

#### DAYLIGHT & SUNLIGHT REPORT

for

#### **PROPOSED DEVELOPMENT**

at

DUNSTAN HOUSE 14A ST CROSS STREET LONDON EC1N

REF: AC/MG/ROL6963

23 June 2016

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Figure 1: Oblique aerial photograph of the site looking south (Source: Google Earth)

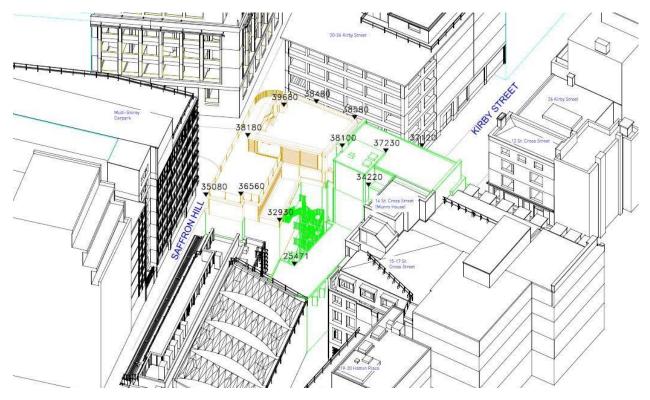


Figure 2: 3D view of computer model in the proposed condition

#### 1. INTRODUCTION

- 1.1 Steeparches Limited is proposing a development at Dunstan House, 14 St Cross Street, EC1N.
- 1.2 The application site is situated on the junction of St Cross St and Saffron Hill and is bounded by properties on Saffron Hill to the north and Hatton Place and St Cross Street to the west.
- 1.3 Steeparches Limited is conscious of the need to minimise impact on the light to neighbouring residential properties and therefore instructed Anstey Horne to work with the project architect, Robson Warren Architects, so that the effects of the proposed development could be properly understood and, wherever possible, minimised.
- 1.4 Following pre-application comments, the proposed development has been modified in order to reduce the potential effects on the properties at the rear of 14 St Cross Street (Munro House). This report considers the potential effects of the modified scheme in which the new 5<sup>th</sup> floor is set further back, so as not to be as visible to an occupant on the first floor in Munro House, and the 6<sup>th</sup> floor has been re-planned to minimise its rearward extent.
- 1.5 Anstey Horne has been commissioned to undertake a formal technical assessment of the effect of the proposed development upon the existing surrounding properties, having regard to the recommendations in BRE Report 209, *Site Layout Planning for Daylight and Sunlight: A guide to good practice* (second edition, 2011).
- 1.6 Our study has been carried out using 3D computer modelling and our specialist computer simulation software. Our 3D model is shown in Figure 2 on page ii.
- 1.7 This report summarises the relevant planning policy, the basic principles of daylighting and sunlighting, the methods used to assess the potential impact of the development, the information used in compiling our 3D computer model and the results of our technical assessment. Drawings and full tables of results of our technical assessment are attached in the appendices.

#### 2. QUALIFICATIONS AND EXPERIENCE

- 2.1 I am Aidan Cosgrave, Chartered Surveyor, and I am a Director of Anstey Horne. I qualified as a Professional Member of the Royal Institution of Chartered Surveyors in 1993 and have an Honours Degree in Building Surveying.
- 2.2 I regularly advise on the effect of proposed development on daylight and sunlight amenity to existing surrounding buildings and on the interior daylight and sunlight conditions within proposed development. I oversee technical studies relating to light and provide formal reports for planning applications and appeals.
- 2.3 Anstey Horne's daylighting studies are undertaken using 3D computer modelling and specialist computer software, specifically written for the purposes of carrying out the tests described in BRE Report 209, *Site Layout Planning for Daylight and Sunlight: A guide to good practice*. Our software has been in use for many years and the technical results have been utilised and accepted by the courts, local planning authorities and other consultants in hundreds of assessments for both common law and town planning purposes.

#### 3. PLANNING POLICY AND GUIDANCE

#### National Planning Policy and Guidance

- 3.1 The National Planning Policy Framework (NPPF) (March 2012, Department for Communities and Local Government) sets out the Government's planning policies and how these are expected to be applied. It provides a framework within which councils can produce their own local plans that reflect the needs and priorities of their communities.
- 3.2 The NPPF contains a set of 12 core land-use planning principles that should underpin councils' plan-making and decision-taking. One such principle is that planning should *"always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings"*.
- 3.3 The Building Research Establishment, whose aims include achieving a higher quality built environment, publish BRE Report 209, *Site Layout Planning for Daylight and Sunlight: A guide to good practice* (second edition, 2011) by PJ Littlefair. This guide gives advice on site layout planning to retain good daylighting and sunlighting in existing surrounding buildings and achieve to it in new buildings. The guide is intended for use by designers, consultants and planning officials and notes that "*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.*"

#### **Regional Planning Policy and Guidance**

#### Mayor's London Plan

- 3.4 The Mayor of London's 'London Plan The Spatial Strategy for London Consolidated with Alterations since 2011' (March 2015) sets out the spatial development strategy for London. It forms part of the development plan for Greater London, along with local plans of the London boroughs. 'Minor Alterations to the London Plan' were published in 2015 and 2016.
- 3.5 Policy 7.6 (Architecture) states that "buildings and structures should ... not cause unacceptable harm to the amenity of surrounding land and buildings, particularly residential buildings, in relation to privacy, overshadowing, wind and microclimate".

#### **Local Planning Policy and Guidance**

- 3.6 The development site is located within the London Borough of Camden.
- 3.7 Camden's Core Strategy 2010-2025 (adopted in 2011) and Camden's Development Policies 2010-2025 (adopted in 2010), which form part of the Local Development Framework, contain a number of relevant policies.
- 3.8 Policy CS5 (Managing the impact of growth and development) states that "*The Council* will protect the amenity of Camden's residents and those working in and visiting the borough by ... e) making sure that the effect of developments on their occupiers and neighbours is fully considered ... and g) requiring mitigation measures where necessary."
- 3.9 Policy DP26 (Managing the impact of development on occupiers and neighbours) of states that "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 ... b) overshadowing and outlook; c) sunlight, daylight and artificial light levels ..."
- 3.10 Camden's Development Policies document notes, at paragraph 26.2, that "development should avoid harmful effects on the amenity of existing and future occupiers and to nearby properties". In its next paragraph it states that "A development's impact on … overshadowing … [and] access to daylight and sunlight can be influenced by its design and layout [and] the distance between properties … 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 into account the standards recommended in the British Research Establishment's Site Layout Planning for Daylight and Sunlight A Guide to Good Practice (1991)."
- 3.11 The Camden Local Plan Submission Draft 2016 notes, at paragraph 6.5, 'Loss of daylight and sunlight can be caused if spaces are overshadowed by development. To assess whether acceptable levels of daylight and sunlight are available to habitable, outdoor amenity and open spaces, the Council will take into account the most recent standards recommended by the Building Research Establishment (currently the Building Research Establishment's Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice 2011). Further detail can be found within our supplementary planning document Camden Planning Guidance 6: Amenity.'
- 3.12 Camden's Planning Guidance provides more detailed guidance on how the aforementioned planning policies will be applied.

