

To

Mr S Woods
34 Deverell Place
Widley
Waterlooville
PO7 5ED

From

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Date

09 January 2023

Your reference

N/A

Our reference

RN/230035

Tuffin Ferraby Taylor LLP
is a limited liability
partnership registered
in England and Wales

Registration number:
OC306766

Registered office:
18 Holborn
London EC1N 2LE

Dear Mr Woods

34 Deverell Place, Waterlooville, PO7 5ED – Sunlight Availability Solar Panel Assessment

TFT have been appointed to consider the roof extension proposals to 34 Deverell Place and their potential effect on sunlight availability to solar panels to 32 Deverell Place. We have their undertaken a 3D computer analysis with the methodology outlined in The Building Research Establishment Report “Site layout planning for daylight and sunlight - A guide to good practice”, 2022, 3rd edition (BRE 209 2022).

In Section 4.3 *Photovoltaics*, the BRE state:

“Calculating loss of radiation to solar panels

Where a proposed development may result in loss of radiation to existing solar panels (either photovoltaic or solar thermal), an assessment should be carried out.

For solar thermal collectors, the loss of radiation falling on the collector is approximately proportional to the loss of renewable heat generation. For example, a collector that has a 25% loss of radiation on its surface would see roughly a 25% reduction in instantaneous performance.

Where the Annual Probable Sunlight Hours (APSH) received by a solar panel with the new development in place is less than 0.90 times the value before, a more detailed calculation of the loss of solar radiation should be undertaken.”

We have therefore undertaken this initial APSH assessment to gauge whether 0.9 of former sunlight hours will be retained i.e. a reduction of 10% or less.

In addition to the holistic assessment of the overall panel area, we have subdivided the panels in to 12 separate sections to determine whether there are particular areas where sunlight reduction may be more apparent.

The results can be seen by reference to drawings and results table at Appendix A. These indicate that in the proposed condition, the panels retain annual sunlight availability of at least 0.94 to any single panel assessed and an average of 0.98 to the panels as whole. In winter, the effect is reduced further still, with individual panels retaining at least 0.97 and an average of 0.99. Therefore, no reductions of 10% or greater will be seen and no further assessments are required.

In accordance with the BRE guidelines, as 0.9 of the former APSH value has been retained, no detailed solar radiation testing is required.

Therefore, it is possible to conclude that no material reduction in sunlight will occur as a result of the proposals and the BRE guidelines are satisfied.

Yours sincerely

Richard Nosworthy
Director – Neighbourly Matters
For and on behalf of Tuffin Ferraby Taylor LLP

