

PROPOSED SCHEME DAYLIGHT, SUNLIGHT & OVERSHADOWING

30-36 Clarendon Road, London N8 0DJ

Produced by XCO₂ for Paul Simon Magic Homes

September 2022



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CONTENTS

EXECUTIVE SUMMARY 5

INTRODUCTION7

METHODOLOGY 8

DESIGN DEVELOPMENT 9

DAYLIGHT ASSESSMENT11

SUNLIGHT ASSESSMENT 13

OVERSHADOWING ASSESSMENT14

CONCLUSION..... 17

APPENDIX A - WINDOW/ROOM REFERENCE.....18

APPENDIX B – DETAILED DAYLIGHT RESULTS.....19

APPENDIX C – DETAILED SUNLIGHT RESULTS..... 22

PROPOSED SCHEME DAYLIGHT, SUNLIGHT & OVERSHADOWING

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Prepared by	GD						
Checked by	FH						
Authorised by	RM						
Date	30/09/2022						
Project reference	9.543						

EXECUTIVE SUMMARY

The daylight, sunlight and overshadowing analysis indicates that the habitable rooms of the proposed development at 30-36 Clarendon Road, London N8 0DJ will achieve adequate levels of daylight and sunlight.

Daylight and Sunlight analysis was carried out for the proposed development at Clarendon Road, located within the London Borough of Haringey. This report outlines the results of the analysis for the planning application, assessing the daylight and sunlight received by the habitable spaces of the proposed development.

The methodology set out in this report is in accordance with BRE's "Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice" by PJ Littlefair et al. (2022) which is accepted as good practice by Planning Authorities.

Computer modelling software was used to carry out the assessments. The model used was based on drawings and a 3D model provided by the design team.

DAYLIGHT ASSESSMENT

The rooms evaluated in the internal daylight assessment include open plan kitchen, living room, dining spaces, and bedrooms within the proposed development.

The assessment was carried out for 17 no. dwellings considered to be the worst-case units in terms of daylight access across the scheme. All habitable rooms within these dwellings have been included in the assessment.

The analysis results indicated that 37 out of 49 rooms satisfy the recommendations set out by the BRE's "Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice" by PJ Littlefair et al. (2022), which is accepted as good practice by Planning Authorities.

Of the remaining 12 rooms, half are kitchen/living/dining rooms while the other half are bedrooms. 5 of the 6 remaining kitchen/living/dining (KLD) rooms meet within 80% or above of the BRE recommendations, and the remaining 1 meets within 70% of the BRE recommendations. 2 of the 6 remaining bedrooms fall within 80% of the BRE

recommendations as well, while the remaining 4 are located on the first floor of the building and have greater obstructions.

Overall, the proposed development as a whole is anticipated to achieve adequate levels of daylighting to all dwellings and habitable spaces, and is therefore considered to provide good quality of accommodation to the future occupants in terms of daylight.

SUNLIGHT ASSESSMENT

The assessment was carried out for 17 no. dwellings considered to be the worst-case units in terms of sunlight access across the scheme.

A total of 17 living spaces were assessed for solar access.

The analysis has shown that 14 rooms will achieve adequate annual and winter sunlight based on the BRE Guide.

The remaining 3 living rooms fall short of the BRE criteria however are located at the north/north-west façades which allows for a reduced amount of sunlight exposure. The number of dwellings with living rooms facing solely north, northeast, or northwest has been minimised in this scheme.

Overall, it can be concluded that the proposed design offers adequate accessibility to sunlight in living spaces considering the context and limitations of the site.

OVERSHADOWING ASSESSMENT

A solar access analysis was undertaken for a total of 3 amenity spaces for the full 24 hours on 21st of March in line with the BRE guidance.

PROPOSED SCHEME DAYLIGHT, SUNLIGHT & OVERSHADOWING

All of the amenity spaces satisfy the BRE criteria. All amenity spaces are predicted to achieve at least 2 hours of sunlight for more than 50% of their area on March 21.

The open spaces of the proposed development are therefore considered to be adequately sunlit.

INTRODUCTION

The site is located in a dense urban environment and the interpretation of the results requires careful consideration of the BRE guidance.

SITE

The proposed development comprises the demolition of the existing building and construction of a part two, six, eight and eleven storey building, with basement, to provide 51 residential units and 560 sqm of commercial floorspace, with access, landscaping and car and cycle parking.

This assessment takes into account the other two cumulative buildings on site within the master plan framework (the other blocks of the master plan

framework do not form part of the current planning application and the three development parcels will be developed independently of each other) as part of the surrounding buildings to represent a worst-case scenario of obstruction to the proposed development. This will ensure that the proposed development is future-proofed in a denser urban environment.

