Daylight and Sunlight Report

254 Kilburn High Road LLP

254 Kilburn High Road
London
NW6 2BS

24 March 2015

Prepared by

GL Hearn Limited
280 High Holborn
London WC1V 7EE

T +44 (0)20 7851 4900
F +44 (0)20 7851 4910
glhearn.com

Contents

Appendices

Quality Standards Control

The signatories below verify that this document has been prepared in accordance with our quality control requirements. These procedures do not affect the content and views expressed by the originator.

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.

DATE	ORIGINATORS	APPROVED
24.03.2015	Toby Rogan-Lyons Senior Surveyor	Ian Smith Building Consultancy Director

Limitations

This document has been prepared for the stated objective and should not be used for any other purpose without the prior written authority of GL Hearn; we accept no responsibility or liability for the consequences of this document being used for a purpose other than for which it was commissioned.

1 INSTRUCTIONS AND BRIEF

1.1 In accordance with your instructions we have carried out a study to assess the effect of the proposed development of 254 Kilburn High Road site ('the proposed scheme') on the daylight and sunlight amenity to the neighbouring residential properties. We are aware that a neighbouring scheme at 248 Kilburn High Road has recently received planning consent ('the neighbouring approved scheme'). We have therefore undertaken analysis with and without the neighbouring approved scheme in place to present a comprehensive assessment of the potential effects of the proposed scheme. As requested we have also assessed the light levels to the habitable residential rooms within the proposed scheme.

1.2 This report assesses a scheme revised to respond to comments from the Council on the previous application (ref 2014/3244), with the aim of improving daylight levels within the proposal. It should be noted that the overall bulk and massing of the proposal is the same as this previous application. It should be noted that the Council raised no issue with the previous application in terms of its impact on neighbouring properties.

1.3 We have received the following documents and used them in preparing this report:

- Centre Line Surveys London – topographical survey and elevation details, received on 21 March 2014.
- Claridge Architects – plans, sections and elevations, received on 11 February 2015.

1.4 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 Principles

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: 2014 (THE GUIDE)

4.1.1 The publication is primarily intended to provide guidance to those responsible for the design, installation, commissioning, operation and maintenance of building services. Section 1.1 states:

"In modern buildings, good daylighting is a balancing act: on one side is the need for sufficient access to daylight and sunlight, and on the other is the need to control its unwanted effects. The design team need to work together to achieve this balance, exploring the options to arrive at a s satisfactory solution."

4.1.2 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."

4.1.3 Section 3.4 provides detailed guidance on daylight calculation. Section 3.4.3 provides guidance on the use of Average Daylight Factor (ADF) calculations and states:

"Average daylight factor calculations can provide a quick overview of the overall level of daylight within a room, and can be useful when comparing different design solutions."

4.1.4 The guide also states that:

4.1.5 "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

5.1.1 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.

5.1.2 We have analysed two scenarios. The first scenario is with the neighbouring properties in their current context ('Existing Conditions'). The second scenario allows for the neighbouring consented scheme ('the Approved Scheme Conditions) at 248 Kilburn High Road (LBC ref 2014/2662/P).

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 The table below sets out the results of our daylight and sunlight assessment for each property, the results are discussed more fully in the paragraphs below:

5.4 246-248 Kilburn High Road

5.4.1 This is a three storey mixed use property, to the south and adjacent the proposed scheme. Desktop research shows there is a residential maisonette at first and second floor level with windows directly overlooking the proposed scheme. We have obtained internal arrangement drawings for this building and have used these plans to model the internal arrangement and identify the room uses. The windows overlooking the proposed scheme serve a bedroom at first floor level and living space at second floor level.

Existing conditions

5.4.2 Using the Vertical Sky Component (VSC) test 7 of the 10 windows tested will remain fully BRE Report compliant. Where transgressions do occur, they occur to three north-ward facing windows directly overlooking the proposed scheme. However, further daylight analysis, using the daylight distribution test, shows the daylight distribution within both the bedroom and living space served by the windows, will see negligible modification to its existing value and will remain fully compliant with the BRE Report guidance.

5.4.3 Study of the building orientation shows that none of the windows face within 90 degrees of due south. The BRE Report states that: "*To assess loss of sunlight to an existing building, it is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south. …"* In line with the BRE Report guidance none of the windows have been tested for sunlight amenity.

Approved scheme conditions

5.4.4 Daylight analysis of the existing building at 246-248 Kilburn High Road shows that with the neighbouring approved scheme and the proposed scheme in place the daylight amenity will remain BRE Report compliant.

5.4.5 *Approved scheme analysis:*

5.4.6 Study of the internal arrangement plans for the approved scheme show that all rooms overlooking the proposed scheme are bedrooms. The BRE Report considers daylight and sunlight amenity within bedrooms to be less important than within main habitable rooms.

5.4.7 All windows overlooking the proposed scheme face north. The BRE Report discusses the restrictions this orientation makes on sunlight access and occupant expectations. The BRE Report recommends that only those windows facing within 90° of due south need to be tested for sunlight amenity. We have not undertaken sunlight amenity testing of the windows overlooking the proposed scheme.

5.4.8 Appendix F of the BRE Report details the setting of alternative daylight targets for urban locations and where buildings take an unfair share of their light from over neighbouring land. The first method discussed involves calculating the obstruction angle to be applied to ensure neighbouring development is of a similar mass to its surrounds. The other method discussed is the mirroring of the tested building across the site boundary. Given the proximity of the approved scheme to the site boundary these tests set the VSC, ADF and daylight distribution guidance values for the bedrooms at or close to zero.

5.4.9 In line with BRE Report guidance we have undertaken daylight analysis of the habitable rooms within the approved scheme using the VSC, Average Daylight Factor (ADF) test and the Daylight Distribution study.

5.4.10 VSC Analysis shows that, as expected, where windows directly overlook the proposed scheme the VSC values will equal, or be close to, zero. It should be noted that some windows will see VSC values below 2% in the existing conditions, i.e. before testing the effect of the proposed scheme.

5.4.11 ADF analysis shows that 6 (50%) of the 12 rooms tested would comply with the BRE Report recommendations of either achieving 1% ADF or retaining 0.8 times their existing value. The proximity of the application scheme and its reliance on light received across the proposed scheme site mean that transgressions of the BRE Report guidance are unavoidable. It is worthy of note that our results show that only 9 (75%) of the rooms would meet the BRE Report guidance in the existing conditions.

5.4.12 Daylight distribution shows that 6 (50%) of the 12 rooms tested will maintain BRE Report compliant daylight penetration levels. As detailed above, the setting of alternative guidance values would reduce the expectations to close to zero. Given this, the urban location and the usage of the rooms tested we would consider the daylight distribution values to be in line with expectations for this neighbouring approved scheme.

5.5 **1-23 Grangeway**

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.

Existing conditions

5.5.2 Daylight analysis of these two windows shows they will see minimal modification to their existing daylight values 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.

Approved scheme conditions

5.5.4 Analysis undertaken with the neighbouring approved scheme in place show the daylight level will be the same as in the existing conditions test.

5.6 **240-242 Kilburn High Road**

5.6.1 This is a five storey residential property, to the south-west of the proposed development.

Existing conditions

5.6.2 Daylight analysis, undertaken using the VSC test, shows there will be little or no modifications to the existing daylight access values and that all windows will remain fully BRE Report compliant.

5.6.3 Study of the building orientation shows that none of the windows face within 90 degrees of due south. In line with the BRE Report guidance none of the windows have been tested for sunlight amenity.

Approved scheme conditions

5.6.4 Analysis undertaken with the neighbouring approved scheme in place show the daylight and sunlight levels will be the same as in the existing conditions test.

5.7 **244 Kilburn High Road**

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.

Existing conditions

5.7.2 Daylight analysis undertaken using the VSC test shows there will be little or no modification to the majority of windows with both the proposed scheme and the approved scheme in place 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 analysis using the daylight distribution test. This analysis shows none of the rooms served by the windows analysed will see any modification to their existing daylight distribution values and all will 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 windows will remain fully BRE Report complaint.

Approved scheme conditions

5.7.5 Our analysis shows that the neighbouring approved scheme will effectively remove the proposed scheme from view of the windows serving this building and that the VSC and APSH values will be little changed by the proposed scheme. All windows and rooms will remain BRE Report compliant.

5.8 **250 Kilburn High Road**

5.8.1 This is a four storey mixed use property, with commercial usage on the ground floor and residential flats to the first, second and third floors.

Existing conditions

5.8.2 Daylight amenity analysis undertaken of the windows facing the proposed scheme shows that, of the 10 windows overlooking, 9 (90%) will remain fully BRE Report compliant. One window (window W2 at first floor level) will see a minor transgression of the VSC target retention value, but will maintain 0.75 times its existing value in the proposed scheme conditions 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. The retained VSC levels indicate the daylight distribution within the room served is likely to remain BRE Report compliant.

5.8.3 The building's orientation means that none of the windows face within 90 degrees of due south. In line with the BRE Report guidance none of the windows have been tested for sunlight amenity.

Approved scheme conditions

5.8.4 Daylight amenity analysis shows that, as above 9 (90%) windows will remain fully BRE Report compliant. Window W2 at first floor level will see a minor transgression of the VSC target retention value, but will maintain 0.78 times its existing value. The retained VSC levels to all windows indicate the daylight distribution within the rooms served are also likely to remain BRE Report compliant.

5.8.5 **252 Kilburn High Road**

5.8.6 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 split into residential flats at first, second and third floors with some residential element at ground floor level also. The windows appear to serve secondary spaces such as bedrooms, bathrooms, kitchens and circulation spaces with the main living spaces overlooking Kilburn High Road and remaining unaffected by the proposed scheme. In the absence of definitive evidence we have analysed all windows.

Existing conditions:

5.8.7 Daylight amenity analysis using the VSC test shows that, of the 8 windows tested, 6 (75.0%) will remain fully BRE Report. Minor transgressions occur to windows W1 at ground floor level and W1 at first floor level. These windows will retain 0.78 times their existing values, very close to the 0.8 times retention factor discussed within the BRE Report. Further study of the results shows the windows will retain an above average level of VSC access for urban areas.

5.8.8 The building's orientation means that none of the windows face within 90 degrees of due south. In line with the BRE Report guidance none of the windows have been tested for sunlight amenity.

Approved scheme conditions

5.8.9 VSC tests shows that as above, of the 8 windows tested, 6 (75.0%) will remain fully BRE Report compliant. Once more, minor transgressions occur to windows W1 at ground and first floor levels. The ground floor window will retain 0.77 times its existing value and the first floor window will retain 0.75 times its existing value. The retained VSC values are consistent with expectations for urban areas.

