



Parker House

Planning & Conservation Area Consent Applications

SD4: Daylight & Sunlight Report

Prepared for Camden Council & E C Harris

November 2012

Daylight & Sunlight Report

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25-37 Parker Street, London WC2

Camden Council

November 2012

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1. Introduction and Scope of Report

- 1.1 GVA Schatunowski Brooks has been appointed by EC Harris LLP on behalf of Camden Council to undertake a daylight and sunlight assessment of the proposed redevelopment of 25-37 Parker Street, London WC2.
- 1.2 The proposal includes the retention of the principal front façade facing onto Parker Street and demolition and redevelopment of the building behind that retained façade.
- 1.3 The purpose of this report is to assess the potential impact of the proposed development on the existing levels of daylight and sunlight amenity enjoyed by existing neighbouring dwellings to ensure that the proposed development satisfies the Council's policy objectives in terms of safeguarding existing residential amenity. As a fundamental part of the design process, GVA Schatunowski Brooks were commissioned to produce an initial building envelope setting out the parameters of feasible massing to assist the architect in determining the appropriate areas for new development to be located within the Site. As the proposed development is for new residential apartments, the quality of daylight that will be received within the new habitable rooms has also been tested to ensure that the future occupants of those rooms will also enjoy an adequate amount of daylight amenity.
- 1.4 The recognised standards used for measuring daylight and sunlight are the standards contained in the Building Research Establishment (BRE) Guidelines: '*Site Layout Planning for Daylight and Sunlight – A Guide To Good Practice*' 2011, together with the standards contained in the British Standard Code of Practice for Daylighting, BS8206, Part 2.

2. Relevant Design Standards

2.1 The BRE Guidelines are well established and are adopted by most Local Authorities as the appropriate scientific and empirical method of measuring daylight and sunlight in order to provide objective data upon which to apply their planning policies. The Guidelines are not fixed standards but should be applied flexibly to take account of the specific circumstances of each case.

2.2 The introduction of the Guidelines states:

“The Guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and this document should not be seen as an instrument of planning policy. Its aim is to help rather than constrain the developer. Although it gives numerical guidelines, these should be interpreted flexibly because natural lighting is only one of many factors in the site layout design”.

Daylighting

2.3 For safeguarding the daylight received by existing neighbouring residential buildings around a proposed development. The relevant recommendations are set out in Section 2.2 of the Guidelines.

2.4 The adequacy of daylight received by existing neighbouring dwellings is measured using two methods of measurement. First, it is necessary to measure the Vertical Sky Component (VSC) followed by the measurement of internal daylight distribution by plotting the position of “existing” and “proposed” no skyline contour.

2.5 VSC is measured at the midpoint on the external face of a window serving a habitable room. For the purpose of the Guidelines, a “habitable” room is defined as a Kitchen Living Room, or Bedroom. Bathrooms, hallways and circulation space are excluded from this definition. In addition, there is often a further distinction in respect of small kitchens. Where the internal area of a small kitchen limits the use of that room to food preparation only, and is not of sufficient size to accommodate some other form of “habitable” use such as dining, the kitchen need not be classed as a “habitable” room in its own right.

2.6 VSC is a “spot” measurement taken on the face of the window and is a measure of the availability of light from the sky from over the “existing” and “proposed” obstructions caused by the buildings or structures in front of the window. As it is measured on the outside face of the window, one of the inevitable shortcomings is that it does not take account of the size of the window or the size of the room served by the window. For this reason, the BRE Guidelines require internal Daylight Distribution to be measured in addition to VSC, where the internal layouts are known. It is often difficult to obtain information on existing neighbouring buildings and in such circumstances it is reasonable for the internal layout and dimensions to be estimated for the purpose of measuring the likely internal daylighting conditions.

2.7 The “no skyline” contour plotted for the purpose of measuring internal Daylight Distribution identifies those areas within the room, usually measured on a horizontal working plane set at table top level, where there is direct sky visibility. This, therefore, represents those parts of the room where the sky can be seen through the window. The second measure therefore takes account of the size of the window and the size and layout of the room. When interpreted in conjunction with the VSC value, the likely internal lighting conditions and hence the quality of lighting within the room can be assessed.

2.8 For VSC, the Guidelines state that:

“If this Vertical Sky Component is greater than 27% then enough sky light should still be reaching the window of the existing building. Any reduction below this level should be kept to a minimum. If the Vertical Sky Component with the new development in place is both less than 27% and less than 0.8 times its former value, then the occupants of the existing building will notice a reduction in the amount of sky light.”

2.9 To put this in context, the maximum VSC value that can be received for a totally unobstructed vertical window is 40%. It is therefore permissible to reduce the VSC value by 13% before the level of daylight received by the window would be considered to be below standard. There are, however, circumstances where the VSC value will already be below 27%. In such circumstances, it is permissible to reduce the existing VSC value by a factor of 0.2 (ie 20%), so that the value of the “proposed” conditions remains more than 0.8 times its former value. The scientific reasoning for this permissible margin of reduction is that through the research undertaken at the Building Research

Establishment they have found that existing daylight (and sunlight) levels can be reduced by a factor of 20% before the loss becomes materially noticeable. This factor of reduction applies to VSC, daylight distribution, sunlight and overshadowing.

Sunlighting

- 2.10 The requirement for the protection of sunlight to existing residential buildings are set out in Section 3.2 of the BRE Guidelines.
- 2.11 The availability of sunlight varies throughout the year with the maximum amount of sunlight being available on the summer solstice and the minimum on the winter solstice. In view of this, the internationally accepted test date for measuring sunlight is the Spring Equinox (21 March) on which day the United Kingdom has equal periods of daylight and darkness and sunlight is available above 10 degrees from approximately 0830 to 1730. In addition, on that date, sunlight received perpendicular to the face of a window would only be received where that window faces within 90 degrees of due south. The BRE Guidelines therefore limit the extent of testing for sunlight where a window serving a habitable room faces within 90 degrees due south.
- 2.12 The sunlight standards are normally applied to the principal Living Room within each dwelling rather than the kitchens and bedrooms.
- 2.13 The recommendation for sunlight is:

“If this window reference point can receive more than one quarter of annual probable sunlight hours, including at least 5% of annual probable sunlight hours during the winter months of 21 September and 21 March, then the room should still receive enough sunlight... any reduction in sunlight access below this level should be kept to a minimum. If the availability of sunlight hours are both less than the amounts given and less than 0.8 times their former value, either over the whole year or just during the winter months, then the occupants of the existing building will notice the loss of sunlight”.

- 2.14 A good level of sunlight will therefore be achieved where a window achieves more than 25% APSH of which 5% should be in the winter months. Where sunlight levels fall below the suggested recommendation a comparison of the existing conditions should be undertaken and if the reduction ratio is less than 0.2, i.e. the window continues to

receive more than 0.8 times its existing sunlight levels, the impact on sunlight will be acceptable.

2.15 The quality of Daylight for New-Build dwellings are the standards set out in the British Standard Code of Practice for Daylighting, BS8206 Part 2. These standards are also referred to in Appendix C of the BRE Guidelines. For New-Build dwellings, Daylight is measured using Average Daylight Factors (ADF) rather than Vertical Sky Components (VSC).

2.16 SC is more commonly used for assessing the availability of Daylight to existing neighbouring buildings as it represents the amount of light striking the face of a window. It is a "spot" measurement and equates to the amount of direct light from the sky that is incident on the face of the window. As such, it has its limitations as it does not take account of the size of the window or the size of the room served by the window. It therefore does not necessarily represent the availability and quality of daylight that will be received within the room itself.

2.17 In the case of New-Build dwellings, it is possible to change aspects of the design in order to achieve good daylighting conditions. The use of ADF is therefore seen as a more appropriate method of measurement during the design process as it is calculated from a number of design variables and co-efficients which provide a more accurate assessment of internal lighting conditions. Those input variable comprise:-

- The size of the window serving the room (area of glazing).
- The size of the room being assessed (internal surface area).
- The average reflectance values of the internal finishes.
- The loss of transmittance of Daylight through the glazing.
- A correction factor for maintenance and soiling of the glass finish.
- The amount of daylight actually received by the window (the angle of visible sky) calculated from the VSC.
- The actual use of the room in question.

2.18 In addition, the application of ADF values makes a distinction between the different uses of the rooms being assessed. For example, a higher ADF value should be achieved for a principal living room in comparison to a bedroom. In the present

circumstances, the design of the flats incorporate combined Living/Kitchen/Diners and where there is a combined use, we have applied the equivalent Living Room ADF target of 1.5% *df*. The equivalent ADF value for a domestic bedroom is 1% *df*.

3. Sources of Information

- 3.1 In testing the availability of daylight and sunlight, a detailed 3D computer model has been constructed. For the existing neighbouring buildings, we have relied upon the Sitech Surveying Services drawing numbers 4920 6458-11A Topo and Roof, 4920 6459-11 Elevations and Spatial Intelligence drawing number 3482 for St Joseph's RC Primary School.
- 3.2 For the proposed scheme we have relied upon the Paul Davies & Partners architect's drawing numbers 1588(SK)015L, 016R, 017Q, 0180, 0190, 028L, 039I, 049J, 067F, 081A, 083C and 084C.

4. Scheme Assessment

- 4.1 From our inspection of the site, we have identified the existence of existing residential premises in the following buildings:
- 34-38 Parker Street
 - Powis House
 - 21-30 Parker Street
- 4.2 Annexed at Appendix I are our drawing numbers PA61/20-BRE/132, BRE/133, BRE/134 and BRE/135 which are images of the 'existing' and 'proposed' 3D massing models used within our analysis. Those drawings are followed in Appendix II by drawing numbers PA61/20-BRE/129, BRE/130 and BRE/131 which are the room location plans used within our analysis. The window and room locations set out on those drawings should be cross-referenced with the equivalent window and room references used in our daylight and sunlight analyses tables annexed at Appendices 3 and 4.
- 4.3 From the numerical results of the daylight analysis set out in our table at Appendix III, it is clear that any impact on daylight will be comfortably within the recommendations of the BRE Guidelines in respect of 34-38 Parker Street and Powis House, and the impact on these properties is therefore comfortably within the Council's policy recommendations.
- 4.4 The analysis has however identified losses in VSC to the four kitchens in the flank elevation of 21-30 Parker Street that will exceed the BRE Guidelines. Those rooms/windows therefore require more detailed consideration.
- 4.5 The windows in the flank elevation of 21-30 Parker Street presently face onto the existing flank wall of Parker House and therefore receive extremely low levels of natural light under existing conditions. They are therefore particularly sensitive to very minor changes in height or 'massing' of the neighbouring building. The rooms served by those windows comprise a bathroom and small kitchen at each level. Although we have tested each bathroom, the results for the bathrooms need not be considered as

a bathroom is not a 'habitable' room for the purpose of the BRE Guidelines. The pertinent results are therefore the results for each kitchen. It should also be noted that the kitchens in question are very small kitchens which are well below the accepted threshold of 13m² usually applied to determine whether a kitchen should be treated as a 'habitable' room in its own right. In view of the size of these kitchens, they would not normally be classed as habitable rooms as their use would be limited to food preparation only as there is insufficient space to allow for any form of dining area or other habitable use. These impacts are therefore not considered to be material.

- 4.6 The results of the sunlight analysis are set out in Appendix IV. The sunlight tests only apply to Powis House and 21-30 Parker Street as these are the only two existing neighbouring residential buildings that have windows that face within 90 degrees of due south, and hence fall within the BRE sunlight criteria.
- 4.7 There will be no measurable loss of sunlight to 21-30 Parker Street but there will be some loss of sunlight to Powis House. Although some of the losses to the availability of annual sunlight will marginally exceed the BRE recommendations, the impact on the overall amount of annual sunlight received by Powis House will be within reasonable margins and will not result in any material loss of amenity. The percentage losses to Winter sunlight will however be more noticeable due to the fact that Winter sunlight is received at relatively low angles of altitude (essentially below 30 degrees) and even small increases in height will therefore have a relatively greater impact on Winter rather than annual sunlight.
- 4.8 The results of the daylight analysis for the proposed new habitable rooms are annexed at Appendices V and VI and include the results for the new habitable rooms that will be created within the existing buildings former Aldwych Workshops. Appendix V consists of drawing numbers PA61/21-BRE/136, BRE/137, BRE/144, BRE/139, BRE/140, BRE/141 and BRE/142, and illustrate the room layouts, locations and room window references used in our technical analysis. Those references should be cross-referenced with the equivalent room and window references in the BRE Amenity Analysis Table annexed at Appendix VI.
- 4.9 Those results show that out of 124 habitable rooms tested, 122 will fully satisfy the daylight standards in the British Standard Code of Practice, with only two rooms falling short. Those rooms are the rooms that we have identified as rooms R1/401 and R11/401 on our drawing number PA61/22-BRE/144 and on page 3 of the BRE Amenity Analysis

Table. They are two Living/Kitchen/Diners at 1st floor level on the front elevation overlooking Parker Street and sit behind the retained façade. There therefore has been very limited scope for increasing the size of the window openings on that façade and the size of the windows serving these two rooms have therefore been determined by the retention of the façade itself. The ADF values recorded for these rooms were 1.30%*df* and 1.04%*df*, and whilst they fall short of the design target of 1.5%*df*, they are both above the minimum standard of 1.0%*df* for habitable use. Internal lighting conditions will therefore be within an acceptable standard.