 Site Location

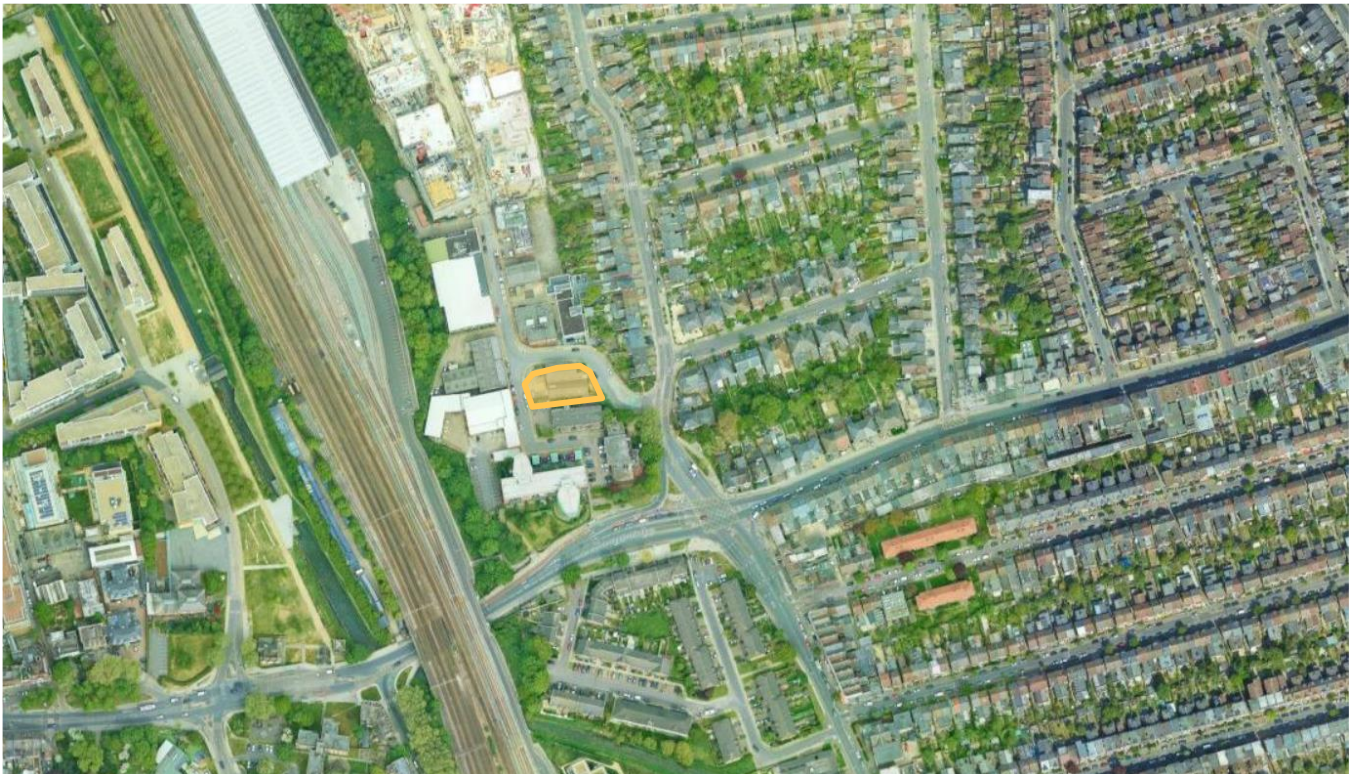


Figure 1: Site location

METHODOLOGY

The assessment is based on guidelines set out in the BRE “Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice” (2022).

The methodology is based on the British Research Establishment’s (BRE) publication “Site Layout Planning for Daylight and Sunlight - A Guide to Good Practice,” by PJ Littlefair et al. (2022).

The BRE publication Site Layout Planning for Daylight and Sunlight gives advice on site layout planning to achieve good daylighting in buildings. It is important to note that the advice given in the BRE guide is “*not mandatory*” and “*its aim is to help rather than constrain the designer*”.

DAYLIGHT

The BRE guidelines refer to the British Standard BS EN 17037 *Daylight in Buildings* recommendations. This stipulates the calculation of the amount of daylight in a space using one of two methods: prediction of illuminance levels using hourly data, or the use of the daylight factor. For this assessment, the method predicting illuminance levels using hourly data is used. For daylight levels in dwellings, BS EN 17037 refers to the UK National Annex which outlines the illuminance level needed in a room according to its occupancy. These are as follows:

- 100 lux for bedrooms
- 150 lux for living rooms and
- 200 lux for kitchens, or rooms with kitchens

The calculation is carried out taking into consideration the relative illuminance values, the amount of daylight hours, and the area of the room. For a room to be compliant with the BRE guidance it must reach the required illuminance levels for at least 50% of the daylight hours across 50% of the room area. This is measured by the Spatial Daylight Autonomy (sDA) metric. sDA is defined as the percentage area of the analysed space that is above a certain lux level for a certain percentage of time.

In addition to the amount of light received on the working plane, this assessment takes into consideration surface materials and in particular their reflectance.

These calculations are carried out using Radiance based software approved by the BRE.

SUNLIGHT

Sunlight is valued within a space, and according to the BRE guidance access to sunlight can be quantified. BS EN 17037 recommends that a space should receive a minimum of 1.5 hours of direct sunlight on the 21st of March – the equinox. The guidance provides categories for access to sunlight according to the below criteria:

- 1.5 hours as the minimum
- 3 hours as a medium level
- 4 hours as a high level

The BRE guidance states that “*in housing, the main requirement for sunlight is in living rooms, where it is valued at any time of day but especially in the afternoon. Sunlight is also required in conservatories. It is viewed as less important in bedrooms and in kitchens, where people prefer it in the morning rather than the afternoon.*”

The guidance states at least one habitable room is recommended to meet the criteria per dwelling.

OVERSHADOWING

Open spaces should retain a reasonable amount of sunlight throughout the year. The BRE states that for an amenity space to “*appear adequately sunlit throughout the year, at least half of the area should receive at least two hours of sunlight on 21 March*”.

DESIGN DEVELOPMENT

The findings presented in the following sections are the result of an iterative design process in which discussions were held between XCO2 and Stockwool Architects in order to optimise the scheme's performance in terms of daylight levels given the context of the site.

Initial drawings from the architect were received where the original internal room layouts and glazing specifications were outlined. From these, baseline assessments were carried out on a worst-case scenario basis following the methodology highlighted in the previous section. This first stage of assessment allowed underperforming rooms to be identified in order for appropriate mitigation measures to be decided and agreed with Stockwool Architects to aid in meeting the recommendations.

Some examples of measures that have been implemented into the proposal in order to improve the levels of natural daylight within the dwellings are outlined below.

REVISION OF ROOM LAYOUTS

A number of KLDs that were performing below recommended lux levels, mainly because of their adjacency to balconies, were redesigned. The design layout was enhanced by changing room uses, allowing for the KLDs to have more windows that are not overshadowed by balconies. In addition, 2 bedrooms were falling short of the recommended lux levels and were thus pushed towards the spaces that are more daylight/less obstructed by surroundings by rearranging the bathrooms locations on the southern façade, increasing their area that meets the BRE recommendations.

