

# Proposed Development at England's Lane Residences, London NW3 4XJ

## Daylight, Sunlight and Overshadowing

25<sup>th</sup> September 2014

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Cisco Property Limited  
c/o Salamanca Group Trust (Switzerland) SA  
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3 Place des Bergues  
1211 Geneva 1  
Switzerland

25<sup>th</sup> September 2014

Dear Sirs

### Daylight, Sunlight and Overshadowing Advice

This report is confidential to the addressees and prepared solely for the purpose(s) set out in our engagement letter. You should not refer to or use our name or the report for any other purpose, disclose them or refer to them in any prospectus or other document, or make them available or communicate them to any other party. No other party is entitled to rely on our report for any purpose whatsoever and we accept no duty of care or liability to any party who is shown or gains access to this report. Neither the whole nor any part of this report nor any reference thereto may be included in any published document, circular or statement nor published in any way without our written approval as to the form and context in which it may appear.

We draw your attention to the scope and basis of our work in Appendix F. We have not commented on the terms of any transaction with England's Lane Residences as this is outside our remit. We have not been asked to advise on cost, town planning or legal matters, although our work shall inevitably interface with these elements. As noted in the engagement, the focus of the review is limited to the England's Lane Residences property only.

The figures contained within this report are presented in the context of advising on the viability of the proposed development. They are not formal valuations and under no circumstances should be relied upon as such.

Yours faithfully

A handwritten signature in black ink that reads "for Deloitte LLP". The signature is written in a cursive, flowing style and is underlined with a single horizontal stroke.

Signing as Deloitte LLP

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# Executive Summary

The proposals include creating additional massing to the rear of the existing hostel building. The massing to the elevations fronting England's Lane, Haverstock Hill and the rear of the existing hostel building adjacent to Atrium Road are not to change.

As a result of the limited additional massing proposed, the only surrounding residential property that is likely to experience some effect is 1-20 Walham Court. Daylight and sunlight calculations have been carried out to this property.

All other surrounding properties are considered to be of sufficient distance from the proposed massing that we consider any effect will be negligible. Detailed assessments to these properties have therefore not been carried out.

The results of the assessments show that any reduction of daylight and sunlight to the surrounding residential properties will be within the recommendations set out within the BRE Guidelines. It is therefore considered that the reductions of daylight and sunlight are unlikely to be noticeable by the occupants.

The results of the proposed internal daylight levels show that of the 36 bedrooms analysed 32 will achieve the criteria as set out in the BRE Guidelines.

Overall, the Proposed Development is not considered to cause material harm to the existing surrounding residential properties and is therefore considered to meet Camden's Policy DP26 with regards to daylight, sunlight and overshadowing.

# 1 Introduction

- 1.1 Deloitte LLP has been appointed by Cisco Property Limited on the 23<sup>rd</sup> September 2014 to undertake daylight, sunlight and overshadowing assessments to the adjacent surrounding properties as a result of the Proposed Development at England's Lane, London NW3 4XJ.
- 1.2 The assessment has been based on submitted drawings by architects Chassay Last dated September 2014, drawing series ELH5\_Drawing Set\_140915.
- 1.3 An Ordnance Survey plan showing the location of the site and the surrounding area is given at Appendix A. 3D images of the existing and proposed massing and the results of the detailed assessments are given at Appendix B. The hourly overshadowing images for 21 March are given at Appendix C. The proposed internal daylight levels are shown at Appendix D.
- 1.4 The technical assessments in this Report have been based on survey information of the site and surrounding properties.

## 2 Adjoining Properties

- 2.1 A site plan illustrating the location of surrounding residential properties is given at Appendix A.
- 2.2 To the north-west of the proposed site is 1-20 Walham Court. This building is split into various apartments. A floor plan for this building has been obtained which shows that two apartments on each floor level may be affected by the Proposed Development. This floor plan has been included at Appendix E. The living room windows to each apartment are orientated away from the Proposed Development, facing north-east or south-west, whilst two small kitchen windows and a bedroom window at each floor level face directly towards the Proposed Development. The living room windows that face north-east will not be affected by the Proposed Development and have not therefore been assessed. Daylight and sunlight calculations have, however, been undertaken to the living room windows facing south-west and the kitchen/bedroom windows facing towards the site.
- 2.3 To the south-west of the proposed site is 59-64 Antrim Mansions. This is a three storey residential terrace which fronts onto Antrim Road. The windows to the rear of property are considered to be of sufficient distance from the proposed massing that we consider any effect will be negligible. Detailed assessments have therefore not been undertaken to this property.
- 2.4 The levels of daylight and sunlight enjoyed to the properties on the opposite side of England's Lane and Haverstock Hill will not be affected by the Proposed Development as they will not see any of the new massing proposed to the rear elevations. Detailed assessments have therefore not been undertaken to these properties.



# 3 Assessment Results

- 3.1 As set out above the only property that requires detailed assessment is 1-20 Walham Court. A full set of the daylight, sunlight and overshadowing results are given at Appendix B.

## **Daylight**

- 3.2 The results show that all windows meet the BRE Guidelines criteria achieving either a VSC of 27% and above in the proposed condition or a ratio reduction of at least 0.8 times its former value. In addition, the NSL results show that all rooms will experience a reduction of daylight distribution in accordance with the BRE Guidelines.

## **Sunlight**

- 3.3 When assessing sunlight to surrounding properties the BRE Guidelines suggest that only the main living room windows need to be assessed. The guidelines suggest that sunlight to bedrooms and kitchens is less important but care should be taken not to block too much sunlight.
- 3.4 Of the 4 living room windows assessed, all will experience either no reduction or continue to enjoy good levels of sunlight in accordance with the BRE Guidelines.

## **Overshadowing**

- 3.5 The images at Appendix B show the overshadowing that will occur to the Walham Court amenity space on an hourly basis in the proposed condition on the 21<sup>st</sup> March.
- 3.6 The overshadowing images clearly demonstrate that the Walham Court amenity space will receive very good levels of sunlight above those recommended by the BRE Guidelines with over half of the amenity space receiving sunlight between 10am and 3pm.

## **Internal Proposed Daylight Levels**

- 3.6.1 To establish whether the proposed habitable bedrooms will enjoy good levels of daylight, ADF assessments have been undertaken. The ADF results undertaken to the proposed habitable rooms are given at Appendix D.
- 3.6.2 The results of the proposed internal daylight levels show that of the 36 bedrooms analysed 32 will achieve the criteria as set out in the BRE Guidelines.

## **Summary**

- 3.7 Overall, the daylight, sunlight and overshadowing assessments have shown that any effect to Walham Court will be within the BRE Guidelines criteria.
- 3.8 The Proposed Development is therefore not considered to cause material harm to existing surrounding residential properties and is therefore considered to meet Camden's policy DP26 with regards to daylight, sunlight and overshadowing.
- 3.8.1 Overall we consider that the proposed habitable bedrooms analysed will enjoy good levels of daylight.

# 4 Daylight, Sunlight and Overshadowing Methodology

- 4.1 When assessing any potential effects on the surrounding properties, the BRE Guidelines suggest that only those windows that have a reasonable expectation of daylight or sunlight need be assessed. In particular the BRE guidelines at paragraph 2.2.2 state:

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“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.”

- 4.2 Further to the above statement, it is considered that the vast majority of commercial properties do not have a reasonable expectation of daylight or sunlight. This is because they are generally designed to rely on electric lighting rather than natural daylight or sunlight.
- 4.3 If a property is considered to have a reasonable expectation of daylight or sunlight the following methodology to assess the impacts has been used.

## Daylighting

- 4.4 Where the internal arrangements are not known, the BRE Guidelines set out three methods for assessing the daylight impacts on neighbouring properties. These methods are summarised below.
- 4.5 The first of these methods is to strike a line at an angle of 25° from the centre of the lowest existing windows. If the profile of the proposed development sits beneath the 25° angle line then the development is unlikely to have a substantial effect on the daylight enjoyed by the existing building. This test is known as the 25° angle test.
- 4.6 If the proposed development protrudes past the 25° angle line then the second test needs to be applied. For this assessment, the first method has not been used as it does not always reflect the differing heights and layouts of the buildings in the local area.
- 4.7 The second method calculates the Vertical Sky Component (VSC) at the centre point of each affected window on the outside face of the wall. The VSC is an external daylighting calculation that measures the amount of direct daylight to a specific window point on the outside of a property. The calculations fundamentally assess the amount of blue sky that you will see, converting results into a percentage. A window looking into an empty field will achieve a maximum value of 40%. However, the BRE Guidelines suggests that 27% VSC is a good level of daylight. If a window does not achieve 27% VSC in the proposed scenario, then the third test is used.
- 4.8 The third method involves calculating the VSC at the window in the existing situation, i.e. before redevelopment. If the reduction of VSC is less than 0.8 times its former value, then the occupants of the adjoining building are likely to notice the reduction in daylight.
- 4.9 In conjunction with the VSC tests, the BRE guidelines and British Standard 8206-2:2008 suggest that the distribution of daylight is assessed using the No Sky Line (NSL) test. This test separates those areas of the working plane that can receive direct skylight and those that cannot.

4.10 The BRE guidelines suggest that the daylight distribution test is undertaken to existing surrounding properties when the internal arrangements are known. To assess the impact of any reduction the BRE guidelines suggest:

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If, following construction of a new development, the no sky line moves so that the area of the existing room, which does receive direct skylight, is reduced to less than 0.8 times its former value this will be noticeable to the occupants, and more of the room will appear poorly lit.

4.11 Where the internal arrangements of a property are known, the Average Daylight Factor (ADF) calculation can be undertaken. This calculation takes into account the size and shape of the room and window, the reflectance of the room's surfaces and diffuse transmittance of the glazing as well as the amount of blue sky calculated in the VSC calculation.

4.12 The BRE guidelines set out the ADF test at Appendix C and further guidance, such as the reflectance of certain materials are given within the British Standard BS8206-2:2008.

4.13 The BRE guidelines and British Standard 8206-2:2008 suggests that the following ADF values should be achieved for the following room types:

- Bedrooms 1%;
- Living Rooms 1.5%; and
- Kitchens 2%.

4.14 Certain constants were assumed in the formula, which are as follows: -

(a) The diffuse light transmittance and maintenance factor for dirt on glass was taken as 0.59.

(b) The average reflectance of interior surfaces was taken as 0.5.

4.15 The ADF results were obtained for each room individually and expressed as a percentage. Where there were two or more windows serving one room the ADF is found separately for each window, and the results summed.

