RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Daylight and Sunlight Report

(Within Development)

4 February 2022
Site at Ballymany
Ballymany Road
Newbridge, Kildare
Ireland W12 T925

RICS
Regulated by RICS

Right of Light Consulting Ltd

Burley House
15-17 High Street
Rayleigh
Essex SS6 7EW

Tel: 0800 197 4836

www.right-of-light.co.uk

CONTENTS

1 EXECUTIVE SUMMARY 2
1.1 Overview 2

2 INFORMATION SOURCES 3
2.1 Documents Considered 3

3 METHODOLOGY OF THE STUDY 5
3.1 Local Planning Policy 5
3.2 Interior Daylighting 5
3.3 Sunlight to Windows 7
3.4 Overshadowing to Gardens and Open Spaces 8

4 RESULTS OF THE STUDY 9
4.1 Window Reference Points and No Sky Line Contours 9
4.2 Daylight & Sunlight Data 9
4.3 Interior Daylighting 9
4.4 Sunlight to Windows 9
4.5 Overshadowing to Gardens and Open Spaces 10
4.6 Conclusion 10

5 CLARIFICATIONS 11
5.1 General 11

APPENDICES

APPENDIX 1 WINDOW KEY & NO SKY LINE CONTOURS
APPENDIX 2 DAYLIGHT & SUNLIGHT DATA
APPENDIX 3 OVERSHADOWING TO GARDENS & OPEN SPACES

1 EXECUTIVE SUMMARY

1.1 Overview

1.1.1 Right of Light Consulting has been commissioned by Briargate Developments Newbridge Ltd to undertake a daylight and sunlight study in connection with the development of the Site at Ballymany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925. The aim of the study is to check whether the proposed accommodation will provide its future occupiers with adequate levels of natural light.

1.1.2 The study is based on the numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a good practice guide, 2nd Edition' by P J Littlefair 2011.

1.1.3 Appendix 1 identifies the windows analysed in this study. The no sky line contours for the habitable rooms are also presented in Appendix 1. The numerical results of the BRE daylight and sunlight tests are provided in Appendix 2. Overshadowing to gardens and opens spaces contour drawings are provided in Appendix 3.

1.1.4 The numerical results demonstrate that the proposed development design achieves a high level of compliance with the BRE recommendations. Whilst a small number of rooms and outdoor amenity areas do not meet the sunlight recommendations, the results are not unusual in the context of an urban location. In our professional opinion, the proposed design will provide the development's future occupiers with adequate levels of natural light.

2 INFORMATION SOURCES

2.1 Documents Considered

2.1.1 This report is based on the following drawings:

Reddy Architecture + Urbanism

P20-071K-RAU-01-XX-DR-A-31100	House Type B1 4B7P	Rev P03.01
P20-071K-RAU-02-XX-DR-A-31100	House Type C1 3B5P	Rev P03.01
P20-071K-RAU-03-XX-DR-A-31100	House Type C2 3B5P	Rev P03.01
P20-071K-RAU-04-XX-DR-A-31100	House Type C3 3B50	Rev P03.01
P20-071K-RAU-05-XX-DR-A-31100	House Type D 2B4P	Rev P03.01
P20-071K-RAU-06-XX-DR-A-31100	House Type E 4B7P	Rev P03.01
P20-071K-RAU-07-XX-DR-A-31100	House Type C5 3B5P	Rev P03.01
P20-071K-RAU-08-XX-DR-A-31100	House Type C4 3B5P	Rev P03.01
P20-071K-RAU-XX-XX-A-DR-31018	SHD Comparison and Detail	Rev P03.01
P20-071K-RAU-XX-XX-DR-A-31001	Proposed Masterplan	Rev P03.02
P20-071K-RAU-XX-XX-DR-A-31002	Proposed Masterplan in Context	Rev P03.02
P20-071K-RAU-XX-XX-DR-A-31010	Site Layout Sheet 1 of 3	Rev P03.01
P20-071K-RAU-XX-XX-DR-A-31011	Site Layout Sheet 2 of 3	Rev P03.01
P20-071K-RAU-XX-XX-DR-A-31013	Proposed Taking in Charge	Rev P03.02
P20-071K-RAU-XX-XX-DR-A-31015	Waste and Cycle Storage Detail	Rev P03.01
P20-071K-RAU-XX-XX-DR-A-31016	Proposed Part V Layout and Schedule	Rev P03.01
P20-071K-RAU-XX-XX-DR-A-31017	Proposed Phasing Plan	Rev P03.01
P20-071K-RAU-XX-ZZ-DR-A-31012	Site Layout Sheet 3/3	Rev P03.01
P20-071	Site Survey	Rev -
P20-071K-RAU-XX-XX-DR-A-31070	Site Survey	Rev P03.01
P20-071K-RAU-20-XX-DR-A-31120	Duplex Type 1_Sheet 1 Du1: 3B5P / 1B2P	Rev P03.02
P20-071K-RAU-20-XX-DR-A-31121	Duplex Type 1_Sheet 2 Du1: 3B5P / 1B2P	Rev P03.01

P20-071K-RAU-30-00-DR-A-31130	Apartment Block Ground-Floor and 1st Floor Plan	Rev P03.05
P20-071K-RAU-30-01-DR-A-31131	2nd & 3rd Floor Plan	Rev P03.05
P20-071K-RAU-30-02-DR-A-31132	Roof Floor Plan	Rev P03.04
P20-071K-RAU-30-XX-DR-A-31133	Apartment Block North, South and Eastern Elevation	Rev P03.04
P20-071K-RAU-30-XX-DR-A-31134	Apartment Block West Elevation & Section	Rev P03.03

Van Dijk Architects

1458-PA-003	Overall Site Layout Plan Phasing Plan and Character Areas Plan	Rev A

3 METHODOLOGY OF THE STUDY

3.1 Local Planning Policy

3.1.1 We understand that the Local Authority takes the conventional approach of considering daylight and sunlight amenity with reference to the various numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a guide to good practice, 2nd Edition' by P J Littlefair 2011. A new European standard BS EN 17037 'Daylight in Buildings' was published in May 2019. An update to the BRE guide to take into account the European standard is expected sometime in 2021. It is not yet clear how, and to what extent, the European recommendations will be adopted by the BRE and Local Authorities.

3.1.2 The standards set out in the BRE guide are intended to be used flexibly. The BRE guide states:

"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."

3.2 Interior Daylighting

3.2.1 The interior daylighting recommendations set out in the BRE guide are based on British Standard BS 8206 Part 2 and the Chartered Institute of Building Services Engineers Applications Manual on window design. Collectively, the guides set out three main criteria for interior daylighting. These are summarised as follows:

<u>Test 1 - Average Daylight Factor</u>

3.2.2 The Average Daylight Factor (ADF) can be calculated using the following formula:

$$df = \frac{T\ Aw\ \theta}{A\ (1-R^2)}\ \%$$

where

T is the diffuse visible transmittance of the glazing
Aw is the net glazed area of the window (m^2)
A is the total area of the room surfaces (m^2)

R is their average reflectance
Θ is the angle of visible sky in degrees

3.2.3 The ADF test is applied to habitable rooms within domestic properties. A kitchen is generally deemed to be a habitable room if it is large enough to accommodate a dining area. If the kitchen is small, or if the property has a separate dining area, then the accepted practice is to treat the kitchen as a non-habitable room.

3.2.4 For the purpose of this study, we have assumed BRE internal reflectance coefficients pertaining to medium wooden floors (0.4), light painted walls (0.8) and matt white painted ceilings (0.85).

3.2.5 We have assumed that each window is double-glazed and has a glazed area that equates to 80% of the structural opening size. A glazing transmittance value, inclusive of a maintenance to allow for the effect of dirt and grime on the glazing, of 0.68 has been used.

3.2.6 To achieve a predominately daylit appearance, the guide recommends an ADF of 5% or more if there is no supplementary electric lighting, or 2% or more if supplementary lighting is provided. The guide also gives minimum recommendations for dwellings of 2% for kitchens, 1.5% for living rooms and 1% for bedrooms. The minimum targets have been adopted for the purpose of this study.

3.2.7 The BRE guide does not give guidance on how to apply the ADF test to spaces which contain a mix of room uses e.g. open plan living, dining and kitchen areas. For this assessment we have set a target of 2% with the aim of reaching the predominately daylit benchmark.

3.2.8 A special procedure is required for floor to ceiling windows such as patio doors. If part of a window is below the height of the working plane (a horizontal plane 0.85m above the floor in housing), this portion should be treated as a separate window. The ADF for this window has an extra factor applied to it, to take account of the reduced effectiveness of low level glazing in lighting the room. A value equal to the floor reflectance may be taken for this factor. The ADF for the portion of the window above the working plane is calculated in the normal way without this additional factor, and the ADFs for the two portions are added together.

3.2.9 Reflected light can be factored into the ADF calculation. For example, where a window has a large obstruction in front of it, the angle of visible sky can be increased by around 6°, assuming the obstruction is painted a light colour.

Test 2 - Room Depth

3.2.10 If a daylit room is lit by windows in one wall only, the depth of the room L should not exceed the limiting value given by:

$$\frac{L}{W} + \frac{L}{H} \leq \frac{2}{1-R_b}$$

where

W is the room width
H is the window-head height above floor level
R_b is the average reflectance of the surfaces in the rear half of the room

Test 3 - Position of the no sky line (Daylight Distribution)

3.2.11 If a significant area of the working plane lies beyond the no sky line (i.e. it receives no direct skylight), then the distribution of daylight in the room will look poor and supplementary electric lighting will be required.

3.2.12 The no sky line assessment is not applicable where a room derives its daylight solely from a light well or atrium. In these situations the room relies on borrowed light instead of direct skylight.

3.3 Sunlight to Windows

3.3.1 The BRE guide states that, in general, a dwelling or non-domestic building which has a particular requirement for sunlight, will appear reasonably sunlit if:

- at least one main window wall faces within 90 degrees of due south, and
- the centre of at least one window to a main living room can receive 25% of annual probable sunlight hours, including at least 5% of the annual probable sunlight hours during the winter months between 21st September and 21st March.

3.3.2 The guide states that, where groups of dwellings are planned, site layout design should aim to maximise the number of dwellings with a main living room that meets the above recommendations.

3.3.3 The guide states that sunlight is viewed as less important in kitchens and bedrooms.

3.4 Overshadowing to Gardens and Open Spaces

3.4.1 The availability of sunlight should be checked for all open spaces where sunlight is required. This would normally include:

- Gardens, usually the main back garden of a house
- Parks and playing fields
- Children's playgrounds
- Outdoor swimming pools and paddling pools
- Sitting out areas, such as those between non-domestic buildings and in public squares
- Focal points for views such as a group of monuments or fountains.

3.4.2 The BRE guide recommends that, for an open space to appear adequately lit throughout the year, at least 50% of its area should receive two hours of sunlight on 21st March.

4 RESULTS OF THE STUDY

4.1 Window Reference Points and No Sky Line Contours

4.1.1 Appendix 1 identifies the positions of the windows analysed in this study. The no skyline contours for the habitable rooms are also presented in Appendix 1.

4.2 Daylight & Sunlight Data

4.2.1 The numerical results of the BRE daylight and sunlight tests are provided in Appendix 2. Overshadowing to gardens and opens spaces contour drawings are provided in Appendix 3.

4.3 Interior Daylighting

4.3.1 All habitable rooms meet or surpass the BRE minimum Average Daylight Factor (ADF) recommendations.

4.3.2 All rooms pass the room depth test.

4.3.3 The BRE guide does not give fixed numerical pass/fail criteria for the No Sky Line test when applied to new dwellings. However, for completeness, we have illustrated the no sky line contours in Appendix 1. The contours illustrate good access to direct skylight over a significant part of the working plane.

4.4 Sunlight to Windows

4.4.1 The BRE guide acknowledges that, in some cases, it may not be possible for every dwelling to achieve ideal levels of sunlight. The guide explains that, where groups of dwellings are planned, the aim should be to maximise the number of dwellings that:

- have at least one main window that faces within 90 degrees of due south, and
- have at least one window to a main living room that meets the BRE numerical targets.

4.4.2 In the case of the proposed development, 61 of the 91 units have a living room window which faces within 90 degrees of due south. 50 of the 91 units have a living room window which meets the BRE numerical targets.

4.4.3 Furthermore, whilst the BRE guide considers sunlight to bedrooms to be less important, it is worth noting that number of the apartments that have north facing living room windows are dual aspect and have south facing bedroom windows. The apartments will therefore have access to some direct sunlight.

4.4.4 In our opinion, the proposed development represents good site layout design. Since the design maximises sunlight availability, as far as practically possible given the constraints of the site, the BRE direct sunlight to windows recommendations for groups of dwellings have been met.

4.5 Overshadowing to Gardens and Open Spaces

4.5.1 The gardens and amenity spaces have been tested for the proposed development at Ballymany Road. The results confirm that not all the gardens meet the BRE recommendations. However, amenity space is provided at the Ballymany Road development in two main forms. Firstly, in the form of the smaller, private amenity areas to individual flats; and secondly, in the form of larger communal areas. Whilst a number of the private amenity spaces fall short of the BRE recommendations the larger community spaces meet the BRE recommendations. Occupants will therefore have access to a choice of shaded or well sun-lit amenity areas.

4.6 Conclusion

4.6.1 The numerical results demonstrate that the proposed development design achieves a high level of compliance with the BRE recommendations. Whilst a small number of rooms and outdoor amenity areas do not meet the recommendations, the results are not unusual in the context of an urban location. In our professional opinion, the proposed design will provide the development's future occupiers with adequate levels of natural light.

5 CLARIFICATIONS

5.1 General

5.1.1 The report provided is solely for the use of the client and no liability to anyone else is accepted.

5.1.2 The study is limited to assessing daylight, sunlight and overshadowing of the proposed development as set out in section 2.1, 3.1 and 3.3 of the BRE Guide.

5.1.3 The study is based on the information listed in section 2 of this report. The study has been undertaken without access to the proposed development site or neighbouring properties.