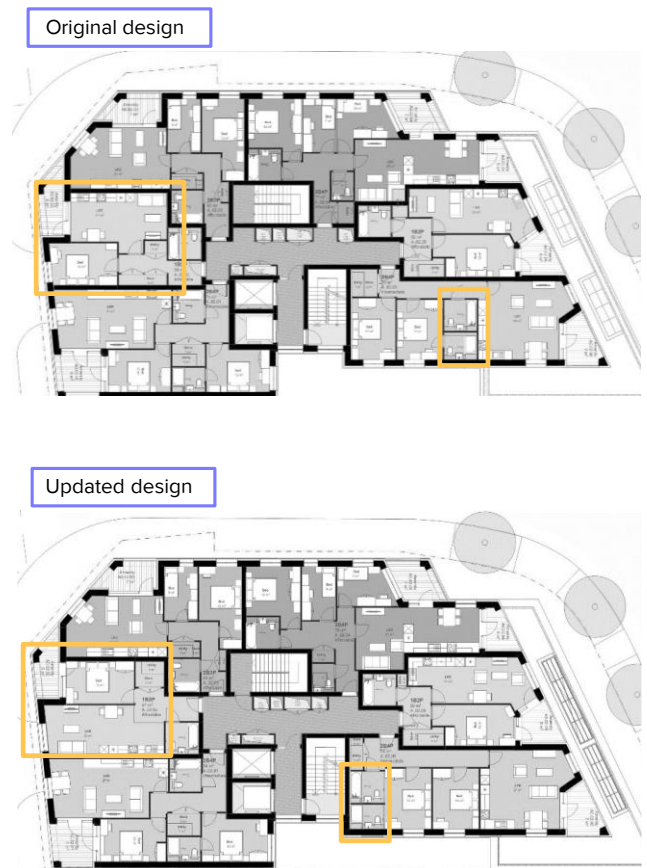


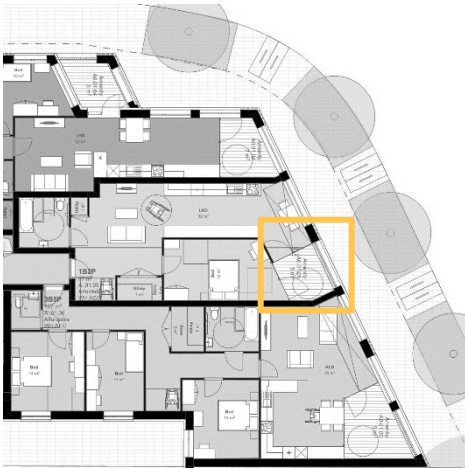
Figure 2: Demonstration of change in layouts to allow for better daylight penetration

PROPOSED SCHEME DAYLIGHT, SUNLIGHT & OVERSHADOWING

DECREASING BALCONY DEPTHS

Balconies have a large effect on overshadowing and have therefore caused obstructions for some KLDs and bedrooms in the development. Balcony depths were reduced to the minimum depth possible in order to maximise daylight penetration in the adjacent rooms.

Original design



Updated design

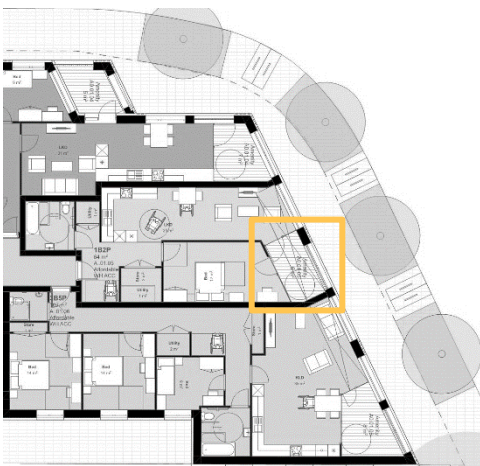
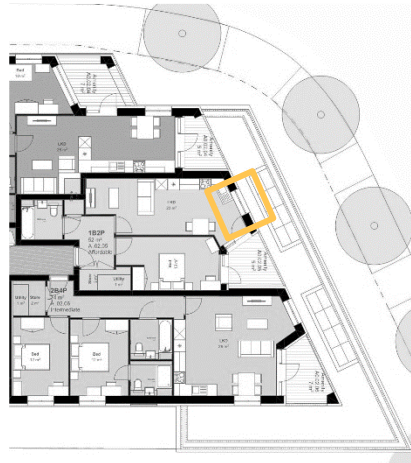


Figure 3: Demonstration of reduction in balcony depth

INCREASED GLAZED AREAS

A large proportion of rooms requiring mitigation in the initial drawings were only marginally below their recommended targets. Glazing areas were increased as far as feasible for the mentioned rooms.

Original design



Updated design

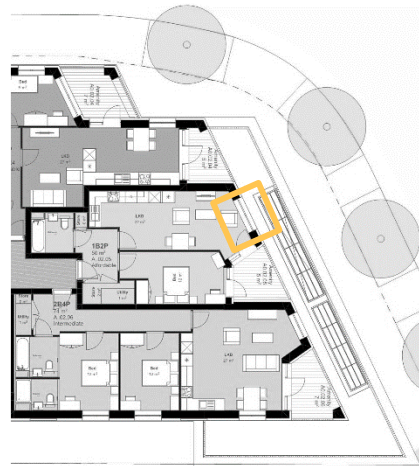


Figure 4: Demonstration of how the glazing area was increased as far as feasible

DAYLIGHT ASSESSMENT

The analysis indicates that the habitable spaces of the proposed development will receive good levels of daylighting.

A total of 17 no. of units located across 4 floors of the development covering those that are considered to be the worst-case dwellings in terms of daylight access have been included in the assessment. All habitable rooms (kitchen, living, dining rooms and bedrooms) within the dwellings were assessed.

The references of the evaluated dwellings and the corresponding habitable rooms can be found in Appendix A - Window/Room Reference. The tables below show the illuminance on grid results for all the assessed rooms.

For the calculations, the following assumptions have been made:

- 50% interior wall reflectance
- 70% interior ceiling reflectance
- 20% interior floor reflectance
- 20% exterior surface reflectance
- 68% light transmission for vertical glazing
- 68% light transmission for horizontal glazing

The 17 units consist of 49 habitable rooms that encompass 17 kitchen/living/dining rooms and 32 bedrooms.

The results show that 11 out of 17 kitchen/living/dining rooms meet the BRE recommendations; and 5 meet within 80% and above of the BRE recommendations (with sDA equal to or greater than 40%). The remaining room meets within 70% of the BRE recommendations achieving the required lux levels for half the daylight hours of the year across 38% of the effective room area. The glazing belonging to this room has been maximised along the façade; and the room is laid out in a way that the living space is placed to the front of the room where there is an abundance of well-lit area

while the rear of the room is reserved for circulation and surface working spaces which are likely to require artificial lighting.

As for the bedrooms, 24 out of 32 bedrooms meet the BRE recommendations. 2 of the remaining 6 bedrooms are meeting within 80% and above of the BRE recommendations (with sDA equal to or greater than 40%). 2 out of the 4 remaining rooms meet within 60% of the BRE recommendations. Of the remaining 2 bedrooms, 1 is limited due to a design constraint being adjacent to a balcony where the main living space of that dwelling was prioritised for available daylight and the other is on the southern façade with greater obstruction from cumulative buildings. It is worth noting that both rooms are located on the first floor thus subjected to slightly lower daylight penetration due to larger obstructions.