5.9 **256 Kilburn High Road**

5.9.1 This is a four storey mixed use property, which external observation and research indicates is in retail use at ground floor level and within a rear first floor extension and residential flats at part first, second and third floors.

Existing conditions:

5.9.2 Daylight amenity analysis using the VSC tests with the proposed scheme in place show all of the windows analysed will maintain VSC levels compliant with the BRE Report.

5.9.3 As with the daylight analysis, the sunlight amenity analysis with the proposed scheme in place shows all windows analysed will maintain sunlight amenity values compliant with the BRE Report.

Approved scheme conditions

5.9.4 Daylight and sunlight analysis undertaken with both the neighbouring approved scheme and the proposed scheme in place show that all windows will continue to be BRE Report compliant.

5.10 **258 Kilburn High Road**

5.10.1 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 residential flats to the first, second and third floors.

Existing conditions:

5.10.2 Daylight analysis undertaken using the VSC test shows 3 (60.0%) of the 5 windows tested will be fully compliant with the BRE Report. Where transgressions exist the windows (W1 and W2 at first floor level) will maintain in excess of 20% VSC, a level of VSC anticipated within urban areas. 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.

5.10.3 The building's orientation means that none of the windows face within 90 degrees of due south. In line with the BRE Report guidance none of the windows have been tested for sunlight amenity.

Approved scheme conditions

5.10.4 With the neighbouring approved scheme in place the VSC analysis shows little change from the values gained above with 3 (60.0%) of the windows remaining fully compliant with the BRE Report guidance and two windows with minor transgressions.

5.11 **260 Kilburn High Road**

5.11.1 Once again, this is a four storey, mixed use property to the west of the proposed development. There are residential flats 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.

Existing conditions

5.11.2 Daylight analysis using the VSC test shows 3 (50.0%) of the 6 windows will be fully compliant with the BRE Report. 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 with the proposed scheme. 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. Window W3 at first floor level

will see a minor transgression but will retain a VSC value in excess of 24%, a value above expectations within urban locations.

5.11.3 Once more, building orientation means that none of the windows face within 90 degrees of due south. In line with the BRE Report guidance none of the windows have been tested for sunlight amenity.

Approved scheme conditions

5.11.4 As above, the VSC test shows 3 (50.0%) of the 6 windows will be fully compliant with the BRE Report. Windows W1 and W2 at first floor level will see transgressions of the BRE Report guidance and window W3 at first floor level will see a minor transgression but will retain a VSC value in excess of 20%, a value inline with expectations within urban locations.

5.12 **262 Kilburn High Road**

5.12.1 This four storey mixed use property is to the west of the proposed development and has residential flats at the first, second and third floors. Once again, external observation indicates the windows to the rear of this property serve secondary living spaces, such as circulation areas, bathrooms and bedrooms.

Existing conditions

5.12.2 Daylight analysis using the VSC test shows all but one window 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 and is directly on the boundary. As discussed for neighbouring properties, the window relies heavily on the light over the proposed scheme site. Observation indicates the window serves a bedroom, it should be remembered that the BRE Report stresses daylight amenity to bedrooms is of a lesser importance than amenity to main living spaces.

5.12.3 None of the windows face within 90 degrees of due south. In line with the BRE Report guidance none of the windows have been tested for sunlight amenity.

Approved scheme conditions

5.12.4 There is no modification to the daylight amenity analysis with the neighbouring consented scheme in place.

5.13 **268 Kilburn High Road**

5.13.1 This is a three storey mixed use property to the west of the proposed development. External observation indicates the first and second floors are split into residential flats.

Existing conditions

5.13.2 Daylight amenity analysis undertaken using the VSC test shows both windows will maintain close to or above 20% VSC, the VSC level normally seen in urban areas. Desktop research has shown that the rooms served by these windows are studio flats.

5.13.3 Daylight distribution analysis shows that these rooms will maintain daylight access to 34.58% and 45.08% of their room areas.

5.13.4 None of the windows face within 90 degrees of due south and have not been tested for sunlight amenity.

Approved scheme conditions

5.13.5 There is no modification to the daylight amenity analysis with the neighbouring consented scheme in place.

5.14 **270-272 Kilburn High Road**

5.14.1 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.

Existing conditions

5.14.2 Daylight analysis shows all of the windows analysed will maintain levels of VSC in line with the levels expected in urban areas. We have obtained internal arrangement plans via the Local Planning Authority Planning Database. These plans do not label the rooms' uses; however, the rooms are likely to be bedrooms, bathrooms and circulation space. Daylight distribution analysis shows the vast majority of rooms will see little or no modification to their existing daylight amenity and will remain BRE Report compliant. The one transgression that does occur is to a suspected circulation space (room R1 at first floor level). Should the space be used for circulation the BRE Report would consider the space to have no requirement for daylight amenity.

5.14.3 None of the windows face within 90 degrees of due south and have not been tested for sunlight amenity.

Approved scheme conditions

5.14.4 There is no modification to the daylight amenity analysis with the neighbouring consented scheme in place.

5.15 **274 Kilburn High Road**

5.15.1 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 / public house usage at first and second floors.

Existing conditions

5.15.2 Daylight and sunlight analysis shows there will be one minor transgression at first floor level. W4 will see its existing VSC reduced to 0.79 time its former value, just slightly under the 0.8 times BRE Report guidance. All other windows will be fully BRE Report compliant.

5.15.3 Two of the windows face within 90° of due south. Sunlight amenity analysis undertaken using the APSH tests show that both will remain compliant with the Annual sunlight amenity guidance. Window W4 will see a minor transgression in its winter sunlight amenity, achieving a value of 4%, just below the 5% BRE Report guidance.

Approved scheme conditions

5.15.4 There is no modification to the daylight amenity analysis with the neighbouring consented scheme in place.

5.16 **Overshadowing**

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

6 LIGHT LEVELS TO RESIDENTIAL ACCOMMODATION WITHIN THE PROPOSED SCHEME

6.1 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 0.68 for standard double-glazing and an internal reflectance value of 0.5. Additionally, we have used the no sky-line (daylight distribution) test to analyse the daylight penetration into the residential accommodation.

6.2 We have analysed all habitable rooms from first to fifth floors. Our analysis has been undertaken with regard to two scenarios. As discussed above we are aware of the approved scheme at 246

Kilburn High Road. We have undertaken analysis with (approved scheme scenario) and without (proposed scheme scenario) this scheme in place. A summary table of the daylight and sunlight amenity results for both the proposed and neighbouring approved scheme scenarios and the 2014/3244/P application scheme is given below and discussed in the following paragraphs.

Analysis type	2014/3244/P application scheme compliance figures	Proposed scheme compliance figures	Neighbouring approved scheme scenario compliance figures
Average Daylight Factor (ADF)	147/187 Rooms (**78.6%**)	169/187 Rooms (**90%**)	169/187 Rooms (**90%**)
Daylight Distribution	N/A	185/187 Rooms (**99%**)	185/187 Rooms (**99%**)
Annual Probable Sunlight Hours (APSH)	72/113 Rooms (**63.7%**)	79/99 Rooms (**79.8%**)	77/99 Rooms (**77.78%**)

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 the relevant spreadsheets.

6.4 For the both the proposed scheme analysis and the neighbouring approved scheme scenario, our analysis shows that, of the 187 rooms tested, 169 (90%) would meet the ADF target values for their specific room type, with many rooms achieving values far in excess of the recommended minimum. These results are a significant revision to the 78.6% pass rate the 2014/3244 application scheme achieved. 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.

6.5 In addition to the ADF analysis we have undertaken analysis of the daylight penetration patterns within the residential accommodation. These daylight distribution results for show that, for both the proposed scheme analysis and the approved scheme scenario, of the 187 rooms tested 185 (99%) would see daylight penetration to over 80% of their area and would be fully compliant with the guidance given in the BRE Report. Where transgressions occur, room R5 at first and second floor, will see daylight penetration concentrated in the lounge element of the rooms. The contours are shown on the appended drawings with the contours for the transgressing rooms enlarged for ease of reference.

6.6 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.

6.7 For the proposed scheme scenario our analysis shows that, of the 99 rooms with windows facing within 90 degrees of due south, 79 (79.8%) will be fully BRE Report compliant in terms of annual sunlight access and winter sunlight access.

6.8 With the neighbouring consented scheme in place our APSH analysis shows that 77 (77.78%) of the analysed rooms would be fully BRE Report compliant in terms of both annual and winter sunlight access.

6.9 While transgressions occur for both tested scenarios, sunlight values retained are in excess of those normally seen within urban areas and are above expectations within modern developments.

7 CONCLUSION

7.1 Effect on surrounding residential properties

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. The proposed scheme does not differ in massing from the 2014/3244 application scheme where no issue was raised in terms of any effect on the neighbouring properties.

