

DAYLIGHT IMPACT ASSESSMENT

SITE 1 LANGNEY POINT
MARTINIQUE WAY
EASTBOURNE

VERSION 02

DECEMBER 2023



Company Registration No: 10354408

CLIENT: Ruby Senior Living Ltd

CONSULTANT: XDA Consulting Ltd
School House
Lewes Road
Westmeston
East Sussex
BN6 8RH

Tel: 07709 425723
Email: hello@xdaconsulting.co.uk
Website: www.xdaconsulting.co.uk

PROJECT NAME: Untold Living, Eastbourne

PROJECT REFERENCE: X228

Version	Date	Description of changes
01	12.12.2023	First issue
02	21.12.2023	Updated to include extant scheme

CONTENTS

1	INTRODUCTION.....	1
2	ASSESSMENT CRITERIA	1
3	METHODOLOGY	1
4	3D MODELS	2
5	RESULTS & DISCUSSION	9
6	CONCLUSIONS.....	10
7	APPENDIX 1: VSC RESULTS.....	11
8	APPENDIX 3: WINDOW REFERENCES.....	15

1 INTRODUCTION

XDA Consulting Ltd have been appointed to identify if there is any impact on the daylight, to the adjacent properties due to the proposed development of an Integrated Retirement Community (extra care) at Site 1, Langney Point, Martinique Way, Eastbourne. The design proposals are the erection of an extra-care retirement community (Use Class C2), comprising 137 no. apartments for older people, ancillary facilities and services including an ancillary restaurant/bar and community meeting/activity space, soft and hard landscaping, parking, access and other associated works.

This daylight assessment shall identify if there is any impact on the windows of:

- Anguilla Close
- 10 Martinique Way
- 37 - 48 Martinique Way
- 28 - 36 Martinique Way

There is an extant consent on the site which is to be used as the baseline situation when assessing the daylight impacts. The design proposals shall be compared with the

The daylight study has been undertaken by Dr Dianne Bowles PhD MSc BSc (Hons) using dynamic modelling software IES Virtual Environment 2023.

2 ASSESSMENT CRITERIA

The criteria used for assessment of the impact of a proposed development on daylight, sunlight and overshadowing to existing dwellings is taken from the BRE Guidance document “BR 209: Site Layout Planning for Daylight and Sunlight, a Guide to Good Practice, 2022”.

2.1 VERTICAL SKY COMPONENT

The amount of skylight that reaches the windows is assessed by determining the Vertical Sky Component (VSC). The vertical sky component is the ratio of direct sky light that reaches a vertical plane (wall or window) to the amount of sky light that reaches the horizontal plane (the ground). This ratio is expressed as a percentage. The maximum VSC that could be achieved for a completely unobstructed window/wall is almost 40%.

When assessing the impact of a new development on existing buildings the BRE guidance suggests that if with a new development, an existing window has a VSC greater than 27% it should still receive sufficient skylight. If the VSC is reduced below 27% and less than 0.8 times its former value, then the occupants are likely to notice the loss of skylight.

3 METHODOLOGY

The Radiance module in the IES Virtual Environment (VE) software is used to calculate the vertical sky component (VSC). The VSC calculation uses the standard CIE overcast sky.

4 3D MODELS

A 3D model of the consented scheme, proposed development and neighbouring properties has been constructed based on the following drawings from Reed Geomatics Ltd, O'Donnell Coward Ltd Architects & Gaunt Francis Architects:

Adjacent:

- RG23 2624 01 Rev3 Topographical Survey
- RG23 2624 02 Elevations

Consented:

- HPE850-PA-3 Lower and Ground Floor Plans; North & South Blocks
- HPE850-PA-7 East & North Elevations 1
- HPE850-PA-9 Sections & Beach Elevation

Proposed:

- 23026-GFA-A-LG-DR-A-11100 Lower Ground Floor Plan P.02
- 23026-GFA-A-00-DR-A-11101 Ground Floor Plan P.02
- 23026-GFA-A-01-DR-A-11102 First Floor Plan P.01
- 23026-GFA-A-02-DR-A-11103 Second Floor Plan P.01
- 23026-GFA-A-03-DR-A-11104 Third Floor Plan P.01
- 23026-GFA-A-04-DR-A-11105 Fourth Floor Plan P.01
- 23026-GFA-A-05-DR -A-11106 Fifth Floor Plan P.01
- 23026-GFA-A-LG06DR-A-11107 Sixth Floor Plan P.01
- 23026-GFA-A-ZZ-DR-A-12150 Bay Section 01 P.01
- 23026-GFA-A-ZZ-DR-A-12151 Bay Section 02 P.01

Visuals of the 3D model are presented in Figure 4.1 to Figure 4.5 inclusive with model orientation illustrated in Figure 4.6.