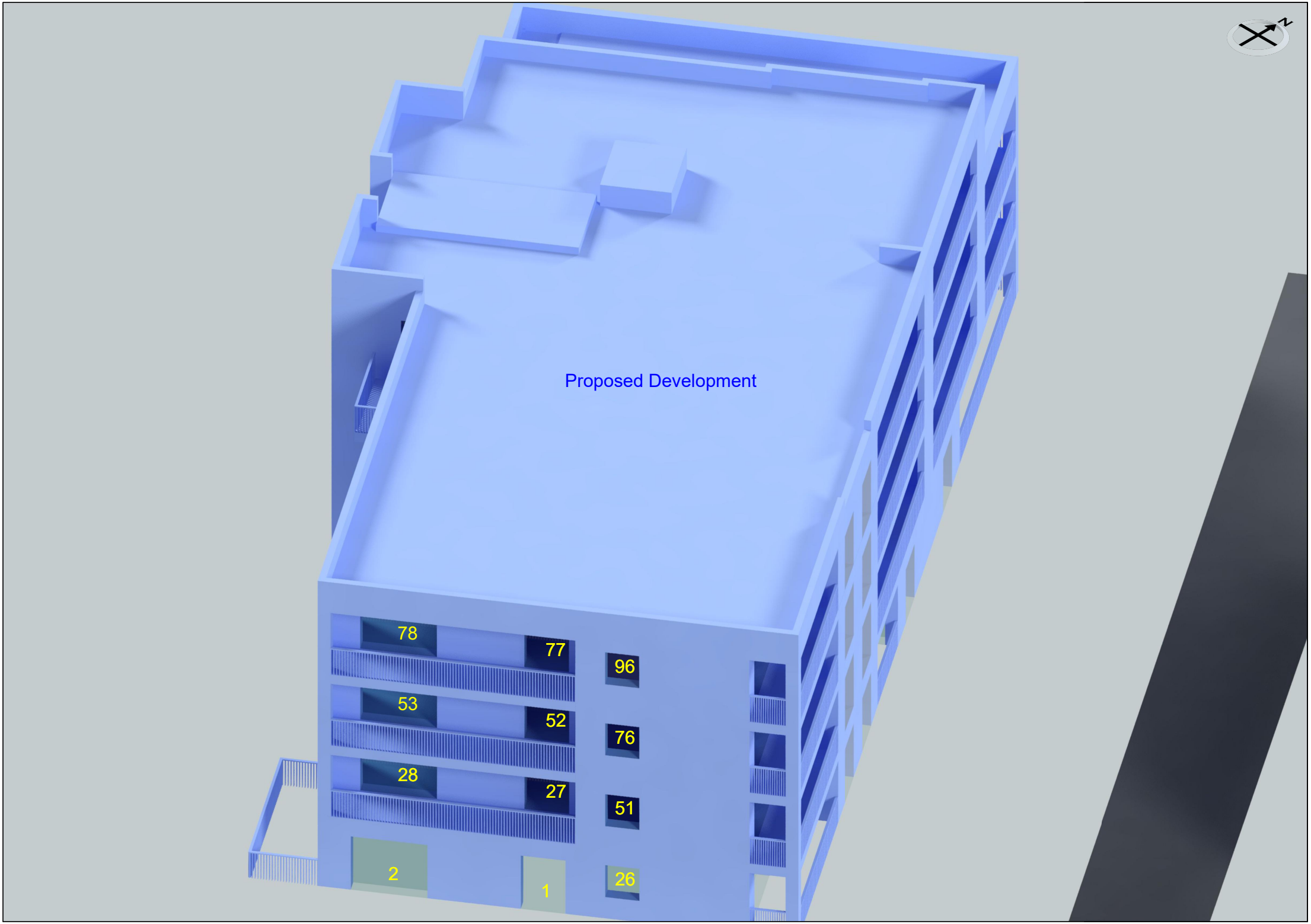
5.1.4 We have undertaken the survey following the guidelines of the RICS publication “Surveying Safely”. Where limited access is available, assumptions will have been made.

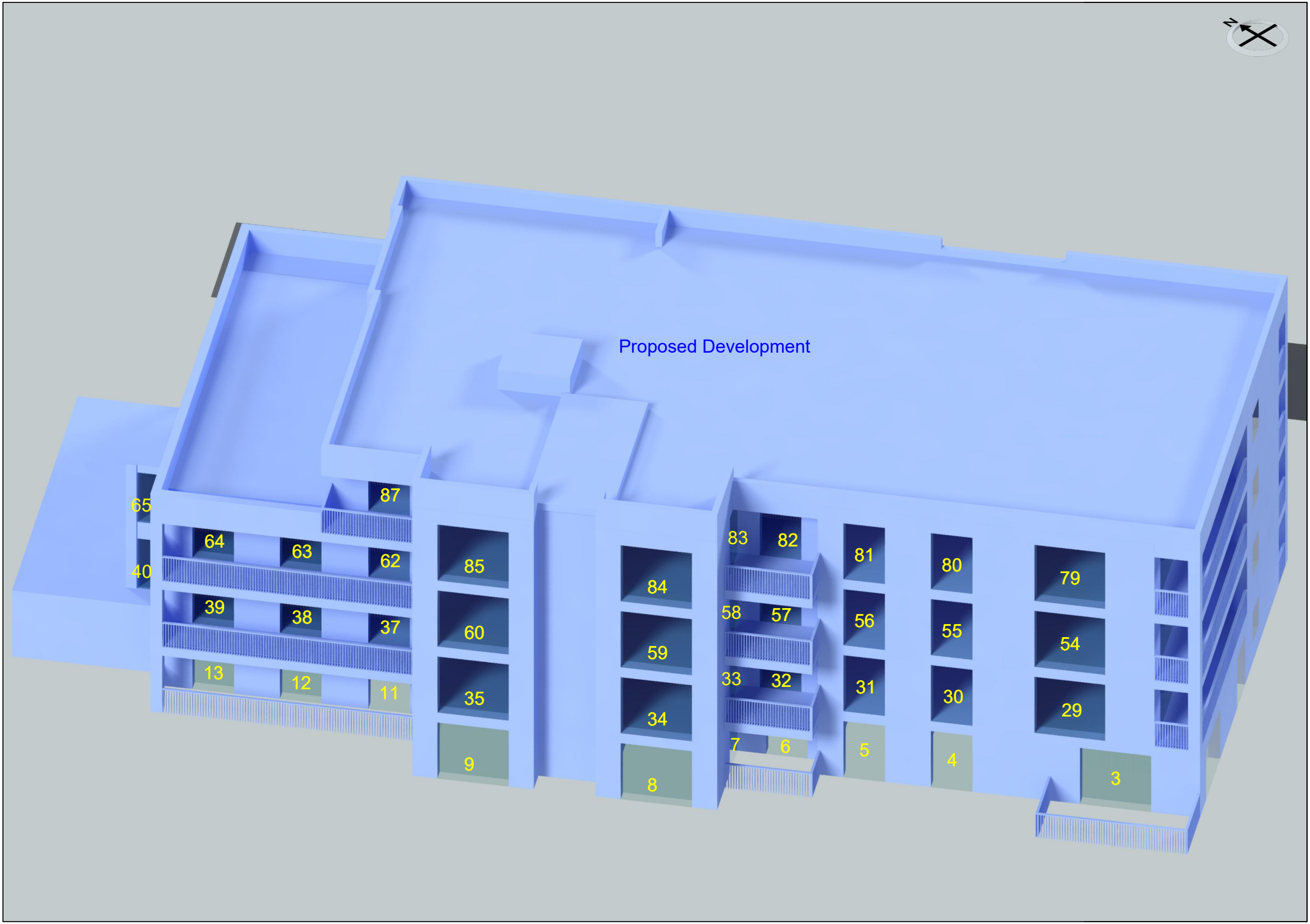
5.1.5 This report is based upon and subject to the scope of work set out in Right of Light Consulting’s quotation and standard terms and conditions.