7.2 Light received to proposed habitable rooms

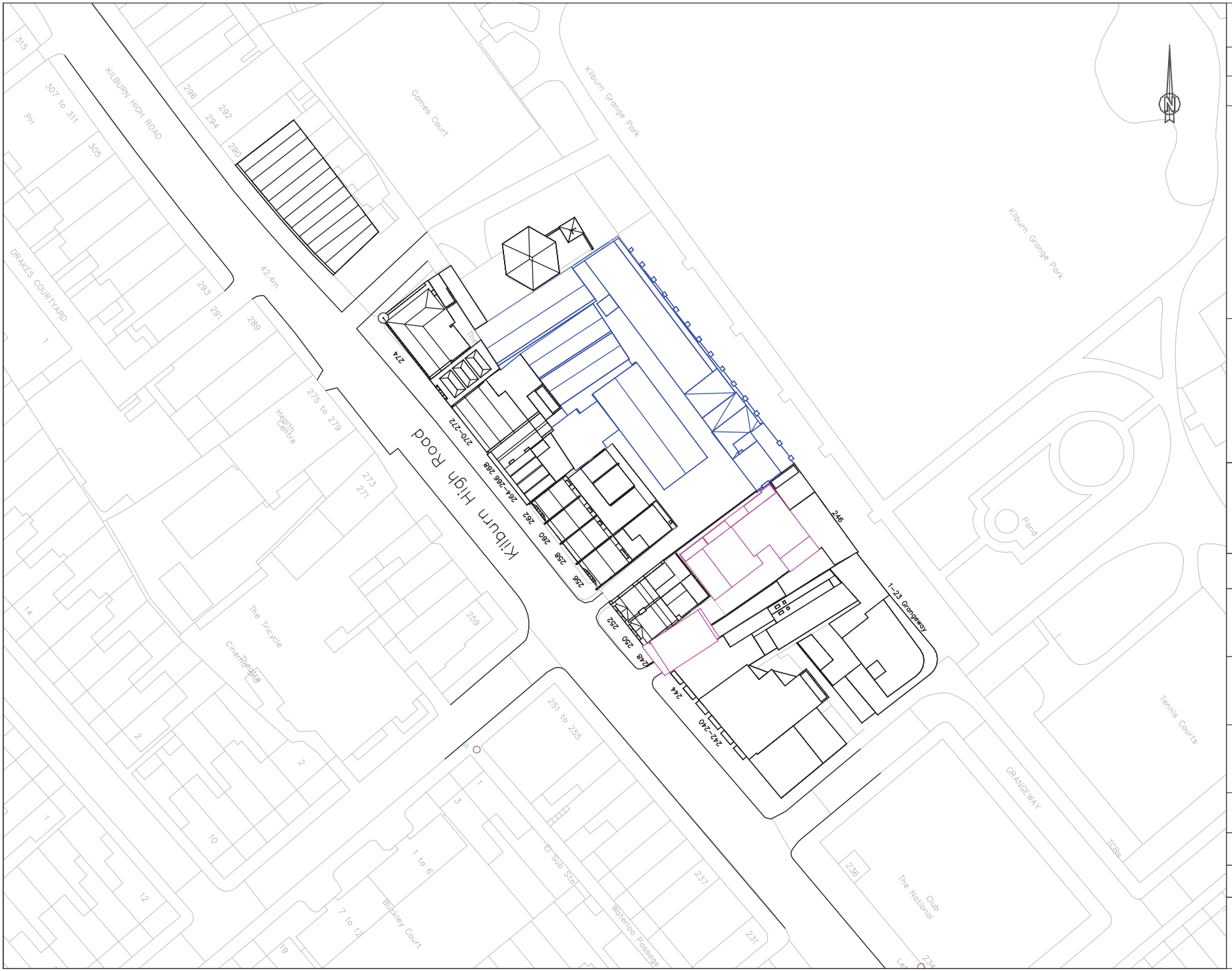
7.2.1 Our analysis shows the overwhelming majority of rooms assessed would meet or exceed the guideline values given in the British Standard for daylight amenity, with the ADF compliance rate increasing from 78.6% to 90%, and the majority of windows serving the rooms would meet the BRE Report criteria 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.

APPENDIX A

DRAWINGS



DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Existing Buildings on site
- Proposed Neighbouring Scheme

GL Hearn
20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

CLIENT:
254 Kilburn High Road LLP

DRAWING TITLE:
Existing Site Plan

DRAWING NO: J031611/01
REVISION: -

DATE: 06/03/15
DRAWN BY: TRL/LT

SCALE: 1:750 @ A3
(internal use only)

DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Proposed Buildings on Site
- Proposed Neighbouring Scheme

GL Hearn
20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

CLIENT:
254 Kilburn High Road LLP

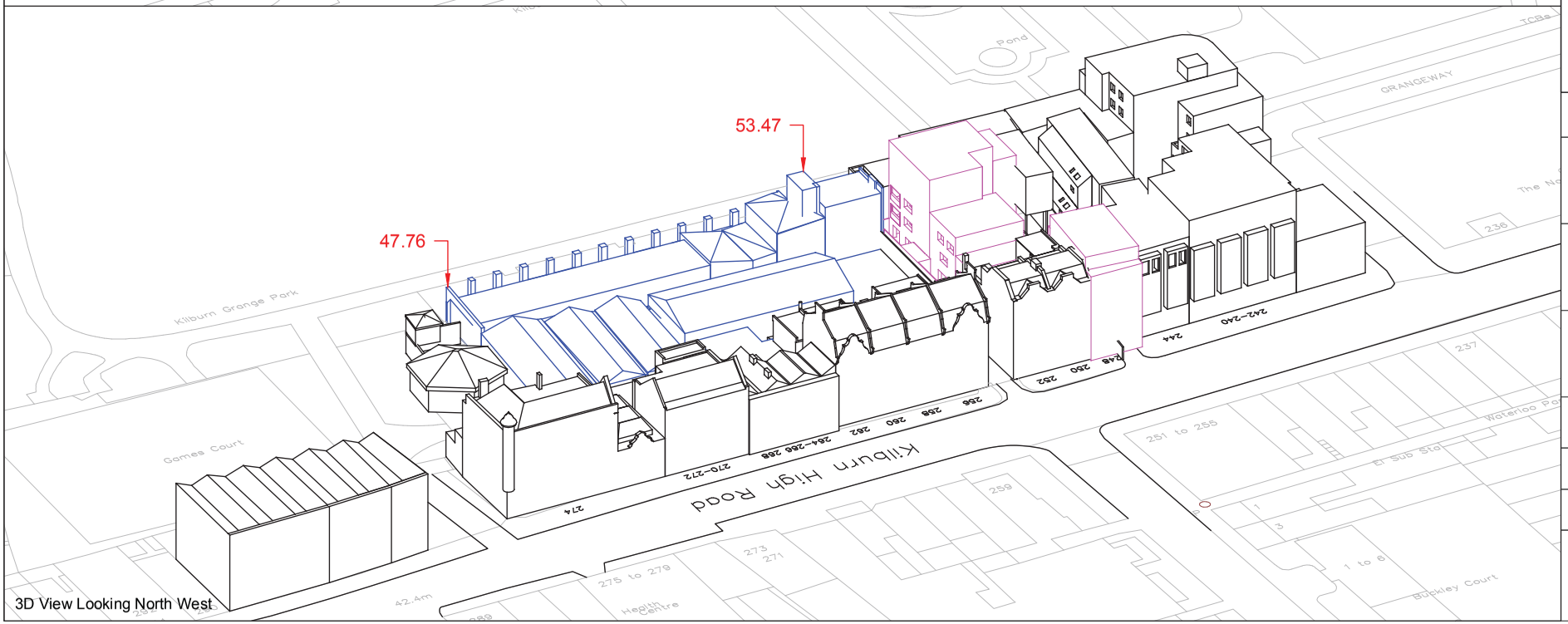
DRAWING TITLE:
Proposed Site Plan

DRAWING NO: J031611/02
REVISION: -

DATE: 06/03/15
DRAWN BY: TRL/LT

SCALE:
1:750 @ A3
(internal use only)

3D View Looking South East



3D View Looking North West

DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Baseline / Masterplan

GL Hearn

20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

CLIENT:
254 Kilburn High Road LLP

DRAWING TITLE:
Baseline 3D Views

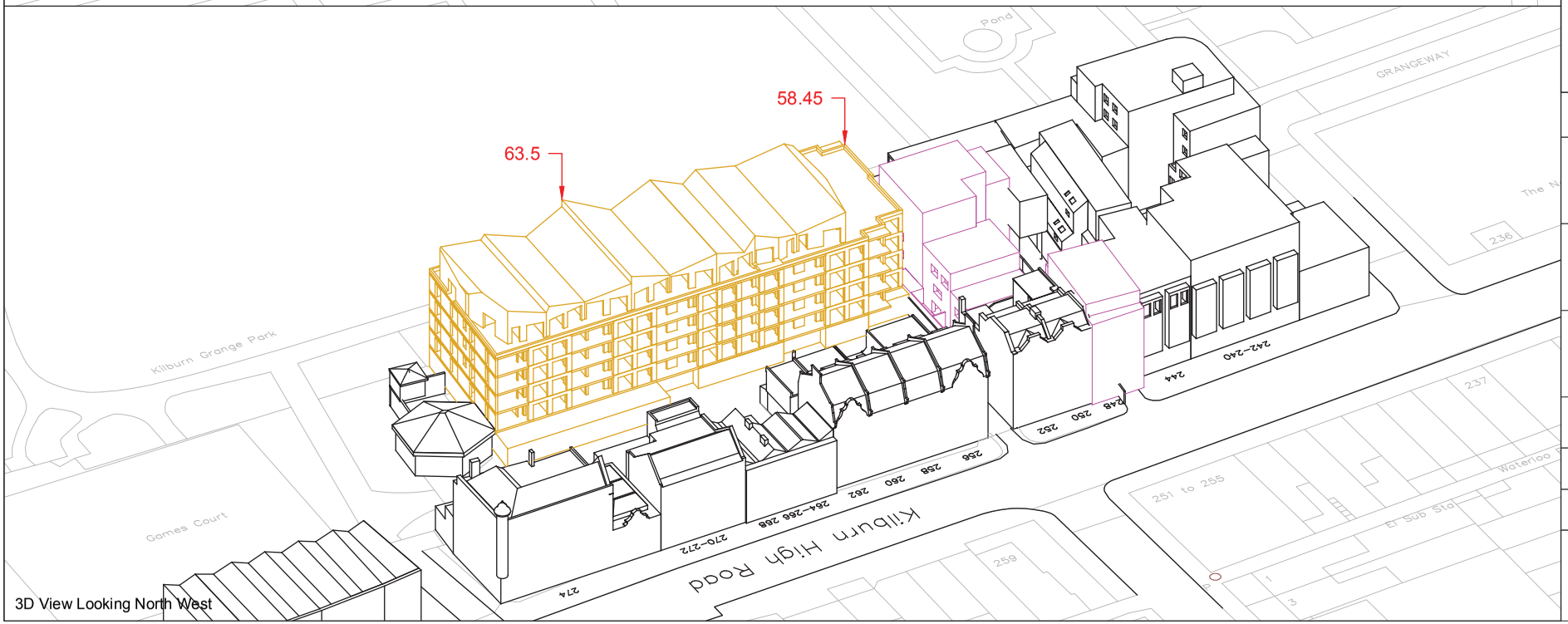
DRAWING NO:	REVISION:
J031611/03	-

DATE:	DRAWN BY:
06/03/15	TRL/LT

SCALE:
NTS

(internal use only)

3D View Looking South East



3D View Looking North West

DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Proposed Buildings on Site
- Proposed Neighbouring Scheme

