DAYLIGHT, SUNLIGHT REPORT

in respect of Proposed Extension at

Cannon Hall, 14 Cannon Place, London, NW3

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162-168 Regent Street
London
W1B 5TF

020 3633 0010

Joel Michaels Reynolds
CHARTERED BUILDING SURVEYORS

Contents

1. The Site, Proposal and Surrounding Buildings

The Site is located on the west side of Cannon Lane. The existing building is used for residential purposes.

The proposed extension is replacing an existing conservatory with a new conservatory more in keeping with the property. The proposed conservatory is slightly larger than the existing conservatory.

There is only one neighbouring property that is within any proximity of the proposed extension. This property is Cannon Lodge, Cannon Place. This neighbour property is to the west of 14 Cannon Place. None of the windows serving the neighbour property that are to the front elevation of the neighbour property looking towards Cannon Place will be affected by the proposed extension to 14 Cannon Place. Therefore, these windows have been ignored from any assessment. This is a similarly the case with regard to neighbouring windows to the rear of the neighbour property. There are a number of windows to the side elevation of the neighbour property, however those at first floor and above will not be affected by the proposed ground floor extension to 14 Cannon Place. There is one window at ground floor level in close proximity to the proposed extension and it is this window that has been assessed and is the subject of this report.

Whilst there is in close proximity to the proposed extension at 14 Cannon Place a passageway which links from the neighbour property down the side of the same and into the rear conservatory, this walkway, passageway is lit by a rooflight. This rooflight has been ignored for two reasons. The first being that a passageway, walkway, does not require assessment as set out in the BRE guidance and secondly, this area is lit by a rooflight which will not be impacted by the proposed extension at 14 Cannon Place.

A Site Plan is attached at Appendix 1.

2. Method of Assessment

The daylight, sunlight to adjoining residential and assisted care use properties have been considered with reference to the BRE guidance, 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice BR209' 2022 Edition (BRE Guidance).

The BRE Guidance 2022 Edition in its own introduction advises that "*it is intended for building designers and their clients, consultants and planning officials. The advice given is not mandatory and the guidance should not be seen as an instrument of planning policy. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design. 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…"

It is important to recognise that daylight, sunlight assessments are one of many considerations that form part of a planning application.

The BRE suggested target criteria should not be considered as a pass, fail criteria in any way.

Given that the BRE Guidance was primarily designed for new housing schemes, two storeys high in a suburban context and not with a (dense) urban environment in mind, a greater flexibility can be applied. Where the assessments have been undertaken in a (dense) urban context or an area designated for much needed housing, regeneration, growth, it should be recognised that not meeting the BRE Guidance does not equate to unacceptable in planning terms.

The BRE Guidance suggests four methods for calculating daylight. The Vertical Sky Component (VSC) and No-Sky Line contour (NSL) are considered appropriate for assessing daylight to existing buildings. Recommendations for daylight in new buildings are given in BS EN 17037 *"Daylight in Buildings"*. Daylight provision in new rooms may be checked using either of the methods in BS EN 17037 "Daylight in Buildings", direct prediction of Illuminance levels using hourly climate data, or the use of the Daylight Factor. Both are measures of the overall amount of daylight in a space.

Areas Requiring Assessment

2.2.2 of the BRE guidance suggests:-

"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, storerooms, 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."

We consider that hotel, retail and commercial spaces should be considered as not requiring a reasonable expectation of daylight or sunlight. This is because these areas are generally designed to rely on electric lighting to provide sufficient and constant uniform light as part of the customer experience or by which to work, rather than rely upon natural daylight or sunlight.

We have therefore ignored, for the purpose of our assessment, any hotel, retail, commercial areas.

In terms of assessing residential dwellings, the BRE guidance goes further to suggest that habitable rooms with a reasonable expectation of daylight will include living rooms, dining rooms and kitchens however, "*bedrooms should also be analysed although they are less important*".

Daylight to Existing Buildings

The VSC test measures the amount of sky that is visible at a specific point on the outside of a property, typically a window, which is directly related to the amount of daylight that can be received at the specific point. When undertaking the VSC test for a window, the specific point is at the centre of the window horizontally and vertically. The VSC calculation does not take into account the size of the window being tested nor the size of the room that the window serves. As the VSC assessment is on the outside face of the window it does not measure light inside the room only "potential" conditions in the room. It is therefore important to take this into consideration when reviewing any VSC test results as they can be misleading when considered in isolation. It is therefore important that the VSC test results should be read in conjunction with the NSL test.