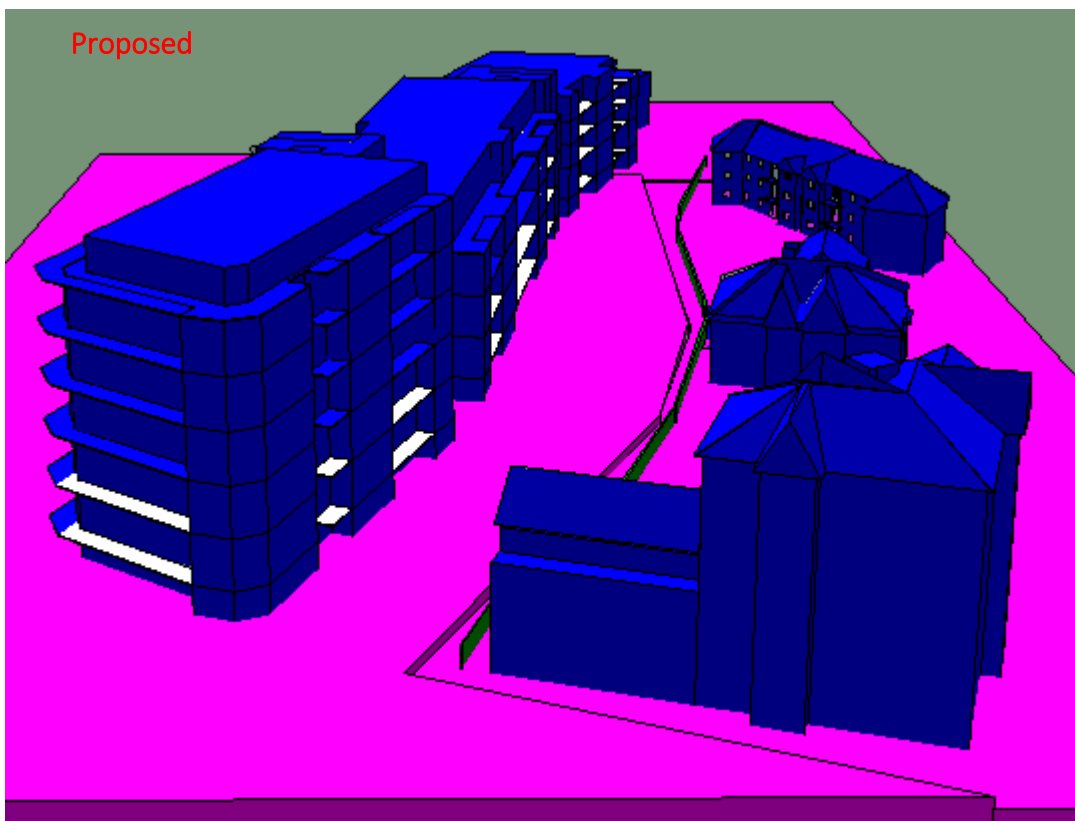
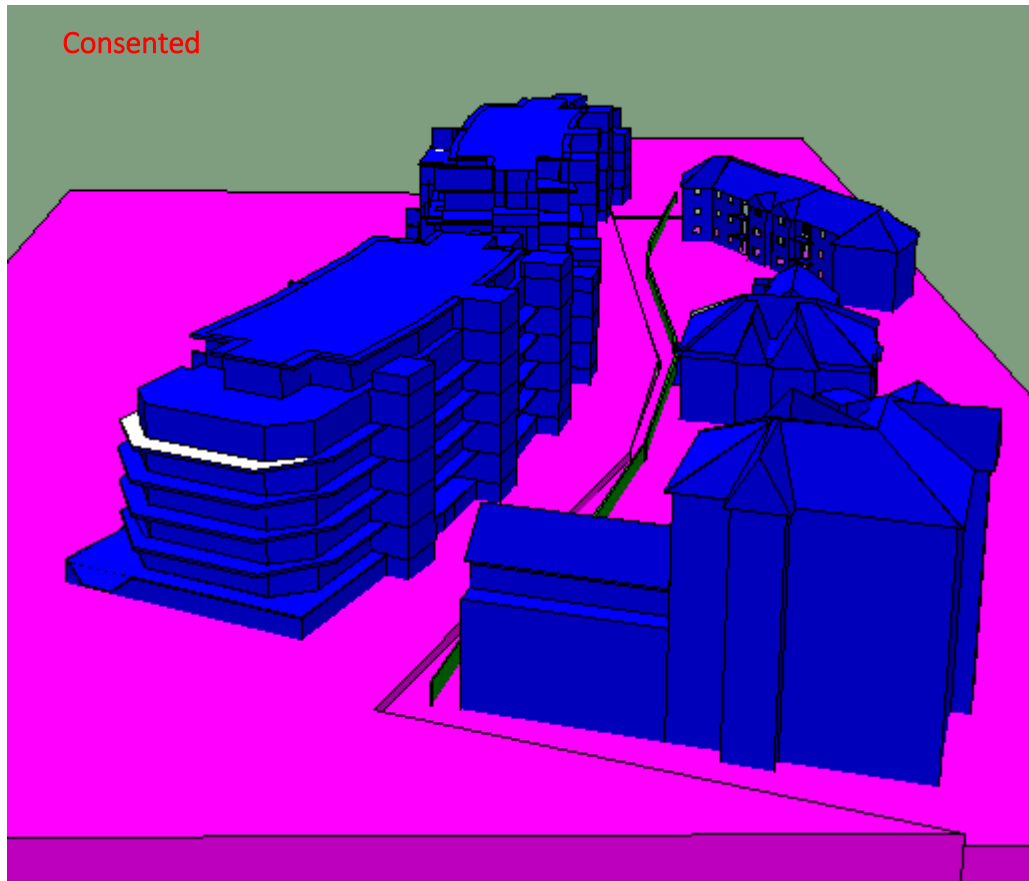


Figure 4.1 Extant consent scheme & proposed scheme with adjacent properties – view from north

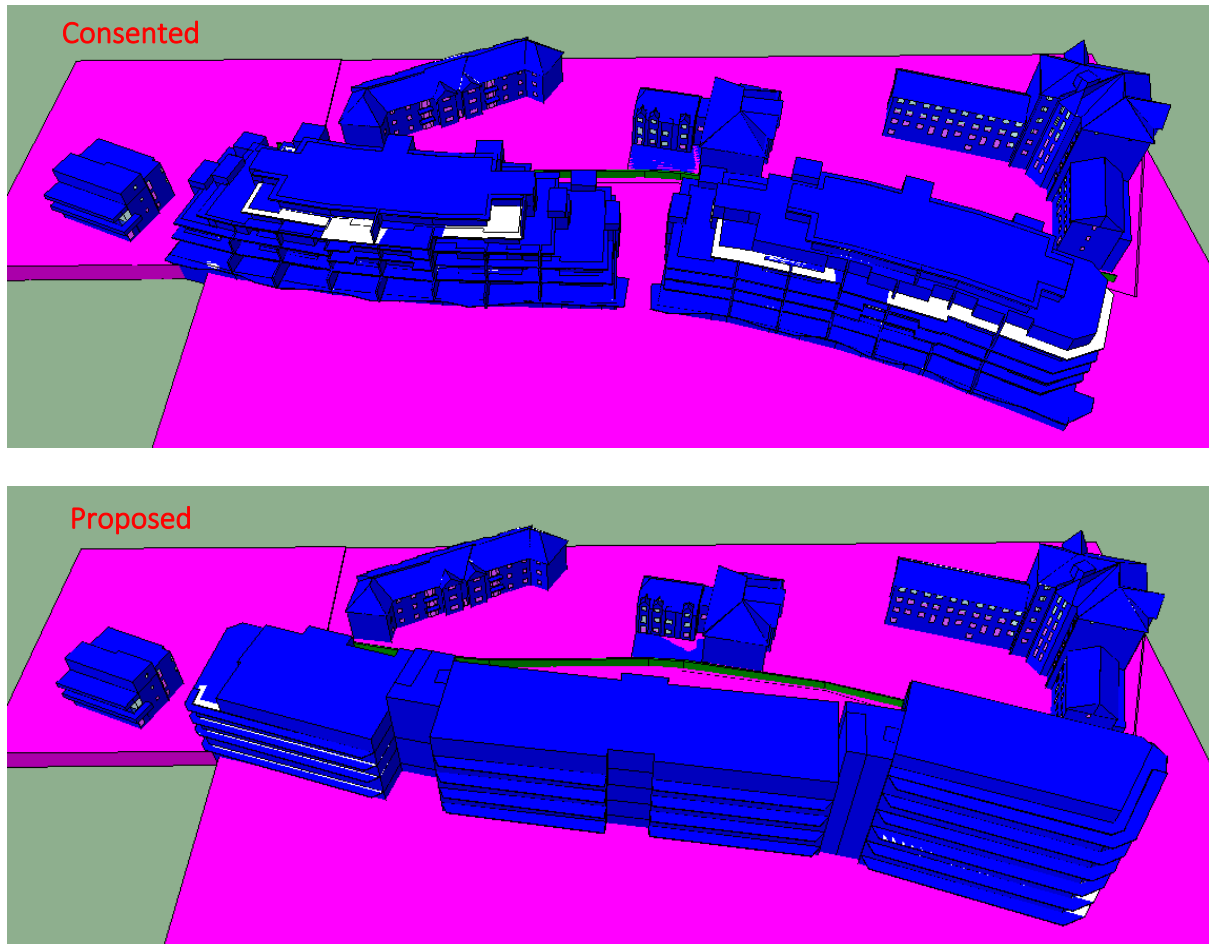


Figure 4.2 Extant consent scheme & proposed scheme with adjacent properties – view from east