4.16 In conjunction with the ADF tests, the BRE guidelines and British Standard 8206-2:2008 suggest that the distribution of daylight is assessed using the No-Sky Line test. This test separates those areas of the working plane that can receive direct skylight and those that cannot.

4.17 For existing buildings the BRE guidelines suggest that:

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If, following construction of a new development, the no sky line moves so that the area of the existing room, which does receive direct skylight, is reduced to less than 0.8 times its former value this will be noticeable to the occupants, and more of the room will appear poorly lit.

4.18 For new developments the British Standard 8206-2:2008 suggest that the uniformity of daylight within a room will be poor if a significant area of the working plane lies beyond the no-sky line. The British Standard BS8206-2:2008 also suggests that 'a significant area' is more than 20% i.e. 80% of the room area should be in front of the no-sky line. This however is not considered practical for urban areas and large rooms over 4m deep. Taking into account an urban setting it is suggested that 'a significant area' should be interpreted as more than 50%. i.e. 50% of the room area should be in front of the no-sky line.

## Sunlighting

- 4.19 The amount of direct sunlight a window can enjoy is dependent on its orientation and the extent of any external obstructions. For example a window that faces directly north, no matter what external obstructions are present, will not be able to enjoy good levels of sunlight throughout the year. However, a window that faces directly south with no obstructions will enjoy very high levels of sunlight throughout the year. As the potential to receive sunlight is dependent on a window's orientation, the BRE guidelines state:

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To assess loss of sunlight to an existing building, it is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun.

- 4.20 To assess the potential effect on existing windows the BRE guidelines set out three methods. These methods are summarised below.
- 4.21 The first test is to apply the 25° angle test as detailed above. If the profile of the proposed development sits beneath the 25° angle line then the development is unlikely to have a substantial effect on the sunlight enjoyed by the existing building. If the proposed development protrudes past the 25° angle line then the second test needs to be applied.
- 4.22 As for the daylight assessments, the 25° angle test has not been used for this assessment as it does not always reflect the differing heights and layouts of the buildings in the local area.
- 4.23 For the second sunlighting test the BRE guidelines suggest calculating the Annual Probable Sunlight Hours (APSH) at the centre of each window on the outside face of the window wall. The BRE guidelines suggest that:

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"If this window point can receive more than one quarter of APSH (see section 3.1), including at least 5% of APSH in the winter months between 21st September and 21st March, then the room should still receive enough sunlight".

- 4.24 The third method involves calculating the APSH at the window in the existing situation, i.e. before redevelopment. If the reduction of APSH between the existing and proposed situations is less than 0.8 times its former value for either the total APSH or in the winter months; and greater than 4% for the total APSH, then the occupants of the adjoining building are likely to notice the reduction in sunlight.

## Overshadowing

- 4.25 Part 3.3 of the BRE guidelines provides guidance for assessing the effect of overshadowing of gardens and amenity areas for both existing and new spaces.
- 4.26 The BRE guidelines suggest that the availability of sunlight should be checked for all open spaces where it is required. These include:
- *'gardens, usually the main back garden of a house*
  - *parks and playing fields*
  - *children's playgrounds*
  - *outdoor swimming pools and paddling pools*
  - *sitting out areas such as those between non-domestic buildings and in public squares*

- *focal points for views such as groups of monuments or fountains’.*

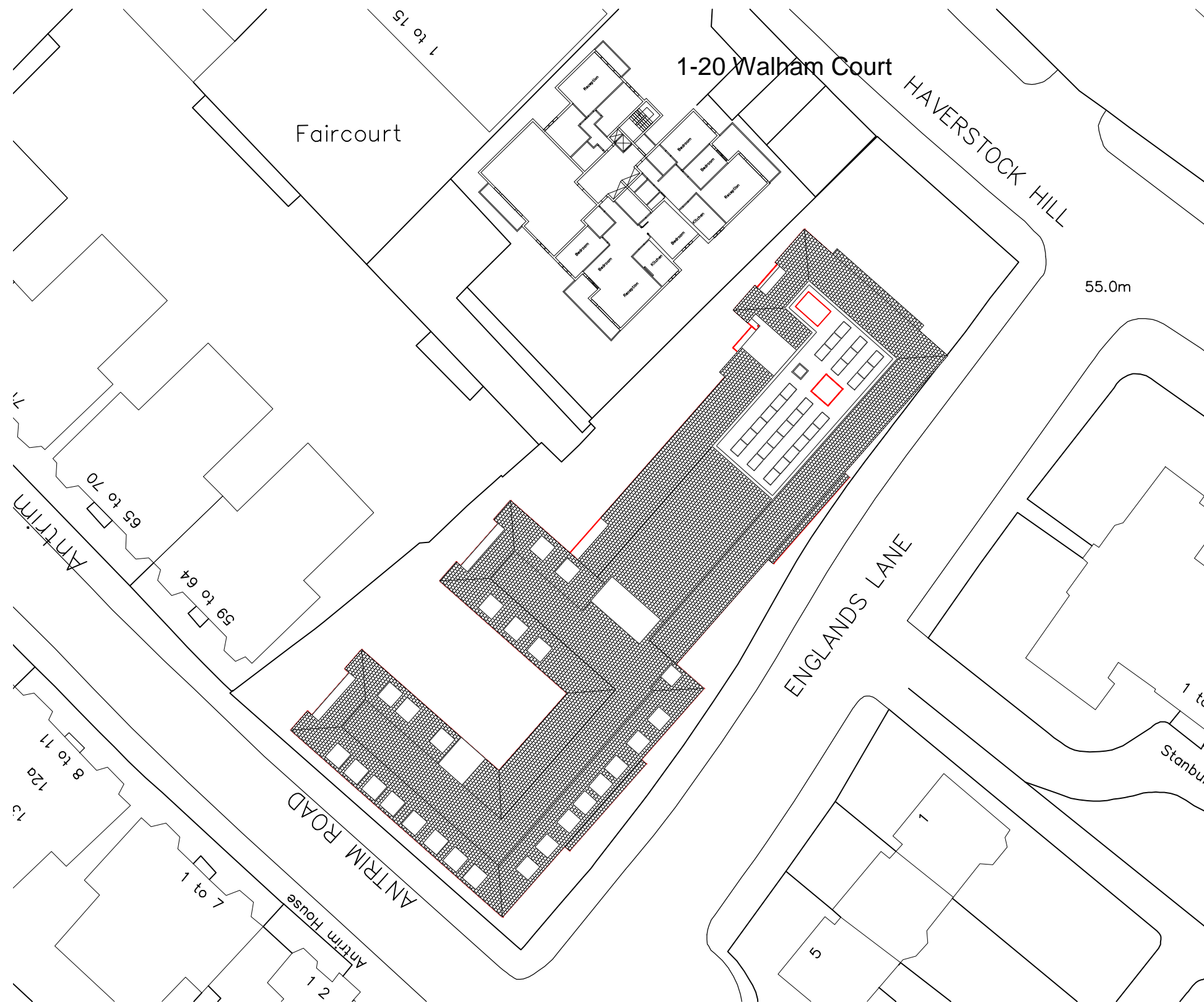
4.27 Where there is an expectation of sunlight the BRE guidelines suggest:

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"It is suggested that for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21 March. If as a result of a new development an existing garden or amenity area does not meet the above, and the area that can receive two hours of sun on 21 March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable. If a detailed calculation cannot be carried out, it is recommended that the centre of the area should receive at least two hours of sunlight on 21 March."

- 4.28 For the assessments undertaken in this report, computer software has been used to plot the shadows in the existing and proposed condition at hourly intervals on 21 March.
- 4.29 A visual assessment has first been undertaken of the hourly images to establish whether each amenity area receives at least two hours of sunlight on 21 March. This is considered to be the case if:
- Three consecutive hourly images clearly show that the amenity space will receive sunlight to over half of its area, e.g. the images for 11am, 12pm, 1pm and 2pm show more than half of the area is in direct sunlight; or
  - Two sets of two consecutive hourly images show the amenity space will receive sunlight to over half of its area, e.g. the images for 10am, 11am and 2pm, 3pm show more than half of the area is in direct sunlight.
- 4.30 If an amenity area will not meet the criteria a second visual assessment is undertaken comparing the existing and proposed overshadowing images. If it is clear that any additional overshadowing effects will meet the above criteria no further assessments are considered necessary.
- 4.31 If it is not clear from the visual assessments that the suggested criteria will be met detailed assessments calculating the areas of shade throughout the day have been carried out.

# Appendix A – Site Plan



— Proposed Site

For identification purposes only. All dimensions to be checked on site and used in preference to those given or scaled from the drawing, and must be brought to the attention of the Surveyor.