With regard to the NSL test this calculates the distribution of daylight within the room by determining the area of the "working plane" which can and cannot receive a direct view of the sky and hence "sky light". The working plane height according to the BRE Guidance is set at 850mm above the floor within a residential property.

For buildings that are located adjacent new development, the BRE Guidance suggests that there will be a 'noticeable' impact to daylight, if either, its windows achieve a VSC below 27% and have existing levels of sky visibility reduced to less than 0.8 times their former value, or the levels of NSL within rooms are reduced to less than 0.8 times their former value. It is important to recognise that the BRE Guidance sets out recommended guidelines and reference to 'noticeable' does not necessarily equate to unacceptable. Therefore, the numerical values generated by the BRE Guidance should be weighed in the overall planning balance in order to reach a decision as to whether the daylight/sunlight impacts are unacceptable.

When considering existing daylight values using the VSC or NSL test, it is important to recognise that a small reduction in real terms can potentially manifest itself as a large relative impact. This is because the calculations work as a percentage reduction. Therefore, where existing levels of sky visibility are high in the existing condition (for example, where a neighbouring property faces an underutilised site coming forward as a development opportunity), reductions in VSC or NSL may in theory be considered to be a transgression of the BRE guidance. In reality, even with a proposed development in place, the daylight to the window or the room behind may still be considered adequate.

Sunlight

The assessment of sunlight within existing buildings is undertaken using the Annual Probable Sunlight Hours (APSH) test.

This test calculates the percentage of statistically probable hours of sunlight received by each window in both the summer and winter months. According to the BRE Guidance March 21 through to September 21 is considered to be the summer period whilst September 21 to March 21 is considered to be the winter period. Properties surrounding a new development only need to be assessed using the APSH test where such windows are orientated within 90° of due south and which overlook the site. The BRE Guidance criteria suggest that the properties outside of this orientation can be ignored.

The BRE Guidance suggests that occupiers of neighbouring buildings are likely to notice the loss of sunlight if the APSH to living rooms is both less than 25% annually (with 5% during winter) and that the amount of sunlight, following the proposed development, is reduced to less than 0.8 times its former value.

Sunlight to Amenity Spaces

The impact to overshadowing and the provision of well sun-lit amenity spaces is assessed using the Sunlight Amenity test. This considers the proportion of an amenity area that receives at least two hours of sun on 21 March in the present condition and compares this with the proportion of the area that receives at least two hours of sun on 21 March with the proposed development in place. The BRE Guidance suggests that existing sunlight to amenity spaces may be reduced to less than 0.8 times its former size.

Appendix F – Setting Alternative Target Values for Skylight and Sunlight Access

The BRE Guidance acknowledges that alternative VSC, NSL targets may need to be considered particularly in a historic city centre where a development in that street is to match existing height proportions and layout as the remainder of the streetscape. Similarly, alternative target values for skylight and sunlight access may need to be adopted in cases where the adjoining buildings have windows that are unusually close to the site boundary and taking more than their fair share of light. To consider where a new development matches the height and proportions of existing adjoining buildings a "mirror-image" building of the same height and size and equal distance away from the site boundary can be considered.

In (dense) urban town centre, city centre environments it is important to consider alternative methods of assessment. The BRE Guidance does not give alternative targets for such dense urban environments and therefore a degree of flexibility can be applied. Appendix F of the BRE Guidance assists in this regard. As the guidance states at the beginning of the document, the results should be interpreted flexibly. This is particularly the case where sites come forward for regeneration, redevelopment within a dense urban context seeking to emulate bulk, massing of surrounding properties whether they be historically or recently granted planning permission.

National Planning Policy Framework (NPPF) 2021

The National Planning Policy Framework at paragraph 125 paragraph c) states "*local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards).*"

London Plan 2021

The London Plan was published on 2nd March 2021. Relevant, selected extracts from the London Plan as set out below:-

"GG2 Making the best use of land"

"To create successful sustainable mixed-use places that make best use of land, those involved in planning and development must:-

B Prioritise sites which are well-connected by existing or planned public transport.

C Proactively explore the potential to intensify the use of land to support additional homes and workspaces, promoting higher density development, particularly in locations that are well connected to jobs, services, infrastructure and amenities by public transport, walking and cycling."