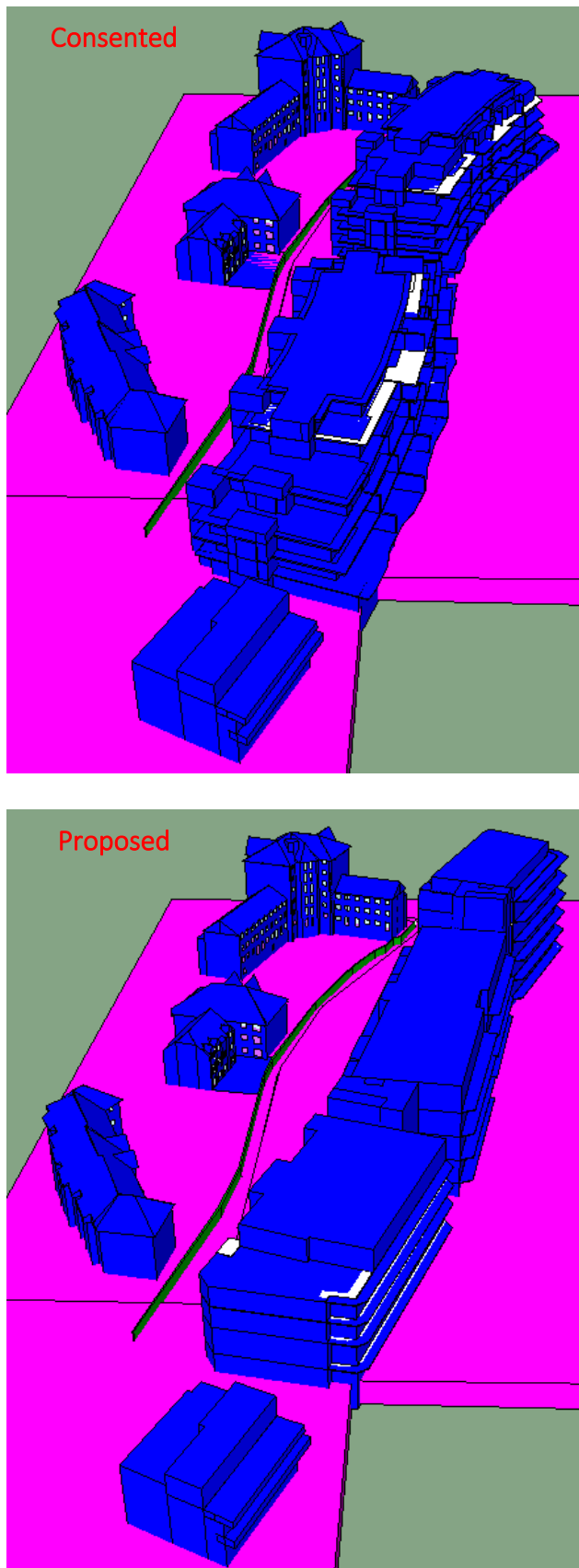


Figure 4.3 Extant consent scheme & proposed scheme with adjacent properties – view from south

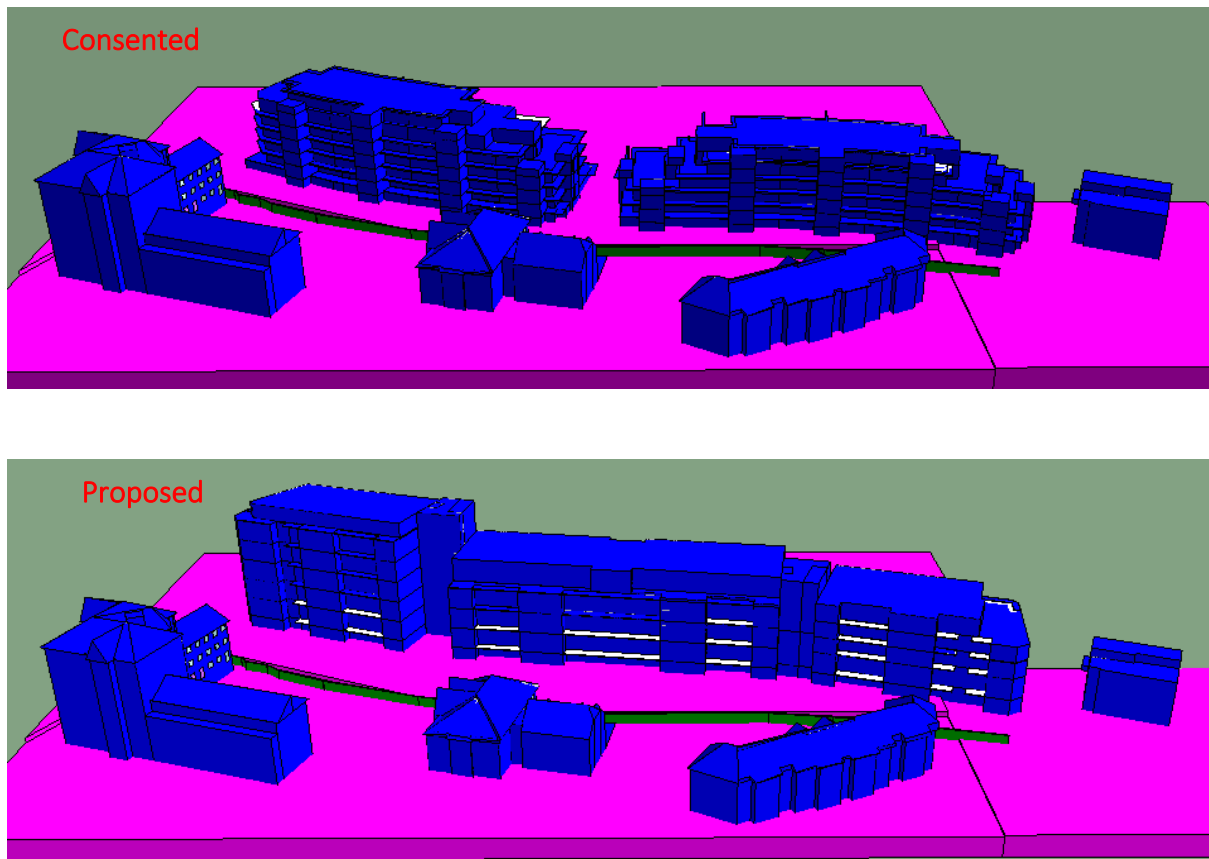


Figure 4.4 Extant consent scheme & proposed scheme with adjacent properties – view from west

