RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Daylight and Sunlight Report

(Within Development)

11 October 2023

53 and 55 Station Road
Hayes
UB3 4BE

RICS
Regulated by RICS

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APPENDICES

1 EXECUTIVE SUMMARY

1.1 Overview

1.1.1 Right of Light Consulting has been commissioned by Rubato Ltd to undertake a daylight and sunlight assessment in connection with the development at 53 and 55 Station Road, Hayes UB3 4BE. The aim of the assessment is to check whether the proposed accommodation will provide its future occupiers with adequate levels of natural light.

1.1.2 The assessment is based on the numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a good practice guide, 3rd Edition' by P J Littlefair 2022.

1.1.3 Appendix 1 identifies the windows and amenity areas analysed in this assessment. Daylight provision data and contours for the habitable rooms are presented in Appendix 2. Exposure to sunlight data is provided in Appendix 3. Overshadowing to gardens and opens spaces data and contour drawings are provided in Appendix 4.

1.1.4 The numerical results demonstrate that the majority of the proposed rooms meet or surpass the BRE recommendations. Whilst there are instances where the Daylight Provision targets are not met, the results are not abnormal in the context of an urban location. The NPPF requires developments to provide acceptable living standards whilst making efficient use of land. The NPPG and BRE guide explain that acceptability is dependent on context and location. The BRE guide also explains that the numerical guidelines should be interpreted flexibly, since natural lighting is only one of many factors in site layout design. The local authority should therefore balance daylight and sunlight considerations against all other material planning considerations when deciding whether to grant planning permission.

2 INFORMATION SOURCES

2.1 Documents Considered

2.1.1 This report is based on the following drawings:

POQ Architects

169/105	Proposed Crown Close Elevation (& Context Photos)	Rev P06
169/106	Proposed Rear & Front Elevations (& Context Photos)	Rev P06
169/100	Proposed GF Plan (4 Apartments)	Rev P06
169/101	Proposed 1F Plan (6 Apartments)	Rev P06
169/102	Proposed 2F Plan (6 Apartments)	Rev P06
169/103	Proposed 3F Plan (Green Roof Amenity Space)	Rev P06

3 METHODOLOGY OF THE ASSESSMENT

3.1 Local Planning Policy

3.1.1 We understand that the Local Authority takes the conventional approach of considering daylight and sunlight amenity with reference to the various numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a guide to good practice, 3rd Edition' by P J Littlefair 2022. The BRE guide is based on European standard BS EN 17037 'Daylight in Buildings', 2019 (BS EN 17037).

3.1.2 The standards set out in the BRE guide are intended to be used flexibly. The BRE guide states:

3.1.3 "The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and the guide 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, since natural lighting is only one of many factors in site layout design."

3.1.4 In reference to applying different numerical target values in different locations, the BRE guide states:

3.1.5 "These values are purely advisory and different targets may be used based on the special requirements of the proposed development or its location."

3.2 National Planning Policy Framework

3.2.1 The BRE numerical guidelines should be considered in the context of the National Planning Policy Framework (NPPF), which stipulates that local planning authorities should take a flexible approach to daylight and sunlight to ensure the efficient use of land. The NPPF states:

"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)."

3.3 National Planning Practice Guidance

3.3.1 The BRE numerical guidelines should also be considered in the context of the National Planning Practice Guidance (NPPG). The NPPG states that developments should maintain acceptable living standards. It goes on to explain that what this means in practice is that appropriate levels of sunlight and daylight, will depend to some extent on the context for the development. This is consistent with the BRE guide which as noted in paragraphs 3.1.4 to 3.1.5 above, states that site location is a relevant factor when setting sunlight and daylight targets.

3.4 Interior Daylighting

3.4.1 The BRE guide recommends that interior daylighting is checked using the daylight provision test set out in BS EN 17037. The test measures both the amount of daylight, as well as the distribution of daylight within a room. The test is applied to habitable rooms such as living rooms and bedrooms. A kitchen is generally deemed to be a habitable room if it is large enough to accommodate a dining area. If the kitchen is small and is solely used for cooking purposes, then the accepted practice is to treat the kitchen as a non-habitable room.

3.4.2 The assessment is carried out using a grid of points on a horizontal reference plane in each room. In accordance with the BRE recommendations, we have set the reference plane at 850mm above the floor and have excluded assessment points from a 0.3m wide band around the perimeter of each room.

3.4.3 The UK National Annex to BS EN 17037 gives UK specific minimum illuminance recommendations which we have set as the targets for this project. The targets comprise of 100 lux in bedrooms, 150 lux in living rooms and 200 lux in kitchens to be exceeded over at least 50% of the reference plane.

3.4.4 Where a room has a shared use, the highest target should apply. However, the BRE guide explains that local authorities could use discretion here. The guide gives the example where the target for a living room could be used for a combined living/dining/kitchen area if the kitchens are not treated as habitable spaces, as it may avoid small separate kitchens in a design.

3.4.5 In the case of the proposed development, it has not been possible to achieve the 200 lux target for all living/dining/kitchen areas. One solution to this issue would have been

to subdivide off the kitchens to make non-habitable non-daylit kitchens, which would not have a requirement for daylight. However, this would result in a lower quality of accommodation. Therefore, we have instead applied a 150 lux target to the living/dining/kitchen areas as per the example given in the BRE guide. In our opinion, the 150 lux target is justified as it avoids separate small non-daylit kitchens and results in an overall better standard of accommodation.

3.4.6 The data in Appendix 2 includes the lux target we have assigned to each room, together with the percentage of the reference plane that meets the target. The median illuminance (lux) achieved for each room is also presented. Where the median illuminance exceeds the lux target, this means the lux target has been achieved over at least 50% of the assessment grid.

3.4.7 The daylight provision test may be carried out using either the daylight factor method, or the interior illuminance method. For the purpose of this assessment, we have adopted the daylight factor method. Using the conversion table set out in the BRE guide, we have expressed the results in terms of lux.