"G4 – Delivering the homes Londoners need"

To create a housing market that works better for all Londoners, those involved in planning and development must:-

A Ensure that more homes are delivered.

C Create mixed and inclusive communities with good quality homes that meet high standards of design and provide for identified needs, including for specialist housing."

Policy D3 Optimising site capacity through the design-led approach

The design-led approach

"A All development must make the best use of land by following a design-led approach that optimises the capacity of sites, including site allocations.

B Higher density developments should generally be promoted in locations that are well connected to jobs, services, infrastructure and amenities….. Where these locations have existing areas of high density buildings, expansion of the areas should be positively considered by Boroughs where appropriate.

C In other areas, incremental densification should be actively encouraged by Boroughs to achieve a change in densities in the most appropriate way. This should be interpreted in the context of Policy H2 Small sites."

Policy H1 – Increasing Housing Supply

"A Table 4.1 sets the 10-year targets for net housing completions that each local planning authority should plan for. Boroughs must include these targets in their development plan documents.

B To ensure that 10-year housing targets are achieved, Boroughs should:-

(1) Prepare delivery-focussed development plans which:-

(a) Allocate and appropriate range in number of sites that are suitable for residential and mixed-use development and intensification.
(b) Encourage development of other appropriate windfall sites not identified in Development Plans through the Plan period, especially from the sources of supply listed in B2.
(c) Enable the delivery of housing capacity identified in Opportunity Areas, working closely with the GLA.

(2) Optimise the potential for housing delivery on all suitable and available brownfield sites through their Development Plans and planning decisions, especially the following sources of capacity:-

(a) Sites with existing or planned Public Transport Access Levels (PTALs) 3-6 or which are located within 800 metre distance of a station or a town centre boundary.
(b) Mixed-use redevelopment of car parks and low-density retail parks and supermarkets.
(c) Housing intensification on other appropriate low-density sites in commercial, leisure and infrastructure uses.
(d) The redevelopment of surplus utilities and public sector owned sites.
(e) Small sites (C Policy H2 Small Sites)

C Boroughs should proactively use brownfield registers and permission in principle to increase planning certainty for those wishing to build new homes.

F On sites that are allocated for residential and mix-use development there is a general presumption against single use low-density retail and leisure parks. These developments should be designed to provide a mix of uses including housing on the same site in order to make the best use of land available for development.

Method of Assessment Summary

It can be difficult to meet the recommended daylight, sunlight criteria set out in the BRE guidelines where there is strong demand for accommodation of all types and where high density development is encouraged by local and national planning policies.

The London Plan 2021 is clear about making best use of land and promoting provision of residential homes.

Where adjoining residential properties with single aspect windows face directly or obliquely to the site, it should also be considered whether the adjoining neighbouring building is in itself a good neighbour taking no more than its fair share of daylight, sunlight. In typical urban context there are often circumstances whereby the adjoining residential buildings can be considered a "bad neighbour" with subsequent habitable rooms overlooking very low massing on a site as existing thereby enjoying unusually high levels of daylight, sunlight in the existing situation. As a result, where development comes forward, areas of non-compliance with the BRE Guidance are likely given that BRE formulas are based upon a ratio reduction between existing and proposed.

The BRE Guidance at Appendix F does provide a method for setting alternative target values for skylight and sunlight access. Where Appendix F of the BRE Guidance has been applied to set an alternative daylight, sunlight, benchmark criteria and those adjoining habitable rooms, despite Appendix F being used, fall shy of the suggested criteria, this does not necessarily mean that the adjoining property experiences poor levels of daylight, sunlight with the proposed development in place or with mirror-image assessment being considered. For example, the adjoining habitable rooms may experience unusually high daylight, sunlight levels as existing over an under-used site. The proposed massing may well seek to emulate the adjoining massing or exceed the bulk/massing of adjoining properties. The ratio reductions suggested by the BRE guidance in such circumstances would not be met. However, the daylight, sunlight results with the proposed development in place can still be considered acceptable.

The BRE provides guidance and as such does not have a pass/fail criteria. The BRE guidance in its own introduction advises that "*it is intended for building designers and their clients, consultants and planning officials. The advice given is not mandatory and the guidance should not be seen as an instrument of planning policy. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is one of many factors inside layout design… 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.*"

However, as mentioned above, areas of non-compliance does not equate to unacceptable. There is no pass/fail criteria associated with the BRE Guidance and the guidance should be interpreted flexibly.