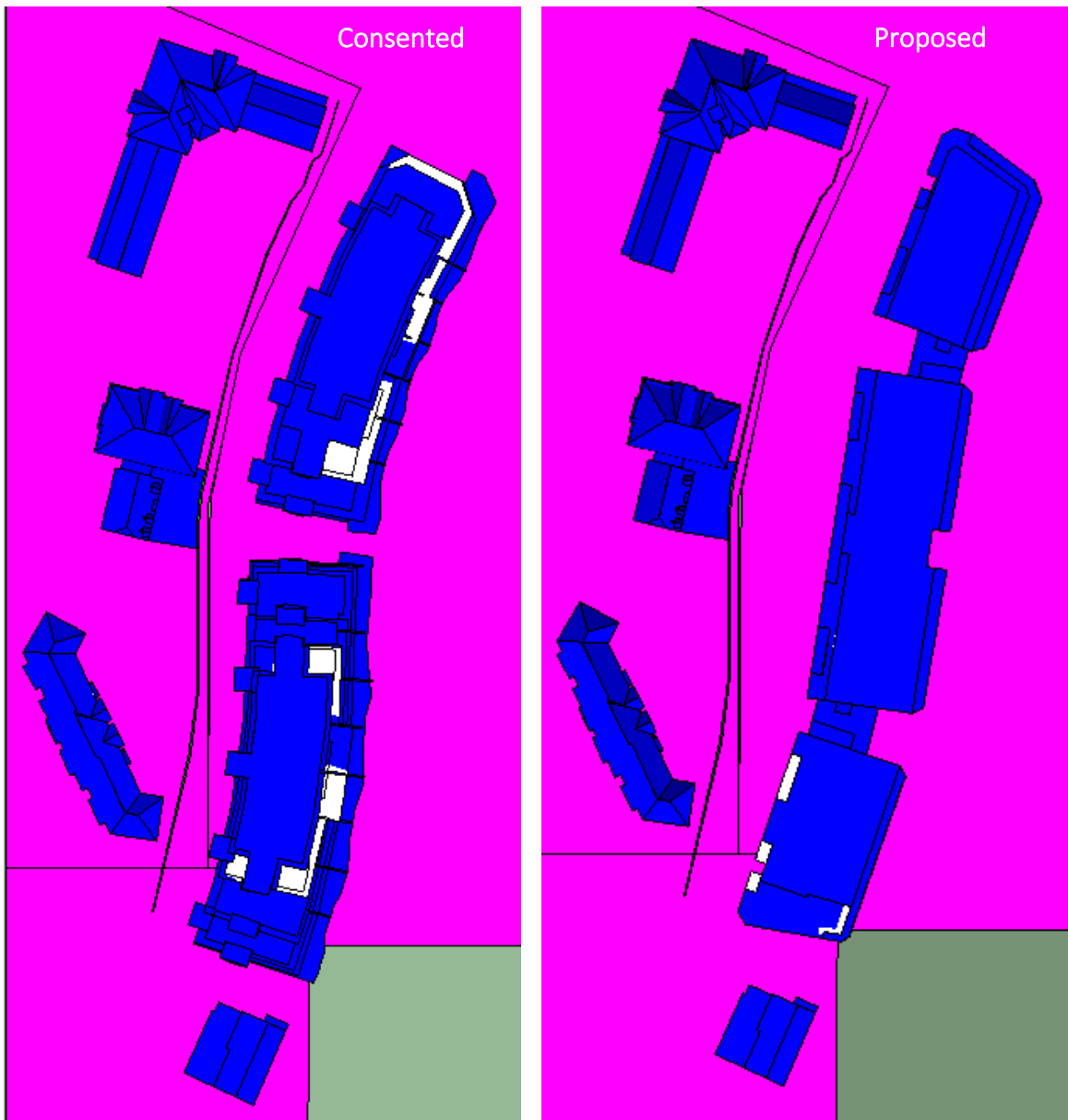


Figure 4.5 Extant consent scheme & proposed scheme with adjacent properties – view from above

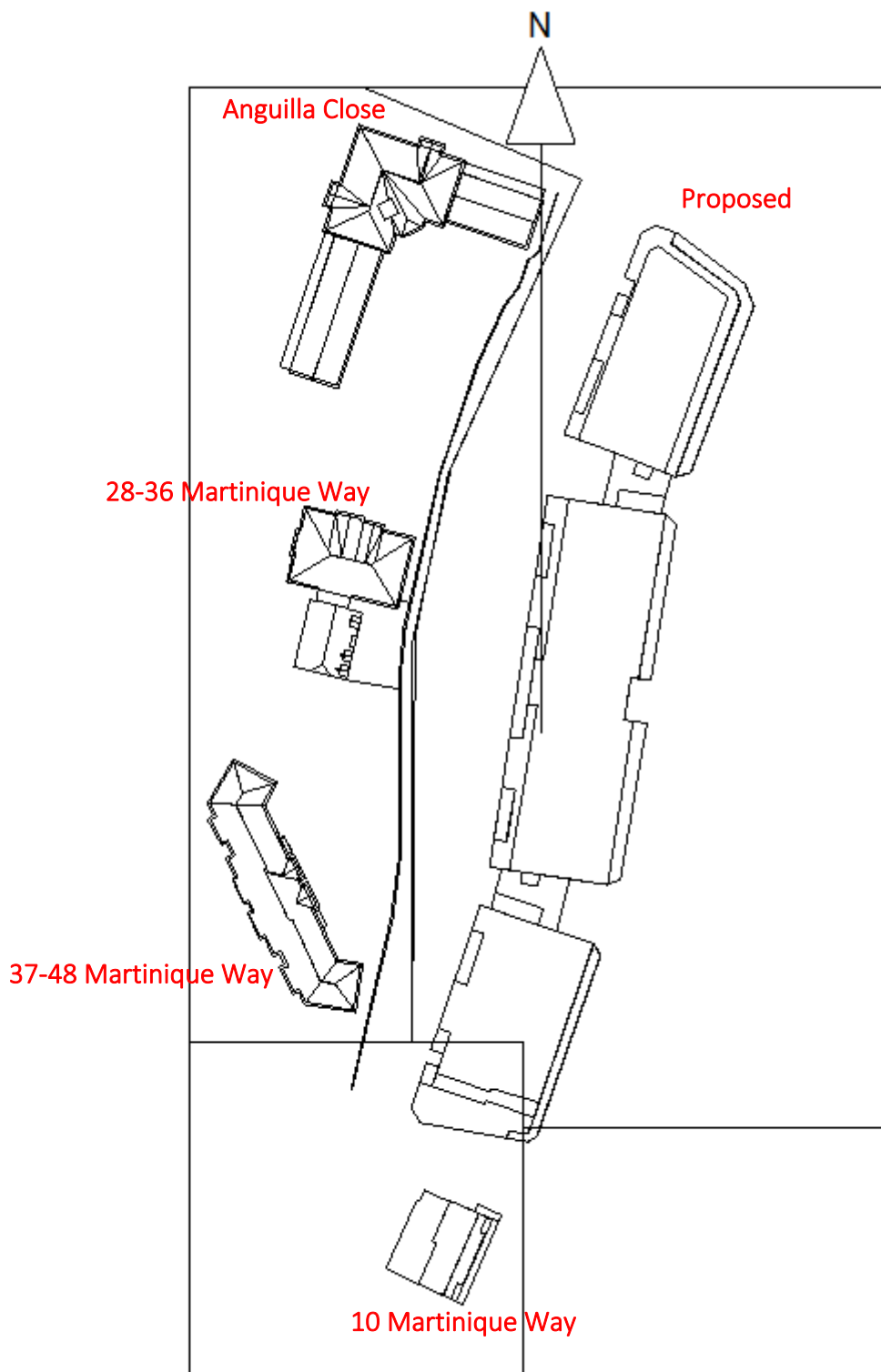


Figure 4.6 Site plan showing orientation of building model

5 RESULTS & DISCUSSION

The section reviews the impact of the proposed development on the adjacent windows and gardens.