- 3.13 Section 6 of CPG6 (Amenity) gives advice on daylight and sunlight and advises that "whilst we strongly support the aims of the BRE methodology for assessing sunlight and daylight we will view the results flexibly and where appropriate we may accept alternative targets to address any special circumstances of a site. For example, to enable new development to respect the existing layout and form in some historic areas. This flexible approach is at the Council's discretion and any exception from the targets will assessed on a case by case basis."
- 3.14 Paragraph 6.13 of CPG6 states "For existing dwellings the Council will consider the overall loss of daylight as opposed to the minimum acceptable levels of daylight. As the BRE guidance suggests, the readings should be interpreted flexibly and the aim of them is to help rather than constrain natural lighting is only one of the many factors in site layout design. Therefore in applying these standards in Camden it is reasonable to take account of other relevant factors."
- 3.15 Paragraphs 6.14 and 6.15 of CPG6 state, "For more complex and larger developments we will expect a daylight study to be submitted with the planning application showing the windows that will be affected and provide before development and post development figures for VSC and ADF. Other methods can be used to measure daylight and these can be incorporated in daylight and sunlight reports, where necessary, as a supplement to VSC and ADF measurements, such as the No Sky Line (NSL) test contained within BRE guidance." For this reason we have followed the normal BRE methodology of assessing impact on VSC and NSL and in any rooms where there are transgressions of the guidelines we have tested the ADF as well.
- 3.16 I confirm that we have undertaken our daylight and sunlight study in accordance with BRE Report 209, *Site Layout Planning for Daylight and Sunlight: A guide to good practice* (second edition, 2011).

#### 4. BRE METHOD OF ASSESSMENT AND NUMERICAL GUIDELINES

#### Daylight to existing surrounding buildings

- 4.1 Section 2.2 of the BRE Report makes recommendations concerning the impact on daylight to existing buildings. 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° to the horizontal, then the diffuse daylighting of the existing building may be adversely affected. This will be the case if either:
  - the VSC [vertical sky component] 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 in a room which can receive direct skylight is reduced to less than 0.8 times its former value."
- 4.2 So, where the angle to the horizontal subtended by the new development measured at the centre of the lowest window in an existing surrounding building (the angle of obstruction) is less than 25° (see Figure 3 below), the diffuse daylight to that building is unlikely to be significantly affected and need not be tested.

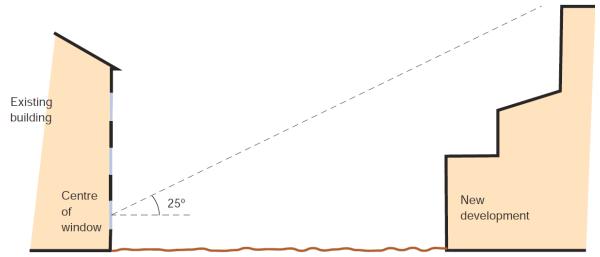


Figure 3 - Section perpendicular to a main window wall of an existing building showing a new development subtending an angle of less than 25° to the horizontal from the centre of the lowest window. (© BRE Report 209)

4.3 Where the obstruction angle is greater than 25°, both of the more detailed daylight tests should be undertaken, namely vertical sky component ('VSC') and daylight distribution. For each test the guidelines operate on the general principle that if the amount of daylight is reduced to less than 0.8 times its former value (i.e. there will be more than a 20% loss) the reduction will be noticeable to the building's occupants.

- 4.4 "Noticeable" does not necessarily equate to "unacceptable" and the BRE's standard target values should not be considered as pass/fail criteria. Ultimately the local planning authority will need to make a judgement as to whether any impacts are acceptable when weighed against the many other planning considerations.
- 4.5 The VSC test measures the amount of skylight available at the centre of a window on the external plane of the window wall. It has a maximum value of almost 40% for a completely unobstructed vertical window wall. If a room has two or more windows of equal size, the mean of their VSCs may be taken. As the VSC calculation takes no account of the size of the window being tested, the size of the room it lights or multiple windows of unequal size, it does not measure light inside the room. It merely measures the <u>potential</u> conditions in the room. The VSC results can therefore be potentially misleading if considered in isolation and should be read in conjunction with those of the second test daylight distribution.
- 4.6 The daylight distribution test calculates the area at working plane level inside a room that will have a direct view of the sky. This is done by plotting the no-sky line, i.e. the line on the working plane that divides those areas that receive direct skylight from those that do not.

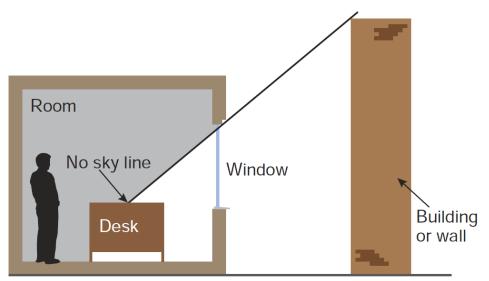


Figure 4 - The no-sky line divides areas of the working plan which can and cannot receive direct skylight. (© BRE Report 209)

- 4.7 One benefit of the daylight distribution test is that the resulting contour plans show where the light falls within a room, both in the existing and proposed conditions, and a judgement may be made as to whether the room will retain light to a reasonable depth.
- 4.8 The BRE guidelines are intended for use for rooms in adjoining dwellings. They may also be applied to any existing non-domestic buildings where the occupants have a reasonable expectation of daylight, which could include schools, hospitals, hotels and offices. For dwellings it states that living rooms, dining rooms and kitchens should be assessed. Bedrooms should also be checked, although it states that they are less important. Other

rooms, such as bathrooms, toilets, storerooms, circulation areas and garages need not be assessed.

4.9 Where rooms will not satisfy the standard numerical guidelines for VSC and/or daylight distribution it can be helpful to calculate the average daylight factor (ADF) for the room with the proposed development in place, so that a comparison may be made with the recommendations in BS8206-2:2008 *Lighting for buildings - Part 2: Code of practice for daylighting*. Appendix C of the BRE Report summarises BS8206, which recommends the following minimum ADFs in dwellings: 1% in bedrooms, 1.5% in living rooms and 2% in kitchens. The ADF test is intended for use in designing new buildings for satisfactory daylight, not for impact assessments. Nevertheless, the results can be of assistance to a local planning authority when judging whether an impact on daylight that is noticeable is nonetheless acceptable when considered in the broader town planning context.

#### Sunlight to existing surrounding buildings

- 4.10 Section 3.2 of the BRE Report makes recommendations concerning the impact on sunlight to existing dwellings or non-domestic buildings where there is a particular requirement for sunlight. The guide notes at paragraph 3.2.1 that "obstruction to sunlight may become an issue if:
  - some part of a new development is situated within 90° of due south of a main window wall of an existing building; and
  - in the section drawn perpendicular to the existing window wall, the new development subtends an angle greater than 25° to the horizontal measured from the centre of the lowest window to a main living room."
- 4.11 If these angle criteria are not met, the guide recommends a more detailed check to calculate the impact of the proposed development on the available sunlight.
- 4.12 The guide suggests "all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° 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 90° of due south anyway." (BRE paragraph 3.2.3)
- 4.13 The available sunlight is measured in terms of the percentage of annual probable sunlight hours ('APSH') at the centre point of the window. 'Probable sunlight hours' is defined as *"the long-term average of the total number of hours during a year in which direct sunlight reaches the unobstructed ground (when clouds are taken into account)."*

#### 4.14 Paragraph 3.2.11 of the BRE Report summarises its sunlight guidance as follows:

"If a living room of an existing dwelling has a main window facing within 90° of due south, and any part of a new development subtends an angle of more than 25° 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 received over the whole year greater than 4% of annual probable sunlight hours".

