

Client: Mr John Bott

Assessment for the Provision Daylight and Sunlight within the Development at 108 Swains Lane, London, N6 6PH

April 2023

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1 Background and Scope of Appraisal

1.1 Study Objectives

Herrington Consulting has been commissioned by Mr John Bott to analyse and quantify the provision of natural daylight and sunlight to the habitable rooms within the proposed development at 108 Swains Lane, London, N6 6PH.

1.2 Site Location

The site is situated near the area of Archway in north London and is located within the administrative boundaries of the London Borough of Camden. The location of the site is shown in Figure 1.1 and the site plan included in Appendix A.1 of this report gives a more detailed reference to the site location and layout.



Figure 1.1 – Location map (Contains Ordnance Survey data © Crown copyright and database right 2011)

1.3 The Development

The proposal for development is a change of use from the existing nursery (use class E) to two residential flats (use class C3). Drawings of the proposed scheme are included in Appendix A.1 of this report.



2 Policy and Guidance

2.1 National Planning Policy

National Planning Policy Framework (Revised July 2021)

Paragraph 125 on 'Achieving appropriate densities' states that "c) 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)."

2.2 Regional Planning Policy

The London Plan – The Spatial Development Strategy for Greater London – (March 2021)

Policy D6 on Housing quality and standards states that C) Housing development should maximise the provision of dual aspect dwellings and normally avoid the provision of single aspect dwellings. A single aspect dwelling should only be provided where it is considered a more appropriate design solution to meet the requirements of Part B in Policy D3 Optimising site capacity through the design-led approach than a dual aspect dwelling, and it can be demonstrated that it will have adequate passive ventilation, daylight and privacy, and avoid overheating.

The London Plan – Supplementary Planning Guidance on Housing (2016)

Policy 7.6Bd on 'Standards for privacy, daylight and sunlight' states that 'An appropriate degree of flexibility needs to be applied when using BRE guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres, large sites and accessible locations, where BRE advice suggests considering the use of alternative targets'

Furthermore, Paragraph 2.3.47 on 'Daylight and Sunlight' includes the following statement 'Quantitative standards on daylight and sunlight should not be applied rigidly, without carefully considering the location and context and standards experienced in broadly comparable housing typologies in London'.

Standard 32 on 'Daylight and Sunlight' states that 'All homes should provide for direct sunlight to enter at least one habitable room for part of the day. Living areas and kitchen dining spaces should preferably receive direct sunlight'.

2.3 Local Planning Policy

Camden Local Plan (2017)

Policy A1 'Managing the impact of development' under Protecting amenity states that: 'The Council will seek to protect the quality of life of occupiers and neighbours. We will grant permission for development unless this causes unacceptable harm to amenity. The factors we will consider include: ... f. sunlight, daylight and overshadowing'. Section 6.5 states that: '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 guidance published by the Building Research Establishment (currently the Building Research Establishment's Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice 2011)'.

High quality accessible homes states in section 3.139 that 'Many aspects of housing quality have a critical impact on the health and wellbeing of occupiers. These aspects of quality include the external environment, the condition of the property and its state of repair and decoration, accessibility, internal space and number of bedrooms, separation between functions such as kitchens, living rooms and bedrooms, adequate noise insulation, and daylight and sunlight and all of which can affect physical and mental health and influence life chances. The Council will therefore seek to secure a variety of high quality housing to meet the needs of different users, and will not sacrifice quality in order to maximise overall housing delivery.'

Paragraph 7.32 relating to Design of housing: 'All residential developments are required to be designed and built to create high quality homes. The Council will seek to ensure that residential development, both new build and change of use: is self-contained and has its own secure private entrance; has good ceiling heights and room sizes; is dual aspect except in exceptional circumstances; has good natural light and ventilation; has good insulation from noise and vibration; has a permanent partition between eating and sleeping areas (studio flats are acceptable where they provide adequate space to separate activities); incorporates adequate storage space; incorporates outdoor amenity space including balconies or terraces; and is accessible and adaptable for a range of occupiers.'

2.4 The Town and Country Planning (General Permitted Development etc.) (England) (Amendment) Order 2021

Legislation on permitted development related to Class MA (Development consisting of a change of use of a building and any land within its curtilage from a use falling within Class E (commercial, business and service) of Schedule 2 to the Use Classes Order to a use falling within Class C3 (dwellinghouses) of Schedule 1 to that Order) states that MA.2 – (1) Development under Class MA is permitted subject to the following conditions (f) the provision of adequate natural light in all habitable rooms of the dwellinghouses.'

2.5 Best Practice Guidance

In the absence of official national planning guidance / legislation on daylight and sunlight, the most recognised guidance document is published by the Building Research Establishment.

An updated version of these guidelines was published on the 8th June 2022 and is referred to as 'Site layout planning for daylight and sunlight: a guide to good practice (BR 209 2022, third edition)'. This version includes significant changes to the 2011 edition methodologies used for analysing the daylight and sunlight provision to new developments and therefore this assessment has been prepared in line with the current 2022, third edition of the guidelines.

The BRE Guidelines are not mandatory and themselves state that they should not be used as an instrument of planning policy, however in practice they are heavily relied upon as they provide a good guide to approach, methodology and evaluation of daylight and sunlight impacts.



In conjunction with the BRE Guidelines further guidance is given within BS EN 17037:2018 - Daylight in Buildings. This British Standard is the UK implementation of the European Standard and supersedes BS 8206-2:2008.

Whilst the BRE Guidelines provide numerical guidance for daylight, sunlight and overshadowing, these criteria should not be seen as absolute targets. The document states that the intention of the guide is to aid rather than constrain the designer. The Guide is not an instrument of planning policy, therefore whilst the methods given are technically robust, it is acknowledged that some level of flexibility should be applied where appropriate.



3 Assessment Techniques

3.1 Background

Natural light refers to both daylight and sunlight. However, a distinction between these two concepts is required for the purpose of analysis and quantification of natural light in buildings. In this assessment, the term 'Daylight' is used for natural light where the source is the sky in overcast conditions, whilst 'Sunlight' refers specifically to the light coming directly from the sun.

