

Daylight and Sunlight Report

254 Kilburn High Road LLP

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06 May 2014

Prepared by

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Contents

Section		Page
1	INSTRUCTIONS AND BRIEF	4
2	PLANNING POLICY	4
3	BRE REPORT 'SITE LAYOUT PLANNING FOR DAYLIGHT AND SUNLIGHT: GOOD PRACTICE' SECOND EDITION (2011) ('THE REPORT')	A GUIDE TO 5
4	DAYLIGHTING AND WINDOW DESIGN, LIGHTING GUIDE LG 10: 1999	7
5	ASSESSMENT OF SURROUNDING PROPERTIES	7
6	LIGHT LEVELS TO RESIDENTIAL ACCOMMODATION WITHIN THE	
	PROPOSED SCHEME	13
7	CONCLUSION	13

Appendices

APPENDIX A: DRAWINGS

APPENDIX B: VERTICAL SKY COMPONENT, ANNUAL PROBABLE SUNLIGHT HOURS AND

AVERAGE DAYLIGHT DISTRIBUTION RESULTS SPREADSHEETS FOR

SURROUNDING RESIDENTIAL PROPERTIES

APPENDIX C: AVERAGE DAYLIGHT FACTOR AND SUNLIGHT RESULTS TO PROPOSED SCHEME

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This document must only be treated as a draft unless it is has been signed by the Originators and approved by a Business or Associate Director.

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Limitations

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1 INSTRUCTIONS AND BRIEF

- 1.1 In accordance with your instructions we have carried out a study to assess the effect of your proposed development on the daylight and sunlight amenity to the neighbouring residential properties and to assess the light levels to the proposed residential accommodation.
- 1.2 We have received the following documents and used them in preparing this report:
 - Centre Line Surveys London topographical survey and elevation details, received
 21 March 2014.
 - Claridge Architects plans, sections and elevations, received 4 April 2014 and 11 April 2014.
- Our study has been undertaken by preparing a three-dimensional computer model of the site and surrounding buildings and analysing the effect of the proposed development on the daylight and sunlight levels received by the neighbouring buildings using our bespoke software. Our assessment is based on a visual inspection, the information detailed above and estimates of relevant distances, dimensions and levels which are as accurate as the circumstances allow.

2 PLANNING POLICY

2.1 The 'Camden Development Policies 2010-2025 Local Development Framework' document, contains the following references to daylight and sunlight amenity:

DP26 – 'Managing the impact of development on occupiers and neighbours':

'The council will protect the quality of life of occupiers and neighbours by only granting permission for development that does not cause harm to amenity. The factors we will consider include: -

- (a) visual privacy and overlooking;
- (b) overshadowing and outlook;
- (c) sunlight, daylight and artificial light levels ...'
- 2.2 The document goes on to say, in paragraph 26.3 ('Visual privacy, overlooking, overshadowing, outlook, sunlight and daylight'):

'A development's impact on visual privacy, overlooking, overshadowing, outlook, access to daylight and sunlight and disturbance from artificial light, can be influenced by design and layout, the distance between properties, the vertical levels of onlookers of occupiers and the angle of views. These issues will also affect the amenity of the new occupiers. We will expect that these elements are considered at the design stage of a scheme, to prevent potential negative impacts of the development on occupiers and neighbours. To assess whether acceptable levels of daylight and sunlight are available to habitable spaces, the council will take in to account the standards recommended in the British Research Establishment's 'Site layout planning for daylight and sunlight – a guide to good practice' (1991).'

2.3 Part one of the core strategy adoption document, states at paragraph 5.7 ('Protecting amenity'):

'Camden's high level of amenity – the features of a place that contribute to its attractiveness and comfort – is a major factor in the quality of life of the borough's residents, workers and visitors and fundamental to Camden's attractiveness and success. However, Camden's inner London location, and close proximity of various uses and the presence of major roads and railways, can mean that privacy, noise and light can be particular issues in the borough.'

- 3 BRE REPORT 'SITE LAYOUT PLANNING FOR DAYLIGHT AND SUNLIGHT: A GUIDE TO GOOD PRACTICE' SECOND EDITION (2011) ('THE REPORT')
- 3.1 <u>Principles</u>
- 3.1.1 The Second Edition of the Report replaces the 1991 document of the same name with effect from October 2011.
- 3.1.2 It is important to note that the introduction to the report stresses that the document is provided for guidance purposes only and it is not intended to be interpreted as a strict set of rules. It also suggests that it may be appropriate to adopt a flexible approach and alternative target values in dealing with 'special circumstances' for example 'in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings.' This is amplified by the following extracts from the introduction (P1, para. 6) and Section 2.2:

'The advice given here is not mandatory and this 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...' (p1, para. 1.6)

'In special circumstances the Developer or Planning Authority may wish to use different target values.' (P1, para. 1.6)

'Note that numerical values given here are purely advisory. Different criteria may be used, based upon the requirements for daylighting in an area viewed against other site layout constraints. Another important issue is whether the existing building is itself a good neighbour, standing a reasonable distance from the boundary and taking no more than its fair share of light'. (P7 para. 2.2.3)

3.1.3 The examples given in the Report can be applied to any part of the country: suburban, urban and rural areas. The inflexible application of the target values given in the Report may make reaching the BRE criteria difficult in a tight, urban environment where there is unlikely to be the same expectation of daylight and sunlight amenity as in a suburban or rural environment.

3.2 Daylight

3.2.1 In summary, the BRE Report states that:

'If any part of a new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building from the centre of the lowest window, subtends an angle of more than 25 degrees to the horizontal, then the diffuse daylighting of the existing building may be adversely affected. This will be the case if either:

- the vertical sky component ['VSC'] measured at the centre of an existing main window is less than 27%, and less than 0.8 times its former value; or
- the area of the working plane (0.85m above floor level in residential properties) in a room which can receive direct skylight is reduced to less than 0.8 times it former value.

The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, store rooms, circulation areas and garages need not be analysed. The guidelines may also be applied to any existing non-domestic building where the occupants have a reasonable expectation of daylight; this would normally include, schools, hospitals, hotels and hostels, small workshops and some offices.'

3.3 Sunlight

3.3.1 The BRE Report advises that new development should take care to safeguard access to sunlight for existing buildings and any non-domestic buildings where there is a particular requirement for sunlight. In summary, the report states:

'If a living room of an existing dwelling has a main window facing within 90 degrees of due south, and any part of a new development subtends an angle of more than 25 degrees to the horizontal measured from the centre of the window in a vertical section perpendicular to the window, then the sunlighting of the existing dwelling may be adversely affected. This will be the case if the centre of the window:

- receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 March and
- receives less than 0.8 times its former sunlight hours during either period and
- has a reduction in sunlight over the whole year greater than 4% of annual probable sunlight hours'

3.3.2 The report also states that:

"...It is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within ninety-degrees of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun. In non-domestic buildings any spaces which are deemed to have a special requirement for sunlight should be checked; they will normally face within ninety-degrees of due south anyway." (3.2.3)

4 DAYLIGHTING AND WINDOW DESIGN, LIGHTING GUIDE LG 10: 1999

4.1 This publication is primarily intended to provide guidance to those responsible for the design, installation, commissioning, operation and maintenance of building services. Section 2.2: Window and rooflight size, shape and position, provides guidance which can be used at several stages of the design process and considers methods of predicting daylight and criteria against which to judge the values.

4.2 Section 2.2.1 states that:

'A well daylit space needs both adequate lighting levels and light that is well distributed. In some rooms, the lighting level at the back falls dramatically below the level close to a window, to such an extent that occupants feel deprived even though their actual task illuminance is otherwise acceptable.'

4.3 The guide recommends using the average daylight factor to assist in the detailed window design procedure and to determine the required window area for a typical or critical room in the building.

4.4 Section 2.2.2.1 states that:

'To start the window sizing process, find the area of glazing required for a given daylit appearance of the space. The average daylight factor is a measure of the amount of skylight in a room. If the room is not too deep or obstructed, an average daylight factor of 5% or more will ensure that an interior looks substantially daylit, except early in the morning, late in the afternoon or on exceptionally dull days. An average daylight factor below 2% generally makes a room look dull; electric lighting is likely to be in frequent use (10). In domestic interiors, however, 2% will still give a feeling of daylight, though some tasks may require electric light.'

4.5 The guide also states that:

'The BS 8206 code of practice(10) recommends average daylight factors of at least 1% in bedrooms, 1.5% in living rooms and 2% in kitchens, even if a predominantly daylit appearance is not required.'

5 ASSESSMENT OF SURROUNDING PROPERTIES

- 5.1 We have analysed the effect of the proposed development on the daylight and sunlight amenity to the properties detailed below. These properties are the only residential buildings that could be affected by the proposed development as all other adjacent buildings will pass the preliminary 25-degree line test recommended by the BRE Report.
- 5.2 The location of the tested properties and window references are shown on the drawings appended to this report; the results are also included in the appendices in the relevant spread sheets.
- 5.3 We set-out below the results of our daylight and sunlight assessment for each property:

5.4 <u>246-248 Kilburn High Road</u>

- 5.4.1 This is a three storey mixed use property, directly to the south and adjacent the proposed development. Desktop research shows there is residential accommodation at the second floor level with windows directly overlooking the proposed development site.
- 5.4.2 Daylight analysis, using the Vertical Sky Component (VSC) test shows six of the eight windows tested will remain fully BRE Report compliant. Where transgressions do occur, they occur to two of the north-ward facing windows directly overlooking the proposed development. However, further daylight analysis, using the daylight distribution test, shows the daylight distribution within the room served by all eight windows, will see no modification to its existing values.
- 5.4.3 Sunlight analysis undertaken using the Annual Probable Sunlight Hours (APSH) test shows there will be no modification to the existing sunlight access values and that all windows requiring testing under BRE Report guidance will remain fully compliant.

5.5 <u>1-23 Grangeway</u>

- 5.5.1 This is a five storey residential property to the south of the proposed development. The property has two windows (one at third and one at fourth floor) that overlook the proposed development site.
- 5.5.2 Daylight analysis of these two windows shows they will see minimal modification to their existing daylight values when tested using the VSC test. Hence, both windows will remain fully BRE Report compliant.
- 5.5.3 Neither of these windows faces within 90 degrees of due south and, in line with BRE Report guidance, do not require testing for sunlight access.

5.6 240-242 Kilburn High Road

This is a five storey residential property, to the south-west of the proposed development. Both daylight and sunlight analysis, undertaken using the VSC and APSH tests, shows there will be little or no modifications to the existing daylight and sunlight access values and that all windows will remain fully BRE Report compliant.

5.7 <u>244 Kilburn High Road</u>

- 5.7.1 Once again, this is a five storey property to the south-west of the proposed development. External observation shows the property has windows at second, third and fourth floors overlooking the proposed development site.
- 5.7.2 Daylight analysis undertaken using the VSC test shows there will be little or no modification to the majority of windows and all windows will remain fully BRE Report compliant.
- 5.7.3 Desktop research has provided us with internal layouts for this property and, in line with BRE Report guidance, we have undertaken a further daylighting test using the daylight distribution test. This analysis shows none of the rooms served by the windows analysed will not see any modification to their existing daylight distribution values and will all remain fully BRE Report compliant.
- 5.7.4 Sunlight amenity analysis of the windows facing within 90 degrees of due south show there will be no modification to the existing values and all window will remain fully BRE Report complaint.

5.8 250 Kilburn High Road

- 5.8.1 This a four storey mixed use property, with commercial usage on the ground floor and residential usage to the first, second and third floors.
- 5.8.2 Daylight amenity analysis undertaken of the windows facing the proposed development shows that, of the 10 windows overlooking, nine will remain fully BRE Report compliant. One window (window W2 at first floor level) will see a minor transgression of the VSC target values, but will maintain 0.73 times its existing value. External observation indicates this window is one of three serving a single room and study of the analysis results shows both of the other windows serving this room will remain BRE Report compliant. This compliance level indicates the daylight distribution within the room served is likely to remain BRE Report compliant.
- 5.8.3 Sunlight analysis of the five windows requiring analysis under BRE Report guidance shows four will remain fully BRE Report compliant. One minor transgression will occur to window W4 at second floor level, which will see its annual sunlight amenity reduced to 0.77 times its existing value. This compares favourably with the 0.8 times BRE Report guidance.

5.9 252 Kilburn High Road

5.9.1 This is a four storey mixed use property to the west of the proposed development site. External observation and desktop research indicate the property is in residential usage at first, second and third floors.

- 5.9.2 Daylight amenity analysis using the VSC tests shows that, of the seven windows tested, six will remain fully BRE report compliant. One minor transgressions occurs to window W1 at first floor level, which will retain 0.75 times its existing VSC value, which is minimally below the 0.8 times BRE Report recommendation. Further study of the results shows the window will retain 25.5% VSC, which is considered an above average level of VSC access in urban areas.
- 5.9.3 Sunlight amenity analysis shows all of the windows analysed will remain fully BRE Report compliant.

5.10 256 Kilburn High Road

- 5.10.1 This is a four storey mixed property, which external observation and research indicates is in commercial usage at ground and within a first floor extension and residential usage at part first, second and third floors.
- 5.10.2 Daylight amenity analysis using the VSC tests shows the vast majority of the windows analysed will maintain VSC levels consistent with and in excess of the levels normally seen in urban areas.
- 5.10.3 As with the daylight analysis, the sunlight amenity analysis shows the vast majority of windows analysed will maintain sunlight amenity values in excess of those normally seen in urban areas.

5.11 <u>258 Kilburn High Road</u>

- 5.11.1 This is a four storey mixed use property to the west of the proposed development. External observation and desktop research has shown the ground floor is in retail use, with suspected residential use to the first, second and third floors.
- 5.11.2 Daylight analysis undertaken using the VSC test shows all of the windows will maintain in excess of 20% VSC (at level of VSC expected within urban areas). Four of the six tested windows will maintain in excess of 26% VSC, with only two windows (window W1 and W2 at first floor level) seeing their existing VSC values reduced to between 20% and 23%. External observation indicates the windows analysed serve secondary living spaces, ie circulation and bedroom spaces, which are considered of lesser significance by the BRE Report.
- 5.11.3 Sunlight analysis using the APSH tests shows that, of the six windows tested, four will remain fully BRE Report compliant. Where transgressions occur, they are minor in nature, with both of the first floor windows maintaining annual and winter sunlight values in line with those normally seen in urban areas.