Notes

Date Revision

Drawing No. 068923/106/SP

Revision

Address.  
ENGLANDS LANE  
LONDON  
MW3 4XJ

Title.  
DAYLIGHT SUNLIGHT  
& OVERSHADOWING ANALYSIS

SITE PLAN

Client  
CISCO PROPERTY LTD

Date

18/09/14

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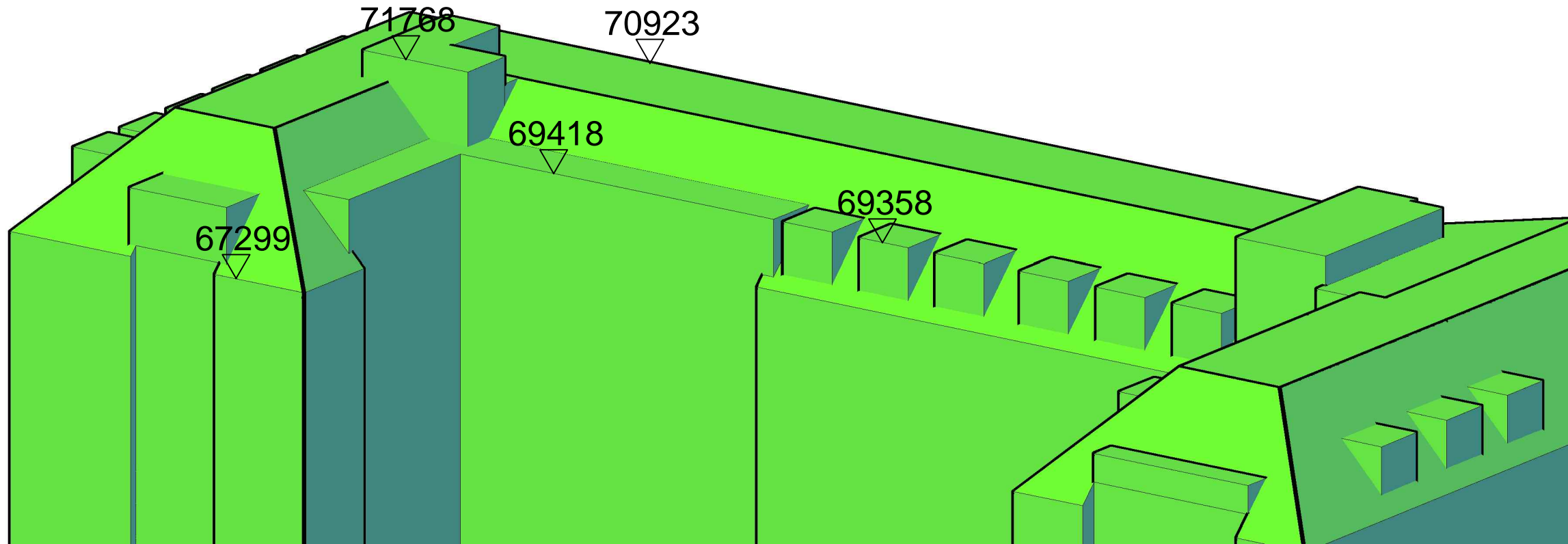
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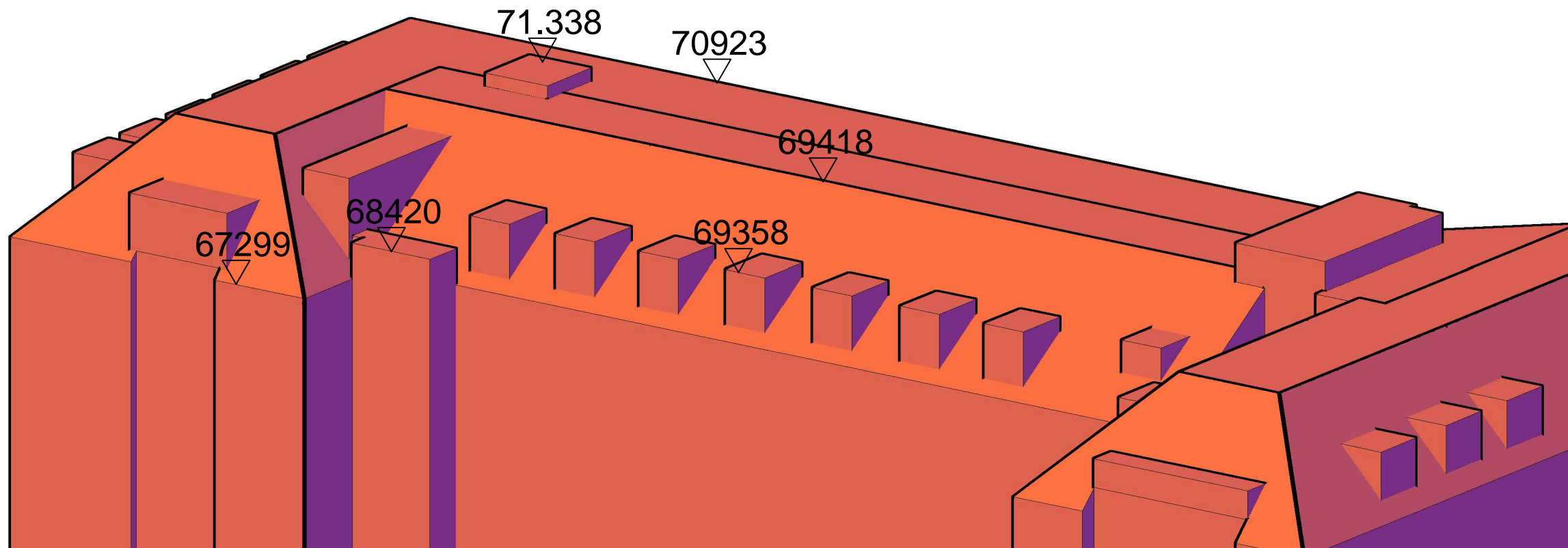
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— EXISTING

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Notes

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A

Drawing No. 068923/ SHC

Revision

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LONDON  
NW3 4XJ

Title.  
DAYLIGHT SUNLIGHT  
& OVERSHADOWING ANALYSIS

3D Views

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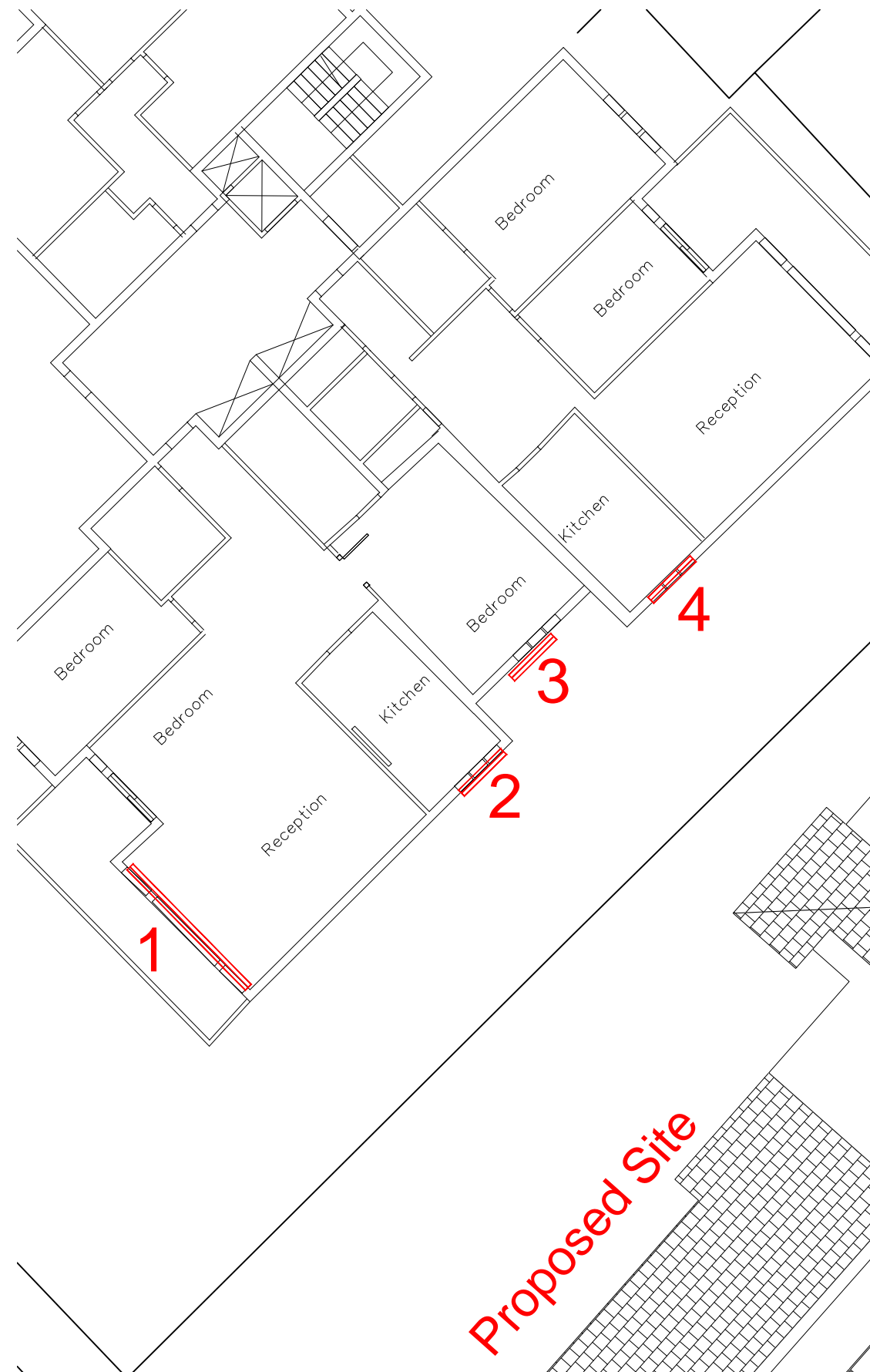
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# Appendix B – VSC, NSL & APSH Results

# Typical Floor Plan



Vertical Sky Component Results Table					
Window			Existing	Proposed	Ratio Reduction
Name	Level	Number			
Walham Ct	00	1	15.33	15.02	0.98
Walham Ct	00	2	17.59	14.48	0.82
Walham Ct	00	3	12.26	10.50	0.86
Walham Ct	00	4	13.82	12.99	0.94
Walham Ct	01	1	17.71	17.31	0.98
Walham Ct	01	2	22.29	19.49	0.87
Walham Ct	01	3	16.31	14.81	0.91
Walham Ct	01	4	17.98	17.33	0.96
Walham Ct	02	1	20.05	19.85	0.99
Walham Ct	02	2	27.58	25.85	0.94
Walham Ct	02	3	21.49	20.60	0.96
Walham Ct	02	4	24.01	23.58	0.98
Walham Ct	03	1	22.31	22.21	1.00
Walham Ct	03	2	32.93	32.21	0.98
Walham Ct	03	3	27.00	26.49	0.98
Walham Ct	03	4	31.84	31.41	0.99
Walham Ct	04	1	38.34	38.30	1.00
Walham Ct	04	2	37.45	37.28	1.00
Walham Ct	04	3	31.41	31.29	1.00
Walham Ct	04	4	37.57	37.47	1.00
Walham Ct	05	0.00	39.60	39.60	1.00
Walham Ct	05	1	34.66	34.66	1.00
Walham Ct	05	2	39.60	39.60	1.00