- 4.10 It is unusual to achieve 100% compliance in a development of flats, especially in an inner city urban environment, and in particular when dealing with a change of use of an existing building or where there is a façade retention. A non-compliance rate of 5% is not uncommon and in the present circumstances, a shortfall of two rooms out of 124 amounts to a pass rate of 98.4% or a failure rate of just 1.6%. When compared to other residential developments, and in particular comparable New-Build schemes, the current design performs extremely well.

5. Summary and Conclusion

- 5.1 The proposed development will not result in any material loss of light to any of the existing neighbouring residential dwellings so as to have a detrimental effect on existing neighbouring amenity. The only impact of any significance will be a minor loss of Winter sunlight to the rooms within Powis House.
- 5.2 122 out of 124 of the proposed new habitable rooms will meet the target design standards for New-Build dwellings with only two minor shortfalls. Those shortfalls would be to two Living/Kitchen/Diners at 1st floor level which are located behind the retained façade. Both rooms will however still receive more than 1%*df* – the minimum amount of daylight required for basic habitable use, and the future occupants of those rooms will therefore still enjoy a reasonable level of amenity.
- 5.3 In overall conclusion, there will be no unreasonable impact as a result of the development and the proposed new dwellings will achieve a reasonable degree of daylighting amenity.



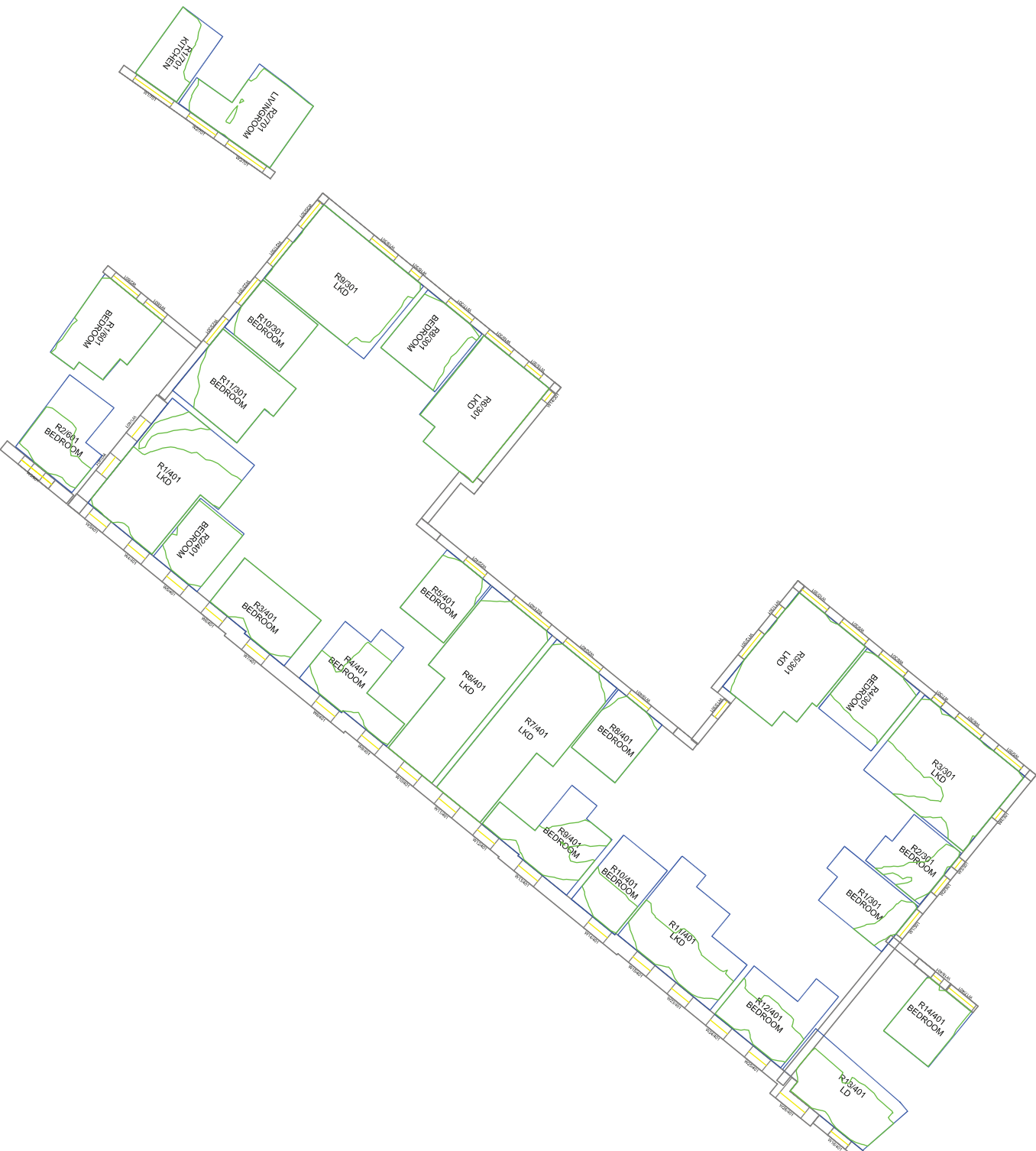
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Appendices



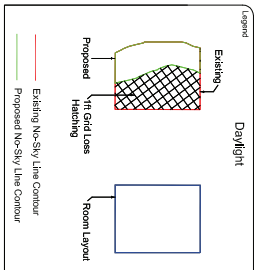
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Appendix I



First floor

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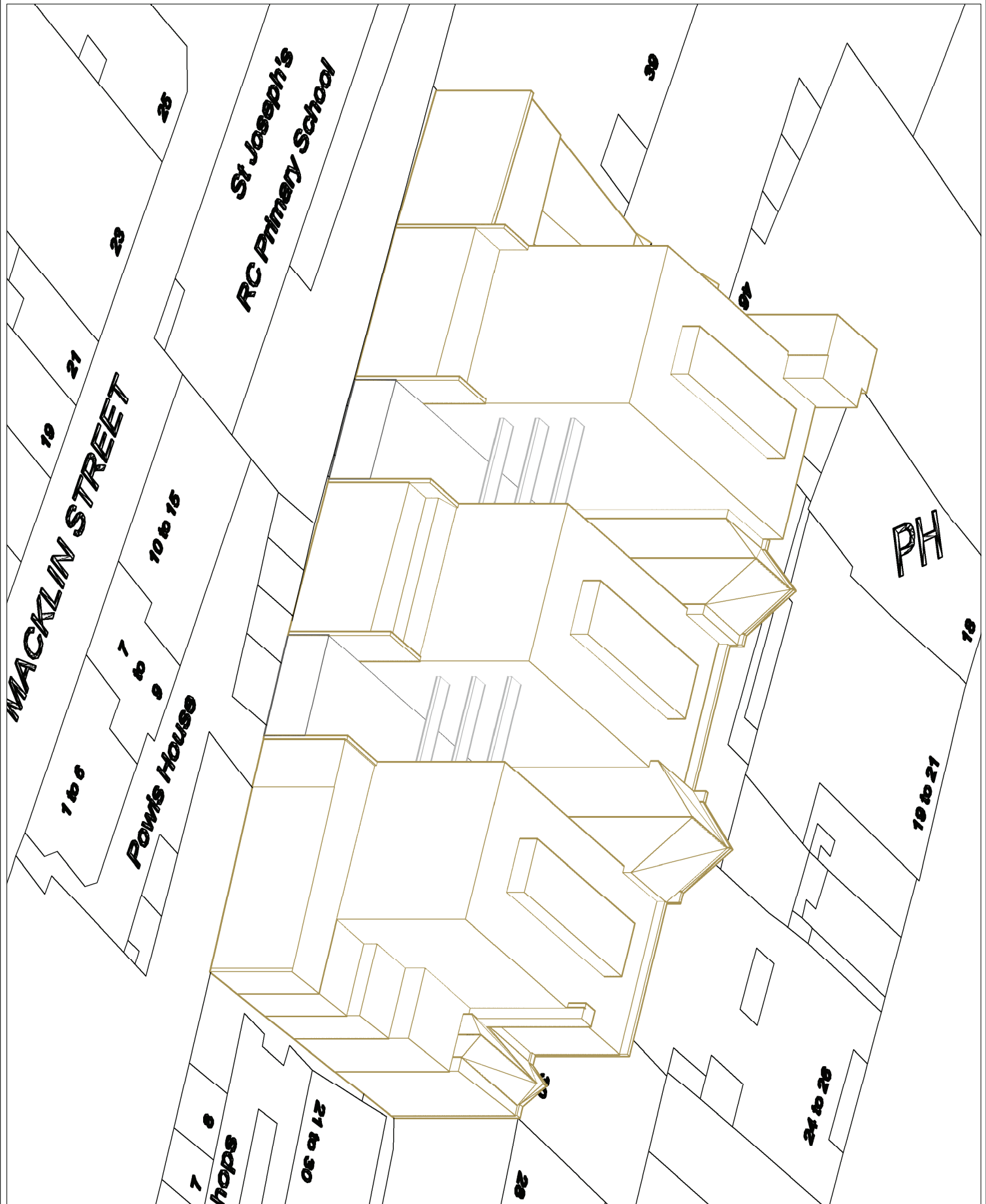
Sources of Information

Survey:
 Sitech Surveying Services
 4920 6458-11A Topo & Roof
 4920 6459-11 Elevations
 Spatial Intelligence
 3482 - St. Josephs RC Primary
 School floor plans
 Proposed:
 Paul Davis + Partners
 Oct 2012
 1588(SK)015 L, 016 R,
 1588(SK)017 R, 018 O,
 1588(SK)019 O, 028 L,
 1588(SK)039 I, 049 J,
 1588(SK)067 F, 081 A,
 1588(SK)083 C, 084 C

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 www.gva.co.uk

Project Name	Parker Street		
Client	EC Harris LLP		
Drawing Title	No Sky Line Contours for Option 25-37 Parker Street		
Drawn By	Checked By	Scale @ A3	Date
Mike S	1200@A3		Nov 2012
Project No.	Drawn No.	Revision	
PA61/22	BRE/144		

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Sources of Information
 Survey:
 Sitech Surveying Services
 4920 6458-11A Topo & Roof
 4920 6459-11 Elevations

Spatial Intelligence
 3482 - St Josephs RC Primary
 School floor plans

Proposed:
 Paul Davis + Partners
 Oct 2012
 1588/SK015 L, 016 R,
 1588/SK017 Q, 018 O,
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 1588/SK039 I, 049 J,
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Project Name
 25-37 Parker Street
 London