The updated third edition of the BRE Guidelines no longer supports the use of the Average Daylight Factor (ADF) method of calculating illuminance within a room and now recommends two methodologies. These are based on the assessment methods included within the BS EN 17037:2018, but with the adaptions as set out in the UK National Annex. The two methods are described as follows.

3.2 Illuminance Method

The Illuminance method involves using climatic data based on the location of the site to calculate the illuminance of the specified reference plane resulting from natural daylight entering the room via windows and other glazed apertures. The analysis is carried out across an assessment grid on the reference plane for at least hourly intervals for a typical year. The objective of this test is to achieve a target illuminance (E_T), which varies depending on room use, across at least half of the reference plane. This level of illuminance needs to be achieved for at least half of the daylight hours.

For UK dwellings, there are specific recommendations for daylight provision, and these are set out in the UK National Annex. These minimum recommendations for habitable rooms acknowledge the specific challenges faced in the UK and these are used throughout this appraisal. The minimum illuminance recommendations are:

- 100 lux for bedrooms:
- 150 lux in living rooms; and
- 200 lux in kitchens/studios.

These are the median illuminances, to be exceeded over at least 50% of the assessment points in the room for at least half of the daylight hours. The National Annex also states that the recommended levels over 95% of a reference plane need not apply to dwellings in the UK.

3.3 Daylight Factor Method

In the same way as for the illuminance method, this method calculates the Daylight Factor (DF) at each calculation point on an assessment grid within each room. DF is the illuminance at a point on the reference plane in a space, divided by the illuminance on an unobstructed horizontal surface outdoors. The CIE standard overcast sky is used, and the ratio is expressed as a percentage.

Given that the numerical modelling process uses an overcast sky model, the orientation of the window(s) serving the room has no bearing on the daylight



availability. However, in order to account for different climatic conditions at different locations around the UK National Annex provides daylight factor targets (D_T) corresponding to the target illuminances for locations of differing latitude. These are shown in Table 3.1 and for each assessment, the targets associated with the location with the closest latitude are adopted.

Location	D _⊤ for 100 lx (Bedroom)	D _T for 150 lx (Living room)	D _⊤ for 200 lx (Kitchen)
St Peter (Jersey)	0.6%	0.9%	1.2%
London (Gatwick Airport)	0.7%	1.1%	1.4%
Birmingham	0.6%	0.9%	1.2%
Hemsby (Norfolk)	0.6%	0.9%	1.3%
Finningley (Yorkshire)	0.7%	1.0%	1.3%
Aughton (Lancashire)	0.7%	1.1%	1.4%
Belfast	0.7%	1.0%	1.4%
Leuchars (Fife)	0.7%	1.1%	1.4%
Oban	0.8%	1.1%	1.5%
Aberdeen	0.7%	1.1%	1.4%

Table 3.1 – Minimum Target daylight factors (D_T)

The recommendations are met if the median of the daylight factors calculated in a room meets or exceeds the specific target for room type and location.

3.4 Access to Sunlight

The provision of sunlight within new development is also important, especially within the main living spaces. Bedrooms and kitchens are generally viewed as less important, where occupants normally prefer sunlight in the mornings.

The requirements for access to sunlight are set out within BS EN 17037 and this standard is adopted by the BRE Guidelines, which recommend that a space should receive a minimum of 1.5 hours of direct sunlight on the spring equinox (21st March) with cloudless conditions. The medium level of recommendation is three hours and the high level of recommendation four hours. The number of sunlight hours received by each window is calculated using the specialist software described in Section 4.2.

The Guidelines state that at least one habitable room, preferably a main living room, should meet at least the minimum criterion.

For new development and especially where existing buildings are being redeveloped, it is important to acknowledge that these are aspirational targets intended to aid and not constrain the designer.

3.5 Sunlight to Gardens and Amenity Spaces

The BRE Guidance suggests that where new development is served by amenity areas, then analysis can be undertaken to quantify the amount of sunlight these amenity areas will enjoy. Typical examples of areas that could be considered as open spaces or amenity areas are main back gardens of houses, allotments, parks and playing fields, children's playgrounds, outdoor swimming pools, sitting-out areas, such as in public squares and focal points for views, such as a group of monuments or fountains.



Sun Hours on Ground

The BRE Guidelines recommend that for a garden or amenity area to appear adequately sunlit throughout the year, at least 50% of an amenity area should receive at least 2 hours of sunlight on 21st March.

When undertaking this analysis, sunlight from an altitude of 10° or less has been ignored as this is likely to be obscured by planting and undulations in the surrounding topography. Driveways and hard standing for cars is also usually left out of the area used for this calculation. Fences or walls less than 1.5 metres high are also ignored. Front gardens which are relatively small and visible from public footpaths are omitted with only main back gardens needing to be analysed.

The Guidelines also state that "normally, trees and shrubs need not be included, partly because their shapes are almost impossible to predict, and partly because the dappled shade of a tree is more pleasant than a deep shadow of a building". This is especially the case for deciduous trees, which provide welcome shade in the summer whilst allowing sunlight to penetrate during the winter months.



4 Assessment Methodology

4.1 Method of Baseline Data Collation

The following data and information has been used to inform this study:

- OS Mastermap mapping
- Scheme drawings in AutoCAD format (DVM Architects March 2023)
- Aerial photography (Google Maps and Bing)

4.2 Numerical Modelling

The numerical analysis used in this assessment has been undertaken using the Waldrum Tools (Version 6.0.0.10) software package.

4.3 Calculation Assumptions

The following assumptions have been made when undertaking the analysis:

- When assessing the Illuminance and/or Daylight Factor for internal rooms and in the absence of specific information, the following parameters are assumed:
 - The glazing type is assumed to be double glazing (Pilkington K Glass 4/16/4 Argon filled) with a light transmittance value of 0.78 (value for double glazed unit not per pane).
 - Correction factor for frames and glazing bars = 0.8

 Where information from the designer is not available, the following values are used to derive the Maintenance Factor applied to the transmittance values.