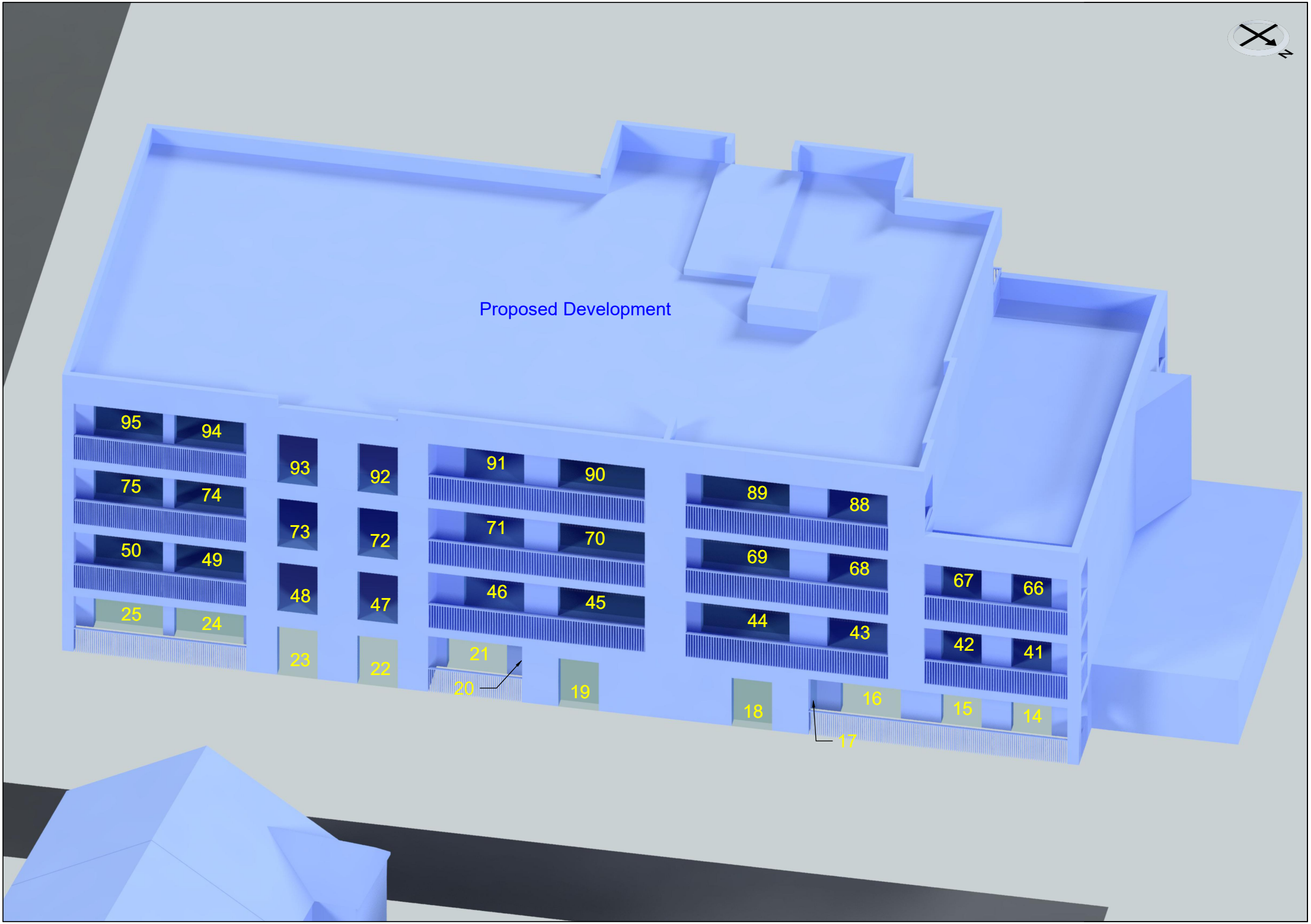
APPENDICES

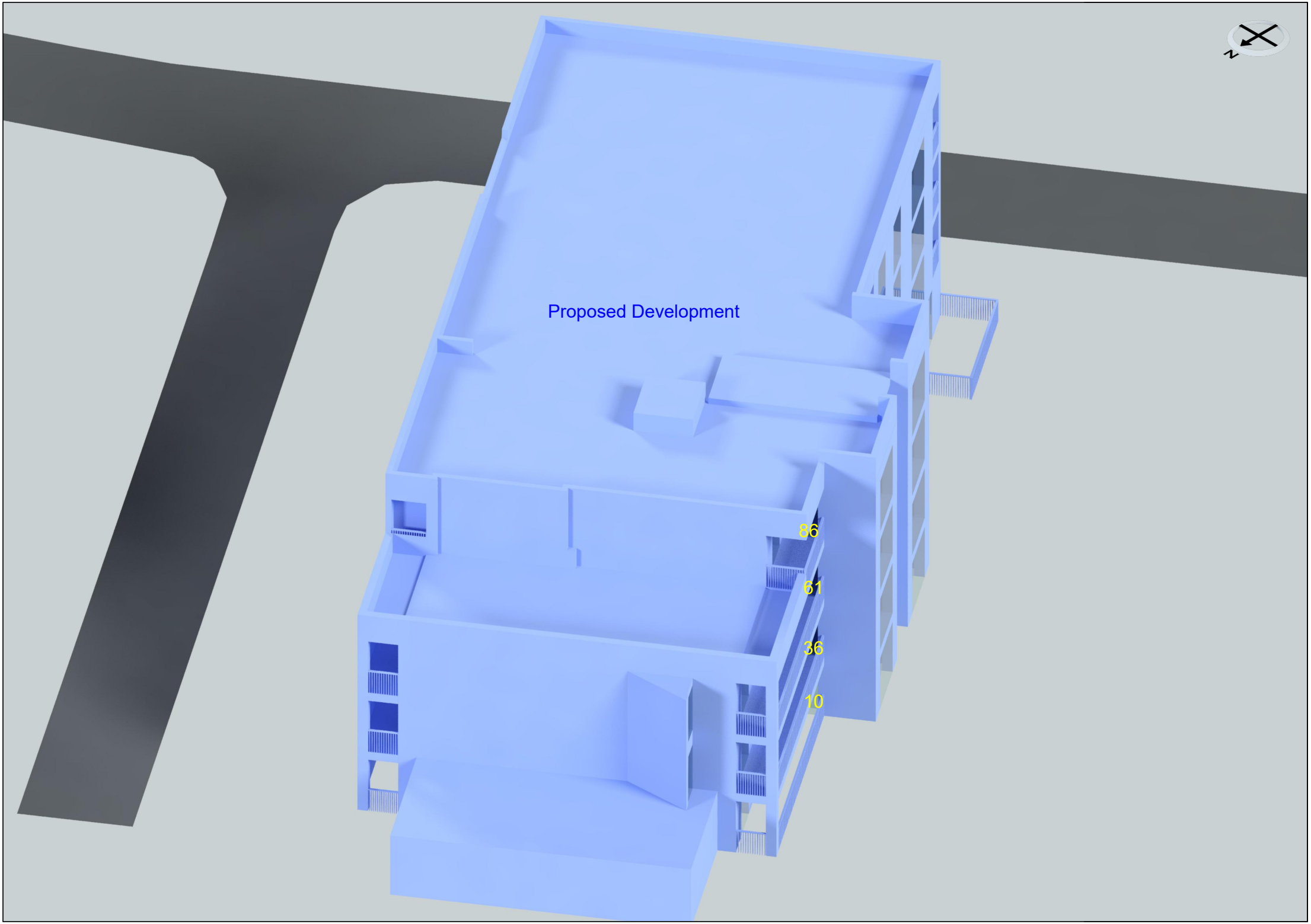
APPENDIX 1

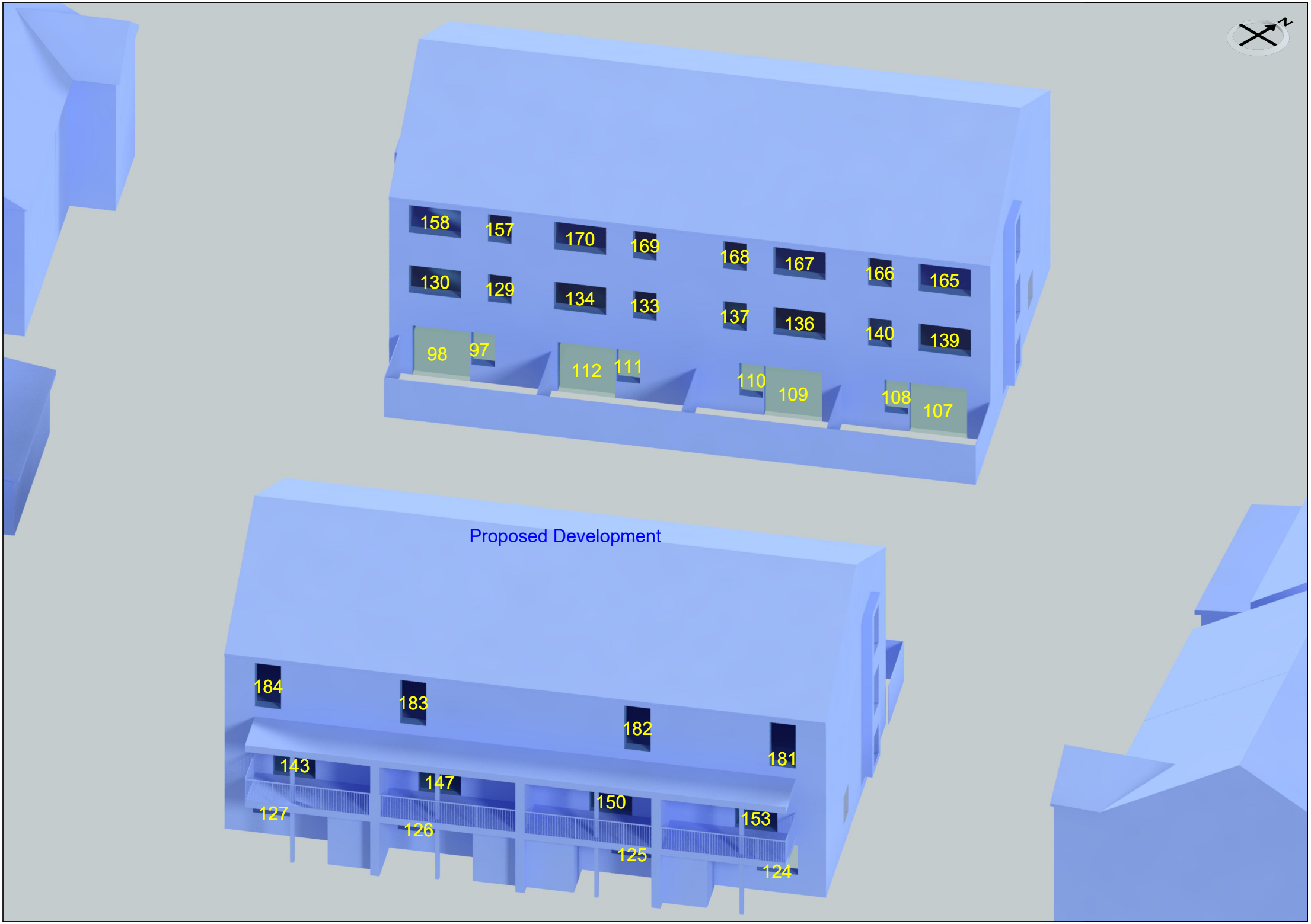
WINDOW KEY & NO SKY LINE CONTOURS

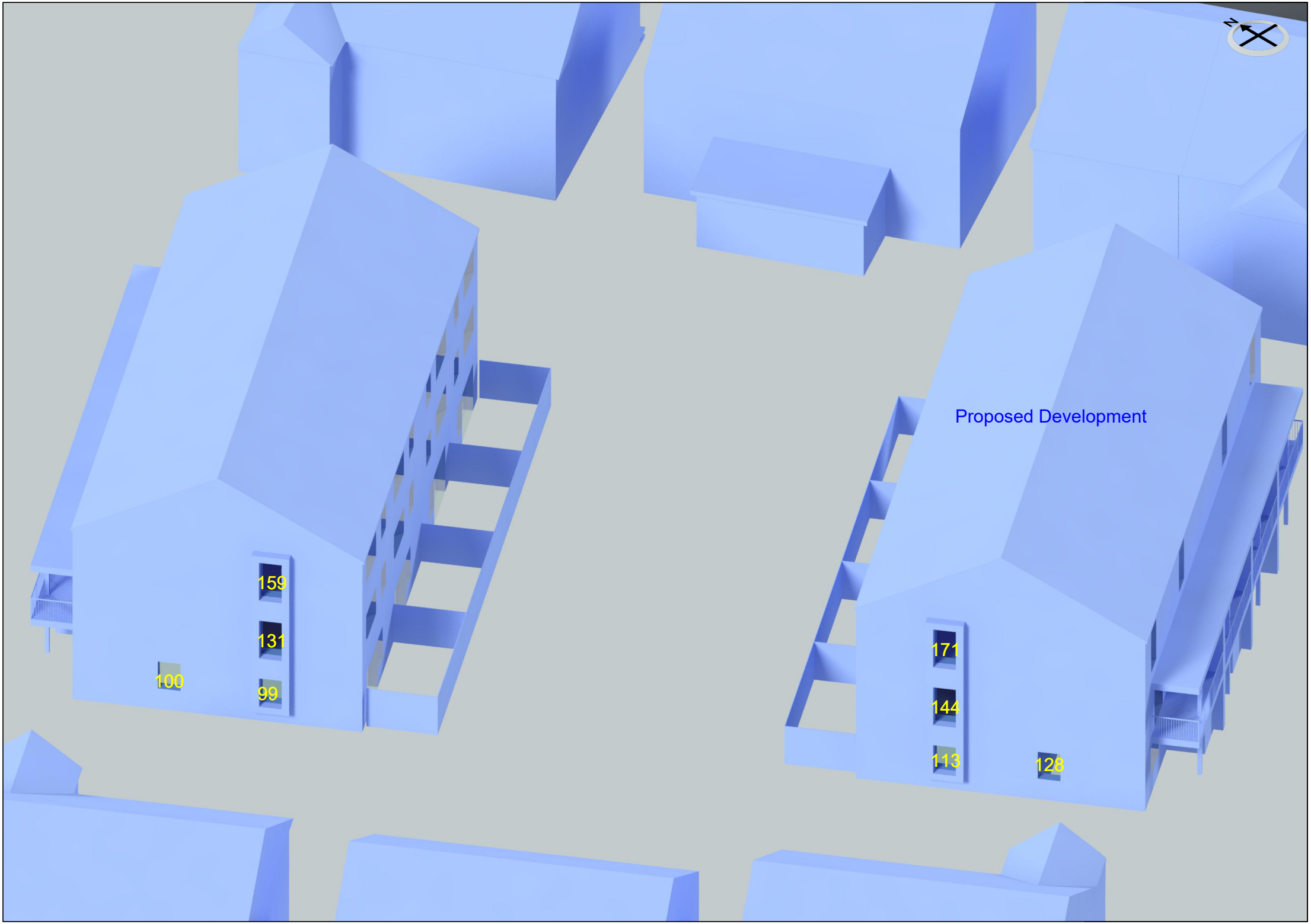

Proposed Development
78
77
96
53
52
76
28
27
51
2
1
26

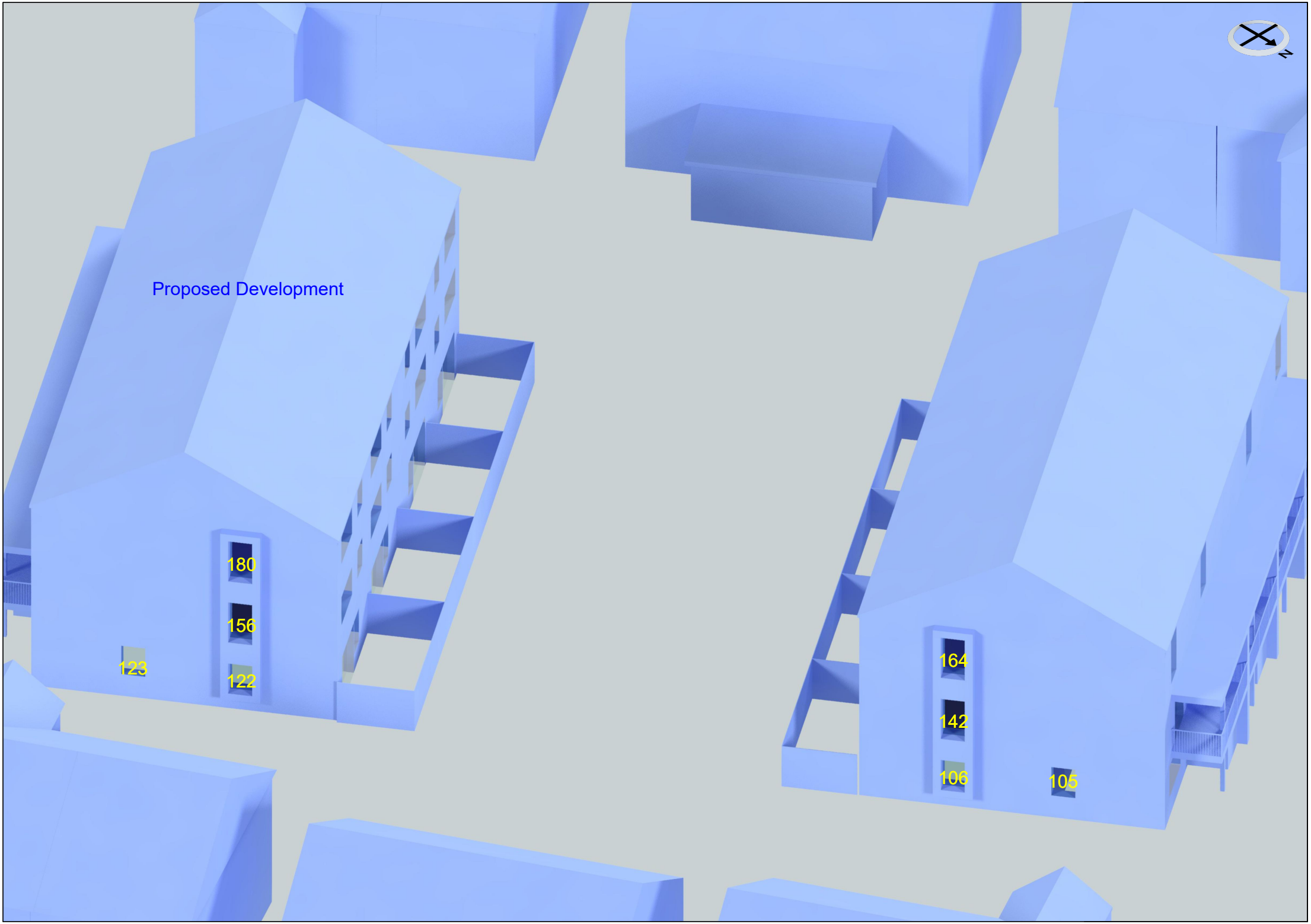

Proposed Development
65
40
87
64
63
62
39
38
37
13
12
11
85
60
35
9
84
59
34
8
83
82
58
57
33
32
7
6
81
56
31
5
80
55
30
4
79
54
29
3