#### **Computer simulation**

- 4.15 Appendix A of the BRE guide describes a method for calculating VSC and APSH using various indicator templates and Appendix D shows how the no-sky line may be plotted inside a room. Where the obstructions on the skyline are complex these manual methods can be difficult to apply and the results can be crude. We therefore prefer to use computer simulation and our specialist software, which is based on the more accurate Waldram method, which is described in Appendix B of the BRE guide.
- 4.16 The information upon which our computer model was based is explained in the section 6 of this report.

### 5. APPLICATION OF BRE GUIDELINES

#### Flexible application of the guidelines

- 5.1 In its introduction the BRE Report 209 (second edition, 2011) states:
  - (Its) "main aim is ... to help to ensure good conditions in the local environment, considered broadly, with enough sunlight and daylight on or between buildings for good interior and exterior conditions." (BRE paragraph 1.5)
  - "The guide is intended for building designers and their clients, consultants and planning officials. 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." (BRE paragraph 1.6)
  - *"Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design."* (BRE paragraph 1.6)
- 5.2 Clearly, the BRE guide is an advisory document, not a rigid set of rules. Care must therefore be taken to apply its recommendations in a manner fitting to the location of the proposed development.

#### Alternative target values

- 5.3 In theory the BRE report's numerical guidelines may be applied to any setting, whether that is a city centre, suburban area or rural village. However, it notes, "In special circumstances the developer or planning authority may wish to use different target values. 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... The calculation methods ... are entirely flexible in this respect." (BRE paragraph 1.6)
- 5.4 At paragraph 2.2.3 it states "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." Appendix F of the BRE Guide gives advice on setting alternative target values for skylight access. At page 62 it states "different targets may be used, based on the special requirements of the proposed development or its location".
- 5.5 Clearly, rigid application of the numerical guidelines could well give rise to an inappropriate answer and form of development for city centre sites, in which case it may be appropriate to adopt lower target values that are more appropriate to the location concerned.

#### Proximity of neighbouring building to the boundary

5.6 The BRE guide permits the reasonableness or otherwise of the distance of the neighbouring building from the boundary to be taken into account. At paragraph 2.2.3 it states, "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".

#### **Interpretation of relative impacts**

- 5.7 Except where the BRE guide's specified minimum values will be retained in the proposed condition (see paragraphs 4.1 and 4.14 above), the guide advises that a loss of light will be noticeable if the amount retained will be less than 0.8 times its former value (the "BRE 0.8 guideline"). Care must be taken when interpreting the 'relative impact' figures (in the columns marked "factor of former value" in the tables of results), because where an existing value is low even a small reduction in real terms can manifest itself as a large relative impact. For example a reduction from 6%VSC to 3%VSC will appear as a reduction to 0.5 times its former value, and is therefore a transgression of the guidelines in theory, but in reality a loss of 3% VSC is very small and would be barely perceptible.
- 5.8 When the BRE launched the second edition of their guidelines in 2011, they cited the above logic as the reason for introducing the third tier to their sunlight criteria, as referred to in paragraph 4.14 above, namely that sunlight will be adversely affected where it is reduced below 25% APSH annually or 5% APSH and to less than 0.8 times its former value and where the reduction annually is greater than 4% APSH criteria.

#### Balconies, projecting wings and other self-obstructing projections

- 5.9 The BRE guide acknowledges that balconies and projecting wings to existing neighbouring buildings artificially limit the available daylight and sunlight and, as a consequence, larger relative reductions in light may be unavoidable. More specifically it states:
  - "Existing windows with balconies above them typically receive less daylight. Because the balcony cuts out light from the top part of the sky, even a modest obstruction opposite may result in a large relative impact on the VSC, and on the area receiving direct skylight. One way to demonstrate this would be to carry out an additional calculation of the VSC and area receiving direct skylight, for both the existing and proposed situations, without the balcony in place. For example, if the proposed VSC with the balcony was under 0.8 times the existing value with the balcony, but the same ratio for the values without the balcony was well over 0.8, this would show that the presence of the balcony, rather than the size of the new obstruction, was the main factor in the relative loss of light." (BRE paragraph 2.2.11)

- "A larger relative reduction in VSC may also be unavoidable if the existing window has projecting wings on one or both sides of it, or is recessed into the building so that it is obstructed on both sides as well as above." (BRE paragraph 2.2.12)
- "Balconies and overhangs above an existing window tend to block sunlight, especially in summer. Even a modest obstruction opposite may result in a large relative impact on the sunlight received. One way to demonstrate this would be to carry out an additional calculation of the APSH, for both the existing and proposed situations, without the balcony in place. For example, if the proposed APSH with the balcony was under 0.8 times the existing value with the balcony, but the same ratio for the values without the balcony was well over 0.8, this would show that the presence of the balcony, rather than the size of the new obstruction, was the main factor in the relative loss of sunlight." (BRE paragraph 3.2.9)
- 5.10 Clearly, where windows are inset or self-obstructed by balconies or other projections they will be unusually sensitive to changes in massing opposite and transgressions of the BRE's default numerical guidelines are more likely to arise. In such circumstances flexible application of the guidelines is very important.

#### **Deep rooms**

5.11 The BRE guide advises that light penetration into deep rooms lit from one side only may be unavoidably affected. At paragraph 2.2.10 it states, "*The guidelines* … *need to be applied sensibly and flexibly. There is little point in designing tiny gaps in the roof lines of new development in order to safeguard no sky lines in existing buildings. If an existing building contains rooms lit from one side only and greater than 5 m deep, then a greater movement of the no sky line may be unavoidable.*"

#### 6. INFORMATION USED IN THE TECHNICAL STUDY

6.1 In order to carry out the tests recommended in the BRE Report, we commenced by building a 3D computer model of the existing buildings on the site, the existing surrounding buildings to be studied, other relevant background massing and the proposed scheme. The computer model is illustrated on the drawings at Appendix C and is based on the information listed below.