It can be considered that the resultant levels of daylight, sunlight, with the proposed development in place can be commensurate with daylight, sunlight reductions accepted and or experienced to similar refurbishment, extensions, development elsewhere within the borough.

3. Data Sources of Information

We have visited site, taken photographs to familiarise ourselves with the potential issues, undertaken research via the Local Authority Planning Portal and based our assessment upon the following information:-

1. Land Survey provided by Cadplan.
2. Charlton Brown Architects Drawing Numbers: -

   010 – Existing Site Plan

   100 – Existing Ground Floor Plan

   101 – Existing First Floor Plan

   102 – Existing Second Floor Plan

   103 – Existing Third Floor Plan

   104 – Existing Roof Plan

   200 – Existing Section AA

   300 – Existing North Elevation

   301 – Existing East Elevation

   302 – Existing South Elevation

   303 – Existing West Elevation

   20049-XX-PL-00 – Proposed Ground Floor Plan

   20049-XX-PL-00 – Proposed First Floor

   20049-XX-PL-00 – Proposed Second Floor

   20049-XX-PL-00 – Proposed Third Floor

   20049-XX-PL-00 - Proposed Roof

   20049-XX-PL-00 – Proposed Section AA

   20049-XX-PL-00 – Proposed North Elevation

   20049-XX-PL-00 – Proposed East Elevation

   20049-XX-PL-00 – Proposed East Elevation - Conservatory

   20049-XX-PL-00 – Proposed South Elevation

   20049-XX-PL-00 – Proposed West Elevation

   20049-XX-PL-00 – Proposed Conservatory Details

4. Daylight, Sunlight to Neighbouring Properties

The results of our assessment, based on the proposed massing prepared by Charlton Brown Architects, is outlined below. This assessment has been informed by the illustrations of the existing and proposed massing, window maps and daylight, sunlight results which can be seen at the Appendix.

4.1 Cannon Lodge, Cannon Place

This residential property is located to the north of 14 Cannon Place. We have managed to obtain room layouts for this property via the local authority planning portal using planning application reference 2012/5536/P.

The window the subject of our assessment, report serves a scullery. Whilst it can be debated as to whether or not a scullery has an expectation of daylight, sunlight we have erred on the side of extreme caution and undertaken a daylight, sunlight assessment. We enclose below an extract from the ground floor plan which was submitted to the local authority associated with the neighbours' proposal, the subject of planning application reference 2012/5536/P. We have highlighted in green the location of the scullery. The proposed extension to 14 Cannon Place is located to the left side of the window serving the neighbours' scullery.

Daylight

The results of our VSC assessment show that the window assessed exceeds the BRE Guidance criteria with the proposed extension in place.

The results of our NSL, daylight distribution assessment, show that the scullery retains a good level of daylight within the room and exceeds the BRE Guidance criteria with the proposed extension in place.

Sunlight

The orientation of the window serving the scullery, with regard to the BRE Guidance criteria, means that a sunlight assessment is not required. This is because the window serving the scullery is located within 90 degrees of due north.

5. Conclusions

The London Plan 2021 is clear about making best use of land, promoting residential use, development and, notwithstanding, we need to be mindful of neighbouring property.

The National Planning Policy Framework at Paragraph 125 paragraph c) of the NPPF (2021) states that *"local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site".*

We have undertaken a daylight, sunlight assessment of the window at ground floor level that serves Cannon Lodge, Cannon Place. The results of our daylight, sunlight assessments demonstrate exceedance of the BRE Guidance criteria with the proposed extension in place.

There is no requirement to assess those windows at first floor and above within the flank elevation of Cannon Place. This is because these windows will not be affected in any way by the proposed extension at ground floor to 14 Cannon Place. In addition, there is no need to assess whatsoever any windows serving the front or rear elevations to Cannon Lodge, Cannon Place. This is because these windows will not be affected by the proposed extension at 14 Cannon Place.

Taking the above into consideration, given that there is exceedance of the BRE Guidance, in planning terms we do not consider that the proposed extension to 14 Cannon Place will cause harm to the ground floor scullery serving the adjoining property, Cannon Lodge, Cannon Place.