5.1 VERTICAL SKY COMPONENT

The BRE guidance states that if with a new development, an existing window has a VSC greater than 27% it should still receive sufficient skylight. If the VSC is reduced below 27% and less than 0.8 times its former value, then the occupants are likely to notice the loss of skylight.

The VSC results are presented in Appendix 1 with the window references illustrated in Appendix 3.

Anguilla Close

The VSC results demonstrate of the 80 windows assessed only 3 will be noticeably impacted by the proposed development when compared with the extant consent scheme. These windows are on the end elevation of a townhouse (layout of similar townhouse illustrated in Figure 5.1) and it is understood these are secondary windows to the Sitting/Dining Room (first floor) and Master Bedroom (third floor), and serve a bathroom (second floor) which does not require assessment. As these windows as secondary to the main windows on the north elevation, these impacts can be considered negligible.



Figure 5.1 Internal layout of mid-terrace townhouse at Anguilla Close

10 Martinique Way

The results for the VSC show that of the 11 windows assessed none of them will be impacted by the proposed development.

28-36 Martinique Way

The results for 28-36 Martinique Way show of the 18 windows assessed only 1 shall be marginally impacted, just falling below the BRE threshold.

37-48 Martinique Way

The VSC results demonstrate there shall be no impact to the windows by the proposed development.

6 CONCLUSIONS

This report has assessed the potential daylight impact on the adjacent properties as a result of the latest proposals for Site 1, Langney Point, Martinique Way, Eastbourne when compared to the consented scheme. The results demonstrate there shall be negligible impact to the daylight of Anguilla Close, 10 Martinique Way, 28 - 36 Martinique Way or 37 – 48 Martinique Way.

This study has been undertaken following the process outlined in the BRE Guidance document “BR 209: Site Layout Planning for Daylight and Sunlight, a Guide to Good Practice, 2022. The guidance states: *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.*

7 APPENDIX 1: VSC RESULTS

Building	Window No.	Consented VSC	Guidance met currently?	80% VSC Threshold	Proposed VSC	reduced below 27%?	Reduced beyond threshold?	BRE Impact Guidance Met?
Anguilla Close	1	27.6	✓	22.1	27.4	No	No	✓
Anguilla Close	2	28.1	✓	22.5	29.0	No	No	✓
Anguilla Close	3	28.7	✓	23.0	28.5	No	No	✓
Anguilla Close	4	28.5	✓	22.8	28.8	No	No	✓
Anguilla Close	5	28.0	✓	22.4	28.1	No	No	✓
Anguilla Close	6	26.6	✗	21.3	26.4	N/A	No	✓
Anguilla Close	7	28.0	✓	22.4	28.1	No	No	✓
Anguilla Close	8	29.7	✓	23.7	30.1	No	No	✓
Anguilla Close	9	30.4	✓	24.3	30.7	No	No	✓
Anguilla Close	10	30.5	✓	24.4	31.0	No	No	✓
Anguilla Close	11	30.3	✓	24.2	31.2	No	No	✓
Anguilla Close	12	29.5	✓	23.6	30.7	No	No	✓
Anguilla Close	13	26.0	✗	20.8	26.3	N/A	No	✓
Anguilla Close	14	27.3	✓	21.8	27.6	No	No	✓
Anguilla Close	15	28.1	✓	22.5	28.5	No	No	✓
Anguilla Close	16	28.3	✓	22.7	29.3	No	No	✓
Anguilla Close	17	28.0	✓	22.4	29.2	No	No	✓
Anguilla Close	18	26.8	✗	21.5	28.6	N/A	No	✓
Anguilla Close	19	26.1	✗	20.9	18.7	N/A	Yes	✗
Anguilla Close	20	28.9	✓	23.2	22.8	Yes	Yes	✗
Anguilla Close	21	27.1	✓	21.7	21.5	Yes	Yes	✗
Anguilla Close	22	23.3	✗	18.6	18.8	N/A	No	✓
Anguilla Close	23	25.4	✗	20.3	22.2	N/A	No	✓
Anguilla Close	24	22.4	✗	17.9	19.8	N/A	No	✓
Anguilla Close	25	25.2	✗	20.1	23.9	N/A	No	✓
Anguilla Close	26	30.9	✓	24.7	30.3	No	No	✓
Anguilla Close	27	30.1	✓	24.1	30.0	No	No	✓
Anguilla Close	28	28.3	✓	22.6	28.4	No	No	✓
Anguilla Close	29	27.1	✓	21.6	26.8	Yes	No	✓
Anguilla Close	30	24.6	✗	19.7	25.1	N/A	No	✓
Anguilla Close	31	26.1	✗	20.9	23.7	N/A	No	✓
Anguilla Close	32	30.9	✓	24.7	28.1	No	No	✓
Anguilla Close	33	28.8	✓	23.0	26.3	Yes	No	✓
Anguilla Close	34	27.1	✓	21.7	24.1	Yes	No	✓
Anguilla Close	35	25.0	✗	20.0	22.1	N/A	No	✓
Anguilla Close	36	21.9	✗	17.5	19.9	N/A	No	✓
Anguilla Close	37	35.3	✓	28.2	32.6	No	No	✓
Anguilla Close	38	34.7	✓	27.7	32.9	No	No	✓
Anguilla Close	39	36.1	✓	28.9	34.1	No	No	✓
Anguilla Close	40	37.0	✓	29.6	34.2	No	No	✓
Anguilla Close	41	34.7	✓	27.7	32.8	No	No	✓
Anguilla Close	42	34.4	✓	27.6	32.6	No	No	✓
Anguilla Close	43	32.9	✓	26.3	30.8	No	No	✓
Anguilla Close	44	31.6	✓	25.3	31.0	No	No	✓
Anguilla Close	45	29.8	✓	23.9	28.5	No	No	✓
Anguilla Close	46	29.3	✓	23.4	28.3	No	No	✓
Anguilla Close	47	26.9	✗	21.5	25.8	N/A	No	✓
Anguilla Close	48	26.5	✗	21.2	25.9	N/A	No	✓