#### Proposed scheme:

 Robson Warren's model of the proposed scheme: Model nos. 2394 A – Dunstan House 3D (06-06-206) dated 6 June 206

Existing building on the site and existing surrounding buildings:

- Maltby Land Survey measured survey model nos 13291-500
- OS map
- Aerial photography from Microsoft Bing
- Site photographs

Internal arrangements within existing surrounding buildings:

Property	Drawings with planning application ref.
44 Saffron Hill	Michael Sierens Associates drawings nos. 94/799/11 - 94/799/18
Munro House, 14 St Cross Street	Layouts from internal survey. Maltby Land Surveys' drawing nos. 13291_100, 13291_200 - 13291_207, 13291_300, 13291_400 & 13291_500

### 7. SCOPE OF TECHNICAL STUDY

- 7.1 In our experience local planning authorities are usually only concerned with the impact on residential properties and this is the basis on which we have scoped our technical study.
- 7.2 Having regard to the preliminary 25°-line test and orientation test recommended in the BRE Report, as explained above in paragraphs 4.1 and 4.10, we have calculated the impact of the proposed development on the daylight levels to relevant rooms in the following existing surrounding buildings. We have not tested sunlight to any of the existing surrounding properties as the only residential windows that are situated to the north of any part of the proposed development do not face within 90 degrees of due south.

Properties	Daylight	Sunlight
44 Saffron Hill	Yes	No
Munro House, 14 St Cross Street	Yes	No

- 7.3 We have only tested the impact on the main rooms in each property, as advised in the BRE guidelines. It is not necessary to test staircases, hallways, bathrooms, toilets etc.
- 7.4 Each of the existing surrounding buildings tested is shown labelled on the plan and 3D views of the computer model on our drawings at Appendix C of this report.
- 7.5 The daylight distribution contour plans at Appendix G show the window positions and room layouts that have been tested in each of the buildings concerned.

#### 8. IMPACT UPON SURROUNDING PROPERTIES

- 8.1 In this section of my report I set out my analysis of the daylight results of our impact study. For each element I will provide commentary on the results taking each property in turn.
- 8.2 To re-cap briefly on the assessment criteria explained in section 5, each of the tests is run in the existing and proposed condition so that the daylight and sunlight levels before and after development are quantified and the relative change is determined. Except where the BRE guide's specified minimum values will be retained in the proposed condition, it advises that a loss of light will be noticeable if the amount retained will be less than 0.8 times its former value (the "BRE 0.8 guideline").

#### Daylight to existing surrounding buildings

8.3 The numerical results of the vertical sky component ('VSC') test are tabulated at Appendix D. For the daylight distribution test, numerical results are tabulated at Appendix E and no-sky contour plans are shown on our drawings at Appendix G. On the plans, the area of the room with a view of sky in the proposed condition is enclosed by the red contour and in the existing condition by the green contour. Where there will be no effect on the no-sky contour the red contour sits on top of the green one and only the red contour is visible. Where there will be a change, the areas of the room that will lose a view of sky are cross-hatched black.

#### 44 Saffron Hill:

- 8.4 This property is located to the south east of the proposed development on the corner of St Cross Street and Saffron Hill. The daylight distribution contours for this property are shown on drawing no. ROL6963\_08\_110.
- 8.5 All of the windows and rooms tested will satisfy the BRE guidelines for both VSC and daylight distribution, generally with negligible reductions to existing levels.

#### Munro House, 14 St Cross Street:

8.6 The applicant owns this adjacent property to the west, which has a U-shaped footprint and straddles the narrow passageway of Hatton Place. The eastern wing of the property nearest to the development site does not have any windows in the flank wall facing the site, so daylight to the flats within this wing will be unaffected.

- 8.7 The western wing contains one flat per floor from first to fifth floor levels, each with two bedrooms per floor lit by windows fronting the Hatton Place passageway and a main living room in the main part of Munro House facing south over St Cross Street. The east-facing bedroom windows take light from over the eastern wing of Munro House and the Dunstan House development site beyond and are blinkered by the main part of Munro House to the south. The internal layouts and the resulting daylight distribution contours are shown on drawing no. ROL6963\_08\_109.
- 8.8 All of the bedroom windows in the western wing will satisfy the BRE guidelines for VSC. All but three bedrooms will also satisfy the guidelines for daylight distribution; the exceptions being two bedrooms at second floor level (R1 & R2/92) and one at third floor level (R1/93), which will reduce to between 0.61 and 0.70 times former value.
- 8.9 As explained above at paragraphs 3.15 and 4.9, we also assessed the effect on the average daylight factor (ADF) to the aforementioned three bedrooms. Their ADF values will reduce slightly from 0.75%, 0.91% and 1.06% in the existing condition to 0.68%, 0.82% and 0.93% in the proposed condition, i.e. between 0.88 and 0.91 times their former value.
- 8.10 Although the BRE guidelines advise that bedrooms should be checked, they also recognise that they are less important than main living rooms. Furthermore, the main living rooms in the two flats concerned front onto St Cross Street and enjoy good daylight as they face down Kirby Street and will be unaffected by the proposed development. In that context the effects on the three bedrooms noted above represent a very minor transgression of the guidelines.

#### 9. SUMMARY AND CONCLUSION

- 9.1 The London Borough of Camden's planning policy seeks to safeguard daylight and sunlight to existing buildings and points to the guidance published in BRE Report 209, *Site Layout Planning for Daylight and Sunlight: A guide to good practice*. Its planning guidance advises that it will view the results flexibly and may accept alternative targets to address special site circumstances.
- 9.2 We have undertaken a study of the impact of the proposed development on the relevant windows and rooms in the surrounding dwellings. The tests were undertaken in accordance with BRE Report 209. The BRE guide gives useful advice and recommends various numerical guidelines by which to assess the impact of development on daylight and sunlight to existing surrounding properties.
- 9.3 The relationship between the neighbouring properties and the development site and the orientation of the windows concerned are such that sunlight is not an issue and need not be assessed.
- 9.4 There will generally be negligible effect on daylight to the surrounding dwellings, with all windows and the vast majority of rooms satisfying the guidelines. There will be a few very minor reductions in daylight to bedrooms in two flats within the applicant's neighbouring property at Munro House; however the guidelines recognise that bedrooms are less important than main living rooms, which will be unaffected by the development and continue to enjoy good daylight, as they face down Kirby Street.
- 9.5 In the main, the layout of the proposed development will satisfy the BRE guidelines and will not significantly reduce sunlight or daylight to existing surrounding properties. In my opinion London Borough of Camden's planning policy on daylight and sunlight will be satisfied.