Notes

**1** Window Number

Date Revision

Drawing No. 068923/102/VSC Revision

**Address.**  
 ENGLANDS LANE  
 LONDON  
 NW3 4XJ

**Title.**  
 DAYLIGHT SUNLIGHT  
 & OVERSHADOWING ANALYSIS  
 VSC TABLE  
 WALHAM COURT

**Client**  
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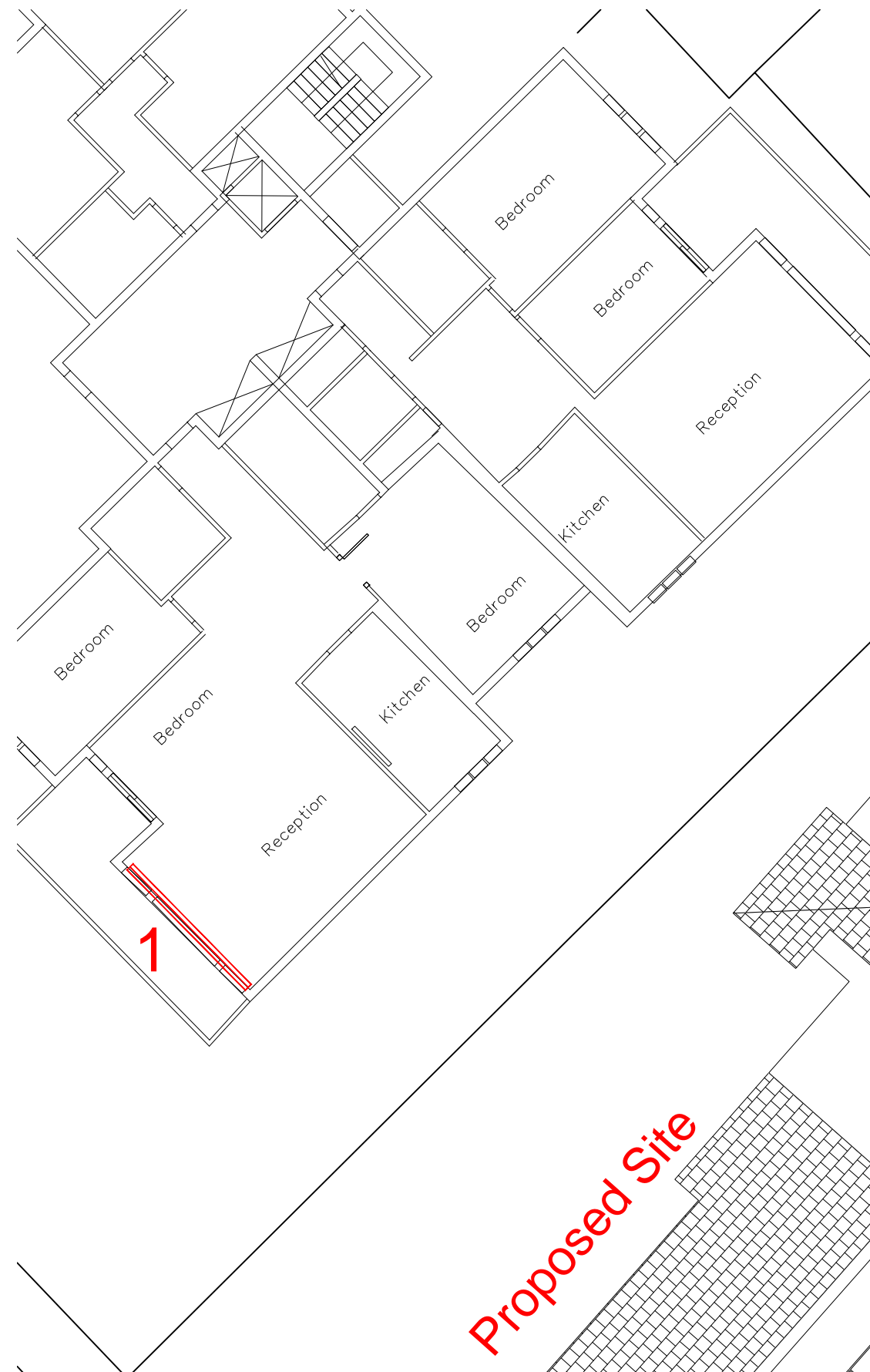
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# Typical Floor Plan



Annual Probable Sunlight Hours Results Table									
Window			Existing		Proposed		Ratio Reduction		
Name	Level	Number	Total	Winter	Total	Winter	Total	Winter	
Walham Ct	00	1	33.00	9.00	32.00	8.00	0.97	0.89	
Walham Ct	01	1	36.00	12.00	35.00	11.00	0.97	0.92	
Walham Ct	02	1	42.00	18.00	40.00	16.00	0.95	0.89	
Walham Ct	03	1	46.00	22.00	46.00	22.00	1.00	1.00	
Walham Ct	04	1	73.00	26.00	73.00	26.00	1.00	1.00	

Notes

**1** Window Number

Date Revision

Drawing No. 068923/102/APSH Revision

Address.  
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Title.  
DAYLIGHT SUNLIGHT  
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APSH TABLE  
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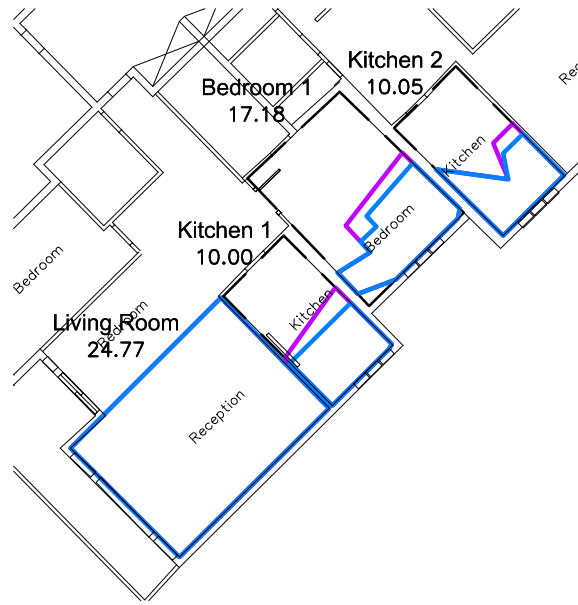
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### Ground Floor



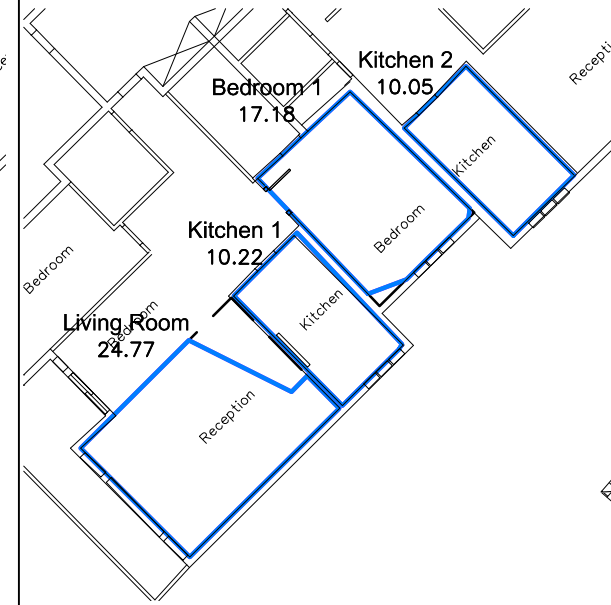
### First Floor



### Second Floor



### Third Floor



### Fourth Floor



No Sky Line Results Table						
Name	Room		Existing (sq.m)	Proposed (sq.m)	Loss Total (sq.m)	Ratio Reduction
	Floor Level	Base Area (sq.m)				
Bedroom 1	00	17.18	6.48	5.52	0.96	0.85
Kitchen 1	00	10.00	4.85	3.86	0.99	0.80
Kitchen 2	00	10.05	4.27	3.85	0.42	0.90
Living Room	00	24.77	24.77	24.77	0.00	1.00
Bedroom 1	01	17.18	9.01	7.62	1.40	0.85
Kitchen 1	01	10.00	6.55	5.45	1.10	0.83
Kitchen 2	01	10.05	4.71	4.40	0.31	0.93
Living Room	01	24.77	24.77	24.77	0.00	1.00
Bedroom 1	02	17.18	13.60	12.04	1.56	0.89
Kitchen 1	02	10.22	9.78	8.23	1.55	0.84
Kitchen 2	02	10.05	6.47	6.45	0.02	1.00
Living Room	02	24.77	24.77	24.77	0.00	1.00
Bedroom 1	03	17.18	16.92	16.92	0.00	1.00
Kitchen 1	03	10.22	10.21	10.21	0.00	1.00
Kitchen 2	03	10.05	10.05	10.05	0.00	1.00
Living Room	03	24.77	21.66	21.66	0.00	1.00
Bedroom 1	04	17.18	16.92	16.92	0.00	1.00
Kitchen 1	04	10.22	10.21	10.21	0.00	1.00
Kitchen 2	04	10.05	10.05	10.05	0.00	1.00
Living Room	04	24.77	24.77	24.77	0.00	1.00

- Existing NSL Contour
- Proposed NSL Contour

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Notes

Date Revision

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Title.  
DAYLIGHT SUNLIGHT  
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NSL TABLE  
WALHAM COURT

Client  
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18/09/14	File No.	068923	nts	

