen 200 Lux

Project: Kennet Centre
Newbury

Title: CBDM Assessment - Daylight illuminance
Proposed Scheme 01/09/23
Fourth Floor

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
--	--	DK	1:250 @ A3	Sep 23	P3427/CBDM/11	02

Sources: Zmapping Ltd
3D Massing Model (received 21/08/23)

ColladoCollins Architects
Proposed Info (received 01/09/23)
20011_Newbury_Eagle Qarter_P1-301_P17_Block S & Car Park Proposed Plan.dwg
20011_Newbury_Eagle Qarter_P1-202_P17_Blocks B, E, F, G and H Proposed Plan.dwg

Key: Daylight Illuminance
(achieved for 50% of daylight hours)

- <50 Lux
- >50 Lux
- >100 Lux
- >150 Lux
- >200 Lux

Median Illuminance (Lux) Levels shown for each room.

Recommended Targets:

Bedroom	100 Lux
Living Room	150 Lux
Kitchen	200 Lux

Project: Kennet Centre
Newbury

Title: CBDM Assessment - Daylight illuminance
Proposed Scheme 01/09/23
Fifth Floor

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
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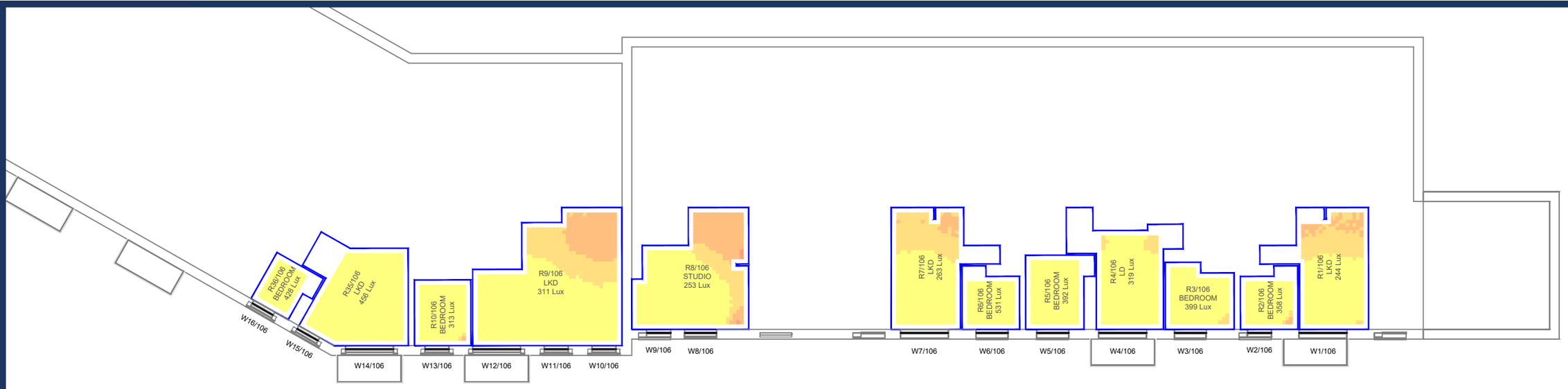

Sources: Zmapping Ltd
3D Massing Model (received 21/08/23)

ColladoCollins Architects
Proposed Info (received 01/09/23)
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20011_Newbury_Eagle Qarter_P1-202_P17_Blocks B, E, F, G and H Proposed Plan.dwg

Key: Daylight Illuminance
(achieved for 50% of daylight hours)

- <50 Lux
- >50 Lux
- >100 Lux
- >150 Lux
- >200 Lux

Median Illuminance (Lux) Levels shown for each room.