3.4.8 Since the assessment is based on a computer simulation, it is necessary to set various surface reflectance values. For example, a 0.6 reflectance means that 60% of the light hitting the surface will be reflected. The BRE guide states that it is necessary to make an allowance for the deterioration of surface finishes. Furniture within the rooms will also have an impact on daylight provision. Since the computer model used in the simulation does not include furniture, the BRE guide recommends that an allowance for this is also made within the reflectance values. For this reason, we have set out below, both the manufacturer's reflectance values, and the values used in the simulation. The simulation values include allowances for furniture and the deterioration of the surfaces. Should product substitutions be required, products with equal reflectance values should be chosen to ensure the daylight results presented in this report are achieved.

Surface	**Product**	**Product Reflectance**	**Simulation Reflectance**
Interior walls	Dulux Light & Space Absolute White	0.93	0.8
Ceilings	Dulux Light & Space Absolute White	0.93	0.8
Floors	Kahrs engineered wood (Ash Air)	0.76	0.4
Development cladding	BRE default value	n/a	0.2
Balcony floors	Portland stone	0.6	0.5
Balcony soffits	Dulux Weathershield Brilliant White	0.92	0.6
Neighbouring buildings	BRE default value	n/a	0.2

Mirror	Generic value	n/a	0.95
Glass	Generic value	n/a	0.1
Exterior ground	BRE default value	n/a	0.2

3.4.9 The simulation is based on double-glazed windows with a glazed area that equates to 80% of the structural opening size. The glazing consists of a Pilkington 4mm Optifloat Clear outer pane and a Pilkington 6.4mm OptiLam K Glass S inner pane, which has an overall manufacturer's direct transmittance of 0.82. In accordance with the BRE guide, the simulation includes maintenance factors to allow for the effect of dirt on the glazing.

3.5 Exposure to Sunlight

3.5.1 The BRE guide states that 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.

3.5.2 The BRE guide states that, in general, a dwelling will appear reasonably sunlit provided:

- at least one main window wall faces within 90 degrees of due south, and
- a habitable room, preferably a main living room, can receive a total of at least 1.5 hours of sunlight on 21 March.

3.5.3 The guide states that, where groups of dwellings are planned, site layout design should aim to maximise the number of dwellings with a main living room that meets the above recommendations.

3.6 Overshadowing to Gardens and Open Spaces

3.6.1 The availability of sunlight should be checked for all open spaces where sunlight is required. This would normally include:

- Gardens, usually the main back garden of a house
- Parks and playing fields
- Children's playgrounds
- Outdoor swimming pools and paddling pools
- Sitting out areas, such as those between non-domestic buildings and in public squares
- Focal points for views such as a group of monuments or fountains.

3.6.2 The BRE guide recommends that, for an open space to appear adequately lit throughout the year, at least 50% of its area should receive two hours of sunlight on 21 March.

4 RESULTS OF THE ASSESSMENT

4.1 Windows and Amenity Areas Analysed

4.1.1 Appendix 1 identifies the windows serving habitable rooms analysed in this assessment.

4.1.2 We have also identified the outdoor amenity areas that have been assessed.

4.2 Interior Daylighting

4.2.1 Daylight provision data and contours for the habitable rooms are presented in Appendix 2.

4.2.2 The results confirm that around 84% of all habitable rooms tested meet or surpass the BRE minimum illuminance recommendations (i.e. 41 of the total 49 rooms surpass their Daylight Factor targets). This is a very high level of compliance in the context of an urban development site.

4.2.3 In addition to the above, we note that some of the rooms which do not meet the BRE interior daylighting recommendations, are served by windows within recessed areas. This is in order to provide private amenity space to the occupants. Whilst this does limit some of the daylight available to the units, on balance, it is considered preferable to retain these, as they provide additional benefits to the residents of the development. If the recessed amenity areas were removed, then the interior daylighting levels would greatly improve. Therefore, in our opinion, there are material considerations which outweigh the lower daylight levels values for the aforementioned rooms.

4.3 Exposure to Sunlight

4.3.1 Exposure to sunlight data is provided in Appendix 3.

4.3.2 In the case of the proposed development, 12 of the 16 units have at least one habitable room window which faces within 90 degrees of due south. 8 units have a living room window which faces within 90 degrees of due south. 9 of the 16 units have a living room which receives a total of at least 1.5 hours of sunlight on 21 March.

4.3.3 The BRE guide acknowledges that in some cases, it may not be possible for every dwelling to achieve ideal levels of sunlight. The guide explains that where groups of

dwellings are planned, site layout design should aim to maximise the number of dwellings with a main living room that:

- faces within 90 degrees of due south, and
- can receive a total of at least 1.5 hours of sunlight on 21 March.

4.3.4 In our opinion, the proposed development represents good site layout design. Since the design maximises sunlight availability, as far as practically possible given the constraints of the site, the BRE exposure to sunlight recommendations for groups of dwellings have been met.

4.4 Overshadowing to Gardens and Open Spaces

4.4.1 Overshadowing to gardens and opens spaces data and contour drawings are provided in Appendix 4.

4.4.2 The results show that amenity spaces do not receive at least two hours of sunlight on 21 March. However, we note that the results are not unusual in the context of an urban site. We are of the opinion that the proposal still provides a useable area of amenity for its future occupants, especially when taking into account the site constraints.

4.5 Conclusion

4.5.1 The numerical results demonstrate that the majority of the proposed rooms meet or surpass the BRE recommendations. Whilst there are instances where the Daylight Provision targets are not met, the results are not abnormal in the context of an urban location. The NPPF requires developments to provide acceptable living standards whilst making efficient use of land. The NPPG and BRE guide explain that acceptability is dependent on context and location. The BRE guide also explains that the numerical guidelines should be interpreted flexibly, since natural lighting is only one of many factors in site layout design. The local authority should therefore balance daylight and sunlight considerations against all other material planning considerations when deciding whether to grant planning permission.

5 CLARIFICATIONS

5.1 General

5.1.1 The report provided is solely for the use of the client and no liability to anyone else is accepted.

5.1.2 The assessment is limited to assessing daylight, sunlight and overshadowing of the proposed development as set out in section 2.1, 3.1 and 3.3 of the BRE guide.

5.1.3 The assessment is based on the information listed in section 2 of this report and a site visit undertaken on 27 September 2023.

