

# **REPORT**

**100 PARK VILLAGE EAST  
LONDON NW1**

**DAYLIGHT & SUNLIGHT**

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Chassay +Last  
Berkeley Works  
Berkley Grove  
London NW1 8XY

Our Ref: JC/SAU/7847

Date: 22<sup>nd</sup> February 2007

Dear Sirs

**100 Park Village East, London NW1**

**Daylight & Sunlight**

We have been instructed by Notting Hill Developments Limited to advise and report upon the daylight and sunlight aspects of their planning application.

This report is based upon the application drawings, site inspection and measurement, including adjoining property, Crown Estate drawings of Tintern House, plus daylight/sunlight calculations of neighbouring residential property.

**1.0 SUMMARY**

- 1.1 This report has been drafted by reference to the Building Research Establishment (BRE) publication '*Site Layout Planning for Daylight and Sunlight: A guide to good practice*' and the requirements of The London Borough of Camden's Unitary Development Plan (UDP).
- 1.2 Consideration is given to residential property neighbouring and facing the site.
- 1.3 The proposed daylight and sunlight to these properties satisfies the BRE guide to good practice.
- 1.4 The relevant policies of The London Borough of Camden's UDP are satisfied.

Yours faithfully



**John Carter FRICS**  
**For BROOKE VINCENT + PARTNERS**

email: john.carter@brooke-vincent.co.uk

## 2.0 INTRODUCTION

2.1 This report is based upon the application drawings of Chassay + Last Architects, which are listed on the following page.

2.2 The London Borough of Camden's Unitary Development Plan (UDP) confirms the need to retain adequate daylight and sunlight to residential buildings and makes specific reference to the good practice guide detailed below.

2.3 We confirm all calculations and considerations within this report are based upon the Building Research Establishment (BRE) publication *"Site Layout Planning for Daylight and Sunlight, a guide to good practice."* This Guide does not contain mandatory requirements, but in the Introduction provides a full explanation of its purpose:

*"The Guide is intended for building designers and their clients, consultants and planning officials."*

*"The advice given here is not mandatory and this document should not be seen as an instrument of planning policy."*

*"It aims to help rather than constrain the designer."*

*"Although it gives numerical guidelines these should be interpreted flexibly because natural lighting is only one of many factors in site layout design."*

*"In special circumstances the developer or planning authority may wish to use different target levels. For example, in an historic city centre, a high degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings."*

2.4 Reference is made in the BRE report to various methods of assessing the effect a development will have on diffused daylight.

2.5 The simplest methods are not appropriate in a central urban location, where the built environment is invariably complex. Vertical Sky Component (VSC) is the calculation most readily adopted, as the principles of calculation can be established by relating the location of any particular window to the existing and proposed, built environment.

2.6 The BRE Guide states *"If any part of a new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building, from the centre of the lowest window, subtends an angle or more than 25° to the horizontal, then the diffused daylighting of the existing building may be adversely affected."*

*This will be the case if the Vertical Sky Component measured at the centre of an existing main window is less than 27% and less than 0.8 times its former value".*

## CHASSAY + LAST - APPLICATION DRAWINGS

PVE-01	Location Plan
PVE-09	Basement Plan
PVE-10	Ground Floor Plan
PVE-11	Plan Level 1
PVE-12	Plan Level 2
PVE-13	Plan Level 3
PVE-14	Plan Level 4
PVE-15	Plan Level 5
PVE-16	Plan Level 6
PVE-17	Plan Level 7
PVE-18	Plan Level 8
PVE-19	Plan Level 9
PVE-20	Roof Plan
PVE-30	NE Elevation to Granby Terrace
PVE-31	NW Elevation to Park Village East
PVE-32	SE Elevation to Augustus House
PVE-33	SW Elevation to Tintern House



### 3.0 **DAYLIGHT**

#### 3.1 **Generally**

- 3.1.1 Daylight is not specific to a particular direction, as it is received from the dome of the sky. It is therefore necessary to consider all neighbouring residential property facing the reference site.
- 3.1.2 We define below the properties that neighbour the site and define the location of the windows we have further considered by calculating VSC. For each window the location number is followed by the floor level.
- 3.1.3 The Waldrum diagrams we refer to in Appendix 2 are produced by our specialist software and are based on the 3D computer aided design model seen in Appendix 1. This recreates the existing and proposed buildings within their environment. The Waldrum diagrams define a two dimensional view of the development site and adjoining property, seen from each neighbouring window.
- 3.1.4 You will notice the outline of these buildings follows what are known as “droop lines” which are based upon a mathematical formula, devised by Percy Waldrum early in the 20<sup>th</sup> century, to measure the visible parts of a three dimensional sky in two dimensional format.
- 3.1.5 On these diagrams, light blue defines the existing site building and dark blue the proposed building. Green defines neighbouring property. The remaining areas are the visible, measured, sky.

#### 3.2 **North**

- 3.2.1 To the north of the development site, across Park Village East, is a vast area of carriage sheds, which require no further consideration for the purposes of this report.

#### 3.2. **East**

- 3.2.1 To the east of the site, at the junction of Granby Terrace and Stanhope Street, is a nine storey residential building, Stanhope House. See Photograph 1, Appendix 2.

- 3.2.2 We had not foreseen any daylighting problems but reviewed windows at ground floor and first floor level as identified on the daylight model/location plan, Appendix 1. Our VSC calculations, based upon Waldrum diagram methods and using our specialist software, are detailed in Appendix 3. The results are shown below for ease of reference. (Figures reduced to a single decimal point.)

Window	Existing VSC	Proposed VSC	Ratio of Proposed Over Existing
<b>Stanhope House</b>			
W1/GF	27.9%	27.8%	N/A
W1/1 <sup>st</sup> F	29.0%	28.9%	N/A

- 3.2.3 These results confirm that daylighting will remain almost exactly the same and above the benchmark figure of 27% VSC. We take this opportunity of referring you to item 2.6 of this report, which confirms BRE's guidance that diffused daylighting on existing building may be adversely affected if VSC is both less than 27% and less than 0.8 times the former value. There will be no adverse effect.

### 3.3 South

- 3.3.1 To the south of the site is the 'L' shaped, nine storey residential building, Augustus House. See Photograph 2, Appendix 2.
- 3.3.2 With an access deck at each floor level, windows are set well back from the face of the building. This always results in low, existing, daylighting.
- 3.3.3 However, we were able to organise access to Augustus House and one of its flats. We found that all the windows fronting the access deck served bathroom, toilet and galley kitchens. All the principal habitable rooms are served by windows on the opposite side of the building. Bathrooms require no further consideration as they are obviously non habitable rooms and daylight is not a relevant factor.

- 3.3.4 Similarly, small kitchens, which can only be used for the purposes of food preparation, are not defined as habitable rooms. However, for the sake of completeness, we have carried out a daylighting analysis in the locations defined on our daylight model/location plan, Appendix 1. Again, the Waldrum calculations are detailed in Appendix 3 and the results shown below.

Window	Existing VSC	Proposed VSC	Ratio of Proposed Over Existing
<b>Augustus House</b>			
W1/GF	7.8%	7.1%	0.91%
W1/1 <sup>st</sup> F	9.3%	8.2%	0.88%
W1/2 <sup>nd</sup> F	11.1%	9.6%	0.86%
W2/GF	6.9%	5.8%	0.84%
W2/1 <sup>st</sup> F	8.3%	6.8%	0.82%
W2/2 <sup>nd</sup> F	9.7%	7.9%	0.82%
W3/GF	6.2%	7.2%	1.17%
W3/1 <sup>st</sup> F	7.1%	8.0%	1.13%

- 3.3.5 In none of these locations will diffused daylight be adversely affected. At window location W3, the ground and first floor windows will receive improved daylighting when compared to existing.

#### 3.4 West

- 3.4.1 Immediately to the west is the rear of Tintern House. It is quite obvious from the site layout plan and our own daylight modelling, that the juxtaposition of Tintern House to the existing building creates the conditions for limited daylight penetration. This is made significantly worse by the deep access decks to the rear of Tintern House, as defined on the first floor extract of Crown Estate drawings. This is included in Appendix 2, immediately behind Photograph 3. This further confirms the close relationship between Tintern House and 100 Park Village East.



3.4.2 The drawing represents one half of Tintern House, the other half is a perfect mirror image. This drawing confirms it is bathrooms and bedroom windows that face towards the proposed development. Principal living rooms and kitchens are on the opposite side of the building, are well lit and remain unaffected. It is also worth noting the bedrooms, sited in the return ends of Tintern House, are served by windows which do not have a direct view of the proposed building and will remain unaffected.

3.4.3 Once again, Waldrum diagrams have been prepared at each floor level. These are in Appendix 3, with the results detailed below.

Window	Existing VSC	Proposed VSC	Ratio of Proposed Over Existing
<b>Tintern House</b>			
W1/GF	0.0%	0.3%	-
W1/1 <sup>st</sup> F	0.0%	0.3%	-
W1/2 <sup>nd</sup> F	0.0%	1.0%	-
W1/3 <sup>rd</sup> F	21.8%	18.7%	0.86
W2/GF	0.0%	0.0%	-
W2/1 <sup>st</sup> F	0.0%	0.0%	-
W2/2 <sup>nd</sup> F	0.0%	0.6%	-
W2/3 <sup>rd</sup> F	16.6%	14.1%	0.85
W3/GF	0.1%	1.5%	15.0
W3/1 <sup>st</sup> F	0.1%	1.7%	17.0
W3/2 <sup>nd</sup> F	0.1%	4.6%	46.0
W3/3 <sup>rd</sup> F	17.7%	27.1%	1.53
W4/GF	0.0%	3.2%	-
W4/1 <sup>st</sup> F	0.0%	3.3%	-
W4/2 <sup>nd</sup> F	0.0%	6.1%	-
W4/2 <sup>nd</sup> F	0.0%	6.1%	-
W4/3 <sup>rd</sup> F	25.2%	33.9%	1.35

3.4.4 This is an extremely positive set of results. We have already referred to the deep access decks to the rear of Tintern House. Our studies prove that at ground, first and second floor levels, except for the merest glimmer of light at the location of window 3 on each floor level, these windows receive no daylight at their centre point. However the proposed design allows for light around the main cylindrical tower and every one of these windows will now receive some light. (Note: Where the existing VSC is 0%, there is no figure for the ratio between proposed and existing as you cannot define a ratio based on zero.)

3.4.5 The third floor windows presently receive levels of daylight that will be fractionally reduced in two locations and significantly improved in the other two locations. Where a reduction occurs the proposed value will be at least 0.8 the former and as previously explained the effect will not be adverse. In the remaining two cases it will be extremely positive.

### 3.5 **DAYLIGHT SUMMARY**

- 3.5.1 There will be only minor variations in the daylight received by Stanhope House and Augustus House. In Tintern House daylight will be received at three floor levels where none is received at the moment. At top floor level there will be a balance between a small loss and significant gain but there will be no adverse effect on daylight.

## 4.0 **SUNLIGHT**

### 4.1 **Generally**

4.1.1 The BRE *Guide to Good Practice* confirms:

- (i) Sunlight is only relevant to neighbouring residential windows which have a view of the proposed development and face south of the east/west axis.
- (ii) The minimum level of sunlight received by these windows should be no less than 25% of the annual probable sunlight hours, of which 5% of the annual total should be received between 21<sup>st</sup> September and 21<sup>st</sup> March (winter).

(Note: Each circle on the Waldrum diagrams represents 1% of annual possible sunlight hours. Yellow for summer months and blue for winter months. The loss of possible sunlight is defined by those circles that are covered by existing and/or proposed buildings.)

4.1.2 The only windows in neighbouring residential property that face south of the east-west axis and have a view of the development site are to be found in Stanhope House.

4.1.3 Sunlight availability diagrams are included in Appendix 4 and the results detailed below.

Available Sunlight/Location	Annual %	Winter Months %
<b>Stanhope House</b>		
W1/GF - Existing	43%	14%
W1/GF - Proposed	44%	14%
W1/1 <sup>st</sup> F - Existing	46%	16%
W1/1 <sup>st</sup> F - Proposed	46%	16%

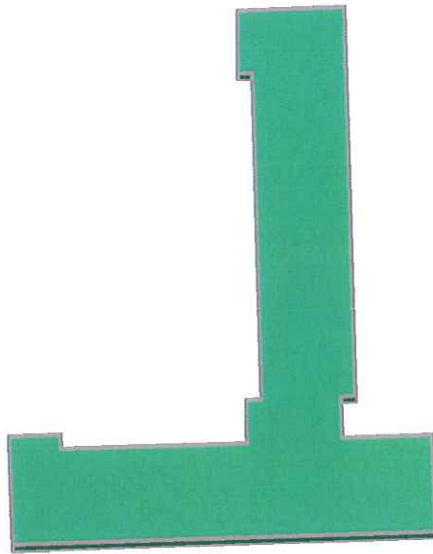
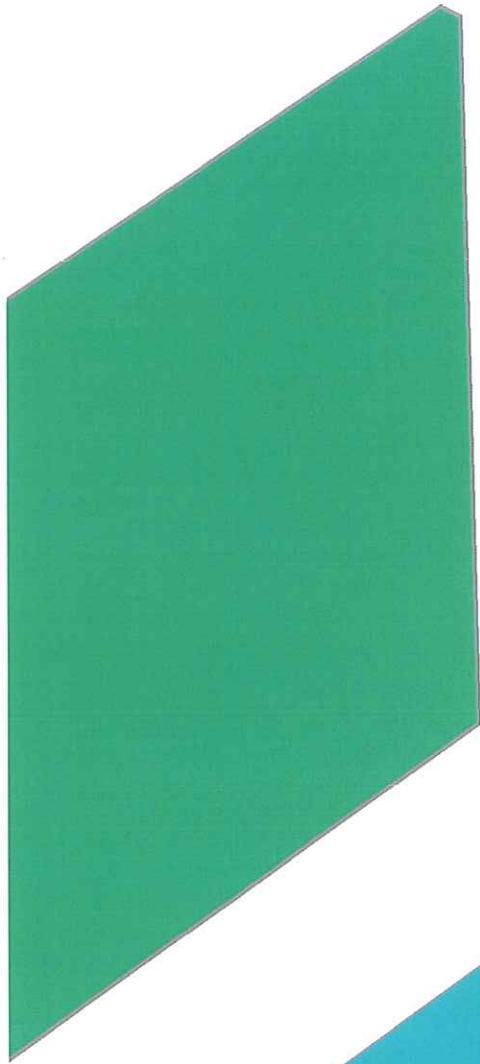
### 4.2 **SUNLIGHT SUMMARY**

4.2.1 Sunlight to neighbouring, south facing windows will barely change and will remain well above the standards required by BRE and Camden's UDP.