Client
 EC Harris LLP

Drawing Title
 Existing Building
 Viewed from Macklin Street

Drawn By	Scale @ A3	Date
Mike S	N/A	Oct 2012

Project No.	Drawing No.	Revision
PAG/20	BRE/135	-



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Sources of Information
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 4920 6458-11A Topo & Roof
 4920 6459-11 Elevations
 Spatial Intelligence
 3482 - St Josephs RC Primary
 School floor plans
 Proposed:
 Paul Davis + Partners
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 1588(SK)015 L, 016 R,
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Project Name
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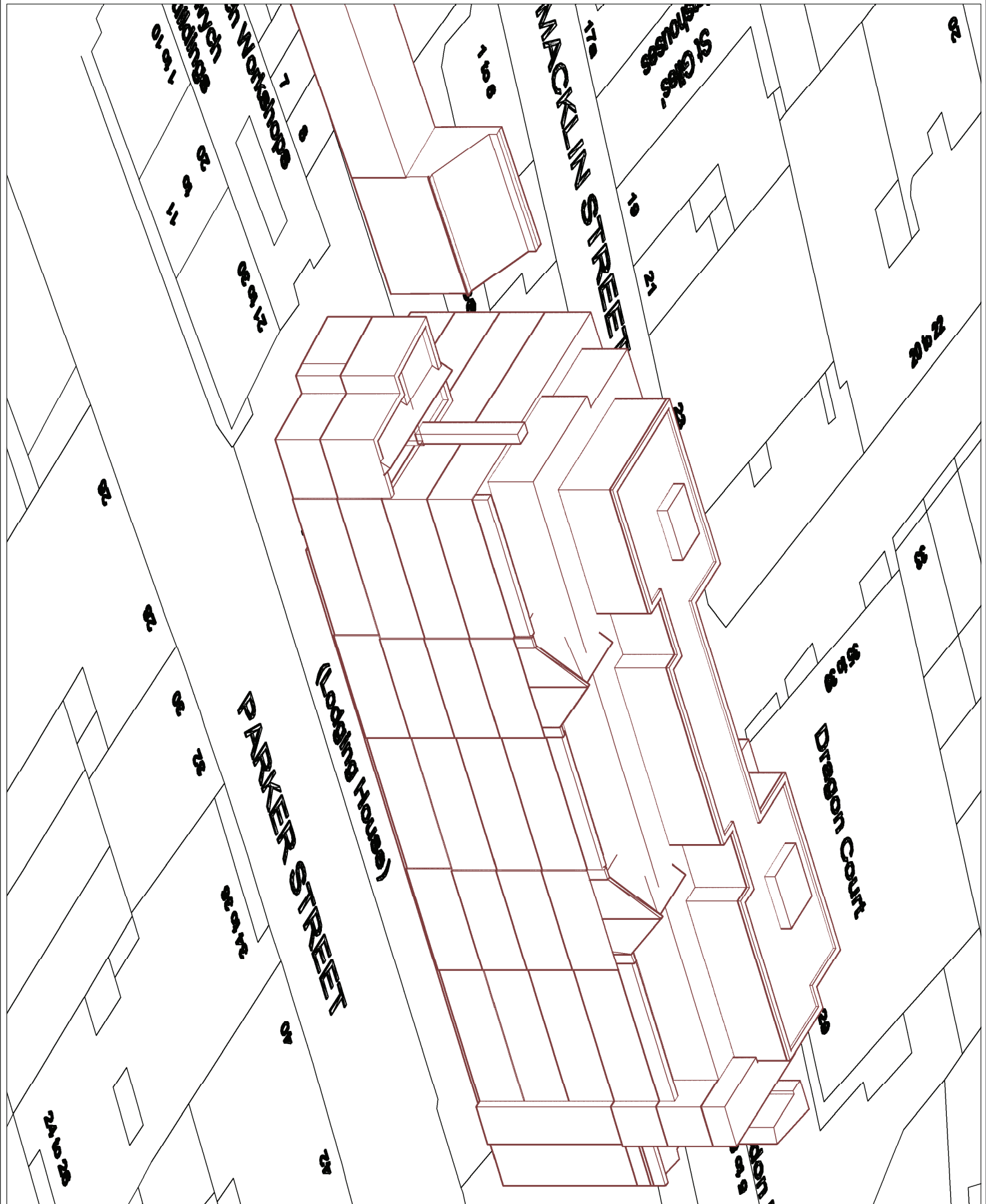
Client
 EC Harris LLP

Drawing Title
 Proposed C Shape Option
 Viewed from Macklin Street

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Sources of Information
Survey: Sitech Surveying Services
4920 6458-17A Topo & Roof
4920 6459-11 Elevations
Spatial Intelligence
3482 - St Josephs RC Primary
School floor plans
Proposed:
Paul Davis + Partners
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1588/SK067 F, 081 A,
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Project Name
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London

Client
EC Harris LLP

Drawing Title
Proposed C Shape Option
Viewed from Parker Street

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Checked By
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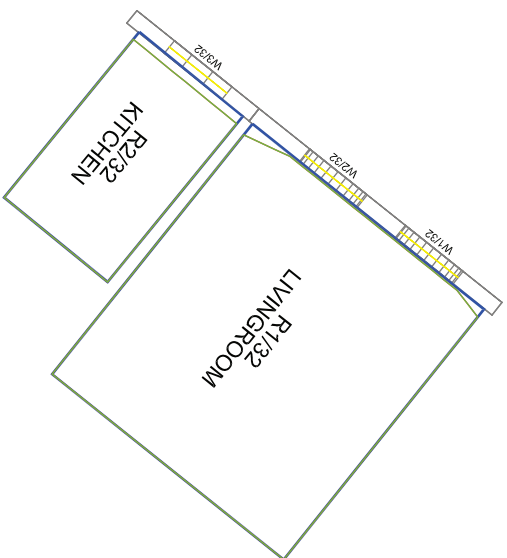
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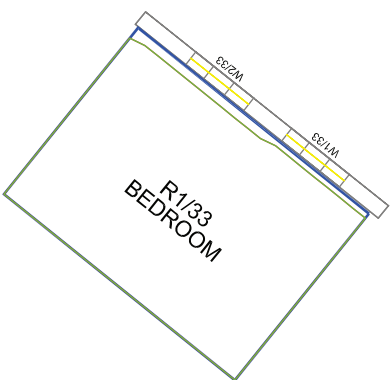
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Appendix II

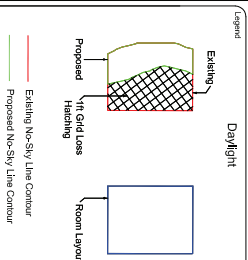
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Second floor



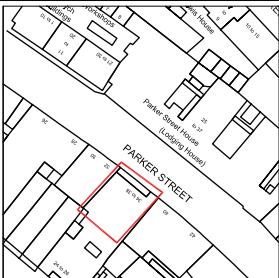
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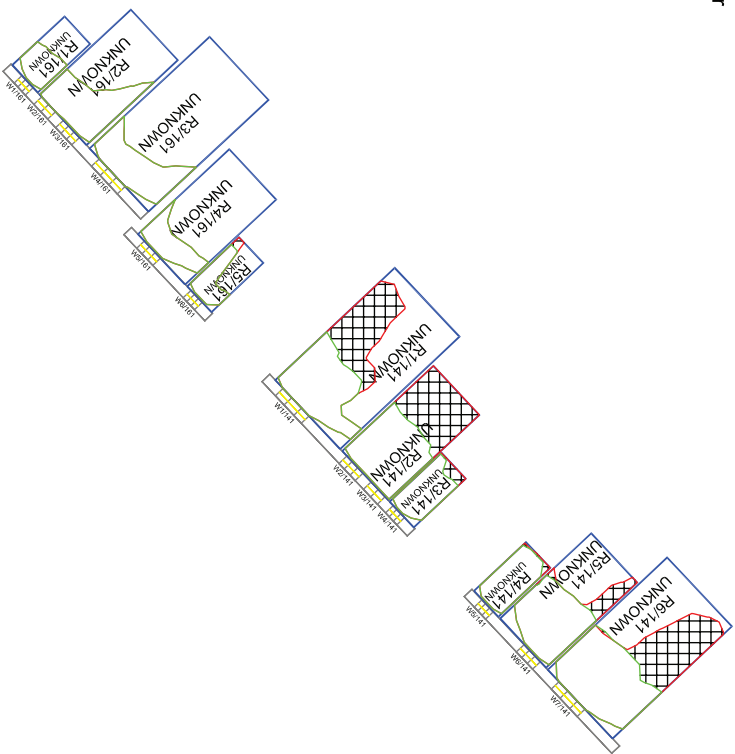
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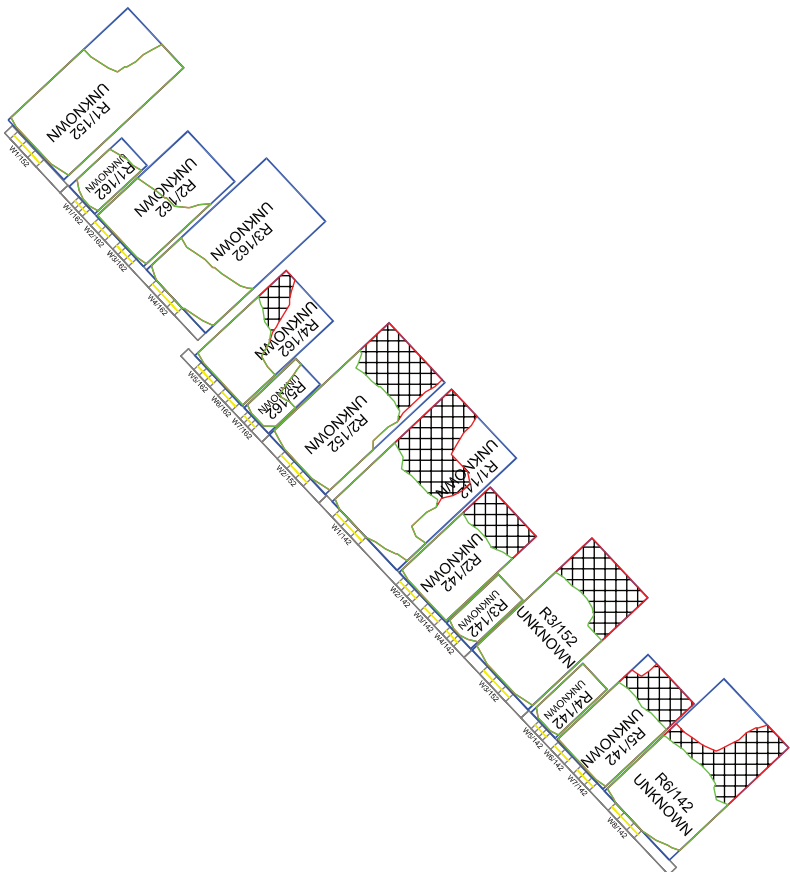
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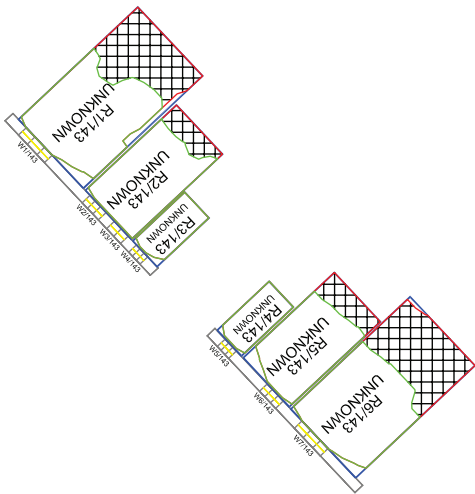
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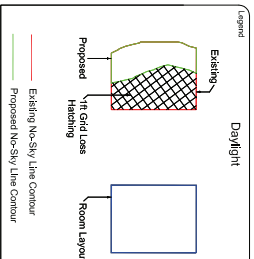
Second floor



Third floor



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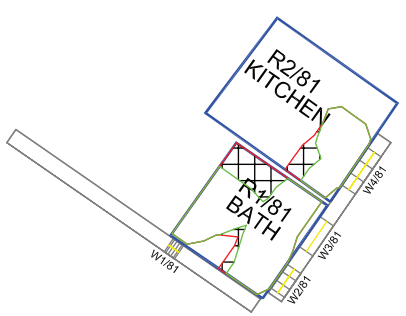
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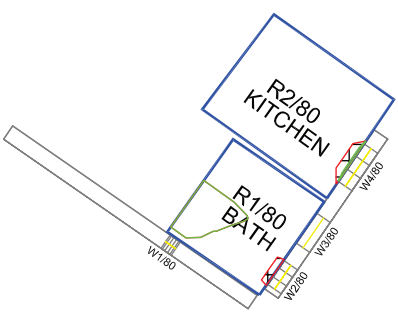
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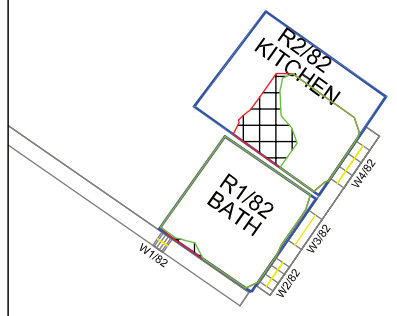
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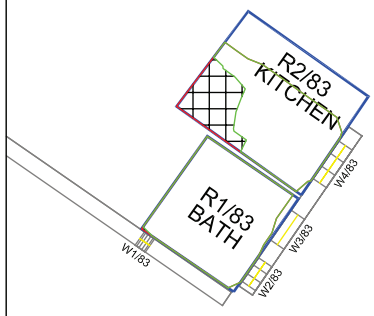
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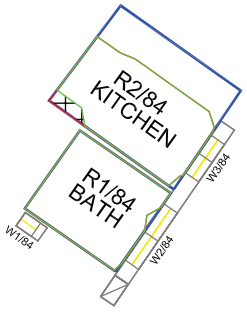
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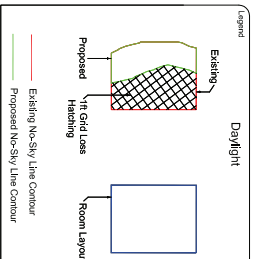
Third floor