5.1.4 This assessment does not calculate the effects of trees and hedges on daylight, sunlight and overshadowing to gardens. The BRE guide states that trees should sometimes be taken into account. e.g. where there is concern that future occupants of the dwelling may want the trees to be cut down if they block too much skylight or sunlight. We are not aware of any such circumstances, in this instance.

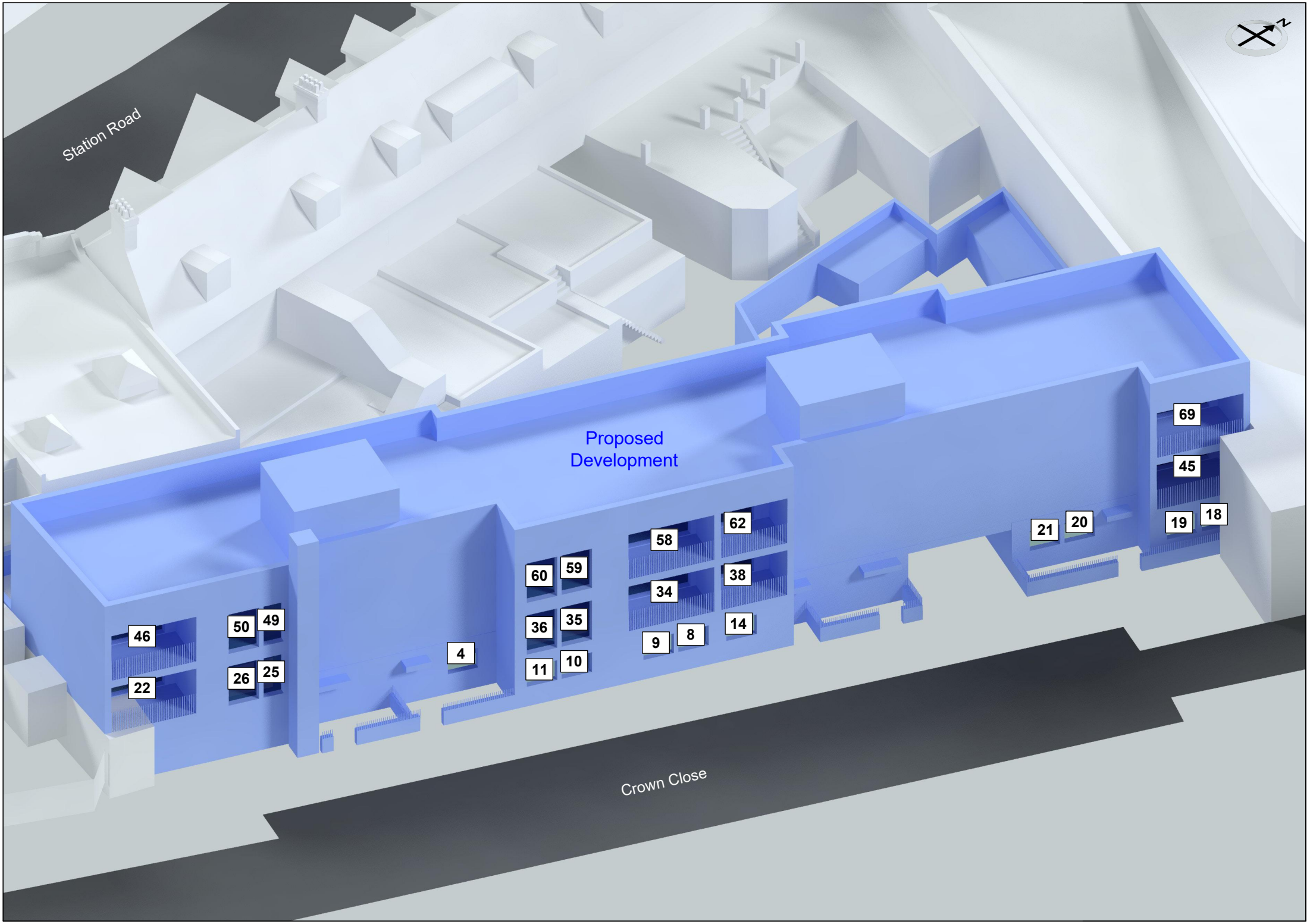
5.1.5 We have undertaken the survey following the guidelines of the RICS publication “Surveying Safely”. Where limited access is available, assumptions will have been made.

5.1.6 This report is based upon and subject to the scope of work set out in Right of Light Consulting’s quotation and standard terms and conditions.

