

RICHARD W STAIG
CHARTERED BUILDING SURVEYOR

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Salt Lane
Salisbury Wiltshire SP1 1DU

Date: Tuesday, February 21, 2023
Our ref: rs/ROL.230267/1

Dear Mr Allen

286-288 LONDON ROAD WATERLOOVILLE PO7 7DS
ADEQUATE DAYLIGHT

This Report has been commissioned by Messrs. Mountley Group to support of a *Prior Approval Application* in respect of Permitted Development rights for development consisting of a change of use of a building and any land within its curtilage from Class E (commercial, business and service) to Class C3 (dwelling-houses) to form 21No. 1bed apartments at first and second floor levels (Planning Reference APP/22/01165) to confirm that there will be adequate daylight to the proposed dwellings having regard to BR209 (2022) *Appendix C: Interior Daylighting recommendations*.

In the first instance, I would confirm that I am a Chartered Building Surveyor working predominately in the field of rights of light including daylight and sunlight assessments. I have an extensive and highly specialised knowledge, in these areas having worked in the past for both Anstey Horne & Co. for five years and Schatunowski Brooks (formerly known as Michael Brooks Associates as it was when I joined, then known as GVA Schatunowski Brooks and now part of Avison Young) for three years, as well as Delva Patman Associates - now known as Delva Patman Redler LLP - for four years prior to joining in Partnership Dixon Payne in 2001. All are acknowledged Experts in these fields; I now act under my own banner.

I regularly provide Expert Witness advice in respect of Planning Applications in respect of daylight and sunlight at Planning Inquiries acting for both Appellants and Planning Authorities. I was consulted by the *Building Research Establishment* prior to the revision of their guidelines in 2011 and was part of the further consultation about further revisions currently being considered following the publication of BS EN 17037:2018. Those discussions have resulted in the recently published BR209 2022.

Drawing JW110-107A provides a layout for a total of 17No. apartments of which 16No. consist of 1bed apartments with 1No. 2bed apartment. Of the 32No. rooms assessed, 30No. or 94% achieved guidance levels of adequate daylight. Of the 2No. rooms which did not achieve guidance levels of adequate daylight, the level of deficiency is 14% or less of the required level. As will be explained further in this Report, the analysis provides for a minimum level of daylight to an apartment where in reality the level of daylight will exceed the analysis results the majority of times.



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Following the publication of the information paper entitled "*Site Layout planning for daylight and sunlight: A guide to good practice*" by the *Building Research Establishment* in 1991, the assessment of daylight and sunlight has been generally carried out in accordance with the criteria set by this publication and which is generally taken to be the accepted basis for such assessment and adopted by most Planning Authorities. This publication was superseded by the *Second Edition* issued *October 2011* which itself has been superseded by *BR209 (2022)* which is the guidance against which the proposed development was assessed.

The *BR209 (2022)* does give numerical guidelines, but recommends that these should be interpreted flexibly. Paragraph 1.6 of the *BR209 (2022)* states in entirety *The guide is intended for building designers and their clients, consultants, and planning officials. The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design (see Section 5). In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings. Alternatively, where natural light is of special importance, less obstruction and hence more sunlight and daylight may be deemed necessary. The calculation methods in Appendices A and B are entirely flexible in this respect. Appendix F gives advice on how to develop a consistent set of target values for skylight under such circumstances.*

With regard to providing adequate daylight to the proposed units, *BS EN 17037* contains advice and guidance on interior daylighting. The guidance contained within *BR 209 (2022)* is used with *BS EN 17037* and its UK National Annex. For daylight provision in buildings, *BS EN 17037* and *Appendix C* of the *BR209 (2022)* provide two methodologies for analysis and the method used in this Report is based on calculating the illuminance levels achieved over specified fractions of the reference plane.

In respect of the results, it should be noted that the analysis undertaken uses the *CIE standard overcast sky* rather than a clear sky when calculating the receipt of daylight; it is considered that the overcast sky provides the worst daylight condition as, as would be expected, a clear sky provides much higher indoor light levels than overcast sky and, therefore, in reality the actual internal illuminance will be increased in most other daylight conditions.