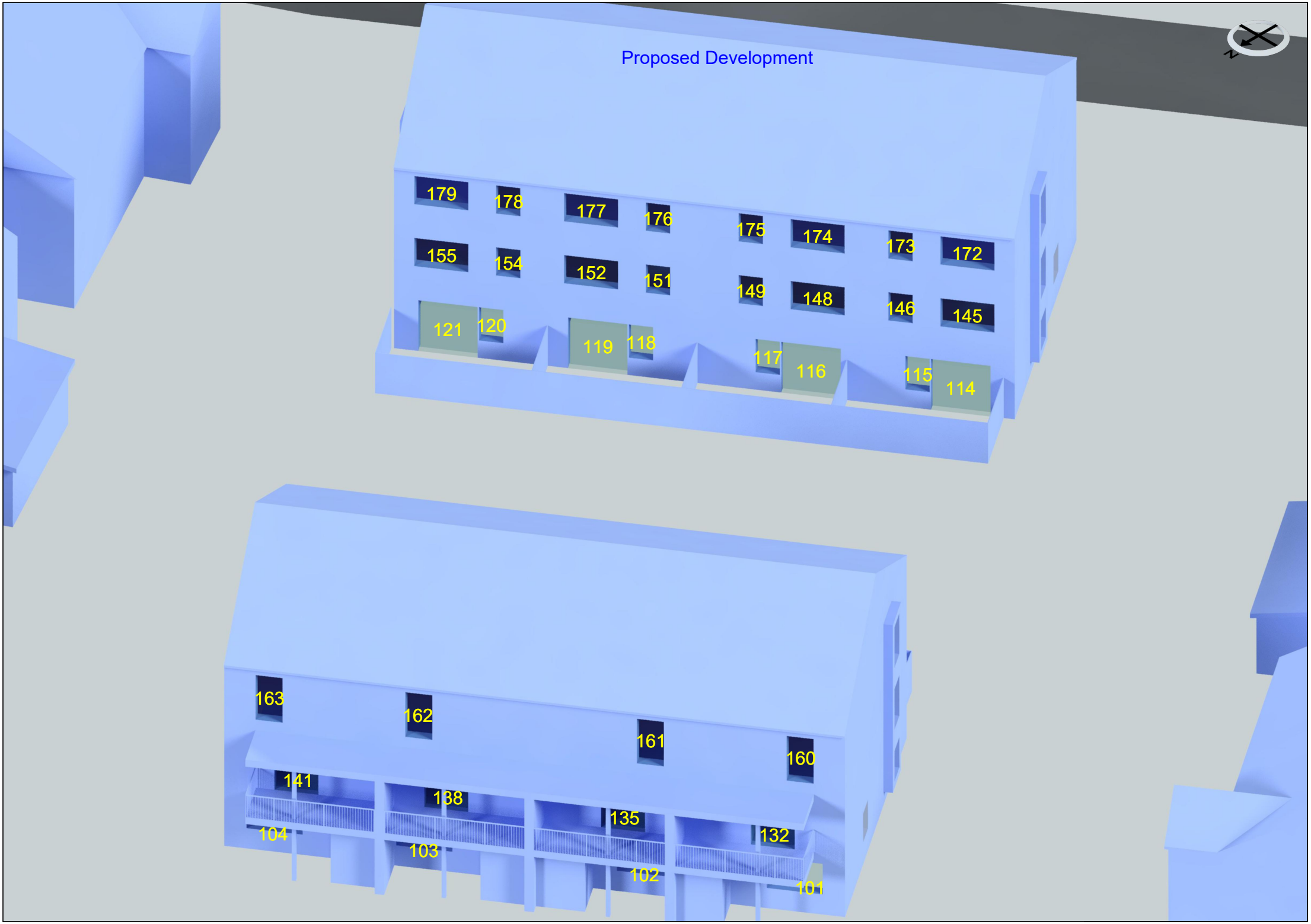

Proposed Development
95
94
93
92
91
90
89
88
75
74
73
72
71
70
69
68
67
66
50
49
48
47
46
45
44
43
42
41
25
24
23
22
21
20
19
18
16
15
14
17

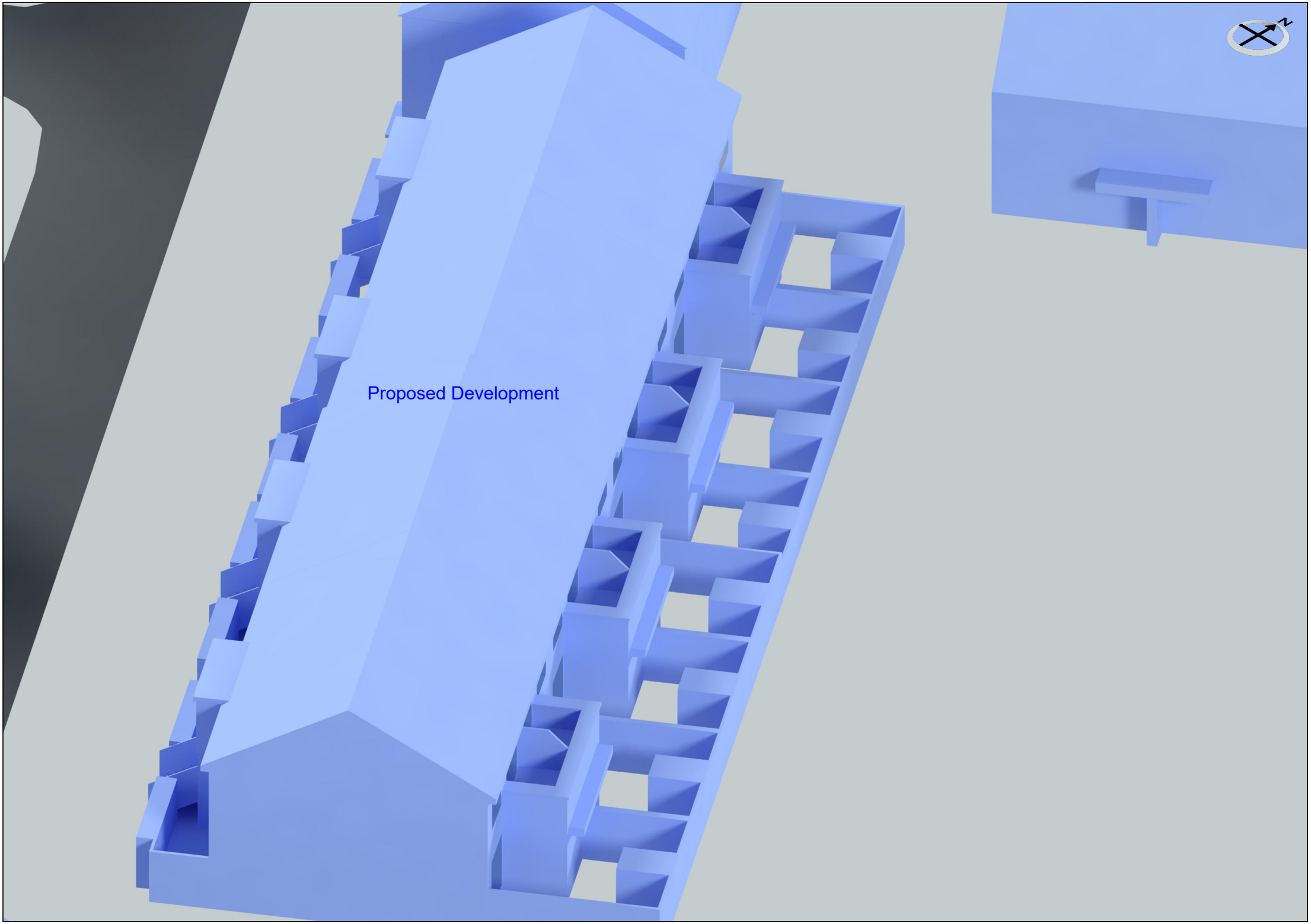

Proposed Development
86
61
36
10

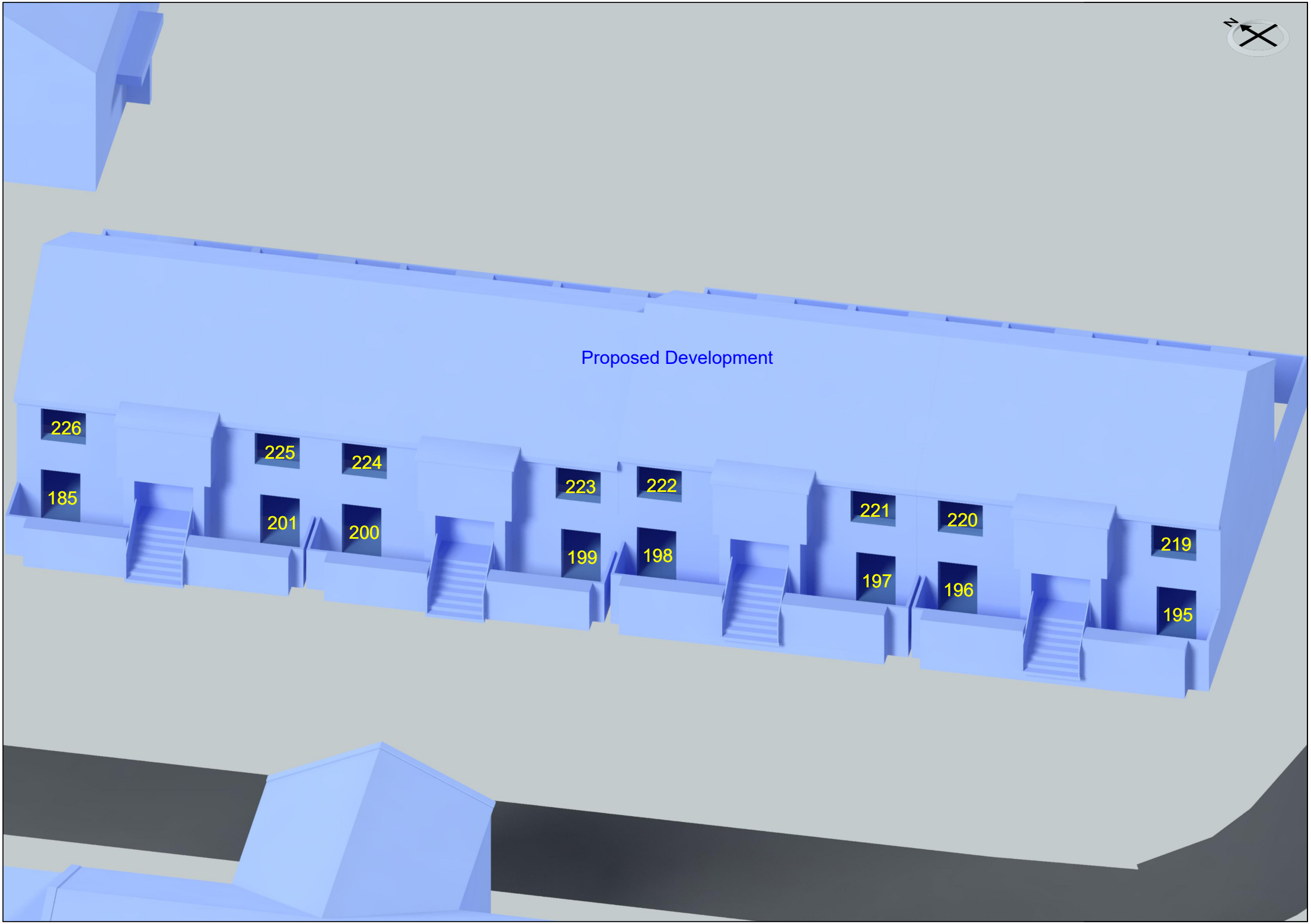

158
157
170
169
168
167
166
165
130
129
134
133
137
136
140
139
98
97
112
111
110
109
108
107
Proposed Development
184
183
182
181
143
147
150
153
127
126
125
124