GL Hearn
20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

CLIENT:
254 Kilburn High Road LLP

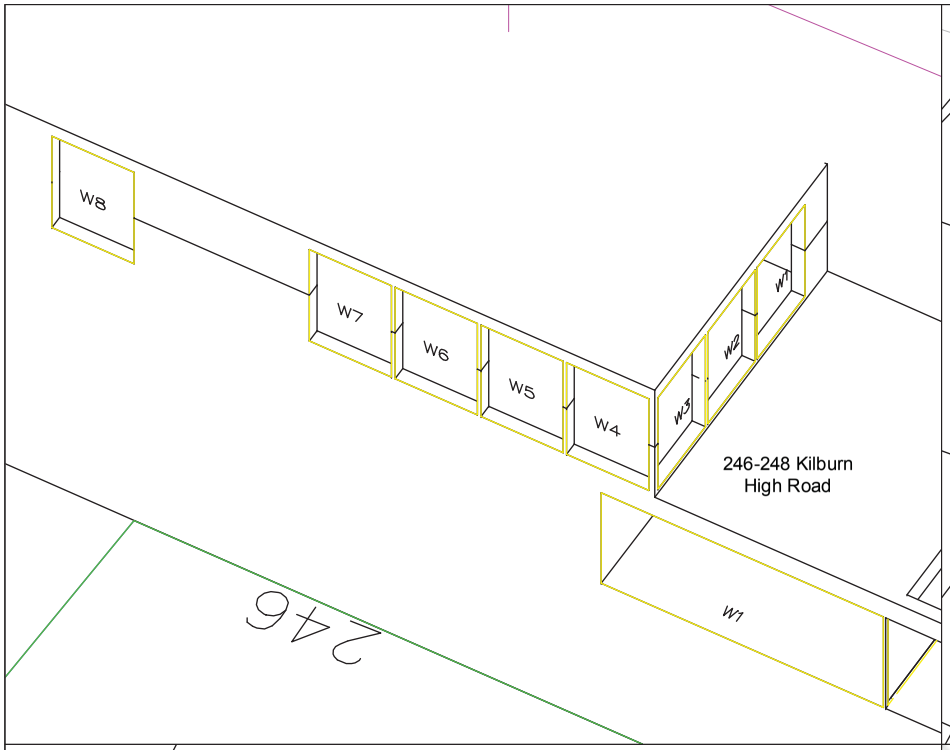
DRAWING TITLE:
Proposed 3D Views

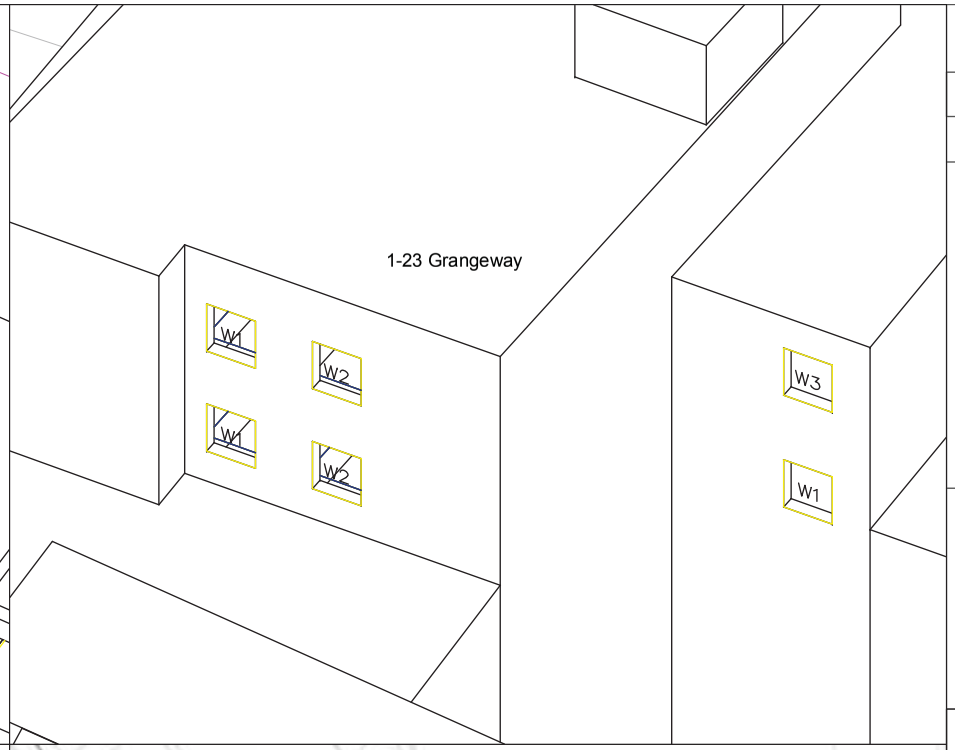
DRAWING NO:	REVISION:
J031611/04	-

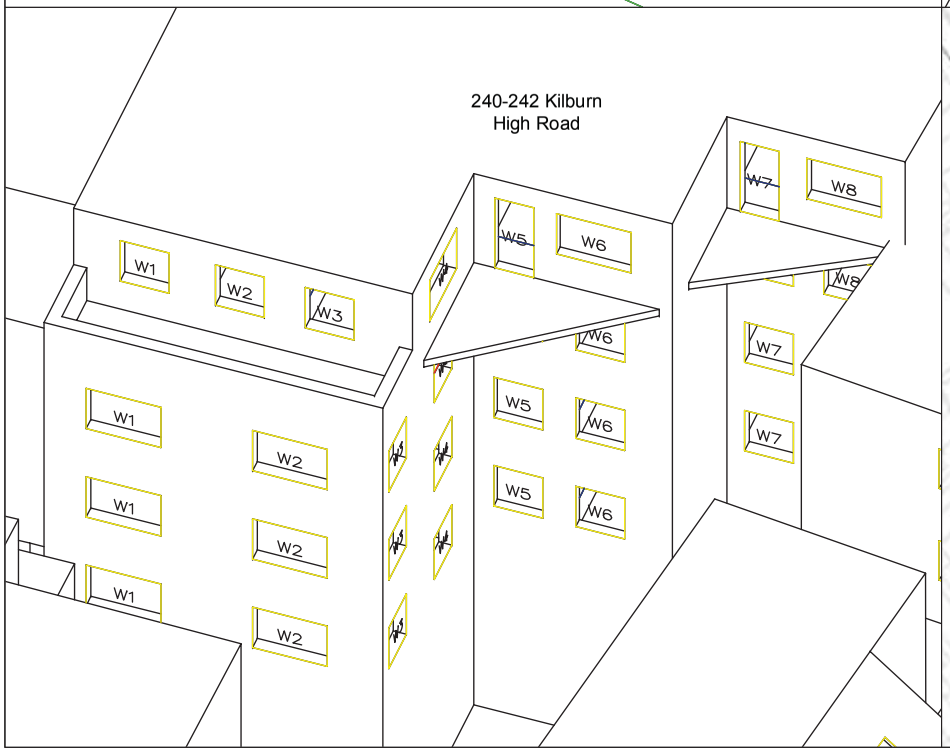
DATE:	DRAWN BY:
06/03/15	TRL/LT

SCALE:
NTS

(internal use only)







DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Building Location on site
- Consented Neighbouring Scheme

GL Hearn
20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

CLIENT:
254 Kilburn High Road LLP

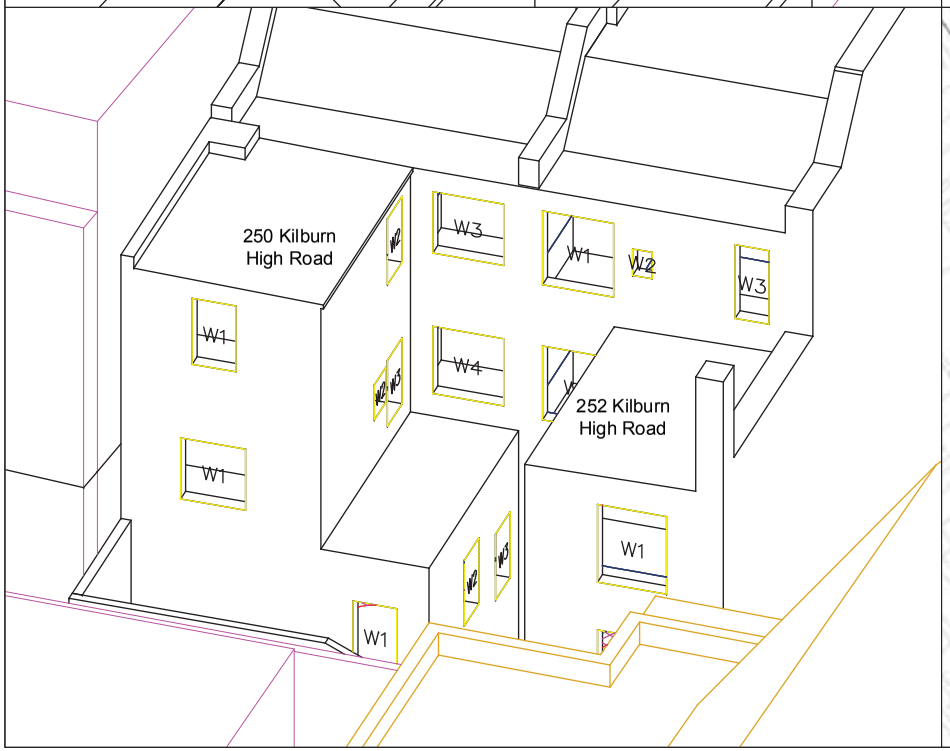
DRAWING TITLE:
Window Maps
1-23 Grangeway &
240-242 Kilburn High Road

DRAWING NO: J031611/06
REVISION: -

DATE: 06/03/15
DRAWN BY: TRL/LT

SCALE: NTS

(internal use only)



DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
Existing Buildings and Structures
Building Location on site
Consented Neighbouring Scheme

GL Hearn
20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

CLIENT:
254 Kilburn High Road LLP

DRAWING TITLE:
Window Maps
244-252 Kilburn High Road

DRAWING NO: J031611/07
REVISION: -

DATE: 06/03/15
DRAWN BY: TRL/LT

SCALE: NTS

(internal use only)

DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Building Location on site
- Consented Neighbouring Scheme