Utilising a 3D survey computer model of the surrounding buildings prepared by Zmapping, with the proposed facades and internal configurations modelled from the Architects' drawings, the appropriate technical analysis has been undertaken in accordance with *Appendix C* of the *BR209 (2022)* to quantify the median daylight factor.

The results, hereto attached, show that all the proposed rooms to the first floor meet the *BR209 (2022)* guidance in respect of illuminance whilst all bar 2No. rooms to the second floor meet guidance. The 2No. rooms which do not meet guidance are 7% or less from guidance levels.

For the sake of clarity, with regard to the provision of obscured glazing, as provided within Planning Permission APP/22/00741, this does not necessarily restrict light transmittance through the glass and affect internal illuminance. For the analysis a value of 0.68 for diffuse transmittance has been used which is for a clean, clear double glazing with a low emissivity coating whereas, but as an example 6 mm Pilkington K Glass™ / 16 mm / 6 mm Pilkington Optifloat™ Opal (Translucent glass) has a light transmittance of 0.72.

To conclude, having regard to paragraph 1.6 of the BR209 (2022), *'The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design (see Section 5).'*, the analysis demonstrates that with overcast skies levels of illuminance exceed guidance to all rooms save 2No and, undoubtedly, all rooms would exceed guidance for levels of illuminance if in the analysis used clear skies in the analysis.

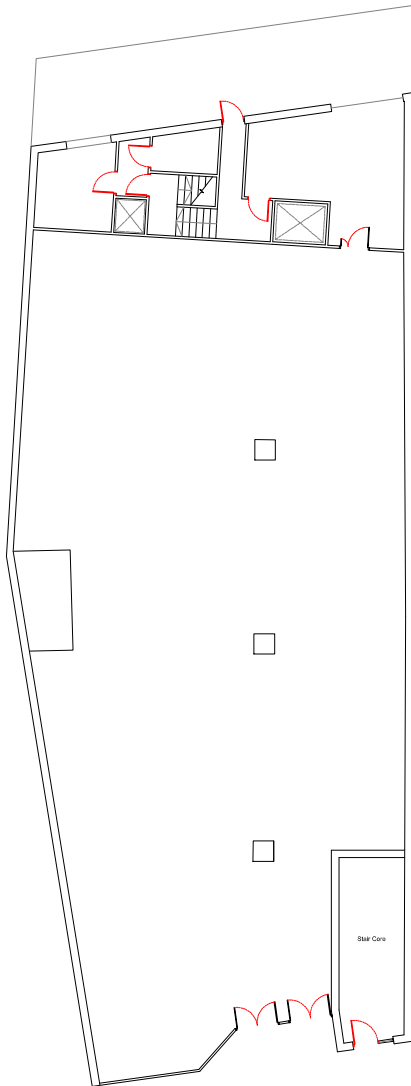
In respect of permitted development Part MA (f) therefore, which requires the *"provision of adequate natural light in all habitable rooms of the dwellinghouses"*, the analysis above having regard to the guidance of BR209 (2022), demonstrates indeed demonstrate adequate daylight.

I hope that the foregoing is sufficient, but if you have any queries, please do not hesitate to contact me.