APPENDICES

APPENDIX 1

WINDOW KEY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Proposed Development
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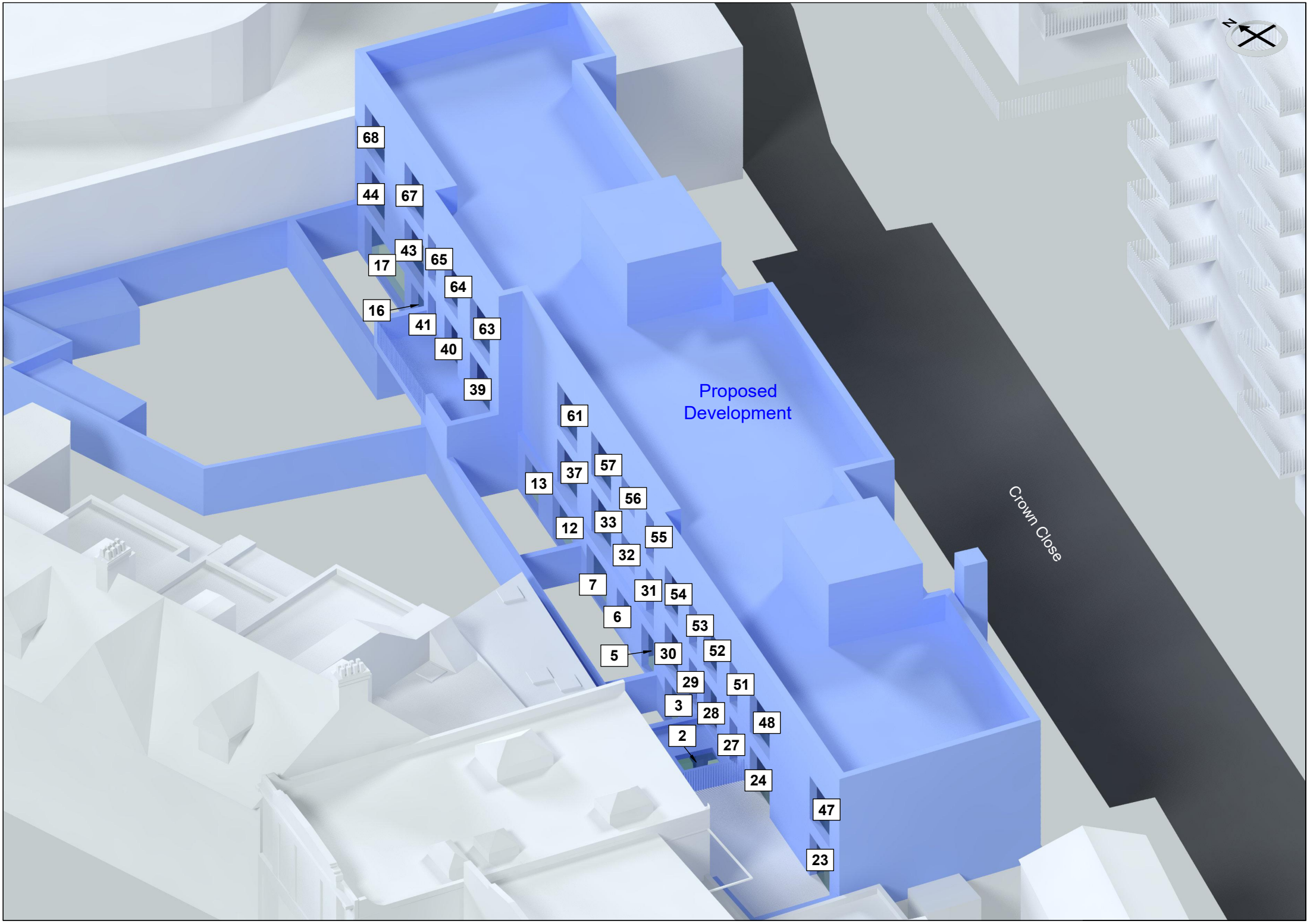
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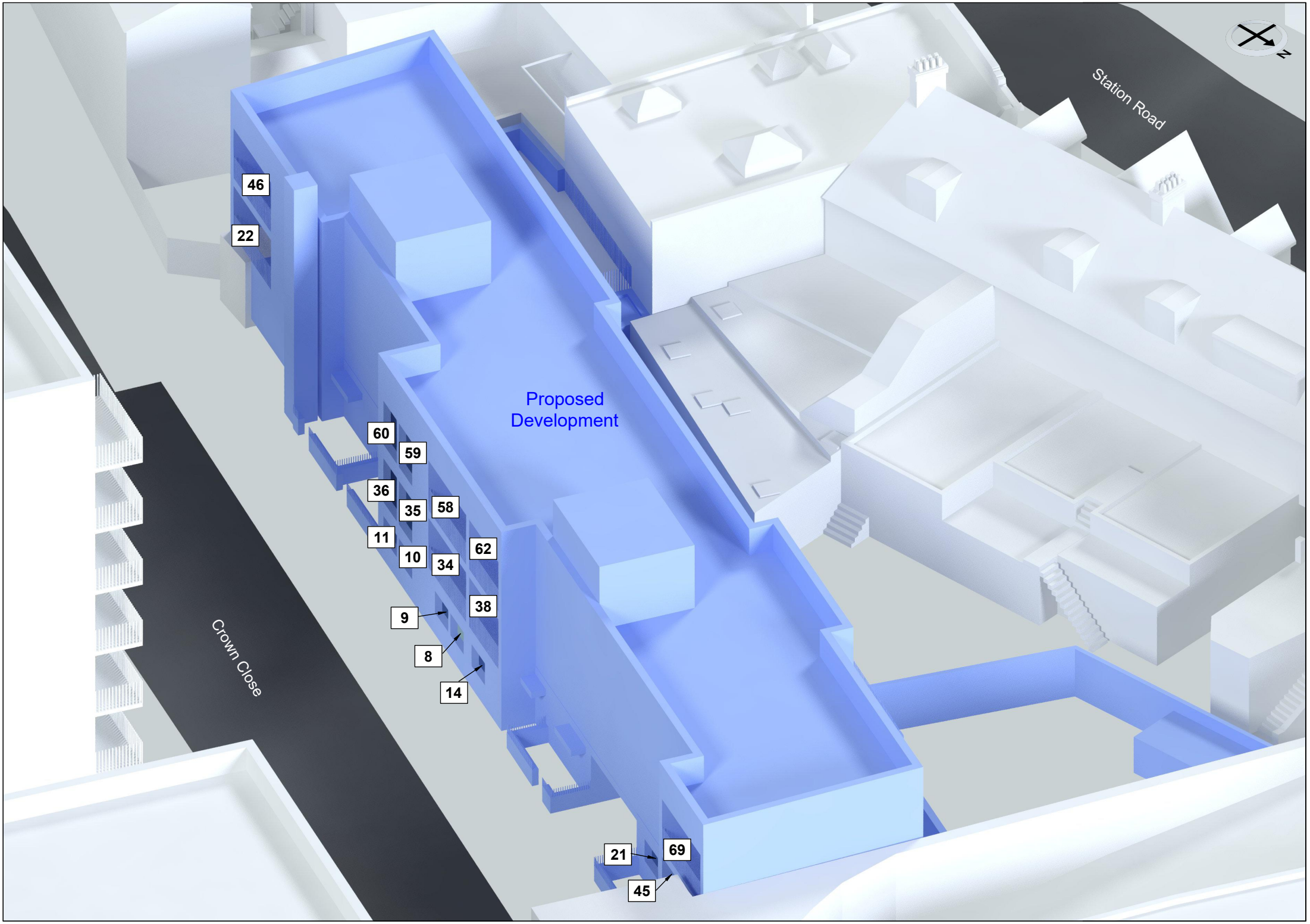
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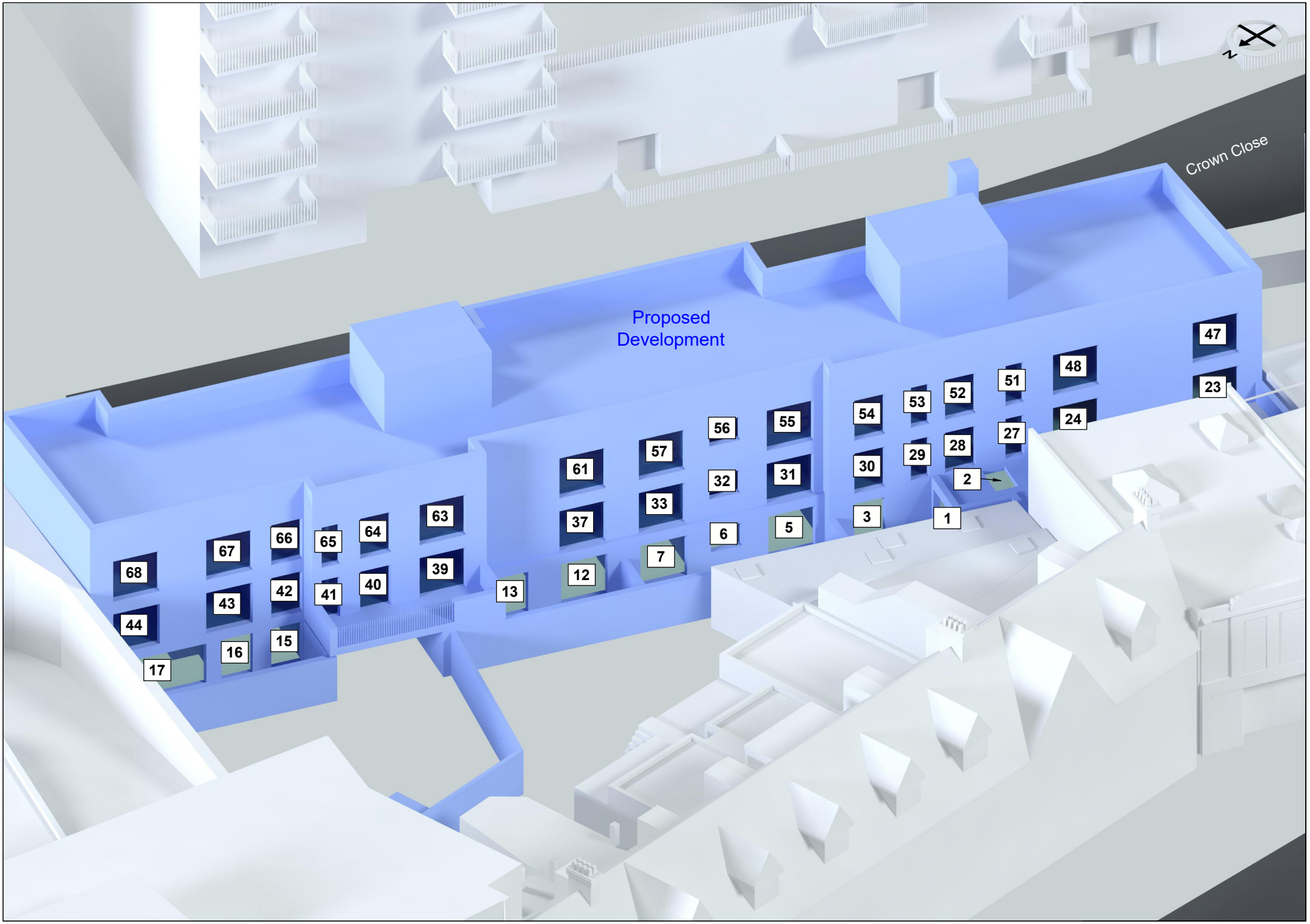
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APPENDIX 2