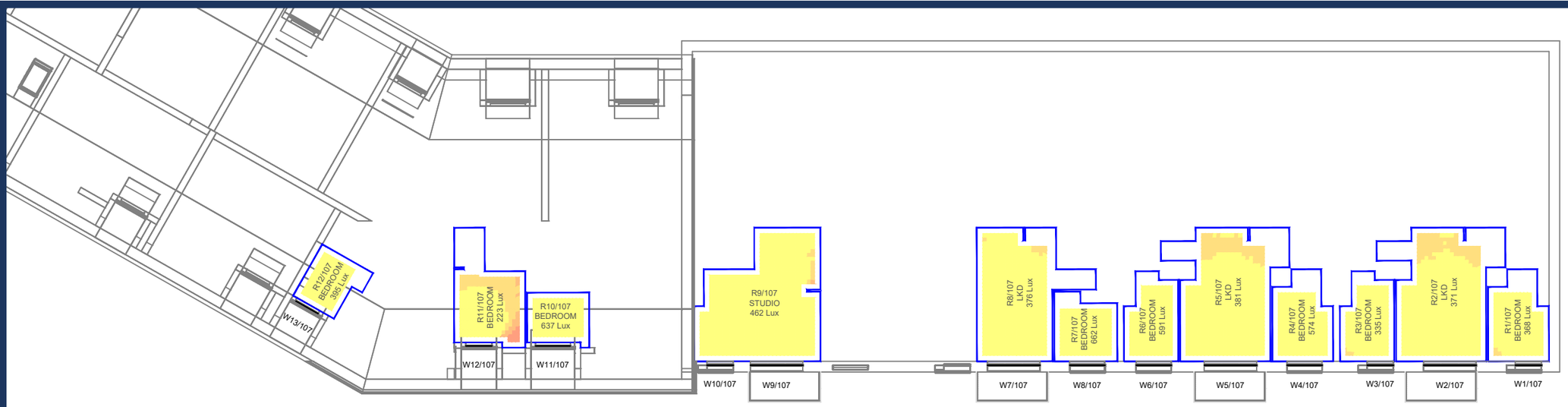
Recommended Targets:

Bedroom	100 Lux
Living Room	150 Lux
Kitchen	200 Lux

Project: Kennet Centre
Newbury

Title: CBDM Assessment - Daylight illuminance
Proposed Scheme 01/09/23
Sixth Floor

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
--	--	DK	1:250 @ A3	Sep 23	P3427/CBDM/13	02



Sources: Zmapping Ltd
3D Massing Model (received 21/08/23)

ColladoCollins Architects
Proposed Info (received 01/09/23)
20011_Newbury_Eagle Qarter_P1-301_P17_Block S & Car Park Proposed Plan.dwg
20011_Newbury_Eagle Qarter_P1-202_P17_Blocks B, E, F, G and H Proposed Plan.dwg

Key: Daylight Illuminance
(achieved for 50% of daylight hours)

- <50 Lux
- >50 Lux
- >100 Lux
- >150 Lux
- >200 Lux

Median Illuminance (Lux) Levels shown for each room.

Recommended Targets:

Bedroom	100 Lux
Living Room	150 Lux
Kitchen	200 Lux

Project: Kennet Centre
Newbury

Title: CBDM Assessment - Daylight illuminance
Proposed Scheme 01/09/23
Seventh Floor

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
--	--	DK	1:250 @ A3	Sep 23	P3427/CBDM/14	02