Adan Gosprane

Aidan Cosgrave BSc(Hons) MRICS

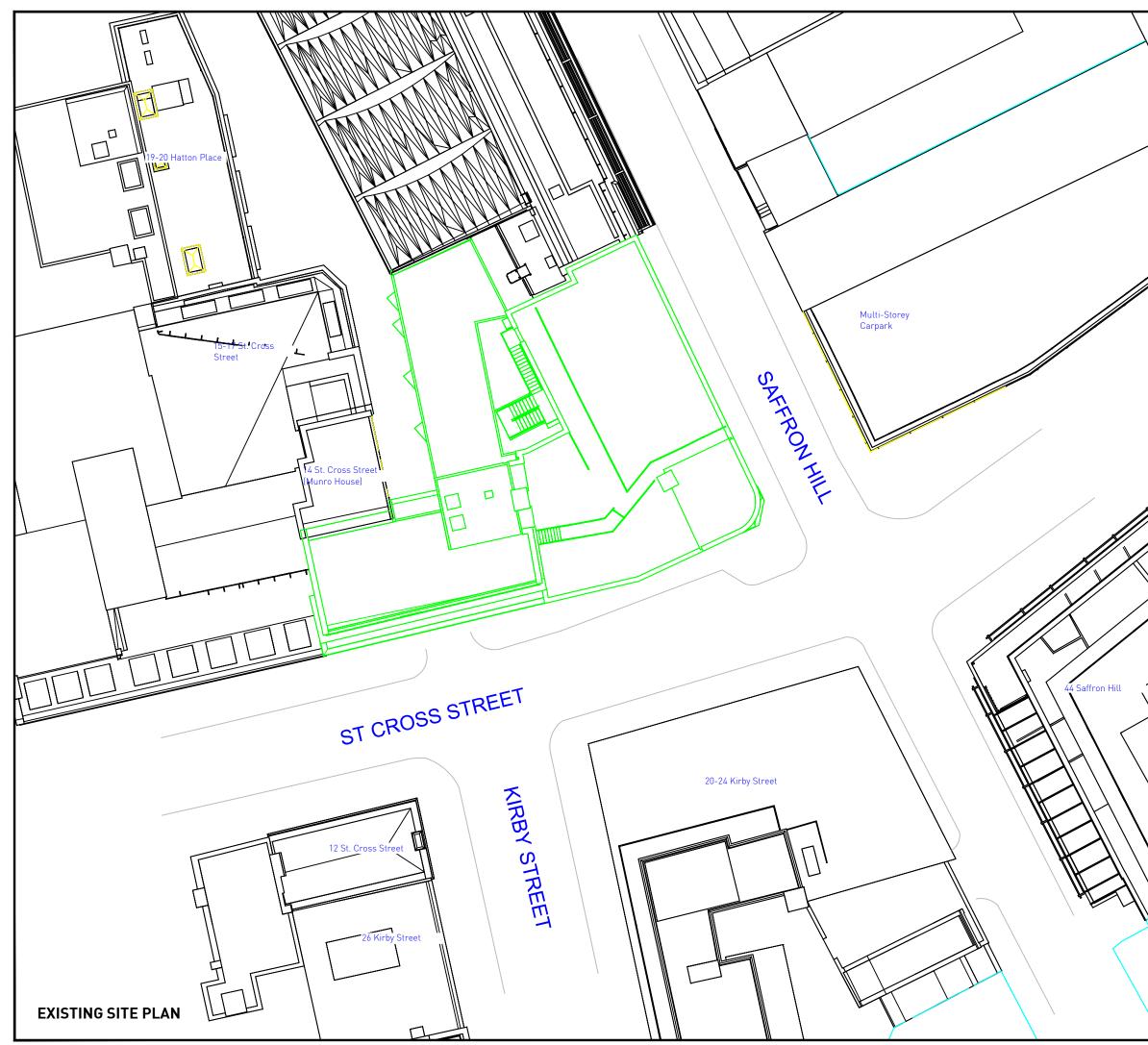
Director ANSTEY HORNE

23 June 2016

# APPENDIX A

### SITE PLAN

DRAWING NOS. ROL6963\_08\_001



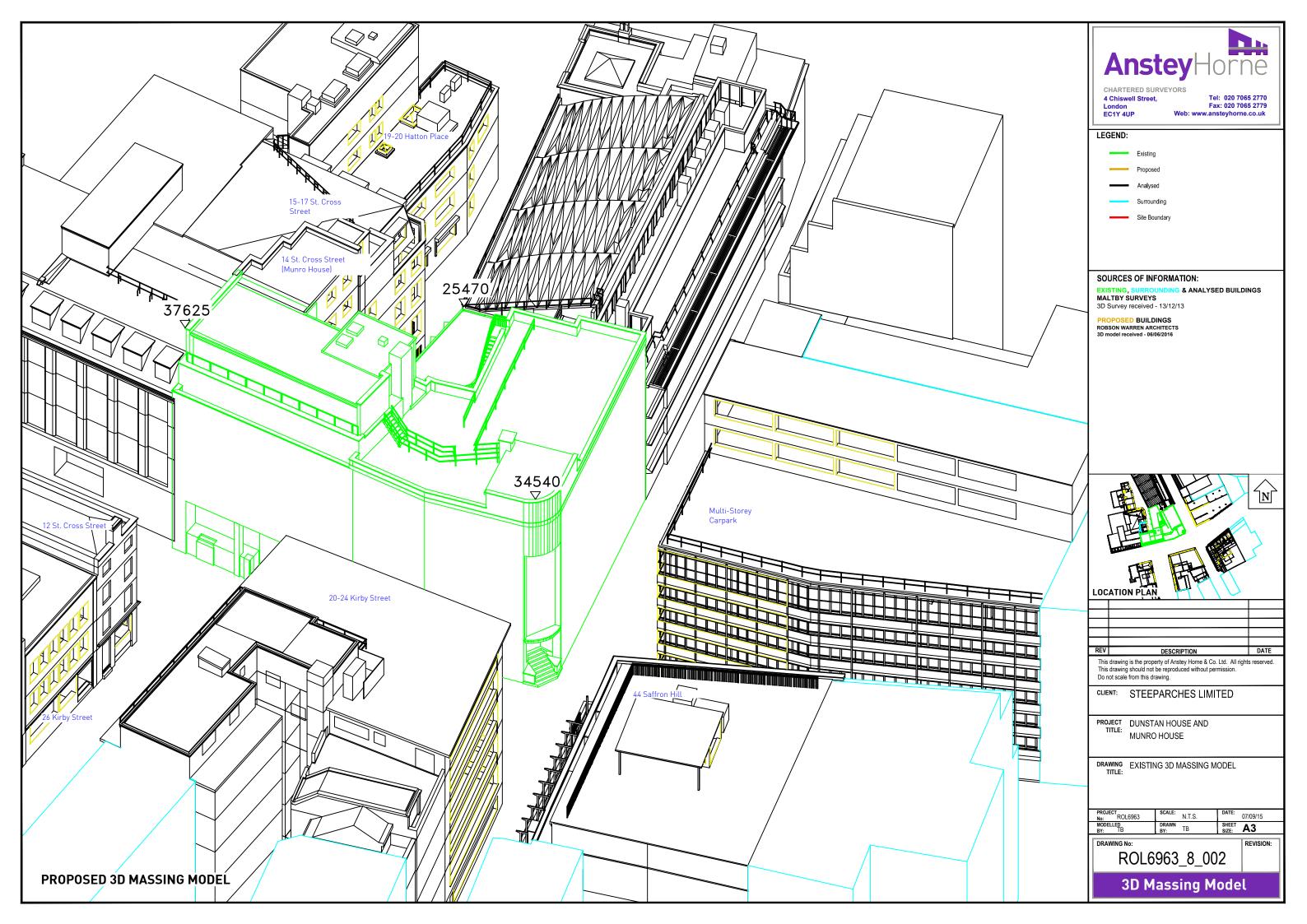
	CHARTERED SURVEYORS 4 Chiswell Street, London EC1Y 4UP Keb: www.ansteyhorne.co.uk
	LEGEND: Existing Proposed Analysed Surrounding Site Boundary
	SOURCES OF INFORMATION: EXISTING, SURROUNDING & ANALYSED BUILDINGS MALTBY SURVEYS 3D Survey received - 13/12/13 PROPOSED BUILDINGS ROBSON WARREN ARCHITECTS 3D model received - 06/06/2016
I	
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	This drawing is the property of Anstey Horne & Co. Ltd. All rights reserved. This drawing should not be reproduced without permission. Do not scale from this drawing. CLIENT: STEEPARCHES LIMITED
	PROJECT DUNSTAN HOUSE AND
	DRAWING EXISTING SITE PLAN TITLE:
$\backslash$	PROJECT ROL6963 SCALE: 1:250 DATE: 07/09/15
$\backslash$	BY: TB BY: TB SIZE: A3
	ROL6963_8_001
	Site Plan