As mentioned in the introduction, it is worth highlighting that the proposed development was assessed under a worst-case scenario where the other 2 cumulative blocks of the master plan framework have been included as part of the surrounding context to ensure the design is future-proofed in a denser urban environment. The development is therefore expected to achieve greater levels of daylight under the existing context (with the current Clarendon Recovery College and the West Indian Cultural Centre in place). Performance is anticipated to improve for the south facing rooms under the existing context.

Detailed results can be found within Appendix B – Detailed Daylight Results.

PROPOSED SCHEME DAYLIGHT, SUNLIGHT & OVERSHADOWING

Figure 5: Daylight results summary for 30-36 Clarendon Road, London N8 0DJ

Number of habitable rooms tested	49
Number of kitchen/living/dining rooms	17
Number of kitchen/living/dining rooms meeting the BRE recommendations	11
Number of kitchen/living/dining rooms meeting within 80% and above the BRE recommendations	5
Number of kitchen/living/dining rooms meeting within 70% and above the BRE recommendations	1
Number of bedrooms	32
Number of bedrooms meeting the BRE recommendations	26
Number of bedrooms meeting within 80% and above the BRE recommendations	2
Number of bedrooms meeting within 60% and above the BRE recommendations	2
Number of rooms not meeting any of the above criteria	2

SUNLIGHT ASSESSMENT

The analysis indicates that the living spaces of the proposed development will receive good levels of sunlight.

A sunlight access assessment has been carried out for living rooms of the proposed development in line with the BRE methodology.

14 out of the 17 living rooms within the proposed development have at least one window facing 90° due south to maximise sunlight access. The remaining 3 living rooms have a north/north-west facing orientation.

A total of 17 no. living rooms located on 4 floors of the development that are considered to be the worst-case living rooms in terms of sunlight access have been included in the assessment.

The references of the evaluated living rooms and detailed sunlight results can be found in Appendix C – Detailed Sunlight Results.

7 of the total number of living rooms achieve more than 4 hours of solar access on March 21, and therefore are considered to receive high levels of sunlight. 2 of the remaining 10 living rooms achieve 3 hours of sunlight access on March 21, and 5 rooms achieve more than 1.5 hours of sunlight access on March 21 as a minimum recommendation.

The remaining 3 living rooms fall short of the BRE criteria however are located at the north/north-west façades which allows for a reduced amount of sunlight exposure. The number of dwellings with living rooms facing solely north, northeast, or northwest has been minimised in this scheme.

Figure 6: Sunlight results summary for 30-36 Clarendon Road, London N8 0DJ

Number of living rooms tested	17
Number of living rooms with more than 4 hours of sunlight access	7
Number of living rooms with more than 3 hours of sunlight access	2
Number of living rooms with more than 1.5 hours of sunlight access	5
Number of living rooms with north/north-west facing orientation not meeting any of the above criteria	3

OVERSHADOWING ASSESSMENT

The analysis indicates that the open spaces of the proposed development will receive adequate sunlight.

A review of the site plan showed that there are 3 amenity or open spaces which are part of the proposed development, as shown in the figure below. A Solar Access Analysis was undertaken on these amenity areas for the full 24 hours on 21 March as set out by the BRE.

The results show that all the amenity spaces assessed pass the BRE criteria receiving more than 2 hours of sunlight on 21 March on at least 50% of their areas.

Detailed results are shown in Table 1 below.

The 3 amenity spaces taken into account are located on three floors of the development: level 06, level 08 and the roof terrace.



Figure 7: Amenity and open spaces in the development L06

PROPOSED SCHEME DAYLIGHT, SUNLIGHT & OVERSHADOWING



Figure 8: Amenity and open spaces in the development L08

PROPOSED SCHEME DAYLIGHT, SUNLIGHT & OVERSHADOWING



Figure 9: Amenity and open spaces in the development Roof terrace

Table 1: Overshadowing results summary for 30-36 Clarendon Road, London N8 0DJ.

Amenity Reference	Amenity Area (m ²)	Lit Area Proposed (m ²)	Meets BRE Criteria
A1	161.7	123.8 (77%)	Meets BRE Guidance
A2	122.3	122.3 (100%)	Meets BRE Guidance
A3	196.7	160.5 (82%)	Meets BRE Guidance

CONCLUSION

The daylight, sunlight and overshadowing analysis indicates that the habitable rooms of the proposed development at S Road will achieve adequate levels of daylight and sunlight.

DAYLIGHT ASSESSMENT

The rooms evaluated in the internal daylight assessment include open plan kitchen, living room, dining spaces, and bedrooms within the proposed development.

The assessment was carried out for 17 no. dwellings considered to be the worst-case units in terms of daylight access across the scheme. All habitable rooms within these dwellings have been included in the assessment.

The analysis results indicated that 37 out of 49 rooms satisfy the recommendations set out by the BRE's "Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice" by PJ Littlefair et al. (2022), which is accepted as good practice by Planning Authorities.

Of the remaining 12 rooms, half are kitchen/living/dining rooms while the other half are bedrooms. 5 of the 6 remaining kitchen/living/dining (KLD) rooms meet within 80% or above of the BRE recommendations, and the remaining 1 meets within 70% of the BRE recommendations. 2 of the 6 remaining bedrooms fall within 80% of the BRE recommendations as well, while the remaining 4 are located on the first floor of the building and have greater obstructions.

Overall, the proposed development as a whole is anticipated to achieve adequate levels of daylighting to all dwellings and habitable spaces, and is therefore considered to provide good quality of accommodation to the future occupants in terms of daylight.

SUNLIGHT ASSESSMENT

The assessment was carried out for 17 no. dwellings considered to be the worst-case units in terms of sunlight access across the scheme.

A total of 17 living spaces were assessed for solar access.

The analysis has shown that 14 rooms will achieve adequate annual and winter sunlight based on the BRE Guide.

The remaining 3 living rooms fall short of the BRE criteria however are located at the north/north-west façades which allows for a reduced amount of sunlight exposure. The number of dwellings with living rooms facing solely north, northeast, or northwest has been minimised in this scheme.

Overall, it can be concluded that the proposed design offers adequate accessibility to sunlight in living spaces considering the context and limitations of the site.