DAYLIGHT PROVISION DATA & CONTOURS

Appendix 2 - Daylight Provision
53 and 55 Station Road, Hayes UB3 4BE

Reference	Room Use	Min.Target Illuminance (Lux)	Target % of Reference Plane	% of Reference Plane Achieved	Target % Achieved	Median Illuminance (Lux)
53 and 55 Station Road (Flat GF 1)						
Ground Floor						
Windows 1 & 2	Living/Kitchen	150	50%	53%	Yes	182
Window 3	Bedroom	100	50%	96%	Yes	199
Window 4	Bedroom	100	50%	74%	Yes	156
53 and 55 Station Road (Flat GF 2)						
Ground Floor						
Window 5	Bedroom	100	50%	100%	Yes	256
Window 6	Bedroom	100	50%	100%	Yes	296
Window 7	Living Room	150	50%	48%	No	139
Windows 8 & 9	Kitchen	200	50%	55%	Yes	214
Windows 10 & 11	Bedroom	100	50%	100%	Yes	249
53 and 55 Station Road (Flat GF 3)						
Ground Floor						
Window 12	Living Room	150	50%	86%	Yes	290
Window 13	Bedroom	100	50%	99%	Yes	201
Window 14	Kitchen	200	50%	23%	No	116
53 and 55 Station Road (Flat GF 4)						
Ground Floor						
Windows 15 & 16	Bedroom	100	50%	100%	Yes	336
Window 17	Living/Kitchen	150	50%	63%	Yes	227
Windows 18 & 19	Bedroom	100	50%	84%	Yes	137
Windows 20 & 21	Bedroom	100	50%	100%	Yes	339
53 and 55 Station Road (Flat 1F 1)						
First Floor						
Windows 22 & 23	Living/Kitchen	150	50%	37%	No	129
Window 24	Bedroom	100	50%	100%	Yes	213
Windows 25 & 26	Bedroom	100	50%	100%	Yes	328
53 and 55 Station Road (Flat 1F 2)						
First Floor						
Windows 27 to 29	Living/Kitchen	150	50%	100%	Yes	338
Window 30	Bedroom	100	50%	100%	Yes	241
53 and 55 Station Road (Flat 1F 3)						
First Floor						
Window 31	Bedroom	100	50%	100%	Yes	309
Window 32	Bedroom	100	50%	100%	Yes	379
Windows 33 & 34	Living/Kitchen	150	50%	69%	Yes	178