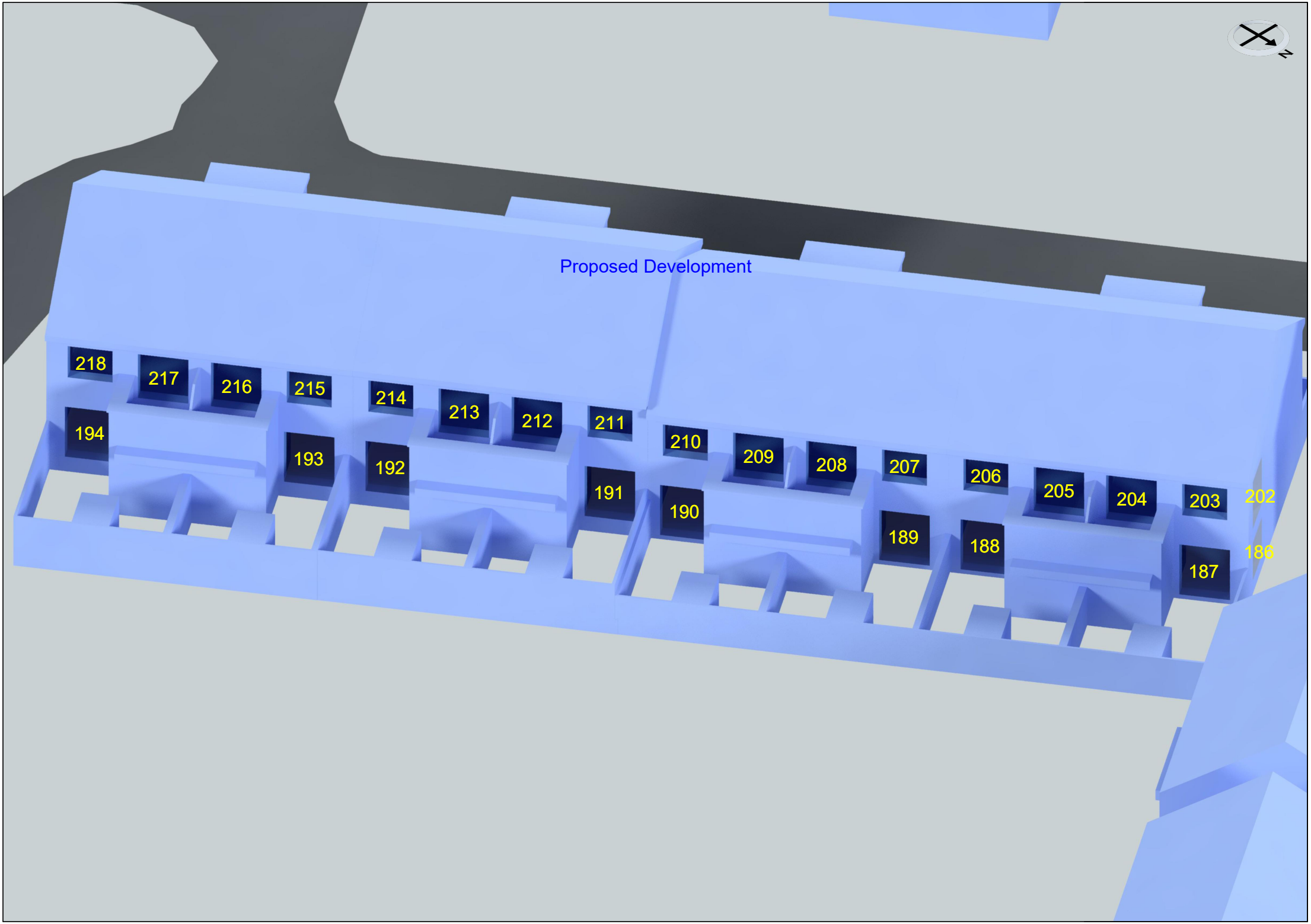

Proposed Development
159
131
100
99
171
144
113
128

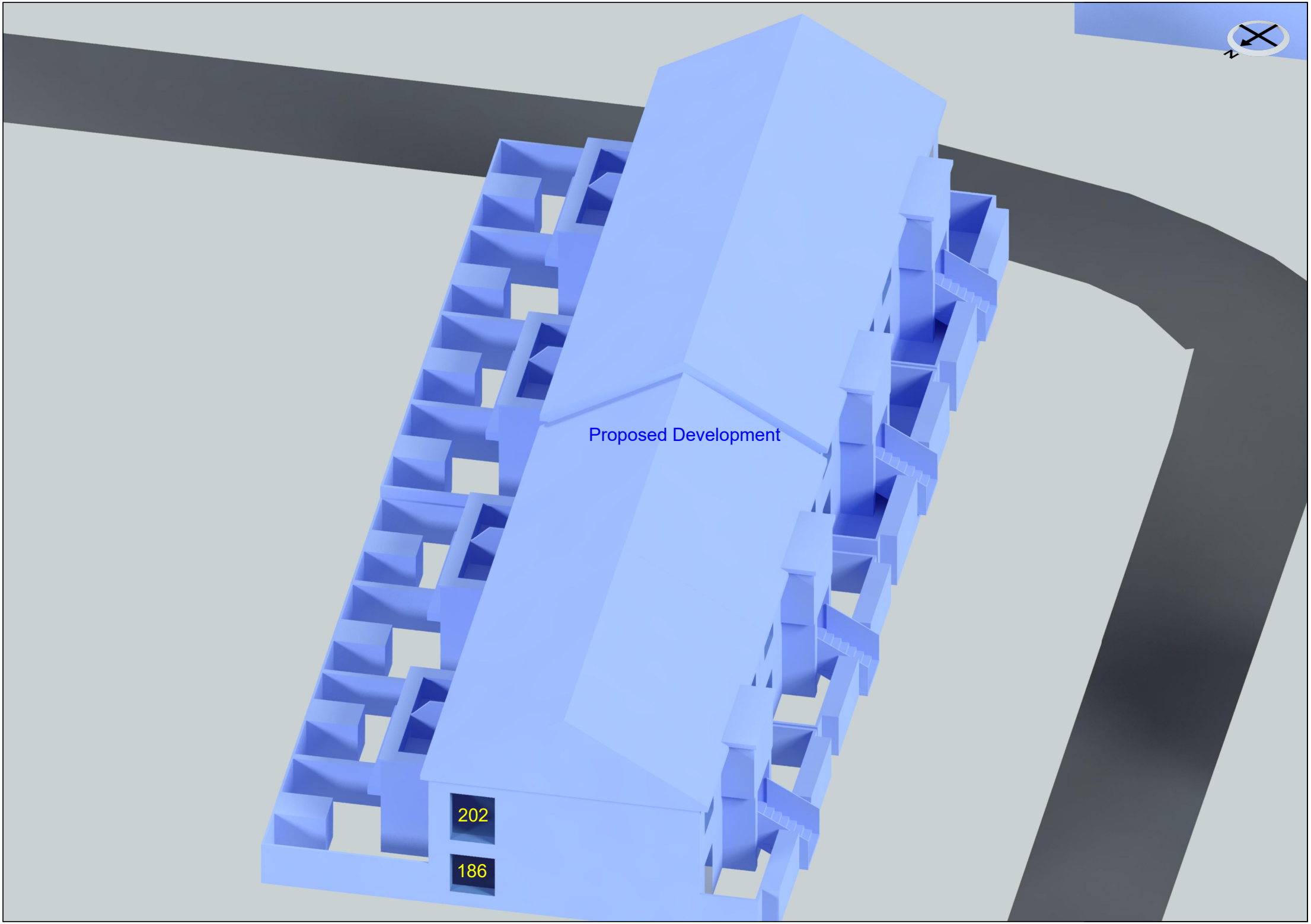

Proposed Development
180
156
123
122
164
142
106
105

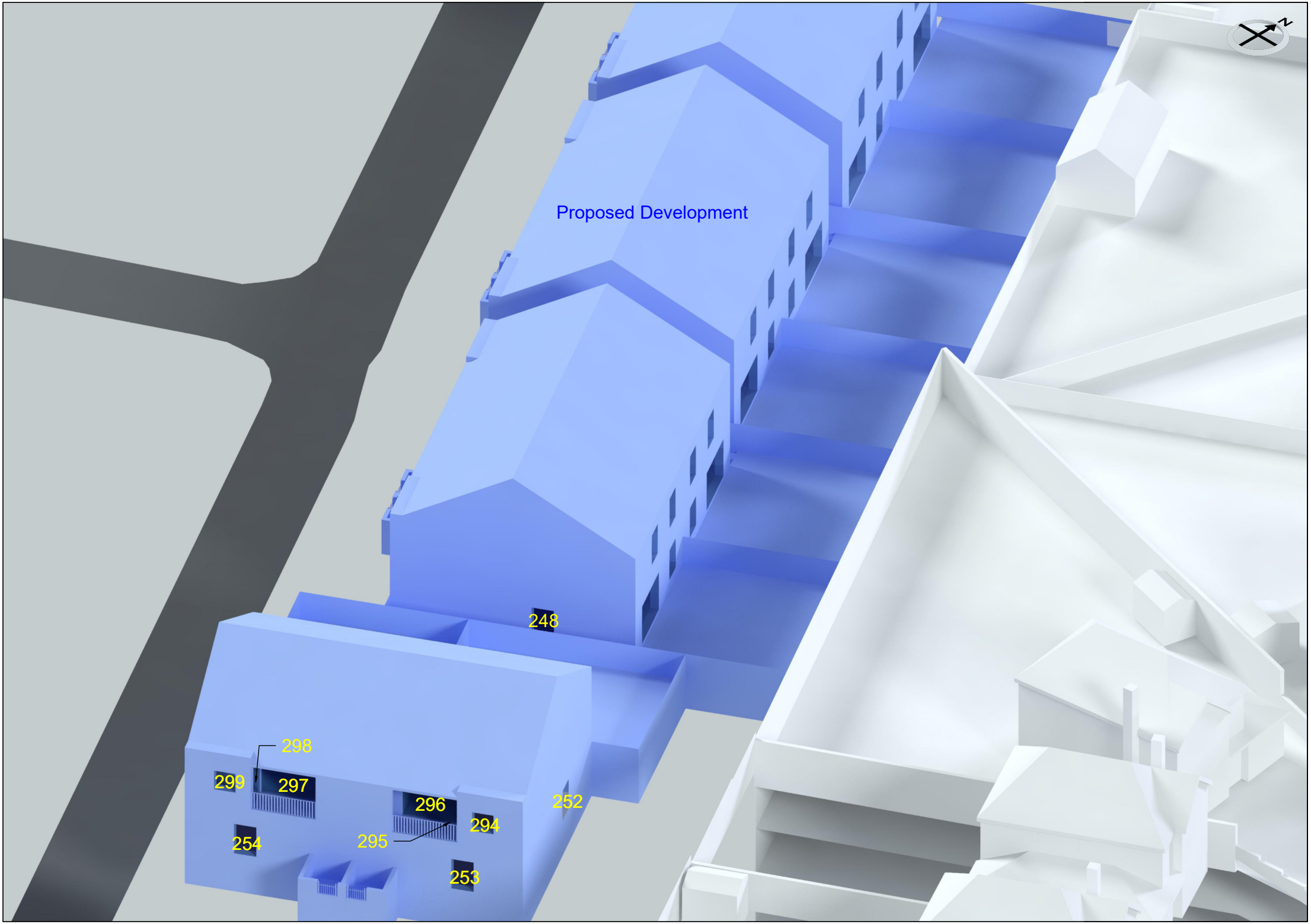

Proposed Development
179
178
177
176
175
174
173
172
155
154
152
151
149
148
146
145
121
120
119
118
117
116
115
114
163
162
161
160
141
138
135
132
104
103
102
101

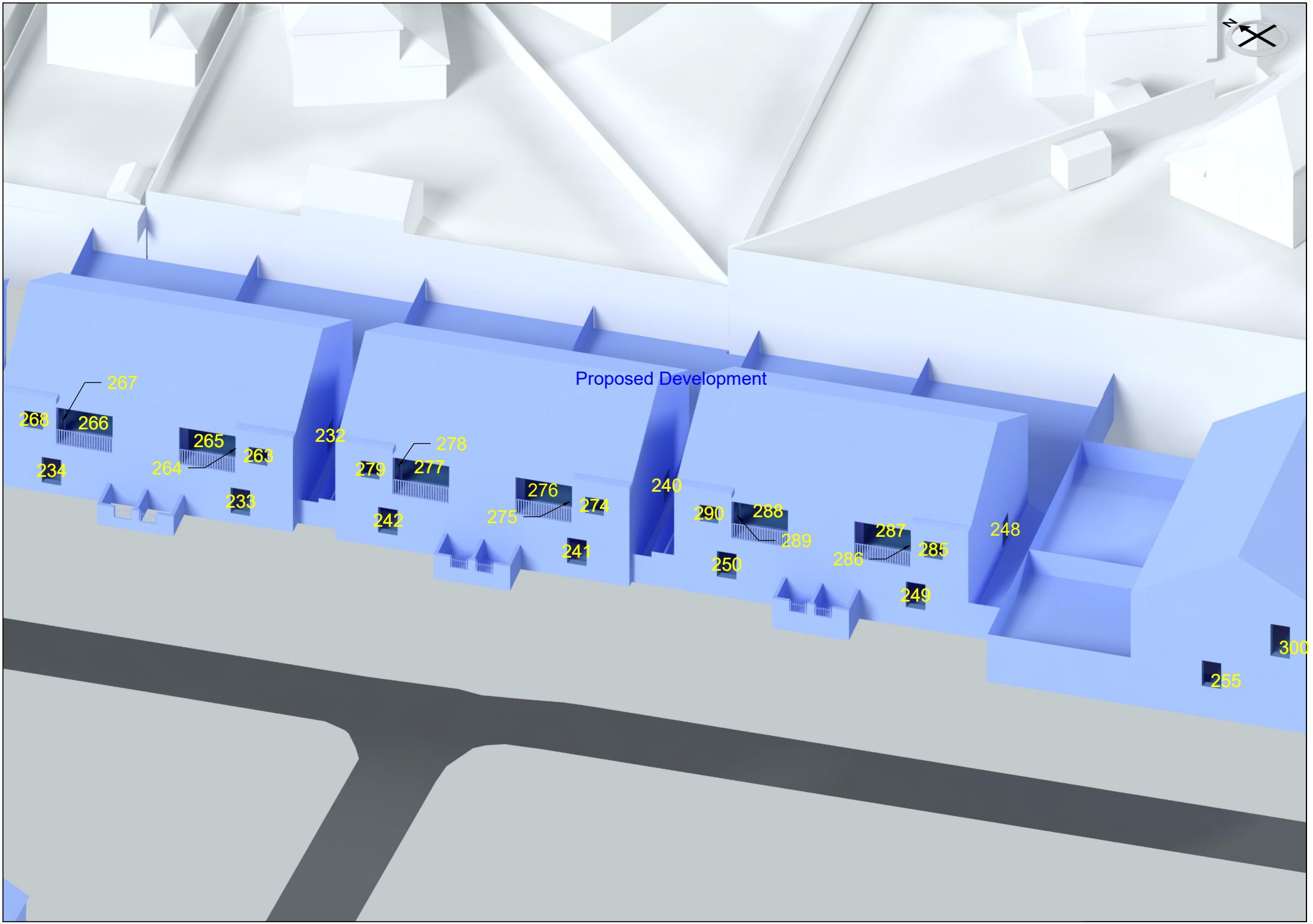

Proposed Development


N
Proposed Development
226
225
224
223
222
221
220
219
185
201
200
199
198
197
196
195