GL Hearn
20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

CLIENT:
254 Kilburn High Road LLP

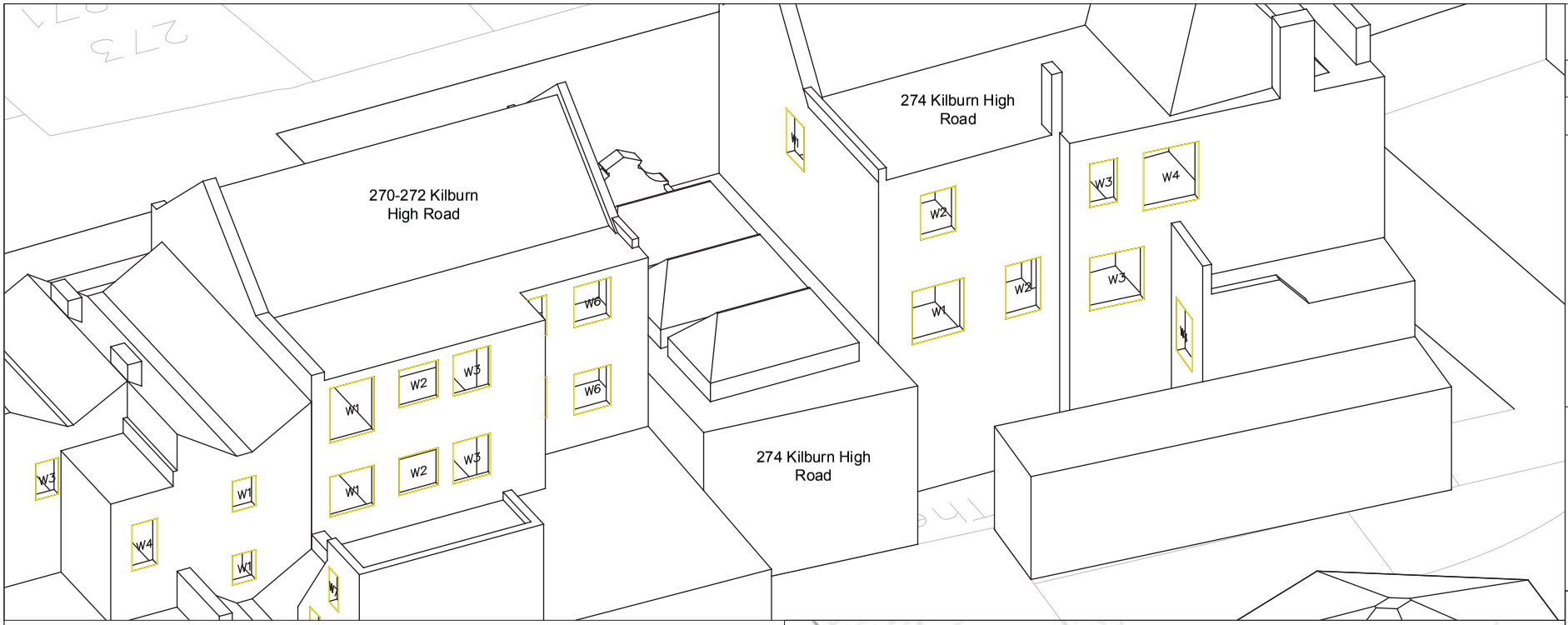
DRAWING TITLE:
Window Maps
256-260 Kilburn High Road

DRAWING NO: J031611/08
REVISION: -

DATE: 06/03/15
DRAWN BY: TRL/LT

SCALE: NTS

(internal use only)



DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Building Location on site
- Consented Neighbouring Scheme

GL Hearn
20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

CLIENT:
254 Kilburn High Road LLP

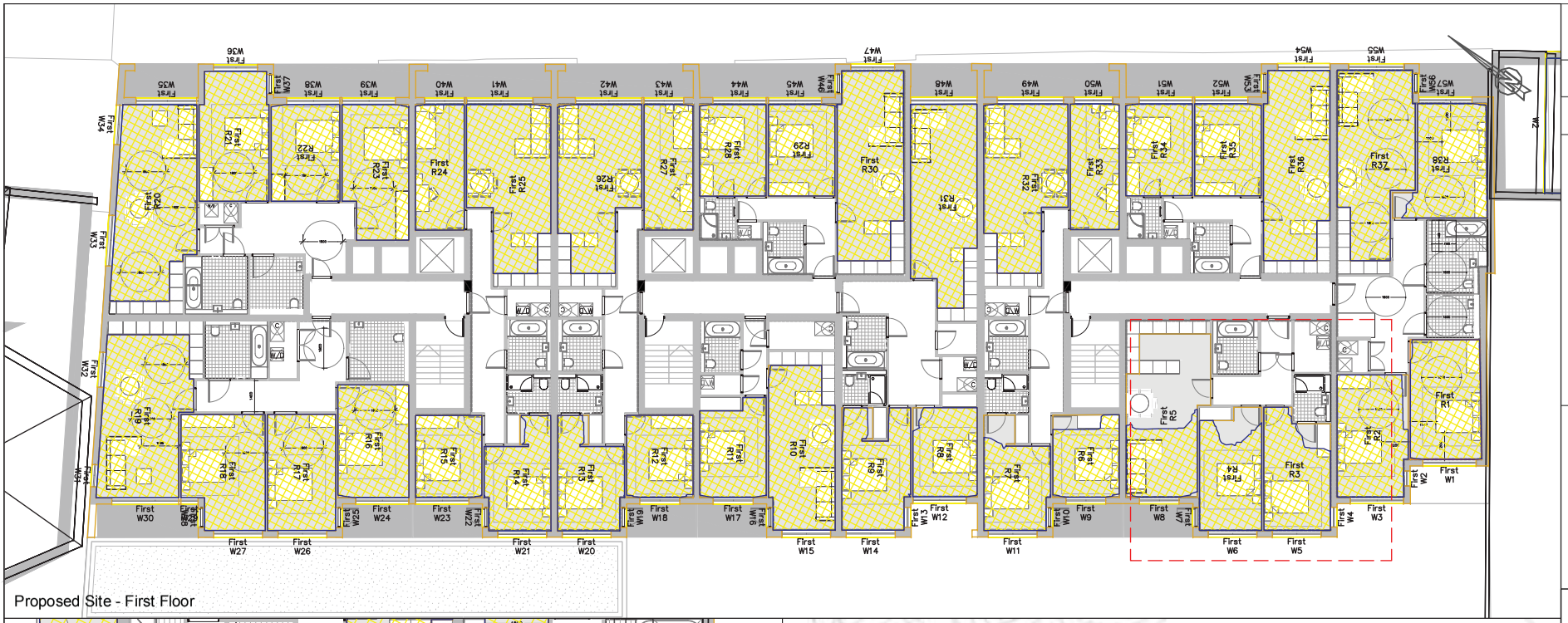
DRAWING TITLE:
Window Maps
270-272 & 274 Kilburn High Road

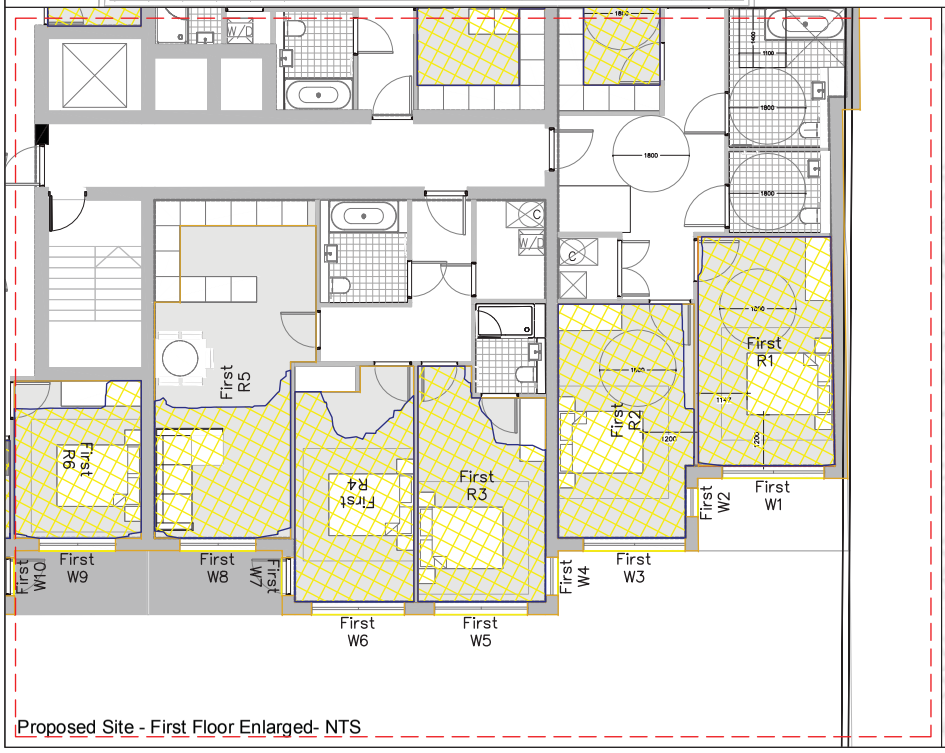
DRAWING NO:	REVISION:
J031611/09	-

DATE:	DRAWN BY:
06/03/15	TRL/LT

SCALE:
NTS

(internal use only)





DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Room Layout
- Proposed Contour
- Area of Visible Skyline
- Building Location on site

GL Hearn

20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

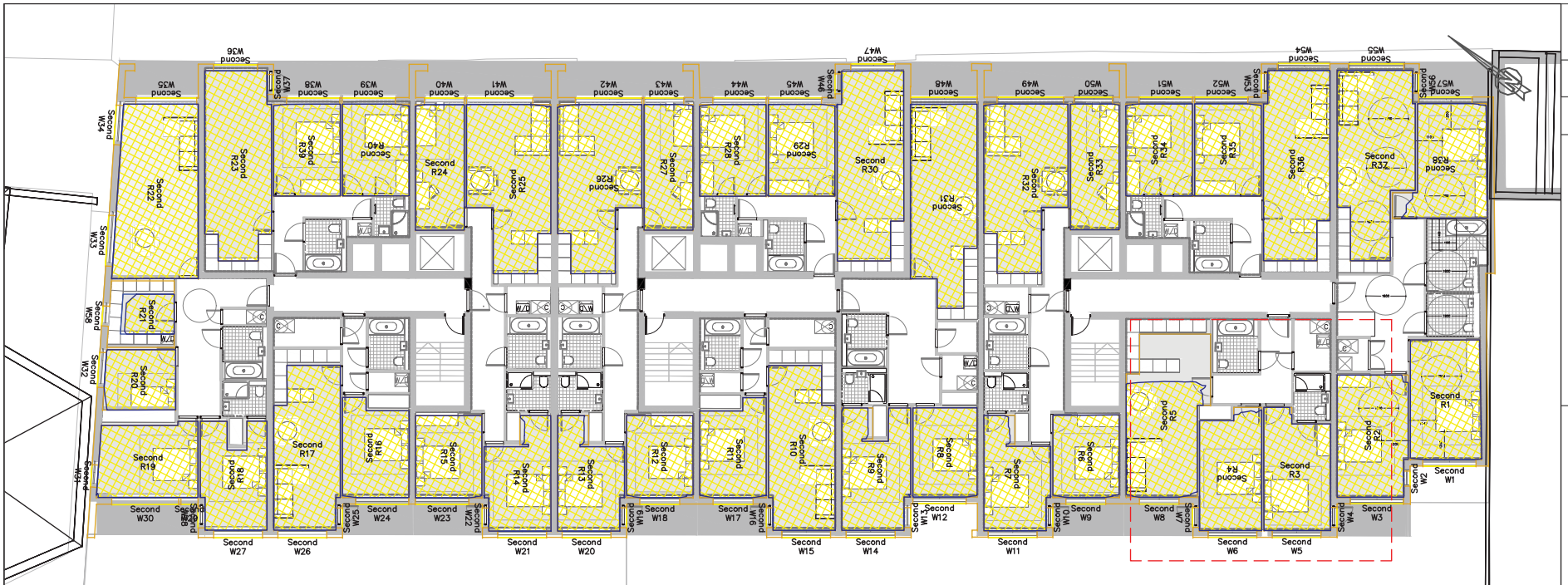
CLIENT:
254 Kilburn High Road LLP

DRAWING TITLE:
Daylight Distribution Contours
254 - Kilburn High Road
Proposed Scheme