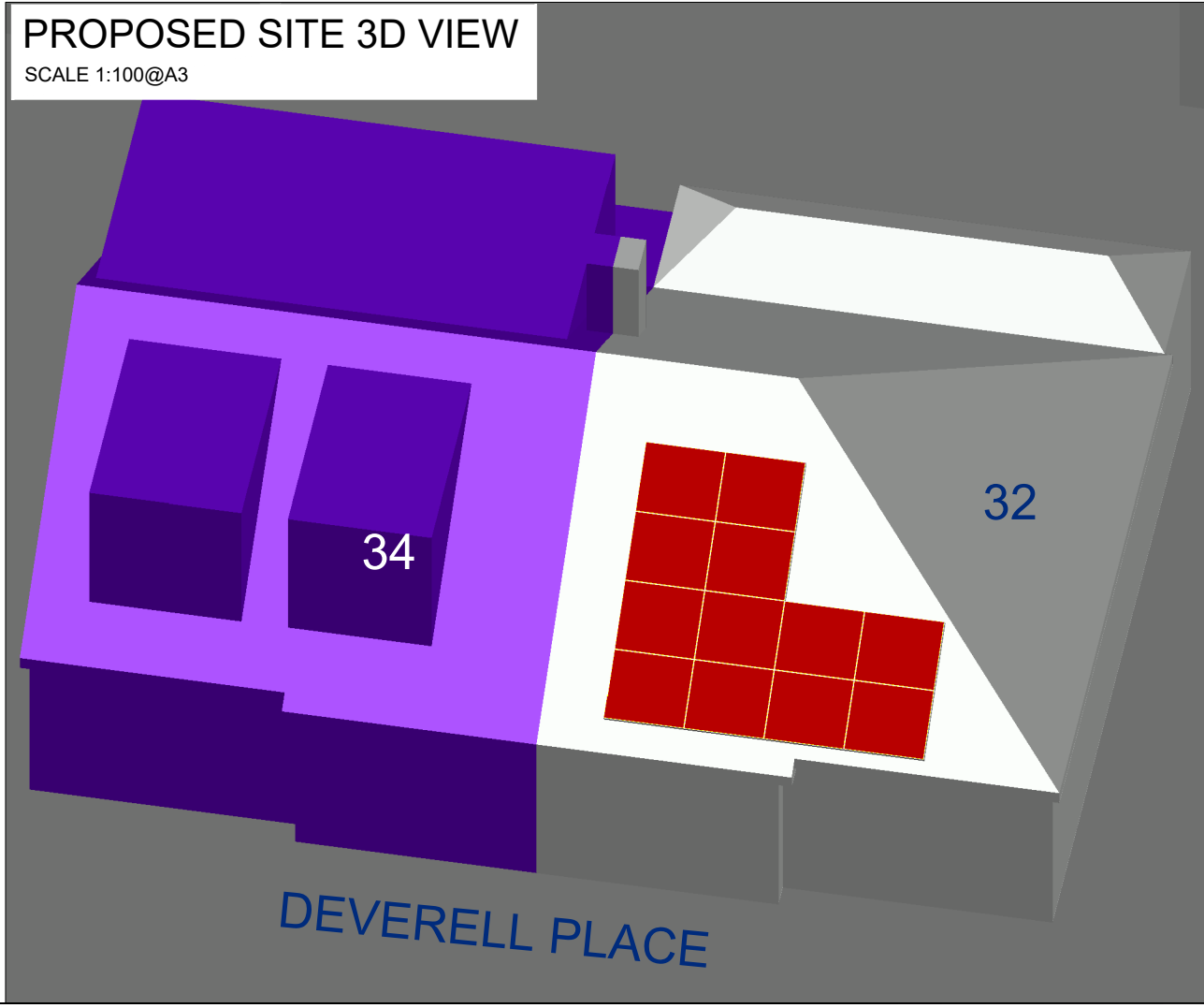
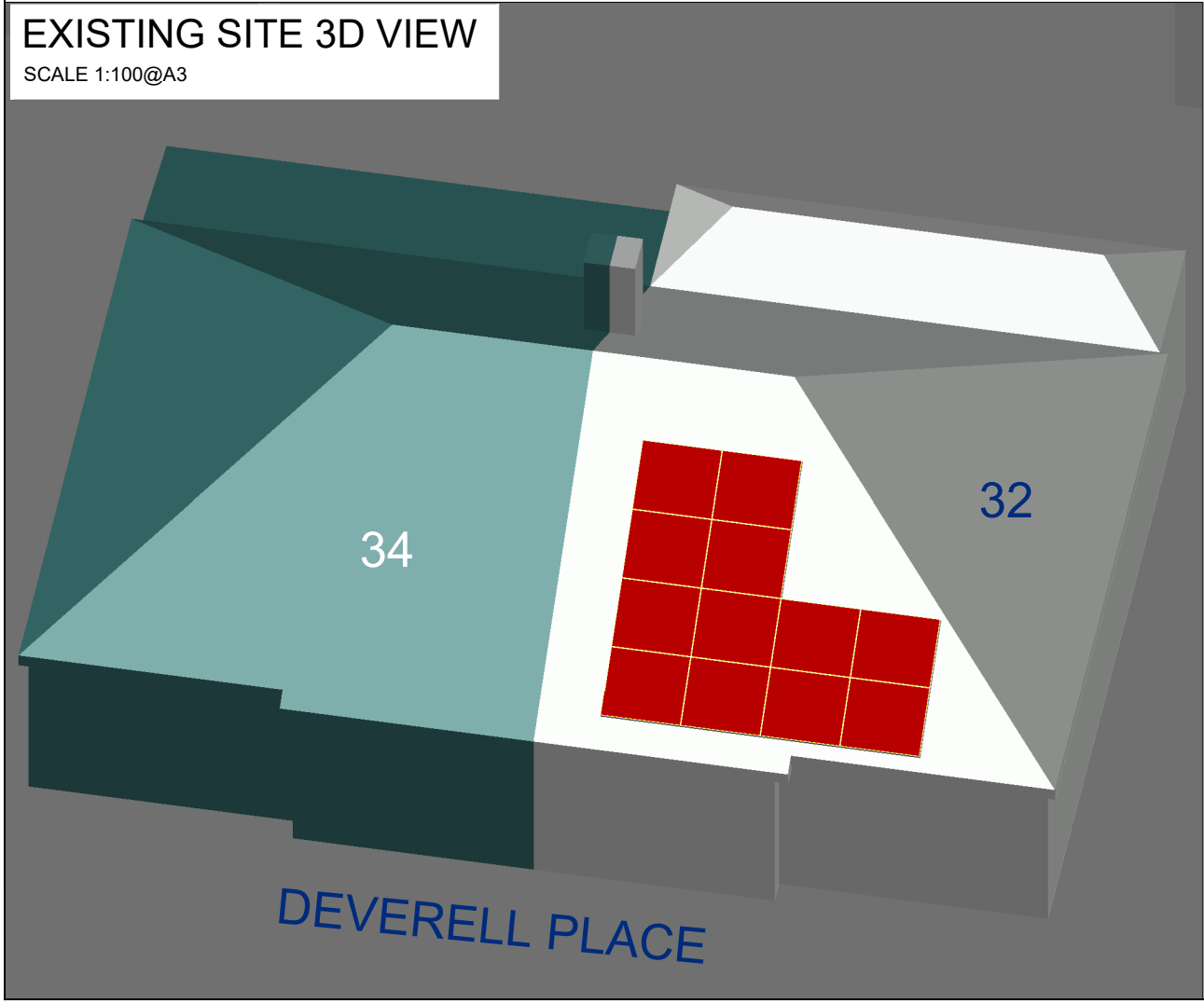