Type of window	Maintenance Factor			
	Rural/ suburban	Urban		
Vertical, no overhang	0.96	0.92		
Vertical, sheltered from rain by balcony/overhang	0.88	0.76		
Sloping rooflight	0.92	0.84		
Horizontal rooflight	0.88	0.76		

Table 4.1 – Parameters used for deriving Maintenance Factor

The reflectance values used in the numerical analysis are shown in Table 4.2 below with the materials/finishes having been specified by DVM Architects Ltd:

Surface	Material/Finish	Reflectance Value		
Internal walls	White Walls	0.8		
Internal ceiling	White Ceilings	0.8		
Internal flooring	Laminate Floor	0.3		
Exterior walls and obstructions	Standard BRE value applied	0.2		
Exterior ground	Standard BRE value applied	0.2		

Table 4.2 – Reflectance values



- The calculation of illuminance or daylight factor is carried out on a grid of points on a reference plane within each room assessed. The plane is set 0.85m from the floor level. This assessment grid excludes a band of 0.3m from the walls, unless otherwise specified.
- BS EN 17037 gives an equation for maximum grid spacing. However, in line with the recommendation of the BRE Guidelines for domestic rooms a maximum grid spacing of 0.3m is adopted.

4.4 Location Specific Data

In terms of latitude, the subject site is located in closest proximity to London (Gatwick Airport) and therefore climatic conditions and DF targets are set using values for this latitude.



5 Daylight Provision

5.1 Principles of Analysis

As discussed in Section 3, there are two tests for daylight; Illuminance and Daylight Factor. Both of these tests have been applied to the habitable rooms within the development and the results are discussed in the following sections. The detailed numerical outputs are included in the appendix to this report.

As discussed in Section 3, there are two tests for daylight; Illuminance and Daylight Factor. The Illuminance test has been applied to the habitable rooms within the development in the first instance and the results are discussed in Section 5.1. In circumstances where the Illuminance test is not compliant, the Daylight Factor analysis has also been calculated. The detailed numerical outputs are included in the appendix to this report.

When setting the target illuminance value (E_T), it is important to account for rooms that have a shared use, as it is necessary to apply the highest target. For example, in a bedroom/sitting room in student accommodation or studio apartment, the value for a living room should be used as the occupants would be spending the majority of the daylight hours using the space as a living room.

However, in the case of a living/dining/kitchen area, the BRE Guidelines fully acknowledge that in the majority of situations, the kitchen element of these open plan living areas is not treated as a habitable space. Therefore, it is acceptable to adopt the target for the dominant room use, i.e. a living room. It is, nevertheless, still necessary to include the kitchen space as part of the

assessment area, albeit that the interpretation of the daylighting results reflects the non-habitable status of the kitchen area.

In addition, if a kitchen is less than 13m² then it is conventional for this room to be considered as a non-habitable space. In which case, such rooms are not necessarily included within the reported outputs of the model. In this instance, both kitchens have been excluded from the report as they have an area of less than 13m² and hence are considered non-habitable.

It is also conventional to assume that where the layout of the rooms and fenestration on lower floors is repeated on the floors above, then providing the daylighting provision on the lower floors meets the specific requirements, then it can be inferred that the rooms on the floors above will also meet the target criteria.

5.2 Analysis of Illuminance

Using the analytical techniques and assumptions discussed in Sections 3 and 4 respectively, the illuminance within each habitable room has been calculated.

For each room, the percentage of the assessment area that meets or exceeds the target illuminance value (E_T) is presented in the detailed outputs included in the appendix of this report. To meet the assessment criteria, 50% or more of the assessment area will need to achieve illuminance that meets or exceeds E_T . The results are summarised in Table 5.1.



Property	Room Reference	Room Use	% Area Meeting Required Lux	Meets BRE Criteria
	R1	Living Room	100%	Yes
Unit 1	R2	Bedroom	75%	Yes
	R3	Bedroom	82%	Yes
Unit 2	R2	Living Room	92%	Yes
Offit 2	R3	Bedroom	100%	Yes

Table 5.1 – Summary of Illuminance Analysis

From the results in Table 5.1 it can be seen that all rooms within the proposed development exceed target illuminance value (E_T). As the rooms are fully compliant with the illuminance test, it has not been necessary to carry out the Daylight Factor analysis in this instance. This is because the UK National Annex to BS EN 17037 states that the provision of natural daylight be adequate provided that at least one of the two daylight tests are passed.

Consequently, it can be concluded that these habitable spaces will be well lit and will have a reduced reliance on supplementary electric lighting.

5.3 Summary of Daylight Provision

From the results summarised in Tables 5.1, it can be seen that the all habitable rooms meet the target values set out within the BRE Guidelines for the illuminance test. The UK National Annex to BS EN 17037 states that the provision of natural daylight be adequate provided that at least one of the two daylight tests are passed.



6 Sunlight Provision to Proposed Development

6.1 Sunlight Exposure Analysis

The BRE Guidelines provide guidance in respect of sunlight quality for new developments stating: "in housing, the main requirement for sunlight is in living rooms, where it is valued at any time of the day, but especially in the afternoon. Sunlight is also required in conservatories. It is viewed as less important in bedrooms and in kitchens where people prefer it in the morning rather than the afternoon."

When considering the provision and access to sunlight, the quantitative methods set out within BS EN 17037 are used and based on these, the BRE Guidelines recommend that a space, preferably a main living room should receive a minimum of 1.5 hours of direct sunlight under cloudless conditions on the 21st March (equinox).

The BS EN 17037 criterion applies to rooms of all orientations, although it is recognised that if a room faces significantly north of due east or west it is unlikely to be met.

It should be noted that where rooms have more than one window, it is acceptable to sum the non-coincident sunlight hours to achieve a 'room total'. This approach is acknowledged by the BRE Guidelines and facilitates a greater understanding of the sunlight received within a room by taking into account the fact that some windows will receive sunlight at different times during the day.

The detailed outputs from the sunlight analysis are presented in Appendix A.3 of this report and a summary provided in Table 6.1.