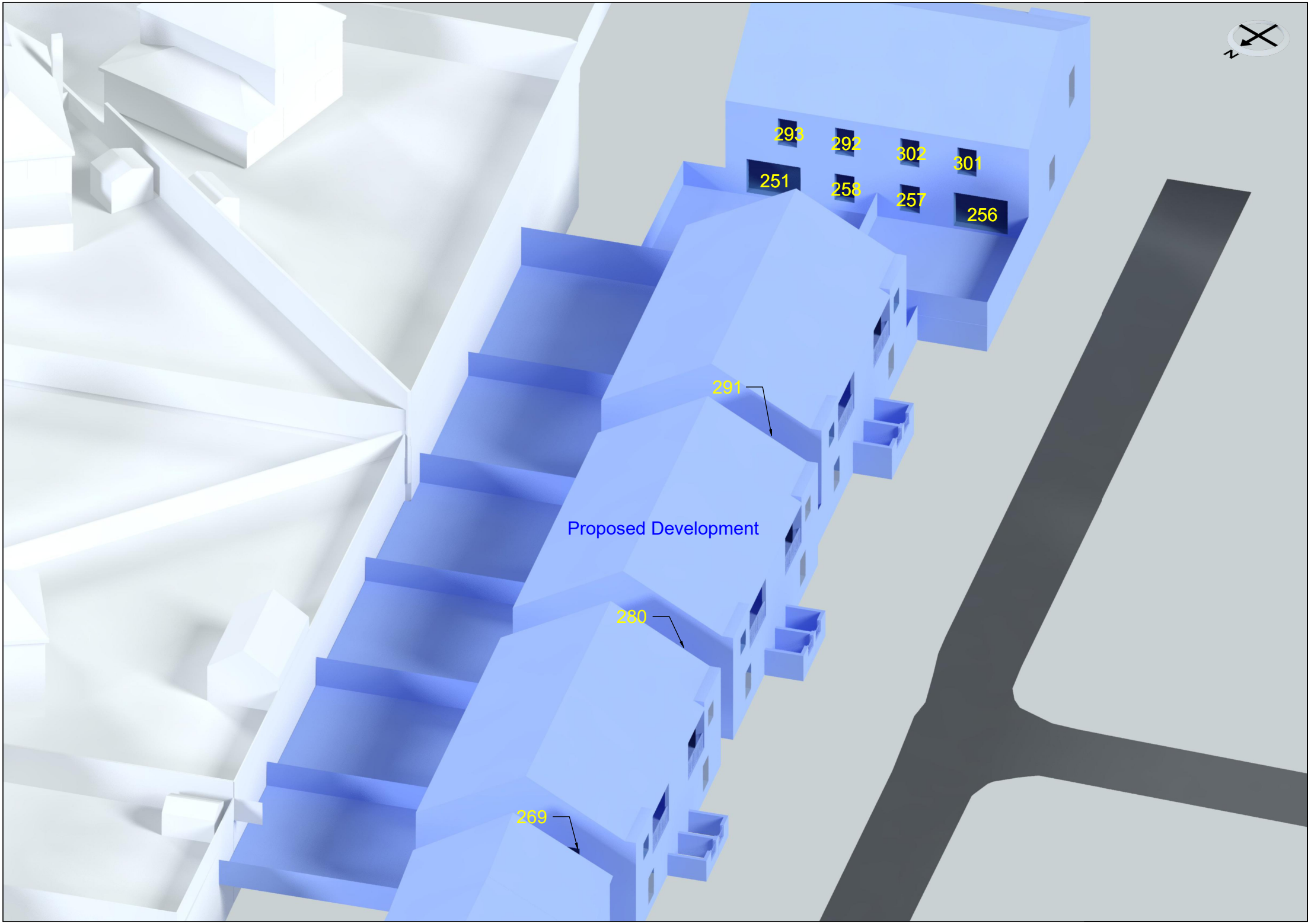

Proposed Development
218
217
216
215
214
213
212
211
210
209
208
207
206
205
204
203
202
194
193
192
191
190
189
188
187
186

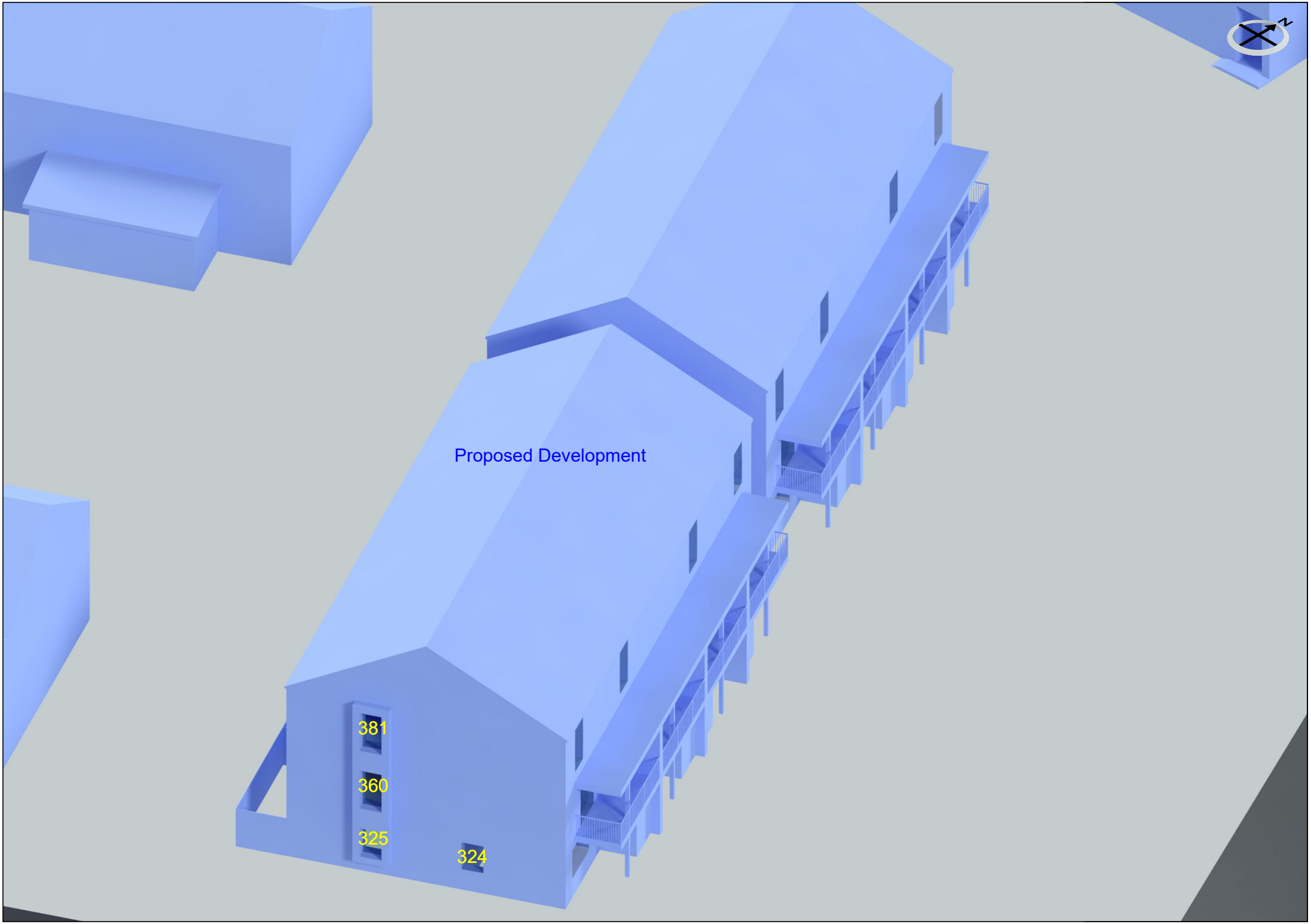

Proposed Development
202
186


Proposed Development
248
298
299
297
296
294
254
295
253
252

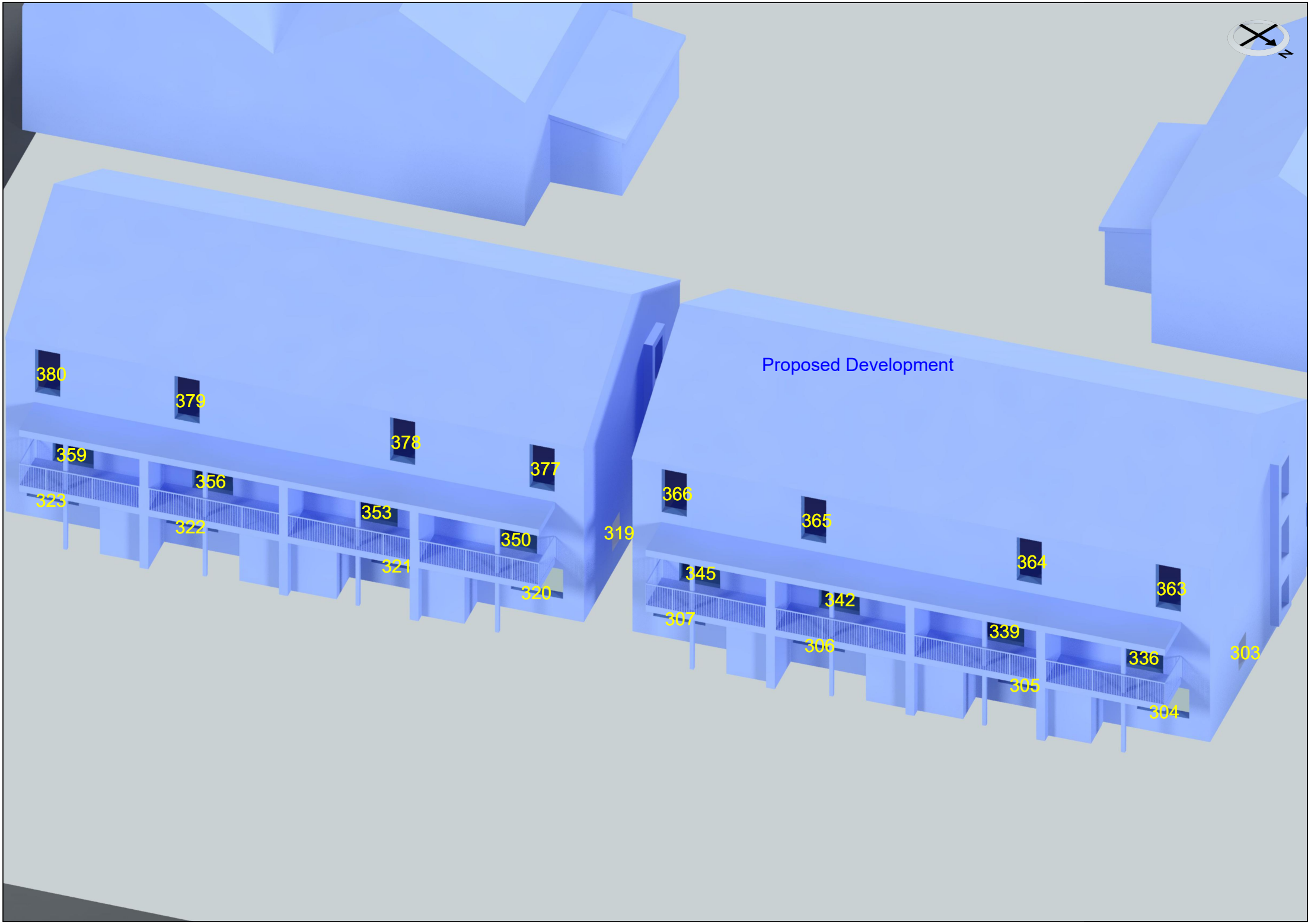

Proposed Development
267
268
266
265
263
234
264
233
232
279
278
277
276
275
274
242
241
240
290
288
289
287
286
285
250
249
248
255
300

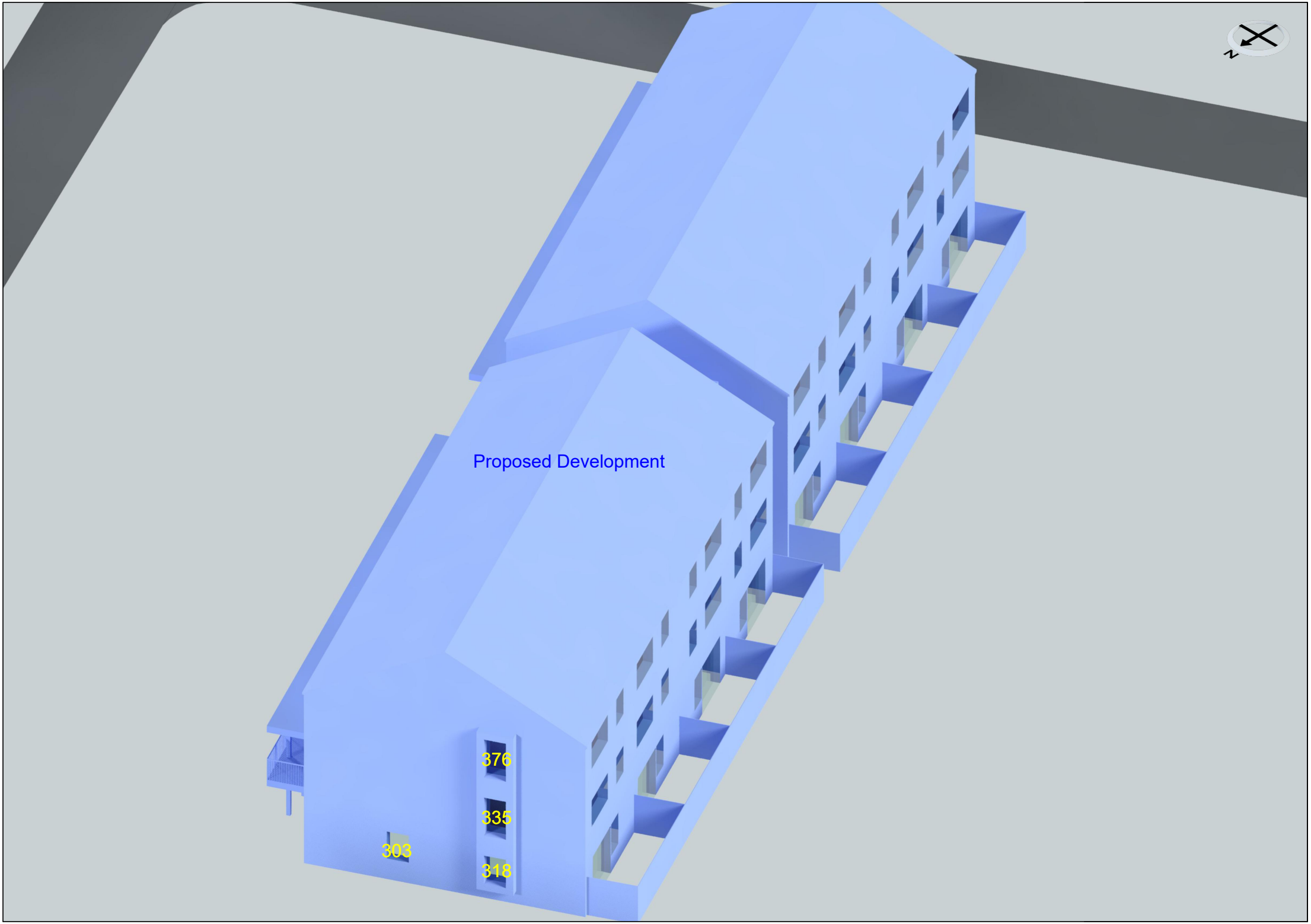
Proposed Development
302
301
256
292
257
293
258
251
252
284
283
282
281
247
246
245
244
243
291
273
272
271
270
239
238
237
236
280
235
262
261
260
259
231
230
229
228
269
227