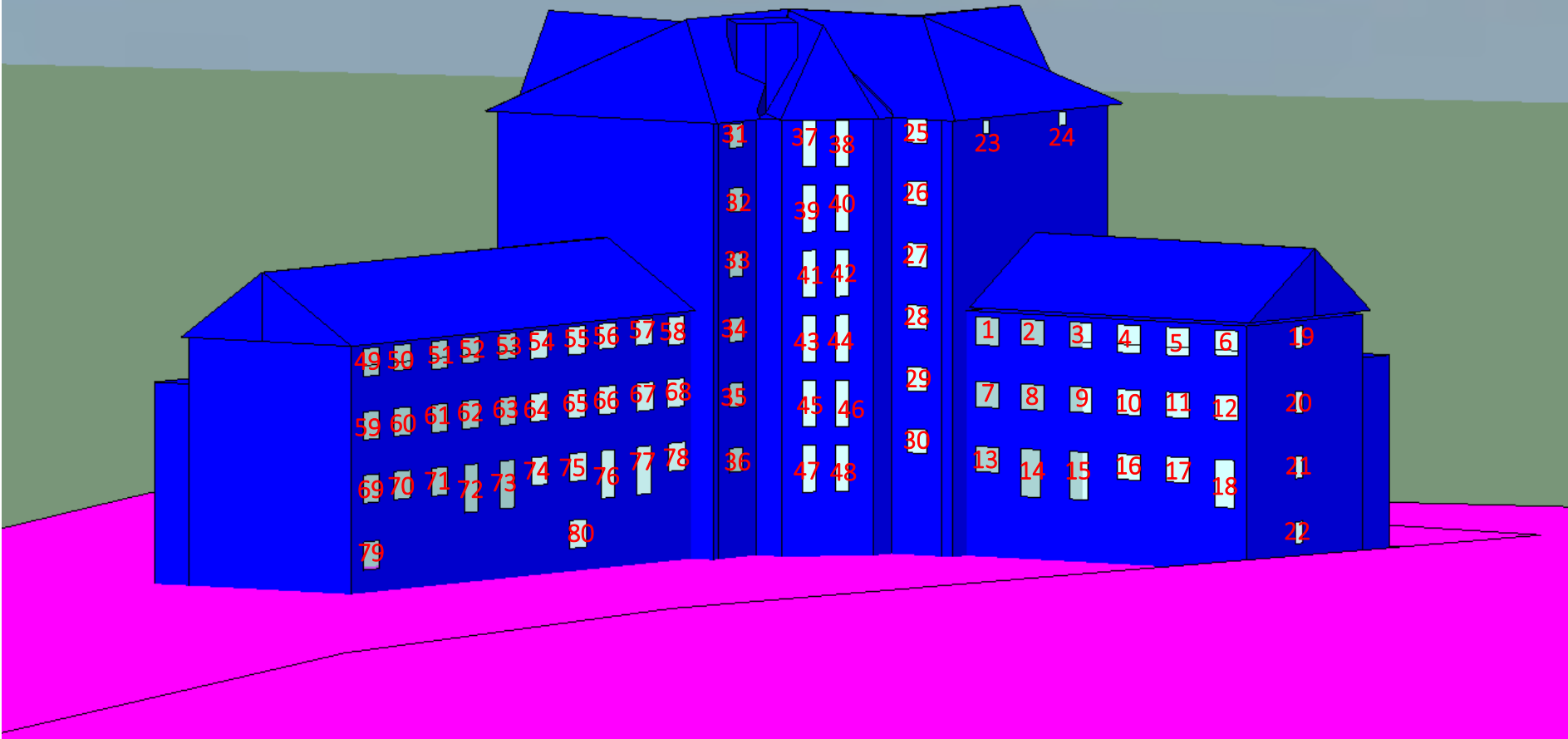
Building	Window No.	Consented VSC	Guidance met currently?	80% VSC Threshold	Proposed VSC	reduced below 27%?	Reduced beyond threshold?	BRE Impact Guidance Met?
Anguilla Close	49	28.6	✓	22.9	27.5	No	No	✓
Anguilla Close	50	28.8	✓	23.0	25.8	Yes	No	✓
Anguilla Close	51	28.6	✓	22.9	27.1	No	No	✓
Anguilla Close	52	27.3	✓	21.8	25.8	Yes	No	✓
Anguilla Close	53	27.1	✓	21.7	24.7	Yes	No	✓
Anguilla Close	54	27.7	✓	22.1	25.2	Yes	No	✓
Anguilla Close	55	28.4	✓	22.7	24.9	Yes	No	✓
Anguilla Close	56	25.9	✗	20.7	23.1	N/A	No	✓
Anguilla Close	57	25.3	✗	20.3	22.8	N/A	No	✓
Anguilla Close	58	24.0	✗	19.2	21.9	N/A	No	✓
Anguilla Close	59	31.3	✓	25.0	29.7	No	No	✓
Anguilla Close	60	31.5	✓	25.2	29.9	No	No	✓
Anguilla Close	61	31.1	✓	24.9	29.6	No	No	✓
Anguilla Close	62	31.4	✓	25.1	29.2	No	No	✓
Anguilla Close	63	30.6	✓	24.5	29.1	No	No	✓
Anguilla Close	64	30.7	✓	24.5	28.8	No	No	✓
Anguilla Close	65	30.0	✓	24.0	28.2	No	No	✓
Anguilla Close	66	29.8	✓	23.9	27.6	No	No	✓
Anguilla Close	67	28.6	✓	22.9	26.3	Yes	No	✓
Anguilla Close	68	26.2	✗	21.0	24.0	N/A	No	✓
Anguilla Close	69	29.0	✓	23.2	28.2	No	No	✓
Anguilla Close	70	29.2	✓	23.4	28.0	No	No	✓
Anguilla Close	71	28.7	✓	23.0	27.7	No	No	✓
Anguilla Close	72	28.6	✓	22.9	27.1	No	No	✓
Anguilla Close	73	28.3	✓	22.7	27.0	No	No	✓
Anguilla Close	74	28.6	✓	22.9	26.9	Yes	No	✓
Anguilla Close	75	28.0	✓	22.4	26.2	Yes	No	✓
Anguilla Close	76	27.0	✓	21.6	24.9	Yes	No	✓
Anguilla Close	77	25.9	✗	20.7	23.7	N/A	No	✓
Anguilla Close	78	23.6	✗	18.8	21.6	N/A	No	✓
Anguilla Close	79	26.5	✗	21.2	25.9	N/A	No	✓
Anguilla Close	80	25.4	✗	20.3	23.7	N/A	No	✓
10 Martinique Way	142	34.6	✓	27.6	30.7	No	No	✓
10 Martinique Way	143	33.9	✓	27.1	30.1	No	No	✓
10 Martinique Way	144	22.0	✗	17.6	18.4	N/A	No	✓
10 Martinique Way	145	36.0	✓	28.8	32.5	No	No	✓
10 Martinique Way	146	32.8	✓	26.2	28.0	No	No	✓
10 Martinique Way	147	27.6	✓	22.1	24.0	Yes	No	✓
10 Martinique Way	148	32.4	✓	26.0	28.3	No	No	✓
10 Martinique Way	149	27.8	✓	22.2	24.9	Yes	No	✓
10 Martinique Way	150	24.8	✗	19.8	21.4	N/A	No	✓
10 Martinique Way	151	32.9	✓	26.3	29.0	No	No	✓
10 Martinique Way	152	27.8	✓	22.2	25.2	Yes	No	✓
28 - 36 Martinique Way	81	32.7	✓	26.1	28.0	No	No	✓
28 - 36 Martinique Way	82	32.7	✓	26.2	27.9	No	No	✓
28 - 36 Martinique Way	83	31.4	✓	25.1	27.1	No	No	✓
28 - 36 Martinique Way	84	12.3	✗	9.9	9.6	N/A	Yes	✗
28 - 36 Martinique Way	85	21.6	✗	17.3	20.6	N/A	No	✓
28 - 36 Martinique Way	86	26.8	✗	21.5	26.1	N/A	No	✓
28 - 36 Martinique Way	87	29.7	✓	23.7	25.5	Yes	No	✓
28 - 36 Martinique Way	88	30.0	✓	24.0	25.4	Yes	No	✓