Property	Room Reference	Room Use	SE Hours	SE Rating	Unit Meets BRE Criteria
	R1	Living room	8.3	High	
Unit 1	R2	Bedroom	0.4	-	Yes
	R3	Bedroom	2.7	Minimum	
Unit 2	R2	Living room	2.3	Minimum	Yes
Offit 2	R3	Bedroom	0.9	North facing	res

Table 6.1 – Results of Sunlight Exposure Analysis

The aspirational requirement of the BRE Guidelines are that for a dwelling, at least one habitable room, preferably a main living room, should meet at least the 'minimum' sunlight criterion of 1.5 hours on 21st March.

The results above show that at least one habitable room, including the main living room for both proposed units, will exceed the minimum requirements set out within the BRE Guidelines for each unit. Therefore, it can be concluded that both residential units within the proposed development are meeting the BRE recommendations and therefore the overall provision of direct sunlight to the development as a whole is considered to be adequate.



6.2 Direct Sunlighting to Amenity Spaces

The BRE Guidelines acknowledge that good site layout planning for daylight and sunlight should not limit itself to providing good natural light inside buildings. Sunlight in the space between buildings has an important effect on the overall appearance and ambiance of a development. The worst situation is to have significant areas on which the sun does not shine for a large part of the year. These areas would, in general, be damp, chilly and uninviting.

The BRE Guidelines set out the following principal benefits of sunlight in the spaces between buildings:

- To provide attractive sunlit views (all year)
- To make outdoor activities, like sitting out and children's play more pleasant (mainly during the warmer months)
- To encourage plant growth (mainly in spring and summer)
- To dry out the ground, reducing moss and slime (mainly during the colder months)
- To melt frost, ice and snow (in winter)
- To dry clothes (all year)

The assessment criteria set out within the BRE Guidelines is based on the recommendation that for an amenity space to appear adequately sunlit throughout the year, at least half of this area should receive at least two hours of sunlight on 21st March.

Inspection of the site plan shows clearly that the residents of Unit 1 will have access to a large area of high-quality amenity space in the form of a garden at ground level which lies to the south-west of the development. Results for the two-hour sun on ground analysis are detailed in Table 6.2 below.

Amenity Reference	Percentage of area lit for 2 hours or more on the 21 st March	Percentage of area lit for 2 hours or more on the 21 st April	Percentage of area lit for 2 hours or more on the 21 st June
Unit 1 Garden	20%	50%	91%

Table 6.2 – Results of Two Hour Sunlight to Amenity Analysis

From the results in Table 6.2 it can be seen that on the standard BRE test date of 21st of March the amenity area in Unit 1 will receive 2 hours of direct sunlight to 20% of its area. Whilst this does fall short of the 50% threshold set out in the BRE guidelines, the amenity space will still receive some direct sunlight.

As a secondary test and in addition to the 21st March test date, the analysis has also been carried out on 21st April and 21st June test dates. On 21st April, the amenity space receives 2 hours of direct sunlight to exactly 50% of its area, thereby indicating that only a month after the BRE test date, the proposed amenity area will have access to good levels of direct sunlight.

Furthermore, on the 21st June, during the summer period when the garden would be in most use, the results of this indicate that the amenity to Unit 1 will receive well in excess of 50% lit area for 2 hours or more achieving 91%. Therefore, it can be concluded that the Unit 1 amenity area will still benefit from direct sunlight during the summer months.



7 Conclusions

The detailed analysis undertaken as part of this assessment has examined the provision of natural daylight and sunlight to the habitable rooms for the proposed development at 108 Swains Lane, London, N6 6PH. Using detailed numerical modelling applications, the Illuminance and Sunlight Exposure have been quantified for each room. In line with the assessment criteria prescribed by the BRE Guidelines, it has been shown that for all habitable rooms, the provision of natural daylight will meet or exceed the minimum required threshold set out in the BRE Guidelines. Consequently, it can be concluded that these habitable spaces will be well lit and will have a reduced reliance on supplementary electric lighting.

It has also been possible to demonstrate that in each of the proposed units, the main living area will receive at least 1.5hr of direct sunlight. As a consequence of the light and additional visual interest provided by this direct sunlight, the amenity value of these rooms will be enhanced.

In addition, the amenity areas of the proposed units have been assessed, and it has been demonstrated that these will benefit from a good level of direct sunlight during the summer months, when they are most likely to be in use.

Overall it can be concluded that with respect to daylight and sunlight, the proposed scheme complies with legislation on permitted development (The Town and Country Planning Order 2021) related to Class MA – (Development consisting of a change of use of a building and any land within its curtilage from

a use falling within Class E (commercial, business and service) of Schedule 2 to the Use Classes Order to a use falling within Class C3) and will provide an adequate provision of natural light in proposed habitable rooms.