OVERSHADOWING ASSESSMENT

A solar access analysis was undertaken for a total of 3 amenity spaces for the full 24 hours on 21st of March in line with the BRE guidance.

All of the amenity spaces satisfy the BRE criteria. All amenity spaces are predicted to achieve at least 2 hours of sunlight for more than 50% of their area on March 21.

The open spaces of the proposed development are therefore considered to be adequately sunlit.

APPENDIX A - WINDOW/ROOM REFERENCE

Notes

Rev	Date	Description	Chk'd	Appr
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Architect
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Project
30-36 Clarendon Road

Window and Room Reference
L01

Schedule N.T.S	Drawn GD	Checked FH	Date 27.09.22
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Drawing Number	Revision
9.543_05	A

DO NOT SCALE			
BACKGROUND DRAWING INFORMATION			
FILE NAME	ORIGINATOR NAME	DESCRIPTION NAME	REVISION INFO

Notes

Rev	Date	Description	Chg'd	Appr

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Project
30-36 Clarendon Road

Title
Window and Room Reference
L02

Drawn	Check	Revised	Date
N.T.S	GD	PH	27.09.22

Drawing Number	Revision
9.543_06	A



Notes

Rev	Date	Description	Chk'd	App
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Paul Simon Magic Group

Architect
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Project
30-36 Clarendon Road

Title
Window and Room Reference
L03

Scale	Drawn	Checked	Date
N.T.S	GD	FH	27.09.22

Drawing Number
9.543_07

1



DO NOT SCALE			
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FILE NAME	ORIGINATOR NAME	DESCRIPTION NAME	REVISION INFO

Notes

Rev	Date	Description	Chg'd	Appr

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Title
Window and Room Reference
L07

Scale	Drawn	Checked	Date
N.T.S	GD	PH	27.09.22

Drawing Number	Revision
9.543_08	A

PROPOSED SCHEME DAYLIGHT, SUNLIGHT & OVERSHADOWING

APPENDIX B – DETAILED DAYLIGHT RESULTS

Note: floor references in the tables below start from ground which refers to the first floor of the architects drawings, first refers to second floor of the architects drawings, second refers to third floor of architects drawings and third refers to seventh floor of the architects drawings. This is due to the technicality of daylight simulation software.

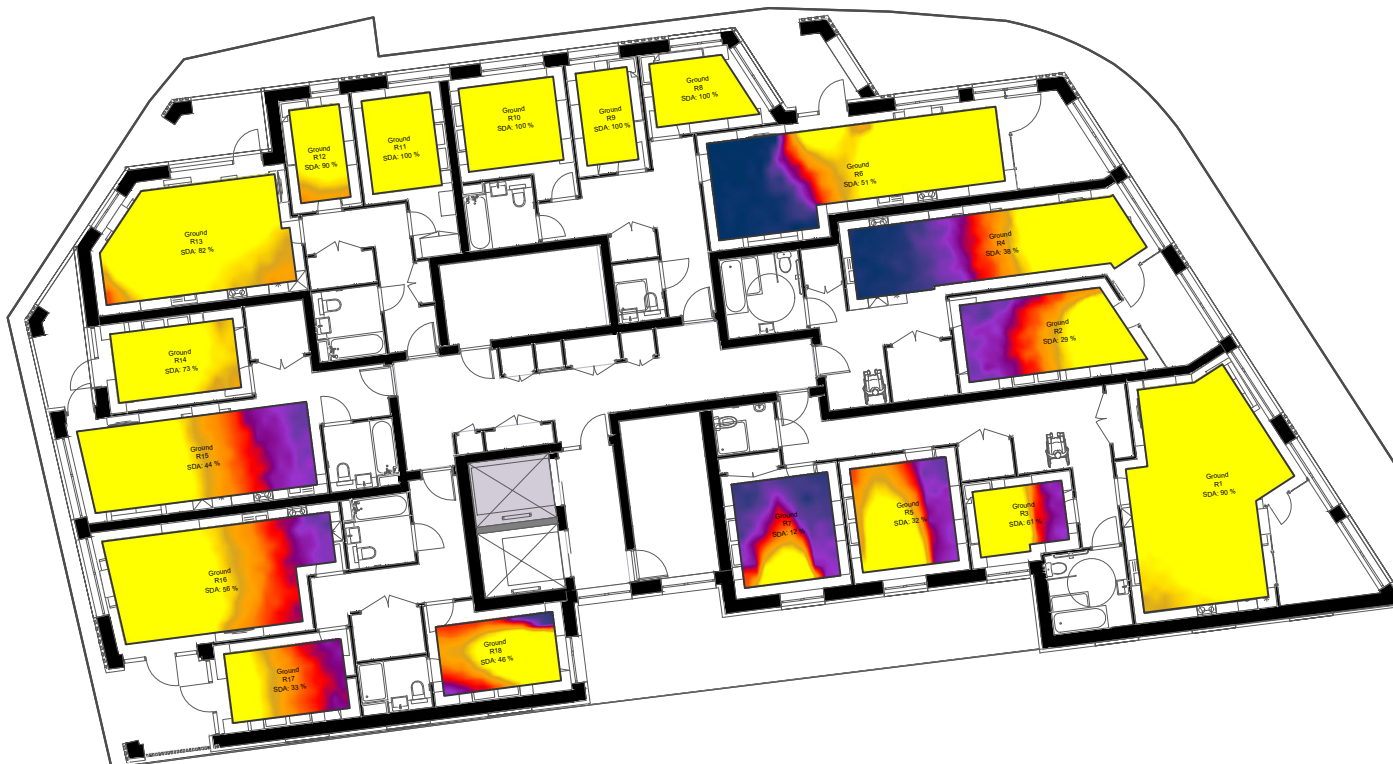
Floor Ref	Room Ref	Room Use	Room Area (m ²)	Effective Area (m ²)	Area Meeting Req Lux (m ²)	% of Area Meeting Req Lux	Criteria				Meets Criteria
							Req Lux	Req % of Effective Area	Req % of Daylight Hours	Daylight Hours	
Ground	R1	LKD	34.50	27.30	24.63	90%	200	50%	50%	4380	Meets BRE Criteria
Ground	R2	Bedroom	16.82	11.93	3.51	29%	100	50%	50%	4380	Falls short of BRE Criteria
Ground	R3	Bedroom	8.71	5.45	3.31	61%	100	50%	50%	4380	Meets BRE Criteria
Ground	R4	LKD	25.01	18.11	6.94	38%	200	50%	50%	4380	Falls short of BRE Criteria
Ground	R5	Bedroom	13.79	9.69	3.08	32%	100	50%	50%	4380	Falls short of BRE Criteria
Ground	R6	LKD	31.36	23.59	11.91	51%	200	50%	50%	4380	Meets BRE Criteria
Ground	R7	Bedroom	13.77	9.68	1.14	12%	100	50%	50%	4380	Falls short of BRE Criteria
Ground	R8	Bedroom	8.68	5.41	5.41	100%	100	50%	50%	4380	Meets BRE Criteria
Ground	R9	Bedroom	7.67	4.62	4.62	100%	100	50%	50%	4380	Meets BRE Criteria
Ground	R10	Bedroom	11.37	7.68	7.68	100%	100	50%	50%	4380	Meets BRE Criteria
Ground	R11	Bedroom	9.62	6.23	6.23	100%	100	50%	50%	4380	Meets BRE Criteria
Ground	R12	Bedroom	7.39	4.39	3.95	90%	100	50%	50%	4380	Meets BRE Criteria
Ground	R13	LKD	23.63	18.02	14.74	82%	200	50%	50%	4380	Meets BRE Criteria
Ground	R14	Bedroom	12.17	8.23	6.02	73%	100	50%	50%	4380	Meets BRE Criteria