5.12 <u>260 Kilburn High Road</u>

- 5.12.1 Once again, this is a four storey, mixed use property to the west of the proposed development. External observation indicates residential usage to the first, second and third floors. As with the neighbouring properties, external observation indicates the windows serve secondary living spaces, such as circulation areas and bedrooms. It should be remembered that the BRE Report considers daylight and sunlight access to spaces such as these to be of secondary importance to the amenity of main living areas.
- 5.12.2 Daylight analysis using the VSC test shows the majority of windows analysed will maintain in excess of 20% VSC. Windows W1 and W2 at first floor level will see transgressions of the BRE Report guidance. These windows serve the rear of a first storey extension which contains windows directly on the boundary. As such, these windows will take a disproportionately large amount of skylight over the proposed development site. External observation indicates both of these windows serve secondary living spaces and, as such, would be considered as less important, in terms of daylight access, by the BRE Report guidance.
- 5.12.3 Sunlight analysis undertaken using the APSH tests, shows the majority of windows will see some form of transgression of the BRE Report guidance, however, it should be remembered the BRE Report considers sunlight amenity access for secondary living spaces to be of a lesser significance than access for main living spaces. APSH levels maintained by the windows are consistent with those normally seen in urban areas.

5.13 262 Kilburn High Road

- 5.13.1 This four storey mixed use property is to the west of the proposed development. External observation indicates residential usage to the first, second and third floors. External observation indicates the windows to the rear of this property serve secondary living spaces, such as circulation areas, bathrooms and bedrooms.
- 5.13.2 Daylight analysis using the VSC test shows the majority of windows analysed will maintain in excess of 20% VSC. Window W1 at first floor level will see a transgression of the BRE Report guidance. This window serves the rear of a first storey extension directly on the boundary.
- 5.13.3 Sunlight analysis undertaken using the APSH tests, shows the windows will see some form of transgression of the BRE Report guidance; however, amenity levels maintained by the windows are consistent with those normally seen in urban areas.

5.14 268 Kilburn High Road

- 5.14.1 This is a three storey mixed property to the west of the proposed development. External observation indicates the first and second floors are in residential usage.
- 5.14.2 Daylight amenity analysis undertaken using the VSC test shows both windows will maintain close to or above 20% VSC, the level normally seen in urban areas. Desktop research has shown that the rooms served by these windows are studio flats. Daylight distribution analysis shows that these rooms will maintain daylight access to 40% of their room areas.
- 5.14.3 Sunlight amenity analysis shows the majority of windows analysed will maintain BRE Report compliant levels of sunlight access. Where transgressions occur, the sunlight levels maintained are consistent with those normally seen in urban areas.

5.15 <u>270-272 Kilburn High Road</u>

- 5.15.1 This is a three storey mixed use property to the west of the proposed development site. As with the neighbouring properties, external observation and desktop research indicates the windows analysed serve secondary living spaces.
- 5.15.2 Daylight and sunlight analysis shows all of the windows analysed will maintain levels of VSC and APSH in line with the levels normally to be expected in urban areas. Daylight distribution analysis shows the vast majority of rooms will see little or no modification to their existing daylight amenity. The one transgression that does occur is to a suspected circulation space. Should the space be used for circulation the BRE Report would consider the space to have no requirement for daylight amenity.

5.16 274 Kilburn High Road

- 5.16.1 Once more, this is a three storey mixed used property to the north-west of the proposed development site. External observation shows there is a public house at ground floor and suspected residential usage at first and second floors.
- 5.16.2 Daylight and sunlight analysis shows there will be one minor transgression at first floor level. W4 will see its existing VSC reduced to 0.77 time its former value, just slightly under the 0.8 times BRE Report guidance. All other windows will be fully BRE Report compliant.

5.17 Overshadowing

5.17.1 Overshadowing analysis of the amenity spaces adjoining the proposed development, shows none of these spaces will see any impact due to the proposed development.

6 LIGHT LEVELS TO RESIDENTIAL ACCOMMODATION WITHIN THE PROPOSED SCHEME

- We have analysed the internal daylighting levels using the average daylight factor (ADF) assessment. As recommended by the BRE Report, we have used a glass transmittance value of 0.65 for standard double-glazing and an internal reflectance value of 0.5.
- 6.2 We have analysed all habitable rooms from first to fifth floors.
- 6.3 The location of the tested rooms and window references are shown in the drawings appended to this report; there is also included in the appendices and relevant spreadsheets.
- Our analysis shows that, of the 187 rooms tested, 147 (78.6%) would meet the ADF target values for their specific room type, with many rooms achieving values far in excess of the recommended minimum. Where transgressions do occur, further study of the analysis shows the vast majority of rooms achieve ADF values in excess of 70% of the BRE Report target value for their room types.
- Where transgressions occur within lounge / kitchen / dining rooms further study of the results shows the rooms will maintain close to, or in excess of, 1.5% ADF, the target value given for living rooms. The overwhelming majority of units will achieve fully BRE Report compliant daylighting levels to at least one room.
- The ADF analysis results shows that all rooms analysed will see ADF values consistent with the guidance given in the BRE Report, or in excess of values normally seen within new development in urban areas.
- 6.7 We have used the Annual Probable Sunlight Hours (APSH) test for sunlight amenity to those rooms with windows facing within 90 degrees of due south. As with the daylight analysis, we have tested the windows on the first to the fifth floors.
- Our analysis shows that, of the 113 rooms with windows facing within 90 degrees of due south, 72 (63.7%) will be fully BRE Report compliant, in terms of annual sunlight access, and 109 (96.5%) will be BRE Report complaint, in terms of winter sunlight amenity access.
- 6.9 Where transgressions occur, they tend to be minor in nature, with sunlight values being in excess of those normally seen within urban areas.

7 CONCLUSION

- 7.1 <u>Effect on surrounding residential properties</u>
- 7.1.1 Our analysis demonstrates that the proposed development of 254 Kilburn High Road, London would leave the neighbouring residential properties with daylight and sunlight amenity appropriate

to their surroundings, when assessed in accordance with the guidelines given in the London Borough of Camden's planning policies and, more specifically, with the guidelines set-out in BRE Report.

7.2 <u>Light received to proposed habitable rooms</u>

- 7.2.1 Our analysis shows the overwhelming majority of rooms assessed would meet or exceed the guideline values given in the British Standard for daylight amenity and the majority of windows serving the rooms would meet the BRE Report criteria for sunlight amenity.
- 7.2.2 Given the high level of compliance, we would consider the levels of daylight and sunlight amenity achieved are consistent with, and in excess of, the expectations of the area.
- 7.2.3 We therefore submit that our analysis demonstrates the residential accommodation within the proposed development would receive adequate and appropriate light, when assessed in accordance with the guidelines given in the London Borough of Camden's planning polices and, more specifically, with the guidelines set out in the BRE Report.

Daylight and Sunlight Report, 06 May 2014 254 Kilburn High Road LLP, 254 Kilburn High Road, London NW6 2BS

APPENDIX A

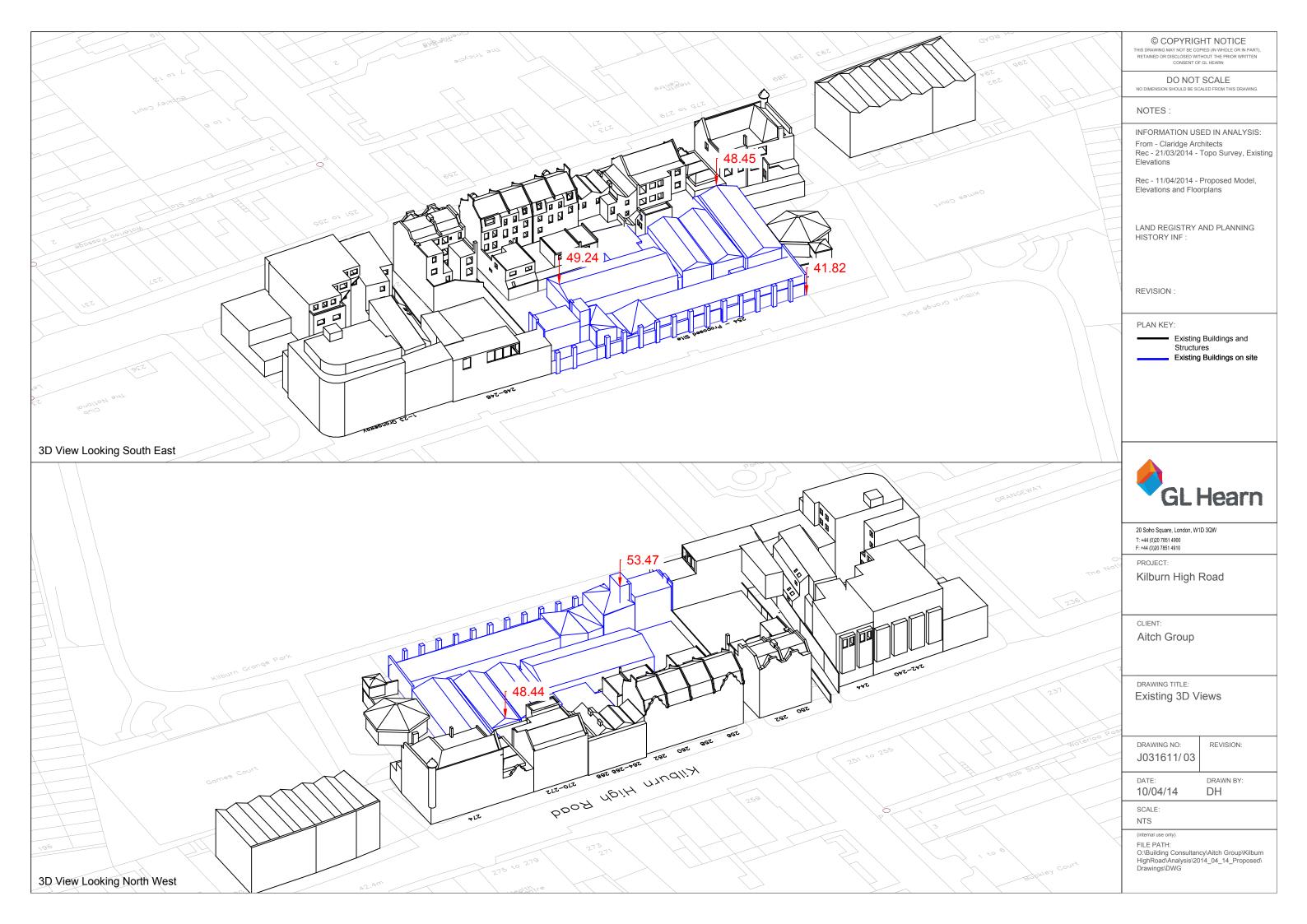
DRAWINGS

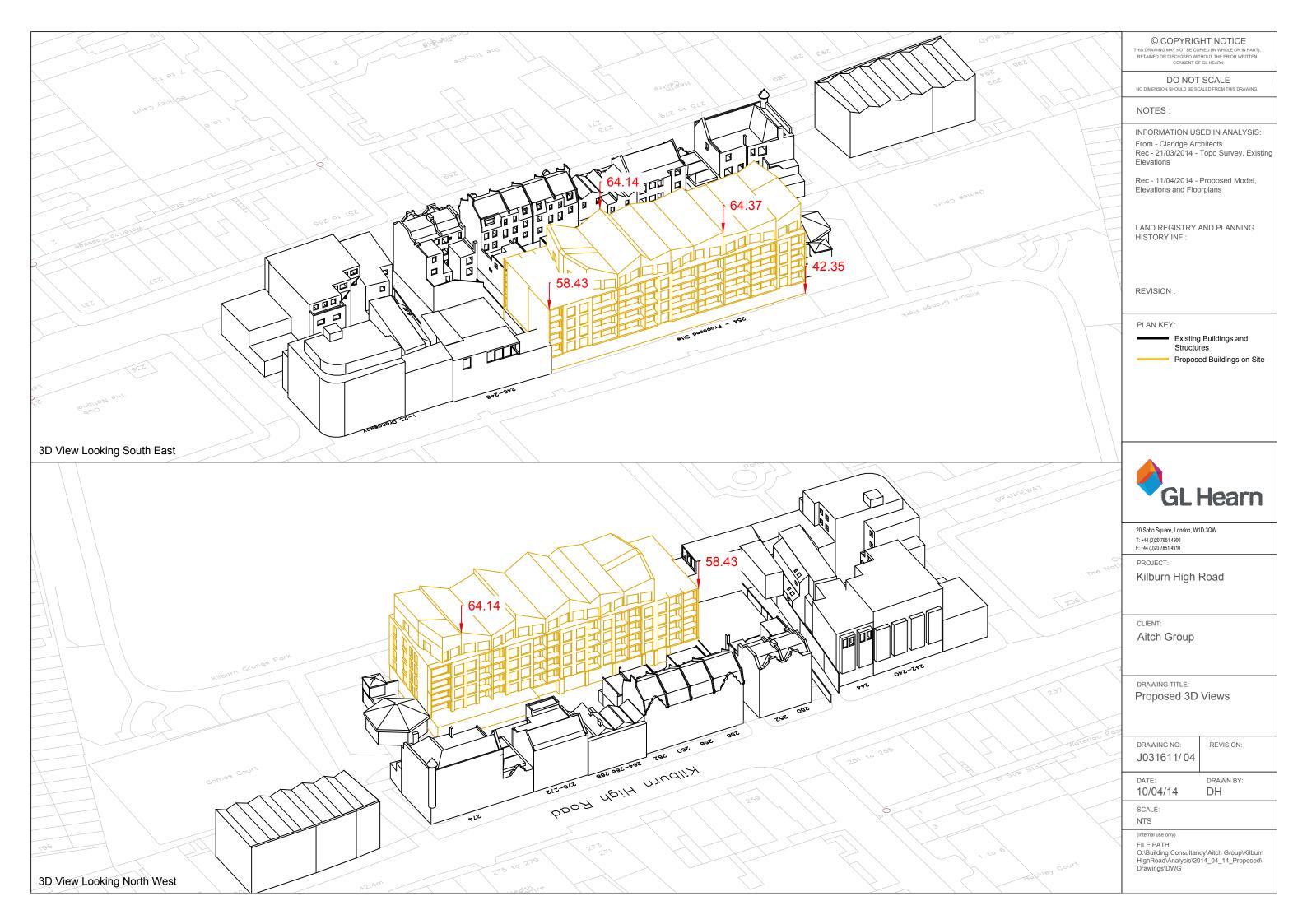
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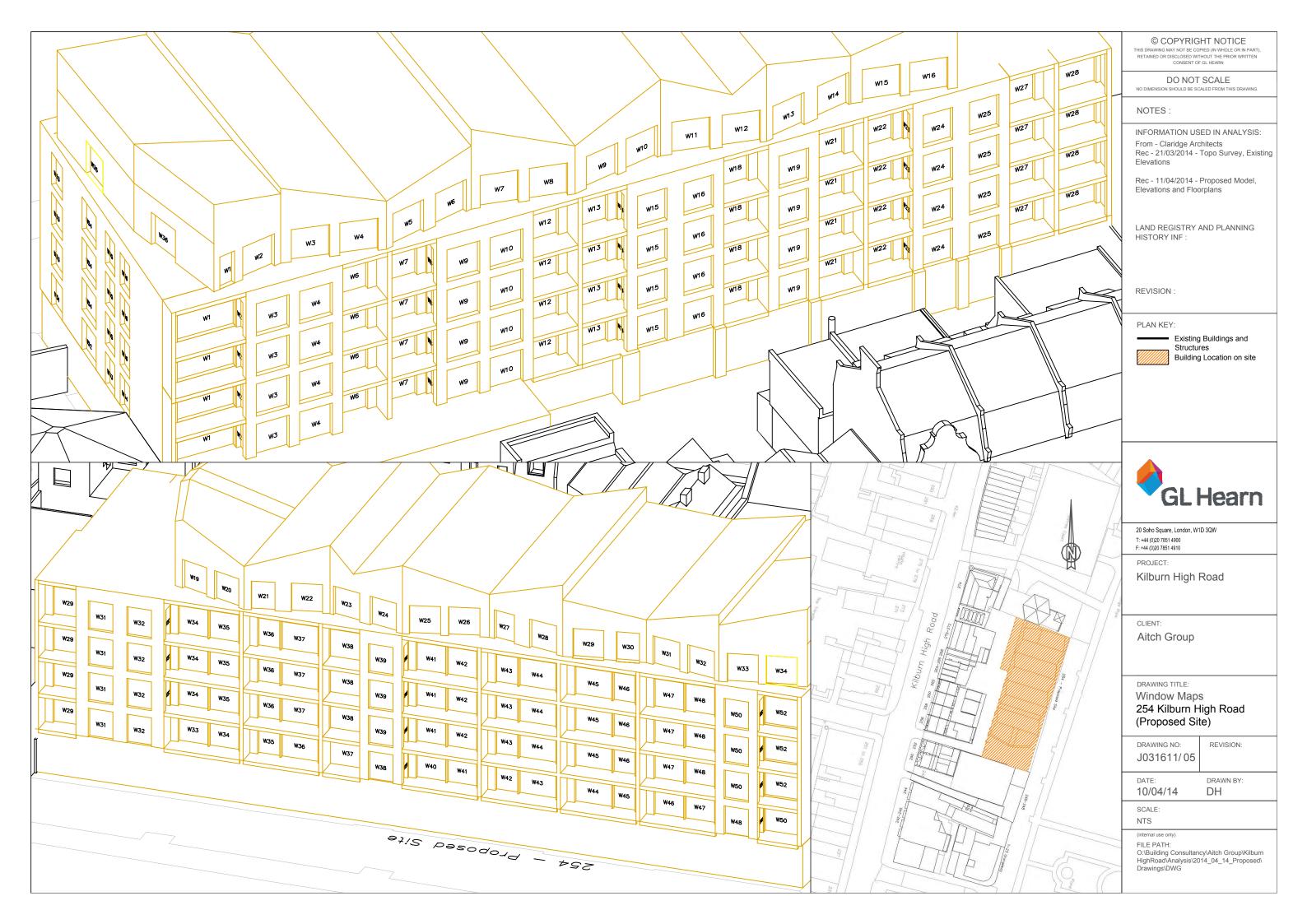
Page 15

