Appendix 2 - Daylight Provision
53 and 55 Station Road, Hayes UB3 4BE

Reference	Room Use	Min.Target Illuminance (Lux)	Target % of Reference Plane	% of Reference Plane Achieved	Target % Achieved	Median Illuminance (Lux)
Windows 35 & 36	Bedroom	100	50%	100%	Yes	373
53 and 55 Station Road (Flat 1F 4)						
First Floor						
Window 37	Bedroom	100	50%	100%	Yes	500
Window 38	Living/Kitchen	150	50%	0%	No	54
53 and 55 Station Road (Flat 1F 5)						
First Floor						
Window 39	Bedroom	100	50%	100%	Yes	431
Window 40	Bedroom	100	50%	100%	Yes	391
Windows 41 & 42	Living/Kitchen	150	50%	48%	No	140
53 and 55 Station Road (Flat 1F 6)						
First Floor						
Window 43	Bedroom	100	50%	100%	Yes	397
Window 44	Bedroom	100	50%	100%	Yes	460
Window 45	Living/Kitchen	150	50%	0%	No	63
53 and 55 Station Road (Flat 2F 1)						
Second Floor						
Windows 46 & 47	Living/Kitchen	150	50%	67%	Yes	180
Window 48	Bedroom	100	50%	100%	Yes	364
Windows 49 & 50	Bedroom	100	50%	100%	Yes	385
53 and 55 Station Road (Flat 2F 2)						
Second Floor						
Windows 51 to 53	Living/Kitchen	150	50%	100%	Yes	437
Window 54	Bedroom	100	50%	100%	Yes	306
53 and 55 Station Road (Flat 2F 3)						
Second Floor						
Window 55	Bedroom	100	50%	100%	Yes	374
Window 56	Bedroom	100	50%	100%	Yes	427
Windows 57 & 58	Living/Kitchen	150	50%	92%	Yes	213
Windows 59 & 60	Bedroom	100	50%	100%	Yes	403
53 and 55 Station Road (Flat 2F 4)						
Second Floor						
Window 61	Bedroom	100	50%	100%	Yes	575
Window 62	Living/Kitchen	150	50%	0%	No	57

Appendix 2 - Daylight Provision
53 and 55 Station Road, Hayes UB3 4BE

Reference	Room Use	Min.Target Illuminance (Lux)	Target % of Reference Plane	% of Reference Plane Achieved	Target % Achieved	Median Illuminance (Lux)
53 and 55 Station Road (Flat 2F 5)						
Second Floor						
Window 63	Bedroom	100	50%	100%	Yes	486
Window 64	Bedroom	100	50%	100%	Yes	423
Windows 65 & 66	Living/Kitchen	150	50%	55%	Yes	177
53 and 55 Station Road (Flat 2F 6)						
Second Floor						
Window 67	Bedroom	100	50%	100%	Yes	459
Window 68	Bedroom	100	50%	100%	Yes	582
Window 69	Living/Kitchen	150	50%	0%	No	88

Proposed Ground Floor

Daylight Provision Contours

Key:

- 200 lux and above
- 150 lux to 199 lux
- 100 lux to 149 lux
- Below 100 lux
- Window reference
- G1 Gardens and Amenity Areas

Drawing Title: Daylight Provision Contours

Scale: Do not scale

Drawing No: 1 of 3 | Rev. -

Rev	Date	Details of revision

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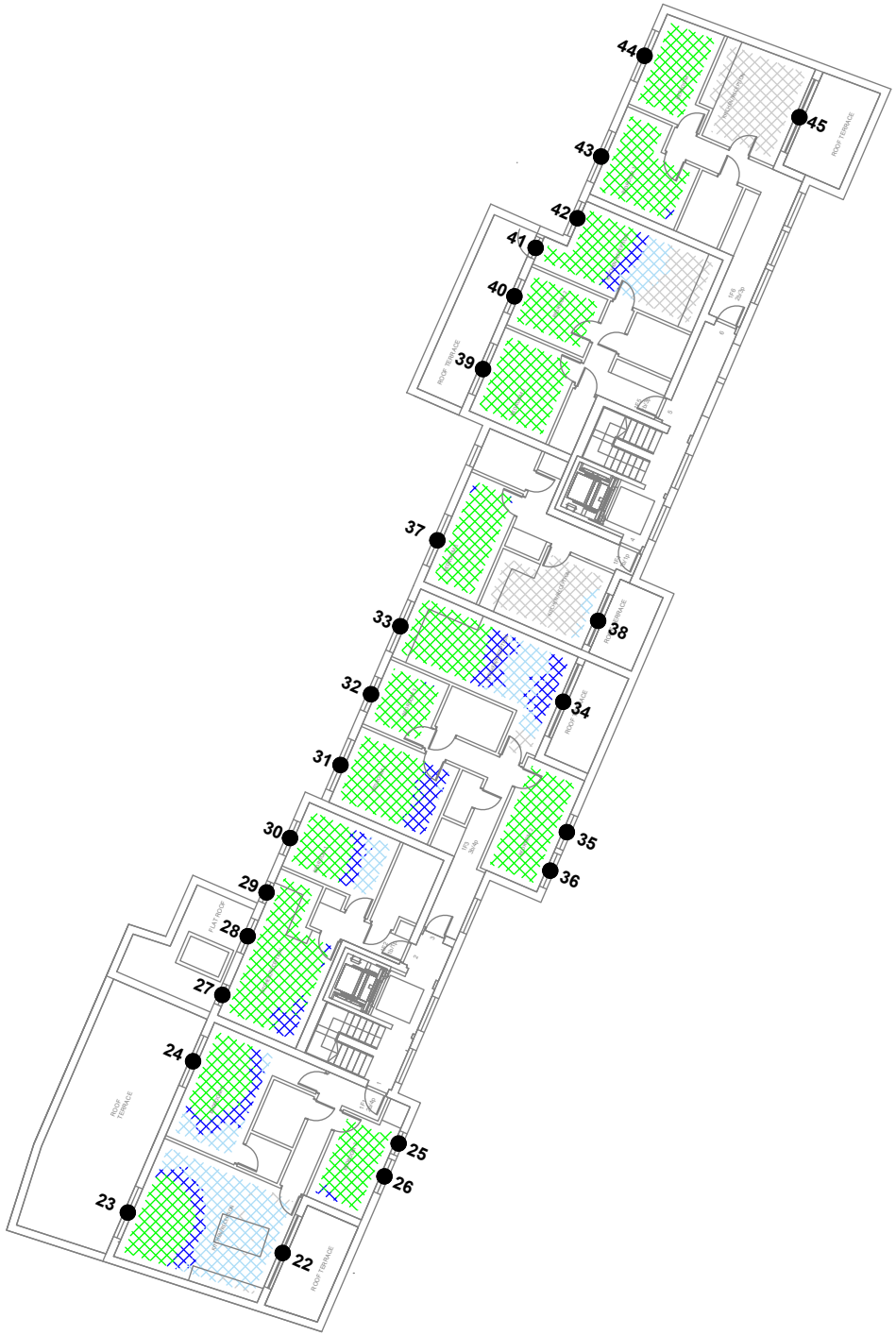
Proposed First Floor