PROPOSED SCHEME DAYLIGHT, SUNLIGHT & OVERSHADOWING

Floor Ref	Room Ref	Room Use	Room Area (m ²)	Effective Area (m ²)	Area Meeting Req Lux (m ²)	% of Area Meeting Req Lux	Criteria				Meets Criteria
							Req Lux	Req % of Effective Area	Req % of Daylight Hours	Daylight Hours	
Ground	R15	LKD	24.38	18.24	8.11	44%	200	50%	50%	4380	Falls short of BRE Criteria
Ground	R16	LKD	26.49	20.09	11.23	56%	200	50%	50%	4380	Meets BRE Criteria
Ground	R17	Bedroom	11.13	7.41	2.47	33%	100	50%	50%	4380	Falls short of BRE Criteria
Ground	R18	Bedroom	11.21	7.46	3.42	46%	100	50%	50%	4380	Falls short of BRE Criteria
First	R1	LKD	27.33	21.23	17.94	85%	200	50%	50%	4380	Meets BRE Criteria
First	R2	Bedroom	12.39	8.00	3.18	40%	100	50%	50%	4380	Falls short of BRE Criteria
First	R3	LKD	21.72	15.51	6.78	45%	200	50%	50%	4380	Falls short of BRE Criteria
First	R4	Bedroom	11.80	8.00	5.71	71%	100	50%	50%	4380	Meets BRE Criteria
First	R5	Bedroom	11.80	8.00	4.37	55%	100	50%	50%	4380	Meets BRE Criteria
First	R6	LKD	26.79	19.94	9.33	47%	200	50%	50%	4380	Falls short of BRE Criteria
First	R7	Bedroom	8.68	5.41	5.41	100%	100	50%	50%	4380	Meets BRE Criteria
First	R8	Bedroom	7.67	4.62	4.54	98%	100	50%	50%	4380	Meets BRE Criteria
First	R9	Bedroom	11.37	7.68	7.68	100%	100	50%	50%	4380	Meets BRE Criteria
First	R10	Bedroom	9.62	6.23	6.23	100%	100	50%	50%	4380	Meets BRE Criteria
First	R11	Bedroom	7.53	4.50	4.50	100%	100	50%	50%	4380	Meets BRE Criteria
First	R12	LKD	23.63	18.02	17.61	98%	200	50%	50%	4380	Meets BRE Criteria
First	R13	Bedroom	12.17	8.23	8.23	100%	100	50%	50%	4380	Meets BRE Criteria

PROPOSED SCHEME DAYLIGHT, SUNLIGHT & OVERSHADOWING

Floor Ref	Room Ref	Room Use	Room Area (m ²)	Effective Area (m ²)	Area Meeting Req Lux (m ²)	% of Area Meeting Req Lux	Criteria				Meets Criteria
							Req Lux	Req % of Effective Area	Req % of Daylight Hours	Daylight Hours	
First	R14	LKD	24.38	18.24	7.68	42%	200	50%	50%	4380	Meets BRE Criteria
First	R15	LKD	26.49	20.09	10.14	50%	200	50%	50%	4380	Meets BRE Criteria
First	R16	Bedroom	11.13	7.41	5.02	68%	100	50%	50%	4380	Meets BRE Criteria
First	R17	Bedroom	11.21	7.46	4.43	59%	100	50%	50%	4380	Meets BRE Criteria
Second	R1	LKD	27.05	20.98	18.05	86%	200	50%	50%	4380	Meets BRE Criteria
Second	R2	Bedroom	11.14	7.25	3.68	51%	100	50%	50%	4380	Meets BRE Criteria
Second	R3	LKD	24.25	17.67	7.33	42%	200	50%	50%	4380	Falls short of BRE Criteria
Second	R4	Bedroom	11.80	8.00	6.08	76%	100	50%	50%	4380	Meets BRE Criteria
Second	R5	Bedroom	11.80	8.00	5.26	66%	100	50%	50%	4380	Meets BRE Criteria
Second	R6	LKD	27.38	20.10	9.98	50%	200	50%	50%	4380	Meets BRE Criteria
Second	R7	Bedroom	13.86	9.42	9.42	100%	100	50%	50%	4380	Meets BRE Criteria
Second	R8	Bedroom	9.65	5.99	4.28	71%	100	50%	50%	4380	Meets BRE Criteria
Second	R9	Bedroom	10.90	7.23	7.23	100%	100	50%	50%	4380	Meets BRE Criteria
Third	R1	LKD	25.40	19.59	19.59	100%	200	50%	50%	4380	Meets BRE Criteria
Third	R2	LKD	29.23	22.87	13.60	59%	200	50%	50%	4380	Meets BRE Criteria
Third	R3	Bedroom	13.72	9.46	9.46	100%	100	50%	50%	4380	Meets BRE Criteria
Third	R4	Bedroom	15.19	10.82	8.30	77%	100	50%	50%	4380	Meets BRE Criteria
Third	R5	Bedroom	11.54	7.74	7.74	100%	100	50%	50%	4380	Meets BRE Criteria