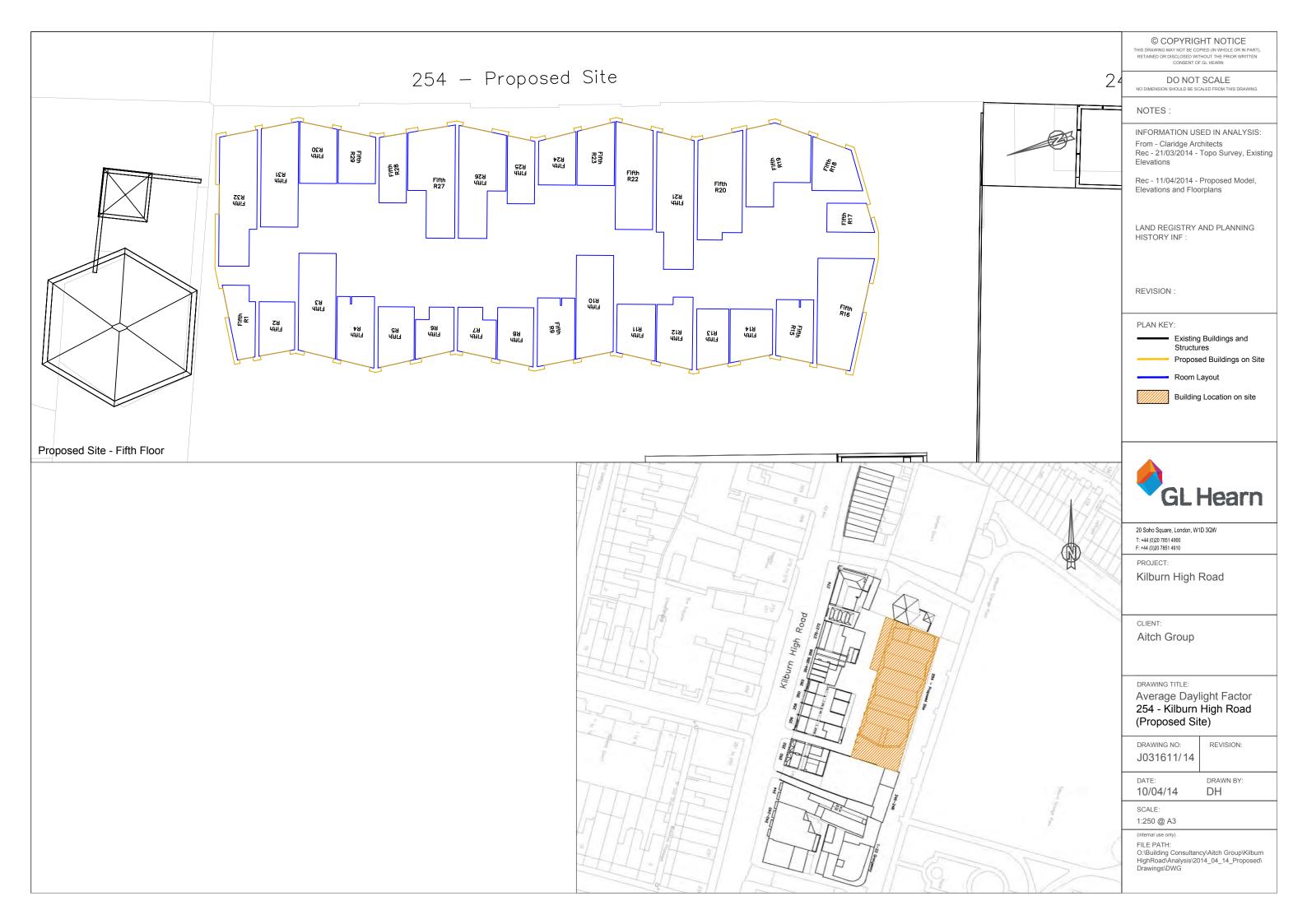


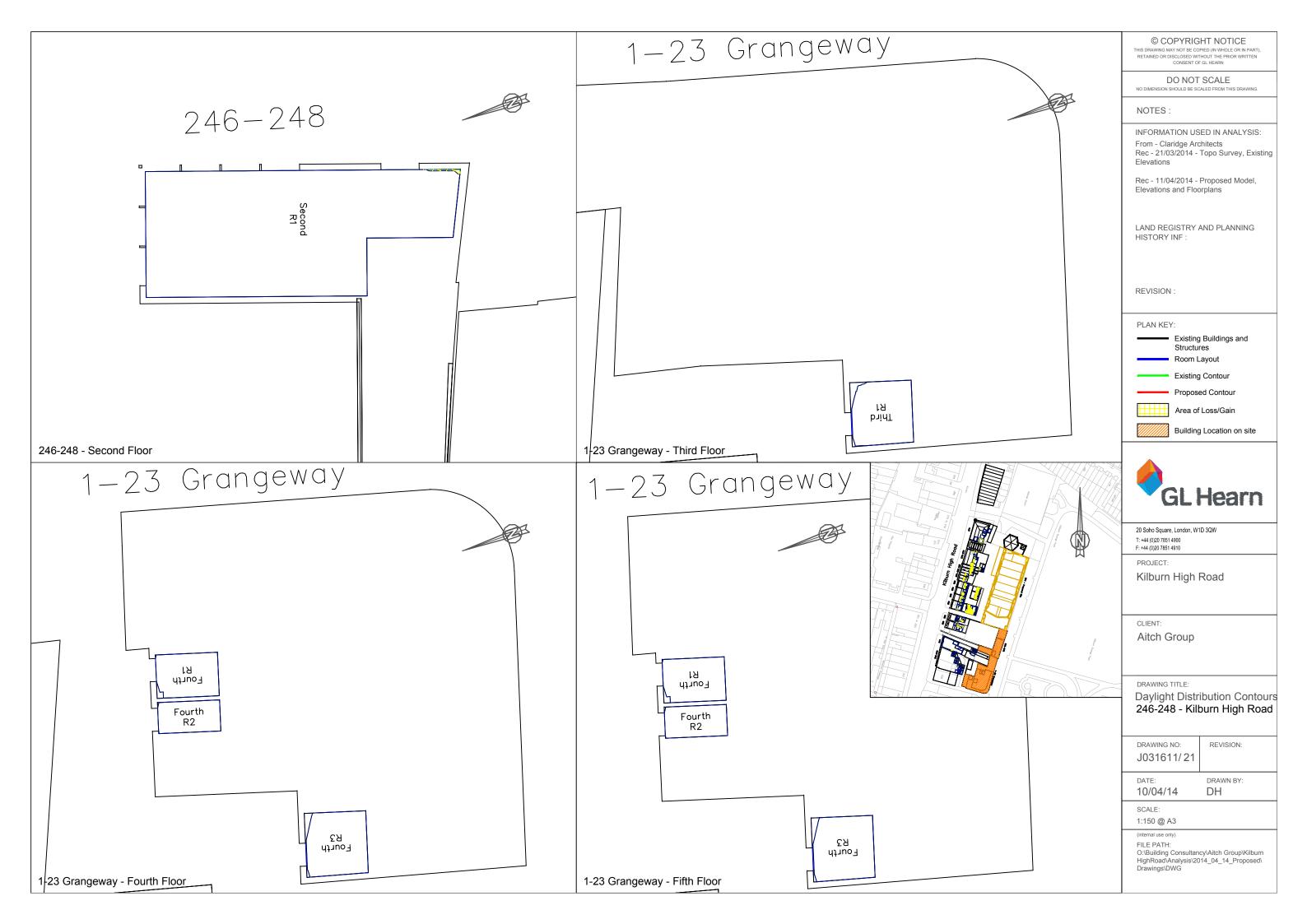








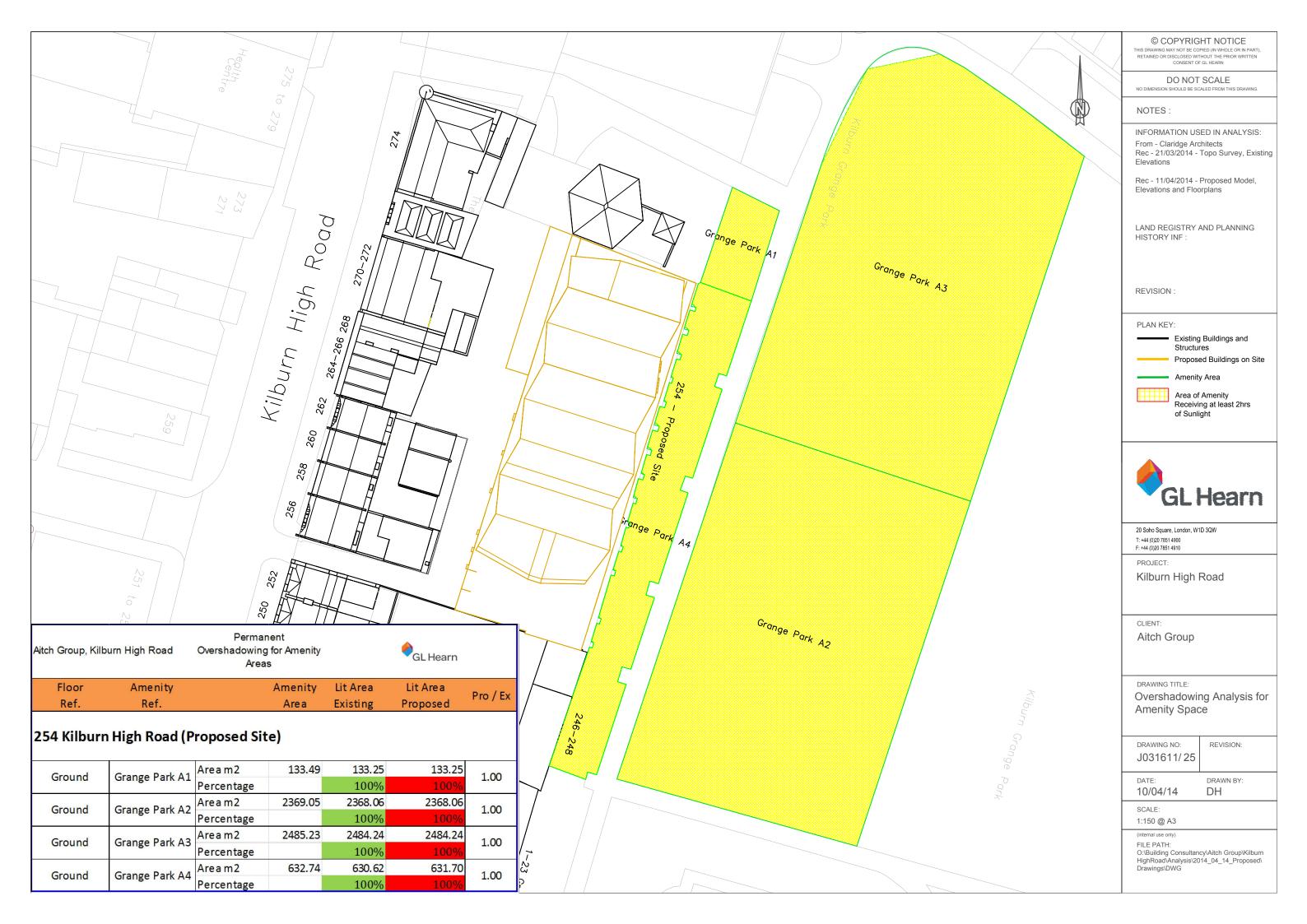


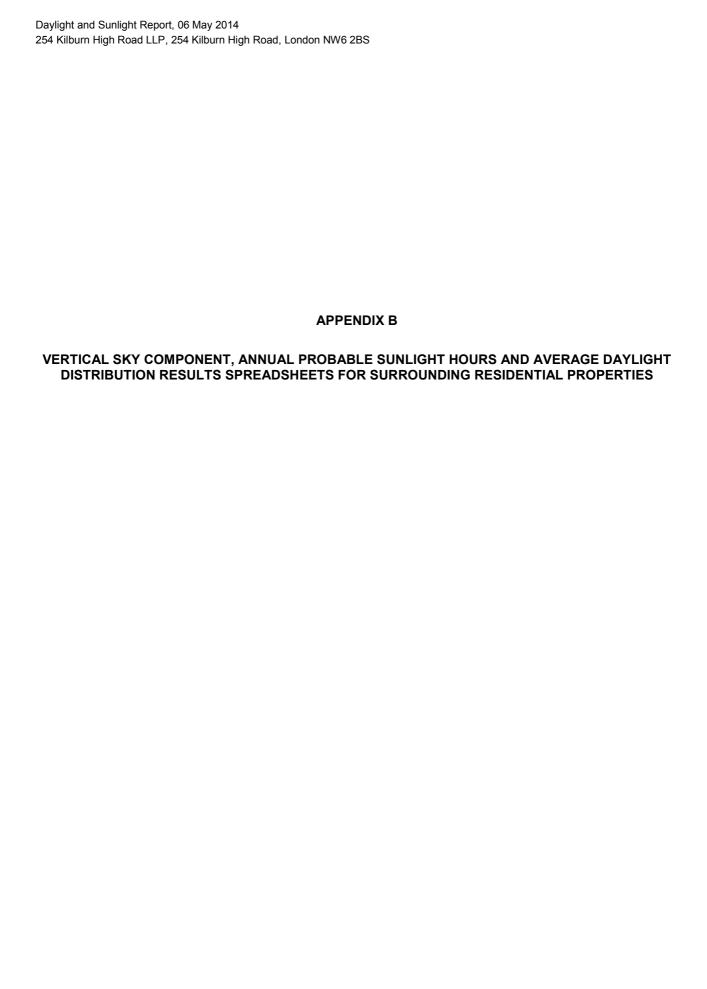












Aitch Group, Kilburn High Road

Daylight and Sunlight - VSC and Sunlight Results



Available Sunlight Hours

Floor Ref. Room Ref. Room Use. Window Ref. Scenario VSC Difference Annual % Winter %

246-248 Kilburn High Road

Second	R1	L/D/K	W1	Existing	37.71	0.58	*North Facing	
				Proposed	21.8			
Second	R1	L/D/K	W2	Existing	38.07	0.64	*North Facing	
				Proposed	24.55	0.04		
Second	R1	L/D/K	W3	Existing	38.23	0.73 *North F		h Facing
				Proposed	28.01	0.73	*North Facing	
Second	R1	L/D/K	W4	Existing	39.6	1.00	50	15
				Proposed	39.6	1.00	50	15
Second	R1	L/D/K	W5	Existing	39.6	1.00	50	15
				Proposed	39.6	1.00	50	15
Second	R1	L/D/K	W6	Existing	39.6	1.00	50	15
				Proposed	39.6		50	15
Second	R1	L/D/K	W7	Existing	39.6	1.00	50	15
				Proposed	39.6	1.00	50	15
Second	R1	R1 L/D/K	W8	Existing	39.59	1.00	50	15
				Proposed	39.59		50	15

1-23 Grangeway

Third	R1	Bedroom	W1	Existing	23.62	0.99	*North Facing
				Proposed	23.45	0.99	North Facility
Fourth	R3	Bedroom	W3	Existing	29.77	0.97	*North Facing
				Proposed	28.8	0.97	*North Facing

240-242 Kilburn High Road

	D1	5	14/4	- · · · ·	00.01		0.4	
Third	R1	Residential	W1	Existing	29.21	0.99	31	8
				Proposed	28.94		31	8
Third	R2	Residential	W2	Existing	31.29	0.99	37	8
				Proposed	30.95		37	8
Third	R2	Residential	W3	Existing	35.21	0.96	*North Facing	
				Proposed	33.97			
Third	R3	Residential	W4	Existing	16.41	0.93	*North Facing	
				Proposed	15.19			
Third	R4	Residential	W5	Existing	8.9	0.94	7	0
				Proposed	8.39		7	0
Third	R5	Residential	W6	Existing	20.25	0.97	18	1
				Proposed	19.69		18	1
Third	R6	Residential	W7	Existing	8.3	1.00	7	1
				Proposed	8.3		7	1
Third	R7	7 Residential	W8	Existing	12.4	1.00	17	4
				Proposed	12.4		17	4
Fourth	R1	R1 Residential	W1	Existing	36.37	1.00	38	8
				Proposed	36.2		38	8
Fourth	R2	R2 Residential	W2	Existing	36.61	0.99	40	10
				Proposed	36.42		40	10

Daylight and Sunlight - VSC and Sunlight Results



							Available Sunl	ight Hours
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Difference	Annual %	Winter %
Fourth	R3	Residential	W3	Existing	36.99	0.99	40	10
				Proposed	36.77	0.77	40	10
Fourth	R3	Residential	W4	Existing	35.06	0.98	*Nort	a Facina
				Proposed	34.31	0.90	*North Facing	
Fourth	R4	Residential	W5	Existing	28.11	0.99	27	2
				Proposed	27.78	0.99	27	2
Fourth	R4	Residential	W6	Existing	36.31	0.99	41	10
				Proposed	35.98	0.99	41	10
Fourth	R5	Residential	W7	Existing	27.03	0.98	22	2
				Proposed	26.56	0.90	22	2
Fourth	R5	Residential	W8	Existing	36.56	0.99	42	11
				Proposed	36.09	0.99	42	11

Second	R2	Bedroom	W2	Existing	29.5	0.87	*Nort	h Facing	
				Proposed	25.57	0.67	NOLL	ir racing	
Second	R2	Bedroom	W3	Existing	28.77	0.84	*Nort	h Facing	
				Proposed	24.21	0.04	NOLL	ir racing	
Second	R3	Bedroom	W4	Existing	20.95	0.92	19	0	
				Proposed	19.2	0.72	19	0	
Third	R1	Bedroom	W1	Existing	38.74	0.92	*Nort	h Facina	
				Proposed	35.75	0.72	*North Facing		
Third	R1	Bedroom	W2	Existing	38.66	0.93	*Nort	h Facina	
				Proposed	35.81	0.73	*North Facing		
Third	R1	Bedroom	W3	Existing	34.68	0.91	*Nort	h Facing	
				Proposed	31.67	0.71	ŭ		
Third	R3	Bedroom	W5	Existing	24.34	0.94	23	2	
				Proposed	22.84	0.74	22	2	
Fourth	R1	L/D/K	W1	Existing	36.63	0.98	46	13	
				Proposed	35.87	0.70	45	13	
Fourth	R1	L/D/K	W2	Existing	30.28	0.96	35	4	
				Proposed	29.2	0.70	34	4	
Fourth	R1	L/D/K	W3	Existing	39.6	1.00	*Nort	h Facing	
				Proposed	39.6	1.00	NOIT	ir racing	
Fourth	R1	L/D/K	W4	Existing	39.6	1.00	*Nort	h Facing	
				Proposed	39.6	1.00	INOLL	ir racing	
Fourth	R1	L/D/K	W5	Existing	39.61	1.00	*Nort	h Facing	
				Proposed	39.61	1.00	INOLL	*North Facing	
Fourth	R1	L/D/K	W6	Existing	39.61	1.00	*Nort	h Facing	
				Proposed	39.61	1.00	*North Facing		

Daylight and Sunlight - VSC and Sunlight Results



Available	Sunlight Hours	

Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Difference	Annual %	Winter %
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250 Kilburn High Road

First	R1	Residential	W1	Existing	26.62	0.00	29	2
				Proposed	21.87	0.82	25	2
First	R1	Residential	W2	Existing	5.85	0.73	*Nort	h Facina
				Proposed	4.25	0.73	NOLL	h Facing
First	R1	Residential	W3	Existing	3.01	0.83	*Nort	h Facing
				Proposed	2.49	0.03	NOLL	ir racing
Second	R1	Residential	W1	Existing	36.57	0.88	45	12
				Proposed	32.07	0.00	40	12
Second	R2	Residential	W2	Existing	22.56	0.88	*Nort	h Facing
				Proposed	19.83	0.88 *North Facin		ir racing
Second	R2	Residential	W3	Existing	18.59	0.88	*Nort	h Facing
				Proposed	16.44	0.00	NOLL	ir racing
Second	R3	Residential	W4	Existing	21.61	0.89	18	2