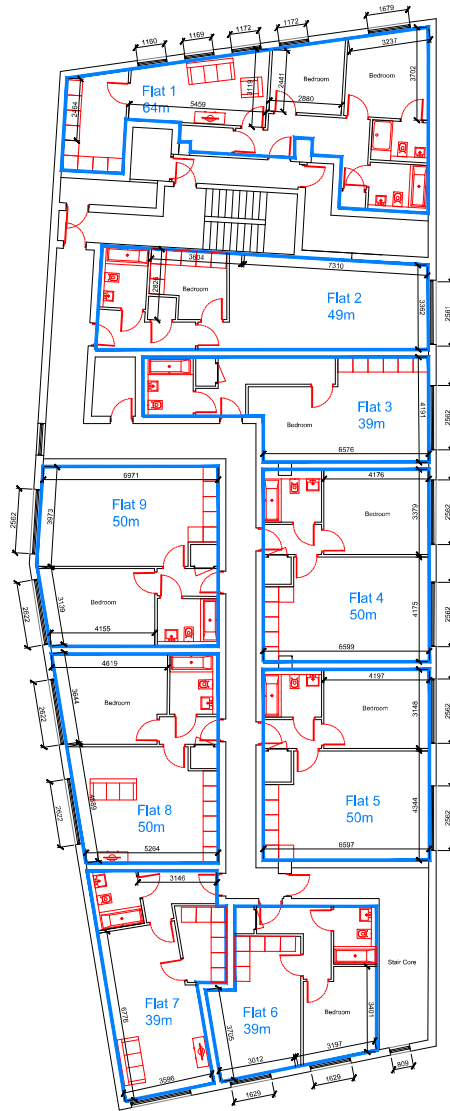
Yours sincerely,

R W STAIG

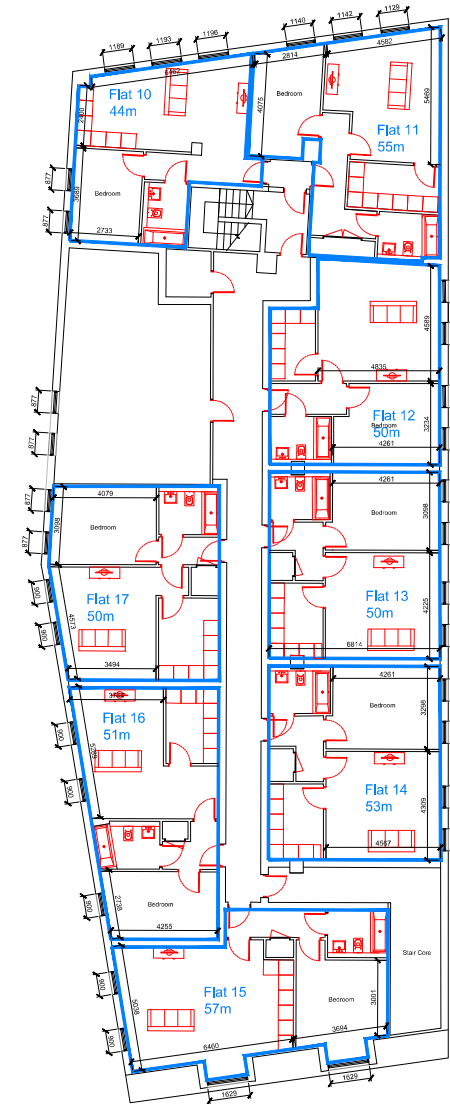
E-mail : richardstaig@btinternet.com
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Encs



Existing & Ground Floor Plan - 1:100



Proposed First Floor Plan - 1:100



Proposed Second Floor Plan - 1:100

Notes:

Drawings:
Detailed drawings and larger scale drawings take precedence. Figure dimensions only are to be taken from this drawing.

Dimensions:
All dimensions are in millimetres. Levels and mass levels at construction points are to be checked and verified on site by the contractor before the commencement of works. All dimensions are to be checked prior to the placement of orders for materials or the fabrication of work and any discrepancy, omission or error is to be reported to the Architect immediately for verification.

Specification:
The Contractor is to comply with current Building Legislation, British Standard Specifications, Building Regulations etc., whether or not specifically stated on this drawing. This drawing must be checked against and read in conjunction with any structural or other relevant landscape and design documentation provided.

Revisions:

PLANNING

client:
Mr. Schneck

project:
286-288
London Road
Waterlooville
PO7 7DS

description:
Proposed ground, 1st
& mezzanine plan

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drawn:	scale:	0A1
rl	1:100	
date:	sheet:	of
Feb 23	SHEET	OF
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JW1110-107		A

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BR209 (2022)
286-288 LONDON ROAD
ILLUMINANCE ANALYSIS