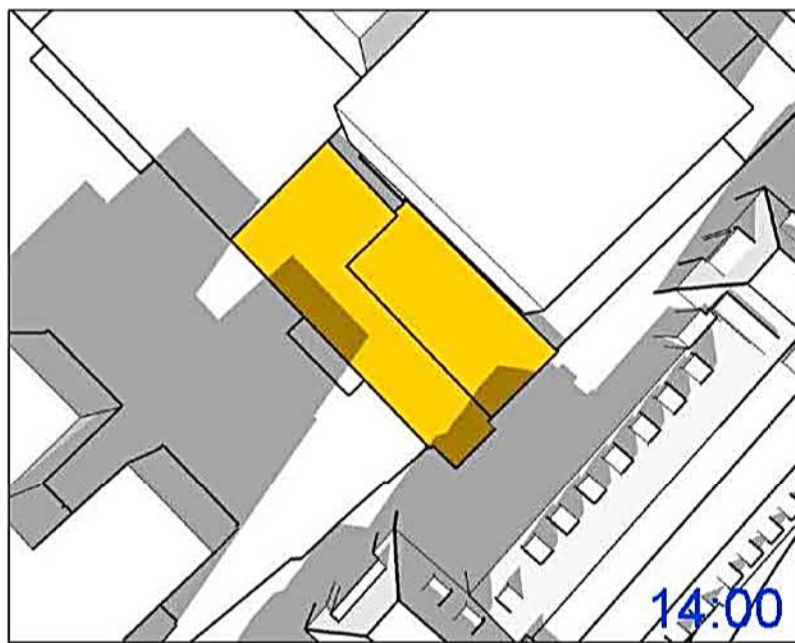
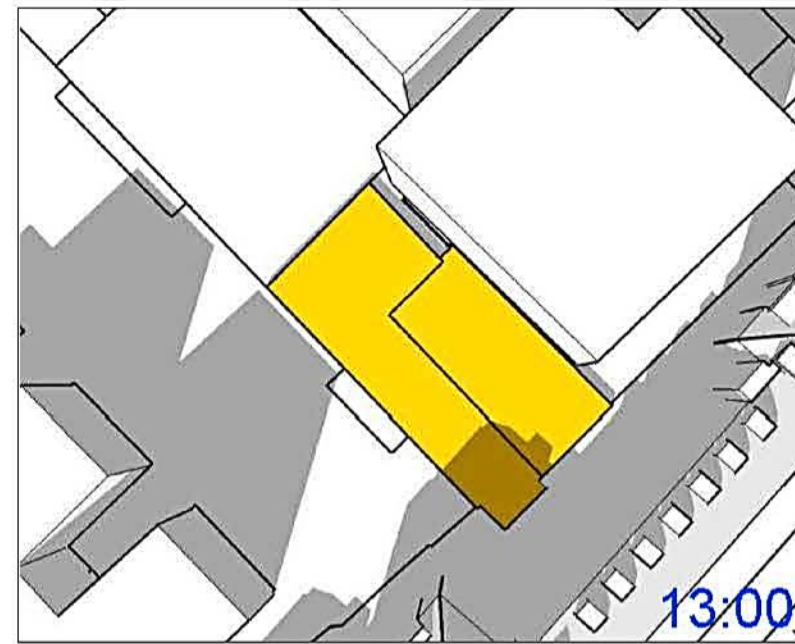
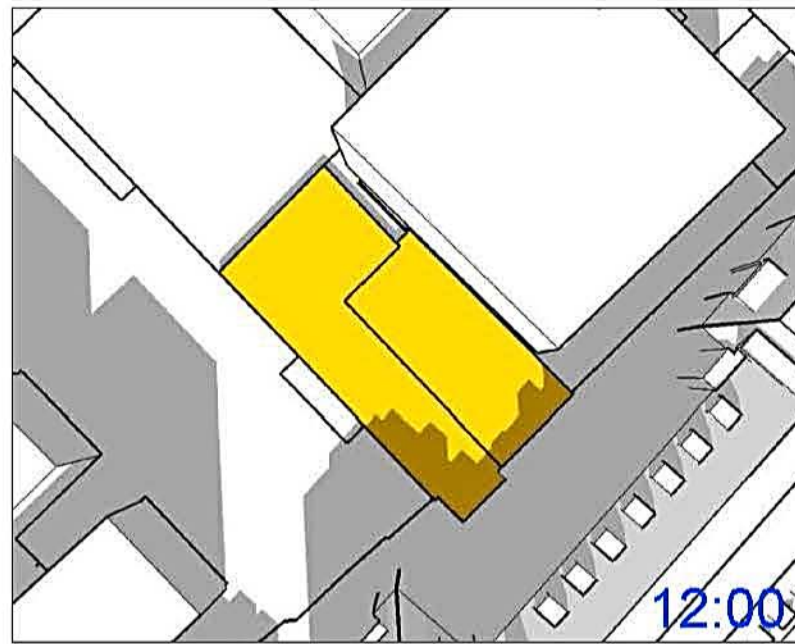
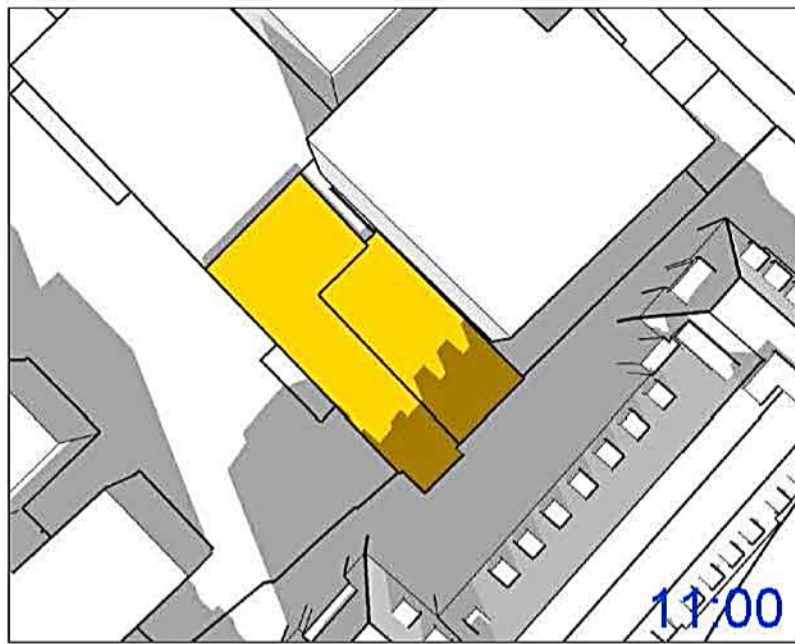
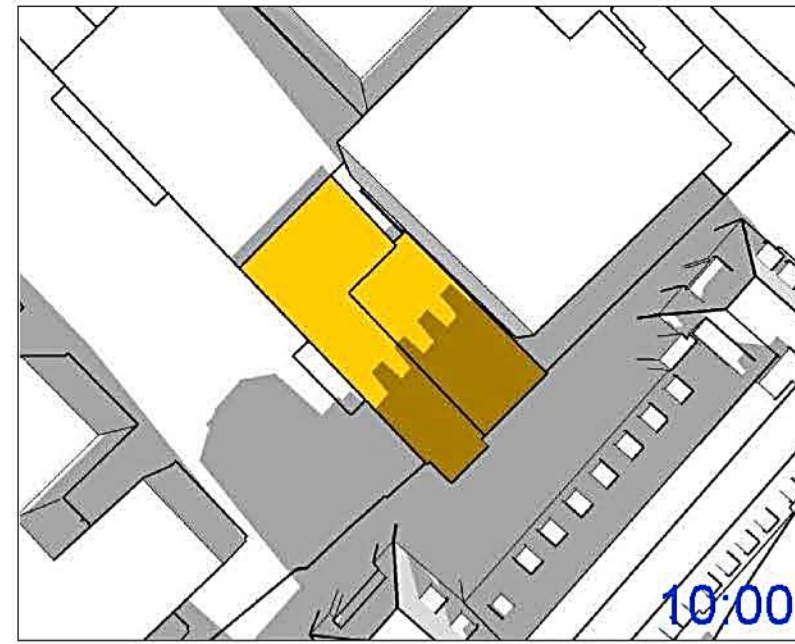
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# Appendix C – Overshadowing Results



Notes

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Drawing No. ENGLANE/OS 01 Revision

**Address.**  
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 Overshadowing Study  
 March 21

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 Cisco Property Ltd

Date	Drawn by	RH	Scale	A3 @
18/09/14	File No.	ENGLA	NTS	

**Deloitte.**

**Real Estate**

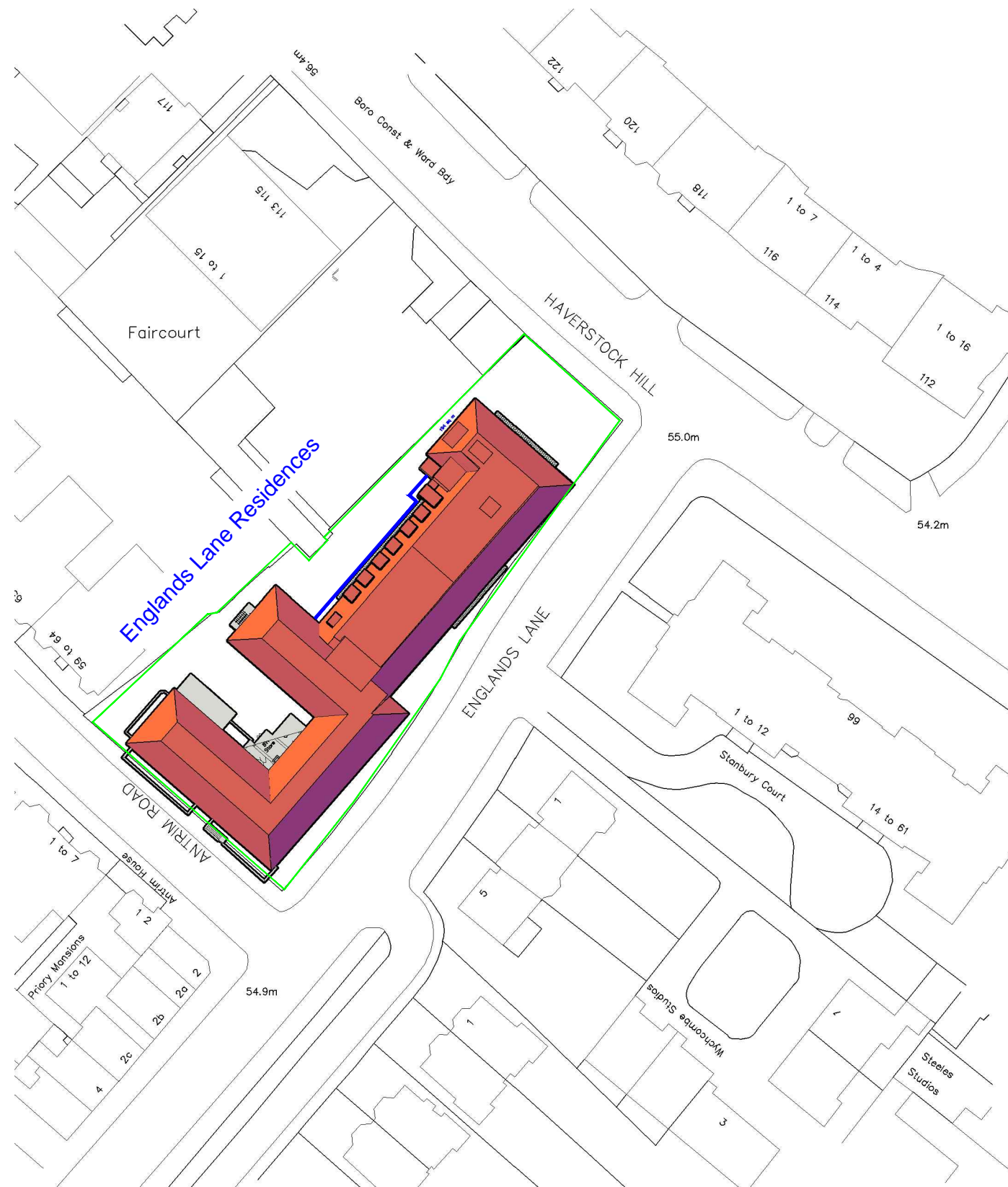
Athene Place, 66 Shoe Lane,  
 London EC4A 3BQ  
 Telephone 020-7597 8000 Fax 020-7596 1130