APPENDIX 1 – SITE MAP

KEY:

REV:	DESCRIPTION:	BY:	DATE:
G			
F			
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D			
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A	-	-	-

PROJECT:
Cannon Place
London

TITLE:
Site Plan
Existing

DATE:	DRAWN:
14/08/23	CRB
DRG NO:	SCALE:
CAPL_ST/01	1:200 @ A3

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APPENDIX 2 – EXISTING AND PROPOSED MASSING

KEY:

REV:	DESCRIPTION:	BY:	DATE:
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D			
C			
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A	-	-	-

PROJECT:
Cannon Place
London

TITLE:
Site Plan
Existing

DATE:	DRAWN:
14/08/23	CRB
DRG NO:	SCALE:
CAPL_ST/01	1:200 @ A3

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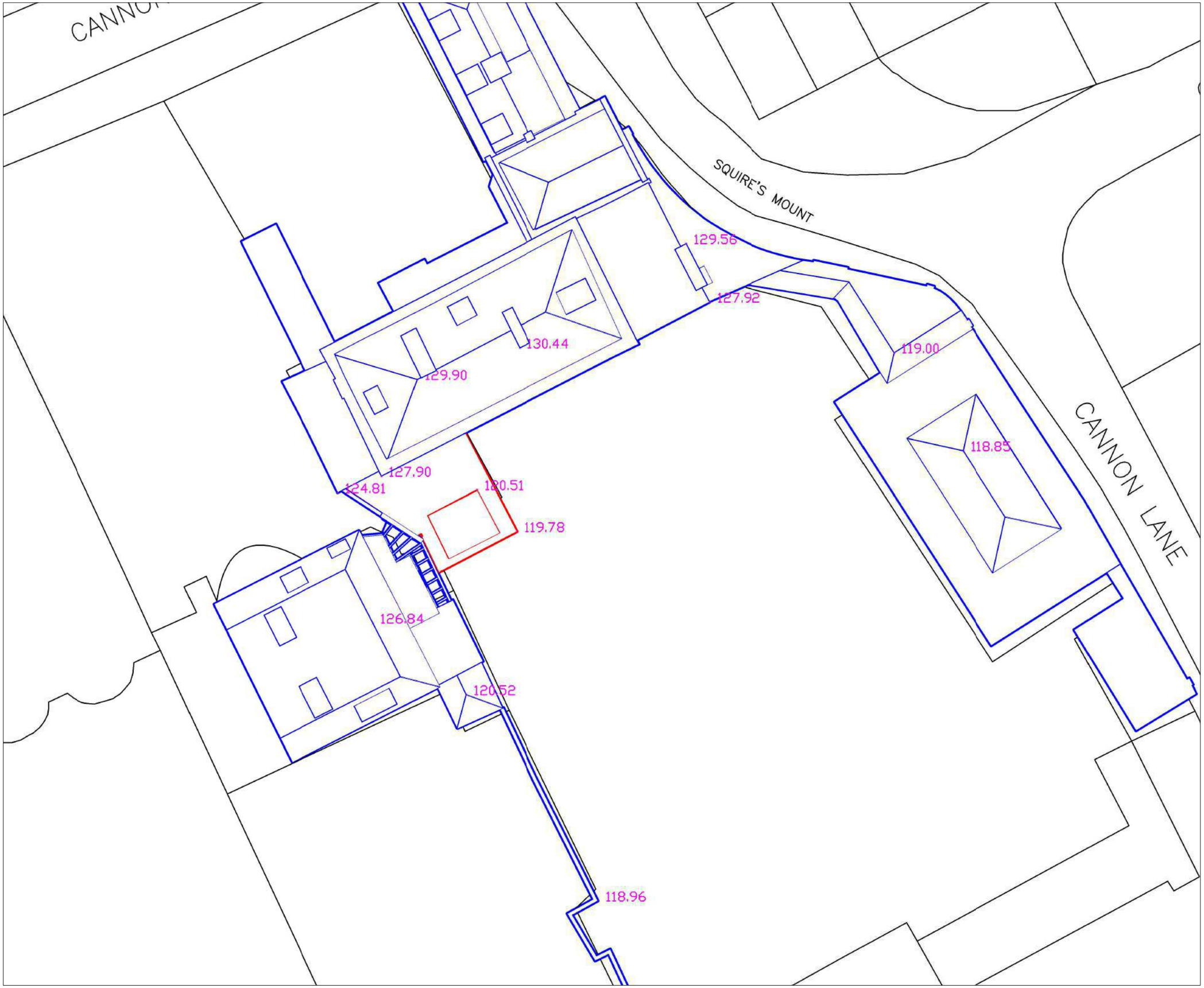