Building Ref	Floor Ref	Room Ref	Room Use	Room Area	Effective Area	Median Lux	Area Meeting Req Lux	% of Area Meeting Req Lux	Req Lux	Req % of Space	Req % of Hours	Occupied Hours	Test
Flat 1	First	R1	Living Room	13.966357	9.483424	309	8.309286	88%	150	50%	50%	4380	YES
Flat 1	First	R2	Bedroom	8.187452	5.093509	126	3.249307	64%	100	50%	50%	4380	YES
Flat 1	First	R3	Bedroom	11.497838	7.768848	165	5.385224	69%	100	50%	50%	4380	YES
Flat 2	First	R1	Living Room	29.758398	22.483174	410	22.483174	100%	150	50%	50%	4380	YES
Flat 3	First	R1	Studio	24.57925	18.122414	289	11.459762	63%	200	50%	50%	4380	YES
Flat 4	First	R1	LKD	26.423604	20.26988	256	12.487694	62%	200	50%	50%	4380	YES
Flat 4	First	R2	Bedroom	14.233556	10.039633	417	10.039633	100%	100	50%	50%	4380	YES
Flat 5	First	R1	LKD	27.096524	20.875854	309	14.962522	72%	200	50%	50%	4380	YES
Flat 5	First	R2	Bedroom	13.173463	9.132164	456	9.132164	100%	100	50%	50%	4380	YES
Flat 6	First	R1	LKD	17.557848	12.460542	208	6.405771	51%	200	50%	50%	4380	YES
Flat 6	First	R2	Bedroom	9.579011	6.040676	349	6.040676	100%	100	50%	50%	4380	YES
Flat 7	First	R1	Living Room	20.006394	13.902946	231	9.475256	68%	150	50%	50%	4380	YES
Flat 8	First	R1	LKD	24.580415	18.789866	281	13.189041	70%	200	50%	50%	4380	YES
Flat 8	First	R2	Bedroom	14.846458	10.477323	432	10.477323	100%	100	50%	50%	4380	YES
Flat 9	First	R1	LKD	26.923809	20.651027	212	10.864236	53%	200	50%	50%	4380	YES
Flat 9	First	R2	Bedroom	13.521878	9.347562	445	9.347562	100%	100	50%	50%	4380	YES
Flat 10	Second	R1	LKD	22.688681	16.600408	577	16.24341	98%	200	50%	50%	4380	YES
Flat 10	Second	R2	Bedroom	10.059527	6.565561	269	6.565561	100%	100	50%	50%	4380	YES
Flat 11	Second	R1	Living Room	21.019428	15.556523	307	10.430963	67%	150	50%	50%	4380	YES
Flat 11	Second	R2	Bedroom	11.527414	7.601694	152	5.128854	67%	100	50%	50%	4380	YES
Flat 12	Second	R1	Living Room	21.915001	16.528342	137	7.767418	47%	150	50%	50%	4380	NO
Flat 12	Second	R2	Bedroom	5.968267	2.67978	170	2.593335	97%	100	50%	50%	4380	YES
Flat 13	Second	R1	Living Room	19.323753	14.399819	152	7.476829	52%	150	50%	50%	4380	YES
Flat 13	Second	R2	Bedroom	13.226511	9.164902	222	8.687564	95%	100	50%	50%	4380	YES
Flat 14	Second	R1	Living Room	19.948236	14.942447	120	6.366013	43%	150	50%	50%	4380	NO
Flat 14	Second	R2	Bedroom	13.660166	9.531671	220	8.472596	89%	100	50%	50%	4380	YES
Flat 15	Second	R1	LKD	31.951001	24.843779	255	14.603512	59%	200	50%	50%	4380	YES
Flat 15	Second	R2	Bedroom	14.076249	9.33755	162	7.750167	83%	100	50%	50%	4380	YES
Flat 16	Second	R1	Living Room	21.838389	15.744382	170	9.840239	63%	150	50%	50%	4380	YES
Flat 16	Second	R2	Bedroom	12.104507	8.137984	183	6.081131	75%	100	50%	50%	4380	YES
Flat 17	Second	R1	Living Room	18.859711	13.394395	187	9.169317	68%	150	50%	50%	4380	YES
Flat 17	Second	R2	Bedroom	12.928097	8.920422	179	7.507286	84%	100	50%	50%	4380	YES