293
292
302
301
251
258
257
256
291
Proposed Development
280
269


Proposed Development
381
360
325
324

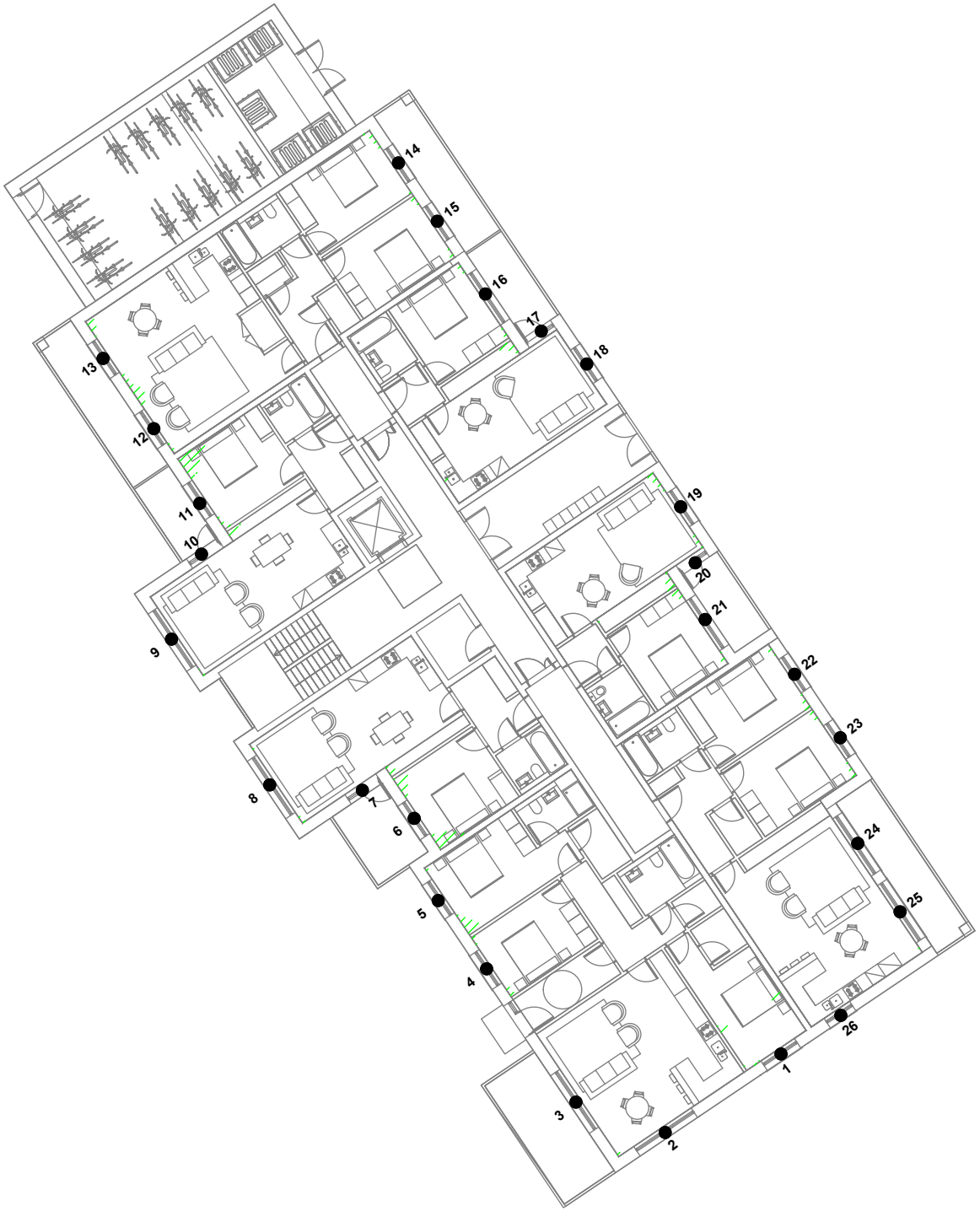
Proposed Development
375
374
373
372
371
370
369
368
367
338
337
341
340
344
343
348
347
346
317
316
315
314
313
312
311
310
309
389
388
387
386
385
384
383
382
352
351
355
354
358
357
362
361
333
332
331
330
329
328
327
326


Proposed Development
380
379
378
377
359
356
353
350
323
322
321
320
319
366
365
364
363
345
342
339
336
307
306
305
304
303


Proposed Development
376
335
303
318

Proposed Apartment Block Ground Floor

Window Key and No Sky Line Contours



Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	1 of 14
Rev.	-

Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Proposed Apartment Block First Floor

Window Key and No Sky Line Contours

Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	2 of 14
Rev.	-

Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Proposed Apartment Block Second Floor

Window Key and No Sky Line Contours

Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	3 of 14
Rev.	-

Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Proposed Apartment Block Third Floor

Window Key and No Sky Line Contours

Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	4 of 14
Rev.	-

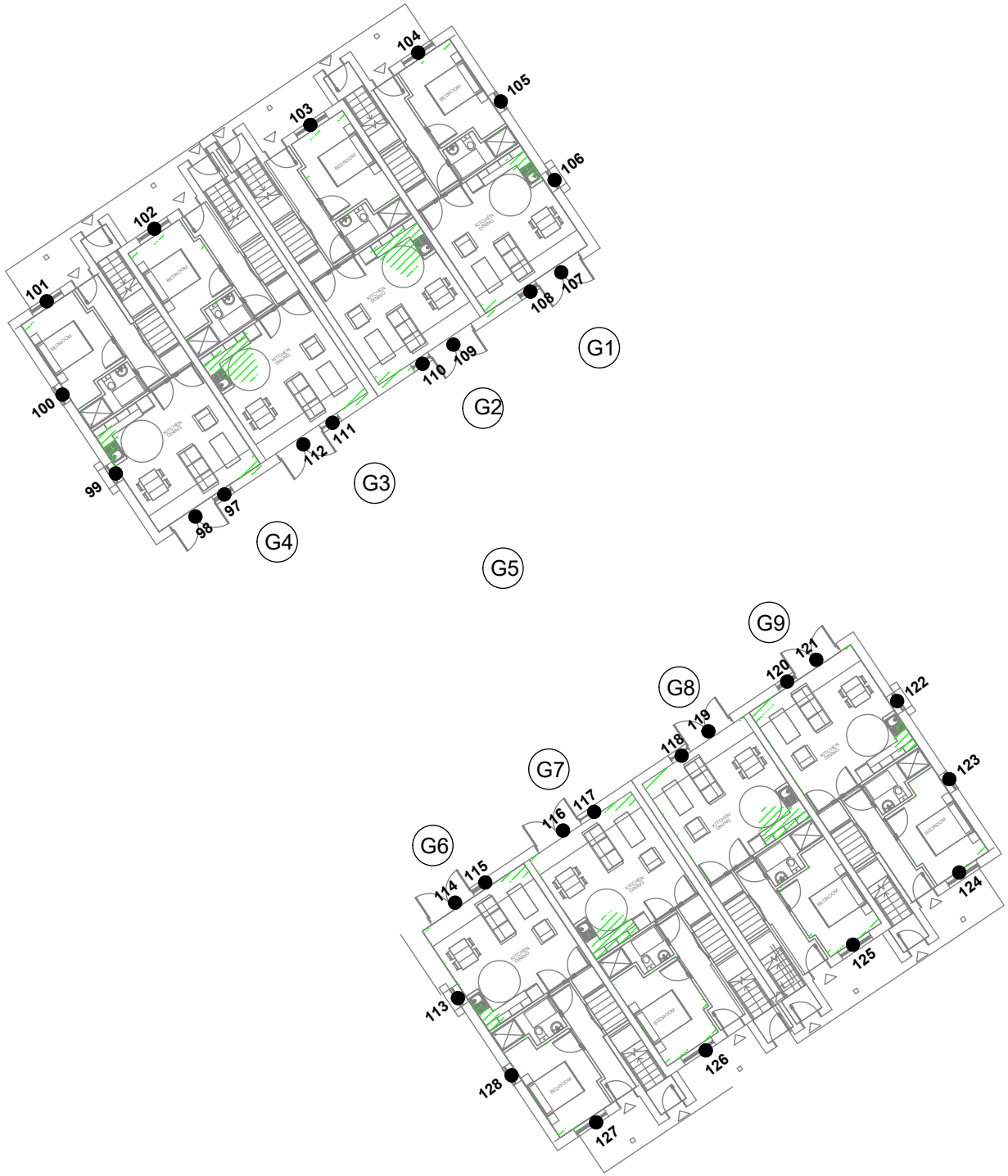
Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Proposed Urban Block 14 Ground Floor

Window Key and No Sky Line Contours



Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	5 of 14
Rev.	-

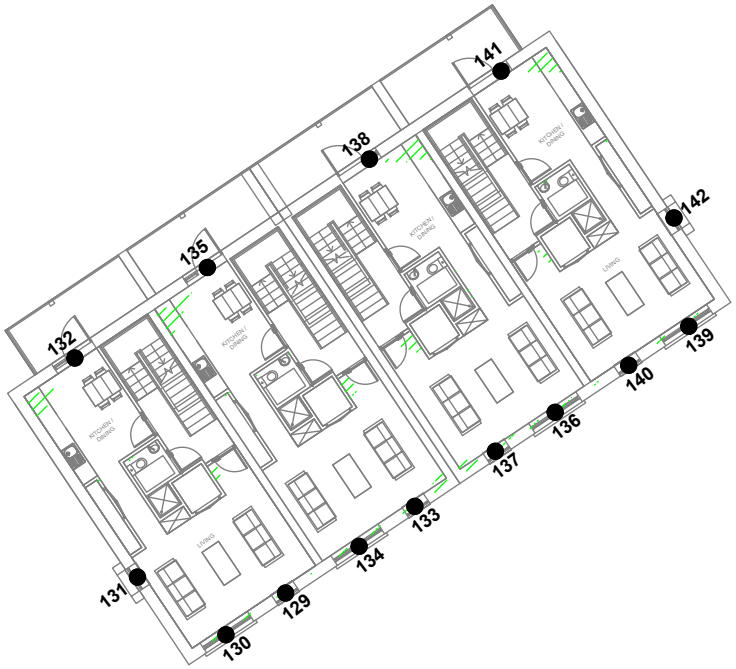
Rev	Date	Details of revision

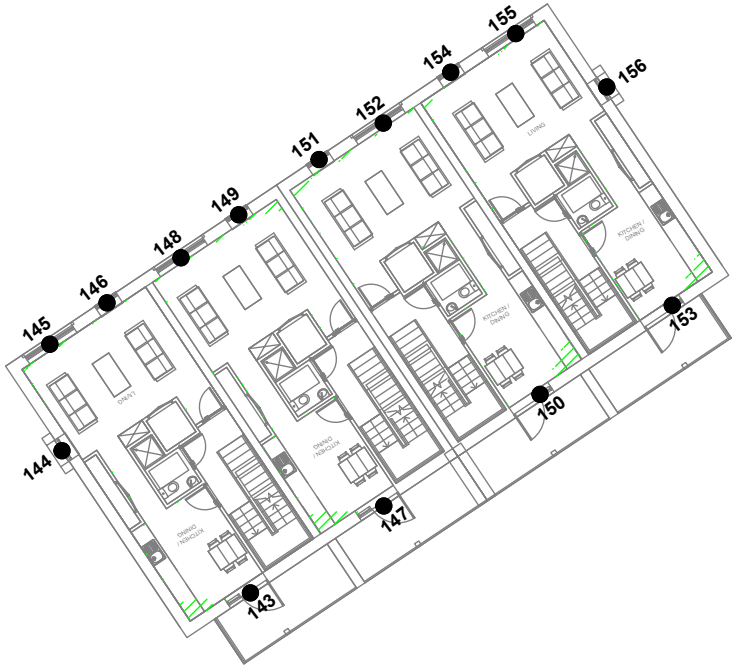
RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Proposed Urban Block 14 First Floor