Kennet Centre, Newbury
Light Within 01/09/23

Unit	Room	Room Use	Date	Sunlight Exposure (Hours)
Proposed Scheme				
	R14/102	LKD	10-Mar	5.5
	R14/103	LKD	26-Feb	5.8
	R14/104	LKD	07-Feb	6.3
	R14/105	LKD	07-Feb	6.3
B106	R26/101	BEDROOM	21-Mar	1.1
	R27/101	LKD	11-Mar	0.8
B115	R28/101	STUDIO	21-Mar	1.1
B206	R26/102	BEDROOM	21-Mar	1.2
	R27/102	LKD	11-Mar	0.8
B215	R28/102	STUDIO	10-Mar	1.9
B306	R26/103	BEDROOM	21-Mar	1.0
	R27/103	BEDROOM	08-Mar	1.0
	R28/103	LKD	21-Mar	3.3
	R34/103	BEDROOM	21-Mar	2.5
B307	R35/103	LKD	21-Mar	2.7
	R36/103	BEDROOM	21-Mar	0.8
B406	R26/104	BEDROOM	21-Mar	1.8
	R27/104	BEDROOM	21-Mar	3.3
	R28/104	LKD	21-Mar	3.9
	R34/104	BEDROOM	21-Mar	3.3
B407	R35/104	LKD	21-Mar	4.0
	R36/104	BEDROOM	21-Mar	1.4
B506	R26/105	BEDROOM	21-Mar	4.0
	R27/105	BEDROOM	21-Mar	4.0
	R28/105	LKD	21-Mar	4.7
	R34/105	BEDROOM	21-Mar	4.0

Kennet Centre, Newbury
Light Within 01/09/23

Unit	Room	Room Use	Date	Sunlight Exposure (Hours)
B507	R35/105	LKD	21-Mar	4.8
	R36/105	BEDROOM	21-Mar	2.1
B606	R9/106	LKD	21-Mar	5.3
	R10/106	BEDROOM	21-Mar	4.5
	R10/107	BEDROOM	21-Mar	4.8
	R11/107	BEDROOM	21-Mar	3.8
B607	R35/106	LKD	21-Mar	5.3
	R36/106	BEDROOM	21-Mar	2.6
	R12/107	BEDROOM	21-Mar	0.0
E204	R29/102	BEDROOM	21-Mar	0.0
	R30/102	LKD	21-Mar	0.0
	R31/102	BEDROOM	21-Mar	0.0
	R29/104	BEDROOM	21-Mar	0.0
	R30/104	LKD	21-Mar	1.8
	R31/104	BEDROOM	21-Mar	1.2
E205	R32/102	STUDIO	21-Mar	0.0
	R32/104	STUDIO	21-Mar	1.5
E206	R33/102	STUDIO	21-Mar	2.2
	R33/104	STUDIO	21-Mar	3.3
E304	R29/103	BEDROOM	21-Mar	0.0
	R30/103	LKD	21-Mar	0.0
	R31/103	BEDROOM	21-Mar	0.5
E305	R32/103	STUDIO	21-Mar	1.3
E306	R33/103	STUDIO	21-Mar	2.3
S101	R7/101	LKD	21-Mar	0.4
	R8/101	BEDROOM	21-Mar	1.2

Kennet Centre, Newbury
Light Within 01/09/23

Unit	Room	Room Use	Date	Sunlight Exposure (Hours)
S102	R9/101	BEDROOM	21-Mar	1.7
	R10/101	LKD	21-Mar	2.2
S103	R11/101	BEDROOM	21-Mar	3.5
	R12/101	LKD	21-Mar	3.7
	R13/101	BEDROOM	20-Mar	3.6
S104	R14/101	LKD	18-Mar	5.3
	R15/101	BEDROOM	20-Mar	4.3
S105	R16/101	BEDROOM	20-Mar	4.7
	R17/101	LKD	21-Mar	3.8
S106	R18/101	LKD	21-Mar	0.0
	R19/101	BEDROOM	21-Mar	0.0
S107	R20/101	BEDROOM	21-Mar	0.0
	R21/101	LKD	21-Mar	0.0
	R22/101	BEDROOM	21-Mar	0.0
S108	R23/101	BEDROOM	21-Mar	0.0
	R24/101	LKD	21-Mar	0.0
	R25/101	BEDROOM	21-Mar	0.1
S119	R1/101	LKD	21-Mar	0.0
	R2/101	BEDROOM	21-Mar	0.0
S120	R3/101	LKD	21-Mar	0.0
	R4/101	BEDROOM	21-Mar	0.0
S121	R5/101	LKD	21-Mar	0.0
	R6/101	BEDROOM	21-Mar	0.0
S201	R7/102	LKD	21-Mar	1.1
	R8/102	BEDROOM	21-Mar	1.9
S202	R9/102	BEDROOM	21-Mar	2.4