Building	Window No.	Consented VSC	Guidance met currently?	80% VSC Threshold	Proposed VSC	reduced below 27%?	Reduced beyond threshold?	BRE Impact Guidance Met?
28 - 36 Martinique Way	89	29.5	✓	23.6	25.3	Yes	No	✓
28 - 36 Martinique Way	90	27.3	✓	21.9	23.2	Yes	No	✓
28 - 36 Martinique Way	91	22.8	✗	18.3	22.2	N/A	No	✓
28 - 36 Martinique Way	92	28.4	✓	22.7	27.3	No	No	✓
28 - 36 Martinique Way	93	26.5	✗	21.2	23.1	N/A	No	✓
28 - 36 Martinique Way	94	26.8	✗	21.4	23.2	N/A	No	✓
28 - 36 Martinique Way	95	25.7	✗	20.6	22.3	N/A	No	✓
28 - 36 Martinique Way	96	22.9	✗	18.3	19.4	N/A	No	✓
28 - 36 Martinique Way	97	19.0	✗	15.2	18.4	N/A	No	✓
28 - 36 Martinique Way	98	23.9	✗	19.1	22.9	N/A	No	✓
37- 48 Martinique Way	99	23.4	✗	18.7	24.4	N/A	No	✓
37- 48 Martinique Way	100	19.4	✗	15.5	20.4	N/A	No	✓
37- 48 Martinique Way	101	20.7	✗	16.5	21.2	N/A	No	✓
37- 48 Martinique Way	102	25.1	✗	20.1	24.7	N/A	No	✓
37- 48 Martinique Way	103	24.9	✗	19.9	25.0	N/A	No	✓
37- 48 Martinique Way	104	23.1	✗	18.5	23.0	N/A	No	✓
37- 48 Martinique Way	105	21.3	✗	17.0	21.1	N/A	No	✓
37- 48 Martinique Way	106	21.6	✗	17.3	21.6	N/A	No	✓
37- 48 Martinique Way	107	26.8	✗	21.4	25.2	N/A	No	✓
37- 48 Martinique Way	108	27.8	✓	22.2	26.0	Yes	No	✓
37- 48 Martinique Way	109	27.8	✓	22.2	26.4	Yes	No	✓
37- 48 Martinique Way	110	22.8	✗	18.2	21.2	N/A	No	✓
37- 48 Martinique Way	111	19.3	✗	15.5	17.5	N/A	No	✓
37- 48 Martinique Way	112	21.7	✗	17.3	20.8	N/A	No	✓
37- 48 Martinique Way	113	27.3	✓	21.8	28.1	No	No	✓
37- 48 Martinique Way	114	21.4	✗	17.1	23.6	N/A	No	✓
37- 48 Martinique Way	115	24.8	✗	19.8	25.4	N/A	No	✓
37- 48 Martinique Way	116	15.9	✗	12.8	16.5	N/A	No	✓
37- 48 Martinique Way	117	15.5	✗	12.4	16.1	N/A	No	✓
37- 48 Martinique Way	118	15.6	✗	12.5	16.0	N/A	No	✓
37- 48 Martinique Way	119	28.3	✓	22.6	28.5	No	No	✓
37- 48 Martinique Way	120	29.8	✓	23.9	29.3	No	No	✓
37- 48 Martinique Way	121	18.0	✗	14.4	16.7	N/A	No	✓
37- 48 Martinique Way	122	19.1	✗	15.2	17.2	N/A	No	✓
37- 48 Martinique Way	123	20.2	✗	16.2	18.8	N/A	No	✓
37- 48 Martinique Way	124	29.8	✓	23.8	28.4	No	No	✓
37- 48 Martinique Way	125	27.5	✓	22.0	25.2	Yes	No	✓
37- 48 Martinique Way	126	27.2	✓	21.8	25.9	Yes	No	✓
37- 48 Martinique Way	127	24.2	✗	19.4	25.7	N/A	No	✓
37- 48 Martinique Way	128	19.6	✗	15.7	21.3	N/A	No	✓
37- 48 Martinique Way	129	20.9	✗	16.7	22.8	N/A	No	✓
37- 48 Martinique Way	130	12.4	✗	9.9	13.4	N/A	No	✓
37- 48 Martinique Way	131	12.4	✗	9.9	13.9	N/A	No	✓
37- 48 Martinique Way	132	12.1	✗	9.7	13.6	N/A	No	✓
37- 48 Martinique Way	133	25.3	✗	20.2	26.0	N/A	No	✓
37- 48 Martinique Way	134	15.5	✗	12.4	14.6	N/A	No	✓
37- 48 Martinique Way	135	27.5	✓	22.0	27.2	No	No	✓
37- 48 Martinique Way	136	16.3	✗	13.0	16.0	N/A	No	✓
37- 48 Martinique Way	137	16.4	✗	13.1	15.1	N/A	No	✓
37- 48 Martinique Way	138	16.1	✗	12.8	15.1	N/A	No	✓
37- 48 Martinique Way	139	26.8	✗	21.4	25.5	N/A	No	✓