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PROJECT:
Cannon Place
London

TITLE:
Site Plan
Proposed

DATE:	DRAWN:
14/08/23	CRB
DRG NO:	SCALE:
CAPL_ST/02	1:200 @ A3

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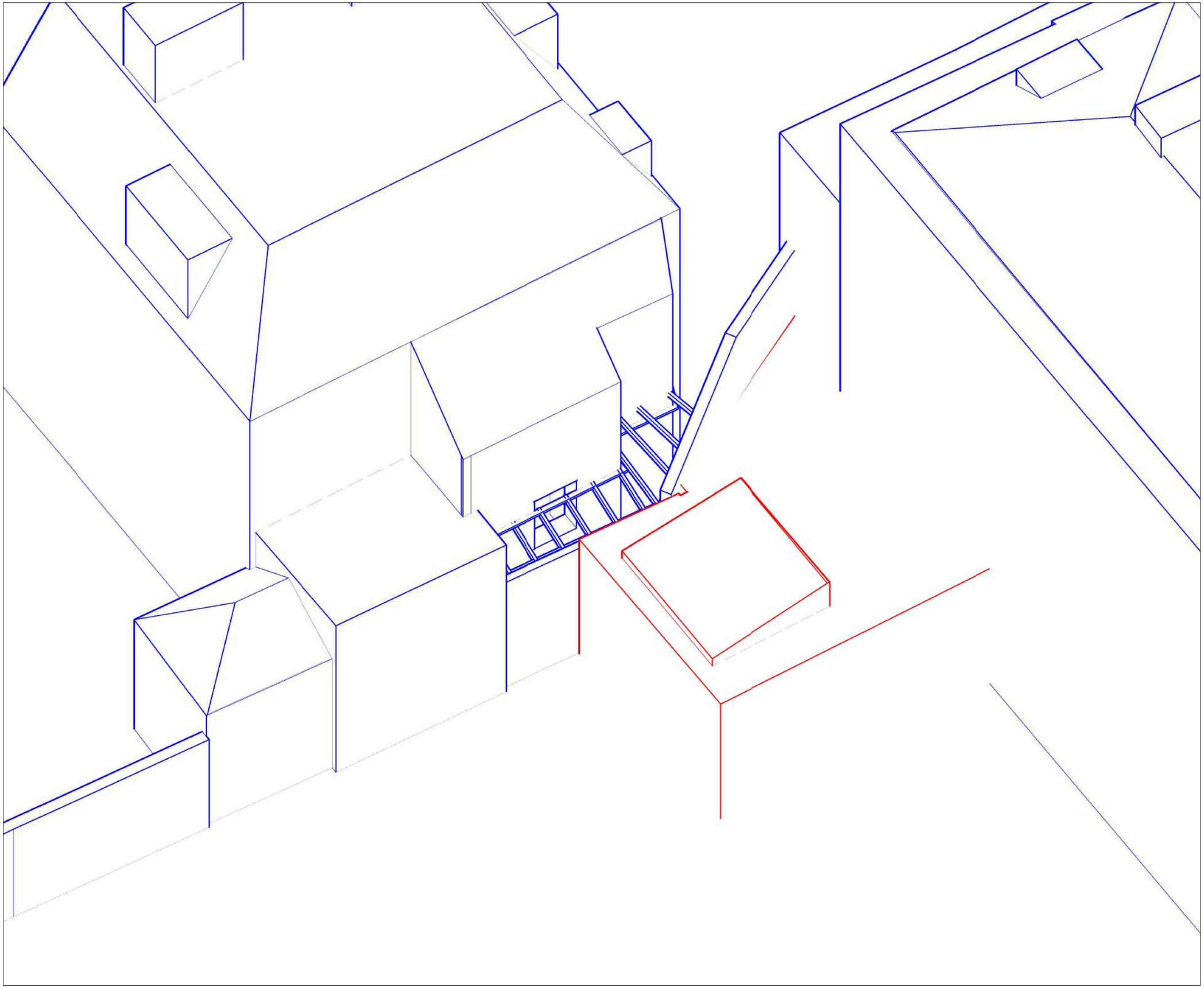