Kennet Centre, Newbury
Light Within 01/09/23

Unit	Room	Room Use	Date	Sunlight Exposure (Hours)
	R10/102	LKD	21-Mar	4.8
S203	R11/102	BEDROOM	21-Mar	4.3
	R12/102	LKD	03-Mar	3.9
	R13/102	BEDROOM	01-Mar	3.8
S204	R15/102	BEDROOM	15-Mar	4.6
S205	R16/102	BEDROOM	19-Mar	4.9
	R17/102	LKD	19-Mar	6.4
S206	R18/102	LKD	21-Mar	0.0
	R19/102	BEDROOM	21-Mar	0.0
S207	R20/102	BEDROOM	21-Mar	0.0
	R21/102	LKD	21-Mar	0.0
	R22/102	BEDROOM	21-Mar	0.0
S208	R23/102	BEDROOM	21-Mar	0.0
	R24/102	LKD	21-Mar	0.1
	R25/102	BEDROOM	21-Mar	0.3
S219	R1/102	LKD	21-Mar	0.0
	R2/102	BEDROOM	21-Mar	0.0
S220	R3/102	LKD	21-Mar	0.0
	R4/102	BEDROOM	21-Mar	0.0
S221	R5/102	LKD	21-Mar	0.0
	R6/102	BEDROOM	21-Mar	0.0
S301	R7/103	LKD	21-Mar	1.4
	R8/103	BEDROOM	21-Mar	2.2
S302	R9/103	BEDROOM	21-Mar	4.6
	R10/103	LKD	21-Mar	5.1

Kennet Centre, Newbury
Light Within 01/09/23

Unit	Room	Room Use	Date	Sunlight Exposure (Hours)
S303	R11/103	BEDROOM	20-Mar	3.8
	R12/103	LKD	18-Feb	4.1
	R13/103	BEDROOM	18-Feb	4.1
S304	R15/103	BEDROOM	01-Mar	4.9
S305	R16/103	BEDROOM	06-Mar	5.3
	R17/103	LKD	06-Mar	6.8
S306	R18/103	LKD	21-Mar	0.0
	R19/103	BEDROOM	21-Mar	0.0
S307	R20/103	BEDROOM	21-Mar	0.0
	R21/103	LKD	21-Mar	0.0
	R22/103	BEDROOM	21-Mar	0.0
S308	R23/103	BEDROOM	21-Mar	0.0
	R24/103	LKD	21-Mar	0.2
	R25/103	BEDROOM	21-Mar	0.4
S319	R1/103	LKD	21-Mar	0.0
	R2/103	BEDROOM	21-Mar	0.0
S320	R3/103	LKD	21-Mar	0.0
	R4/103	BEDROOM	21-Mar	0.0
S321	R5/103	LKD	21-Mar	0.0
	R6/103	BEDROOM	21-Mar	0.0
S401	R7/104	LKD	21-Mar	1.4
	R8/104	BEDROOM	21-Mar	3.3
S402	R9/104	BEDROOM	21-Mar	4.6
	R10/104	LKD	14-Mar	4.8
S403	R11/104	BEDROOM	21-Mar	4.1
	R12/104	LKD	06-Feb	4.5