Fourth floor

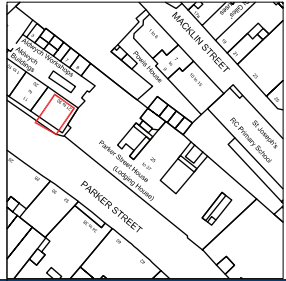


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Sources of Information
 Survey: Sitech Surveying Services
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 4920 6459-11 Elevations
 Spatial Intelligence
 3482 - St Josephs RC Primary
 School floor plans

Proposed:
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 1588/SK1067 F, 081 A,
 1588/SK1083 C, 084 C



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Project Name
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 London

Client
 EC Harris LLP

Drawing Title
 No Sky Line Contours for C Option
 21- 30 Parker Street

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 Scale 1:1000
 Date
 1:1000(A3)
 Oct 2012

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 PG6/20
 Drawing No
 BRE/131
 Revision



Report

Appendix III



PARKER STREET
BRE DAYLIGHT ANALYSIS
C Option - 22 October 2012

Room/Floor	Room Use	Window	%VSC			% Daylight Factor			Proposed No Sky	
			Exist	Prop	% Loss	Exist	Prop	% Loss	% of Room Area	% Loss of Existing
34-38 Parker Street - BRE/129										
First floor										
R1/32	LIVINGROOM	W1/32	31.32	26.89	14.14%	6.28	5.27	16.17%	98.94%	0.00%
		W2/32	32.52	28.14	>27					
R2/32	KITCHEN	W3/32	30.40	27.38	>27	3.16	2.49	21.05%	95.54%	0.00%
Second floor										
R1/33	BEDROOM	W1/33	36.46	34.54	>27	4.01	3.27	18.34%	96.23%	0.00%
		W2/33	37.08	35.28	>27					
Powis House - BRE/130										
First floor										
R1/141	UNKNOWN	W1/141	16.98	14.30	15.78%	1.73	1.51	13.09%	29.68%	45.61%
R2/141	UNKNOWN	W2/141	18.20	15.35	15.66%	2.72	2.35	13.33%	53.73%	45.66%
		W3/141	18.53	15.67	15.43%					
R3/141	UNKNOWN	W4/141	18.77	15.92	15.18%	2.24	1.93	13.88%	83.18%	12.32%
R4/141	UNKNOWN	W5/141	18.80	16.19	13.88%	2.02	1.79	11.71%	91.59%	3.92%
R5/141	UNKNOWN	W6/141	17.45	15.46	11.40%	1.38	1.24	9.87%	49.93%	16.67%
R6/141	UNKNOWN	W7/141	14.51	13.11	9.65%	1.69	1.57	6.98%	39.04%	39.36%
R1/161	UNKNOWN	W1/161	15.37	15.06	2.02%	1.30	1.30	0.15%	47.79%	0.00%
R2/161	UNKNOWN	W2/161	14.23	13.90	2.32%	2.06	2.06	0.24%	41.56%	0.00%
		W3/161	13.95	13.64	2.22%					
R3/161	UNKNOWN	W4/161	12.28	11.87	3.34%	1.45	1.42	2.14%	23.08%	0.00%
R4/161	UNKNOWN	W5/161	12.41	11.58	6.69%	0.83	0.75	9.58%	20.03%	0.00%
R5/161	UNKNOWN	W6/161	14.40	12.57	12.71%	1.47	1.21	17.47%	48.13%	7.21%
Second floor										
R1/142	UNKNOWN	W1/142	21.58	17.80	17.52%	2.06	1.77	14.01%	39.65%	45.27%
R2/142	UNKNOWN	W2/142	23.22	19.07	17.87%	3.20	2.72	14.98%	68.64%	30.58%
		W3/142	23.62	19.43	17.74%					
R3/142	UNKNOWN	W4/142	23.93	19.70	17.68%	2.61	2.19	15.89%	94.86%	0.00%
R4/142	UNKNOWN	W5/142	24.39	20.39	16.40%	2.37	2.02	14.85%	96.26%	0.00%
R5/142	UNKNOWN	W6/142	24.37	20.42	16.21%	3.02	2.57	14.80%	68.07%	28.93%
		W7/142	24.28	20.42	15.90%					
R6/142	UNKNOWN	W8/142	23.19	19.51	15.87%	2.26	1.98	12.23%	49.54%	35.42%
R1/152	UNKNOWN	W1/152	24.06	24.00	0.25%	2.28	2.28	0.00%	79.84%	0.00%
R2/152	UNKNOWN	W2/152	23.16	19.45	16.02%	2.18	1.90	12.63%	65.40%	30.69%
R3/152	UNKNOWN	W3/152	27.21	22.28	18.12%	2.50	2.14	14.55%	67.08%	31.84%
R1/162	UNKNOWN	W1/162	19.06	18.91	0.79%	1.69	1.69	0.00%	78.76%	0.00%
R2/162	UNKNOWN	W2/162	18.31	18.12	1.04%	2.13	2.13	0.00%	51.58%	0.00%
		W3/162	17.71	17.46	1.41%					
R3/162	UNKNOWN	W4/162	15.76	15.36	2.54%	1.78	1.75	1.41%	30.00%	0.00%
R4/162	UNKNOWN	W5/162	15.83	14.78	6.63%	2.03	1.85	8.91%	50.89%	21.40%
		W6/162	17.11	15.26	10.81%					
R5/162	UNKNOWN	W7/162	18.11	15.77	12.92%	1.79	1.54	14.17%	61.68%	0.00%



Room/Floor	Room Use	Window	%VSC			% Daylight Factor			Proposed No Sky	
			Exist	Prop	% Loss	Exist	Prop	% Loss	% of Room Area	% Loss of Existing
Third floor										
R1/143	UNKNOWN	W1/143	27.19	22.46	17.40%	2.45	2.11	13.89%	60.73%	36.21%
R2/143	UNKNOWN	W2/143	28.97	23.69	18.23%	3.41	2.88	15.63%	82.84%	16.22%
		W3/143	29.32	23.93	18.38%					
R3/143	UNKNOWN	W4/143	29.58	24.08	18.59%	2.73	2.27	16.84%	94.86%	0.00%
R4/143	UNKNOWN	W5/143	29.88	24.39	18.37%	2.72	2.26	16.82%	96.26%	0.00%
R5/143	UNKNOWN	W6/143	29.84	24.38	18.30%	1.90	1.58	16.59%	76.65%	19.97%
R6/143	UNKNOWN	W7/143	29.35	24.08	17.96%	2.62	2.24	14.59%	58.90%	39.72%
21-30 Parker Street - BRE/131										
Ground floor										
R1/80	BATH	W1/80	21.52	21.68	-0.74%	0.22	0.22	0.00%	18.95%	8.16%
		W2/80	1.85	1.66	10.27%					
		W3/80	1.61	0.85	47.20%					
R2/80	KITCHEN	W4/80	1.62	0.56	65.43%	0.00	0.00	0.00%	0.45%	78.57%
First floor										
R1/81	BATH	W1/81	25.27	25.33	-0.24%	2.27	1.39	38.92%	71.79%	19.58%
		W2/81	12.80	5.80	54.69%					
		W3/81	13.69	6.56	52.08%					
R2/81	KITCHEN	W4/81	12.19	5.24	57.01%	1.37	0.91	33.65%	19.44%	18.63%
Second floor										
R1/82	BATH	W1/82	29.44	29.45	>27	3.29	2.85	13.54%	96.42%	1.72%
		W2/82	22.02	18.97	13.85%					
		W3/82	21.75	17.81	18.11%					
R2/82	KITCHEN	W4/82	20.37	15.86	22.14%	2.02	1.60	20.96%	31.60%	34.26%
Third floor										
R1/83	BATH	W1/83	33.74	33.74	>27	4.51	3.69	18.19%	97.05%	0.22%
		W2/83	32.37	25.40	21.53%					
		W3/83	32.97	24.94	24.36%					
R2/83	KITCHEN	W4/83	32.28	22.56	30.11%	2.88	2.14	25.84%	51.04%	26.34%
Fourth floor										
R1/84	BATH	W1/84	37.48	37.48	>27	7.29	6.28	13.78%	99.00%	0.00%
		W2/84	38.36	31.55	>27					
R2/84	KITCHEN	W3/84	38.28	29.79	>27	3.67	2.95	19.67%	66.47%	4.07%



Report

Appendix IV



**PARKER STREET
BRE SUNLIGHT ANALYSIS
Option C - 22 October 2012**

Available sunlight as a percentage of annual unobstructed total (1486.0 Hrs)

Room use	Window Ref	Existing %			Proposed %			% Loss of Summer	% Loss of Winter	% Loss of Total
		Summer	Winter	Total	Summer	Winter	Total			
Powis House - BRE/130										
First floor										
UNKNOWN	W1/141	25	0	25	18	0	18	28.00%	0.00%	28.00%
UNKNOWN	W2/141	23	0	23	17	0	17	26.09%	0.00%	26.09%
UNKNOWN	W3/141	21	0	21	18	0	18	14.29%	0.00%	14.29%
UNKNOWN	W4/141	19	0	19	17	0	17	10.53%	0.00%	10.53%
UNKNOWN	W5/141	18	4	22	17	1	18	5.56%	75.00%	18.18%
UNKNOWN	W6/141	21	4	25	19	0	19	9.52%	100.00%	24.00%
UNKNOWN	W7/141	20	3	23	20	1	21	0.00%	66.67%	8.70%
UNKNOWN	W1/161	6	3	9	6	3	9	0.00%	0.00%	0.00%
UNKNOWN	W2/161	4	3	7	4	3	7	0.00%	0.00%	0.00%
UNKNOWN	W3/161	6	1	7	6	1	7	0.00%	0.00%	0.00%
UNKNOWN	W4/161	9	5	14	9	5	14	0.00%	0.00%	0.00%
UNKNOWN	W5/161	9	0	9	7	0	7	22.22%	0.00%	22.22%
UNKNOWN	W6/161	8	0	8	5	0	5	37.50%	0.00%	37.50%
Second floor										
UNKNOWN	W1/142	33	2	35	28	0	28	15.15%	100.00%	20.00%
UNKNOWN	W2/142	29	4	33	25	0	25	13.79%	100.00%	24.24%
UNKNOWN	W3/142	27	5	32	23	1	24	14.81%	80.00%	25.00%
UNKNOWN	W4/142	23	6	29	20	1	21	13.04%	83.33%	27.59%
UNKNOWN	W5/142	22	5	27	21	2	23	4.55%	60.00%	14.81%
UNKNOWN	W6/142	27	6	33	22	2	24	18.52%	66.67%	27.27%
UNKNOWN	W7/142	29	7	36	24	2	26	17.24%	71.43%	27.78%
UNKNOWN	W8/142	32	8	40	27	3	30	15.63%	62.50%	25.00%
UNKNOWN	W1/152	24	14	38	24	14	38	0.00%	0.00%	0.00%
UNKNOWN	W2/152	34	3	37	28	1	29	17.65%	66.67%	21.62%
UNKNOWN	W3/152	33	10	43	30	4	34	9.09%	60.00%	20.93%
UNKNOWN	W1/162	11	3	14	11	3	14	0.00%	0.00%	0.00%
UNKNOWN	W2/162	11	3	14	11	3	14	0.00%	0.00%	0.00%
UNKNOWN	W3/162	11	1	12	11	1	12	0.00%	0.00%	0.00%
UNKNOWN	W4/162	13	5	18	13	5	18	0.00%	0.00%	0.00%
UNKNOWN	W5/162	15	0	15	12	0	12	20.00%	0.00%	20.00%
UNKNOWN	W6/162	16	0	16	11	0	11	31.25%	0.00%	31.25%
UNKNOWN	W7/162	13	0	13	10	0	10	23.08%	0.00%	23.08%
Third floor										
UNKNOWN	W1/143	37	8	45	32	5	37	13.51%	37.50%	17.78%
UNKNOWN	W2/143	31	9	40	30	5	35	3.23%	44.44%	12.50%
UNKNOWN	W3/143	28	9	37	27	5	32	3.57%	44.44%	13.51%
UNKNOWN	W4/143	24	10	34	23	5	28	4.17%	50.00%	17.65%
UNKNOWN	W5/143	24	10	34	23	4	27	4.17%	60.00%	20.59%
UNKNOWN	W6/143	31	10	41	29	4	33	6.45%	60.00%	19.51%
UNKNOWN	W7/143	36	15	51	33	8	41	8.33%	46.67%	19.61%
21-30 Parker Street - BRE/131										
Ground floor										
BATH	W1/80	6	0	6	6	0	6	0.00%	0.00%	0.00%