A Appendices

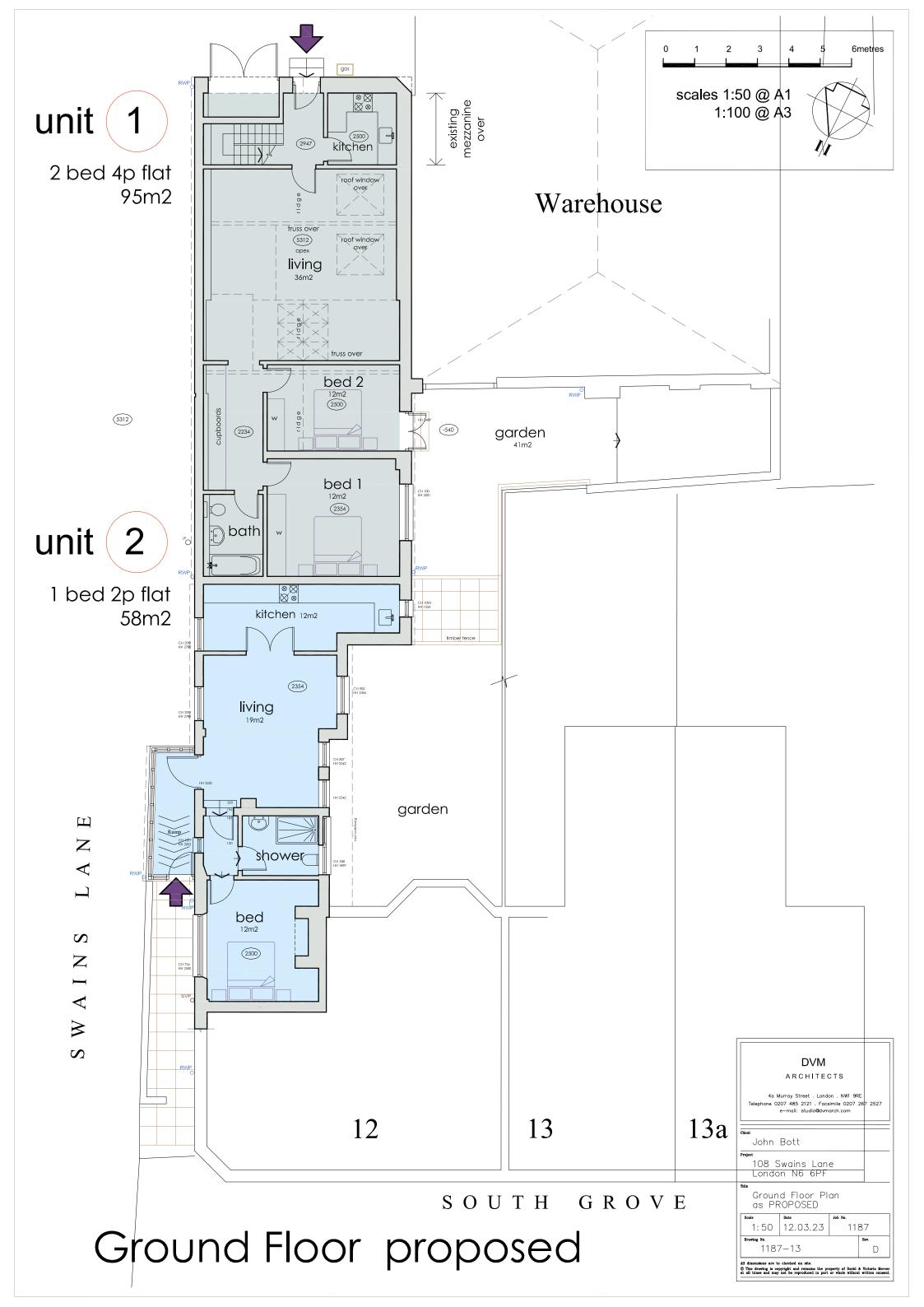
Appendix A.1 – Scheme Drawings

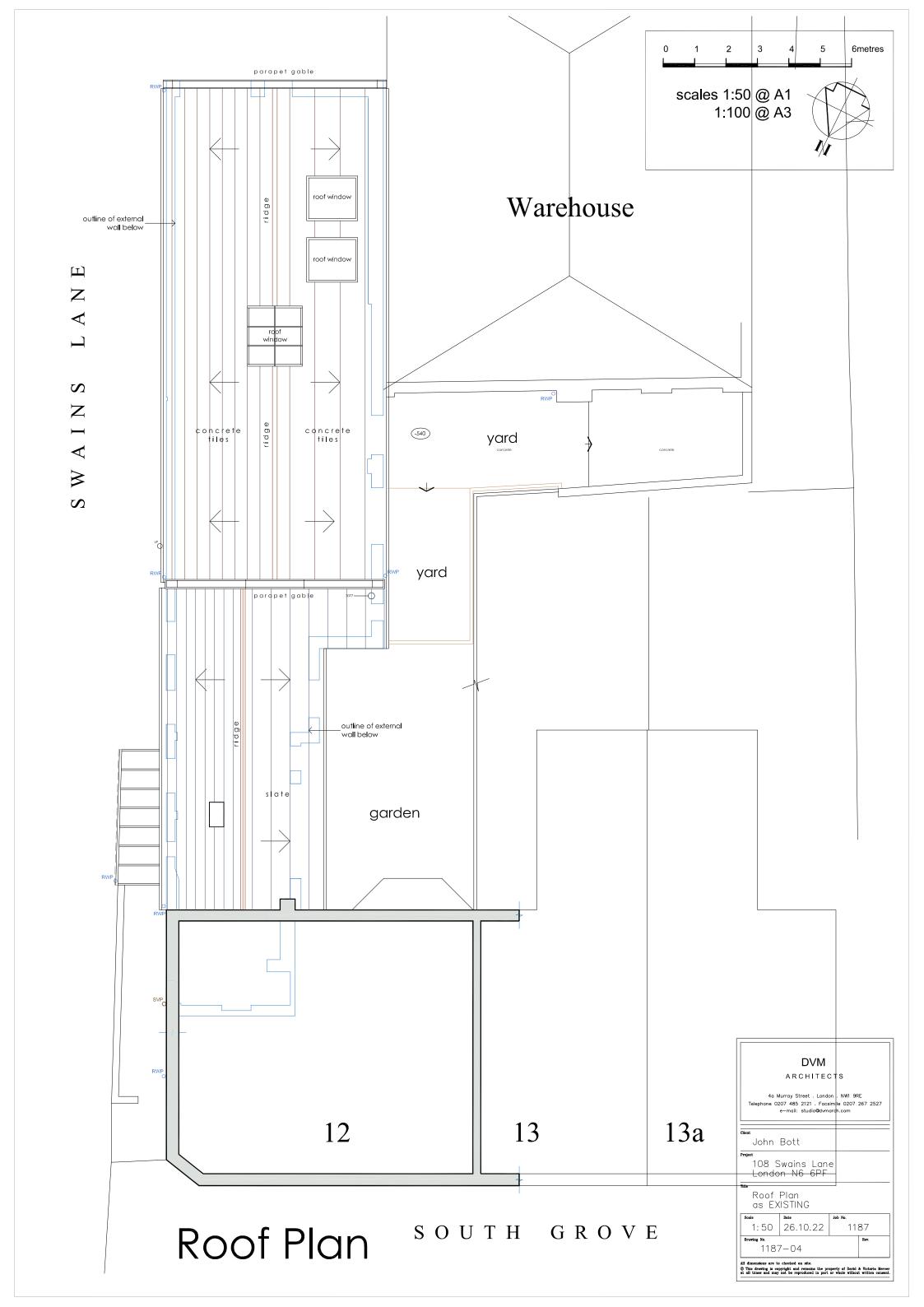
Appendix A.2 – Graphical Model Outputs

Appendix A.3 – Tabulated Results for Daylight & Sunlight Calculations (Provision to New Development)