DO NOT SCALE			
BACKGROUND DRAWING INFORMATION			
FILE NAME	DESIGNATOR NAME	DESCRIPTION NAME	REVISION INFO

Notes

SDA % of floor area, by room

50% Required to meet BRE recommendations

200 lux KLDs
150 lux Living rooms
100 lux Bedrooms

Rev	Date	Description	Ch'd	Appr

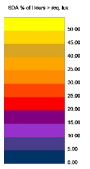
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Client	Paul Simon Magic Group
Architect	Stock Wool Architects
Project	30-36 Clarendon Road
Title	Internal Daylight Analysis L01
Scale	N.T.S
Drawn	GD
Checked	PH
Date	22.09.2022
Drawing Number	9.543_01
Revision	B

DO NOT SCALE			
BACKGROUND DRAWING INFORMATION			
FILE NAME	ORIGINATOR NAME	DESCRIPTION NAME	REVISION INFO

Notes



50% Required to meet BRE recommendations

200 lux KLDs
150 lux Living rooms
100 lux Bedrooms

Rev	Date	Description	Chg'd	Appr

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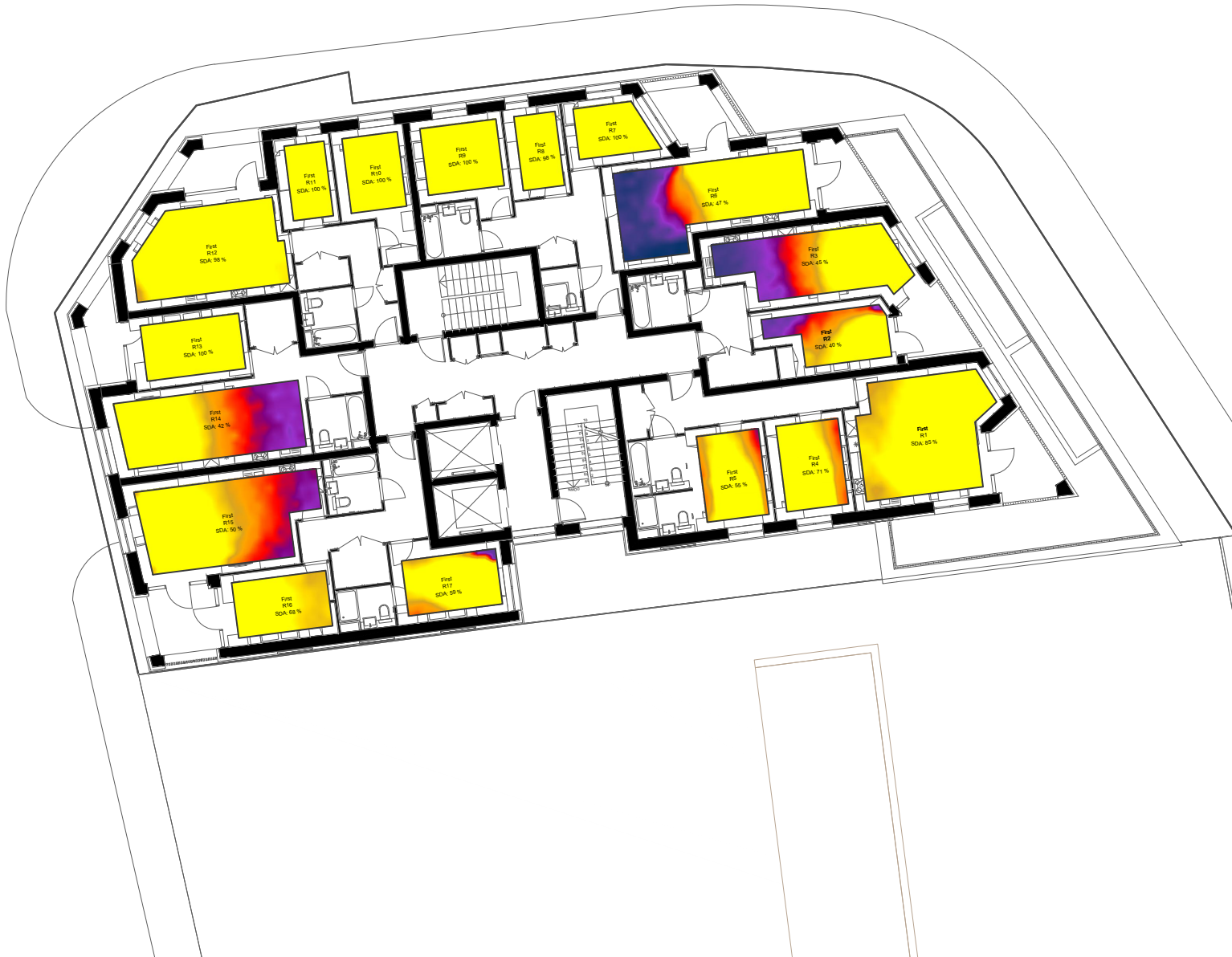
Architect
Stock Wool Architects