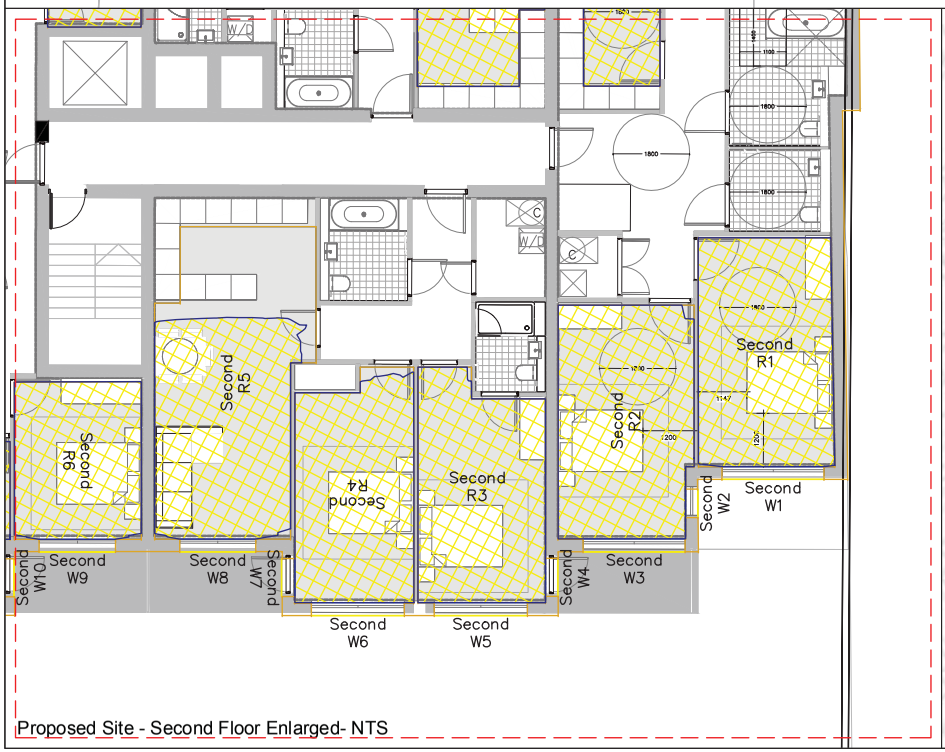
DRAWING NO: J031611/15
REVISION: -

DATE: 06/03/15
DRAWN BY: TRL/LT

SCALE:
1:200 @ A3
(internal use only)



Proposed Site - Second Floor



Proposed Site - Second Floor Enlarged- NTS

DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Room Layout
- Proposed Contour
- Area of Visible Skyline
- Building Location on site

GL Hearn

20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

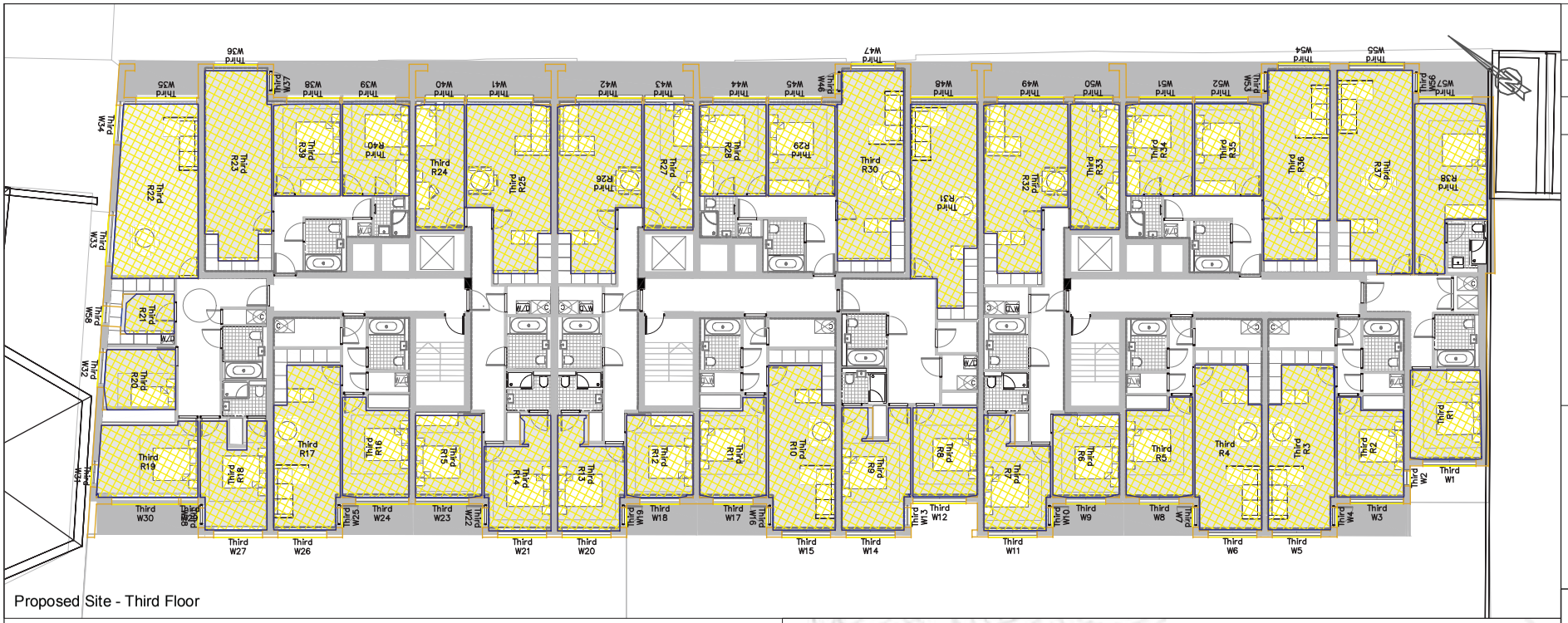
CLIENT:
254 Kilburn High Road LLP

DRAWING TITLE:
Daylight Distribution Contours
254 - Kilburn High Road
Proposed Scheme

DRAWING NO: J031611/16
REVISION: -

DATE: 06/03/15
DRAWN BY: TRL/LT

SCALE:
1:200 @ A3
(internal use only)



Proposed Site - Third Floor

DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Room Layout
- Proposed Contour
- Area of Visible Skyline
- Building Location on site

GL Hearn

20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

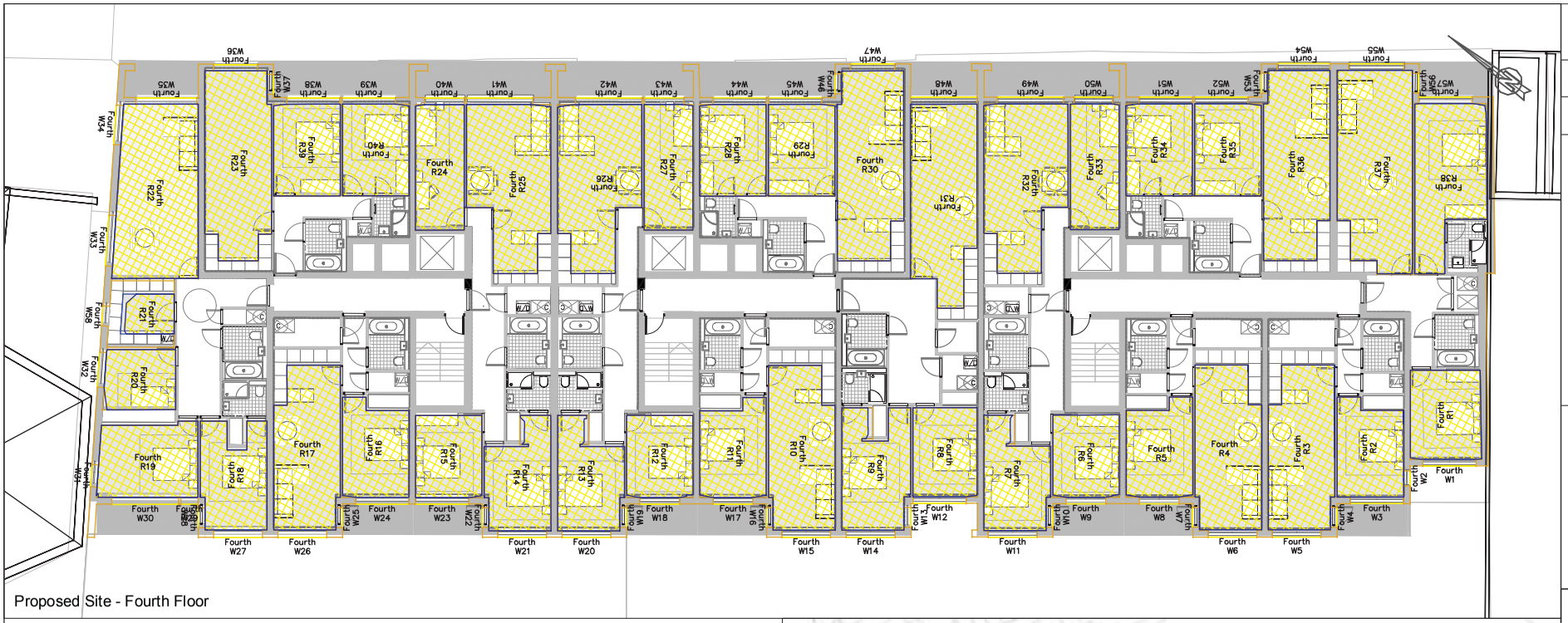
CLIENT:
254 Kilburn High Road LLP

DRAWING TITLE:
Daylight Distribution Contours
254 - Kilburn High Road
Proposed Scheme

DRAWING NO: J031611/17
REVISION: -

DATE: 06/03/15
DRAWN BY: TRL/LT

SCALE: 1:200 @ A3
(internal use only)