				Proposed	19.21	0.09	14	2
Third	R1	Residential	W1	Existing	38.66	0.92	41	10
				Proposed	35.51	0.72	40	10
Third	R2	Residential	W2	Existing	29.54	0.90	*Nort	h Facing
				Proposed	26.63	0.90	NOLL	ir racing
Third	R3	Residential	W3	Existing	31.63	0.89	35	3
				Proposed	28.27	0.09	33	3

First	R1	Residential	W1	Existing	33.96	0.75	45	12
				Proposed	25.5	0.75	35	12
First	R2	Residential	W2	Existing	11.29	0.99	16	1
				Proposed	11.15	0.99	16	1
Second	R1	Residential	W1	Existing	37.72	0.78	48	14
				Proposed	29.26	0.76	39	14
Second	R2	Residential	W2	Existing	19.82	0.99	29	4
				Proposed	19.69	0.99	29	4
Third	R1	Residential	W1	Existing	37.06	0.90	46	12
				Proposed	33.3	0.90	43	12
Third	R2	Residential	W2	Existing	37.98	0.90	26	5
				Proposed	34.03	0.90	22	5
Third	R3	Residential	W3	Existing	38.34	0.89	37	8
				Proposed	33.96	0.09	32	8

Daylight and Sunlight - VSC and Sunlight Results



							Available Julii	igittilours
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Difference	Annual %	Winter %

256 Kilburn High Road

First	R2	Residential	W3	Existing	24	0.07	39	16
				Proposed	23.19	0.97	39	16
First	R3	Residential	W4	Existing	30.67	0.76	34	4
				Proposed	23.31	0.76	23	3
First	R3	Residential	W5	Existing	30.37	0.78	35	7
				Proposed	23.66	0.76	26	6
Second	R1	Residential	W1	Existing	37.82	0.76	41	9
				Proposed	28.72	0.76	31	7
Second	R1	Residential	W2	Existing	38.37	0.74	42	9
				Proposed	28.49	0.74	29	6
Second	R2	Residential	W3	Existing	38.29	0.70	43	10
				Proposed	26.78	0.70	30	7
Third	R1	Residential	W1	Existing	39.23	0.84	48	15
				Proposed	32.97	0.84	41	13
Third	R2	Residential	W2	Existing	39.25	0.78	38	9
				Proposed	30.77	0.78	27	6

First	R1	Residential	W1	Existing	29.46	0.69	34	3
				Proposed	20.31	0.09	17	2
First	R2	Residential	W2	Existing	35	0.65	40	10
				Proposed	22.73	0.05	20	4
Second	R1	Residential	W1	Existing	38.54	0.68	42	10
				Proposed	26.38	0.00	28	7
Second	R2	Residential	W2	Existing	38.88	0.69	42	10
				Proposed	26.69	0.09	28	6
Third	R1	Residential	W1	Existing	39.29	0.77	38	9
				Proposed	30.19	0.77	28	6
Third	R2	Residential	W2	Existing	39.27	0.79	40	9
				Proposed	30.85	0.79	31	6

Daylight and Sunlight - VSC and Sunlight Results



							Available Sunii	ignt Hours
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Difference	Annual %	Winter %

260 Kilburn High Road

First	R1	Residential	W1	Existing	35.03	0.24	44	14
				Proposed	8.4	0.24	5	3
First	R2	Residential	W2	Existing	34.71	0.23	34	6
				Proposed	7.89	0.23	2	0
First	R3	Residential	W3	Existing	33.94	0.66	38	8
				Proposed	22.46	0.00	19	4
Second	R1	Residential	W1	Existing	39	0.67	40	10
				Proposed	26.25	0.07	27	7
Second	R2	Residential	W2	Existing	38.86	0.64	43	10
				Proposed	24.68	0.04	25	4
Third	R1	Residential	W1	Existing	39.3	0.77	41	10
				Proposed	30.31	0.77	31	7
Third	R2	Residential	W2	Existing	39.41	0.73	36	8
				Proposed	28.81	0.73	24	4

262 Kilburn High Road

First	R1	Residential	W1	Existing	34.56	0.22	40	10
				Proposed	7.54	0.22	1	0
Second	R1	Residential	W1	Existing	38.93	0.63	43	10
				Proposed	24.49	0.03	25	4
Second	R2	Residential	W2	Existing	39.16	0.65	43	10
				Proposed	25.39	0.00	27	4
Third	R1	Residential	W1	Existing	39.42	0.72	40	9
				Proposed	28.39	0.72	28	4
Third	R2	Residential	W2	Existing	39.37	0.76	45	12
				Proposed	29.82	0.76	34	8

First	R1	Residential	W1	Existing	28.67	0.64	26	8
				Proposed	18.32	0.04	10	1
Second	R1	Residential	W1	Existing	37.54	0.59	37	9
				Proposed	22.26	0.39	16	2

Daylight and Sunlight - VSC and Sunlight Results



Available Sunlight Hours

Floor Ref. Room Ref. Room Use. Window Ref. Scenario VSC Difference Annual % Winter %

270-272 Kilburn High Road

First	R2	Residential	W2	Existing	34.37	0.64	41	10
				Proposed	22.1	0.64	22	4
First	R2	Residential	W3	Existing	35.78	0.63	45	12
				Proposed	22.44	0.03	21 4	
First	R3	Residential	W4	Existing	19.06	0.91	*Nort	n Facing
				Proposed	17.4	0.71	NOLL	i i aciriy
First	R4	Residential	W5	Existing	25.26	0.65	19	2
				Proposed	16.53	0.03	4	0
First	R5	Residential	W6	Existing	34.22	0.64	38	9
				Proposed	21.89	0.04	19	2
First	R6	Residential	W7	Existing	27.94	0.75	43	17
				Proposed	21.02	0.75	36	11
First	R6	Residential	W8	Existing	26.64	0.76	42	17
				Proposed	20.34		35	11
Second	R2	Residential	W2	Existing	39.42	0.66	46	13
				Proposed	25.89	0.00	27	4
Second	R2	Residential	W3	Existing	39.43	0.66	46	13
				Proposed	26.15	0.00	28	4
Second	R3	Residential	W4	Existing	24.1	0.95	*Nort	n Facing
				Proposed	22.78	0.43	NOLL	i i aciriy
Second	R4	Residential	W5	Existing	28.21	0.76	26	2
				Proposed	21.3	0.70	19	0
Second	R5	Residential	W6	Existing	38.28	0.73	44	11
				Proposed	28.09	0.73	31	4
Second	R6	Residential	W7	Existing	32.15	0.78	45	17
				Proposed	25.22	0.70	39	11