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# Appendix D – Proposed Internal Daylight Levels



Elevation Analyzed



SITE

**Notes**

- Drawings Used:
- ELH5\_Proposed Elevation + Section\_140806 MB.dwg
- ELH5\_Proposed Plans\_140806 MB.dwg
- ELH5 - Sunlight Daylight Analysis Model - 140804 MB.dwg

- Site Boundary
- Property analysed
- Elevation analysed

Date Revision

Drawing No. 02018859/Site/01 Revision

**Address.**  
**Englands Lane**  
**London**

**Title.**  
**Average Daylight Factor**  
**England's Lane**  
**Residences**

**Client**  
**Cisco Properties**

Date	Drawn by	Scale
18/09/14	IKA	A3 @
	File No.	NTS
	02018859	

**Deloitte.**  
**Real Estate**  
 Athene Place, 66 Shoe Lane,  
 London EC4A 3BQ  
 Telephone 020-7007 9000 Fax 020-7063 1198

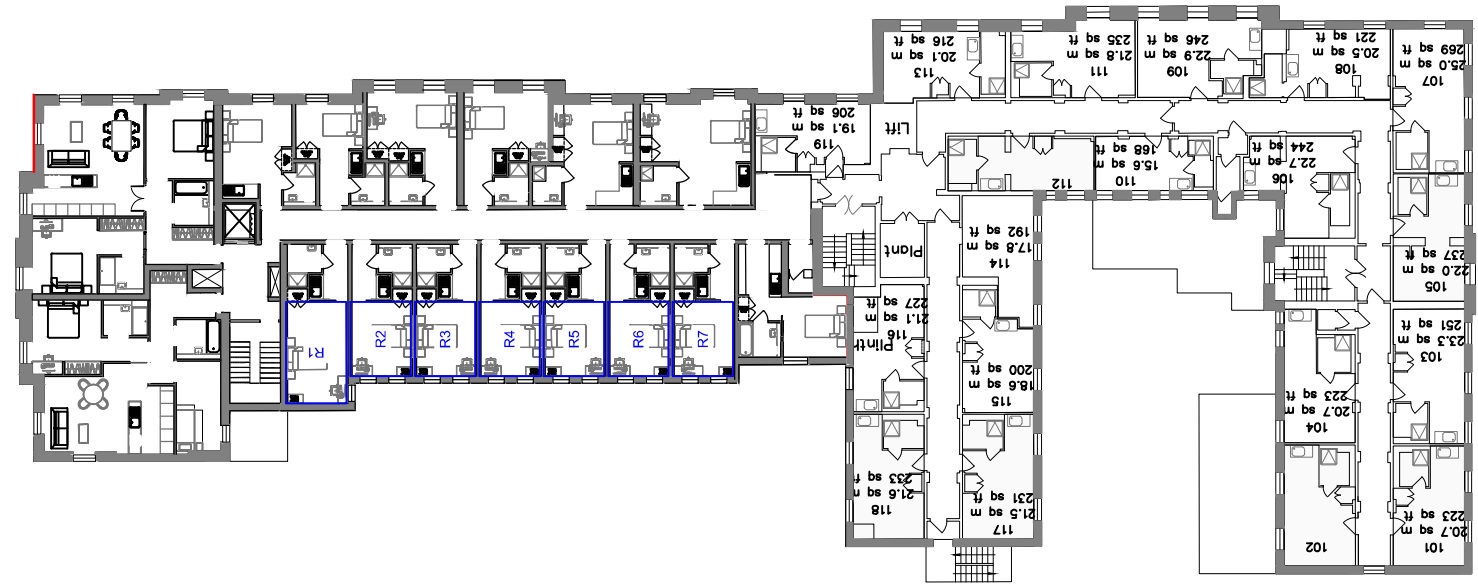
For identification purposes only. All dimensions to be checked on site and used in preference to those given or scaled from the drawing, and must be brought to the attention of the Surveyor.