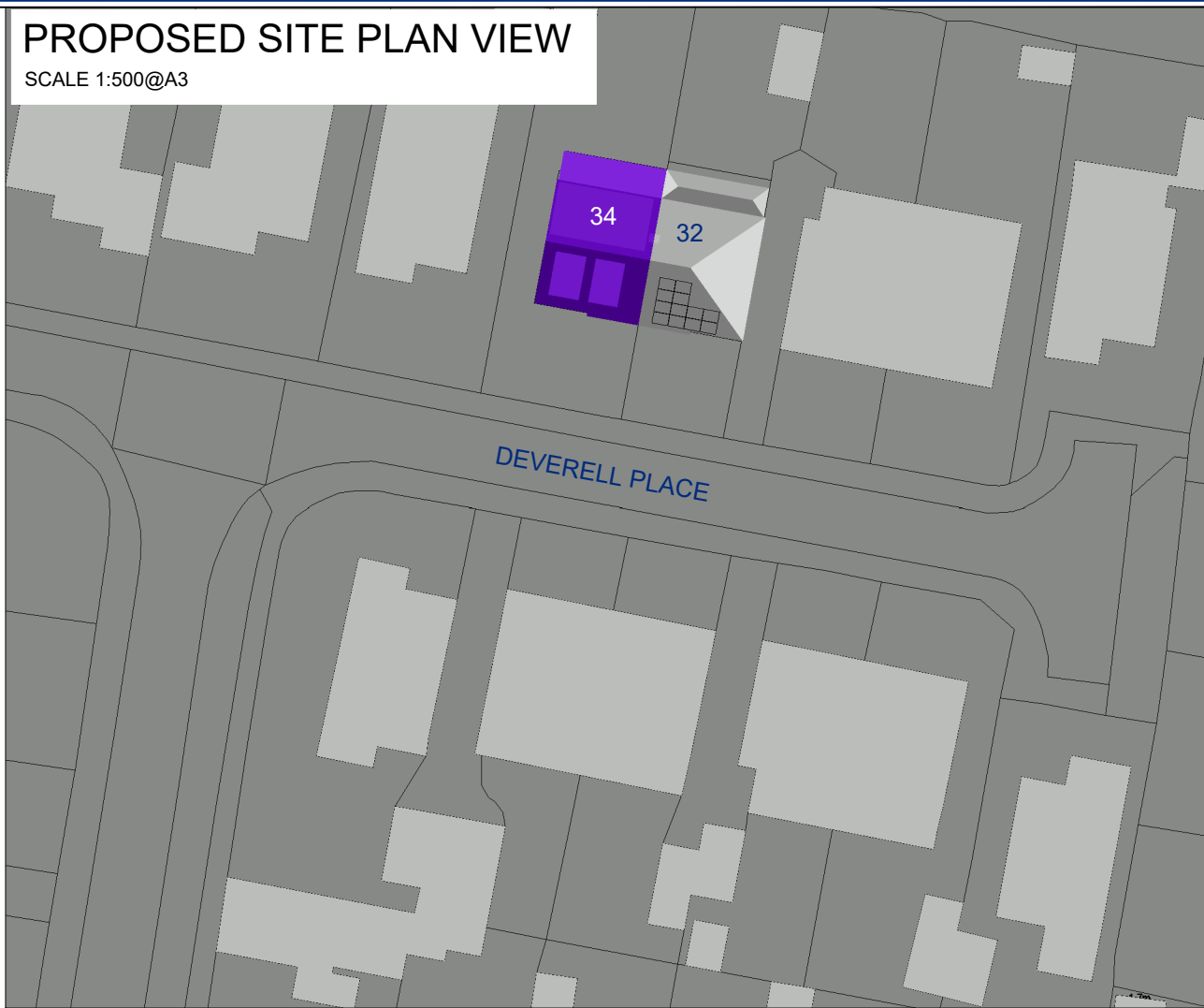
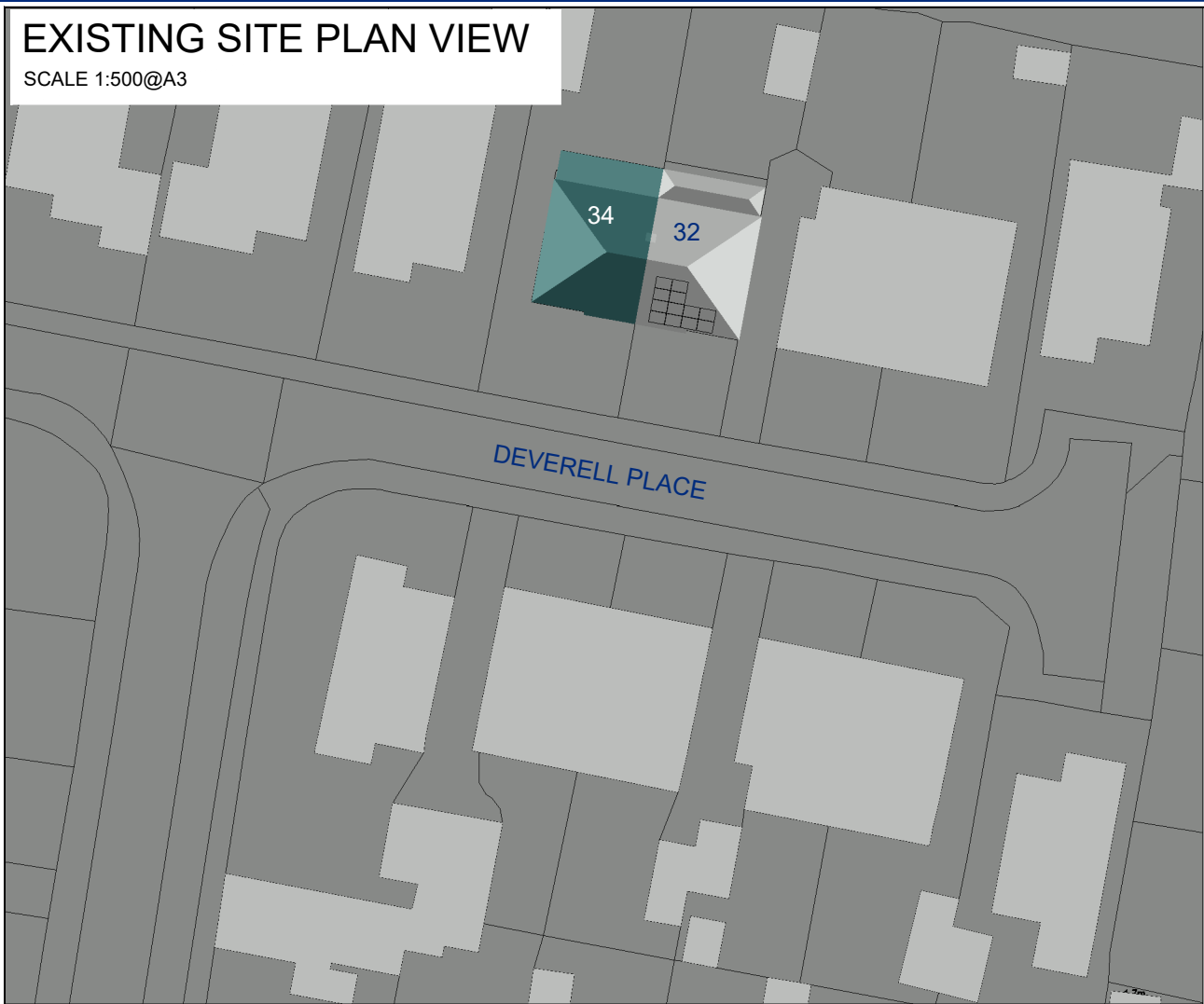
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Telephone: +44 7918 973822