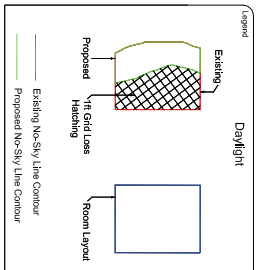
Room use	Window Ref	Existing %			Proposed %			% Loss of Summer	% Loss of Winter	% Loss of Total
		Summer	Winter	Total	Summer	Winter	Total			
First floor										
BATH	W1/81	11	0	11	11	0	11	0.00%	0.00%	0.00%
Second floor										
BATH	W1/82	15	0	15	15	0	15	0.00%	0.00%	0.00%
Third floor										
BATH	W1/83	16	3	19	16	3	19	0.00%	0.00%	0.00%
Fourth floor										
BATH	W1/84	23	7	30	23	7	30	0.00%	0.00%	0.00%



Report

Appendix V

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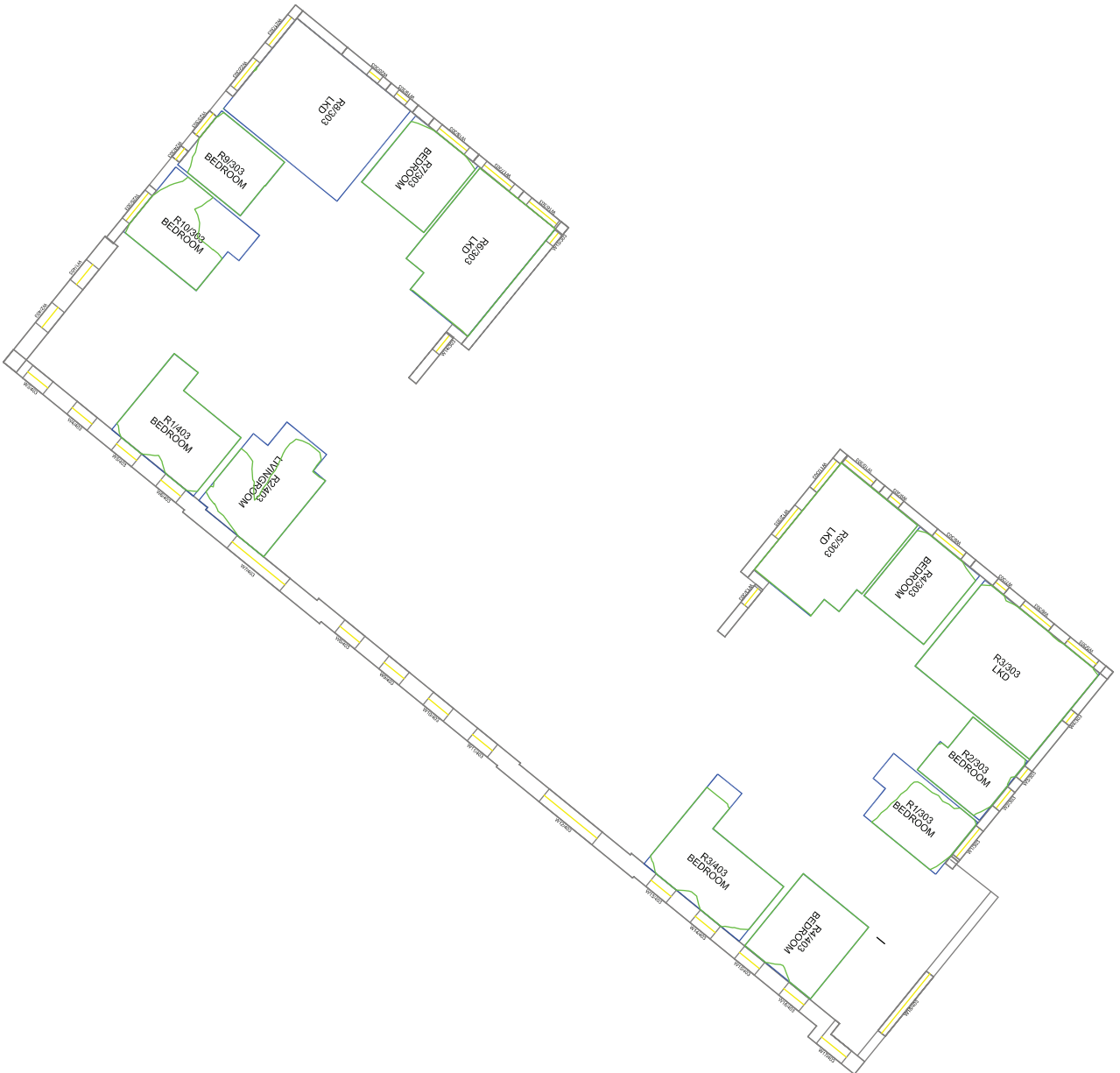


Sources of Information

Survey:
 Sitech Surveying Services
 4920 6458-11A Topo & Roof
 4920 6459-11 Elevations
 Spatial Intelligence
 3482 - St. Josephs RC Primary
 School floor plans

Proposed:
 Paul Davis + Partners
 Oct 2012

- 1588/SK1015 L, 016 R,
- 1588/SK1017 Q, 018 O,
- 1588/SK1019 O, 028 L,
- 1588/SK1039 I, 049 J,
- 1588/SK1067 F, 081 A,
- 1588/SK1083 C, 084 C



Third floor

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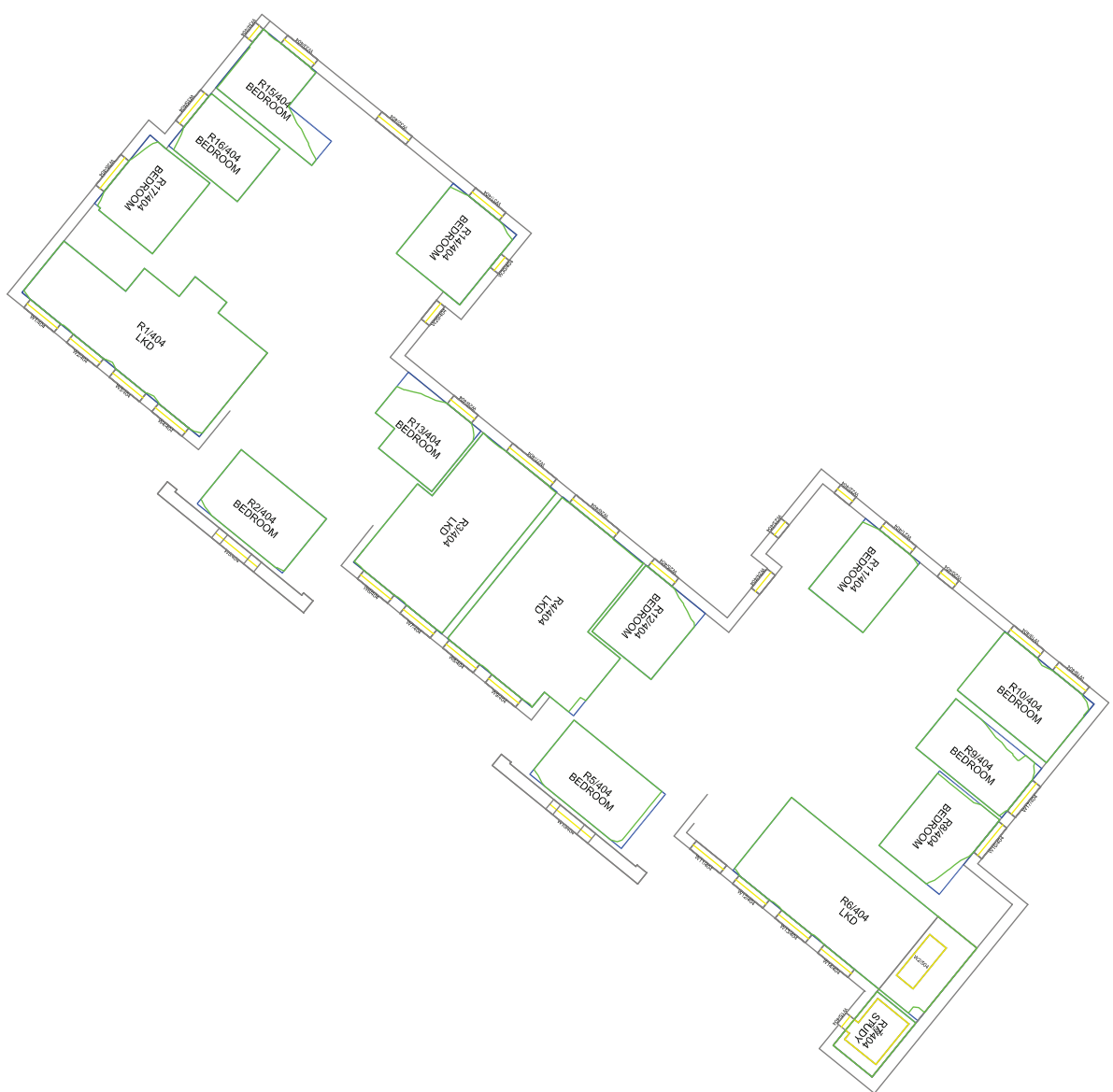
Client
 EC Harris LLP

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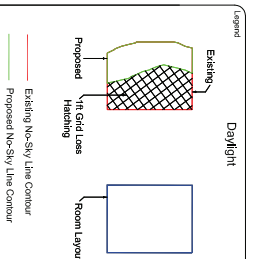
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Fourth floor



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 Proposed:
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 1588(SK)019 O, 028 L,
 1588(SK)039 I, 049 J,
 1588(SK)067 F, 081 A,
 1588(SK)083 C, 084 C

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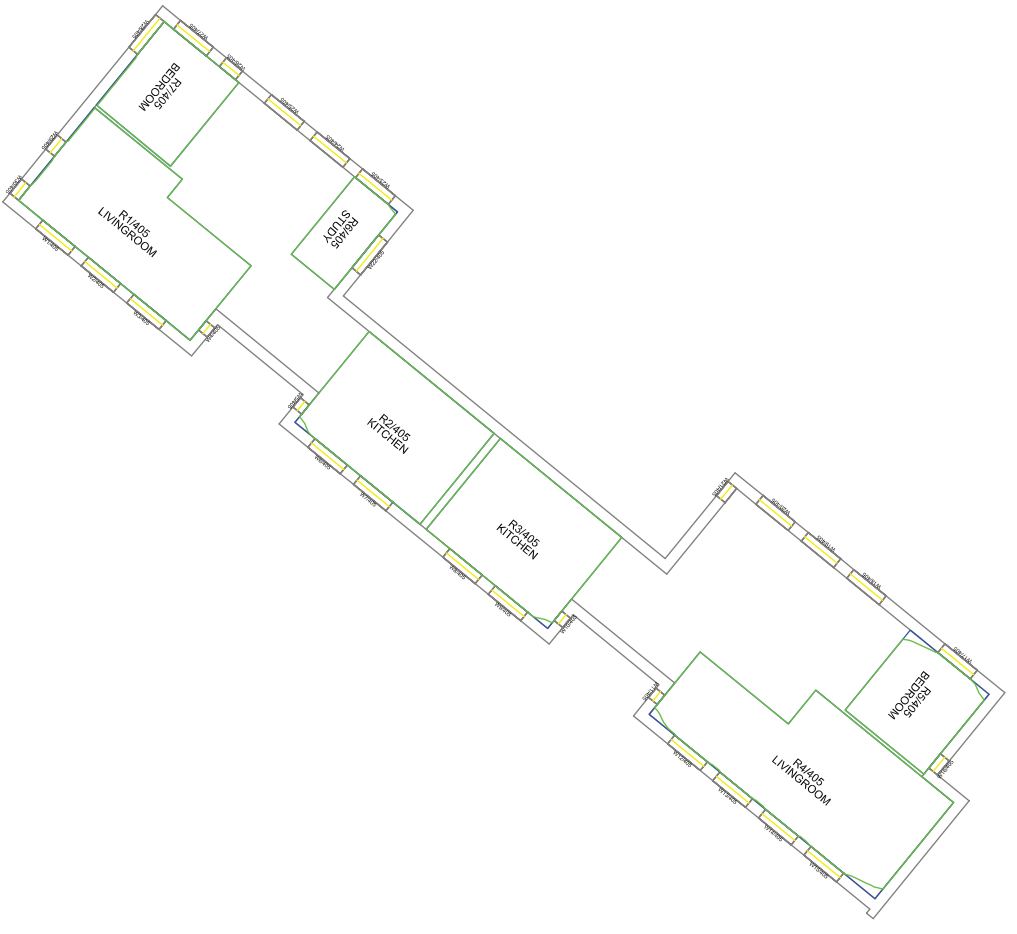
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Date
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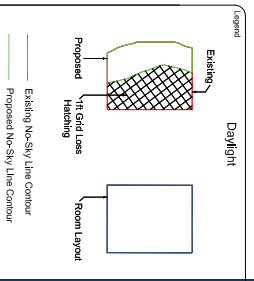
Project No
 P461/21