Daylight and Sunlight - VSC and Sunlight Results



Available Sunlight Hours

Floor Ref. Room Ref. Room Use. Windo	w Scenario	VSC	Difference	Annual %	Winter %
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First	R1	Residential	W1	Existing	38.86	0.79	49	15
				Proposed	30.58	0.79	38	6
First	R2	Residential	W2	Existing	36.55	0.81	46	12
				Proposed	29.6	0.61	38	5
First	R3	Residential	W3	Existing	34.5	0.81	46	15
				Proposed	27.93	0.61	39	8
First	R4	Residential	W4	Existing	21.26	0.77	41	19
				Proposed	16.47	0.77	34	13
Second	R1	Residential	W1	Existing	35.99	0.92	63	24
				Proposed	33.23	0.92	62	23
Second	R2	Residential	W2	Existing	39.45	0.85	46	12
				Proposed	33.38	0.65	39	5
Second	R3	Residential	W3	Existing	39.53	0.88	46	12
				Proposed	34.65	0.00	40	6
Second	R4	Residential	W4	Existing	39.53	0.89	51	15
				Proposed	35.08	0.09	45	9

Aitch Group, Kilburn High Road		Daylight Distribution - Results	GL Hearn			
Floor Ref.	Room Ref.	Room Use.	Room Area	Lit Area Existing	Lit Area Proposed	Proposed / Existing

246-248 Kilburn High Road

Socond	D1	L/D/K	Area m2	78.97	78.97	78.83	1 00
Second	KI	L/D/K	% of room		100%	100%	1.00

1-23 Grangeway

Third	R1	Bedroom	Area m2	9.01	8.56	8.56	1.00
mild	ΚI	bearoom	% of room		95%	95%	1.00
Fourth	R1	Bathroom	Area m2	6.30	6.17	6.17	1.00
Fourtii	ΚI	Datrii Oom	% of room		98%	98%	1.00
Fourth	R2	Circulation Area	Area m2	4.50	4.49	4.49	1.00
Tourtii	NΖ	Circulation Area	% of room		100%	100%	1.00
Fourth	R3	Bedroom	Area m2	9.01	8.64	8.64	1.00
Tourtii	I\3	Dedition	% of room		96%	96%	1.00
Fifth	R1	Circulation Area	Area m2	5.10	5.07	5.07	1.00
1 11 (11	IXT	Circulation Area	% of room		99%	99%	1.00
Fifth	R2	Bathroom	Area m2	5.70	5.64	5.64	1.00
1 11 (11	I\Z	Datriloulli	% of room		99%	99%	1.00

244 Kilburn High Road

Second	R1	Bathroom	Area m2 % of room	4.34	4.34 100%	4.34 100%	1.00
Casand	DO	Bedroom	Area m2	6.58	6.58	6.57	1.00
Second	R2	Bedroom	% of room		100%	100%	1.00
Second	R3	Bedroom	Area m2	10.35	9.22	9.22	1.00
Second	KS	Dealoon	% of room		89%	89%	1.00
Third	R1	Bedroom	Area m2	13.53	13.53	13.53	1.00
TIIIU	ΚI	bearoom	% of room		100%	100%	1.00
Third	R2	Circulation Area	Area m2	14.52	6.45	6.45	1.00
TTIII U	KΖ	Circulation Area	% of room		44%	44%	1.00
Third	R3	Bedroom	Area m2	10.35	9.75	9.75	1.00
IIIIIU KS	Bearoom	% of room		94%	94%	1.00	
Fourth	Fourth D1	L/D/K	Area m2	127.74	127.49	127.49	1.00
Foultii	R1	L/D/N	% of room		100%	100%	1.00

First	R2	L/D/K	Area m2 % of room	11.80	8.80 75%	3.54 30%	0.40
			% ULTUUITI		7370	30%	
Second R2	L/D/K	Area m2	13.71	13.00	5.15	0.40	
	I\Z	L/D/K	% of room		95%	38%	0.40

Aitch Group, Kilburn High Road		Daylight Distribution - Results		GL Hearn		
Floor Ref.	Room Ref.	Room Use.	Room Area	Lit Area Existing	Lit Area Proposed	Proposed / Existing

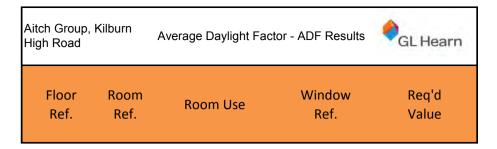
270-272 Kilburn High Road

			Area m2	9.74	9.70	4.95		
First	R1	Residential	% of room	7.71	100%	51%	0.51	
			Area m2	12.61	12.39	10.51		
First	R2	Residential	% of room	12.01	98%	83%	0.85	
			Area m2	3.72	3.12	3.11		
First	R3	Residential	% of room	0.72	84%	84%	1.00	
			Area m2	2.81	2.66	2.66		
First	R4	Residential	% of room		95%	95%	1.00	
- 1	DE	5	Area m2	7.00	6.71	6.14	0.00	
First	R5	Residential	% of room		96%	88%	0.92	
6 1	D1	D1	Area m2	9.74	9.73	7.52	0.77	
Second	R1	Residential	% of room		100%	77%	0.77	
C	DO	Desidential	Area m2	12.62	12.32	12.31	1.00	
Second	R2	Residential	% of room		98%	98%	1.00	
Canana	DO	Decidential	Area m2	3.72	3.09	3.09	1.00	
Second	R3	Residential	% of room		83%	83%	1.00	
Casand	Second R4	Decidential	Area m2	2.81	2.69	2.69	1.00	
Second		Residential	% of room		96%	96%	1.00	
Socond	`acand DE	DE Decidential	Area m2	7.00	6.74	6.74	1.00	
Second	R5	Residential	% of room		96%	96%	1.00	

Daylight and Sunlight Report, 06 May 2014 254 Kilburn High Road LLP, 254 Kilburn High Road, London NW6 2BS

APPENDIX C

AVERAGE DAYLIGHT FACTOR AND SUNLIGHT RESULTS TO PROPOSED SCHEME



254 Kilburn High Road (Proposed Site)

W1-U (W53-L (0.11 0.88 0.07
W53-L (
	1117
	0.87
	0.07
	0.88
	2.87
	0.04
	0.34
	0.18
	2.23
	2.78
	0.18
	2.23
	0.03
	0.33
	2.77
	0.08
l	0.68
	0.76
	0.12
	1.08
	1.20
	0.03
	0.33
	0.18
	2.24
	2.78
	0.18
	2.23
W11-L (0.03
W11-U(0.32
	2.76
First R8 Bedroom W12-L (0.13
W12-U	1.08
	1.20
First R9 Bedroom W13-L (0.10
W13-U(0.88
	0.98
First R10 L/D/K W14-L (0.02
	0.21
	0.10
	1.25
	1.58

ch Group, h Road	Kilburn	Average Daylight Fac	tor - ADF Results	GL Hear
Floor	Room		Window	Req'd
Ref.	Ref.	Room Use	Ref.	Value
First	R11	Bedroom	W16-L	0.13
			W16-U	1.64
			W17-L	0.03
			W17-U	0.26 2.05
First	R12	Bedroom	W18-L	0.10
			W18-U	0.84
				0.94
First	R13	Bedroom	W19-L	0.15
			W19-U	1.92
			W20-L	0.03
			W20-U	0.31 2.41
First	R14	Bedroom	W21-L	0.11
1 1100		Bodroom	W21-U	0.90
				1.02
First	R15	Bedroom	W22-L	0.09
			W22-U	0.72
			14/00 1	0.81
First	R16	L/D/K	W23-L	0.02
			W23-U W24-L	0.21 0.09
			W24-U	1.16
			W210	1.48
First	R17	L/D/K	W25-L	0.09
			W25-U	1.17
			W26-L	0.02
			W26-U	0.18
Eirot	R18	Bedroom	W27-L	1.46 0.09
First	KIO	bearoom	W27-L W27-U	0.09
			WZ1-0	0.83
First	R19	L/D/K	W28-L	0.12
			W28-U	0.90
				1.02
First	R20	Bedroom	W29-L	0.17
			W29-U	1.62
First	R21	Bedroom	W30-L	1.80 0.03
1 1151	ΠΔΙ	DEGLOOM	W30-L	0.03
			W30-6 W31-L	0.17
			W31-U	2.08
				2.57
First	R22	L/D/K	W32-L	0.13
			W32-U	1.62
First	R23	Bedroom	W33-L	1.75 0.22
r⊪5t	r23	Deuroom	W33-L W33-U	1.95
			VV 00-0	2.17

h Road	Kilburn	Average Daylight Fac	GL Hear	
Floor	Room		Window	Req'd
Ref.	Ref.	Room Use	Ref.	Value
First	R24	Bedroom	W34-L	0.22
			W34-U	1.95 2.17
First	R25	Bedroom	W35-L	0.15
1 1100	1120	Bedroom	W35-U	1.34
				1.49
First	R26	L/D/K	W36-L	0.15
			W36-U	1.31
Eirot	D27	L/D/K	W37-L	1.45 0.11
First R27	L/D/K	W37-L W37-U	1.04	
			VV37-0	1.15
First R	R28	L/D/K	W38-L	0.13
	. 120	2/2/11	W38-U	1.62
			W39-L	0.03
			W39-U	0.27
				2.05
First	R29	Bedroom	W40-L	0.22
			W40-U	1.95
				2.17
First	R30	Bedroom	W41-L	0.22
			W41-U	1.96
			\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2.17
First	R31	Bedroom	W42-L	0.15
			W42-U	1.34
Circt	Daa	I /D/I/	W43-L	1.49 0.15
First	R32	L/D/K	W43-L W43-U	1.31
			VV-43-O	1.45
First	R33	L/D/K	W44-L	0.15
1 1100	1100	L/D/IX	W44-U	1.31
				1.45
First	R34	Bedroom	W45-L	0.15
			W45-U	1.34
				1.49
First	R35	Bedroom	W46-L	0.14
			W46-U	1.25
				1.39
First	R36	Bedroom	W47-L	0.21
			W47-U	1.90
			14/12:	2.11
First	R37	Bedroom	W48-L	0.21
			W48-U	2.55
			W49-L	0.04
			W49-U	0.41

ch Group, l gh Road	Kilburn	Average Daylight Fac	tor - ADF Results	GL Hear
Floor	Room	D	Window	Req'd
Ref.	Ref.	Room Use	Ref.	Value
First	R38	L/D/K	W50-L	0.10
			W50-U	0.95
			W51-L	0.09
			W51-U	1.20
First	R38	L/D/K	W52-L	0.11
			W52-U	1.48
0 1	D.4		\A/4 I	3.94
Second	R1	Bedroom	W1-L	0.24
			W1-U	2.10
Second		Dadasas	\\\\O_1	2.34
Second	R2	Bedroom	W2-L	0.04
			W2-U	0.35
			W3-L W3-U	0.18 2.29
			VV 3-U	2.29
Second	R3	L/D/K	W4-L	0.12
Second	110	LIDIK	W4-U	1.53
			W5-L	0.02
			W5-U	0.23
			1100	1.91
Second	R4	Bedroom	W6-L	0.11
			W6-U	1.04
				1.15
Second	R5	Bedroom	W7-L	0.14
			W7-U	1.26
				1.40
Second	R6	Bedroom	W8-L	0.04
			W8-U	0.36
			W9-L	0.20
			W9-U	2.46
0		Dadasas	W(40.1	3.05
Second	R7	Bedroom	W10-L	0.20
			W10-U W11-L	2.45 0.04
			W11-L W11-U	0.04
			۷۷ ۱ ۱ - U ا	3.03
Second	R8	Bedroom	W12-L	0.14
3000 Iu	1.0	Dogroom	W12-L W12-U	1.26
			2	1.40
Second	R9	Bedroom	W13-L	0.11
			W13-U	1.03
				1.14
Second	R10	L/D/K	W14-L	0.02
			W14-U	0.23
			W15-L	0.11
			W15-U	1.37
				1.73

ch Group, l h Road	Kilbum	Average Daylight Fac	GL Hear	
Floor	Room		Window	Req'd
Ref.	Ref.	Room Use	Ref.	Value
Second	R11	Bedroom	W16-L	0.14
			W16-U	1.80
			W17-L	0.03
			W17-U	0.28
	540		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2.25
Second	R12	Bedroom	W18-L	0.12
			W18-U	1.01
Second	R13	Bedroom	W19-L	1.13 0.17
Jecond	17.19	DEGLOOM	W19-L W19-U	2.11
			W20-L	0.04
			W20-U	0.34
				2.66
Second	R14	Bedroom	W21-L	0.13
			W21-U	1.12
				1.24
Second	R15	Bedroom	W22-L	0.10
			W22-U	0.90
				1.00
Second	R16	L/D/K	W23-L	0.02
			W23-U	0.23
			W24-L W24-U	0.10 1.28
			VV 24-U	1.64
Second	R17	L/D/K	W25-L	0.10
COOCIIG	1317	LIDIK	W25-U	1.30
			W26-L	0.02
			W26-U	0.21
				1.63
Second	R18	Bedroom	W27-L	0.11
			W27-U	0.92
	546	1.75.07	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1.02
Second	R19	L/D/K	W28-L	0.13
			W28-U	1.12 1.25
Second	R20	Bedroom	W29-L	0.18
Cecond	1120	Pediooiii	W29-L W29-U	1.70
			W25 G	1.88
Second	R21	Bedroom	W30-L	0.03
	-		W30-U	0.34
			W31-L	0.17
			W31-U	2.08
				2.62
Second	R22	L/D/K	W32-L	0.13
			W32-U	1.62
			W33-L	0.03
			W33-U	0.27

tch Group, gh Road				GL Hear
Floor Ref.	Room Ref.	Room Use	Window Ref.	Req'd Value
Second	R23	Bedroom	W34-L	0.22
			W34-U	1.95 2.17
Second	R24	Bedroom	W35-L	0.22
0000114		200,00,	W35-U	1.95
				2.17
Second	R25	Bedroom	W36-L	0.15
			W36-U	1.34
0 1	D00	L /D //	14/07	1.49
Second	R26	L/D/K	W37-L	0.15
			W37-U	1.31 1.45
Second	R27	L/D/K	W38-L	0.11
Second	1121	LIDIN	W38-U	1.04
			11000	1.15
Second	R28	L/D/K	W39-L	0.13
			W39-U	1.62
			W40-L	0.03
			W40-U	0.27
				2.05
Second	R29	Bedroom	W41-L	0.22
			W41-U	1.95
0	Dan	Dadasass	W42-L	2.17
Second	R30	Bedroom	W42-L W42-U	0.22 1.96
			VV42-U	2.17
Second	R31	Bedroom	W43-L	0.15
OCCOOLIG	1101	Beardonn	W43-U	1.34
				1.49
Second	R32	L/D/K	W44-L	0.15
			W44-U	1.31
				1.45
Second	R33	L/D/K	W45-L	0.15
			W45-U	1.31
0	D0.4	D. J	\A/40 !	1.45
Second	R34	Bedroom	W46-L	0.15
			W46-U	1.34 1.49
Second	R35	Bedroom	W47-L	0.22
Jeconiu	1100	Pedioom	W47-L W47-U	1.96
			J	2.18
Second	R36	Bedroom	W48-L	0.22
			W48-U	1.96
				2.17