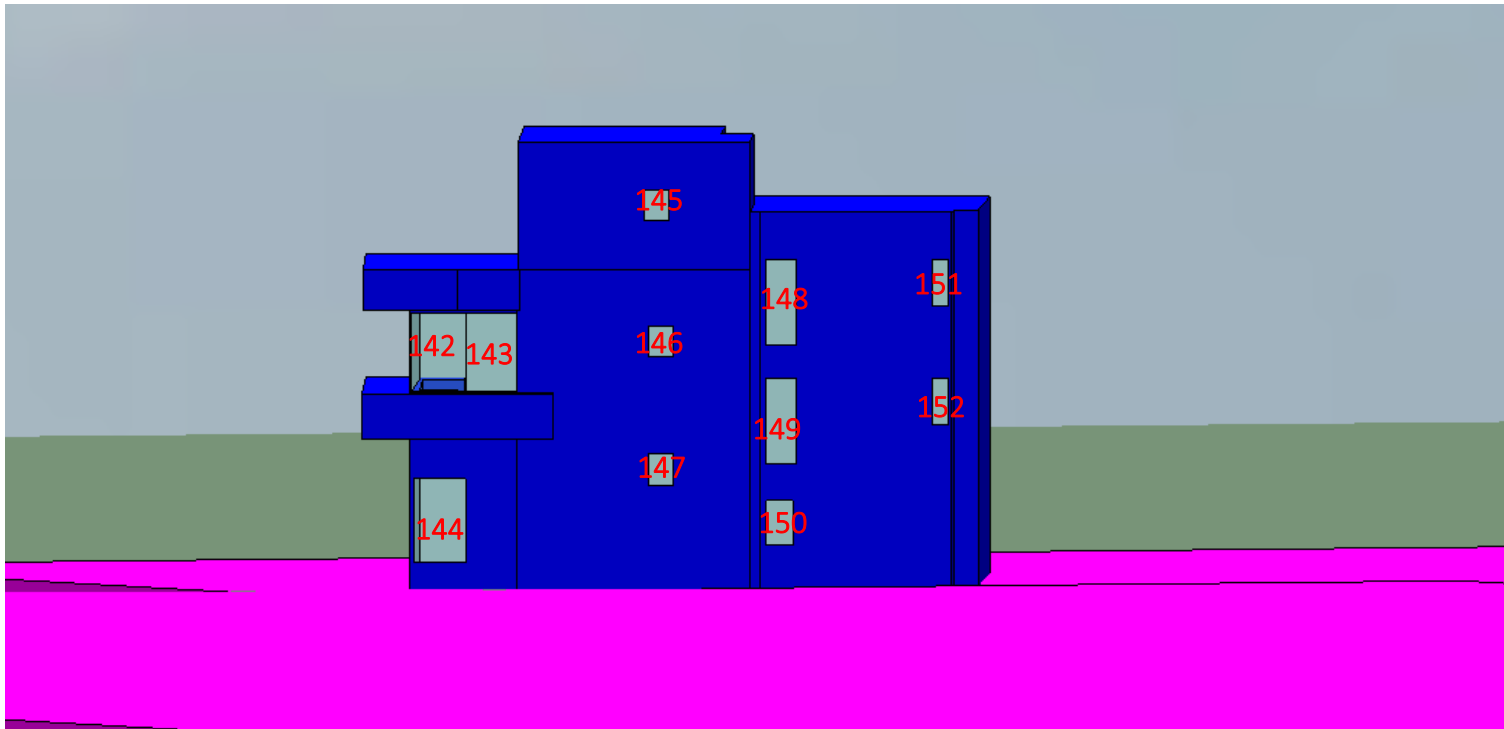
Building	Window No.	Consented VSC	Guidance met currently?	80% VSC Threshold	Proposed VSC	reduced below 27%?	Reduced beyond threshold?	BRE Impact Guidance Met?
37- 48 Martinique Way	140	24.9	✗	19.9	23.3	N/A	No	✓
37- 48 Martinique Way	141	23.8	✗	19.0	22.8	N/A	No	✓

8 APPENDIX 3: WINDOW REFERENCES

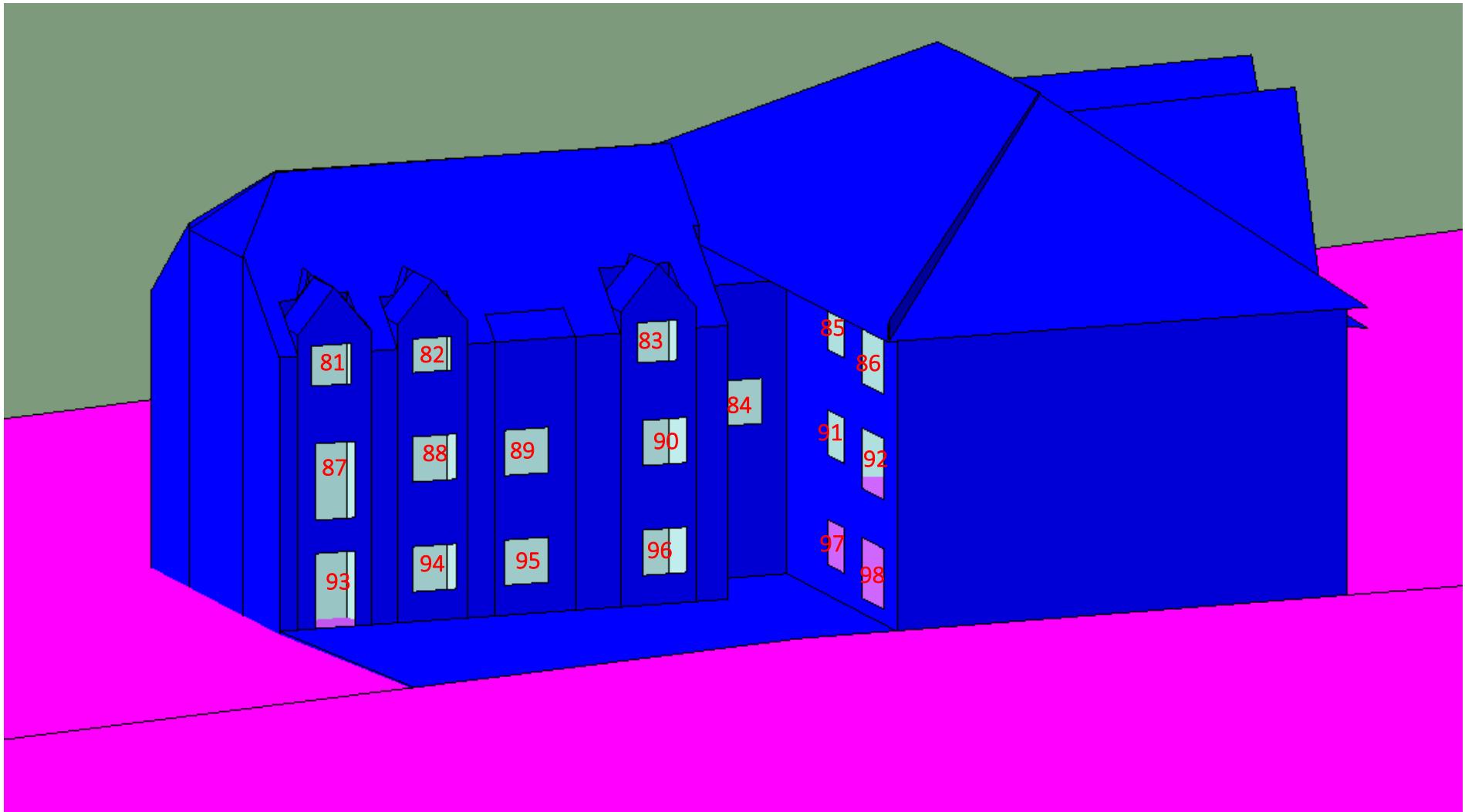
Anguilla Close



10 Martinique Way



28-36 Martinique Way



37-48 Martinique Way