Quote No
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Fifth floor



Sources of Information

Survey:
 Sitech Surveying Services
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 School floor plans

Proposed:
 Paul Davis + Partners
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 1588(SK)067 F, 081 A,
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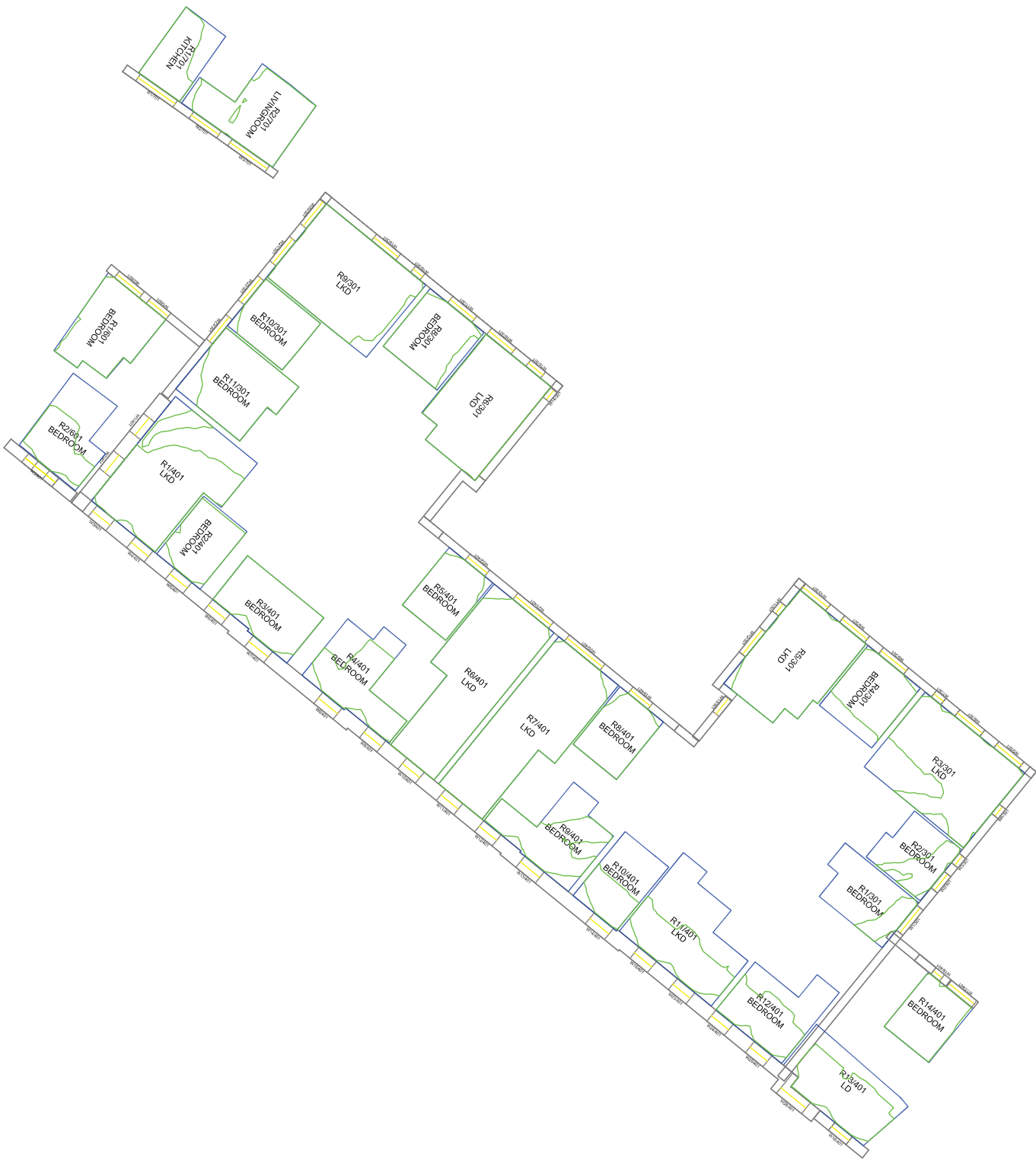
Client
 EC Harris LLP

Drawing Title
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 25-37 Parker Street

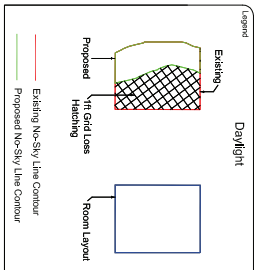
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Date Oct 2012

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Quote No BRE/142
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First floor



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 Spatial Intelligence
 3482 - St. Josephs RC Primary
 School floor plans
 Proposed:
 Paul Davis + Partners
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 1588(SK)017 R, 018 O,
 1588(SK)019 O, 028 L,
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 1588(SK)067 F, 081 A,
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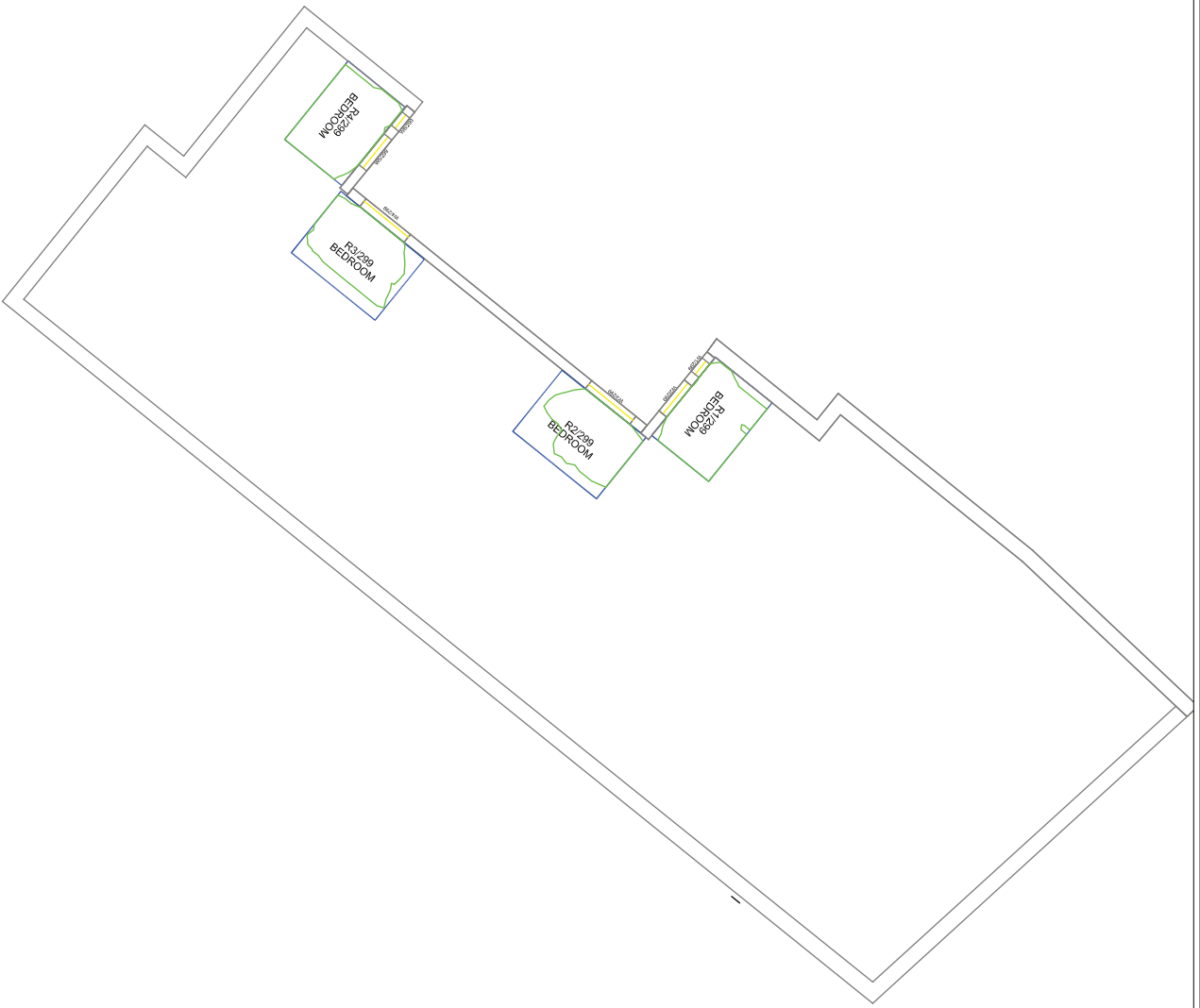
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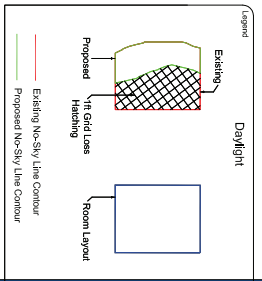
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 Mike S / 1:200@A3 / Nov 2012

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 P461/22 / BRE/144 /



Lower Ground floor



Sources of Information

- Survey:**
 Sitech Surveying Services
 4920 6458-11 A Topo & Roof
 4920 6459-11 Elevations
 Spatial Intelligence
 3482 - St. Josephs RC Primary
 School floor plans
- Proposed:**
 Paul Davis + Partners
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 1588(SK)017 Q, 018 O,
 1588(SK)019 O, 028 L,
 1588(SK)039 J, 049 J,
 1588(SK)067 F, 081 A,
 1588(SK)083 C, 084 C



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Project Name
 Parker Street
 London

Client
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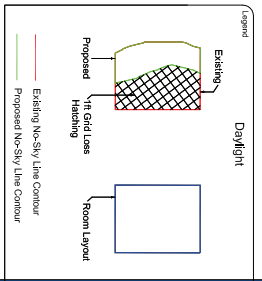
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Checked By
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Proposed:
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 1588(SK)017 Q, 018 O,
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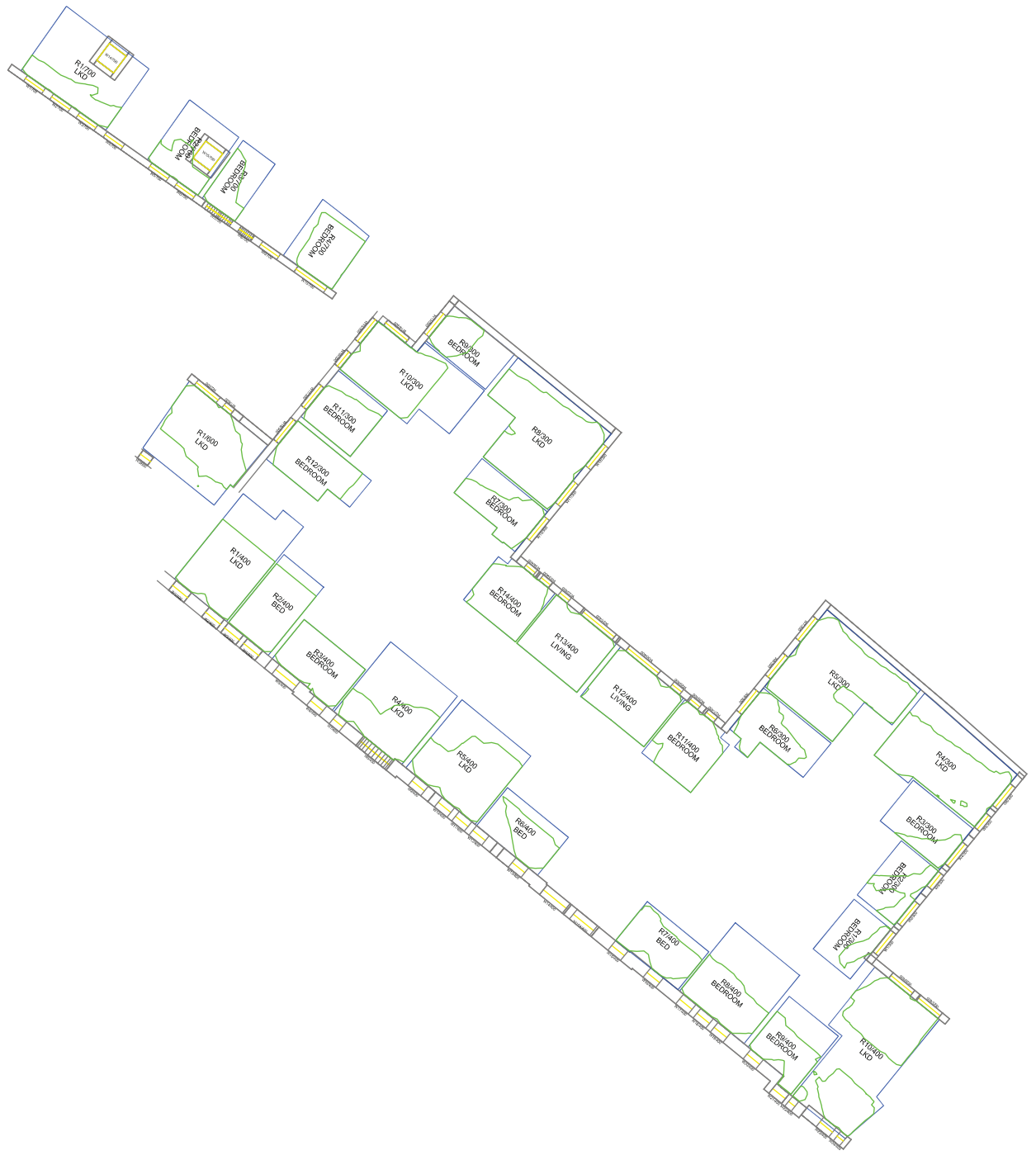
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 10 Station Street, London, W1J 8JR
 www.gva.co.uk