Proposed Site - Fourth Floor

DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Room Layout
- Proposed Contour
- Area of Visible Skyline
- Building Location on site

GL Hearn
20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

CLIENT:
254 Kilburn High Road LLP

DRAWING TITLE:
Daylight Distribution Contours
254 - Kilburn High Road
Proposed Scheme

DRAWING NO:	REVISION:
J031611/18	-

DATE:	DRAWN BY:
06/03/15	TRL/LT

SCALE:
1:200 @ A3
(internal use only)

Proposed Site - Fifth Floor

DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Room Layout
- Proposed Contour
- Area of Visible Skyline
- Building Location on site

GL Hearn
20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

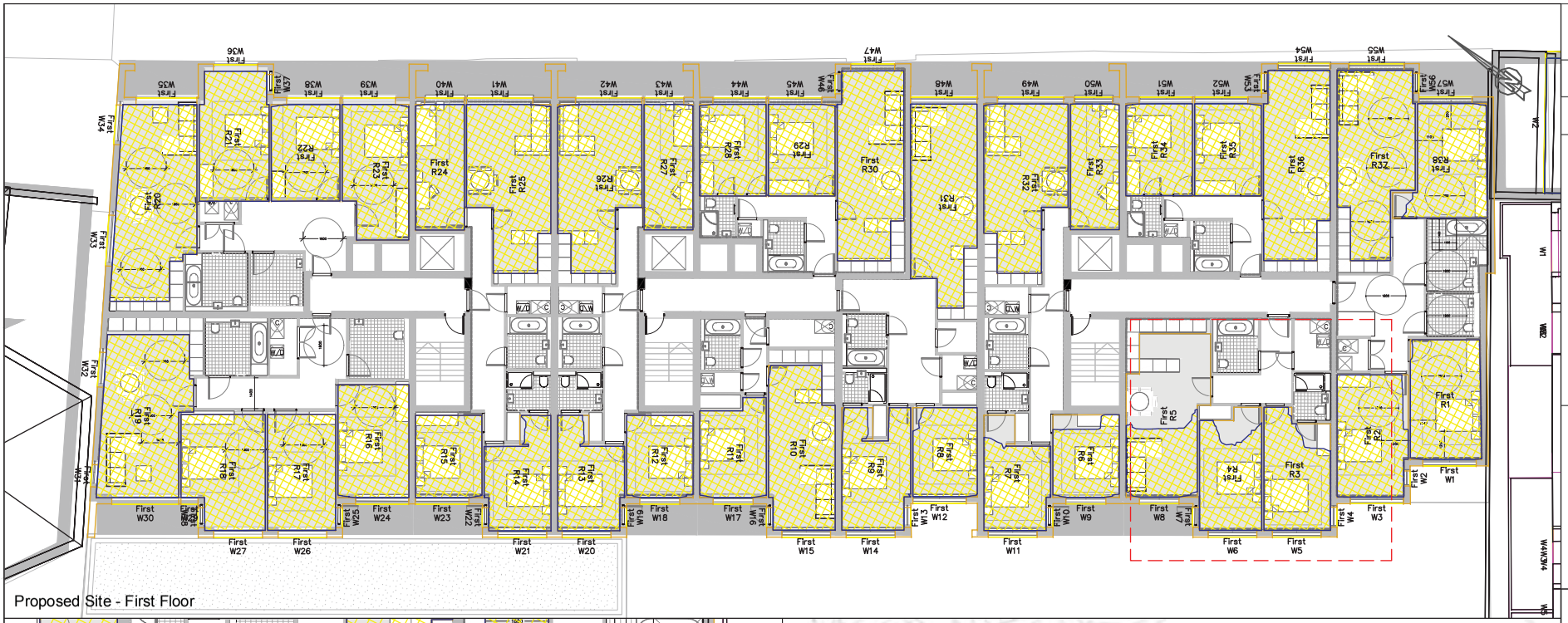
CLIENT:
254 Kilburn High Road LLP

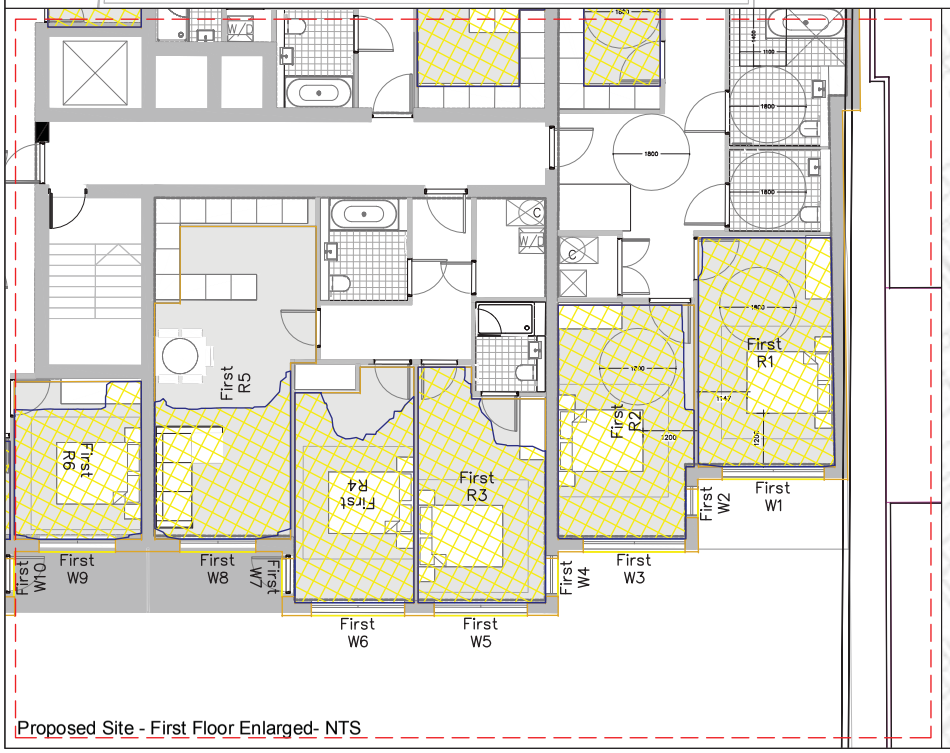
DRAWING TITLE:
Daylight Distribution Contours
254 - Kilburn High Road
Proposed Scheme

DRAWING NO:	REVISION:
J031611/19	-

DATE:	DRAWN BY:
06/03/15	TRL/LT

SCALE:
1:200 @ A3
(internal use only)





DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Room Layout
- Proposed Contour
- Area of Visible Skyline
- Building Location on site

GL Hearn

20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

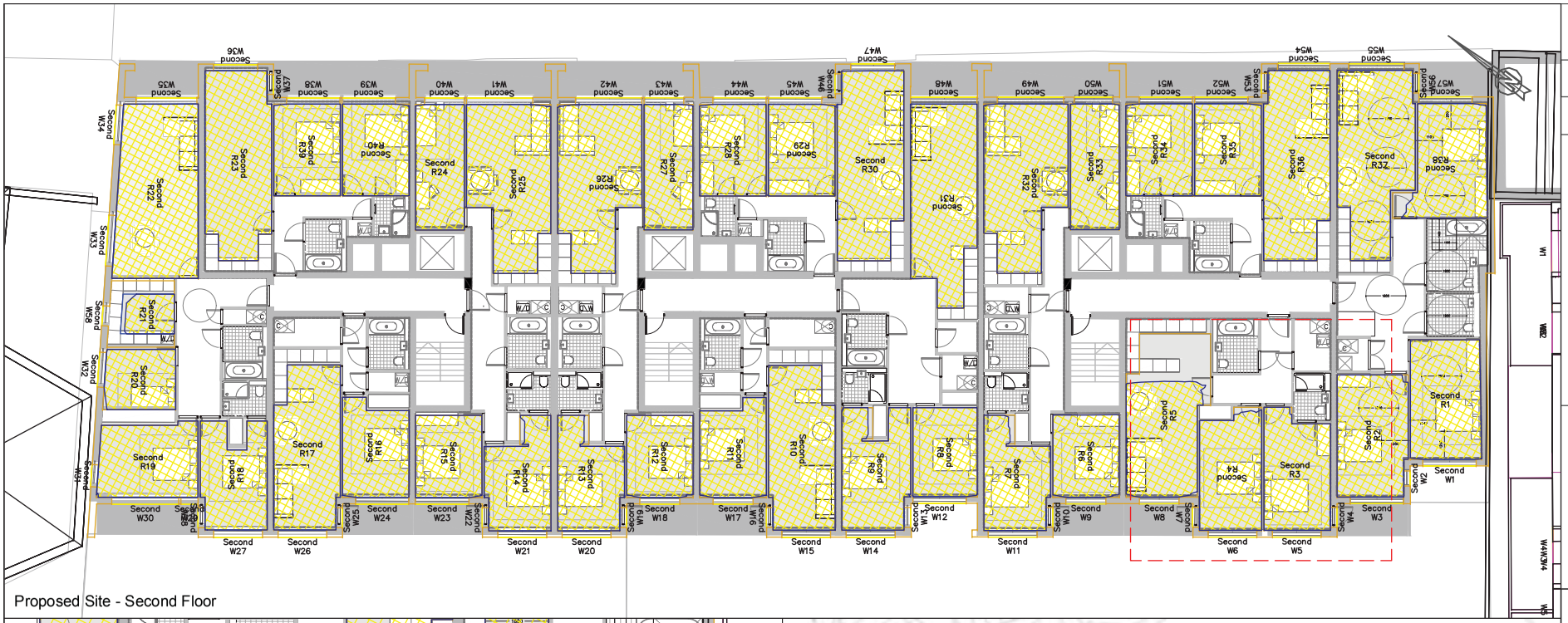
CLIENT:
254 Kilburn High Road LLP

DRAWING TITLE:
Daylight Distribution Contours
254 - Kilburn High Road
Consented Scenario