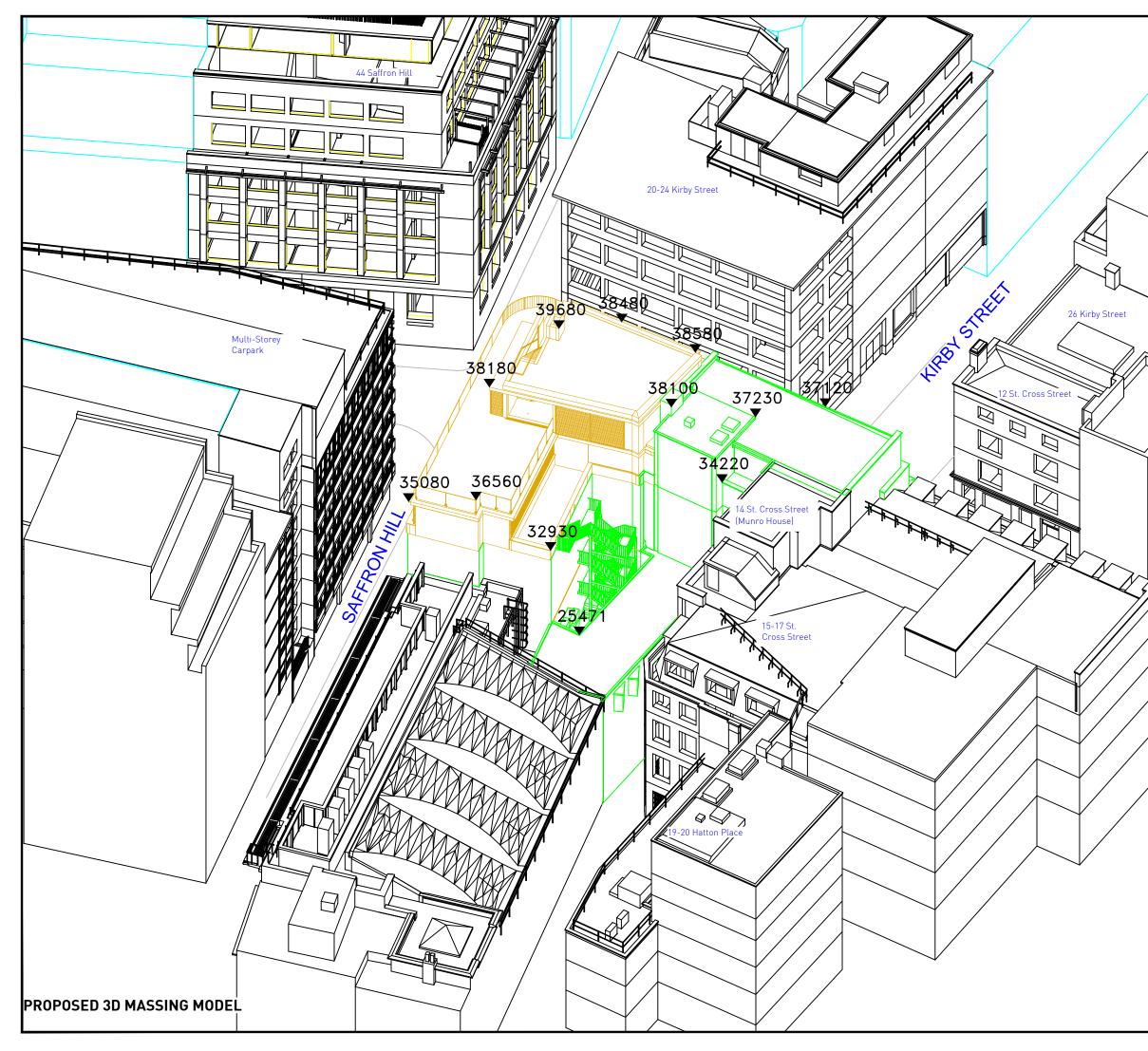
### **APPENDIX B**

#### PLAN AND 3D VIEWS OF THE COMPUTER MODEL

DRAWING NOS. ROL6963\_08\_002 TO 004







CHARTERED SURVEYORS   4 Chiswell Street,   1 Chiswell Street,   2 Chiswell Street,
Surounding
RV DESCRIPTION DATE   Ris drawing is the property of Anstey Horne & Co. Ltd. All rights reserved. This drawing should not be reproduced without permission. Do not scale from this drawing. DATE   CLIENT: STEEPARCHES LIMITED   PROJECT: DUNSTAN HOUSE   IN ISOLATION LONDON   SCHEME: SCHEME RECEIVED:- 06/06/19   REF: SCHEME RECEIVED:- 06/06/19   DRAWING: 3D MASSING MODEL VIEW   TITLE: PROPOSED CONDITION   MODELLED BY:/ DRAWN BY: DATE:   *'/SK A3   DRAWING NO: REVISION:   ROL6963_08_004 REVISION:   AD MASSING MODEL SCALE:   MODELLED BY:/ DRAWN BY: DATE:   ''/SK SCALE:

## APPENDIX C

VERTICAL SKY COMPONENT ('VSC') TABLE

#### TABLE P1 VERTICAL SKY COMPONENT (VSC) SURROUNDING BUILDINGS



Robson Warren Architects, scheme received - 06/06/16

Property/	Property	Room	Window	Existing	Proposed	*Factor of
room ref.	type	usage	ref.	VSC(%)	VSC(%)	former value
		00080		130(70)	100(70)	
44 Saffron Hill						
44 Samon min						
Gnd Floor						
R1/80		BEDROOM	W3/80	5.68	5.50	0.97
R2/80		KITCHEN	W4/80	5.89	5.64	0.96
R3/80		LIVINGROOM	W5/80	6.71	6.45	0.96
R3/80		LIVINGROOM	W6/80	16.44	15.94	0.97
R4/80		LIVINGROOM	W7/80	15.43	14.90	0.97
R5/80		KITCHEN	W8/80	14.77	14.36	0.97
R6/80		BEDROOM	W9/80	14.21	13.91	0.98
R7/80		BEDROOM	W10/80	13.60	13.42	0.99
R8/80		BEDROOM	W10/80	13.18	13.05	0.99
10,00		DEDINOON		15.10	13.05	0.55
1st Floor						
R1/81		BEDROOM	W12/81	17.66	17.48	0.99
R2/81		LIVINGROOM	W12/81 W11/81	18.09	17.83	0.99
R3/81		BEDROOM	W9/81	19.21	18.69	0.97
R3/81		BEDROOM	W10/81	18.61	18.26	0.98
R4/81		LIVINGROOM	W8/81	19.88	19.18	0.96
R5/81		LIVINGROOM	W6/81	9.23	8.85	0.96
R5/81		LIVINGROOM	W7/81	20.71	20.02	0.97
R6/81		KITCHEN	W5/81	8.49	8.16	0.96
R7/81		BEDROOM	W4/81	8.41	8.18	0.97
117/01		DEDITOON	VV4/01	0.41	0.10	0.57
2nd Floor						
R1/82		BEDROOM	W12/82	22.04	21.80	0.99
R2/82		LIVINGROOM	W12/82	22.55	22.18	0.98
R3/82		BEDROOM	W9/82	23.45	22.81	0.97
R3/82		BEDROOM	W10/82	23.02	22.53	0.98
R4/82		LIVINGROOM	W8/82	23.92	23.06	0.96
R5/82		LIVINGROOM	W6/82	12.00	11.62	0.97
R5/82		LIVINGROOM	W7/82	24.29	23.41	0.96
R6/82		KITCHEN	W5/82	11.64	11.29	0.97
R7/82		BEDROOM	W4/82	11.92	11.68	0.98
117/02		DEDITOON	VV4/02	11.52	11.00	0.50
3rd Floor						
R1/83		BEDROOM	W12/83	25.78	25.40	0.99
R2/83		BEDROOM	W12/83 W11/83	26.06	25.59	0.99
R3/83		BEDROOM	W11/83 W10/83	26.42	25.80	0.98
R4/83		BEDROOM	W10/85 W9/83	26.78	25.80 25.97	0.98
R5/83		LIVINGROOM	W8/83	20.78	26.06	0.97
R6/83		LIVINGROOM	W6/83	17.67	20.00	0.96
R6/83		LIVINGROOM	W7/83	27.42	26.37	0.97
R7/83		KITCHEN	W5/83	17.28	26.37 16.86	0.98
			W5/83 W4/83			
R8/83		BEDROOM	vv4/ð3	18.08	17.78	0.98
4th Floor						
			W10/94	22.20	22.76	NI/A
R1/84		BEDROOM	W10/84	33.38	32.76	N/A
R2/84	I	BATHROOM?	W9/84	33.58	32.86	N/A

\*NOTES: 'Factor of former value' = Proposed VSC / Existing VSC.

A factor greater than 1 indicates an increase in daylight.

A proposed VSC of 27% or more satisfies the BRE criteria and the ratio is N/A.

#### TABLE P1 VERTICAL SKY COMPONENT (VSC) SURROUNDING BUILDINGS



Property/ Property		Room	Window	Existing	Proposed	*Factor of
room ref.	type	usage	ref.	VSC(%)	VSC(%)	former value
R3/84		BEDROOM	W8/84	33.87	33.04	N/A
R4/84		LIVINGROOM	W6/84	34.17	33.16	N/A
R4/84		LIVINGROOM	W7/84	34.04	33.12	N/A
R5/84		KITCHEN	W5/84	30.48	29.97	N/A
R6/84		BEDROOM	W4/84	29.89	29.47	N/A
R7/84		BEDROOM	W2/84	30.25	30.03	N/A
R7/84		BEDROOM	W3/84	29.77	29.46	N/A
14 St. Cross Stre	et (Munro House)					
1st Floor						
R1/91		BEDROOM	W1/91	10.02	8.99	0.90
R2/91		BEDROOM	W2/91	11.73	10.44	0.89
2nd Floor						
R1/92		BEDROOM	W1/92	14.93	12.70	0.85
R2/92		BEDROOM	W2/92	17.79	15.03	0.84
3rd Floor						
R1/93		BEDROOM	W2/93	24.65	20.35	0.83
R2/93		BEDROOM	W1/93	20.42	17.11	0.84
4th Floor						
R1/94		BEDROOM	W1/94	25.51	22.48	0.88
R2/94		BEDROOM	W2/94	29.92	26.18	0.88
5th Floor						
R1/95		BEDROOM	W1/95	33.61	32.28	N/A
R2/95		BEDROOM	W2/95	35.66	34.03	N/A

## APPENDIX D

DAYLIGHT DISTRIBUTION TABLE

#### TABLE P2 DAYLIGHT DISTRIBUTION (DD) SURROUNDING BUILDINGS



Robson Warren Architects, scheme received - 06/06/16

Property /	Property	Room	Room area	Existing lit	Proposed lit	*Factor of
room ref.	type	Usage	(m²)	area (m²)	area (m²)	former value
44 Saffron Hill						
Gnd Floor						
R1/80		BEDROOM	11.34	2.04	2.04	1.00
R2/80		KITCHEN	8.01	1.76	1.76	1.00
R3/80		LIVINGROOM	16.33	14.14	14.14	1.00
R4/80		LIVINGROOM	23.76	13.73	11.91	0.87
R5/80		KITCHEN	10.30	7.07	6.75	0.96
R6/80		BEDROOM	7.90	6.39	6.39	1.00
R7/80		BEDROOM	14.79	10.82	10.82	1.00
R8/80		BEDROOM	16.59	12.96	12.96	1.00
1st Floor						
R1/81		BEDROOM	15.62	13.53	13.53	1.00
R2/81		LIVINGROOM	20.94	15.57	15.57	1.00
R3/81		BEDROOM	21.53	21.40	20.73	0.97
R4/81		LIVINGROOM	18.62	15.55	14.24	0.92
R5/81		LIVINGROOM	18.61	18.35	18.35	1.00
R6/81		KITCHEN	8.10	3.56	3.56	1.00
R7/81		BEDROOM	12.13	4.55	4.55	1.00
2nd Floor						
R1/82		BEDROOM	15.62	14.53	14.53	1.00
R2/82		LIVINGROOM	20.94	17.71	17.71	1.00
, R3/82		BEDROOM	21.53	21.29	21.14	0.99
, R4/82		LIVINGROOM	18.62	16.82	16.58	0.99
R5/82		LIVINGROOM	18.20	17.95	17.95	1.00
R6/82		KITCHEN	8.03	4.35	4.35	1.00
R7/82		BEDROOM	11.93	6.48	6.48	1.00
,						
3rd Floor						
R1/83		BEDROOM	21.61	18.24	18.24	1.00
R2/83		BEDROOM	16.56	13.87	13.87	1.00
R3/83		BEDROOM	10.67	10.48	10.48	1.00
R4/83		BEDROOM	11.64	11.15	11.15	1.00
R5/83		LIVINGROOM	23.39	20.26	19.69	0.97
R6/83		LIVINGROOM	18.07	17.92	17.92	1.00
R7/83		KITCHEN	8.01	4.92	4.92	1.00
R8/83		BEDROOM	11.92	8.88	8.88	1.00
10/05		DEDITOON	11.52	0.00	0.00	1.00
4th Floor						
R1/84		BEDROOM	15.90	15.87	15.87	1.00
R2/84		BATHROOM?	7.69	7.60	7.60	1.00
R3/84		BEDROOM	13.45	13.42	13.42	1.00
R4/84		LIVINGROOM	23.84	23.82	23.82	1.00
R5/84		KITCHEN	6.45	6.28	6.28	1.00
R5/84 R6/84		BEDROOM	0.45 14.21	6.28 14.07	6.28 14.07	1.00
R7/84		BEDROOM	24.26	24.25	24.25	1.00