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PROJECT:
Cannon Place
London

TITLE:
3D View
Cannon Lodge

DATE:	DRAWN:
14/08/23	CRB
DRG NO:	SCALE:
CAPL_3D/01	NTS @ A3

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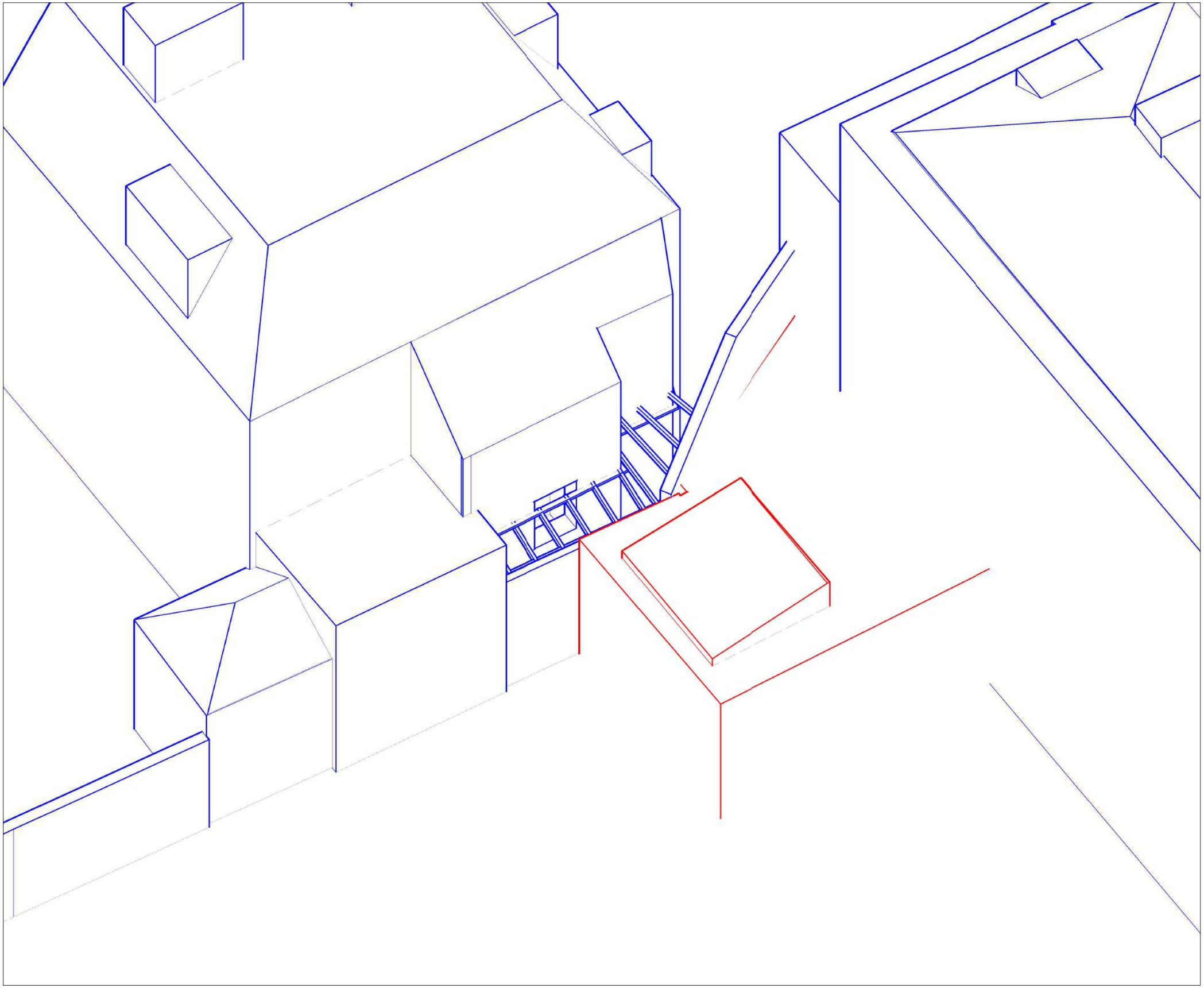
APPENDIX 3 – WINDOW MAPS



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PROJECT:
Cannon Place
London