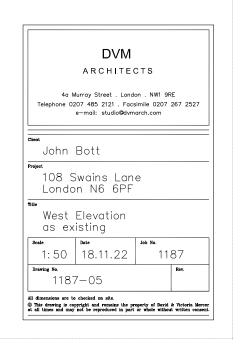
Appendix A.1 – Scheme Drawings





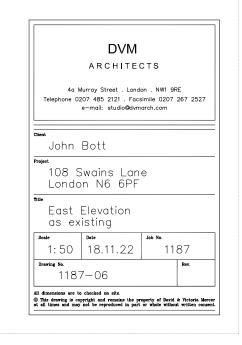


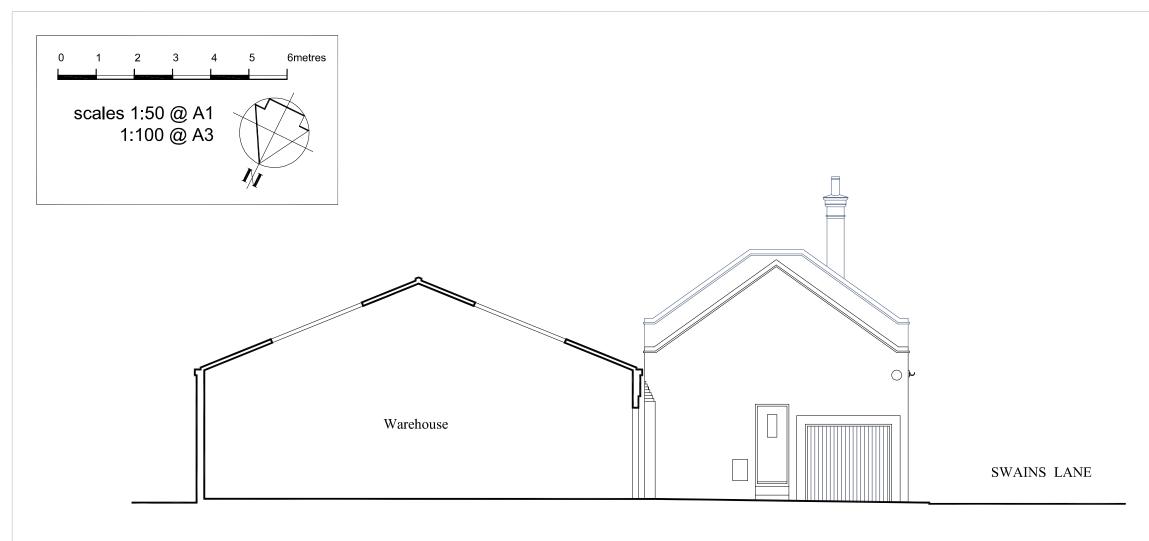
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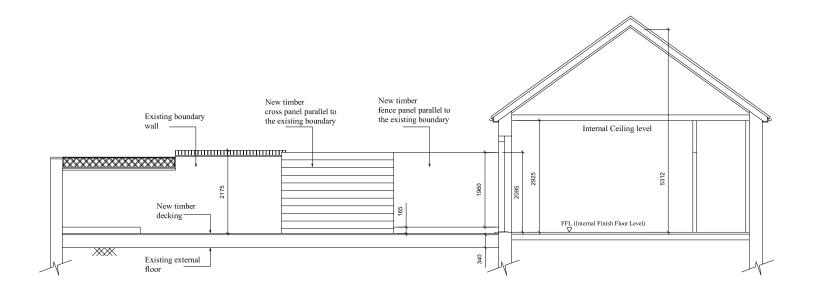


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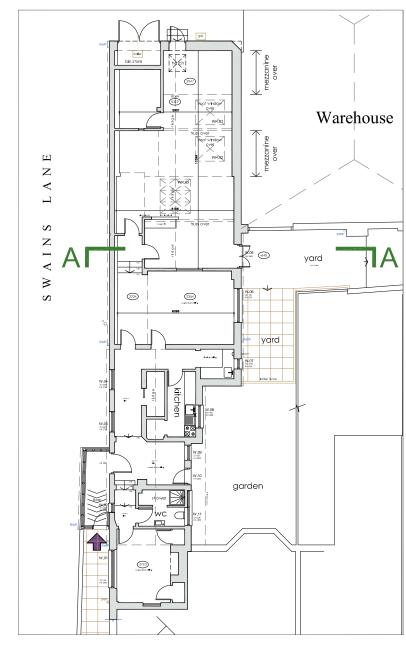




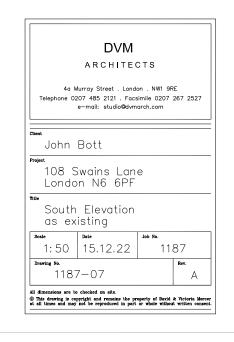
south elevation



section AA



section location





Appendix A.2 – Graphical Model Outputs





Unit 6 - Barham Business Park Elham Valley Road Canterbury Kent CT4 6DQ

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01	Second issue	 00/00/0000
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Rev	Description	 Date
CLIE	NT -	
Mr J	ohn Bott	