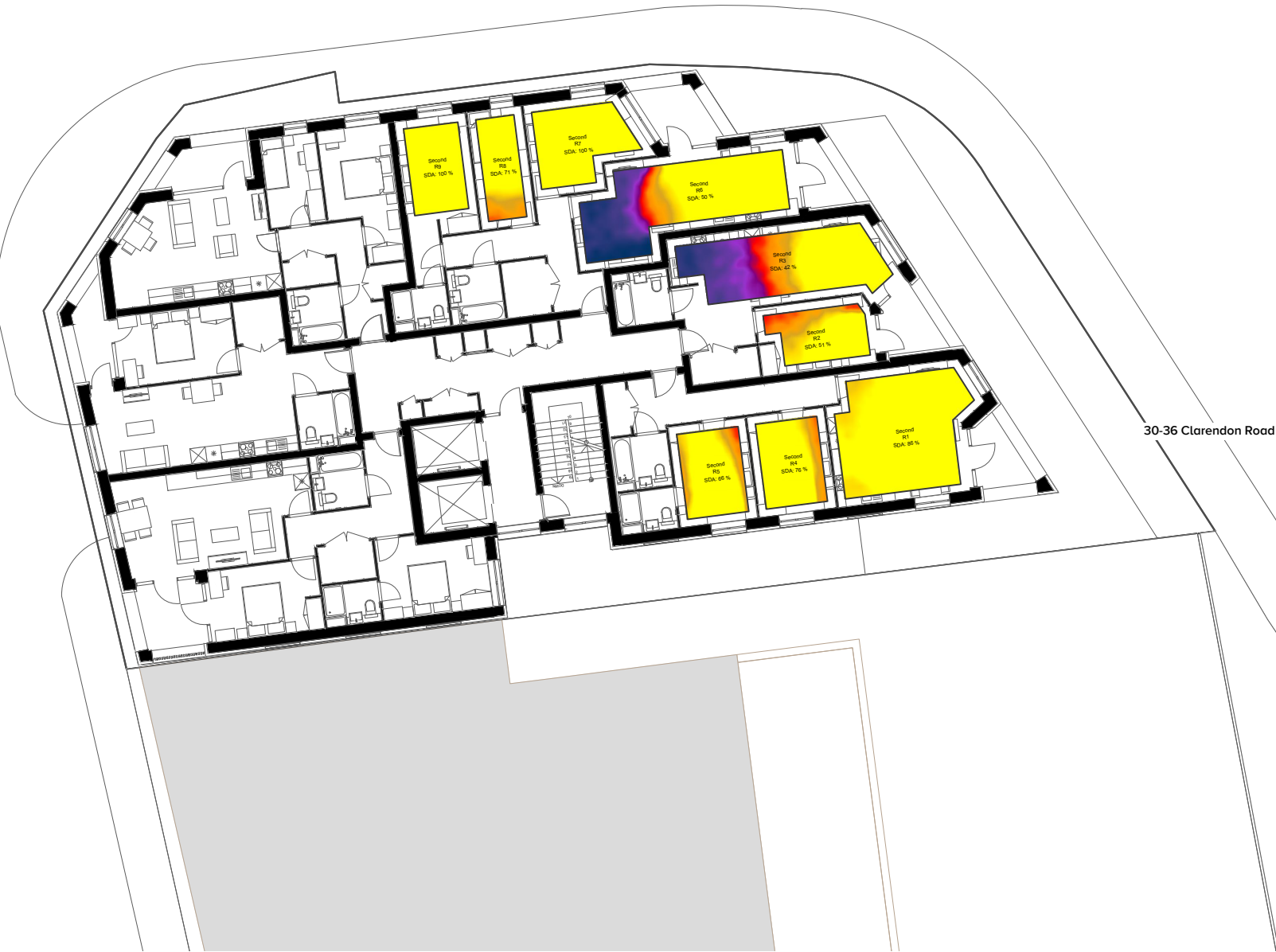
Project
30-36 Clarendon Road

Title
**Internal Daylight Analysis
L02**

Scale	Drawn	Checked	Date
N.T.S	GD	FH	22.09.2022

Drawing Number	Revision
9.543_02	B





30-36 Clarendon Road

DO NOT SCALE			
BACKGROUND DRAWING INFORMATION			
FILE NAME	ORIGINATOR NAME	DESCRIPTION NAME	REVISION NUMBER

Notes



50% Required to meet
BRE recommendations

200 lux KLDs
150 lux Living rooms
100 lux Bedrooms

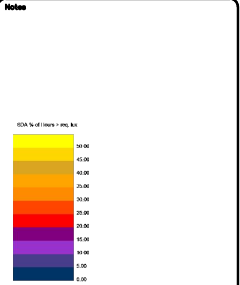
Rev	Date	Description	Chg'd	Appr

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Project	30-36 Clarendon Road
Title	Internal Daylight Analysis LO3
Scale	N.T.S
Drawn	GD
Checked	PH
Date	22.09.2022
Drawing Number	9.543_03
Revision	B



DO NOT SCALE			
BACKGROUND DRAWING INFORMATION			
FILE NAME	ORIGINATOR NAME	DESCRIPTION NAME	REVISION HISTORY



50% Required to meet BRE recommendations

200 lux KLDs
150 lux Living rooms
100 lux Bedrooms

Rev	Date	Description	Chg'd	Appr

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Title
Internal Daylight Analysis
L07

Scale	Drawn	Checked	Date
N.T.S	GD	FH	22.09.2022

Drawing Number
9.543_04

Revision
B

PROPOSED SCHEME DAYLIGHT, SUNLIGHT & OVERSHADOWING

APPENDIX C – DETAILED SUNLIGHT RESULTS

Floor Ref	Room Ref	Room Use	Window Ref	Proposed Sunlight Exposure (Hours)	Rating
Ground	R1	LKD	W1	0	Minimum
			W2	0	
			W3	2.5	
			W4	2.6	
			W5	1.2	
				2.6	
Ground	R4	LKD	W8	0.2	Minimum
			W9	2.7	
			W10	1.3	
				2.7	
Ground	R6	LKD	W12	0	Falls short of BRE Criteria
			W13	0	
			W14	0	
			W15	0	
				0	
Ground	R13	LKD	W23	0	Minimum
			W24	2.7	
				2.7	
Ground	R15	LKD	W26	0	High
			W27	5.1	
				5.1	

PROPOSED SCHEME DAYLIGHT, SUNLIGHT & OVERSHADOWING

Floor Ref	Room Ref	Room Use	Window Ref	Proposed Sunlight Exposure (Hours)	Rating
Ground	R16	LKD	W28	5.1	High
			W29	2.6	
				5.2	
First	R1	LKD	W1	1.2	High
			W2	3.3	
			W3	2.3	
				4.1	
First	R3	LKD	W5	1.5	Minimum
				1.5	
First	R6	LKD	W8	0.6	Falls short of BRE Criteria
			W9	0	
			W10	0	
				0.6	
First	R12	LKD	W17	0	Medium
			W18	3	
				3	
First	R14	LKD	W20	5.2	High
				5.2	
First	R15	LKD	W21	5.2	High
			W22	2.6	
				5.2	
Second	R1	LKD	W1	1.3	High
			W2	3.5	

PROPOSED SCHEME DAYLIGHT, SUNLIGHT & OVERSHADOWING

Floor Ref	Room Ref	Room Use	Window Ref	Proposed Sunlight Exposure (Hours)	Rating
			W3	2.3	
				4.3	
Second	R3	LKD	W5	1.5	Minimum
				1.5	
Second	R6	LKD	W8	0.6	Falls short of BRE Criteria
			W9	0	
			W10	0	
				0.6	
Third	R1	LKD	W1	3	High
			W2	9.3	
			W3	3	
			W4	9	
				9.3	
Third	R2	LKD	W5	3	Medium
			W7	0	
				3	

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