ch Group, l Jh Road	NIIDUITI	Average Daylight Fac	tor - ADF Results	GL Hear
Floor	Room		Window	Req'd
Ref.	Ref.	Room Use	Ref.	Value
nei.	Rei.		Kei.	value
Second	R37	L/D/K	W49-L	0.03
			W49-U	0.27
			W50-L	0.13
			W50-U	1.62
			W51-L	0.03
			W51-U	0.26
				2.34
Second	R38	L/D/K	W52-L	0.12
			W52-U	1.11
			W53-L	0.12
			W53-U	1.45
			W54-L	0.15
			W54-U	1.85 4.80
Second	R39	Bedroom	W56-L	0.25
Second	1139	Deditoon	W56-U	3.05
			W00 0	3.30
Third	R1	Bedroom	W1-L	0.26
	1 ()	Beardon	W1-U	2.33
				2.59
Third	R2	Bedroom	W2-L	0.04
			W2-U	0.37
			W3-L	0.20
			W3-U	2.46
				3.06
Third	R3	L/D/K	W4-L	0.13
			W4-U	1.65
			W5-L	0.02
			W5-U	0.24
				2.04
Third	R4	Bedroom	W6-L	0.12
			W6-U	1.14
Thind	D.E.	Dadraam	\A/ 7 I	1.26
Third	R5	Bedroom	W7-L W7-U	0.15 1.38
			۷۷ <i>۲-</i> U ا	1.58
Third	R6	Bedroom	W8-L	0.04
mu	110	Penionii	W8-U	0.04
			W9-L	0.30
			W9-U	2.64
				3.28
Third	R7	Bedroom	W10-L	0.21
			W10-U	2.63
			W11-L	0.04
			W11-U	0.37
				3.26
Third	R8	Bedroom	W12-L	0.15
			W12-U	1.38
				1.53

Aitch Group, High Road	Kilburn	Average Daylight Fac	tor - ADF Results	GL Hearn
Floor Ref.	Room Ref.	Room Use	Window Ref.	Req'd Value
Third	R9	Bedroom	W13-L W13-U	0.12 1.13 1.25
Third	R10	L/D/K	W14-L W14-U W15-L W15-U	0.02 0.24 0.12 1.48 1.86
Third	R11	Bedroom	W16-L W16-U W17-L W17-U	0.15 1.94 0.03 0.31 2.43
Third	R12	Bedroom	W18-L W18-U	0.13 1.15 1.27
Third	R13	Bedroom	W19-L W19-U W20-L W20-U	0.18 2.30 0.04 0.37 2.89
Third	R14	Bedroom	W21-L W21-U	0.14 1.29 1.43
Third	R15	Bedroom	W22-L W22-U	0.11 1.04 1.16
Third	R16	L/D/K	W23-L W23-U W24-L W24-U	0.02 0.24 0.11 1.41 1.79
Third	R17	L/D/K	W25-L W25-U W26-L W26-U	0.11 1.43 0.02 0.23 1.79
Third	R18	Bedroom	W27-L W27-U	0.12 1.06 1.17
Third	R19	L/D/K	W28-L W28-U	0.14 1.30 1.44
Third	R20	Bedroom	W29-L W29-U	0.18 1.70 1.88

h Group, h Road	Tallourn	Average Daylight Fac	tor - ADF Results	GL Hea
Floor	Room		Window	Req'd
Ref.	Ref.	Room Use	Ref.	Value
Third	R21	Bedroom	W30-L	0.03
			W30-U	0.34
Third	R21	Bedroom	W31-L	0.17
			W31-U	2.08
				2.62
Third	R22	L/D/K	W32-L	0.13
			W32-U	1.62
			W33-L	0.03
			W33-U	0.27
Thind	Doo	Dadraam	\\/24 I	2.05
Third	R23	Bedroom	W34-L W34-U	0.22 1.95
			VV 34-U	2.17
Third	R24	Bedroom	W35-L	0.22
TIMA	1127	Beardonn	W35-U	1.95
				2.17
Third	R25	Bedroom	W36-L	0.15
			W36-U	1.34
				1.49
Third	R26	L/D/K	W37-L	0.15
			W37-U	1.31
				1.45
Third	R27	L/D/K	W38-L	0.11
			W38-U	1.04
The inval	D00	L/D/I/	W39-L	1.15
Third	R28	L/D/K	W39-L W39-U	0.13 1.62
			W40-L	0.03
			W40-U	0.03
			VV-10-0	2.05
Third	R29	Bedroom	W41-L	0.22
			W41-U	1.95
				2.17
Third	R30	Bedroom	W42-L	0.22
			W42-U	1.96
				2.17
Third	R31	Bedroom	W43-L	0.15
			W43-U	1.34
				1.49
Third	R32	L/D/K	W44-L	0.15
			W44-U	1.31
Third	Daa	LIDIV	W45-L	1.45
Third	R33	L/D/K	W45-L W45-U	0.15 1.31
			vv 4 5-U	1.45
Third	R34	Bedroom	W46-L	0.15
iiiiu	1107	Dealoom	W46-U	1.34
				1.49

ch Group, h Road	Kilbum	Average Daylight Fac	tor - ADF Results	GL Hear
Floor	Room		Window	Reg'd
Ref.	Ref.	Room Use	Ref.	Value
Third	R35	Bedroom	W47-L	0.22
			W47-U	1.96 2.18
Third	R36	Bedroom	W48-L	0.22
			W48-U	1.96
Third	D27	L/D/K	W/40 I	2.17
i nira	R37	L/D/K	W49-L W49-U	0.03 0.27
			W50-L	0.13
			W50-U	1.62
			W51-L	0.03
			W51-U	0.26
				2.34
Third	R38	L/D/K	W52-L	0.12
			W52-U	1.11
			W53-L	0.12
			W53-U	1.46
			W54-L	0.15
			W54-U	1.87
				4.84
Third	R39	Bedroom	W56-L	0.25
			W56-U	3.09
			18/4 1	3.34
Fourth	R1	Bedroom	W1-L W1-U	0.29
			VV 1-O	2.96 3.25
Fourth	R2	Bedroom	W2-L	0.04
. oarar		Dodroom	W2-U	0.44
			W3-L	0.21
			W3-U	2.58
				3.27
Fourth	R3	L/D/K	W4-L	0.14
			W4-U	1.73
			W5-L	0.03
			W5-U	0.28
				2.18
Fourth	R4	Bedroom	W6-L	0.13
			W6-U	1.41
C	D.C.	Dadasaa	14/7 1	1.55
Fourth	R5	Bedroom	W7-L W7-U	0.16 1.71
			VV / -U	1.71
Fourth	R6	Bedroom	W8-L	0.04
. ourti		Dogroom	W8-U	0.45
			W9-L	0.22
			W9-U	2.77
				3.48

ch Group, _I h Road	Mibani	Average Daylight Fac	GL Hear	
Floor	Room		Window	Req'd
Ref.	Ref.	Room Use	Ref.	Value
Fourth	R7	Bedroom	W10-L	0.22
			W10-U	2.75
			W11-L	0.04
			W11-U	0.45
			\\\\.	3.47
Fourth	R8	Bedroom	W12-L	0.16
			W12-U	1.71
Fourth	R9	Bedroom	W13-L	1.87 0.13
Fourtii	Ľθ	Deuroom	W13-L W13-U	1.41
			W 10 0	1.54
Fourth	R10	L/D/K	W14-L	0.03
r carar	1110	2,3,1,	W14-U	0.28
			W15-L	0.13
			W15-U	1.55
				1.99
Fourth	R11	Bedroom	W16-L	0.16
			W16-U	2.05
			W17-L	0.03
			W17-U	0.37
			14440.1	2.62
Fourth	R12	Bedroom	W18-L	0.14
			W18-U	1.47 1.61
Fourth	R13	Bedroom	W19-L	0.20
i ourui	1113	Deditoon	W19-U	2.46
			W20-L	0.04
			W20-U	0.45
			11_1	3.15
Fourth	R14	Bedroom	W21-L	0.16
			W21-U	1.69
				1.84
Fourth	R15	Bedroom	W22-L	0.13
			W22-U	1.38
Farme	D40	1 /15/14	14/00 1	1.50
Fourth	R16	L/D/K	W23-L	0.03
			W23-U W24-L	0.28
			W24-L W24-U	0.12 1.53
			VV 24-U	1.96
Fourth	R17	L/D/K	W25-L	0.12
. Jaran	1311	LIDIN	W25-U	1.54
			W26-L	0.03
			W26-U	0.28
				1.97
Fourth	R18	Bedroom	W27-L	0.13
			W27-U	1.39
				1.52

ch Group, h Road		Average Daylight Fac	tor - ADF Results	GL Hear
Floor	Room		Window	Reg'd
Ref.	Ref.	Room Use	Ref.	Value
Fourth	R19	L/D/K	W28-L	0.16
			W28-U	1.71 1.87
Fourth	R20	Bedroom	W29-L	0.19
			W29-U	2.00 2.20
Fourth	R21	Bedroom	W30-L	0.03
			W30-U	0.38
			W31-L	0.17
			W31-U	2.08 2.67
Fourth	R22	L/D/K	W32-L	0.13
			W32-U	1.62
			W33-L	0.03
			W33-U	0.31
Fourth	R23	Bedroom	W34-L	2.09 0.23
	1123	Dediooni	W34-U	2.33
			***************************************	2.56
Fourth	R24	Bedroom	W35-L	0.23
			W35-U	2.34
			14/00 1	2.56
Fourth	R25	Bedroom	W36-L	0.16
			W36-U	1.60 1.76
Fourth	R26	L/D/K	W37-L	0.15
			W37-U	1.57
- "		1.70.07	14/00 1	1.72
Fourth	R27	L/D/K	W38-L	0.12
			W38-U	1.23 1.35
Fourth	R28	L/D/K	W39-L	0.13
1 Ourui	1120	LIDIK	W39-U	1.62
			W40-L	0.03
			W40-U	0.31
				2.09
Fourth	R29	Bedroom	W41-L	0.23
			W41-U	2.34 2.57
Fourth	R30	Bedroom	W42-L	0.23
i Oditii	1100	Deditoili	W42-U	2.34
				2.57
Fourth	R31	Bedroom	W43-L	0.16
			W43-U	1.60
Farrette	Daa	1 / 17 / 17	\\/.4.4.1	1.76
Fourth	R32	L/D/K	W44-L W44-U	0.15 1.57
			V V 1 1 1 - U	1.72

ch Group, h Road	KIIDUITI	Average Daylight Fac	tor - ADF Results	GL Hear
Floor	Room		Window	Reg'd
Ref.	Ref.	Room Use	Ref.	Value
Fourth	R33	L/D/K	W45-L	0.15
			W45-U	1.57
- "	D0.4		14/40 1	1.72
Fourth	R34	Bedroom	W46-L W46-U	0.16 1.60
			VV 40-U	1.76
Fourth	R35	Bedroom	W47-L	0.23
			W47-U	2.34
				2.57
Fourth	R36	Bedroom	W48-L	0.23
			W48-U	2.34
Fourth	D27	L/D/K	W49-L	2.57 0.03
r-ourtri	R37	L/D/K	W49-L W49-U	0.03
			W50-L	0.13
			W50-U	1.62
			W51-L	0.03
			W51-U	0.30
- "		L (D () (\\/FO.I	2.41
Fourth	R38	L/D/K	W52-L W52-U	0.13 1.32
			W53-L	0.12
			W53-U	1.46
			W54-L	0.16
			W54-U	1.88
				5.07
Fourth	R39	Bedroom	W56-L	0.26
			W56-U	3.11
Fifth	R1	Bedroom	W1-L	0.13
		200.00	W1-U	1.59
			W36-L	0.29
			W36-U	3.54
L:Wr	D0	Dadas	14/0 !	5.55
Fifth	R2	Bedroom	W2-L W2-U	0.31 3.74
			VV∠-U	3.74 4.04
Fifth	R3	L/D/K	W3-L	0.17
	-		W3-U	2.11
				2.28
Fifth	R4	Bedroom	W4-L	0.24
			W4-U	2.87
Fifth	R5	Bedroom	W5-L	0.28
CHUI	CZI	DEGLOOM	W5-L W5-U	3.46
			0	3.75
Fifth	R6	Bedroom	W6-L	0.31
			W6-U	3.85
				4.17

ch Group, h Road	141104111	Average Daylight Fac	tor - ADF Results	GL Hear
Floor	Room		Window	Req'd
Ref.	Ref.	Room Use	Ref.	Value
Fifth	R7	Bedroom	W7-L	0.32
			W7-U	3.90 4.22
Fifth	R8	Bedroom	W8-L	0.29
			W8-U	3.54 3.83
Fifth	R9	Bedroom	W9-L W9-U	0.24 2.94
				3.18
Fifth	R10	L/D/K	W10-L W10-U	0.17 2.12
				2.29
Fifth	R11	Bedroom	W11-L W11-U	0.29 3.49
Fifth	R12	Bedroom	W12-L	3.78 0.25
FIIUI	RIZ	Bearoom	W12-L W12-U	3.07
Fifth	R13	Bedroom	W13-L	3.32 0.30
	•	200.00	W13-U	3.70
Fifth	R14	Bedroom	W14-L	4.00 0.28
			W14-U	3.42 3.70
Fifth	R15	Bedroom	W15-L	0.25
			W15-U	3.11
Fifth	R16	L/D/K	W16-L W16-U	0.15 1.77
			W17-L	0.15
			W17-U	1.78 3.84
Fifth	R17	Bedroom	W18-L	0.18
			W18-U	2.19 2.37
Fifth	R18	Bedroom	W19-L W19-U	0.28 3.46
				3.74
Fifth	R19	L/D/K	W20-L W20-U	0.17 2.03
			W21-L	0.13
			W21-U	1.53 3.85
Fifth	R20	L/D/K	W22-L W22-U	0.15 1.85
				2.00
Fifth	R21	L/D/K	W23-L W23-U	0.14 1.69
				1.83

ch Group, Ih Road	Kilbulli	Average Daylight Fac	tor - ADF Results	GL Hear
Floor Ref.	Room Ref.	Room Use	Window Ref.	Req'd Value
Fifth	R22	L/D/K	W24-L W24-U	0.17 2.09 2.26
Fifth	R23	Bedroom	W25-L W25-U	0.27 3.31 3.58
Fifth	R24	Bedroom	W26-L W26-U	0.31 3.76 4.07
Fifth	R25	Bedroom	W27-L W27-U	0.22 2.69 2.91
Fifth	R26	L/D/K	W28-L W28-U	0.16 1.90 2.06
Fifth	R27	L/D/K	W29-L W29-U	0.16 1.89 2.05
Fifth	R28	Bedroom	W30-L W30-U	0.22 2.64 2.85
Fifth	R29	Bedroom	W31-L W31-U	0.30 3.72 4.02
Fifth	R30	Bedroom	W32-L W32-U	0.28 3.36 3.63
Fifth	R31	L/D/K	W33-L W33-U	0.18 2.13 2.31
Fifth	R32	L/D/K	W34-L W34-U W35-L W35-U	0.14 1.73 0.14 1.73