Daylight Provision Contours



Key:

- 200 lux and above
- 150 lux to 199 lux
- 100 lux to 149 lux
- Below 100 lux
- Window reference

Drawing Title:	Daylight Provision Contours
Scale:	Do not scale
Drawing No:	2 of 3
Rev.	-

Rev	Date	Details of revision

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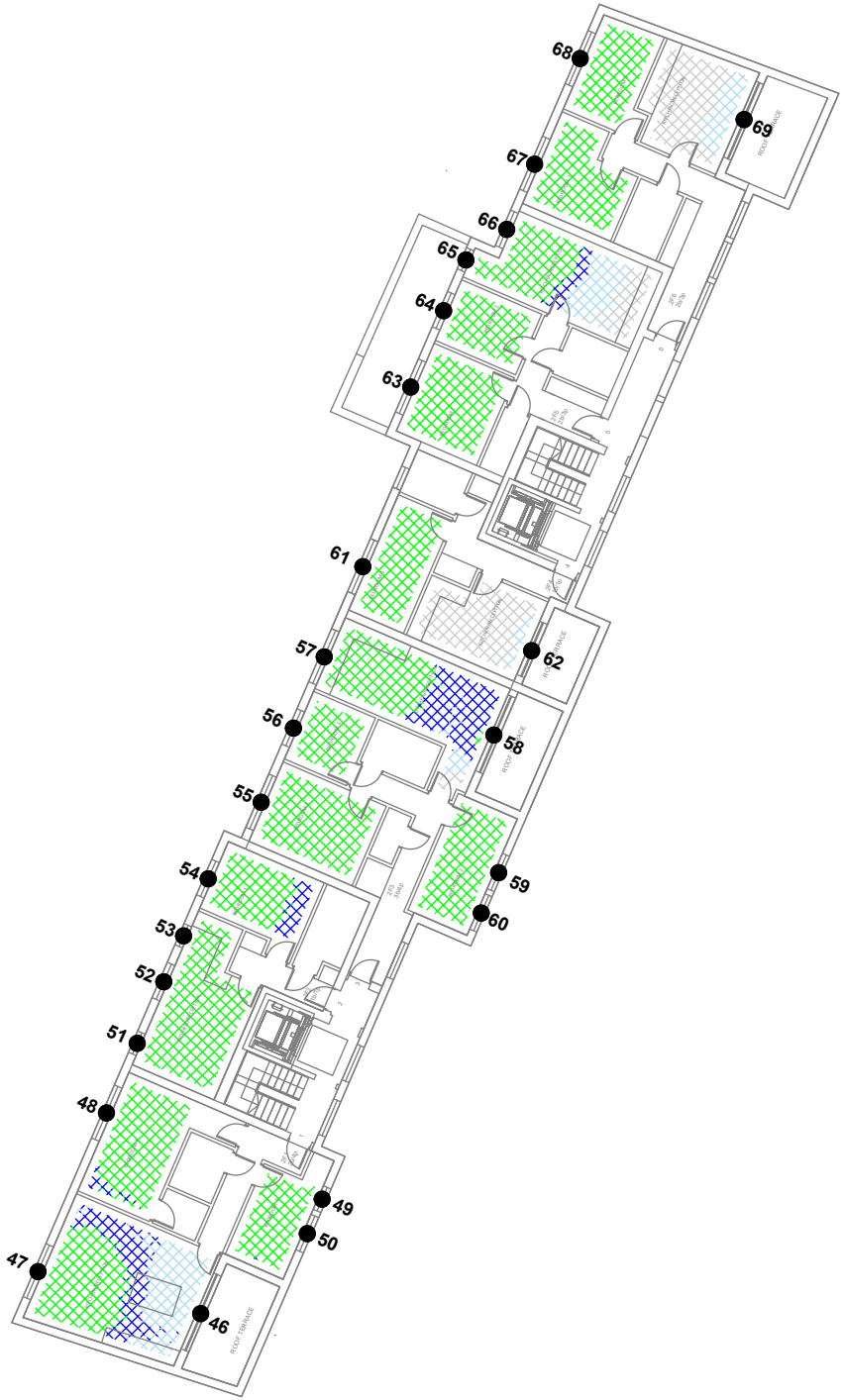
Proposed Second Floor

Daylight Provision Contours



Key:

- 200 lux and above
- 150 lux to 199 lux
- 100 lux to 149 lux
- Below 100 lux
- Window reference

Drawing Title:	Daylight Provision Contours
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Drawing No:	3 of 3
Rev.	-