PROJECT -

Swains Lane, London SCALE -PROJ REF -

Not to scale

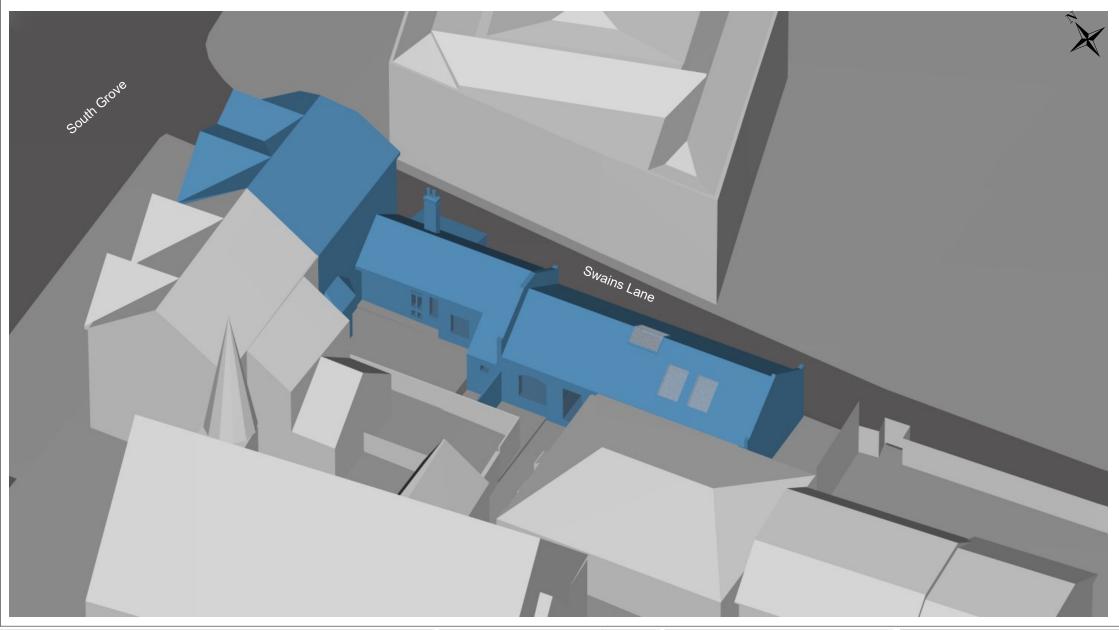
ANALYST -LH 3638

DWG REF.-

3D Model - Proposed Location Plan

DWG No. -

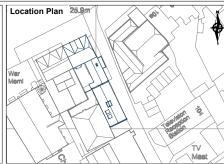
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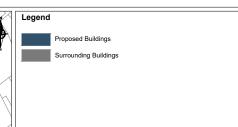




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Mr John Bott

DWG REF.-

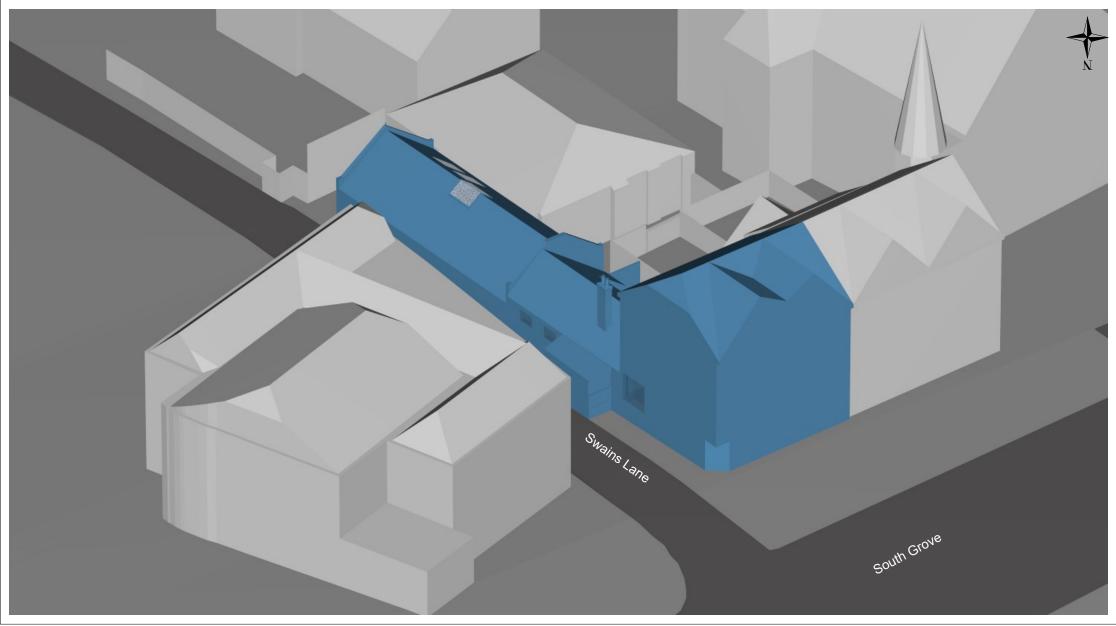
PROJECT -Swains Lane, London

SCALE -- PROJ REF -Not to scale

ANALYST -LH 3638

DWG No. -3D Model - Proposed Site Scenarios

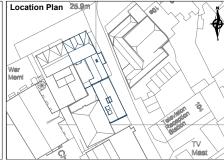
JP





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7	01	Second issue	 00/00/0000
	00	First issue	 14/04/2023
	Rev	Description	 Date
ı	- CLIE	NT —	
	Mr J	ohn Bott	
ı	- PRO	JECT —	
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		ina Lana Landan	