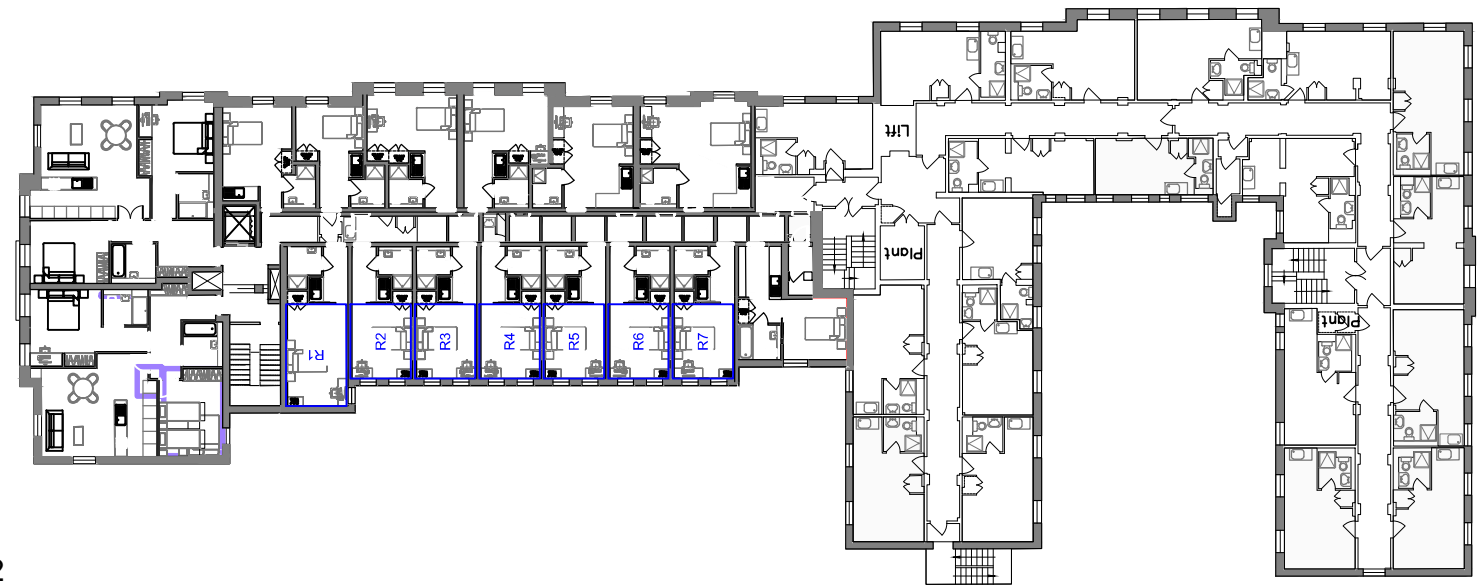
Notes



00



01



02

Date Revision

Drawing No. 02018859/ADF 01 Revision

Address.  
Englands Lane  
London

Title.  
Average Daylight Factor  
Englands Lane  
Residences

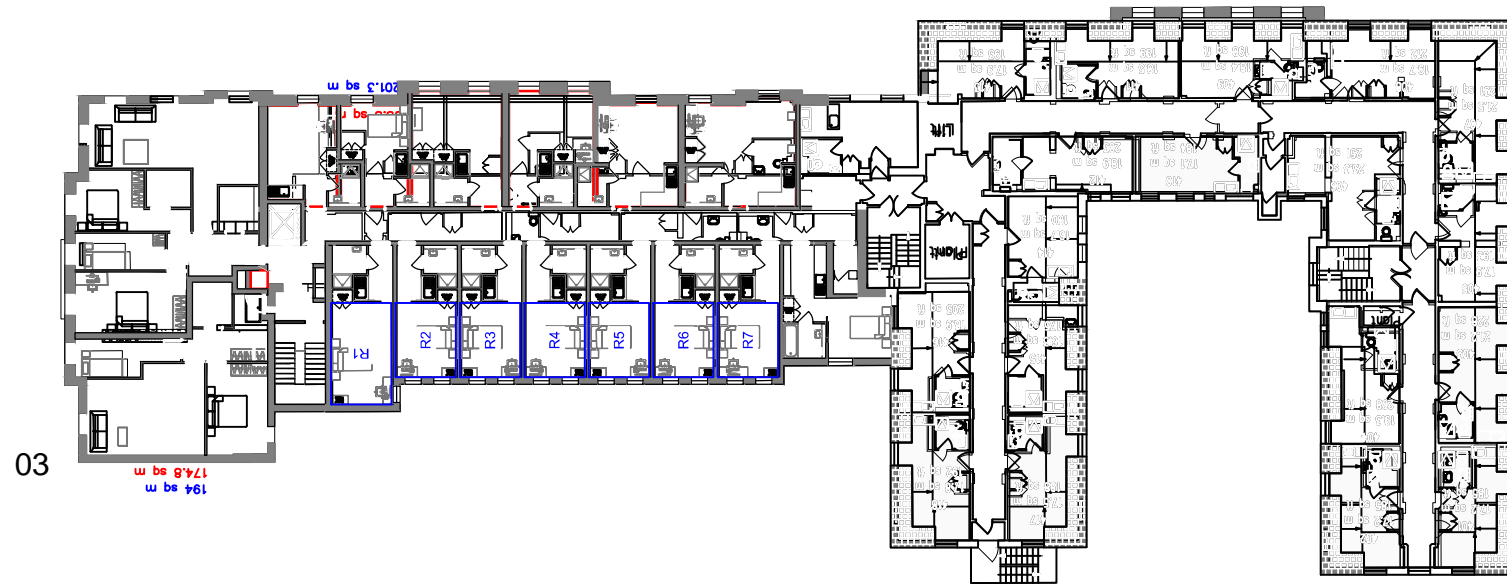
Client  
Cisco Properties

Date	Drawn by	Scale
18/09/14	IKA	A3 @
	File No.	NTS
	02018859	

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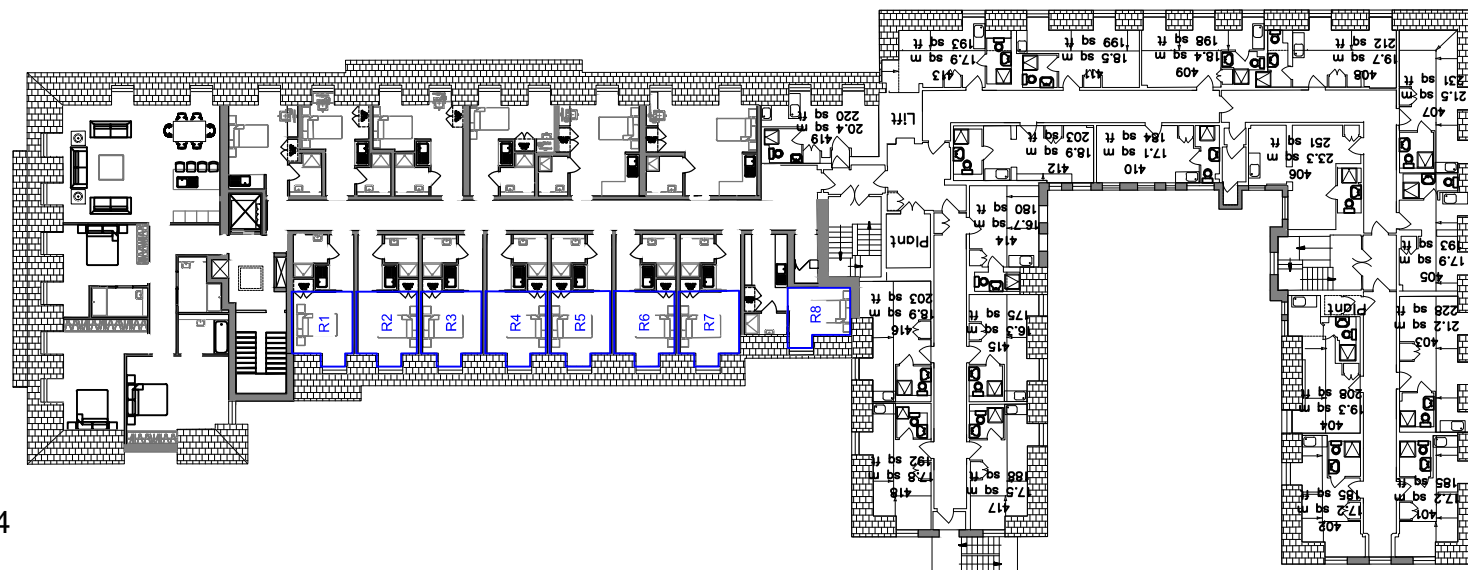
For identification purposes only. All dimensions to be checked on site and used in preference to those given or scaled from the drawing, and must be brought to the attention of the Surveyor.

Notes



03

194 sq m  
174.8 sq m



04

Date Revision

Drawing No. 02018859/ADF/02 Revision

Address.  
Englands Lane  
London

Title.  
Average Daylight Factor  
Englands Lane  
Residences

Client  
Cisco Properties

Date	Drawn by IKA	Scale A3 @
18/09/14	File No. 02018859	NTS

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For identification purposes only. All dimensions to be checked on site and used in preference to those given or scaled from the drawing, and must be brought to the attention of the Surveyor.

Project Name: 140916\_ADF Model  
 Project No:  
 Report Title:  
 Architect:  
 Scheme Iteration No:  
 Iteration Description:  
 Date of Analysis: 17/09/2014  
 Key drawings:

Floor Ref.	Room Ref.	Room Use.	Window Ref.	Glass Transmittance	Glazed Area	Clear Sky Angle Proposed	Room Surface Area	Average Surface Reflectance	Below Working Plane Factor	ADF Proposed	Req'd Value	Pass/Fail
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### Englands Lane Residences

Ground	R1	Bedroom	W13-L	0.68	0.12	42.56	69.78	0.50	0.15	0.01	1.00	FAIL
			W13-U	0.68	0.87	43.67	69.78	0.50	1.00	0.49		
Ground	R2	Bedroom	W11-L	0.68	0.12	43.90	54.98	0.50	0.15	0.01	1.00	PASS
			W11-U	0.68	0.87	45.70	54.98	0.50	1.00	0.66		
			W12-L	0.68	0.12	39.25	54.98	0.50	0.15	0.01		
			W12-U	0.68	0.87	40.68	54.98	0.50	1.00	0.58		
										1.26		
Ground	R3	Bedroom	W9-L	0.68	0.13	50.50	55.07	0.50	0.15	0.02	1.00	PASS
			W9-U	0.68	0.86	52.89	55.07	0.50	1.00	0.75		
			W10-L	0.68	0.13	47.70	55.07	0.50	0.15	0.02		
			W10-U	0.68	0.86	49.85	55.07	0.50	1.00	0.71		
										1.49		
Ground	R4	Bedroom	W7-L	0.68	0.14	55.41	55.00	0.50	0.15	0.02	1.00	PASS
			W7-U	0.68	0.86	58.28	55.00	0.50	1.00	0.83		
			W8-L	0.68	0.14	53.64	55.00	0.50	0.15	0.02		
			W8-U	0.68	0.86	56.34	55.00	0.50	1.00	0.80		
										1.66		
Ground	R5	Bedroom	W5-L	0.68	0.14	57.65	55.05	0.50	0.15	0.02	1.00	PASS
			W5-U	0.68	0.85	60.51	55.05	0.50	1.00	0.85		
			W6-L	0.68	0.14	56.80	55.05	0.50	0.15	0.02		
			W6-U	0.68	0.85	59.71	55.05	0.50	1.00	0.84		
										1.72		
Ground	R6	Bedroom	W3-L	0.68	0.15	57.77	55.07	0.50	0.15	0.02	1.00	PASS
			W3-U	0.68	0.84	60.47	55.07	0.50	1.00	0.84		
			W4-L	0.68	0.15	57.92	55.07	0.50	0.15	0.02		
			W4-U	0.68	0.84	60.74	55.07	0.50	1.00	0.84		
										1.72		
Ground	R7	Bedroom	W1-L	0.68	0.16	56.25	64.51	0.50	0.15	0.02	1.00	PASS
			W1-U	0.68	0.84	58.54	64.51	0.50	1.00	0.69		
			W2-L	0.68	0.16	57.24	64.51	0.50	0.15	0.02		
			W2-U	0.68	0.84	59.73	64.51	0.50	1.00	0.71		
										1.43		
First	R1	Bedroom	W13-L	0.68	0.28	46.05	69.78	0.50	0.15	0.03	1.00	FAIL
			W13-U	0.68	0.72	46.79	69.78	0.50	1.00	0.44		
First	R2	Bedroom	W11-L	0.68	0.28	49.14	54.98	0.50	0.15	0.03	1.00	PASS
			W11-U	0.68	0.72	50.11	54.98	0.50	1.00	0.59		
			W12-L	0.68	0.28	43.32	54.98	0.50	0.15	0.03		
			W12-U	0.68	0.72	44.13	54.98	0.50	1.00	0.52		
										1.18		
First	R3	Bedroom	W9-L	0.68	0.28	57.16	55.07	0.50	0.15	0.04	1.00	PASS
			W9-U	0.68	0.71	58.21	55.07	0.50	1.00	0.68		
			W10-L	0.68	0.28	53.86	55.07	0.50	0.15	0.04		
			W10-U	0.68	0.71	54.88	55.07	0.50	1.00	0.64		
										1.40		
First	R4	Bedroom	W7-L	0.68	0.29	63.30	55.00	0.50	0.15	0.05	1.00	PASS
			W7-U	0.68	0.70	64.30	55.00	0.50	1.00	0.74		
			W8-L	0.68	0.29	61.09	55.00	0.50	0.15	0.04		
			W8-U	0.68	0.70	62.10	55.00	0.50	1.00	0.72		
										1.55		
First	R5	Bedroom	W5-L	0.68	0.29	65.60	55.05	0.50	0.15	0.05	1.00	PASS
			W5-U	0.68	0.70	66.53	55.05	0.50	1.00	0.77		
			W6-L	0.68	0.29	64.84	55.05	0.50	0.15	0.05		
			W6-U	0.68	0.70	65.81	55.05	0.50	1.00	0.76		
										1.62		
First	R6	Bedroom	W3-L	0.68	0.30	65.91	55.07	0.50	0.15	0.05	1.00	PASS
			W3-U	0.68	0.69	66.96	55.07	0.50	1.00	0.76		
			W4-L	0.68	0.30	66.03	55.07	0.50	0.15	0.05		
			W4-U	0.68	0.69	67.01	55.07	0.50	1.00	0.76		
										1.62		
First	R7	Bedroom	W1-L	0.68	0.31	63.54	55.01	0.50	0.15	0.05	1.00	PASS
			W1-U	0.68	0.68	64.72	55.01	0.50	1.00	0.73		
First	R7	Bedroom	W2-L	0.68	0.31	65.05	55.01	0.50	0.15	0.05	1.00	PASS
			W2-U	0.68	0.68	66.26	55.01	0.50	1.00	0.74		
										1.57		

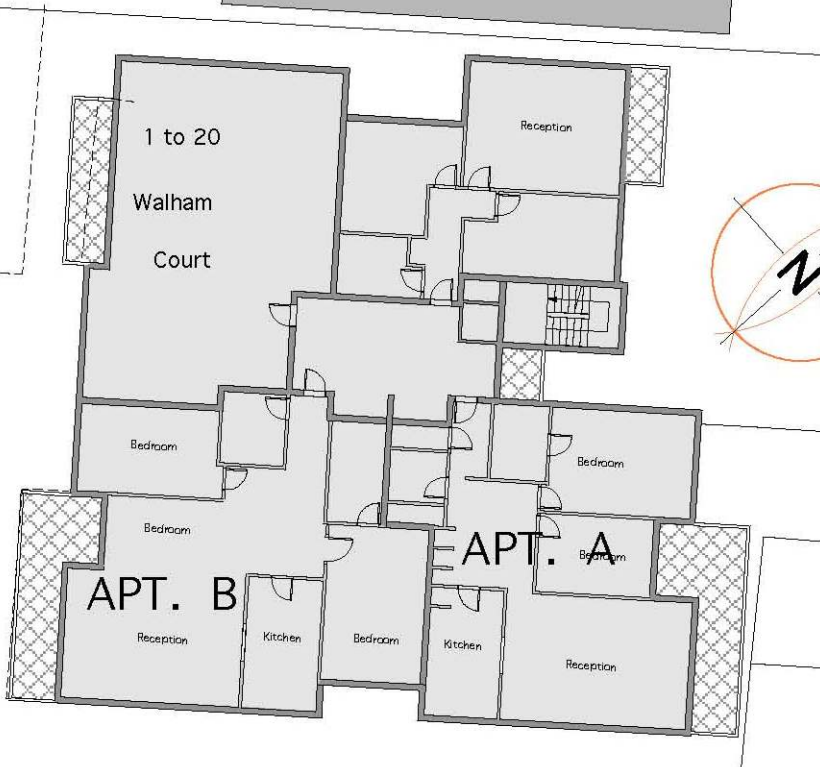
Project Name: 140916\_ADF Model  
 Project No:  
 Report Title:  
 Architect:  
 Scheme Iteration No:  
 Iteration Description:  
 Date of Analysis: 17/09/2014  
 Key drawings:

Floor Ref.	Room Ref.	Room Use.	Window Ref.	Glass Transmittance	Glazed Area	Clear Sky Angle Proposed	Room Surface Area	Average Surface Reflectance	Below Working Plane Factor	ADF Proposed	Req'd Value	Pass/Fail
Second	R1	Bedroom	W13-L	0.68	0.31	48.97	69.78	0.50	0.15	0.03	1.00	FAIL
			W13-U	0.68	0.69	49.90	69.78	0.50	1.00	0.45		
Second	R2	Bedroom	W11-L	0.68	0.31	52.99	54.98	0.50	0.15	0.04	1.00	PASS
			W11-U	0.68	0.69	54.31	54.98	0.50	1.00	0.62		
			W12-L	0.68	0.31	46.50	54.98	0.50	0.15	0.04		
			W12-U	0.68	0.69	47.55	54.98	0.50	1.00	0.54		
Second	R3	Bedroom	W9-L	0.68	0.31	61.30	55.07	0.50	0.15	0.05	1.00	PASS
			W9-U	0.68	0.68	62.61	55.07	0.50	1.00	0.70		
			W10-L	0.68	0.31	57.91	55.07	0.50	0.15	0.04		
			W10-U	0.68	0.68	59.28	55.07	0.50	1.00	0.66		
Second	R4	Bedroom	W7-L	0.68	0.32	67.28	55.00	0.50	0.15	0.05	1.00	PASS
			W7-U	0.68	0.67	68.42	55.00	0.50	1.00	0.76		
			W8-L	0.68	0.32	65.13	55.00	0.50	0.15	0.05		
			W8-U	0.68	0.67	66.38	55.00	0.50	1.00	0.73		
Second	R5	Bedroom	W5-L	0.68	0.33	69.39	55.05	0.50	0.15	0.06	1.00	PASS
			W5-U	0.68	0.67	70.49	55.05	0.50	1.00	0.78		
			W6-L	0.68	0.33	68.62	55.05	0.50	0.15	0.06		
			W6-U	0.68	0.67	69.69	55.05	0.50	1.00	0.77		
Second	R6	Bedroom	W3-L	0.68	0.33	70.06	55.07	0.50	0.15	0.06	1.00	PASS
			W3-U	0.68	0.66	71.26	55.07	0.50	1.00	0.77		
			W4-L	0.68	0.33	70.01	55.07	0.50	0.15	0.06		
			W4-U	0.68	0.66	71.16	55.07	0.50	1.00	0.77		
Second	R7	Bedroom	W1-L	0.68	0.34	68.44	55.01	0.50	0.15	0.06	1.00	PASS
			W1-U	0.68	0.65	69.78	55.01	0.50	1.00	0.75		
			W2-L	0.68	0.34	69.56	55.01	0.50	0.15	0.06		
			W2-U	0.68	0.65	70.82	55.01	0.50	1.00	0.76		
Third	R1	Bedroom	W13-L	0.68	0.33	52.78	69.78	0.50	0.15	0.03	1.00	FAIL
			W13-U	0.68	0.67	54.23	69.78	0.50	1.00	0.47		
Third	R2	Bedroom	W11-L	0.68	0.33	58.27	54.98	0.50	0.15	0.05	1.00	PASS
			W11-U	0.68	0.66	60.24	54.98	0.50	1.00	0.66		
Third	R2	Bedroom	W12-L	0.68	0.33	50.78	54.98	0.50	0.15	0.04	1.00	PASS
			W12-U	0.68	0.66	52.82	54.98	0.50	1.00	0.57		
Third	R3	Bedroom	W9-L	0.68	0.34	66.40	55.07	0.50	0.15	0.06	1.00	PASS
			W9-U	0.68	0.66	67.99	55.07	0.50	1.00	0.74		
			W10-L	0.68	0.34	63.15	55.07	0.50	0.15	0.05		
			W10-U	0.68	0.66	64.92	55.07	0.50	1.00	0.71		
Third	R4	Bedroom	W7-L	0.68	0.34	71.51	55.00	0.50	0.15	0.06	1.00	PASS
			W7-U	0.68	0.65	72.68	55.00	0.50	1.00	0.78		
			W8-L	0.68	0.34	69.87	55.00	0.50	0.15	0.06		
			W8-U	0.68	0.65	71.15	55.00	0.50	1.00	0.76		
Third	R5	Bedroom	W5-L	0.68	0.35	73.64	55.05	0.50	0.15	0.06	1.00	PASS
			W5-U	0.68	0.64	74.82	55.05	0.50	1.00	0.79		
			W6-L	0.68	0.35	72.75	55.05	0.50	0.15	0.06		
			W6-U	0.68	0.64	73.91	55.05	0.50	1.00	0.78		
Third	R6	Bedroom	W3-L	0.68	0.36	74.79	55.07	0.50	0.15	0.07	1.00	PASS
			W3-U	0.68	0.64	76.12	55.07	0.50	1.00	0.80		
			W4-L	0.68	0.36	74.50	55.07	0.50	0.15	0.07		
			W4-U	0.68	0.64	75.74	55.07	0.50	1.00	0.80		
Third	R7	Bedroom	W1-L	0.68	0.36	73.89	55.01	0.50	0.15	0.07	1.00	PASS
			W1-U	0.68	0.63	75.50	55.01	0.50	1.00	0.78		
			W2-L	0.68	0.36	74.63	55.01	0.50	0.15	0.07		
			W2-U	0.68	0.63	76.07	55.01	0.50	1.00	0.79		
Fourth	R1	Bedroom	W8-L	0.68	0.23	58.57	53.05	0.50	0.15	0.03	1.00	PASS
			W8-U	0.68	1.20	58.28	53.05	0.50	1.00	1.20		
Fourth	R2	Bedroom	W7-L	0.68	0.24	63.14	53.06	0.50	0.15	0.04	1.00	PASS
			W7-U	0.68	1.19	63.87	53.06	0.50	1.00	1.30		
										1.34	1.00	PASS

Project Name: 140916\_ADF Model  
 Project No:  
 Report Title:  
 Architect:  
 Scheme Iteration No:  
 Iteration Description:  
 Date of Analysis: 17/09/2014  
 Key drawings:

Floor Ref.	Room Ref.	Room Use.	Window Ref.	Glass Transmittance	Glazed Area	Clear Sky Angle Proposed	Room Surface Area	Average Surface Reflectance	Below Working Plane Factor	ADF Proposed	Req'd Value	Pass/Fail
Fourth	R3	Bedroom	W6-L	0.68	0.25	70.63	53.14	0.50	0.15	0.05	1.00	PASS
			W6-U	0.68	1.18	69.40	53.14	0.50	1.00	1.40		
Fourth	R4	Bedroom	W5-L	0.68	0.26	74.84	53.07	0.50	0.15	0.05	1.00	PASS
			W5-U	0.68	1.17	72.98	53.07	0.50	1.00	1.46		
Fourth	R5	Bedroom	W4-L	0.68	0.27	77.15	53.17	0.50	0.15	0.05	1.00	PASS
			W4-U	0.68	1.16	75.02	53.17	0.50	1.00	1.48		
Fourth	R6	Bedroom	W3-L	0.68	0.28	78.94	53.23	0.50	0.15	0.06	1.00	PASS
			W3-U	0.68	1.15	76.68	53.23	0.50	1.00	1.50		
Fourth	R7	Bedroom	W2-L	0.68	0.29	79.53	53.30	0.50	0.15	0.06	1.00	PASS
			W2-U	0.68	1.14	77.40	53.30	0.50	1.00	1.50		
Fourth	R8	Bedroom	W1	0.68	0.83	73.06	46.00	0.50	1.00	1.20	1.00	PASS
										1.20		

# Appendix E – Internal Layout at Walham Court



1 to 20

Walham

Court

Reception

Bedroom

Bedroom

Bedroom

APT. A  
Bedroom

APT. B

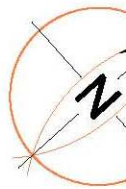
Reception

Kitchen

Bedroom

Kitchen

Reception



# Appendix F – Instruction



Cisco Property Limited  
c/o Salamanca Group Trust (Switzerland) SA  
PO Box 1744  
3 Place des Bergues  
1211 Geneva 1  
Switzerland

11 September 2014  
Our ref: ENG/2014/01

Dear Sirs

## **Redevelopment of England's Lane Residences, England's Lane, London NW3 4XY**

### **Contract Addendum**

This letter (the "Contract Addendum"), which sets out the terms on which we offer to perform the additional services specified below, is supplemental to and should be read in conjunction with the contract between you and Deloitte LLP ("Deloitte") dated *20 August 2014* (the "Contract").

The terms of the Contract apply to the provision of our additional services under this Contract Addendum as if these supplementary instructions had been included in the Contract, subject only to the modifications set out in this Contract Addendum.

### **1 Additional services and deliverables**

The scope of our work under the Contract will be extended to include the following:

- *Providing a new Daylight and Sunlight report to support the latest application being submitted.*
- *Analyse the latest scheme changes and the effects on the surrounding residential properties for daylight, sunlight and overshadowing.*
- *A revised analysis of the Internal Daylight Levels of the revised proposed building.*

The deliverables we will produce as part of this additional work will be as follows:

*We will produce a revised Daylight, Sunlight & Overshadowing report showing the findings from the latest scheme analysis which addresses the daylight, sunlight and overshadowing implications to the surrounding residential properties and proposed habitable rooms as a result of the latest scheme changes.*

### **2 Fees and expenses**

- *We suggest a fixed fee of £3,500 in order to produce the above mentioned deliverables*

# Deloitte.

Our fees and expenses will be payable in accordance with the terms and conditions of the Contract.

### 3 Conclusion and confirmation of agreement

Except for those terms that are modified above, all of the terms of the Contract shall remain unchanged. In particular, our agreeing to undertake the additional work under this Contract Addendum will not in any circumstances increase our aggregate liability to all parties for all services provided under this Contract Addendum and under the Contract beyond the limit of our liability already specified in the Contract.

Please confirm your acceptance of this Contract Addendum by signing and returning the attached copy of it.

Yours faithfully

*for Deloitte LLP*

Deloitte LLP

I hereby confirm the agreement to the terms set out above on behalf of Cisco Property Limited.

Signed:



Name:

Lorraine Lees



Ross Stamislas

Date:

22/09/2014

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