Kennet Centre, Newbury
Light Within 01/09/23

Unit	Room	Room Use	Date	Sunlight Exposure (Hours)
	R13/104	BEDROOM	04-Feb	4.3
S404	R15/104	BEDROOM	15-Feb	5.3
S405	R16/104	BEDROOM	18-Feb	5.6
	R17/104	LKD	22-Feb	7.2
S406	R18/104	LKD	21-Mar	0.0
	R19/104	BEDROOM	21-Mar	0.0
S407	R20/104	BEDROOM	21-Mar	0.0
	R21/104	LKD	21-Mar	0.0
	R22/104	BEDROOM	21-Mar	0.0
S408	R23/104	BEDROOM	21-Mar	0.0
	R24/104	LKD	21-Mar	0.3
	R25/104	BEDROOM	21-Mar	0.8
S419	R1/104	LKD	21-Mar	0.0
	R2/104	BEDROOM	21-Mar	0.0
S420	R3/104	LKD	21-Mar	0.0
	R4/104	BEDROOM	21-Mar	0.0
S421	R5/104	LKD	21-Mar	0.0
	R6/104	BEDROOM	21-Mar	0.0
S501	R7/105	LKD	21-Mar	5.1
	R8/105	BEDROOM	21-Mar	3.8
S502	R9/105	BEDROOM	21-Mar	4.6
	R10/105	LKD	21-Mar	5.1
S503	R11/105	BEDROOM	20-Mar	3.8
	R12/105	LKD	06-Feb	4.5
	R13/105	BEDROOM	04-Feb	4.4

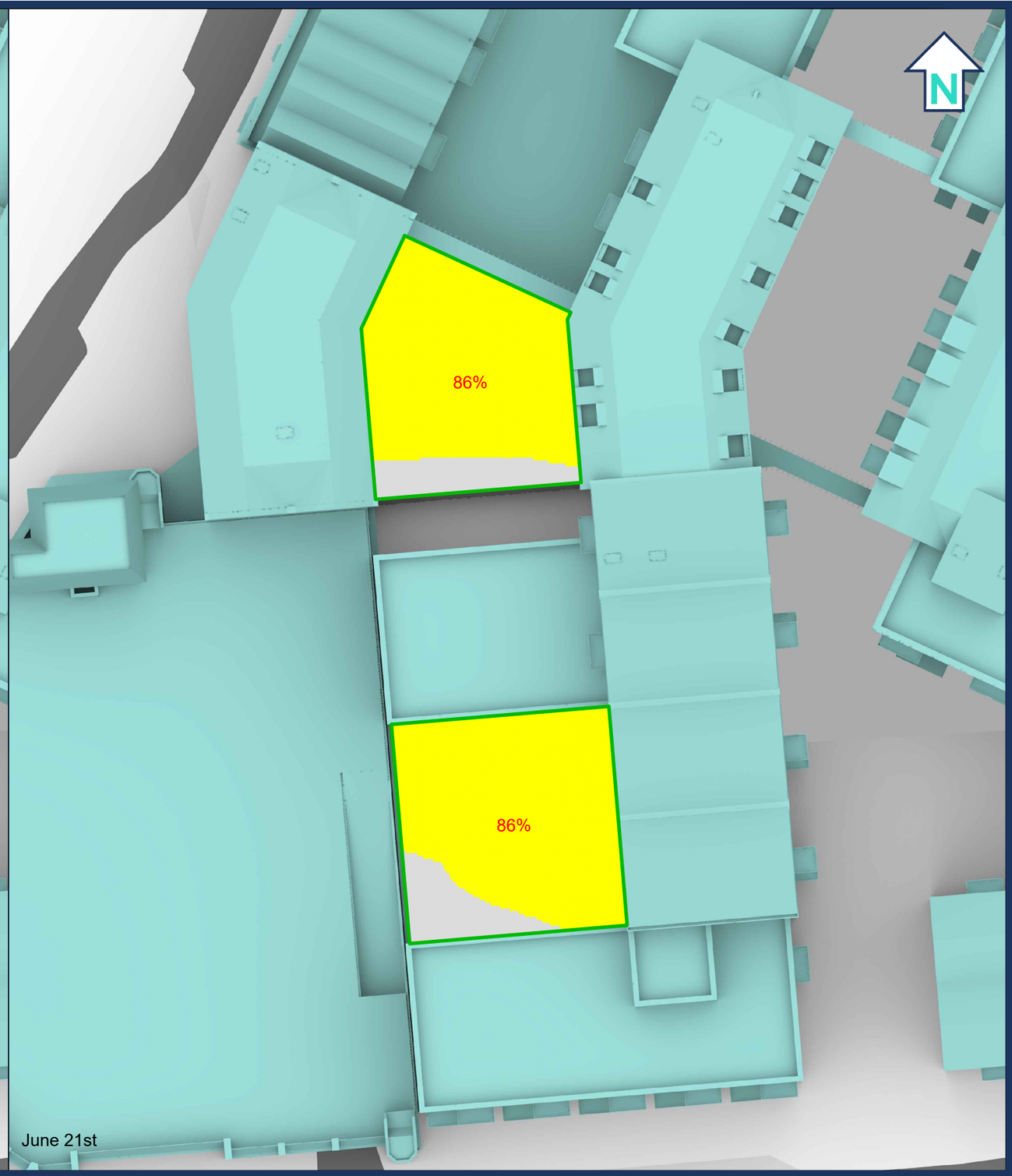
Kennet Centre, Newbury
Light Within 01/09/23