Appendix A: Technical Sunlight Assessment



APPENDICES

APPENDIX A



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Disclaimer:

This drawing should not be scaled. Do NOT scale off this drawing.

All heights & dimensions given in m AOD unless specified.

This drawing is copyrighted and must not be reproduced in any format or disclosed to any third party without the written consent of Tuffin Ferraby Taylor LLP.

All information displayed is subject to a complete verifiable site survey being undertaken. TFT takes no responsibility for the accuracy or reliability of the displayed data since a verified site survey was not made available prior to the generation of such information.

Sources of Information

Existing Site Baseline - 2D & 3D OS Map Data:
OS_MasterMap_3D_-_Building_Heights_-_OS_Terrain_5_834938_1068946.dwg
Emapsite - Received 05/01/2023

Proposed Scheme Info - Architect's Scheme Drawings:
Plans A3 Rev B.pdf
Andrew R Dunks - Received 04/01/2023

Drawing Key

BUILDING KEY:

SURROUNDING BUILDINGS

TFT PROPOSED SCHEME

TFT EXISTING BUILDING

APSH % RETAINED KEY:

100.00

95.00

90.00

85.00

80.00

75.00

70.00

65.00

60.00

55.00

50.00

45.00

40.00

35.00

30.00

25.00

20.00

15.00

10.00

5.00

0.00

CLIENT:

MR SIMON WOODS

PROJECT:

34 DEVERELL PLACE,
PURBROOK, PO7 5ED.

DRAWING TITLE:

3D VIEWS OF SITE MODEL -
LOOKING NORTH

DWN BY	CHK BY	DATE	SCALE	REV
NM	RN	JAN 2023	VARIES	-
PROJ No.	REL No.	ADR No.	IS No.	DWG No.
-	01	-	-	01

TFT

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Project Name: 34 Deverell Place, Widley, Waterloooville
 Report Title: APSH (Sunlight) Analysis to Neighbouring Solar Photovoltaic Panels
 Date of Analysis: 05/01/2023

Solar PV Ref.	Attribute	Site Scenario	Orientation	Annual	Pr/Ex	Winter	Pr/Ex
32 DEVERELL PLACE							
W1	SolarPV	Existing	190° Inc	97.00	0.99	30.00	0.97
		Proposed		96.00		29.00	
W2	SolarPV	Existing	190° Inc	97.00	1.00	30.00	1.00
		Proposed		97.00		30.00	
W3	SolarPV	Existing	190° Inc	97.00	0.96	30.00	1.00
		Proposed		93.00		30.00	
W4	SolarPV	Existing	190° Inc	96.00	0.99	29.00	1.00
		Proposed		95.00		29.00	
W5	SolarPV	Existing	190° Inc	96.00	0.94	29.00	1.00
		Proposed		90.00		29.00	
W6	SolarPV	Existing	190° Inc	96.00	0.96	29.00	1.00
		Proposed		92.00		29.00	
W7	SolarPV	Existing	190° Inc	96.00	0.98	29.00	1.00
		Proposed		94.00		29.00	
W8	SolarPV	Existing	190° Inc	94.00	1.00	27.00	1.00
		Proposed		94.00		27.00	
W9	SolarPV	Existing	190° Inc	95.00	0.99	28.00	1.00
		Proposed		94.00		28.00	
W10	SolarPV	Existing	190° Inc	96.00	0.99	29.00	1.00
		Proposed		95.00		29.00	
W11	SolarPV	Existing	190° Inc	96.00	0.99	29.00	1.00
		Proposed		95.00		29.00	
W12	SolarPV	Existing	190° Inc	92.00	0.99	28.00	1.00
		Proposed		91.00		28.00	