Daylight and Sunlight - VSC and Sunlight Results



Available Sunlight Hours

Floor Ref. Room Ref. Room Use. Window Scenario VSC Annual % Winter %

254 Kilburn High Road (Proposed Site)

First	R1	L/D/K	W1			*North Facing
				Proposed	14.32	
First	R1	L/D/K	W53			*North Fooling
				Proposed	35.95	*North Facing
First	R1	L/D/K	W54			*NI=. 01 = 1
				Proposed	35.25	*North Facing
First	R2	Bedroom	W2			
				Proposed	8.00	*North Facing
First	R2	Bedroom	W3	- 1		
				Proposed	30.58	*North Facing
First	R3	Bedroom	W4		00.00	
11130		Dear dom	V V 1	Proposed	30.64	*North Facing
First	R3	Bedroom	W5	110p03cu	30.04	
11131		Deartoon	v V J	Proposed	7.5	14 5
First	R4	Bedroom	W6	TTOPOSEU	7.0	14 5
11131	1 X 1	Dealouii	VVO	Proposed	12.87	*North Facing
First	R5	Bedroom	W7	Proposed	12.07	
LII 21	IXO	Dealoon	VV /	Dranged	10.04	*North Facing
Fire+	R6	Dadraan	14/0	Proposed	12.84	
First	KO	Bedroom	W8	D	7.5	*North Facing
F1 .	D/		1410	Proposed	7.5	
First	R6	Bedroom	W9			*North Facing
	D.7			Proposed	30.41	
First	R7	Bedroom	W10			*North Facing
				Proposed	30.52	
First	R7	Bedroom	W11		<u> </u>	
				Proposed	7.19	12 4
First	R8	Bedroom	W12			*North Facing
				Proposed	12.91	
First	R9	Bedroom	W13			*North Facing
				Proposed	12.74	- TVOLUTT GOING
First	R10	L/D/K	W14			*North Facing
				Proposed	7.67	
First	R10	L/D/K	W15			*North Facing
				Proposed	30.11	noith Faciliy
First	R11	Bedroom	W16			*North Faster
				Proposed	29.8	*North Facing
First	R11	Bedroom	W17		<u>'</u>	
				Proposed	6.79	11 3
First	R12	Bedroom	W18	'		Į.
				Proposed	11.31	*North Facing



						Available Sunlight Hours		
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Annual %	Winter %	
First	R13	Bedroom	W19	-	00.50	*North	n Facing	
First	R13	Dodroom	11/20	Proposed	28.52			
First	KTS	Bedroom	W20	Proposed	6.72	11	3	
First	R14	Bedroom	W21		5			
				Proposed	10.73	"NOI LI	n Facing	
First	R15	Bedroom	W22			*North	n Facing	
E	D1/	L /D /l/	14/00	Proposed	10.39			
First	R16	L/D/K	W23	Proposed	7.48	*North	n Facing	
First	R16	L/D/K	W24	Порозец	7.40			
0 .		_, _,		Proposed	27.48	- *North	n Facing	
First	R17	L/D/K	W25	·		*North	n Facing	
				Proposed	27.37	NOLLI	racing	
First	R17	L/D/K	W26					
First	R18	Dodroom	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Proposed	6.34	11	2	
First	KIO	Bedroom	W27	Proposed	10.51	*North Facing		
First	R19	L/D/K	W28	Тторозса	10.51			
				Proposed	12.02	*North	n Facing	
First	R20	Bedroom	W29					
				Proposed	17.61	23	6	
First	R21	Bedroom	W30	Description	0.00	10	7	
First	R21	Bedroom	W31	Proposed	8.09	10	7	
11131	1121	Dearoom	VV 3 I	Proposed	39.41	49	15	
First	R22	L/D/K	W32					
				Proposed	39.54	42	12	
First	R23	Bedroom	W33					
Eta 1	D24	Dadaaa	14/27	Proposed	22.24	24	6	
First	R24	Bedroom	W34	Proposed	22.25	26	9	
First	R25	Bedroom	W35	roposeu	22.20	20	7	
1 11 31		200.00111		Proposed	21.65	24	6	
First	R26	L/D/K	W36	1		<u> </u>		
				Proposed	22.67	27	9	
First	R27	L/D/K	W37	_				
Finat	R28	L /D /K	14/20	Proposed	19.43	23	6	
First	K∠O	L/D/K	W38	Proposed	39.56	49	15	
First	R28	L/D/K	W39	110h03ca	37.00	1		
11131		_, _, .,	****/	Proposed	11.35	→ *North	n Facing	



						Available Sunlight Hours		
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Annual %	Winter %	
First	R29	Bedroom	W40	-	00.04	0.1		
Cino+	R30	Dodroom	\\/41	Proposed	22.24	24	6	
First	KSU	Bedroom	W41	Proposed	22.25	26	9	
First	R31	Bedroom	W42	Порозса	22.20	20	/	
				Proposed	21.65	24	6	
First	R32	L/D/K	W43	·		-		
				Proposed	22.68	27	9	
First	R33	L/D/K	W44		00.40	0.5		
First	R34	Bedroom	W45	Proposed	22.68	25	7	
1 11 31		Dedition	V V 4 J	Proposed	21.64	26	9	
First	R35	Bedroom	W46		21101	20	,	
				Proposed	22.26	24	6	
First	R36	Bedroom	W47			, , , , , , , , , , , , , , , , , , , 		
EL .	R37	D 1	14/40	Proposed	22.26	26	9	
First	K3/	Bedroom	W48	Proposed	39.5	49	15	
First	R37	Bedroom	W49	FTOPOSeu	39.0	1		
11130		Boardon	V 1 7	Proposed	10.54	*North Facing		
First	R38	L/D/K	W50	·		•		
				Proposed	19.68	23	6	
First	R38	L/D/K	W51		07.54	*North	n Facing	
First	R38	L/D/K	W52	Proposed	37.51			
LII 21	1130	L/D/K	VVOZ	Proposed	35.19	*North	n Facing	
Second	R1	Bedroom	W1	1100000	55.17	de N. L L.	- ·	
				Proposed	17.39	*Nortr	n Facing	
Second	R2	Bedroom	W2			*North	n Facing	
	DO	-	1440	Proposed	9.06		8	
Second	R2	Bedroom	W3	Proposed	34.19	*North	n Facing	
Second	R3	L/D/K	W4	rroposeu	34.17			
5550110		_, _, .,	* * 1	Proposed	34.24	*North	n Facing	
Second	R3	L/D/K	W5	·		1		
				Proposed	8.6	15	6	
Second	R4	Bedroom	W6		45.10	*North	n Facing	
Coccod	R5	Dodroom	\\/7	Proposed	15.63			
Second	UZI	Bedroom	W7	Proposed	15.67	*North	n Facing	
Second	R6	Bedroom	W8	πορύσου	10.07			
2 - 2 - 2 - 3 - 3				Proposed	8.51	*North	n Facing	



						Available Sunli	ight Hours
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Annual %	Winter %
Second	R6	Bedroom	W9	Dramagad	24.27	*North	n Facing
Second	R7	Bedroom	W10	Proposed	34.26		
Second		Bedroom	VV 10	Proposed	34.33	*North	n Facing
Second	R7	Bedroom	W11	-			
				Proposed	8.25	13	4
Second	R8	Bedroom	W12	Drangood	15 //	*North	n Facing
Second	R9	Bedroom	W13	Proposed	15.66		
3000110		Beardon	VV 13	Proposed	15.5	*North	n Facing
Second	R10	L/D/K	W14	,		*North	n Facing
	D10			Proposed	8.65	NOLLI	i i acirig
Second	R10	L/D/K	W15	Drangood	22.70	*North	n Facing
Second	R11	Bedroom	W16	Proposed	33.78		
3000110		Bedroom	VV 10	Proposed	33.46	*North	n Facing
Second	R11	Bedroom	W17	'		· I	
				Proposed	7.92	13	4
Second	R12	Bedroom	W18	Drangood	1 4 1 1	*North	n Facing
Second	R13	Bedroom	W19	Proposed	14.11		
Second		Bedroom	VV 1 7	Proposed	32.36	*North	n Facing
Second	R13	Bedroom	W20	,			
	511			Proposed	7.94	13	4
Second	R14	Bedroom	W21	Drangood	10 /	*North	n Facing
Second	R15	Bedroom	W22	Proposed	13.6		
3000110		Bodroom	V V Z Z	Proposed	13.32	*North	n Facing
Second	R16	L/D/K	W23			*North	n Facing
	D1/) N (5 ·)	Proposed	8.49	NOITI	i i aciriy
Second	R16	L/D/K	W24	Droposod	31.45	*North	n Facing
Second	R17	L/D/K	W25	Proposed	31.45		
5550HG		_, _, .,	***	Proposed	31.56	*North	n Facing
Second	R17	L/D/K	W26			-	
	D10		1115 =	Proposed	7.79	13	4
Second	R18	Bedroom	W27	Droposad	10 41	*North	n Facing
Second	R19	L/D/K	W28	Proposed	13.61		
JUUJII			v v 2 O	Proposed	15.28	*North	n Facing
Second	R20	Bedroom	W29	1			
				Proposed	19.14	23	6



						Available Sunlight Hours		
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Annual %	Winter %	
Second	R21	Bedroom	W30	Durana	10.44	10	10	
Second	R21	Bedroom	W31	Proposed	10.44	13	10	
Second	112 1	bearoom	VV 3 I	Proposed	39.59	49	15	
Second	R22	L/D/K	W32	Поросси	67.67	17	10	
				Proposed	39.59	42	12	
Second	R22	L/D/K	W33			*North	n Facing	
	Daa			Proposed	11.35	110111	- Tuomig	
Second	R23	Bedroom	W34	Droposed	22.24	24		
Second	R24	Bedroom	W35	Proposed	22.24	24	6	
Jocoffa	•	200100111	v v O O	Proposed	22.25	26	9	
Second	R25	Bedroom	W36	·		<u> </u>		
				Proposed	21.65	24	6	
Second	R26	L/D/K	W37					
<u> </u>	R27	LIDIK	14/00	Proposed	22.67	27	9	
Second	KZ/	L/D/K	W38	Proposed	19.43	23	6	
Second	R28	L/D/K	W39	Froposed	19.43	23	0	
0000114		2, 3,	*****	Proposed	39.56	49	15	
Second	R28	L/D/K	W40	·		*North	n Facing	
				Proposed	11.35	NOLLI	i i aciriy	
Second	R29	Bedroom	W41		00.01			
Cocond	R30	Dodroom	\\\\\	Proposed	22.24	24	6	
Second	K30	Bedroom	W42	Proposed	22.25	26	9	
Second	R31	Bedroom	W43	Порозса	22.20	20	/	
				Proposed	21.65	24	6	
Second	R32	L/D/K	W44			· ·		
				Proposed	22.68	27	9	
Second	R33	L/D/K	W45	Dana	00.70	0.5		
Socond	R34	Bedroom	W46	Proposed	22.68	25	7	
Second	1107	DEGLOCITI	VV40	Proposed	21.64	26	9	
Second	R35	Bedroom	W47	. 10p030u	21.04	20	/	
			•	Proposed	22.26	24	6	
Second	R36	Bedroom	W48					
				Proposed	22.26	26	9	
Second	R37	L/D/K	W49	Dana	44.60		<i>A</i> -	
Socond	R37	L/D/K	W50	Proposed	11.32	14	11	
Second	INJ /	L/ U/ N	UCVV	Proposed	39.51	49	15	
				Troposed	37.01	47	10	



						Available Sunli	ght Hours
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Annual %	Winter %
Second	R37	L/D/K	W51	Droposad	10 54	*North	r Facing
Second	R38	L/D/K	W52	Proposed	10.54		
Second		L/ D/ IX	VV 02	Proposed	19.68	23	6
Second	R38	L/D/K	W53				r Facing
				Proposed	39.1	NOLLI	i i aciriy
Second	R38	L/D/K	W54	_		*North	Facing
C I	R39	Dodroom	\	Proposed	38.95		
Second	K37	Bedroom	W56	Proposed	38.67	*North	Facing
Third	R1	Bedroom	W1	Порозец	30.07		
				Proposed	19.84	*North	Facing
Third	R2	Bedroom	W2			*North	r Facing
				Proposed	10.06	INOLLI	i i aciriy
Third	R2	Bedroom	W3		<u> </u>	*North	Facing
Thind	R3	L/D/K	10/4	Proposed	37.02		
Third	KS	L/D/K	W4	Proposed	37.09	*North	Facing
Third	R3	L/D/K	W5	Порозец	37.09		
				Proposed	9.51	15	6
Third	R4	Bedroom	W6			*North	r Facing
				Proposed	17.77	NOLLI	i i aciriy
Third	R5	Bedroom	W7		47.00	*North	Facing
Thind	R6	Dodroom	\\/O	Proposed	17.83		
Third	NO	Bedroom	W8	Proposed	9.41	*North	Facing
Third	R6	Bedroom	W9	πορύσου	7.41		
3				Proposed	37.21	→ *North	Facing
Third	R7	Bedroom	W10			*North	n Facing
				Proposed	37.2	NOLLI	i i aciriy
Third	R7	Bedroom	W11		0.10	4.4	
Third	R8	Bedroom	W12	Proposed	9.18	14	5
TTIIf CI	NU	DEUI UUITI	VV I Z	Proposed	17.75	*North	Facing
Third	R9	Bedroom	W13	торозси	17.75		
				Proposed	17.64	*North	Facing
Third	R10	L/D/K	W14	·		*North	r Facing
				Proposed	9.52	INULLI	i i acilly
Third	R10	L/D/K	W15	_		*North	Facing
Th. 1	D11	Dodne	14/4	Proposed	36.76	1.2.0	· 5
Third	R11	Bedroom	W16	Droposad	24 52	*North	Facing
				Proposed	36.53		