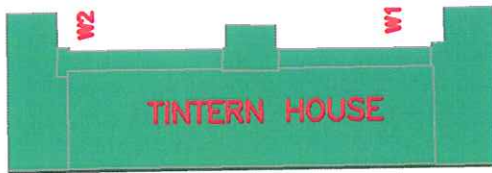
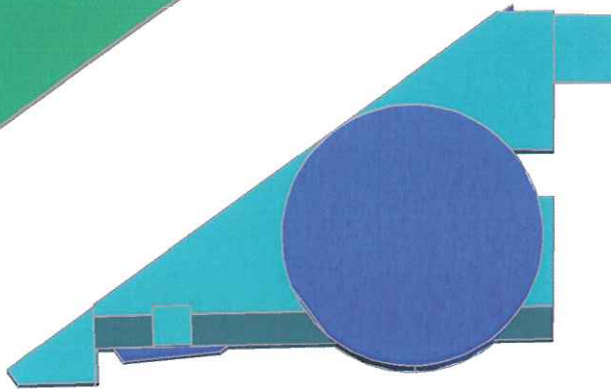
## **APPENDIX 1**

### **DAYLIGHT MODEL AND LOCATION PLAN**





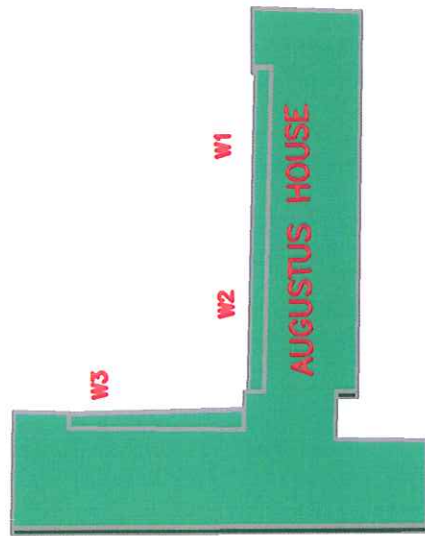
W1



W2

W1

TINTERN HOUSE

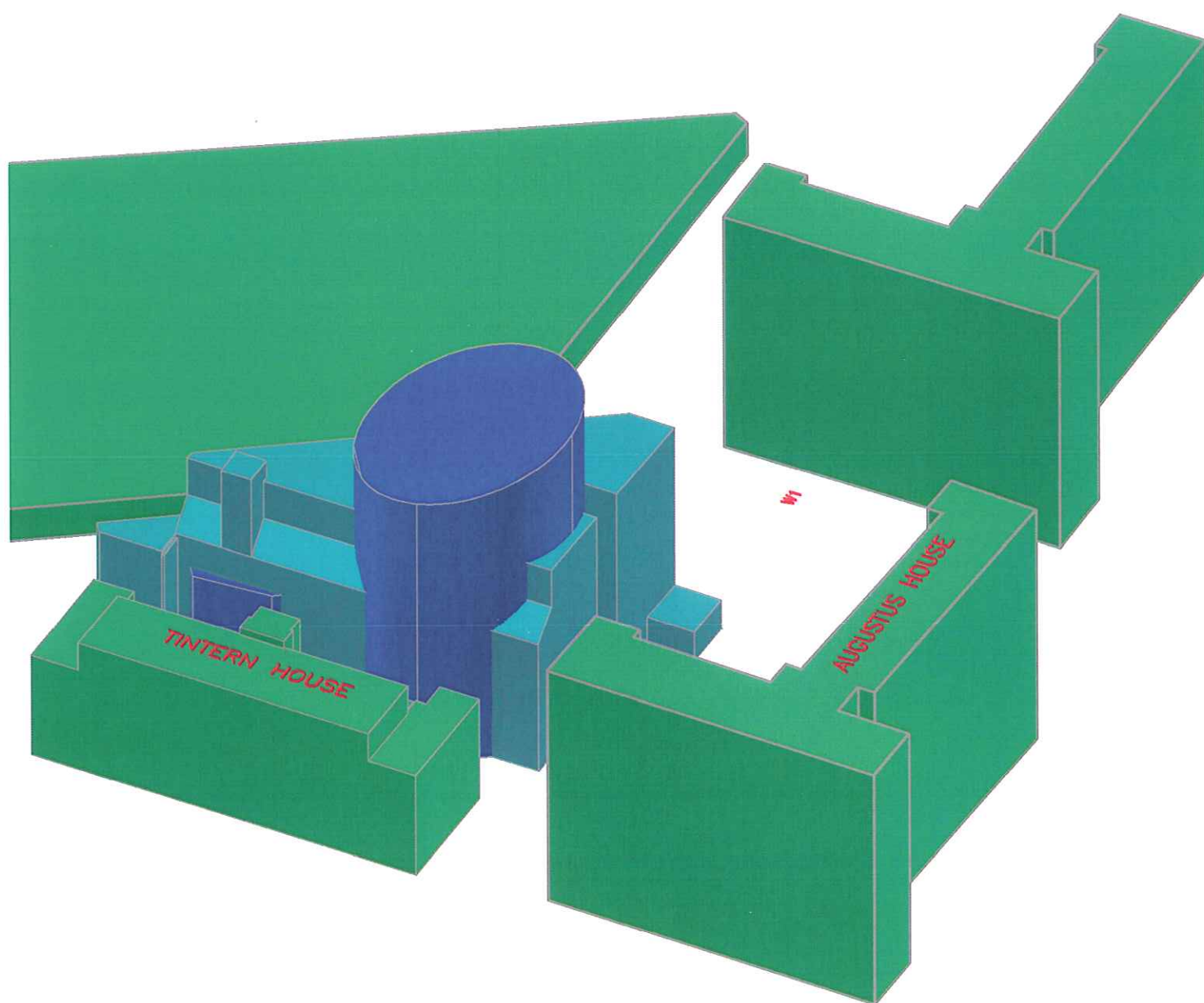


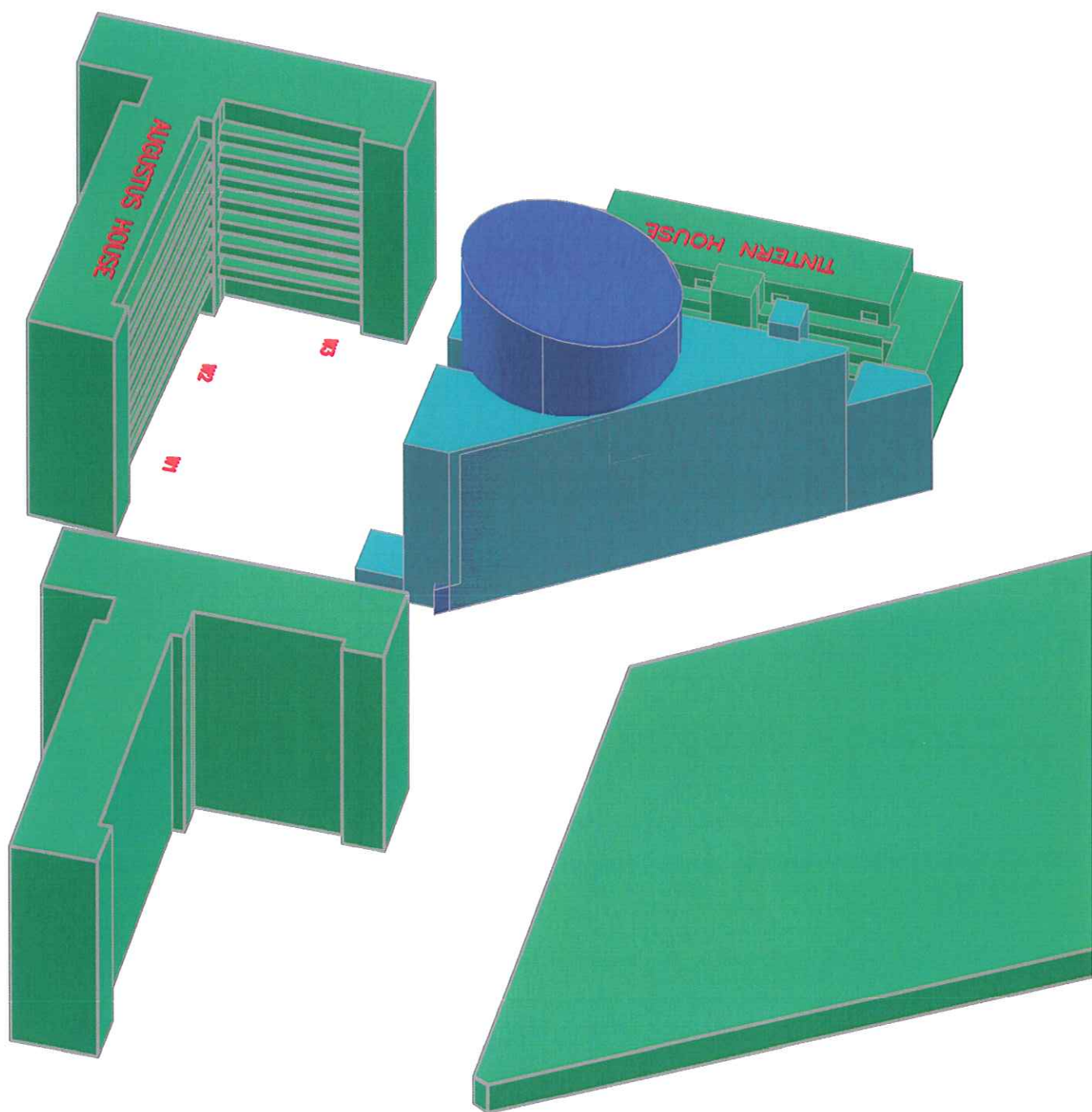
W3

W1

W2

AUGUSTUS HOUSE





Park Village East - Daylight Analysis Dec 2006 Scheme					Sunlight Analysis		
Location	Window Reference	Existing VSC	Proposed VSC	Ratio of Proposed Existing	Available Sunlight	Annual %	Winter months %
Stanhope House	1 Grd floor	27.9	27.8	1.00	Existing	43	14
					Proposed	44	14
	1 1st Floor	29.0	28.9	1.00	Existing	46	16
					Proposed	46	16
Augustus House	1 Grd Floor	7.8	7.1	0.91	Existing	n/a	n/a
					Proposed	n/a	n/a
	1 1st Floor	9.3	8.2	0.88	Existing	n/a	n/a
					Proposed	n/a	n/a
	1 2nd floor	11.1	9.6	0.86	Existing	n/a	n/a
					Proposed	n/a	n/a
	2 Grd floor	6.9	5.8	0.84	Existing	n/a	n/a
					Proposed	n/a	n/a
	2 1st floor	8.3	6.8	0.82	Existing	n/a	n/a
					Proposed	n/a	n/a
	2 2nd floor	9.7	7.9	0.82	Existing	n/a	n/a
					Proposed	n/a	n/a
	3 Grd floor	6.2	7.2	1.17	Existing	n/a	n/a
					Proposed	n/a	n/a
	3 1st floor	7.1	8.0	1.13	Existing	n/a	n/a
					Proposed	n/a	n/a
Tintern House	1Grd Floor	0.0	0.3	#DIV/0!	Existing	n/a	n/a
					Proposed	n/a	n/a
	1 1st floor	0.0	0.3	#DIV/0!	Existing	n/a	n/a
					Proposed	n/a	n/a
	1 2nd floor	0.0	1.0	#DIV/0!	Existing	n/a	n/a
					Proposed	n/a	n/a
	1 3rd floor	21.8	18.7	0.86	Existing	n/a	n/a
					Proposed	n/a	n/a
	2 Grd floor	0.0	0.0	#DIV/0!	Existing	n/a	n/a
					Proposed	n/a	n/a
	2 1st floor	0.0	0.0	#DIV/0!	Existing	n/a	n/a
					Proposed	n/a	n/a
	2 2nd floor	0.0	0.6	#DIV/0!	Existing	n/a	n/a
					Proposed	n/a	n/a
	2 3rd floor	16.6	14.1	0.84	Existing	n/a	n/a
					Proposed	n/a	n/a
	3 Grd floor	0.1	1.5	21.00	Existing	n/a	n/a
					Proposed	n/a	n/a
	3 1st floor	0.1	1.7	27.83	Existing	n/a	n/a
					Proposed	n/a	n/a
	3 2nd floor	0.1	4.6	77.33	Existing	n/a	n/a
					Proposed	n/a	n/a
	3 3rd floor	17.7	27.1	1.53	Existing	n/a	n/a
					Proposed	n/a	n/a
	4 Grd floor	0.0	3.2	#DIV/0!	Existing	n/a	n/a
					Proposed	n/a	n/a
	4 1st Floor	0.0	3.3	#DIV/0!	Existing	n/a	n/a
					Proposed	n/a	n/a
	4 2nd floor	0.0	6.1	#DIV/0!	Existing	n/a	n/a
					Proposed	n/a	n/a
	4 3rd floor	25.2	33.9	1.34	Existing	n/a	n/a
					Proposed	n/a	n/a



## **APPENDIX 2**

### **FENESTRATION TO NEIGHBOURING PROPERTY**



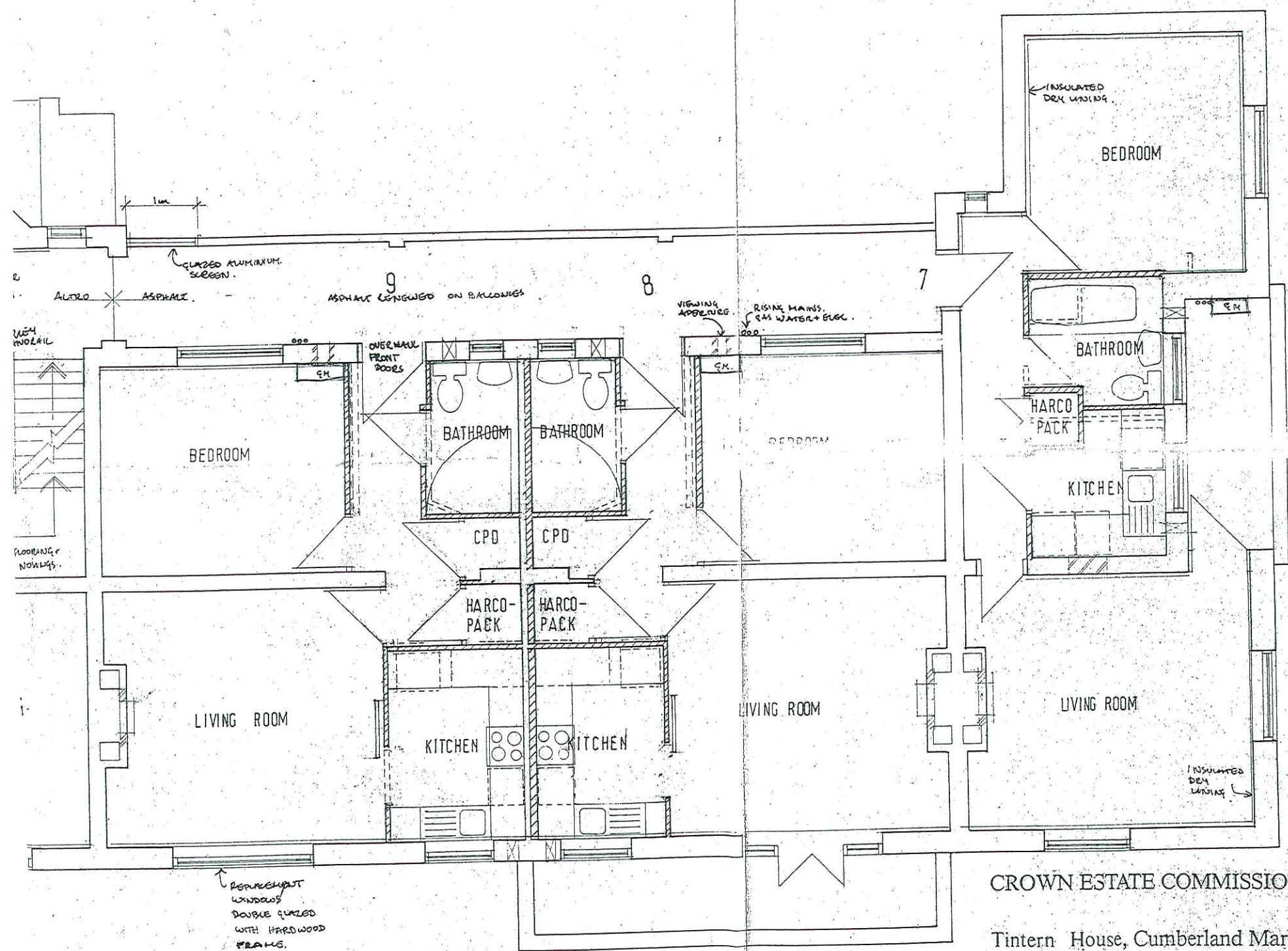












CROWN ESTATE COMMISSIONERS

Tintern House, Cumberland Market Estate, N.W.1

Drawing PROPOSED 1<sup>ST</sup> FLOOR PLAN (EXTRACT)