TITLE:
3D View
Cannon Lodge

DATE:	DRAWN:
14/08/23	CRB
DRG NO:	SCALE:
CAPL_3D/01	NTS @ A3

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APPENDIX 4 – VSC, APSH RESULTS, EXISTING VERSUS PROPOSED MASSING

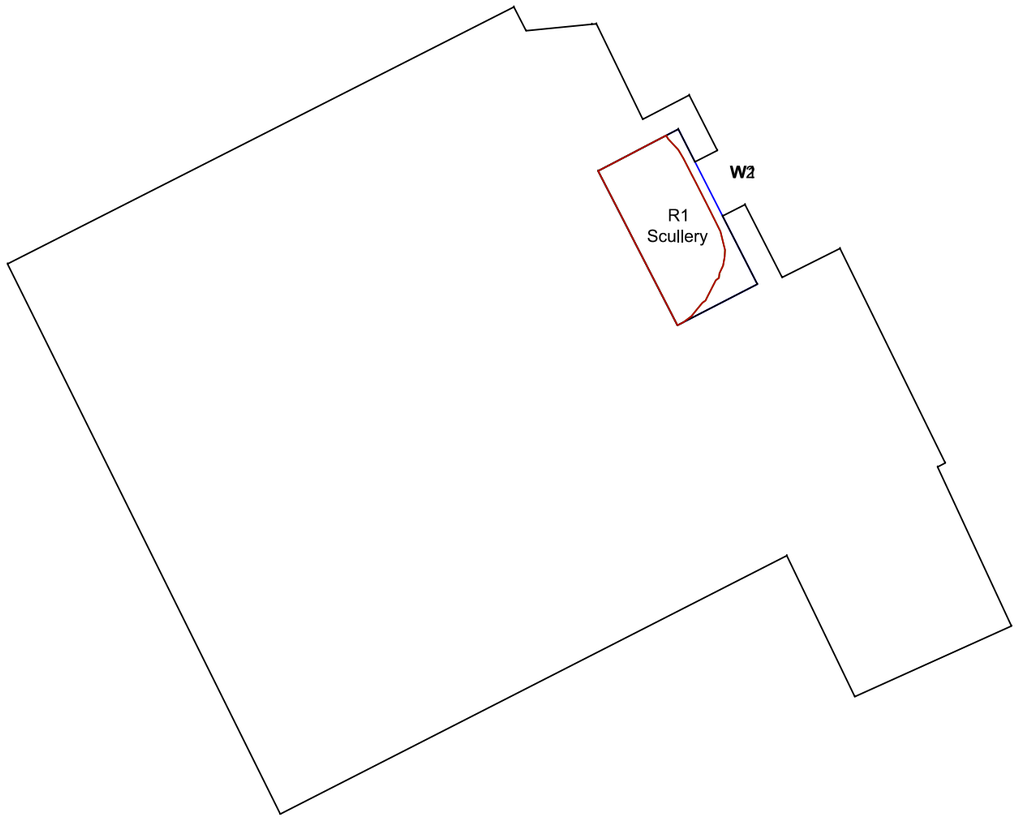
Project Name: 230807_3D Model_M
Project No.: 1
Report Title: Daylight & Sunlight Analysis - Neighbour
Date of Analysis: 08/08/2023

Floor Ref.	Room Ref.	Room Attribute	Property Type	Room Use	Window Ref.		VSC	Pr/Ex	Window Orientation	Annual	Pr/Ex	Winter	Pr/Ex
Cannon Lodge													
F00	R1	Plans	Residential	Scullery	W1	Existing	20.38	0.94	63°N		*North		*North
						Proposed	19.11						
					W2	Existing	16.44	1.00	63°N		*North		*North
						Proposed	16.36						

APPENDIX 5 – DAYLIGHT DISTRIBUTION AND PLAN

Project Name: 230807_3D Model_M
Project No.: 1
Report Title: Daylight Distribution Analysis - Neighbour
Date of Analysis: 08/08/2023

Floor Ref.	Room Ref	Room Attribute	Property Type	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex
Cannon Lodge									
F00	R1	Plans	Residential	Scullery	Area m2	4.16	3.38	3.38	
					% of room		81.27%	81.27%	1.00



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REV:	DESCRIPTION:	BY:	DATE:
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PROJECT:
Cannon Place
London

TITLE:
Daylight Distribution
Cannon Lodge

DATE:	DRAWN:
14/08/23	CRB
DRG NO:	SCALE:
CAPL_DD/01	1:100 @ A3

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