Swains Lane, London SCALE -- PROJ REF

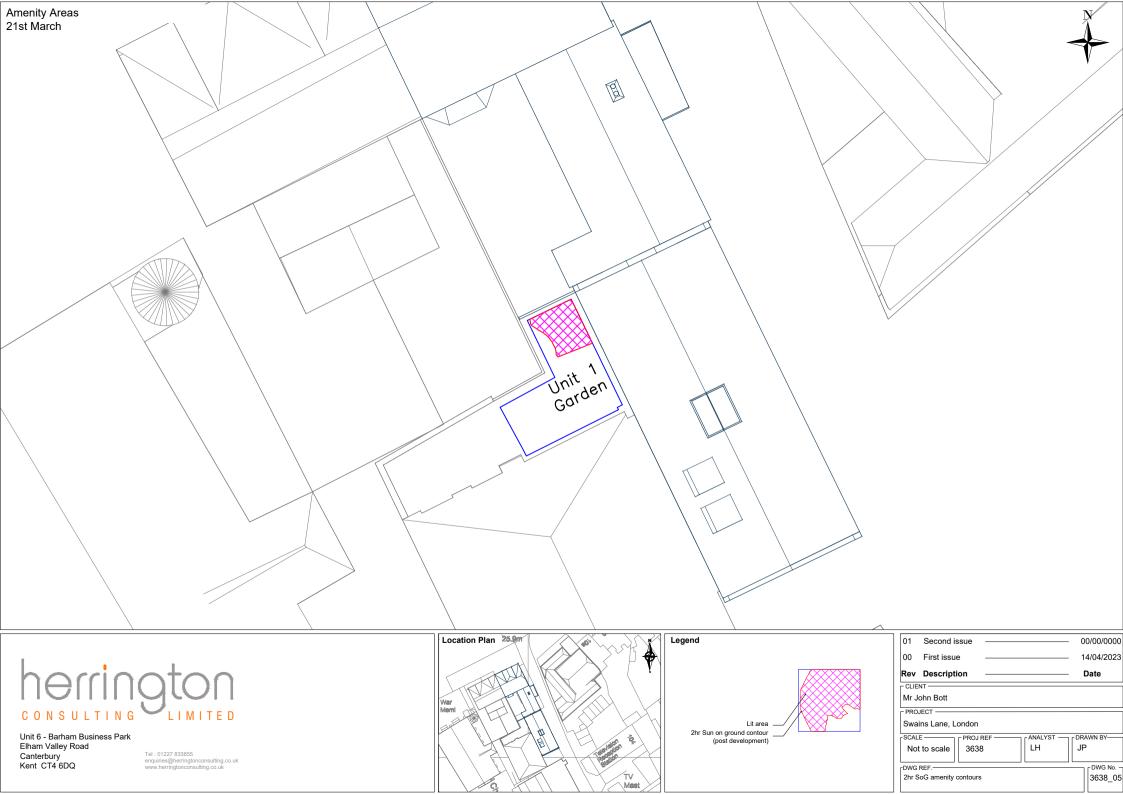
ANALYST -LH 3638 Not to scale

DWG REF.-

DWG No. -3D Model - Proposed Site Scenarios

JP







Appendix A.3 – Tabulated Results for Daylight and Sunlight Calculations (Provision to New Development)

Project Name: Swains Lane, London Project No.: 3638 Report Title: SDA BS En17037 Analysis - Proposed Scheme Date of Analysis: 06/04/2023

Criteria													
Floor Ref	Room Ref	Property Type	Room Use	Room Area m2	Effective Area	Median Lux	Area Meeting Req Lux	% of Area Meeting Req Lux	Req Lux	Req % of Effective Area	Req % of Daylight Hours	Daylight Hours	Meets Criteria
Unit 1													
Ground	R1	Residential	Living Room	36.54	29.51	1023	29.51	100%	150	50%	50%	4380	YES
	R2	Residential	Bedroom	11.71	7.86	156	5.90	75%	100	50%	50%	4380	YES
	R3	Residential	Bedroom	15.76	11.34	139	9.29	82%	100	50%	50%	4380	YES
		Residential	Kitchen		٨	Ion-habitba	le <13sqm.		200	50%	50%	4380	n/a
Unit 2													
						• • • • • • • • • • • • • • • • • • • •	_						
Ground	R1	Residential	Kitchen		Non-habitbale <13sqm.				200	50%	50%	4380	n/a
	R2	Residential	Living Room	19.18	14.07	240	12.88	92%	150	50%	50%	4380	YES
	R3	Residential	Bedroom	12.27	7.73	370	7.73	100%	100	50%	50%	4380	YES

Project Name: Swains Lane, London Project No.: 3638 Report Title: Sunlight Exposure Analysis - Proposed Scheme Date: 06/04/2023

Floor Ref	Room Ref	Property Type	Room Use	Window Ref	Window Orientation	Proposed Sunlight Exposure	Rating
			Unit 1				
Ground	R1	Residential	Living Room	W1	244° Inc	5.2	
				W2	244° Inc	4.9	
				W3	244° Inc	5.9	
				W4	64°N Inc	6.6	
						8.3	High
Ground	R2	Residential	Bedroom	W5	244°	0.4	
						0.4	Failed
Ground	R3	Residential	Bedroom	W6	244°	2.7	
						2.7	Minimum
		Residential	Kitchen				
			(Non - habitable) <13sqm				n/a
Ground	R1	Residential	Unit 2 Kitchen	W1	244°		
Ground	KI	Residential	(Non - habitable) <13sqm	W11	64°N		
			(14011 - 11801(8016) <133q111	VVII	04 14		n/a
Ground	R2	Residential	Living Room	W2	244°	2.2	
				W3	244°	1	
				W4	244°	0	
				W5	244°	0.8	
				W6	244°	0.8	
				W7	244°	0.8	
				W8	244°	0.8	
				W10	64°N	0	
						2.3	Minimum
Ground	R3	Residential	Bedroom	W9	64°N	0.9	
						0.9	Failed

Project Name:Swains Lane, London Project No.: 3638

Report Title: Two hours Sunlight to Amenity Analysis - Proposed Scheme Date of Analysis: 06/04/2023

21st March

Floor Ref	Floor Ref Amenity Ref			Lit Area Proposed	Meets BRE Criteria		
Unit 1							
Ground	Garden	Area m2 Percentage	19.77	4.03 20%	NO		

Project Name: Swains Lane, London Project No.: 3638

Report Title: Two hours Sunlight to Amenity Analysis - Proposed Scheme Date of Analysis: 06/04/2023
21st April

ZISCAPIII								
Floor Ref Amenity Ref			Amenity Area	Lit Area Proposed	Meets BRE Criteria			
Unit 1								
Ground	Garden	Area m2 Percentage	19.77	9.93 50%	YES			

Project Name:Swains Lane, London Project No.: 3638

Report Title: Two hours Sunlight to Amenity Analysis - Proposed Scheme Date of Analysis: 06/04/2023

21st June

E E S C S G I I C								
Floor Ref Amenity Ref			Amenity Area	Lit Area Proposed	Meets BRE Criteria			
Unit 1								
Ground	Garden	Area m2 Percentage	19.77	17.89 91%	YES			