## **APPENDIX 3**

### **DAYLIGHT DIAGRAMS**

## **DAYLIGHTING**

### **STANHOPE HOUSE**

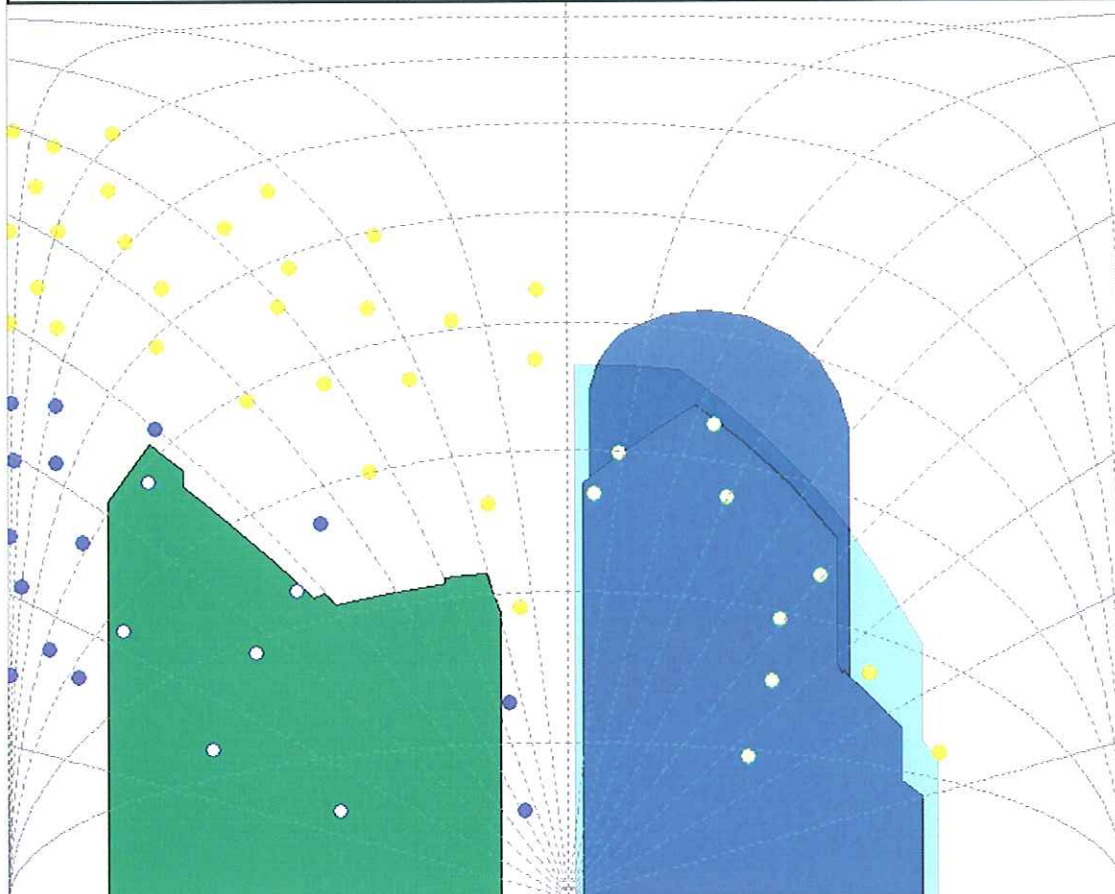


Drawing Ref: Park Village East Dec 2006 Sun Model.dwg  
Window Ref: Stanhope House W1 GF

VSC: Existing 27.89  
Proposed 27.77

AVAILABLE  
SUNLIGHT:

	Annual	Winter
Existing	43	14
Proposed	44	14

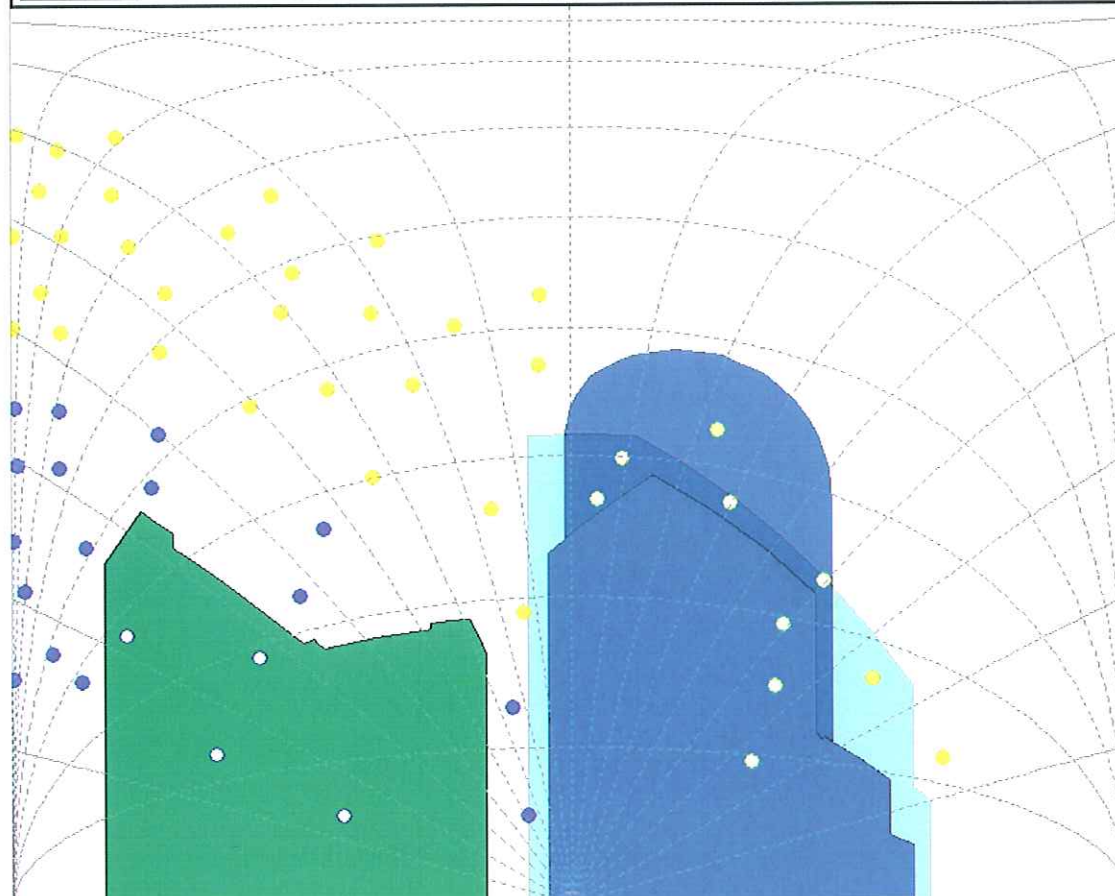


Drawing Ref: Park Village East Dec 2006 Sun Model.dwg  
Window Ref: Stanhope House W1 1st floor

VSC: Existing 28.99  
Proposed 28.85

AVAILABLE  
SUNLIGHT:

	Annual	Winter
Existing	46	16
Proposed	48	16





## **DAYLIGHTING**

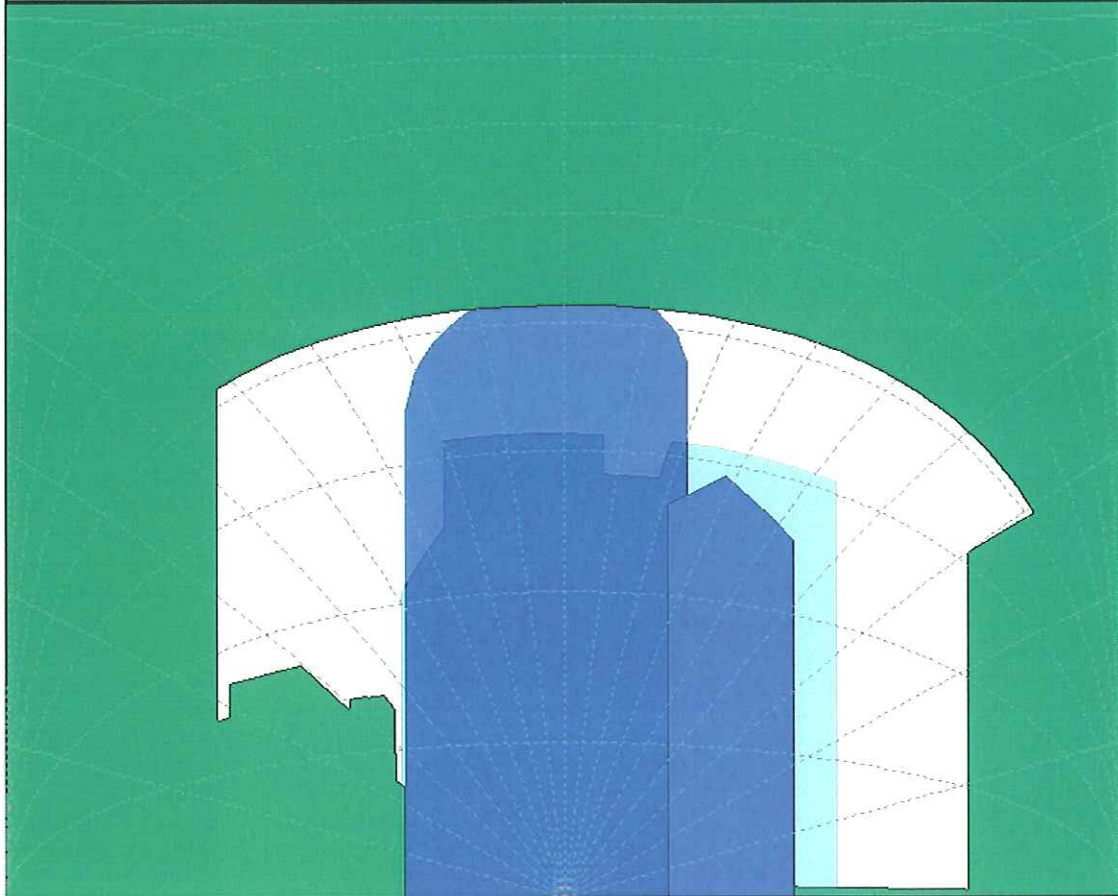
### **AUGUSTUS HOUSE**

Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Augustus House W1 GF

VSC: Existing 7.75  
Proposed 7.08

AVAILABLE  
SUNLIGHT:

	Existing	Annual	Winter
	Proposed	n/a	n/a

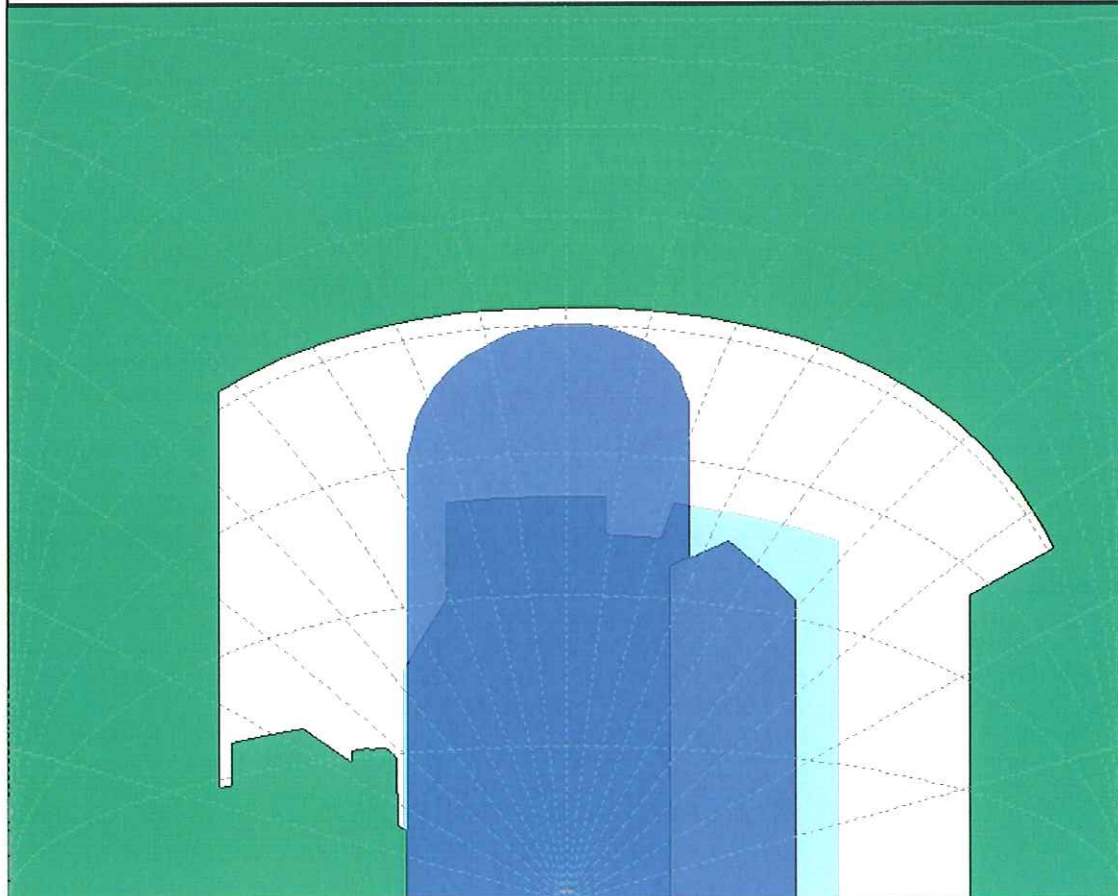


Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Augustus House W1 1st floor

VSC: Existing 9.34  
Proposed 8.23

AVAILABLE  
SUNLIGHT:

	Existing	Annual	Winter
	Proposed	n/a	n/a

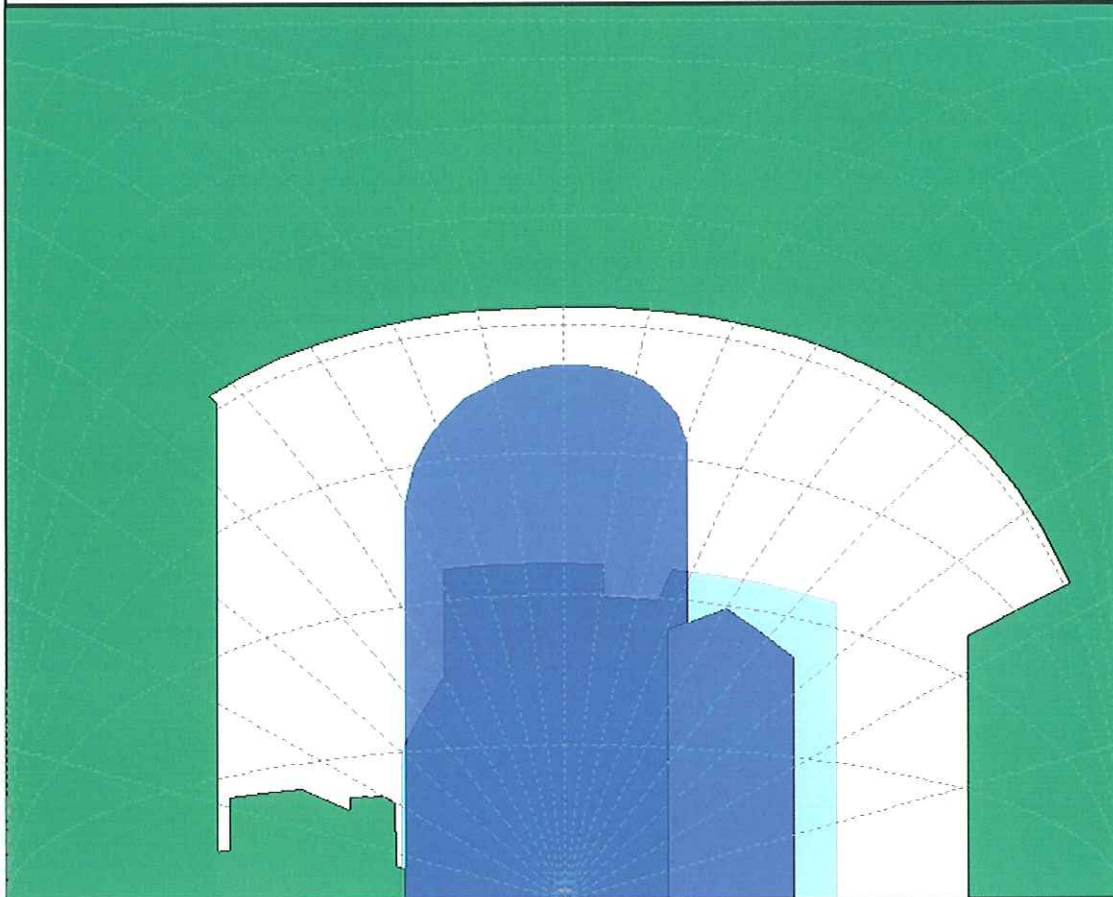


Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Augustus House W1 2nd floor

VSC: Existing 11.07  
Proposed 9.55

AVAILABLE  
SUNLIGHT:

	Existing	Annual	Winter
Proposed	n/a	n/a	n/a

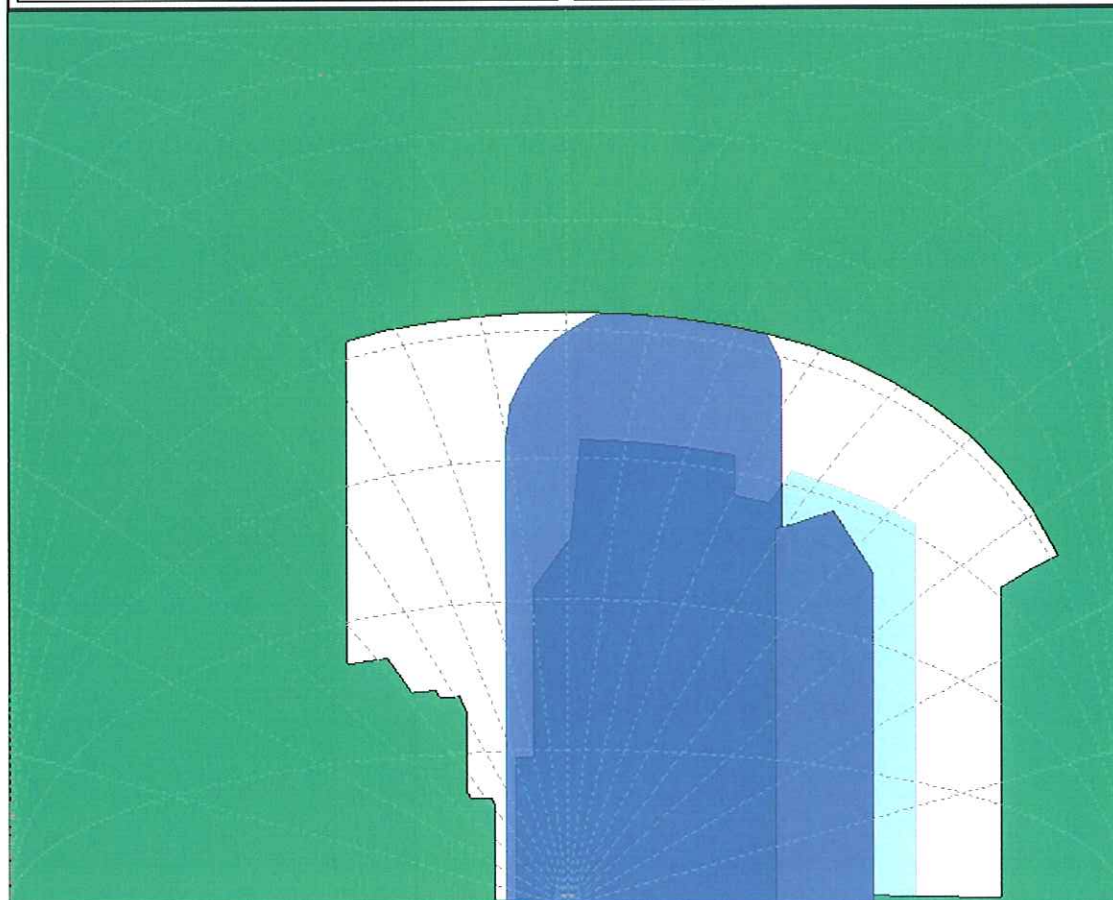


Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Augustus House W2 GF

VSC: Existing 6.88  
Proposed 5.77

AVAILABLE  
SUNLIGHT:

	Existing	Annual	Winter
Proposed	n/a	n/a	n/a



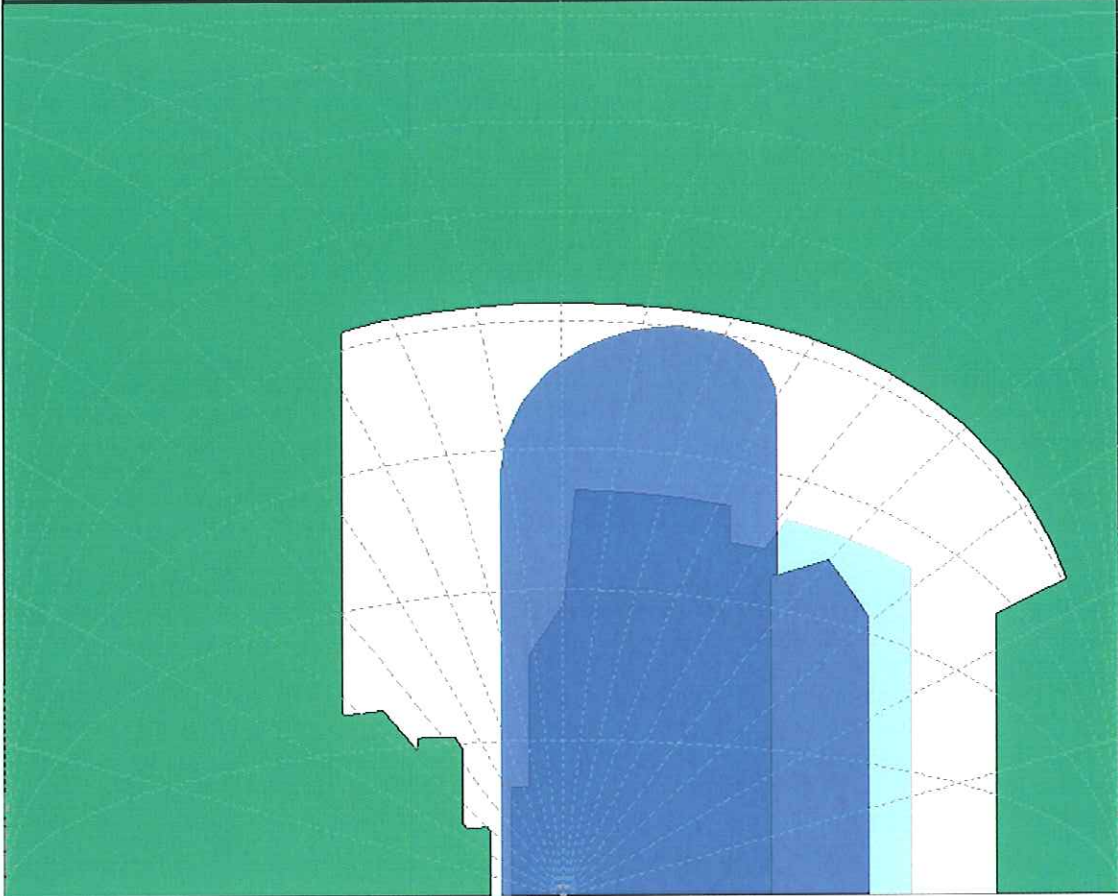


Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Augustus House W2 1st floor

VSC: Existing 8.26  
Proposed 6.75

AVAILABLE  
SUNLIGHT:

Existing	Annual	Winter
Proposed	n/a	n/a

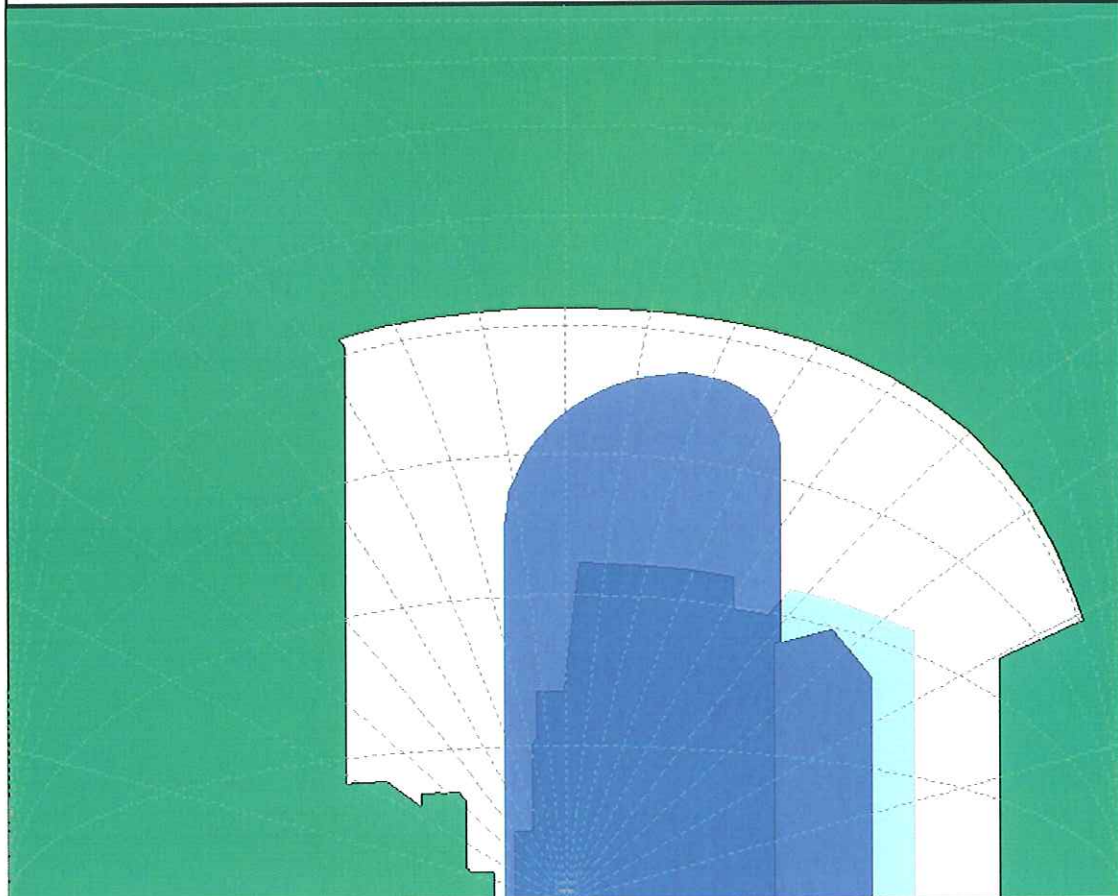


Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Augustus House W2 2nd floor

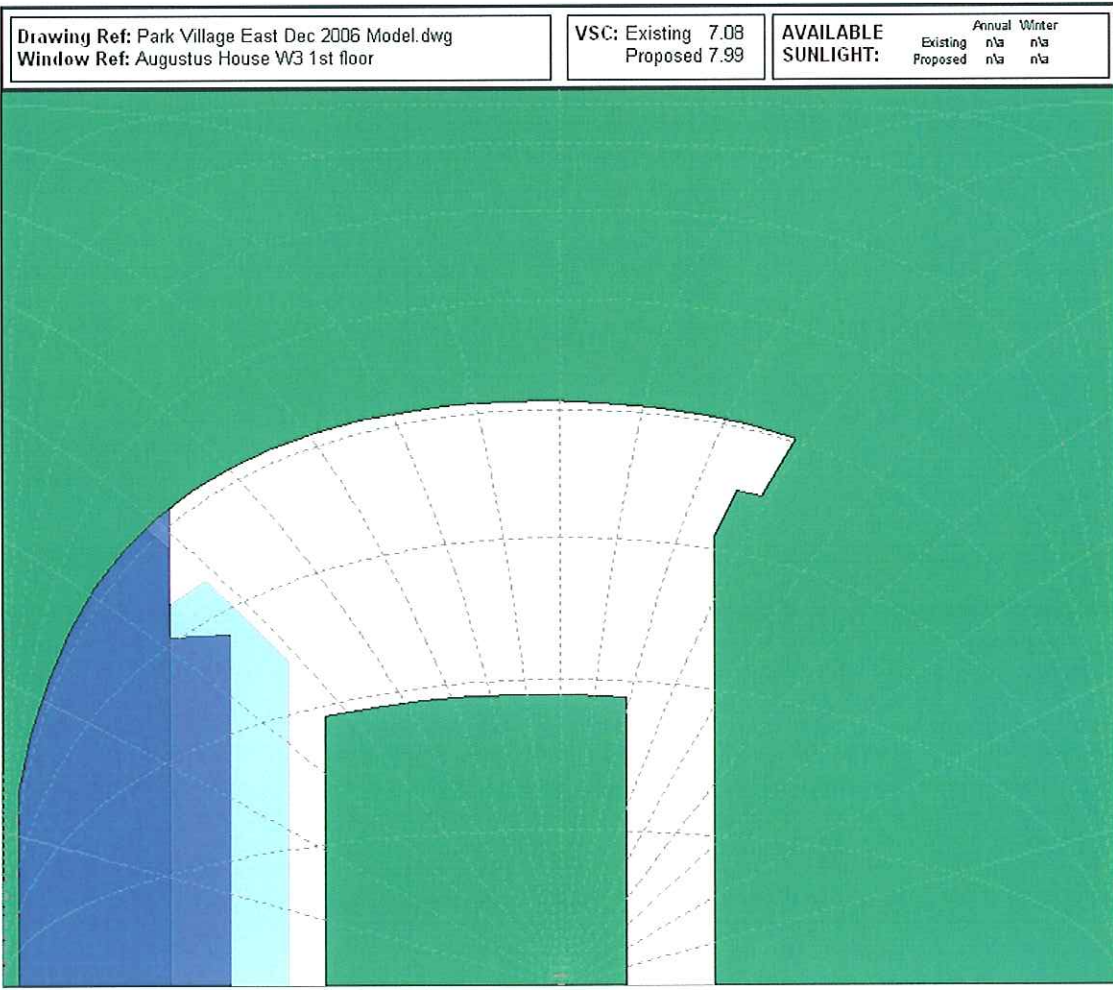
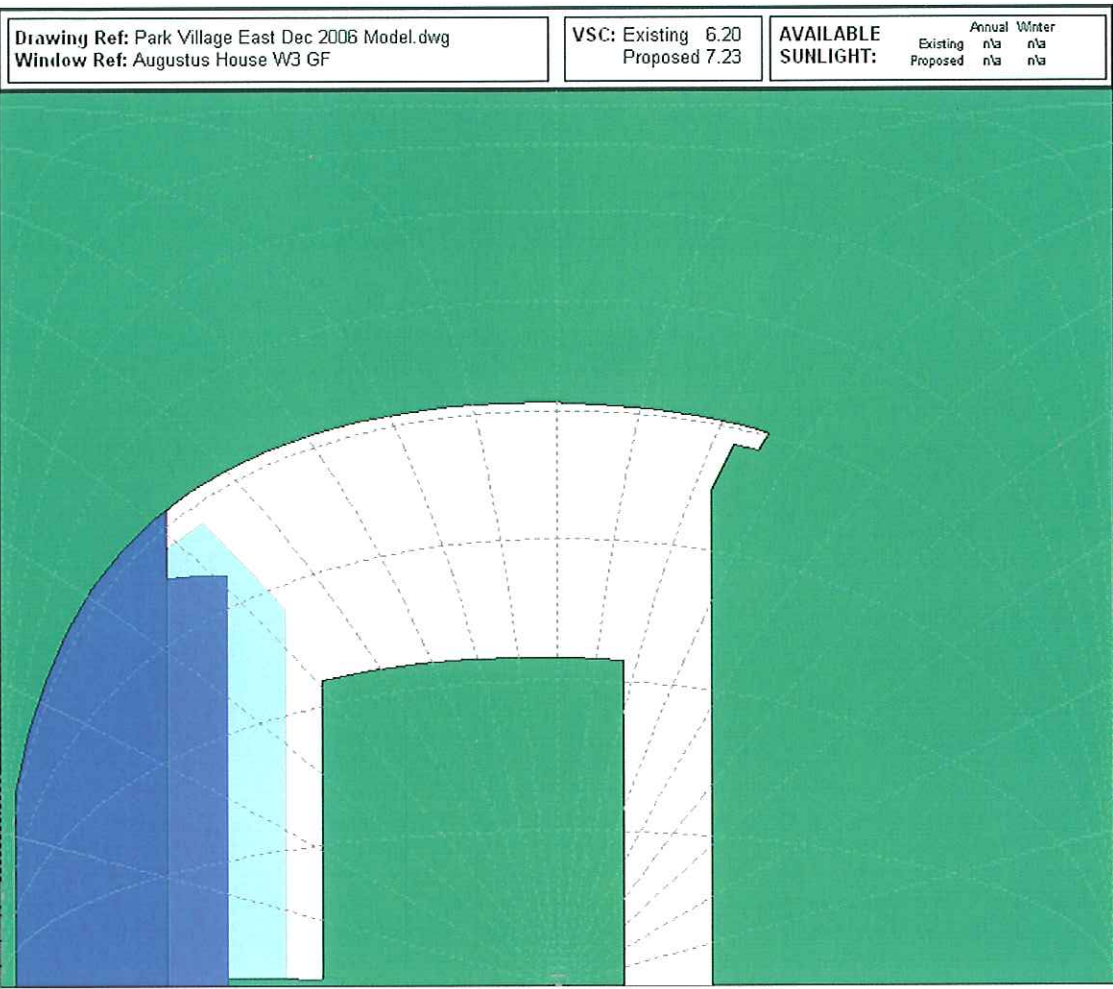
VSC: Existing 9.69  
Proposed 7.90

AVAILABLE  
SUNLIGHT:

Existing	Annual	Winter
Proposed	n/a	n/a

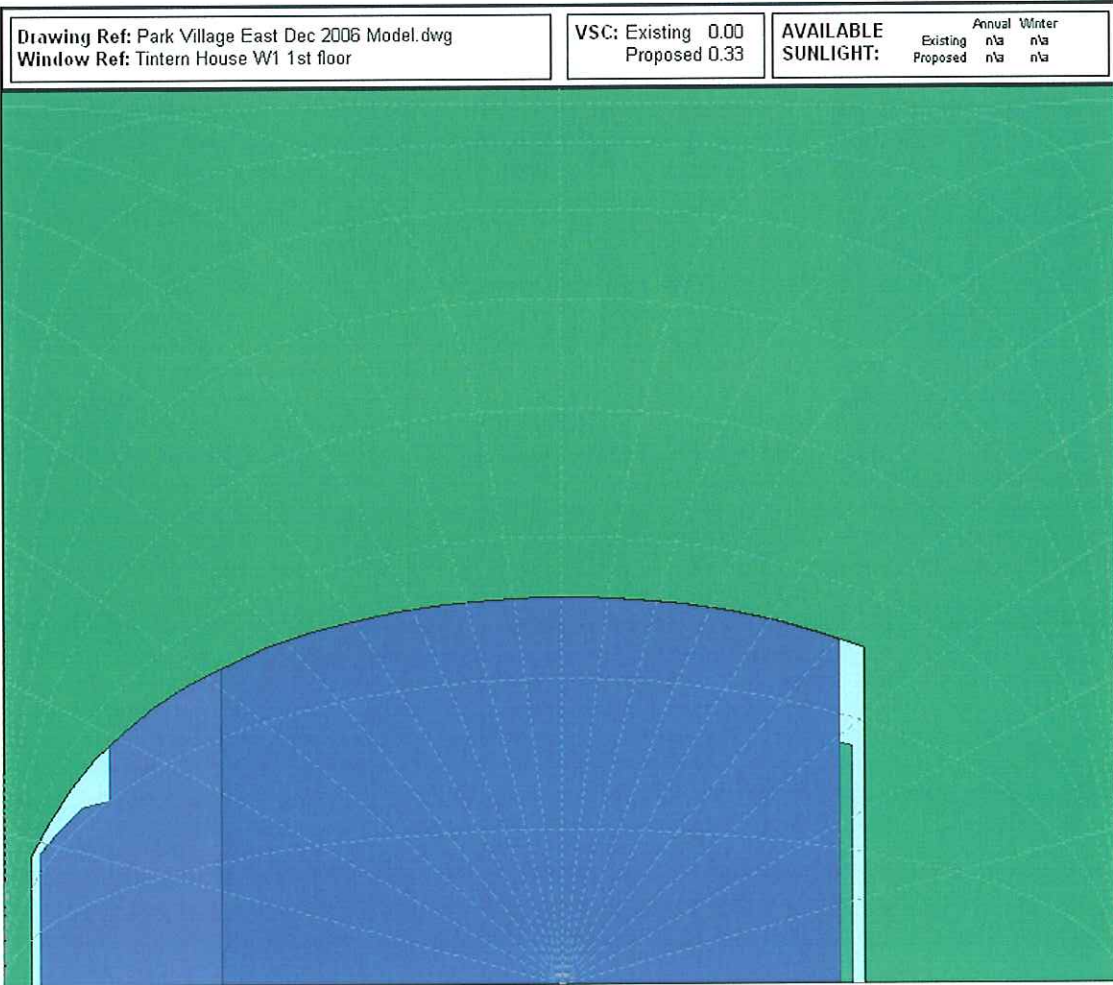
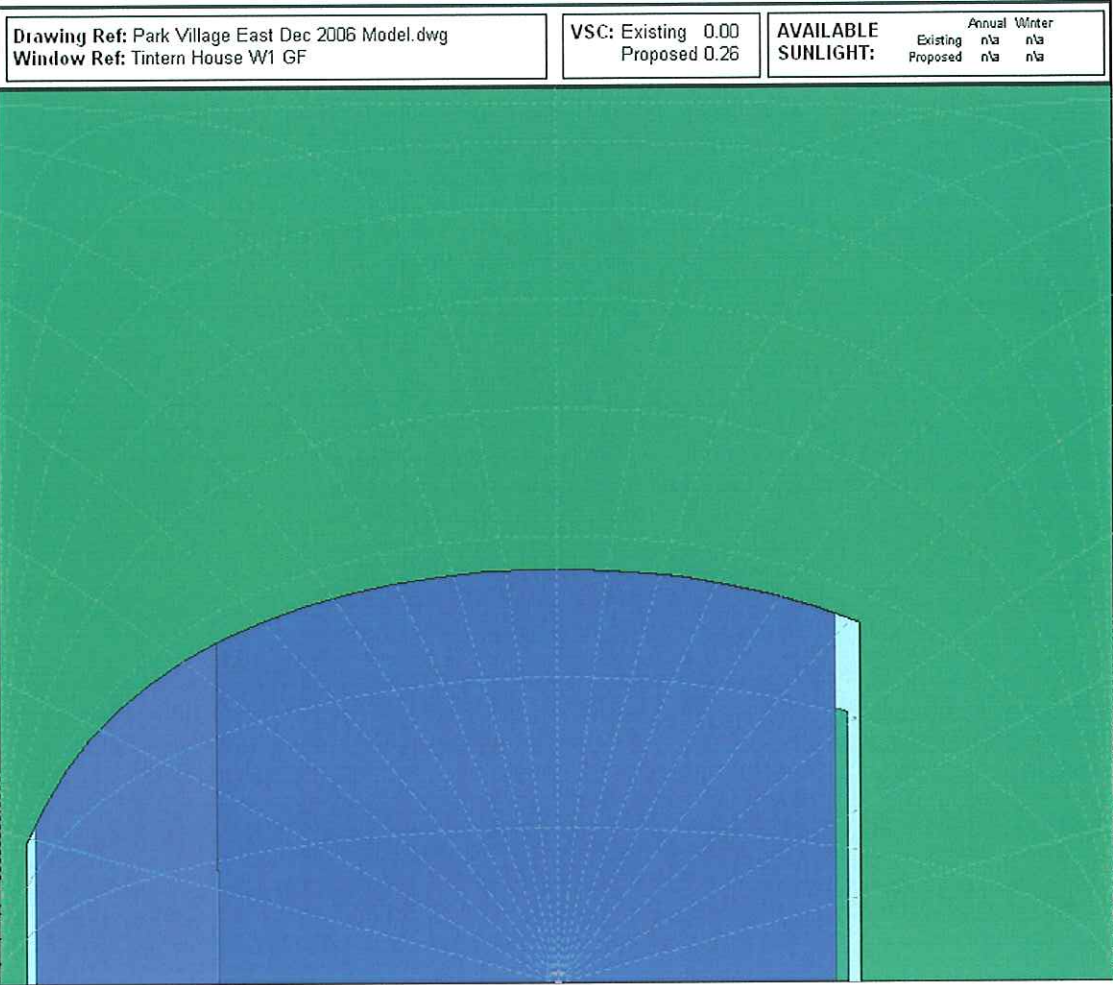






**DAYLIGHTING**

**TINTERN HOUSE**



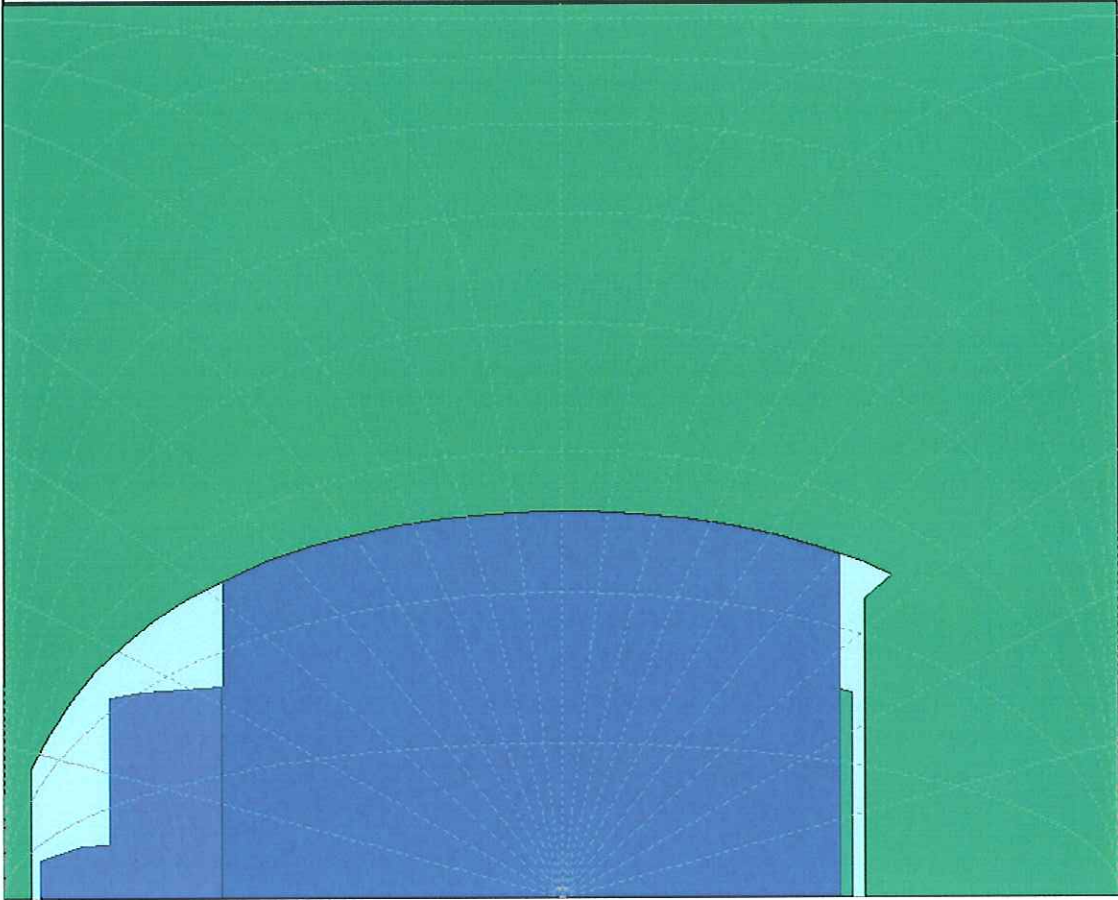


Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Tintern House W1 2nd floor

VSC: Existing 0.00  
Proposed 1.03

AVAILABLE  
SUNLIGHT:

	Existing	Annual	Winter
	Proposed	n/a	n/a

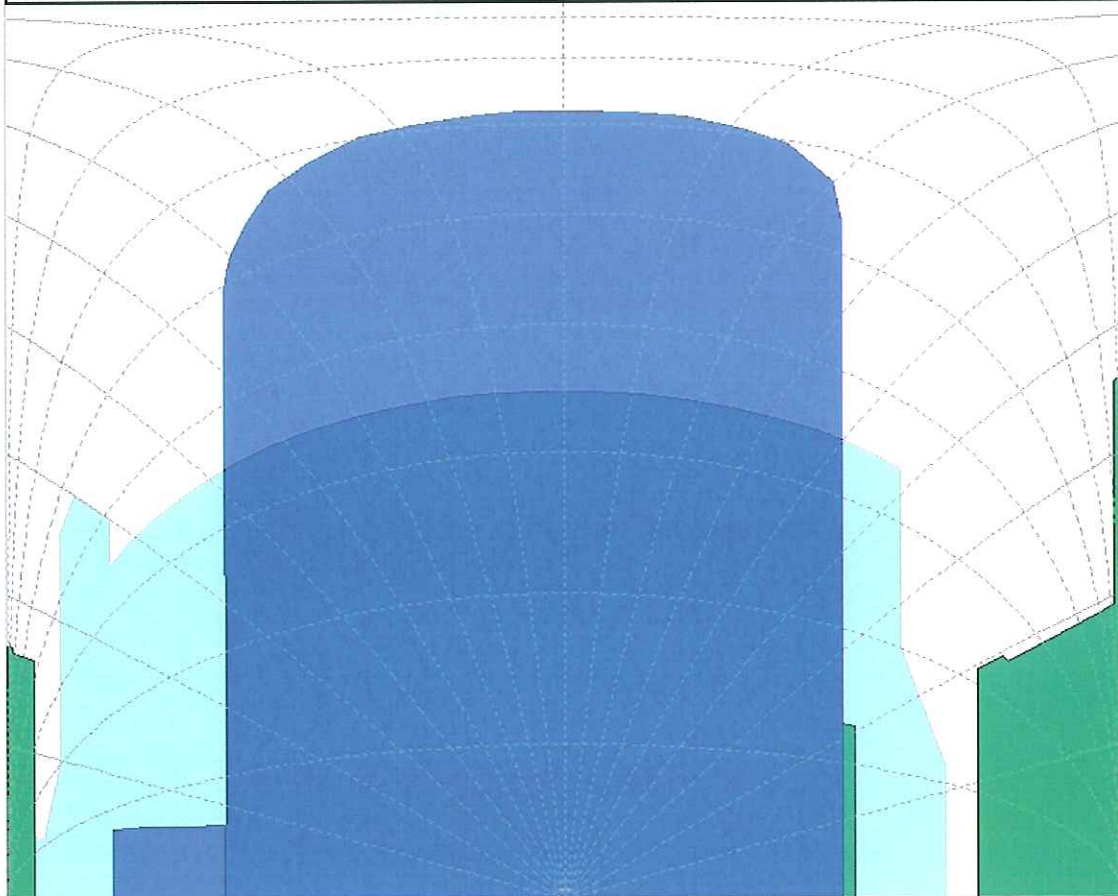


Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Tintern House W1 3rd floor

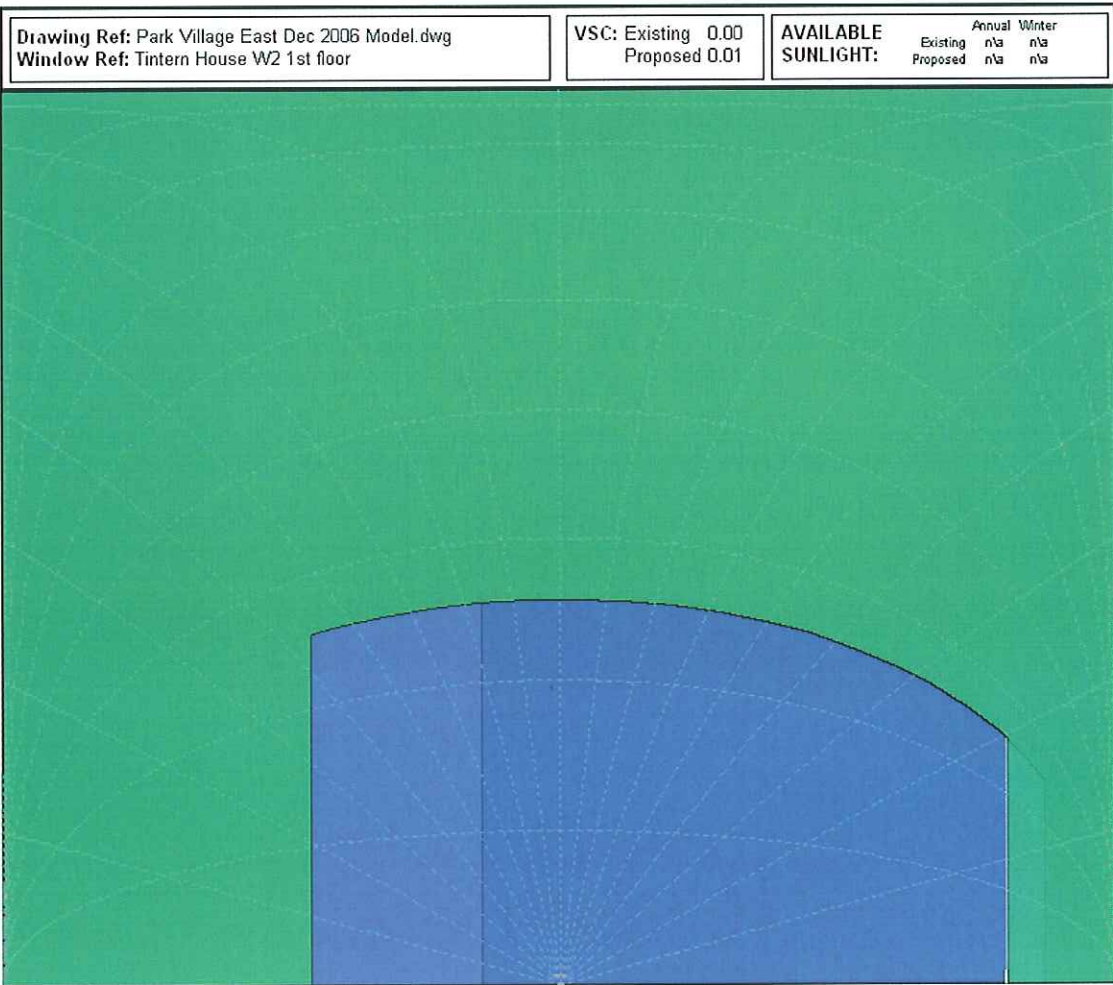
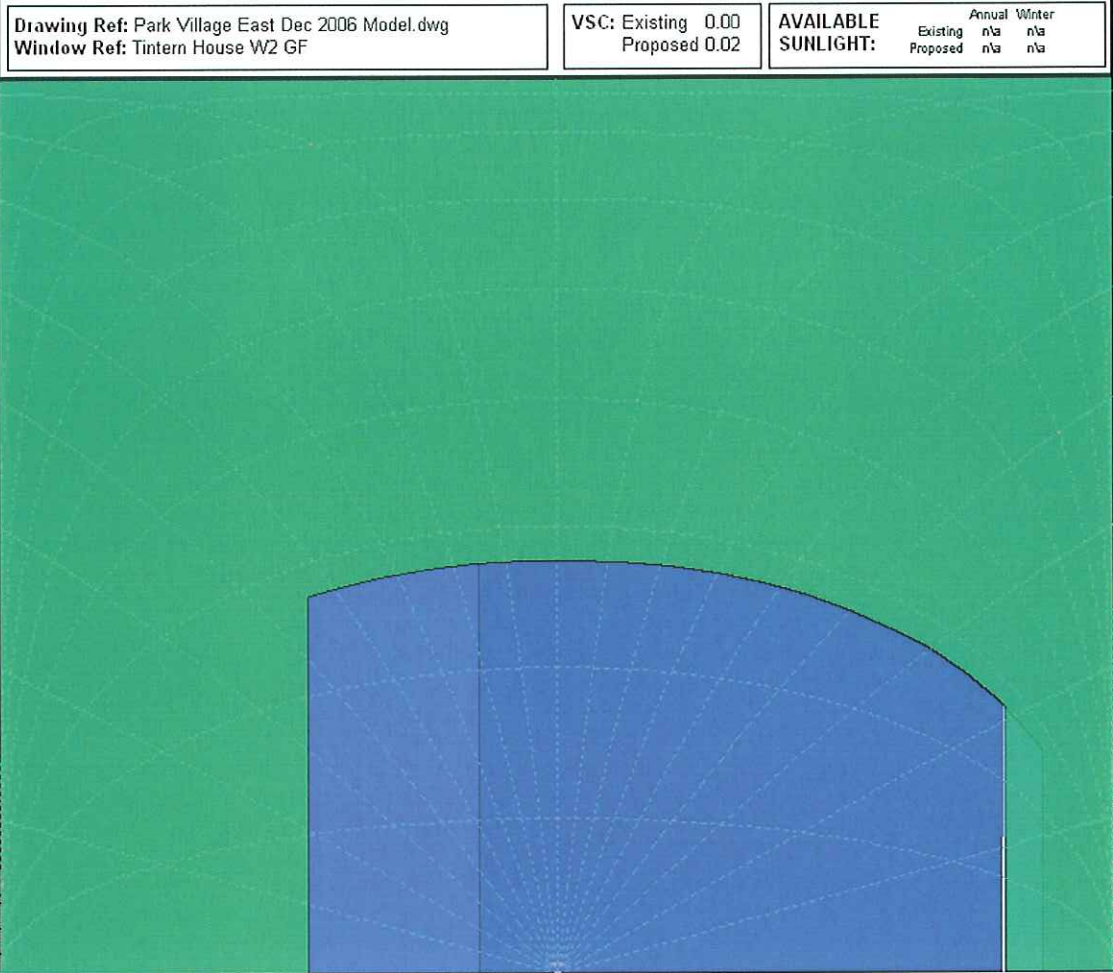
VSC: Existing 21.79  
Proposed 18.70

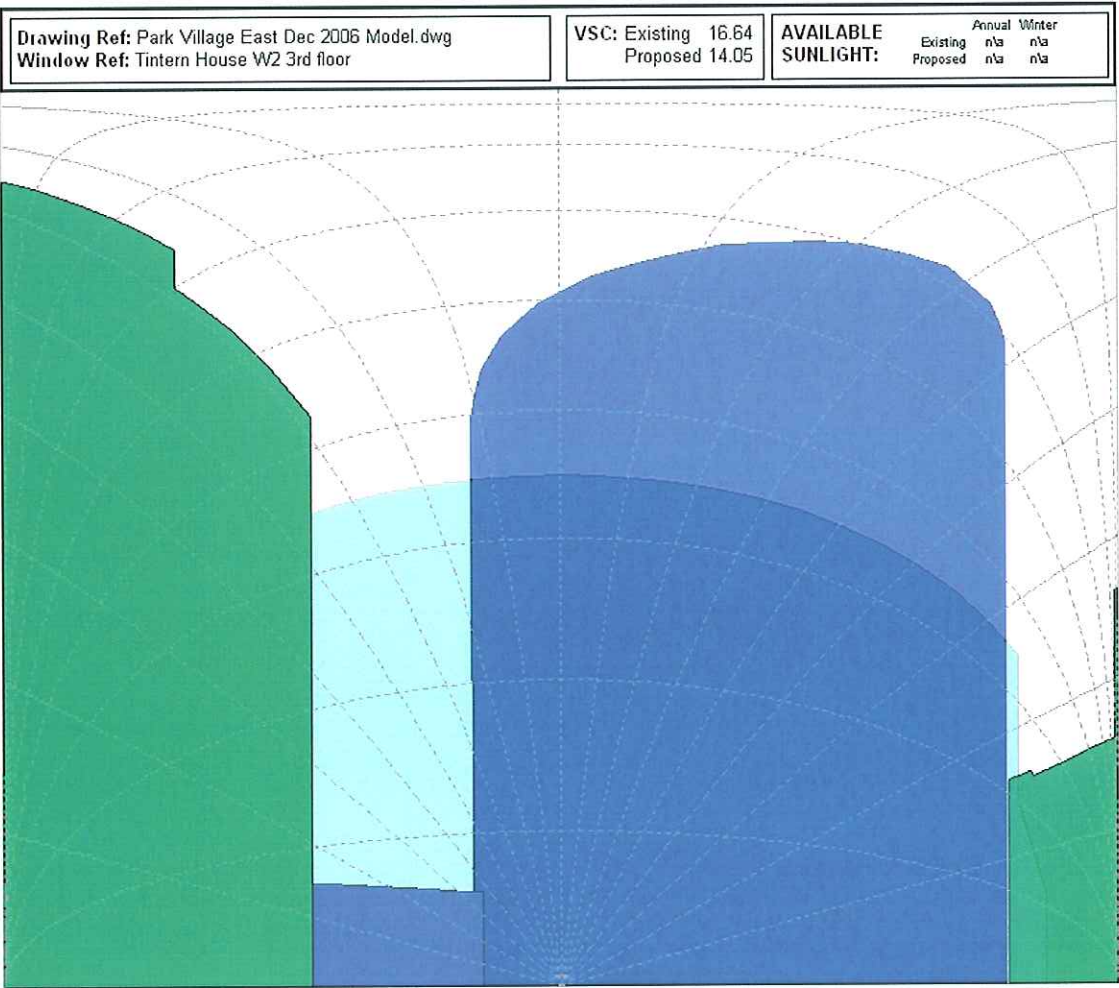
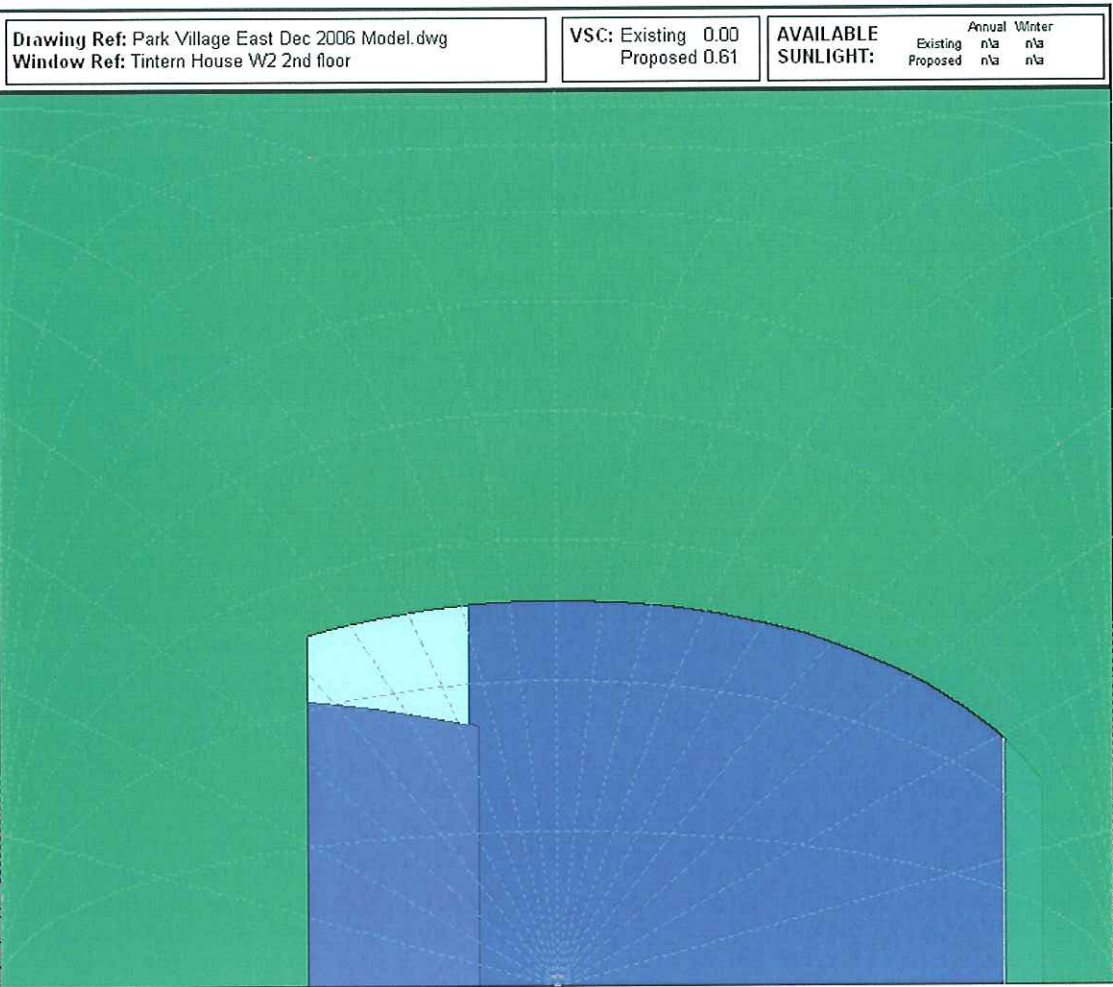
AVAILABLE  
SUNLIGHT:

	Existing	Annual	Winter
	Proposed	n/a	n/a









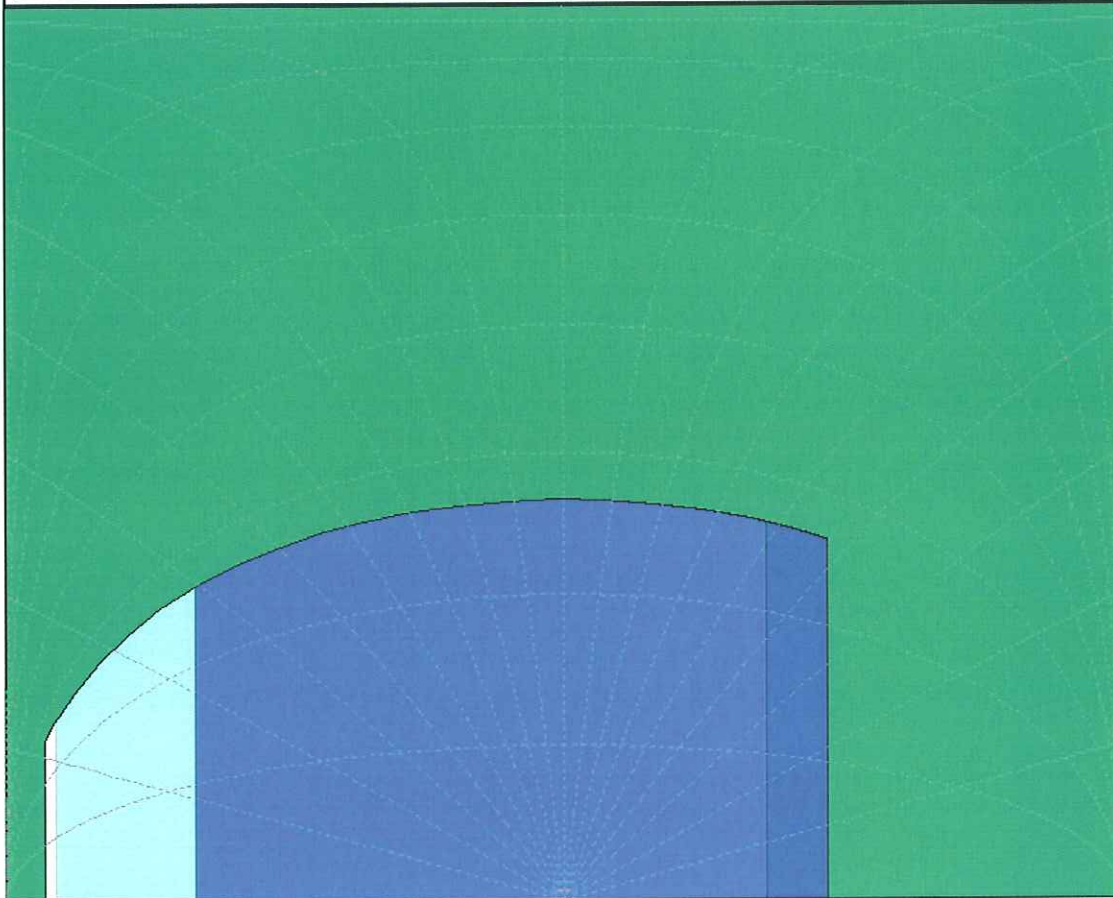


Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Tintern House W3 GF

VSC: Existing 0.07  
Proposed 1.47

AVAILABLE  
SUNLIGHT:

	Existing	Annual	Winter
	Proposed	n/a	n/a

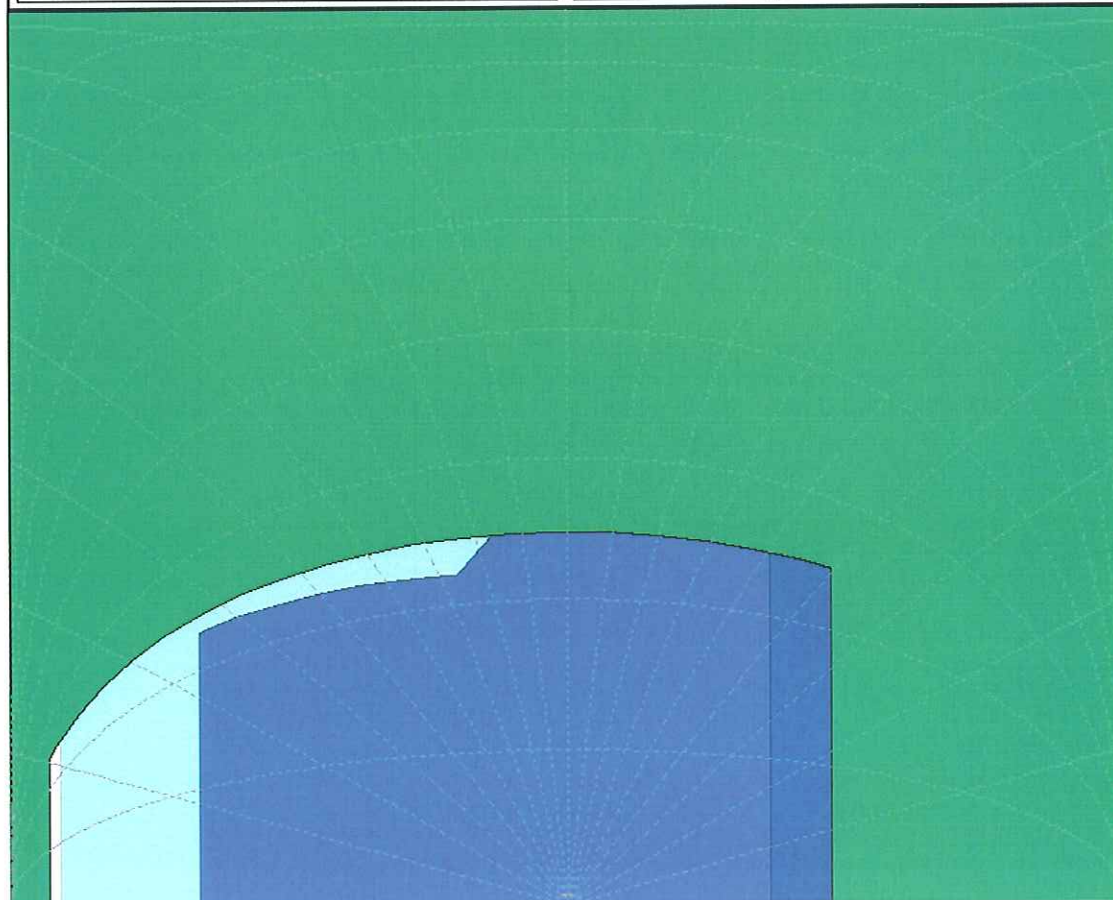


Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Tintern House W3 1st floor

VSC: Existing 0.06  
Proposed 1.67

AVAILABLE  
SUNLIGHT:

	Existing	Annual	Winter
	Proposed	n/a	n/a



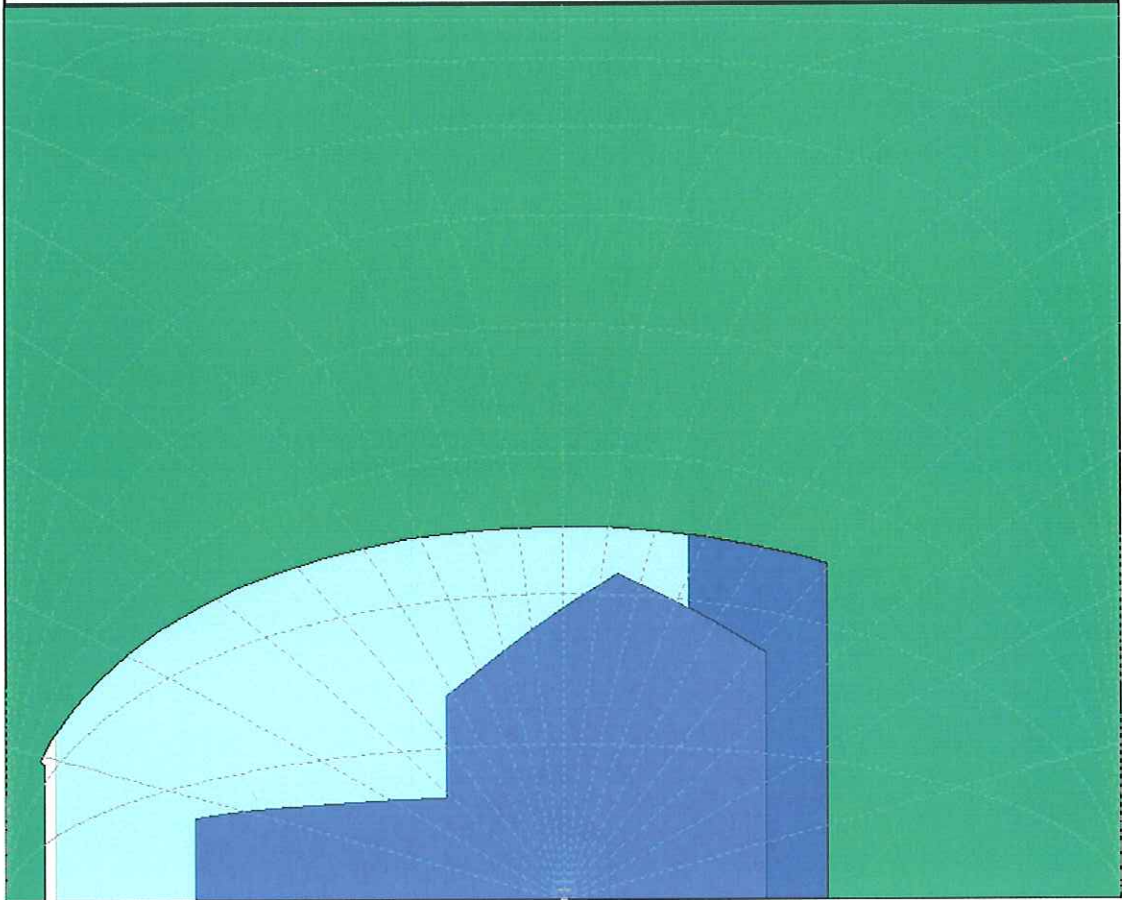


Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Tintern House W3 2nd floor

VSC: Existing 0.06  
Proposed 4.64

AVAILABLE  
SUNLIGHT:

	Existing	Annual	Winter
	Proposed	n/a	n/a

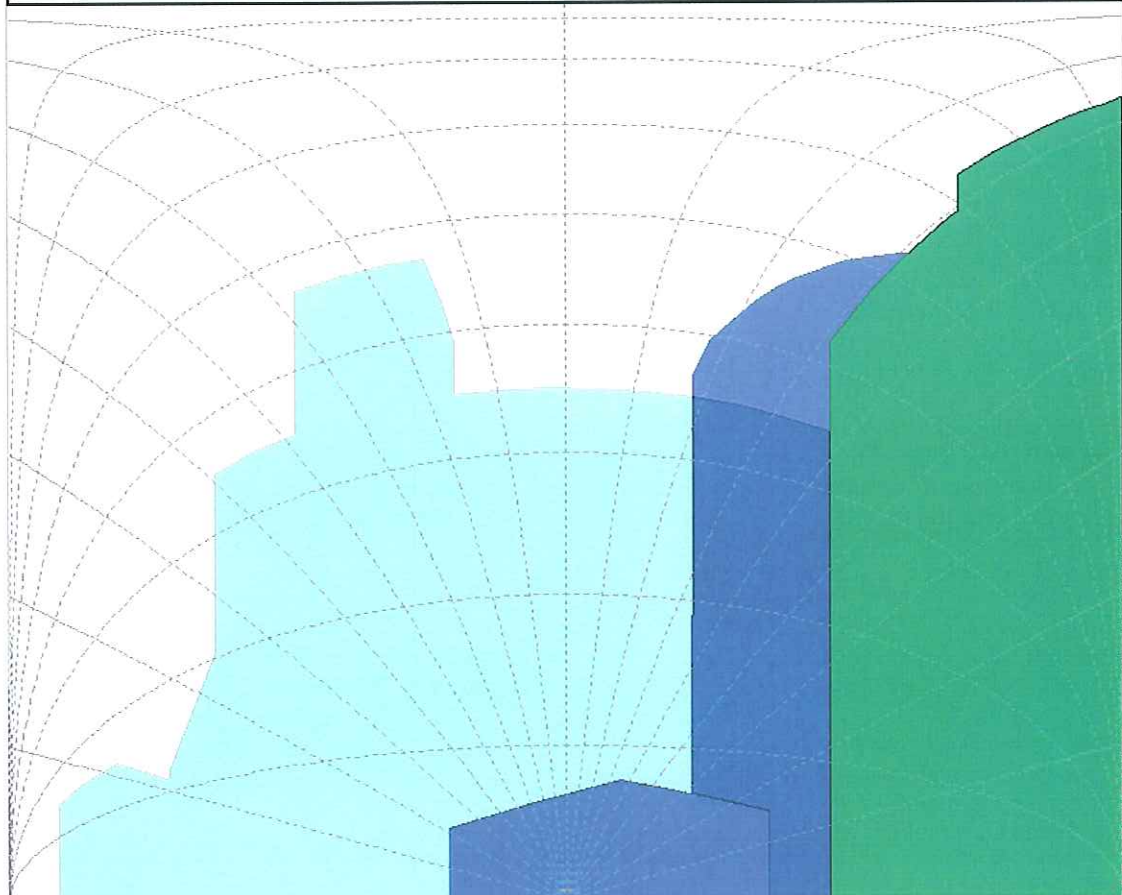


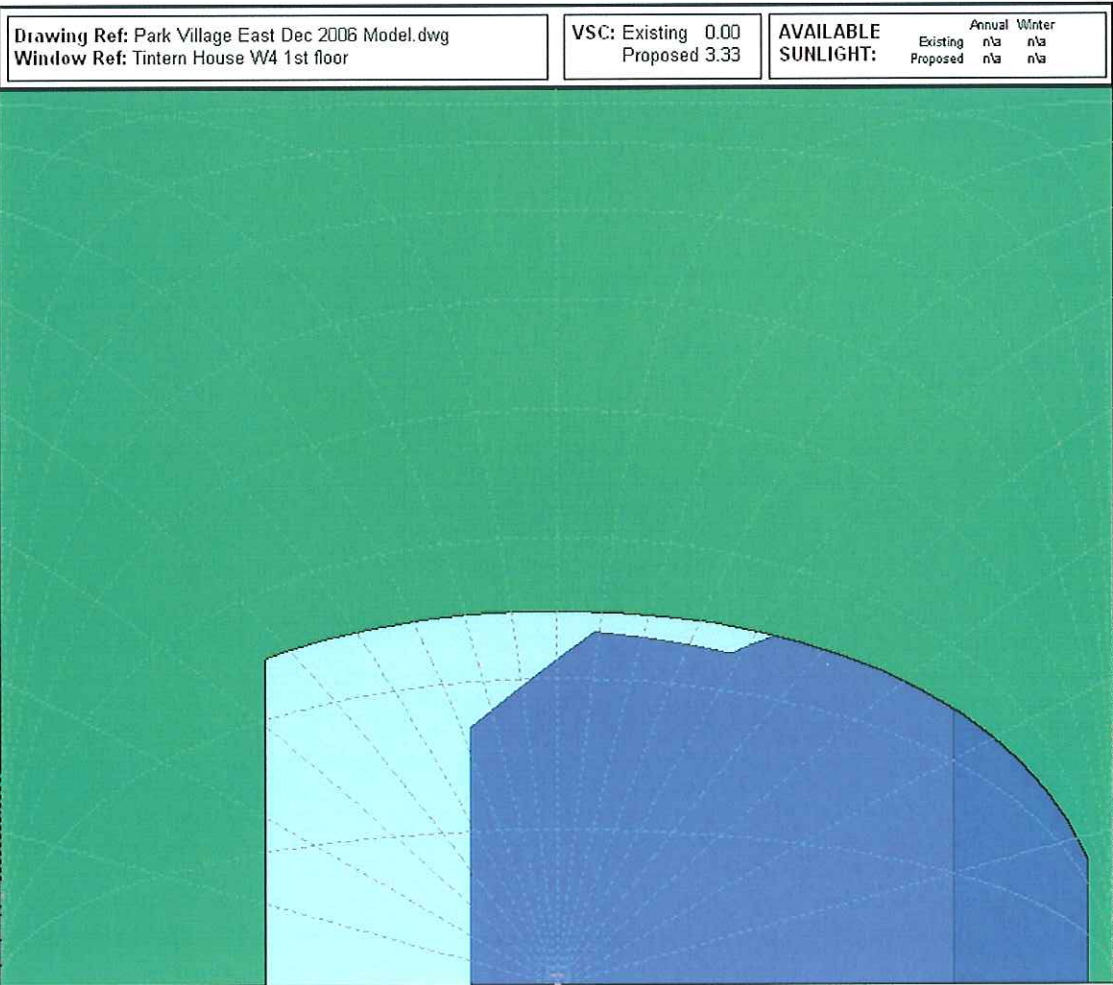
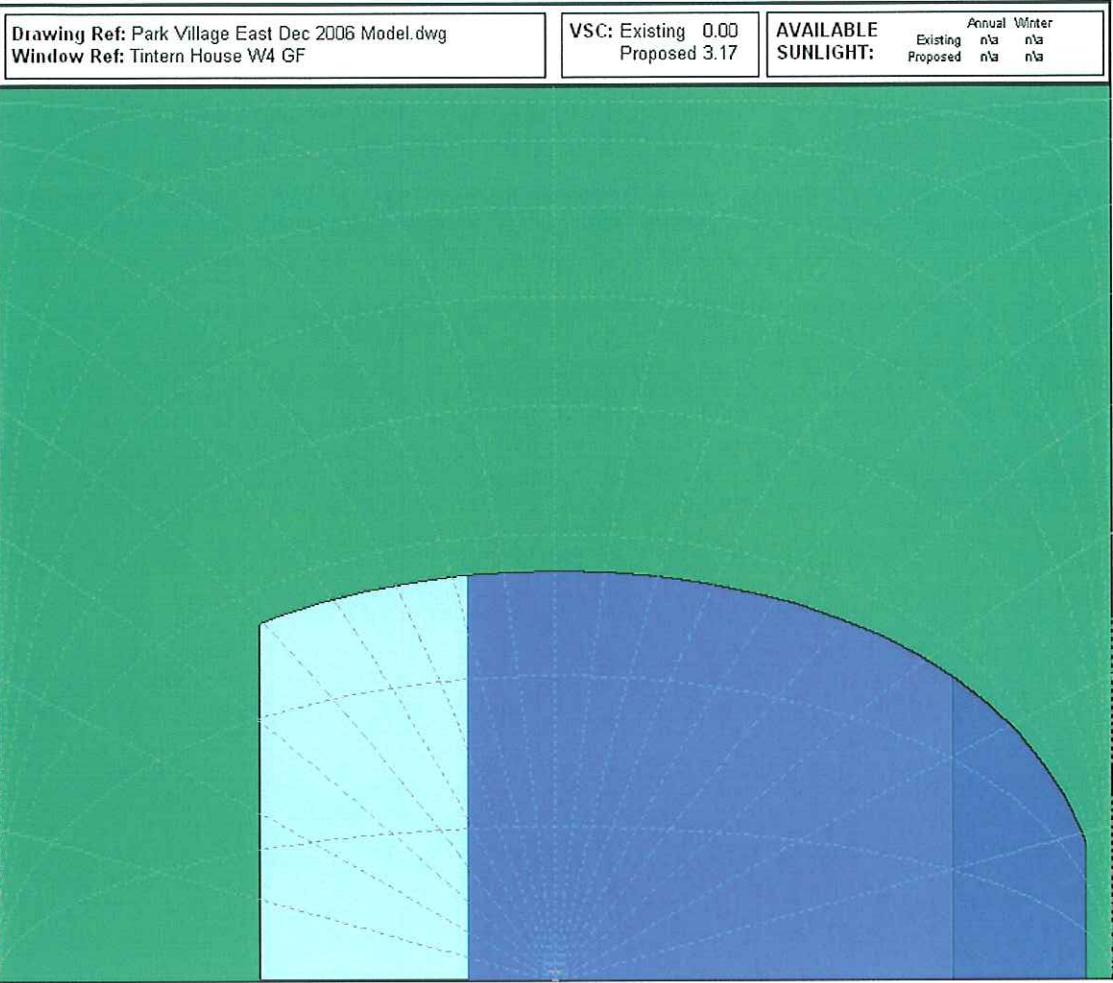
Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Tintern House W3 3rd floor

VSC: Existing 17.67  
Proposed 27.05

AVAILABLE  
SUNLIGHT:

	Existing	Annual	Winter
	Proposed	n/a	n/a



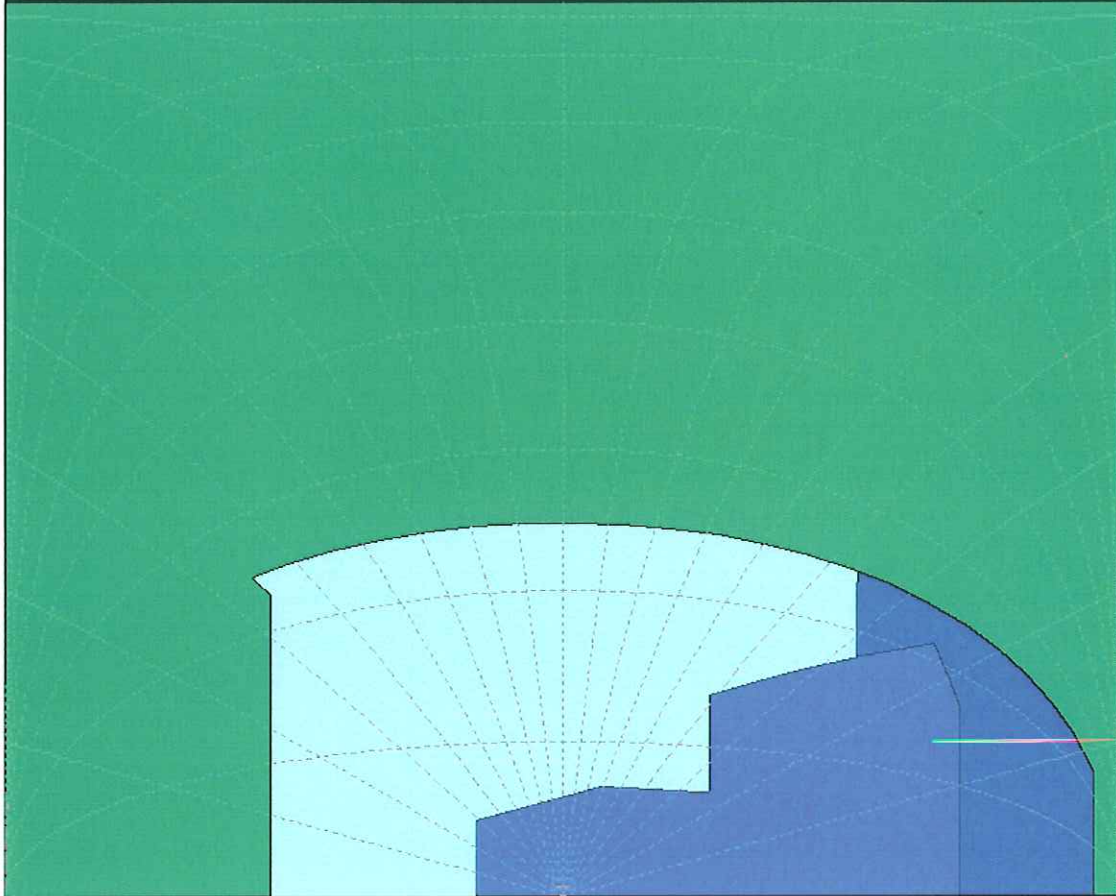




Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Tintern House W4 2nd floor

VSC: Existing 0.00  
Proposed 6.08

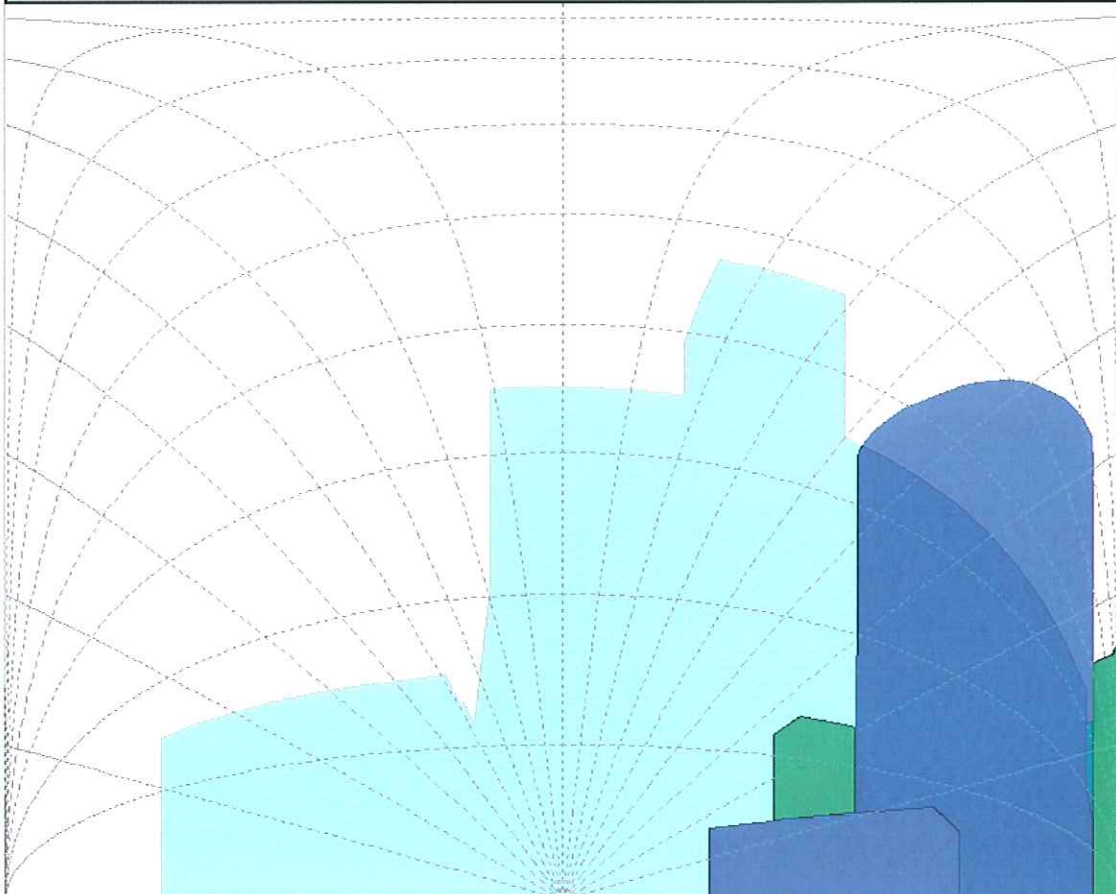
AVAILABLE  
SUNLIGHT:  
Existing Annual Winter  
Proposed n/a n/a n/a



Drawing Ref: Park Village East Dec 2006 Model.dwg  
Window Ref: Tintern House W4 3rd floor

VSC: Existing 25.21  
Proposed 33.89

AVAILABLE  
SUNLIGHT:  
Existing Annual Winter  
Proposed n/a n/a n/a





## **APPENDIX 4**

### **CREDENTIALS**

A Founding Partner of Brooke Vincent + Partners in 1974 and a Fellow of the Royal Institution of Chartered Surveyors since 1981.

Professional experience covers most aspects of a Chartered Building Surveyor's workload but currently, boundary related matters including, Rights To Light, Daylighting, Party Wall legislation disputes, etc., and building surveys of a wide variety of building styles and ages.

Past Chairman of the Pyramus & Thisbe Club (a club for surveyors advising on boundary related disciplines) and now Honorary Secretary. Previously a member of two of the Institution's skills panels (residential surveys and geodetics) and a consulting member to the boundaries panel.

Whilst with the residential survey panel, co-opted onto the working party responsible for revising and extending the RICS Good Practice Note for Residential Building Surveys and thereafter scripting and presenting an educational tape on the same subject.

A frequent speaker on light, party wall and survey matters and an independent assessor of candidates undertaking their RICS Assessment of Professional Competence.

In 1999, received CEDR accreditation as a mediator and became a member of the RICS panel of mediators.

## **Clients - Rights to Light and Daylight/Sunlight**

Akeler Developments Limited  
Alburn Limited  
Antler Homes  
Associated Newspapers  
Barratt Homes  
Bee Bee Developments Limited  
Berkeley Homes  
Bryant Homes  
Cala Homes  
Canon Estates Limited  
City North Group Plc  
City & Thames  
Credit Suisse  
Crest Nicholson  
Galliard Homes Limited  
Grainger Trust Plc.  
Heritage Group  
Ipsus Developments Limited  
J.G. Land + Estates Limited  
Londnewcastle  
Michael Shanley Homes  
Morris Homes  
Pinnacle Estates Limited  
Quintain Estates & Development Plc  
Redrow Homes Limited  
Reit Asset Management  
Rialto Homes  
Rushbond Group  
Shaftesbury Plc  
St. James Homes Limited  
St. James's Investments  
St. John's College, Oxford  
Swan Hill Properties  
Tesco Stores Limited  
The Trustees of Charterhouse London  
Ward Homes  
Wilson Bowden  
Windmill Properties Limited