Unit	Room	Room Use	Date	Sunlight Exposure (Hours)
S504	R15/105	BEDROOM	21-Mar	5.5
S505	R16/105	BEDROOM	03-Feb	5.9
	R17/105	LKD	07-Feb	7.6
S506	R18/105	LKD	21-Mar	0.0
	R19/105	BEDROOM	21-Mar	0.0
S507	R20/105	BEDROOM	21-Mar	0.0
	R21/105	LKD	21-Mar	0.0
	R22/105	BEDROOM	21-Mar	0.0
S508	R23/105	BEDROOM	21-Mar	0.0
	R24/105	LKD	21-Mar	0.7
	R25/105	BEDROOM	21-Mar	3.1
S519	R1/105	LKD	21-Mar	0.0
	R2/105	BEDROOM	21-Mar	0.0
S520	R3/105	LKD	21-Mar	0.0
	R4/105	BEDROOM	21-Mar	0.0
S521	R5/105	LKD	21-Mar	0.0
	R6/105	BEDROOM	21-Mar	0.0
S601	R1/106	LKD	21-Mar	5.1
	R2/106	BEDROOM	21-Mar	3.5
S602	R3/106	BEDROOM	21-Mar	4.6
	R4/106	LD	21-Mar	5.1
	R5/106	BEDROOM	21-Mar	3.9
S603	R6/106	BEDROOM	21-Mar	4.6
	R7/106	LKD	21-Mar	5.1
S604	R8/106	STUDIO	27-Feb	3.7

Kennet Centre, Newbury
Light Within 01/09/23

Unit	Room	Room Use	Date	Sunlight Exposure (Hours)
S701	R1/107	BEDROOM	21-Mar	4.2
	R2/107	LKD	21-Mar	5.1
	R3/107	BEDROOM	21-Mar	4.0
S702	R4/107	BEDROOM	21-Mar	4.6
	R5/107	LKD	21-Mar	5.1
	R6/107	BEDROOM	21-Mar	4.6
S703	R7/107	BEDROOM	21-Mar	4.6
	R8/107	LKD	21-Mar	5.1
S704	R9/107	STUDIO	21-Mar	5.1

Appendix 2: Drawings



Sources: Zmapping Ltd
3D Massing Model (received 21/08/23)

ColladoCollins Architects
Proposed Info (received 01/09/23)
20011_Newbury_Eagle Qarter_P1-301_P17_Block S & Car Park Proposed Plan.dwg
20011_Newbury_Eagle Qarter_P1-202_P17_Blocks B, E, F, G and H Proposed Plan.dwg

Key:
- Area analysed
- Area with more than 2 hours of direct sunlight
- Area with less than 2 hours of direct sunlight
- 50% Percentage of area with more than 2 hours of direct sunlight

Project: Kennet Centre
Newbury

Title: BRE 2 Hour Sun on Ground Test
March and June 21st
Proposed Scheme 01/09/23

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
--	--	DK	1:500 @ A3	Sep 23	P3427/SHA/01	02