Project Name: Parker Street
Client: EC Harris LLP
Location: London

Drawing Title: No Sky Line Contours for C Option
 25-37 Parker Street

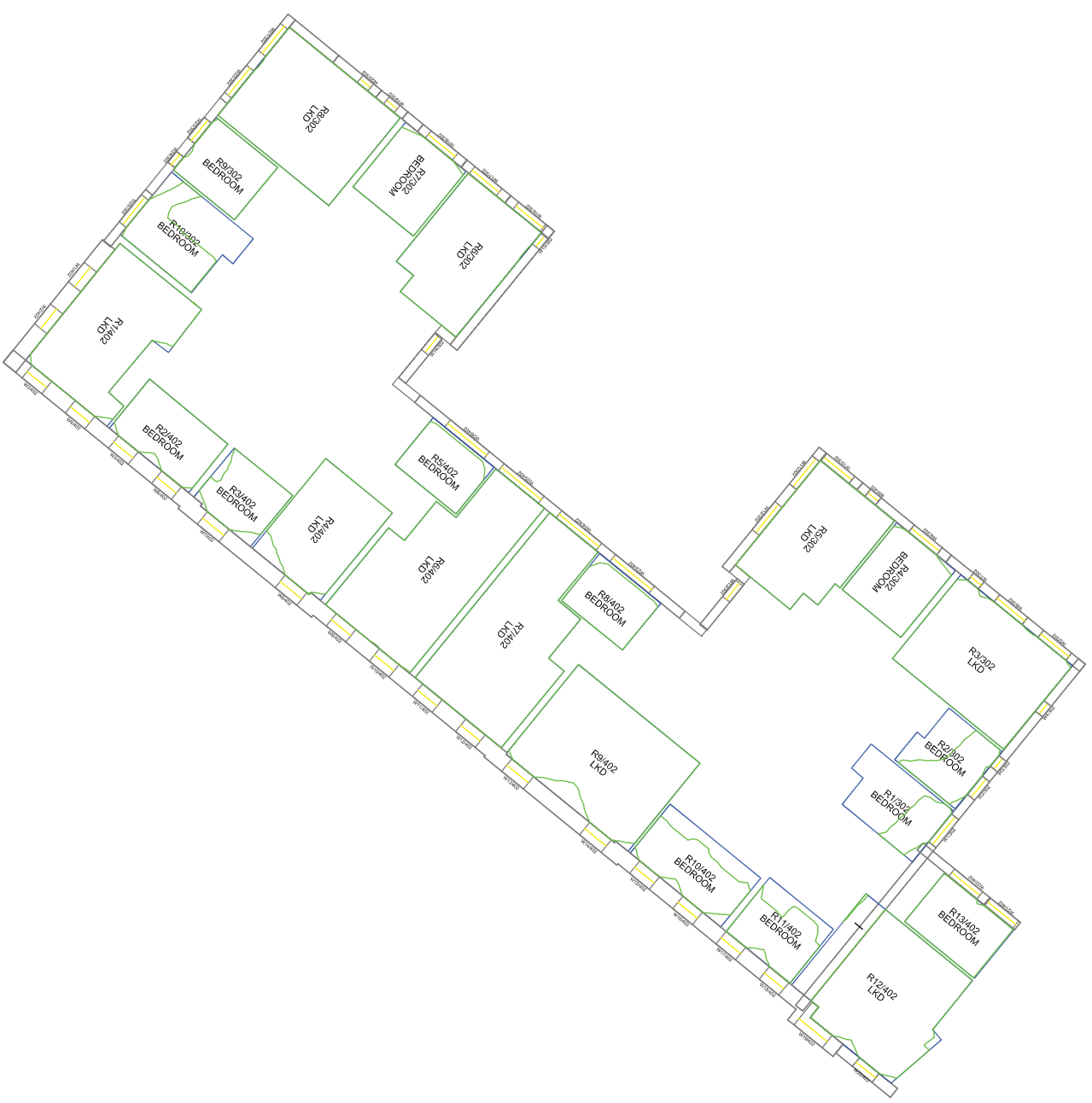
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Date: Oct 2012

Project No: PAg1/21
Quote No: BRE/137
Revision: [Blank]

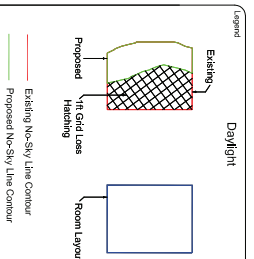


Ground floor

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Second floor



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 Proposed:
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 1588(SK)019 Q, 028 L,
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 1588(SK)067 F, 081 A,
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 Parker Street
 London

Client
 EC Harris LLP

Drawing Title
 No Sky Line Contours for C Option
 25-37 Parker Street

Drawn By	Scale @ A3	Date
MHC S	1:200@A3	Oct 2012

Project No.	Quantity No.	Revision
PA61/21	BRE/139	



Report

Appendix VI



**PARKER STREET
BRE AMENITY ANALYSIS
Option C - October 2012**

Room/Floor	Room Use	Window			No Sky	%Sun		
			%VSC	%ADF	% of Room	Summer	Winter	Total
25-37 Parker Street								
Lower Ground floor - BRE/136								
R1/299	BEDROOM	W1/299	12.20	3.79	92.39%	16	0	16
		W2/299	11.87			14	0	14
R2/299	BEDROOM	W3/299	11.71	3.78	67.04%	N/A	N/A	N/A
R3/299	BEDROOM	W4/299	11.80	3.92	74.09%	N/A	N/A	N/A
R4/299	BEDROOM	W5/299	12.01	3.86	95.36%	N/A	N/A	N/A
		W6/299	11.62			N/A	N/A	N/A
Ground floor - BRE/137								
R1/300	BEDROOM	W1/300	4.11	1.60	24.17%	N/A	N/A	N/A
R2/300	BEDROOM	W2/300	5.25	2.96	43.40%	N/A	N/A	N/A
		W3/300	6.49			N/A	N/A	N/A
R3/300	BEDROOM	W4/300	7.92	1.97	25.34%	N/A	N/A	N/A
R4/300	LKD	W5/300	10.45	2.21	74.86%	N/A	N/A	N/A
		W6/300	12.84			N/A	N/A	N/A
R5/300	LKD	W7/300	17.13	3.03	87.65%	29	2	31
		W8/300	16.38			26	3	29
R6/300	BEDROOM	W9/300	14.72	2.68	63.19%	20	0	20
R7/300	BEDROOM	W10/300	14.49	2.80	71.90%	N/A	N/A	N/A
R8/300	LKD	W11/300	16.52	2.99	88.72%	N/A	N/A	N/A
		W12/300	17.22			N/A	N/A	N/A
R9/300	BEDROOM	W13/300	4.74	1.75	42.90%	6	0	6
R10/300	LKD	W14/300	2.07	2.71	66.00%	N/A	N/A	N/A
		W15/300	10.51			18	4	22
		W16/300	14.10			23	3	26
R11/300	BEDROOM	W17/300	16.24	3.41	78.65%	22	3	25
		W18/300	15.06	2.82	88.90%	19	2	21
R1/400	LKD	W1/400	19.47	1.81	65.48%	34	6	40
		W2/400	19.86			35	6	41
R2/400	BED	W3/400	19.94	2.84	85.77%	35	6	41
		W4/400	20.03			33	6	39
R3/400	BEDROOM	W5/400	19.53	2.92	97.43%	32	8	40
		W6/400	19.58			28	8	36
R4/400	LKD	W8/400	17.65	2.41	46.87%	23	10	33
		W9/400	17.84			22	12	34
		W10/400	17.49			22	10	32
R5/400	LKD	W11/400	17.25	1.74	68.89%	20	9	29
		W12/400	17.05			20	9	29
R6/400	BED	W13/400	16.73	1.82	50.00%	20	9	29
		W15/400	16.46			22	7	29
R7/400	BED	W16/400	16.69	1.90	76.27%	21	8	29



Room/Floor	Room Use	Window			No Sky	%Sun		
			%VSC	%ADF	% of Room	Summer	Winter	Total
R8/400	BEDROOM	W17/400	16.78	1.86	47.49%	23	8	31
		W18/400	16.82			23	8	31
		W19/400	16.86			24	8	32
R9/400	BEDROOM	W20/400	15.96	1.84	59.22%	26	7	33
		W21/400	16.67			26	5	31
R10/400	LKD	W23/400	17.05	2.21	61.69%	26	5	31
		W24/400	16.39			25	5	30
		W25/400	9.75			N/A	N/A	N/A
		W26/400	9.13			N/A	N/A	N/A
R11/400	BEDROOM	W27/400	14.70	1.94	90.73%	N/A	N/A	N/A
		W28/400	16.71			N/A	N/A	N/A
R12/400	LIVING	W29/400	18.73	4.94	98.52%	N/A	N/A	N/A
		W30/400	20.75			N/A	N/A	N/A
R13/400	LIVING	W31/400	21.13	5.19	98.87%	N/A	N/A	N/A
		W32/400	19.10			N/A	N/A	N/A
R14/400	BEDROOM	W33/400	16.95	2.03	93.11%	N/A	N/A	N/A
		W34/400	14.94			N/A	N/A	N/A
R1/600	LKD	W1/600	14.12	2.48	63.56%	N/A	N/A	N/A
		W2/600	15.95			N/A	N/A	N/A
		W3/600	0.00			0	0	0
R1/700	LKD	W1/700	10.69	1.89	28.12%	16	3	19
		W2/700	10.65			16	3	19
		W3/700	10.57			16	4	20
		W14/700	85.73			N/A	N/A	N/A
R2/700	BEDROOM	W5/700	10.34	2.14	36.21%	16	4	20
		W6/700	10.29			16	4	20
		W15/700	70.24			N/A	N/A	N/A
R3/700	BEDROOM	W7/700	10.39	1.97	54.70%	18	3	21
R4/700	BEDROOM	W10/700	9.75	3.04	71.67%	19	3	22
First floor - BRE/144								
R1/301	BEDROOM	W1/301	6.02	1.70	22.31%	N/A	N/A	N/A
R2/301	BEDROOM	W2/301	7.77	2.03	41.23%	N/A	N/A	N/A
		W3/301	8.76			N/A	N/A	N/A
R3/301	LKD	W4/301	11.48	3.85	79.05%	N/A	N/A	N/A
		W5/301	15.73			N/A	N/A	N/A
		W6/301	16.49			N/A	N/A	N/A
		W7/301	22.04			N/A	N/A	N/A
R4/301	BEDROOM	W8/301	23.20	4.05	79.27%	N/A	N/A	N/A
R5/301	LKD	W9/301	18.28	6.73	98.02%	N/A	N/A	N/A
		W10/301	19.04			N/A	N/A	N/A
		W11/301	20.54			33	2	35
		W12/301	18.43			27	0	27
R6/301	LKD	W14/301	21.04	3.67	99.13%	N/A	N/A	N/A
		W15/301	18.84			N/A	N/A	N/A
		W16/301	17.90			N/A	N/A	N/A