Rev	Date	Details of revision

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APPENDIX 3

EXPOSURE TO SUNLIGHT DATA

Appendix 3 - Sunlight Exposure
53 and 55 Station Road, Hayes UB3 4BE

Reference	Room Use	Target Sunlight Exposure	Sunlight Exposure Achieved	At least one room meets Sunlight Exposure Target
53 and 55 Station Road (Flat GF 1)				
Ground Floor				
Windows 1 & 2	Living/Kitchen	1.5 hours	1.7 hours	Yes
Window 3	Bedroom	1.5 hours	0 hours	
Window 4	Bedroom	1.5 hours	2.6 hours	
53 and 55 Station Road (Flat GF 2)				
Ground Floor				
Window 5	Bedroom	1.5 hours	0 hours	Yes
Window 6	Bedroom	1.5 hours	1 hours	
Window 7	Living Room	1.5 hours	1.3 hours	
Windows 8 & 9	Kitchen	1.5 hours	3 hours	
Windows 10 & 11	Bedroom	1.5 hours	3 hours	
53 and 55 Station Road (Flat GF 3)				
Ground Floor				
Window 12	Living Room	1.5 hours	0 hours	Yes
Window 13	Bedroom	1.5 hours	0.9 hours	
Window 14	Kitchen	1.5 hours	2.3 hours	
53 and 55 Station Road (Flat GF 4)				
Ground Floor				
Windows 15 & 16	Bedroom	1.5 hours	0 hours	Yes
Window 17	Living/Kitchen	1.5 hours	1.7 hours	
Windows 18 & 19	Bedroom	1.5 hours	2.7 hours	
Windows 20 & 21	Bedroom	1.5 hours	2.6 hours	
53 and 55 Station Road (Flat 1F 1)				
First Floor				
Windows 22 & 23	Living/Kitchen	1.5 hours	1.8 hours	Yes
Window 24	Bedroom	1.5 hours	1.6 hours	
Windows 25 & 26	Bedroom	1.5 hours	2 hours	
53 and 55 Station Road (Flat 1F 2)				
First Floor				
Windows 27 to 29	Living/Kitchen	1.5 hours	0.6 hours	No
Window 30	Bedroom	1.5 hours	0.6 hours	

Appendix 3 - Sunlight Exposure
53 and 55 Station Road, Hayes UB3 4BE

Reference	Room Use	Target Sunlight Exposure	Sunlight Exposure Achieved	At least one room meets Sunlight Exposure Target
53 and 55 Station Road (Flat 1F 3)				
First Floor				
Window 31	Bedroom	1.5 hours	0.5 hours	Yes
Window 32	Bedroom	1.5 hours	1.9 hours	
Windows 33 & 34	Living/Kitchen	1.5 hours	3.5 hours	
Windows 35 & 36	Bedroom	1.5 hours	3.8 hours	
53 and 55 Station Road (Flat 1F 4)				
First Floor				
Window 37	Bedroom	1.5 hours	1.9 hours	Yes
Window 38	Living/Kitchen	1.5 hours	0.4 hours	
53 and 55 Station Road (Flat 1F 5)				
First Floor				
Window 39	Bedroom	1.5 hours	1.1 hours	Yes
Window 40	Bedroom	1.5 hours	1.8 hours	
Windows 41 & 42	Living/Kitchen	1.5 hours	0.8 hours	
53 and 55 Station Road (Flat 1F 6)				
First Floor				
Window 43	Bedroom	1.5 hours	2.2 hours	Yes
Window 44	Bedroom	1.5 hours	2.5 hours	
Window 45	Living/Kitchen	1.5 hours	1.8 hours	
53 and 55 Station Road (Flat 2F 1)				
Second Floor				
Windows 46 & 47	Living/Kitchen	1.5 hours	3.4 hours	Yes
Window 48	Bedroom	1.5 hours	2.5 hours	
Windows 49 & 50	Bedroom	1.5 hours	2.6 hours	
53 and 55 Station Road (Flat 2F 2)				
Second Floor				
Windows 51 to 53	Living/Kitchen	1.5 hours	2.1 hours	Yes
Window 54	Bedroom	1.5 hours	2.1 hours	
53 and 55 Station Road (Flat 2F 3)				
Second Floor				
Window 55	Bedroom	1.5 hours	1.4 hours	Yes
Window 56	Bedroom	1.5 hours	2.1 hours	
Windows 57 & 58	Living/Kitchen	1.5 hours	3.9 hours	
Windows 59 & 60	Bedroom	1.5 hours	3.8 hours	

Appendix 3 - Sunlight Exposure
53 and 55 Station Road, Hayes UB3 4BE

Reference	Room Use	Target Sunlight Exposure	Sunlight Exposure Achieved	At least one room meets Sunlight Exposure Target
53 and 55 Station Road (Flat 2F 4)				
Second Floor				
Window 61	Bedroom	1.5 hours	2.5 hours	Yes
Window 62	Living/Kitchen	1.5 hours	0.4 hours	
53 and 55 Station Road (Flat 2F 5)				
Second Floor				
Window 63	Bedroom	1.5 hours	2.5 hours	Yes
Window 64	Bedroom	1.5 hours	2.1 hours	
Windows 65 & 66	Living/Kitchen	1.5 hours	1.3 hours	
53 and 55 Station Road (Flat 2F 6)				
Second Floor				
Window 67	Bedroom	1.5 hours	2.3 hours	Yes
Window 68	Bedroom	1.5 hours	2.5 hours	
Window 69	Living/Kitchen	1.5 hours	2.2 hours	

APPENDIX 4

OVERSHADOWING TO GARDENS & OPEN SPACES

Appendix 4 - Overshadowing to Gardens and Open Spaces
53 and 55 Station Road, Hayes UB3 4BE

Reference	Total Area	Area receiving at least 2 hours of sunlight on 21 March	
53 and 55 Station Road (Flat GF 1)			
Ground Floor			
Garden 1	11.67 m2	0.0 m2	0%
53 and 55 Station Road (Flat GF 2)			
Ground Floor			
Garden 2	28.24 m2	0.0 m2	0%
53 and 55 Station Road (Flat GF 3)			
Ground Floor			
Garden 3	19.85 m2	1.65 m2	8%
53 and 55 Station Road (Flat GF 4)			
Ground Floor			
Garden 4	28.49 m2	0.0 m2	0%

Key

Receives under two hours sunlight on 21st March.

Receives at least two hours sunlight on 21st March.

Project Name: 53 and 55 Station Road, Hayes UB3 4BE

Drawing Title: Appendix 3 - Overshadowing to Gardens and Open Spaces

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