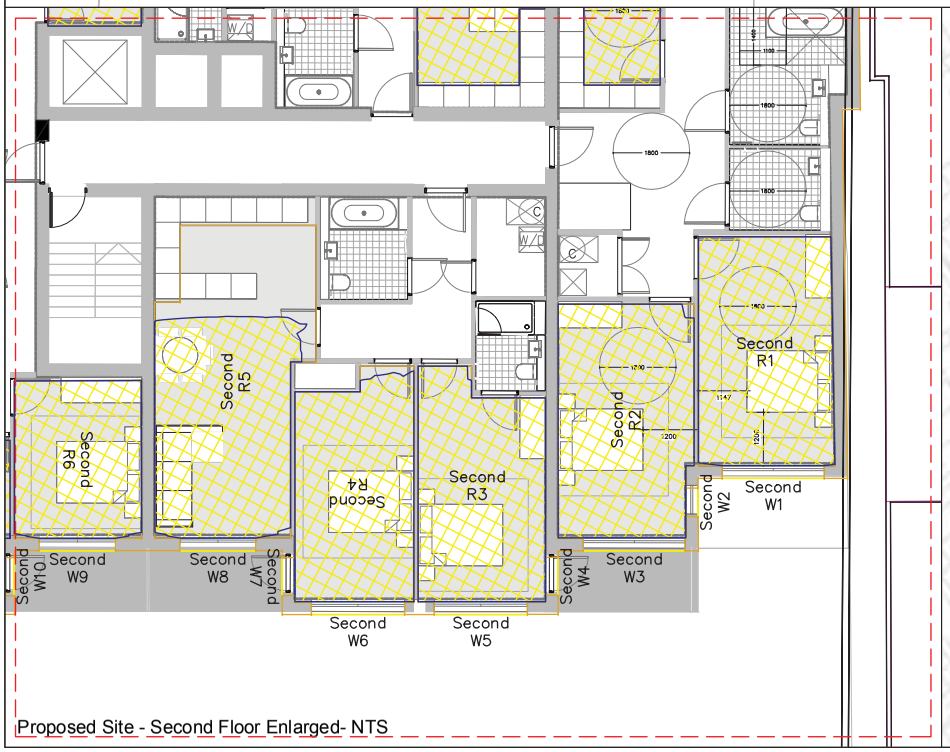
DRAWING NO: J031611/20
REVISION: -

DATE: 06/03/15
DRAWN BY: TRL/LT

SCALE:
1:200 @ A3
(internal use only)



Proposed Site - Second Floor



Proposed Site - Second Floor Enlarged- NTS

DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Room Layout
- Proposed Contour
- Area of Visible Skyline
- Building Location on site

GL Hearn
20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

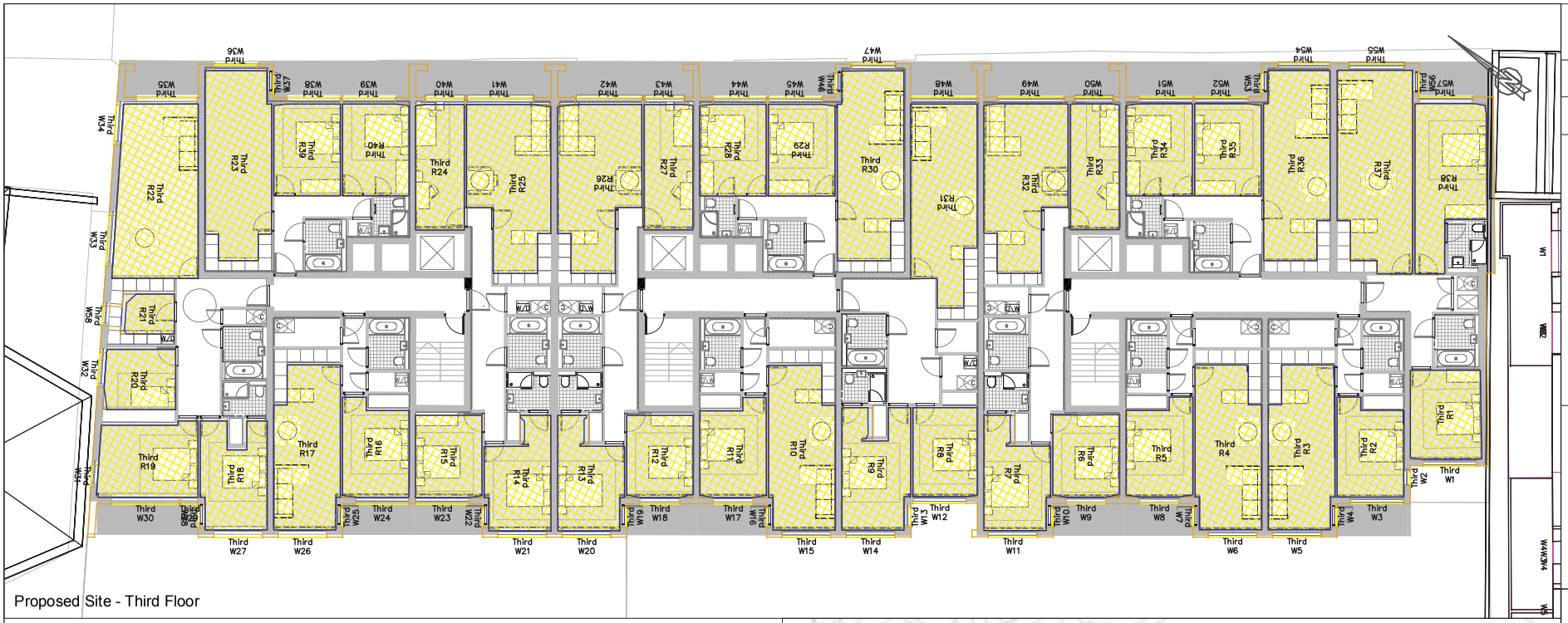
CLIENT:
254 Kilburn High Road LLP

DRAWING TITLE:
Daylight Distribution Contours
254 - Kilburn High Road
Consented Scenario

DRAWING NO:	REVISION:
J031611/21	-

DATE:	DRAWN BY:
06/03/15	TRL/LT

SCALE:
1:200 @ A3
(internal use only)



Proposed Site - Third Floor

DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Room Layout
- Proposed Contour
- Area of Visible Skyline
- Building Location on site

GL Hearn
20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

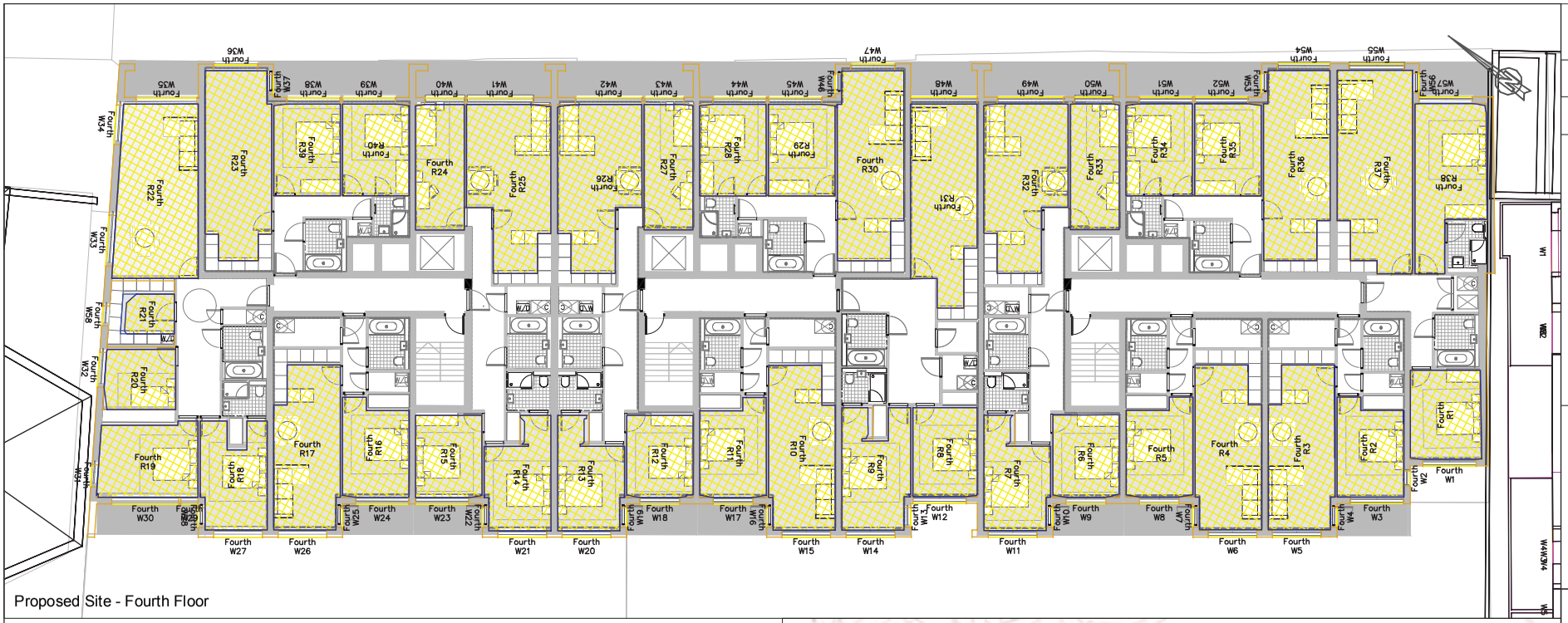
CLIENT:
254 Kilburn High Road LLP

DRAWING TITLE:
Daylight Distribution Contours
254 - Kilburn High Road
(Consented Scenario)

DRAWING NO:	REVISION:
J031611/22	-

DATE:	DRAWN BY:
06/03/15	TRL/LT

SCALE:
1:200 @ A3
(internal use only)



Proposed Site - Fourth Floor

DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Room Layout
- Proposed Contour
- Area of Visible Skyline
- Building Location on site

GL Hearn
20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

CLIENT:
254 Kilburn High Road LLP

DRAWING TITLE:
Daylight Distribution Contours
254 - Kilburn High Road
(Consented Scenario)

DRAWING NO:	REVISION:
J031611/23	-

DATE:	DRAWN BY:
06/03/15	TRL/LT

SCALE:
1:200 @ A3
(internal use only)

Proposed Site - Fifth Floor

DO NOT SCALE
NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

NOTES :

INFORMATION USED IN ANALYSIS:
From - Claridge Architects
Rec - 21/03/2014 - Topo Survey, Existing Elevations

Proposed Schcme Drawings
Rec. 13/02/2015

PLAN KEY:
- Existing Buildings and Structures
- Room Layout
- Proposed Contour
- Area of Visible Skyline
- Building Location on site

GL Hearn
20 Soho Square, London, W1D 3QW
T: +44 (0)20 7851 4900
F: +44 (0)20 7851 4910

PROJECT:
Kilburn High Road

CLIENT:
254 Kilburn High Road LLP

DRAWING TITLE:
Daylight Distribution Contours
254 - Kilburn High Road
(Consented Scenario)

DRAWING NO: J031611/24
REVISION: -

DATE: 06/03/15
DRAWN BY: TRL/LT

SCALE:
1:200 @ A3
(internal use only)