Floor Ref.	Room Ref.	Room Use.	Window				
Third	R11		Ref.	Scenario	VSC	Annual %	Winter %
	13.1.1	Bedroom	W17				
				Proposed	8.97	15	6
Third	R12	Bedroom	W18	Droposed	1/ 50	*North	n Facing
Third	R13	Bedroom	W19	Proposed	16.53		
TTIII G		Bodroom	***	Proposed	35.76	*North	n Facing
Third	R13	Bedroom	W20	'		•	
				Proposed	9.02	15	6
Third	R14	Bedroom	W21		44.04	*North	n Facing
Third	R15	Bedroom	W22	Proposed	16.26		
HIIIU		DEGI OUTT	V V ∠∠	Proposed	16.06	*North	n Facing
Third	R16	L/D/K	W23		.0.00	₩ N1= 11	- Fools -
				Proposed	9.38	^Nortr	n Facing
Third	R16	L/D/K	W24			*North	n Facing
	D17	1 /5 ///	11/05	Proposed	35.19	110111	
Third	R17	L/D/K	W25	Proposed	35.27	*North	n Facing
Third	R17	L/D/K	W26	rioposeu	30.27		
Time		2, 2, 1,	***20	Proposed	9.05	14	5
Third	R18	Bedroom	W27	·		*North	n Facing
	D.1.0			Proposed	16.31	NOITI	
Third	R19	L/D/K	W28	Drangood	18.37	*North	n Facing
Third	R20	Bedroom	W29	Proposed	18.37		
TTIII CI		Bedroom	V V Z /	Proposed	19.14	23	6
Third	R21	Bedroom	W30	I		_ L	
				Proposed	10.44	13	10
Third	R21	Bedroom	W31		00.44	1 40 1	4.5
Third	R22	L/D/K	W32	Proposed	39.61	49	15
HIIIU	1144	L/ U/ N	V V J Z	Proposed	39.61	42	12
Third	R22	L/D/K	W33		37.31	1	
				Proposed	11.35	^ NOrtr	n Facing
Third	R23	Bedroom	W34				
Th. ! !	D24	Dodroor-	MAC	Proposed	22.24	24	6
Third	R24	Bedroom	W35	Proposed	22.25	26	9
Third	R25	Bedroom	W36	Troposeu	22.20	۷0	7
		_ 0 0. 0 0.11		Proposed	21.65	24	6
Third	R26	L/D/K	W37				
				Proposed	22.67	27	9



						Available Sunlight Hours			
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Annual %	Winter %		
Third	R27	L/D/K	W38						
				Proposed	19.43	23	6		
Third	R28	L/D/K	W39	_					
Tle !:!	R28	1 /D /l/	14/40	Proposed	39.57	49	15		
Third	KZ0	L/D/K	W40	Proposed	11.35	*North	n Facing		
Third	R29	Bedroom	W41	Порозец	11.55				
		200.00		Proposed	22.24	24	6		
Third	R30	Bedroom	W42	•					
				Proposed	22.25	26	9		
Third	R31	Bedroom	W43						
	Daa	. 15 111		Proposed	21.65	24	6		
Third	R32	L/D/K	W44	Danasasas	22.70	27	9		
Third	R33	L/D/K	W45	Proposed	22.68	27	9		
TIIIU	1100	L/D/K	VV43	Proposed	22.68	25	7		
Third	R34	Bedroom	W46	1100000	22.00	20	,		
				Proposed	21.64	26	9		
Third	R35	Bedroom	W47						
				Proposed	22.26	24	6		
Third	R36	Bedroom	W48	_					
Third	R37	L/D/K	\\\\\	Proposed	22.26	26	9		
ITIII U	K37	L/D/K	W49	Proposed	11.32	14	11		
Third	R37	L/D/K	W50	110p03cu	11.52	17	1.1		
		_, _ ,		Proposed	39.51	49	15		
Third	R37	L/D/K	W51	•		*North	n Facing		
				Proposed	10.54	NOLLI	racing		
Third	R38	L/D/K	W52						
	D20	L /D /l/	\A/E 0	Proposed	19.68	23	6		
Third	R38	L/D/K	W53	Dranged	39.43	*North	n Facing		
Third	R38	L/D/K	W54	Proposed	39.43				
mu		LIDIN	v v J +	Proposed	39.37	*North	n Facing		
Third	R39	Bedroom	W56	-1	21.07	₩ N I = - 1 I	- Fooler-		
				Proposed	39.25	^ North	n Facing		
Fourth	R1	Bedroom	W1			*North	n Facing		
	D0			Proposed	25.27	110111			
Fourth	R2	Bedroom	W2	Danier	10.07	*North	n Facing		
Equrth	R2	Rodroom	\\/\?	Proposed	12.26	1			
Fourth	1\∠	Bedroom	W3	Proposed	39.02	*North	n Facing		
				i i oposeu	J7.UZ	l			



						Available Sunli	ght Hours
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Annual %	Winter %
Fourth	R3	L/D/K	W4	Г .	00.05	*North	n Facing
F	R3	L/D/I/	\\/ \	Proposed	39.05		
Fourth	KO	L/D/K	W5	Proposed	11.41	20	7
Fourth	R4	Bedroom	W6	'			. Faalma
				Proposed	22.15	NOILI	n Facing
Fourth	R5	Bedroom	W7			*North	n Facing
	D/			Proposed	22.17	110111	
Fourth	R6	Bedroom	W8	Dramanad	11 07	*North	n Facing
Fourth	R6	Bedroom	W9	Proposed	11.37		
i oui tii	110	DOGLOOM	V V 7	Proposed	39.08	*North	Facing
Fourth	R7	Bedroom	W10	Поросси	67.66	de N. L	
				Proposed	39.05	*North	n Facing
Fourth	R7	Bedroom	W11	·		•	
				Proposed	11.27	20	7
Fourth	R8	Bedroom	W12			*North	n Facing
F 11	R9	Dl	14/10	Proposed	22.09		
Fourth	K9	Bedroom	W13	Proposed	22.05	*North	n Facing
Fourth	R10	L/D/K	W14	FTOPOSEG	22.00		
rourth		2, 5, 10	V V I I	Proposed	11.44	*North	n Facing
Fourth	R10	L/D/K	W15	'		* N 0 m t lo	. Fooler
				Proposed	38.83	"NOI LI	n Facing
Fourth	R11	Bedroom	W16			*North	n Facing
	D11			Proposed	38.74	140111	
Fourth	R11	Bedroom	W17	D	11.01	0.0	
Fourth	R12	Bedroom	W18	Proposed	11.21	20	7
i oui ti i	1114	Pediodill	VVIO	Proposed	21.39	*North	Facing
Fourth	R13	Bedroom	W19	. 100000	21.07		
				Proposed	38.49	→ *North	Facing
Fourth	R13	Bedroom	W20				
				Proposed	11.28	20	7
Fourth	R14	Bedroom	W21			*North	n Facing
Farmtle	R15	Dodroom	14/22	Proposed	21.53	1	
Fourth	CIN	Bedroom	W22	Proposed	21.46	*North	n Facing
Fourth	R16	L/D/K	W23	rrupuseu	∠1.40		
1 001111		LIDIN	v v Z J	Proposed	11.37	*North	n Facing
Fourth	R16	L/D/K	W24	-		+ N 1 1 1 1	
				Proposed	38.38	*North	n Facing



						Available Sunligh			
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Annual %	Winter %		
Fourth	R17	L/D/K	W25			*North	n Facing		
	2.17			Proposed	38.43	North			
Fourth	R17	L/D/K	W26	Dropood	11.00	20	7		
Fourth	R18	Bedroom	W27	Proposed	11.33	20	7		
Fourtii	KTO	Dedition	VV Z /	Proposed	21.69	*North	n Facing		
Fourth	R19	L/D/K	W28	11000304	21.07				
				Proposed	24.49	*North	n Facing		
Fourth	R20	Bedroom	W29			•			
				Proposed	22.16	31	7		
Fourth	R21	Bedroom	W30	_		1			
- II	R21	D - du	14/04	Proposed	11.73	17	10		
Fourth	KZ I	Bedroom	W31	Proposed	39.62	49	15		
Fourth	R22	L/D/K	W32	Proposed	39.02	49	10		
1 Odi ti i		L/ D/ K	VV 02	Proposed	39.62	42	12		
Fourth	R22	L/D/K	W33						
				Proposed	12.91	- ^NOrtr	n Facing		
Fourth	R23	Bedroom	W34						
				Proposed	26.03	32	7		
Fourth	R24	Bedroom	W35		07.00	0./	10		
Fourth	R25	Bedroom	W36	Proposed	26.03	36	12		
roultii	1123	bearoom	VV 30	Proposed	25.3	30	6		
Fourth	R26	L/D/K	W37	11000304	20.0	00			
				Proposed	26.55	37	12		
Fourth	R27	L/D/K	W38			•			
				Proposed	22.49	29	6		
Fourth	R28	L/D/K	W39		05	,_ I			
Fourth	R28	1 /D /V	\\\\	Proposed	39.59	49	15		
Fourth	17∠0	L/D/K	W40	Proposed	12.91	*North	n Facing		
Fourth	R29	Bedroom	W41	rroposeu	12.71	1			
1 Gui tii		2041 00111	v v ¬т I	Proposed	26.03	32	7		
Fourth	R30	Bedroom	W42	1 222	2.44	<u> </u>	•		
				Proposed	26.03	36	12		
Fourth	R31	Bedroom	W43						
	D00			Proposed	25.3	30	6		
Fourth	R32	L/D/K	W44	Daniel	07.57		4.0		
Fourth	R33	1 /D/V	\\/4E	Proposed	26.56	37	12		
Fourth	CCZI	L/D/K	W45	Proposed	26.56	34	9		
				Troposed	20.00	54	9		



					Available Sunlight Hours		
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Annual %	Winter %
Fourth	R34	Bedroom	W46	Durana	05.00	27	10
Fourth	R35	Bedroom	W47	Proposed	25.29	36	12
Tourtii	1100	Dearoom	V V 4 7	Proposed	26.04	32	7
Fourth	R36	Bedroom	W48				•
				Proposed	26.04	36	12
Fourth	R37	L/D/K	W49				
	R37	L/D/K	\\/FO	Proposed	12.88	18	11
Fourth	K3/	L/D/K	W50	Proposed	39.56	49	15
Fourth	R37	L/D/K	W51	Troposed	37.30	1	
				Proposed	11.88	*North Facing	
Fourth	R38	L/D/K	W52			•	
				Proposed	22.84	29	6
Fourth	R38	L/D/K	W53		00.50	*North	n Facing
Fourth	R38	L/D/K	W54	Proposed	39.59		
	1130	L/D/K	VV 34	Proposed	39.58	*North	n Facing
Fourth	R39	Bedroom	W56	Поросоц	67.66	*NI author E a dia au	
				Proposed	39.56	^ Nortr	n Facing
Fifth	R1	Bedroom	W1			*North Facing	
FIGU	D1		14/07	Proposed	39.33	Trentin deling	
Fifth	R1	Bedroom	W36	Proposed	39.62	*North	n Facing
Fifth	R2	Bedroom	W2	FTOPOSeu	37.02		
		200.00	***	Proposed	38.86	*North	n Facing
Fifth	R3	L/D/K	W3	·		*North Facing	
				Proposed	38.85	NOITI	i i aciriy
Fifth	R4	Bedroom	W4		00.05	*North Facing	
Fifth	R5	Bedroom	W5	Proposed	39.35	- *North Facing	
	110	Deditoon	VVJ	Proposed	39.36		
Fifth	R6	Bedroom	W6	: = - 00004	37.30		
				Proposed	38.73	^North	n Facing
Fifth	R7	Bedroom	W7			*North	n Facing
E'C'	DO	Dadaaa	1440	Proposed	38.83		
Fifth	R8	Bedroom	W8	Drongsod	39.37	*North	n Facing
Fifth	R9	Bedroom	W9	Proposed	37.37	1	
1 11 (1)	• •	Dodroom	V V /	Proposed	39.33	*North	n Facing
Fifth	R10	L/D/K	W10	1		*North Facing	
				Proposed	38.73	"Nortr	racing



						Available Sunli	ght Hours
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Annual %	Winter %
Fifth	R11	Bedroom	W11	D 1	22.24	*North Facing	
Fifth	R12	Bedroom	W12	Proposed	38.86		
FIIUI	1112	bearoom	VVIZ	Proposed	39.36	*North Facing	
Fifth	R13	Bedroom	W13	·		*North Facing	
FIGU	D1.4		1117	Proposed	39.41	- rorur ading	
Fifth	R14	Bedroom	W14	Proposed	38.81	*North Facing	
Fifth	R15	Bedroom	W15	Порозец	30.01	*North Facing	
				Proposed	38.97		
Fifth	R16	L/D/K	W16			*North Facing	
E'CII	R16	L/D/K	W17	Proposed	39.39		
Fifth	KIU	L/D/K	VV I /	Proposed	39.6	71	26
Fifth	R17	Bedroom	W18	тторозса	37.0	7 1	20
				Proposed	39.6	64	26
Fifth	R18	Bedroom	W19			1	
□ Fifth	R19	L/D/K	W20	Proposed	39.62	61	21
Fifth	1\ 1 7	L/D/K	VV2U	Proposed	39.62	61	21
Fifth	R19	L/D/K	W21		07.02	01	2 1
				Proposed	39.35	42	10
Fifth	R20	L/D/K	W22		00.70		
Fifth	R21	L/D/K	W23	Proposed	38.73	45	12
1 11 (11	1121	LIDIK	VV Z J	Proposed	38.53	55	16
Fifth	R22	L/D/K	W24	'		I I	
				Proposed	39.3	59	20
Fifth	R23	Bedroom	W25	Droposed	20.25	40	11
Fifth	R24	Bedroom	W26	Proposed	39.35	43	11
		_ 00.00.11	25	Proposed	38.82	43	11
Fifth	R25	Bedroom	W27			·	
FIGU	D2/		14/0.5	Proposed	38.55	53	15
Fifth	R26	L/D/K	W28	Proposed	39.33	58	19
Fifth	R27	L/D/K	W29	πορύσσα	37.33	JU	17
				Proposed	39.43	48	14
Fifth	R28	Bedroom	W30				
FIGU	R29	Dodroom	14/21	Proposed	38.99	46	12
Fifth	K2 Y	Bedroom	W31	Proposed	39.06	57	18
				Tupuseu	37.00	J/	10



						Available Sunlight Hours		
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Scenario	VSC	Annual %	Winter %	
Fifth	R30	Bedroom	W32					
				Proposed	39.43	59	20	
Fifth	R31	L/D/K	W33					
				Proposed	39.62	47	13	
Fifth	R32	L/D/K	W34					
				Proposed	39.62	47	13	
Fifth	R32	L/D/K	W35			*North Facing		
				Proposed	39.62			