Property /	Property	Room	Room area	Existing lit	Proposed lit	*Factor of
room ref.	type	Usage	(m²)	area (m²)	area (m²)	former value
14 St. Cross S	treet (Munro Ho	use)				
1st Floor						
R1/91		BEDROOM	9.97	3.40	3.06	0.90
R2/91		BEDROOM	11.73	2.20	1.79	0.81
2nd Floor						
R1/92		BEDROOM	10.03	7.58	5.26	0.69
R2/92		BEDROOM	12.10	5.26	3.23	0.61
3rd Floor						
R1/93		BEDROOM	13.78	9.69	6.78	0.70
R2/93		BEDROOM	11.03	9.61	9.02	0.94
4th Floor						
R1/94		BEDROOM	7.64	7.14	7.14	1.00
R2/94		BEDROOM	12.99	11.26	11.12	0.99
5th Floor						
R1/95		BEDROOM	10.28	9.57	9.57	1.00
R2/95		BEDROOM	12.61	10.73	10.73	1.00

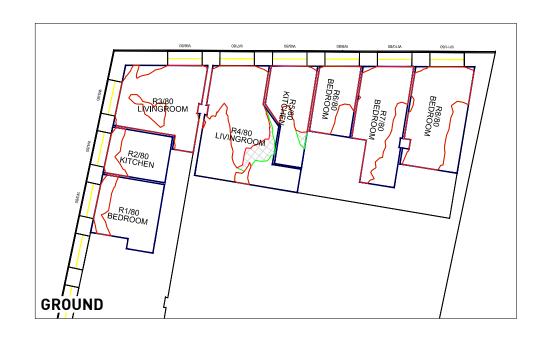
## APPENDIX E

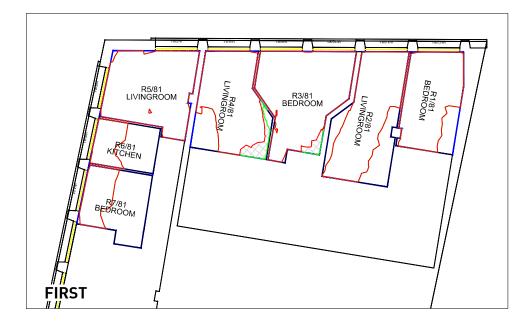
### DAYLIGHT DISTRIBUTION CONTOUR PLANS

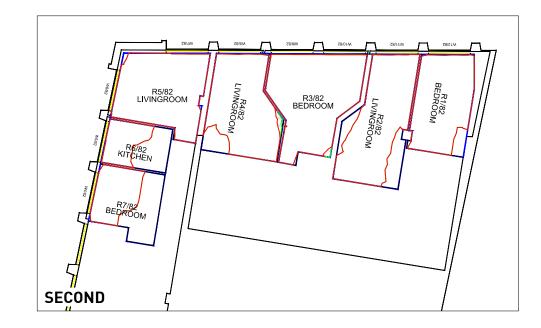
DRAWING NOS. ROL6963\_08\_109 TO 110

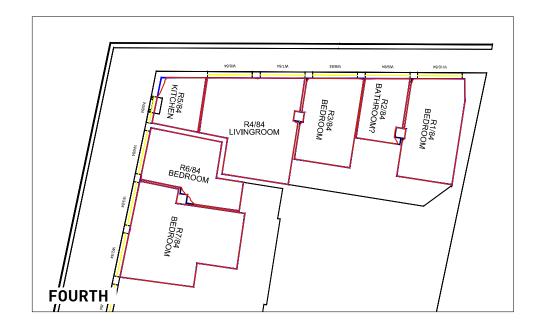


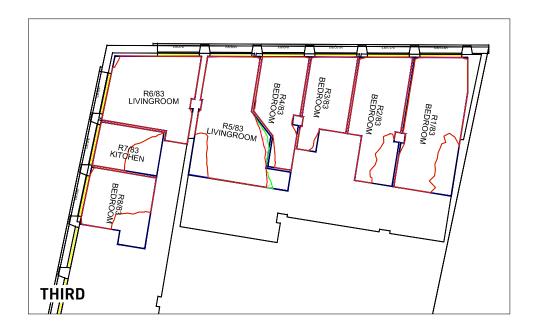
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	Room Layout from Plan/ Inspection Proposed Contour   Room Layout - Notional Existing Contour   Assumed Room Layout Square Ft. Grid
	SOURCES OF INFORMATION:
	EXISTING, SURROUNDING & ANALYSED BUILDINGS MALTBY SURVEYS Survey received - 13/12/13 PROPOSED BUILDINGS ROBSON WARREN ARCHITECTS 3D model received - 06/06/16
	0 <u>m 2m 4m 6m 8m 10</u> m
	REV DESCRIPTION DATE
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	CLIENT: STEEPARCHES LIMITED
	PROJECT DUNSTAN HOUSE TITLE: IN ISOLATION LONDON
	SCHEME SCHEME RECEIVED:- 06/06/19
	DRAWING   DAYLIGHT DISTRIBUTION CONTOURS     TITLE:   MUNRO HOUSE     14 ST, CROSS STREET
	MODELLED BY:/ DRAWN BY: DATE: */5K 13/06/16 SCALE: 1:200 A3
	**/sk   13/06/16   1.200   A3     DRAWING No:   ROL6963_08_109   REVISION:
	Daylight & Sunlight











<b>Anstey</b> Horne
CHARTERED SURVEYORS 4 Chiswell Street, Tel: 020 7065 2770 London Fax: 020 7065 2779 EC1Y 4UP Web: www.ansteyhorne.co.uk
LEGEND:
Room Layout from Plan/ Inspection Proposed Contour
Room Layout - Notional Contour
Assumed Room Square Ft. Layout Grid
SOURCES OF INFORMATION:
EXISTING, SURROUNDING & ANALYSED BUILDINGS MALTBY SURVEYS
Survey received - 13/12/13 PROPOSED BUILDINGS ROBSON WARREN ARCHITECTS 3D model received - 06/06/16
0m <u>2m 4m 6m 8m 10</u> m
REV   DESCRIPTION   DATE     This drawing is the property of Anstey Home & Co. Ltd. All rights reserved.   This drawing should not be reproduced without permission.     Do not scale from this drawing.   Description
CLIENT: STEEPARCHES LIMITED
PROJECT DUNSTAN HOUSE TITLE: IN ISOLATION LONDON
SCHEME RECEIVED:- 06/06/19
DRAWING DAYLIGHT DISTRIBUTION CONTOURS TITLE: 44 SAFFRON HILL
MODELLED BY/ DRAWN BY: DATE: */SK 13/06/16 SCALE: 1:200 A3 DRAWING No: REVISION:
ROL6963_08_110
Daylight & Sunlight

Chartered Surveyors, founded 1795

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