Room/Floor	Room Use	Window			No Sky	%Sun		
			%VSC	%ADF	% of Room	Summer	Winter	Total
R8/301	BEDROOM	W17/301	19.50	3.44	89.73%	N/A	N/A	N/A
R9/301	LKD	W18/301	14.85	4.25	95.02%	N/A	N/A	N/A
		W19/301	9.11			N/A	N/A	N/A
		W20/301	13.04			21	7	28
		W21/301	16.24			32	5	37
R10/301	BEDROOM	W22/301	20.74	4.21	96.85%	35	5	40
R11/301	BEDROOM	W23/301	18.69	2.69	90.01%	23	3	26
R1/401	LKD	W1/401	6.06	1.30	76.13%	15	5	20
		W2/401	12.58			25	8	33
		W3/401	24.63			39	9	48
		W4/401	25.05			39	9	48
R2/401	BEDROOM	W5/401	25.20	1.28	90.85%	37	10	47
R3/401	BEDROOM	W6/401	25.03	2.10	95.07%	35	11	46
		W7/401	24.59			33	12	45
R4/401	BEDROOM	W8/401	23.43	1.51	67.39%	28	12	40
		W9/401	22.67			30	12	42
R5/401	BEDROOM	W22/401	20.05	3.60	95.65%	N/A	N/A	N/A
R6/401	LKD	W10/401	22.29	2.58	98.07%	29	12	41
		W21/401	17.82			N/A	N/A	N/A
R7/401	LKD	W11/401	21.88	2.58	98.13%	30	12	42
		W20/401	17.75			N/A	N/A	N/A
R8/401	BEDROOM	W19/401	20.06	3.60	95.37%	N/A	N/A	N/A
R9/401	BEDROOM	W12/401	21.71	1.28	66.49%	33	11	44
		W13/401	21.63			33	11	44
R10/401	BEDROOM	W14/401	21.74	1.02	39.65%	33	10	43
R11/401	LKD	W15/401	21.95	1.04	44.85%	34	9	43
		W23/401	22.06			35	10	45
R12/401	BEDROOM	W24/401	22.13	1.51	56.32%	35	10	45
		W25/401	21.22			35	11	46
R13/401	LD	W16/401	22.20	2.03	66.68%	34	8	42
		W26/401	22.04			34	9	43
R14/401	BEDROOM	W17/401	13.58	4.57	97.41%	N/A	N/A	N/A
		W18/401	13.20			N/A	N/A	N/A
R1/601	BEDROOM	W1/601	18.06	5.71	97.90%	N/A	N/A	N/A
		W2/601	20.86			N/A	N/A	N/A
R2/601	BEDROOM	W3/601	21.97	1.35	49.90%	36	8	44
R1/701	KITCHEN	W1/701	14.29	3.22	75.24%	24	6	30
R2/701	LIVINGROOM	W2/701	15.00	3.10	93.39%	28	7	35
		W3/701	14.10			26	7	33
Second floor - BRE/139								
R1/302	BEDROOM	W1/302	8.79	2.16	33.16%	N/A	N/A	N/A
R2/302	BEDROOM	W2/302	11.64	2.70	60.80%	N/A	N/A	N/A
		W3/302	13.03			N/A	N/A	N/A
R3/302	LKD	W4/302	16.35	4.91	99.47%	N/A	N/A	N/A
		W5/302	22.52			N/A	N/A	N/A
		W6/302	23.21			N/A	N/A	N/A
		W7/302	28.67			N/A	N/A	N/A
R4/302	BEDROOM	W8/302	29.75	4.76	98.37%	N/A	N/A	N/A



Room/Floor	Room Use	Window			No Sky	%Sun		
			%VSC	%ADF	% of Room	Summer	Winter	Total
R5/302	LKD	W9/302	24.21	8.15	100.00%	N/A	N/A	N/A
		W10/302	25.31			N/A	N/A	N/A
		W11/302	25.49			39	5	44
		W12/302	22.47			33	3	36
R6/302	LKD	W15/302	25.05	5.44	99.88%	N/A	N/A	N/A
		W16/302	26.25			N/A	N/A	N/A
		W17/302	24.34			N/A	N/A	N/A
R7/302	BEDROOM	W18/302	25.49	4.06	98.36%	N/A	N/A	N/A
R8/302	LKD	W19/302	19.65	4.16	99.91%	N/A	N/A	N/A
		W20/302	15.25			N/A	N/A	N/A
		W21/302	20.48			25	14	39
		W22/302	21.18			36	13	49
R9/302	BEDROOM	W23/302	25.38	4.89	99.28%	41	9	50
		W24/302	24.50			39	8	47
R10/302	BEDROOM	W25/302	18.67	2.77	58.35%	26	4	30
R1/402	LKD	W1/402	8.60	2.97	98.70%	19	8	27
		W2/402	16.96			28	10	38
		W3/402	28.66			41	16	57
		W4/402	28.96			40	17	57
		W1/403	13.04			27	12	39
		W2/403	22.65			37	17	54
		W3/403	32.26			43	20	63
		W4/403	32.41			43	21	64
R2/402	BEDROOM	W5/402	29.02	2.63	96.83%	40	18	58
		W6/402	28.81			37	19	56
R3/402	BEDROOM	W7/402	28.34	1.79	89.00%	40	20	60
R5/402	BEDROOM	W26/402	24.86	3.29	93.78%	N/A	N/A	N/A
R6/402	LKD	W9/402	26.54	3.46	99.90%	38	17	55
		W10/402	26.28			37	18	55
		W25/402	28.45			N/A	N/A	N/A
		W8/403	30.10			42	18	60
		W9/403	30.08			43	19	62
R7/402	LKD	W11/402	26.03	3.39	100.00%	38	17	55
		W12/402	26.04			39	15	54
		W24/402	28.33			N/A	N/A	N/A
		W10/403	30.01			43	18	61
		W11/403	30.15			44	17	61
R8/402	BEDROOM	W23/402	24.96	3.29	93.69%	N/A	N/A	N/A
R9/402	LKD	W13/402	26.16	2.11	95.09%	41	13	54
		W14/402	26.43			39	13	52
		W12/403	30.58			43	18	61
R10/402	BEDROOM	W15/402	26.58	2.11	71.76%	39	14	53
		W16/402	26.65			40	14	54
R11/402	BEDROOM	W17/402	26.68	2.67	76.83%	39	15	54
		W18/402	25.73			38	15	53
R12/402	LKD	W19/402	26.67	3.12	82.26%	39	15	54
		W20/402	26.57			36	14	50
		W17/403	30.97			40	21	61
		W18/403	8.14			N/A	N/A	N/A



Room/Floor	Room Use	Window			No Sky	%Sun		
			%VSC	%ADF	% of Room	Summer	Winter	Total
R13/402	BEDROOM	W21/402	17.75	7.60	98.71%	N/A	N/A	N/A
		W22/402	16.91			N/A	N/A	N/A
Third floor - BRE/140								
R1/303	BEDROOM	W1/303	13.22	2.80	72.30%	N/A	N/A	N/A
R2/303	BEDROOM	W2/303	18.00	3.63	98.30%	N/A	N/A	N/A
		W3/303	19.87			N/A	N/A	N/A
R3/303	LKD	W4/303	23.61	6.87	99.57%	N/A	N/A	N/A
		W5/303	35.89			N/A	N/A	N/A
		W6/303	36.15			N/A	N/A	N/A
		W7/303	36.31			N/A	N/A	N/A
R4/303	BEDROOM	W8/303	36.45	5.58	98.51%	N/A	N/A	N/A
R5/303	LKD	W9/303	36.58	9.82	99.53%	N/A	N/A	N/A
		W10/303	36.72			44	10	54
		W11/303	29.55			40	6	46
		W12/303	26.56					
R6/303	LKD	W15/303	29.58	7.20	99.53%	N/A	N/A	N/A
		W16/303	37.19			N/A	N/A	N/A
		W17/303	36.49			N/A	N/A	N/A
R7/303	BEDROOM	W18/303	34.89	5.06	98.37%	N/A	N/A	N/A
R8/303	LKD	W19/303	31.61	5.94	0.00%	N/A	N/A	N/A
		W20/303	29.69			N/A	N/A	N/A
		W21/303	32.66			45	21	66
		W22/303	32.61			47	19	66
R9/303	BEDROOM	W23/303	30.96	5.43	95.75%	48	15	63
		W24/303	29.37			49	13	62
R10/303	BEDROOM	W25/303	23.74	3.25	69.07%	38	6	44
R1/403	BEDROOM	W5/403	32.36	2.58	97.30%	42	21	63
		W6/403	31.95			39	21	60
R2/403	LIVINGROOM	W7/403	30.76	3.10	76.35%	42	21	63
R3/403	BEDROOM	W13/403	30.74	2.13	90.60%	42	22	64
		W14/403	30.83			41	22	63
R4/403	BEDROOM	W15/403	30.80	2.79	98.18%	41	22	63
		W16/403	29.78			38	22	60
R1/503	BEDROOM	W2/503	31.78	6.13	98.83%	N/A	N/A	N/A
R2/503	BEDROOM	W3/503	31.88	6.15	98.83%	N/A	N/A	N/A
Fourth floor - BRE/141								
R1/404	LKD	W1/404	37.08	8.63	99.51%	45	23	68
		W2/404	36.99			45	24	69
		W3/404	36.73			45	24	69
		W4/404	36.03			45	24	69
R2/404	BEDROOM	W5/404	32.71	2.81	99.17%	38	21	59
R3/404	LKD	W6/404	34.76	8.46	99.70%	46	19	65
		W7/404	35.36			46	21	67
		W27/404	35.78			N/A	N/A	N/A
R4/404	LKD	W8/404	35.43	7.41	99.17%	45	22	67
		W9/404	35.22			45	23	68
		W26/404	35.83			N/A	N/A	N/A
R5/404	BEDROOM	W10/404	34.81	2.85	95.14%	43	23	66



Room/Floor	Room Use	Window			No Sky	%Sun		
			%VSC	%ADF	% of Room	Summer	Winter	Total
R6/404	LKD	W12/404	35.34	48.48	99.30%	44	23	67
		W13/404	34.28			44	23	67
		W14/404	30.01			36	23	59
		W15/404	28.94			37	24	61
		W1/504	69.34			33	9	42
		W2/504	65.03			35	19	54
R8/404	BEDROOM	W16/404	19.61	2.72	92.30%	N/A	N/A	N/A
R9/404	BEDROOM	W17/404	26.18	3.38	95.05%	N/A	N/A	N/A
R10/404	BEDROOM	W18/404	38.91	9.89	98.93%	N/A	N/A	N/A
		W19/404	39.04			N/A	N/A	N/A
R11/404	BEDROOM	W21/404	39.18	6.38	99.17%	N/A	N/A	N/A
R12/404	BEDROOM	W25/404	30.01	4.05	94.94%	N/A	N/A	N/A
R13/404	BEDROOM	W28/404	29.87	3.89	92.17%	N/A	N/A	N/A
R14/404	BEDROOM	W30/404	30.59	7.10	98.43%	N/A	N/A	N/A
		W31/404	39.37			N/A	N/A	N/A
R15/404	BEDROOM	W33/404	39.34	6.98	89.53%	N/A	N/A	N/A
		W34/404	36.49			49	26	75
R16/404	BEDROOM	W35/404	33.34	4.60	98.55%	41	18	59
R17/404	BEDROOM	W36/404	32.20	3.98	97.32%	49	20	69
Fifth floor - BRE/142								
R1/405	LIVINGROOM	W1/405	39.24	9.51	99.70%	45	24	69
		W2/405	39.19			45	24	69
		W3/405	39.15			45	24	69
		W4/405	19.27			N/A	N/A	N/A
		W29/405	39.29			49	27	76
		W30/405	39.32			49	27	76
R2/405	KITCHEN	W5/405	19.44	6.95	99.58%	27	19	46
		W6/405	38.95			45	24	69
		W7/405	38.90			45	24	69
R3/405	KITCHEN	W8/405	38.81	7.10	99.60%	45	24	69
		W9/405	38.76			45	24	69
		W10/405	18.92			N/A	N/A	N/A
R4/405	LIVINGROOM	W11/405	19.73	8.45	98.73%	27	19	46
		W12/405	38.46			45	24	69
		W13/405	38.27			45	24	69
		W14/405	38.07			44	24	68
		W15/405	37.63			44	24	68
R5/405	BEDROOM	W16/405	22.49	6.29	97.34%	N/A	N/A	N/A
		W17/405	39.60			N/A	N/A	N/A
R6/405	STUDY	W22/405	29.35	13.54	99.52%	N/A	N/A	N/A
		W23/405	39.60			N/A	N/A	N/A
R7/405	BEDROOM	W26/405	39.59	11.50	99.42%	N/A	N/A	N/A
		W27/405	39.60			N/A	N/A	N/A
		W28/405	39.26			49	27	76