Window Key and No Sky Line Contours





Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	6 of 14
Rev.	-

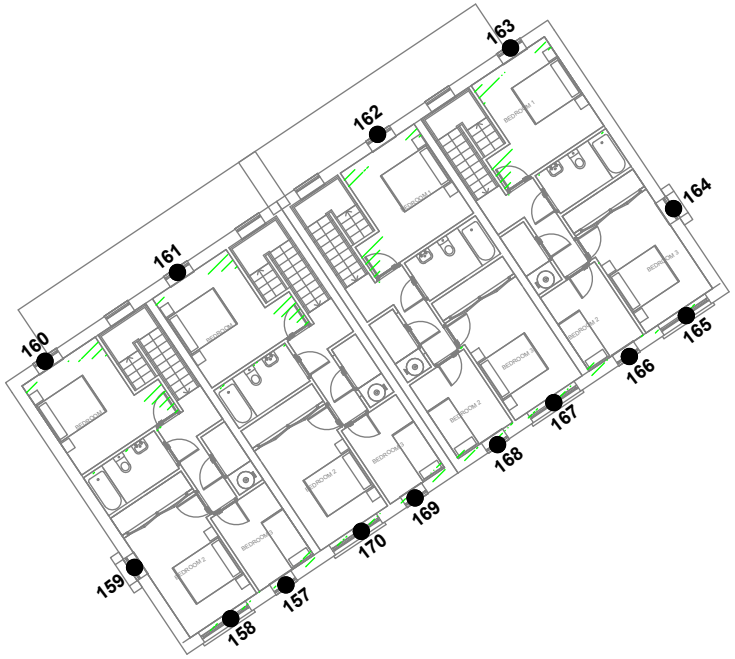
Rev	Date	Details of revision

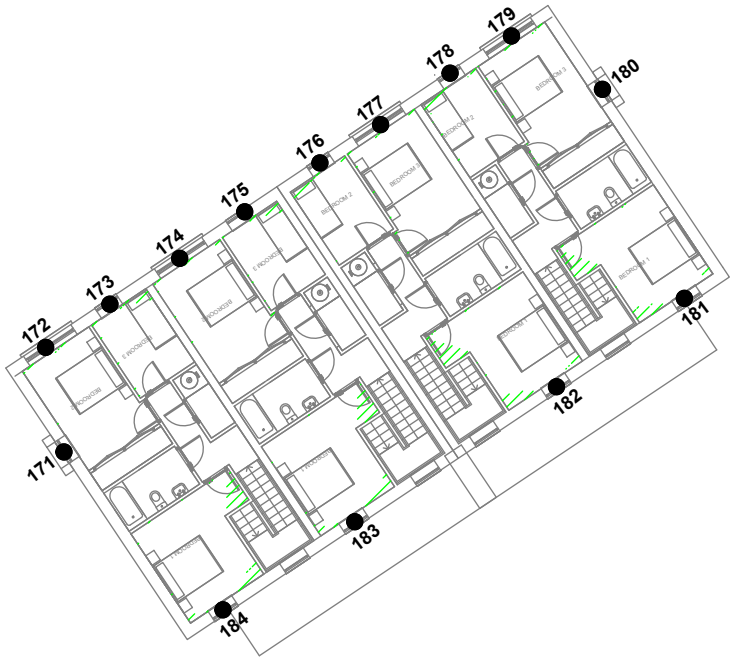
RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Proposed Urban Block 14 Second Floor

Window Key and No Sky Line Contours





Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	7 of 14
Rev.	-

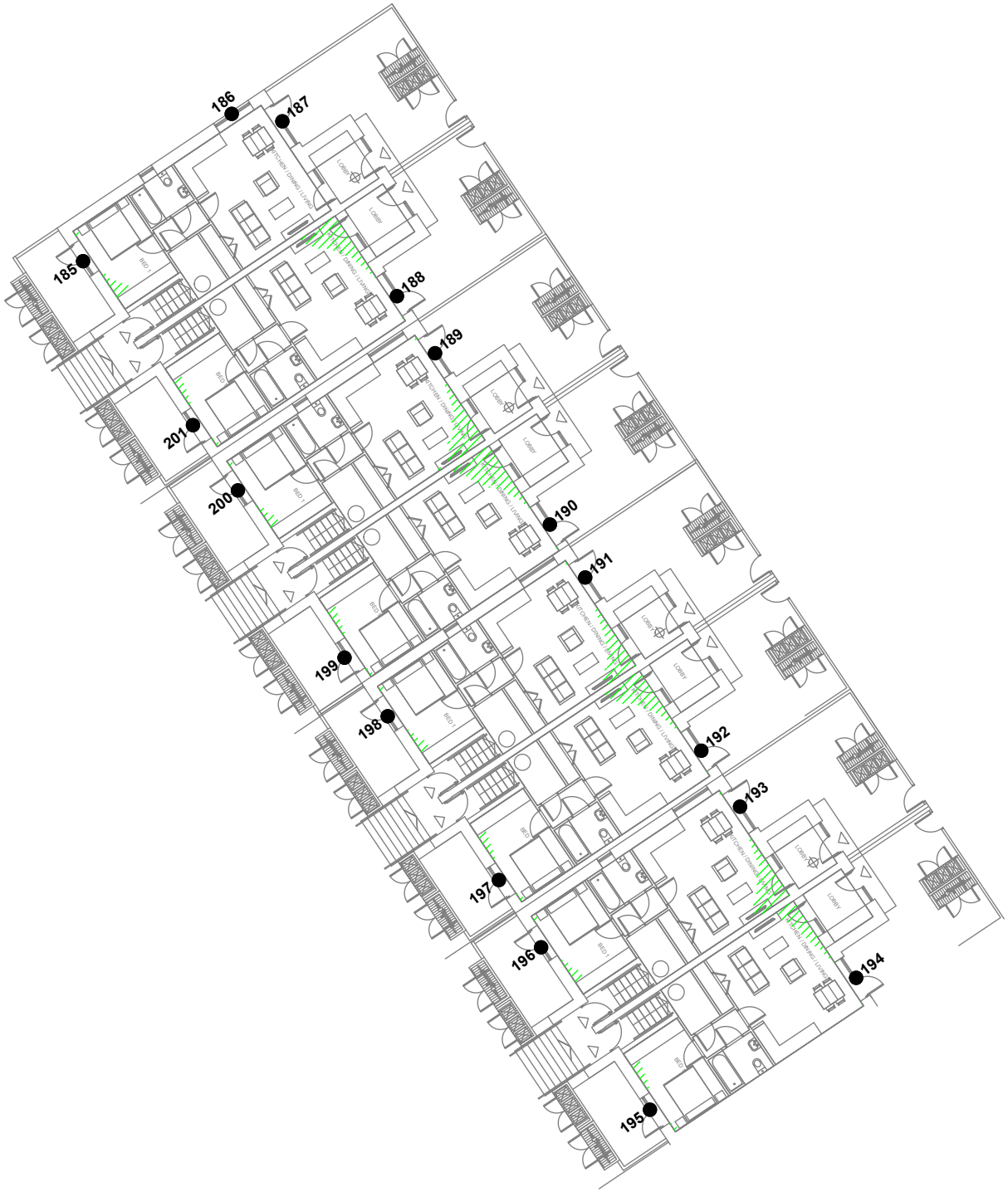
Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Proposed Urban Block 7 Ground Floor

Window Key and No Sky Line Contours



Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	8 of 14
Rev.	-

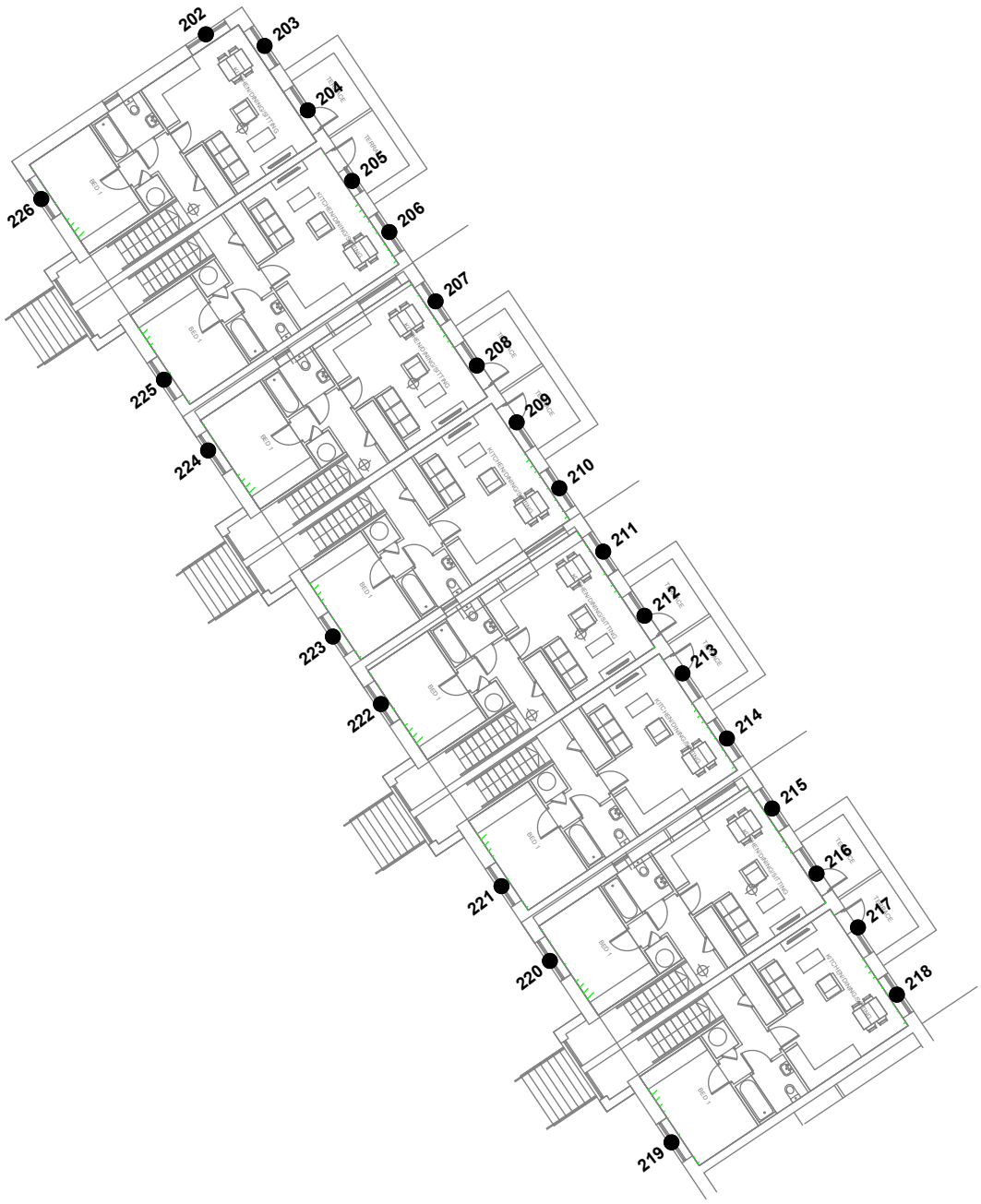
Rev	Date	Details of revision

Right of Light Consulting
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Proposed Urban Block 7 First Floor

Window Key and No Sky Line Contours



Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	9 of 14
Rev.	-

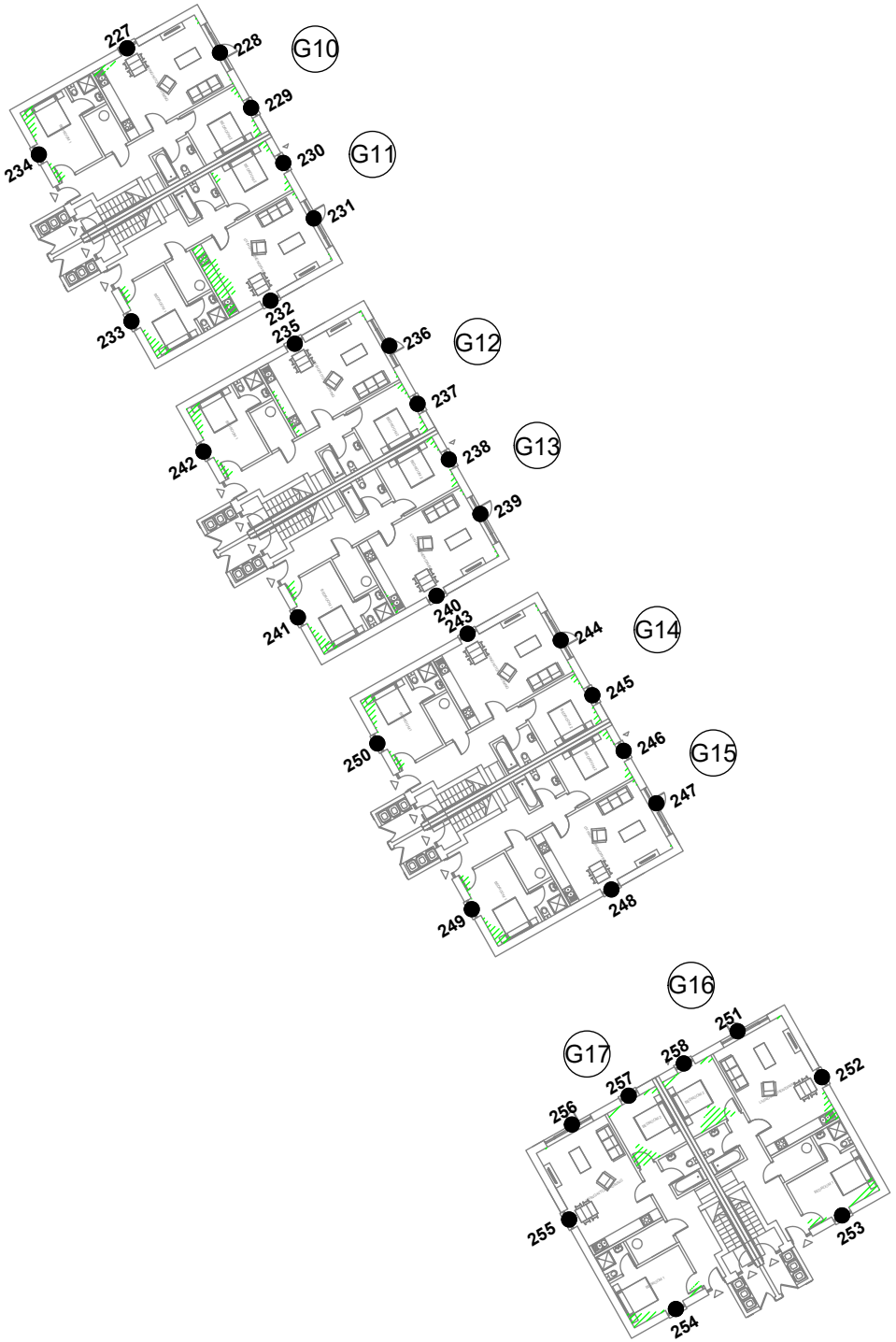
Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Proposed Urban Block 8 Ground Floor

Window Key and No Sky Line Contours



Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	10 of 14
Rev.	-

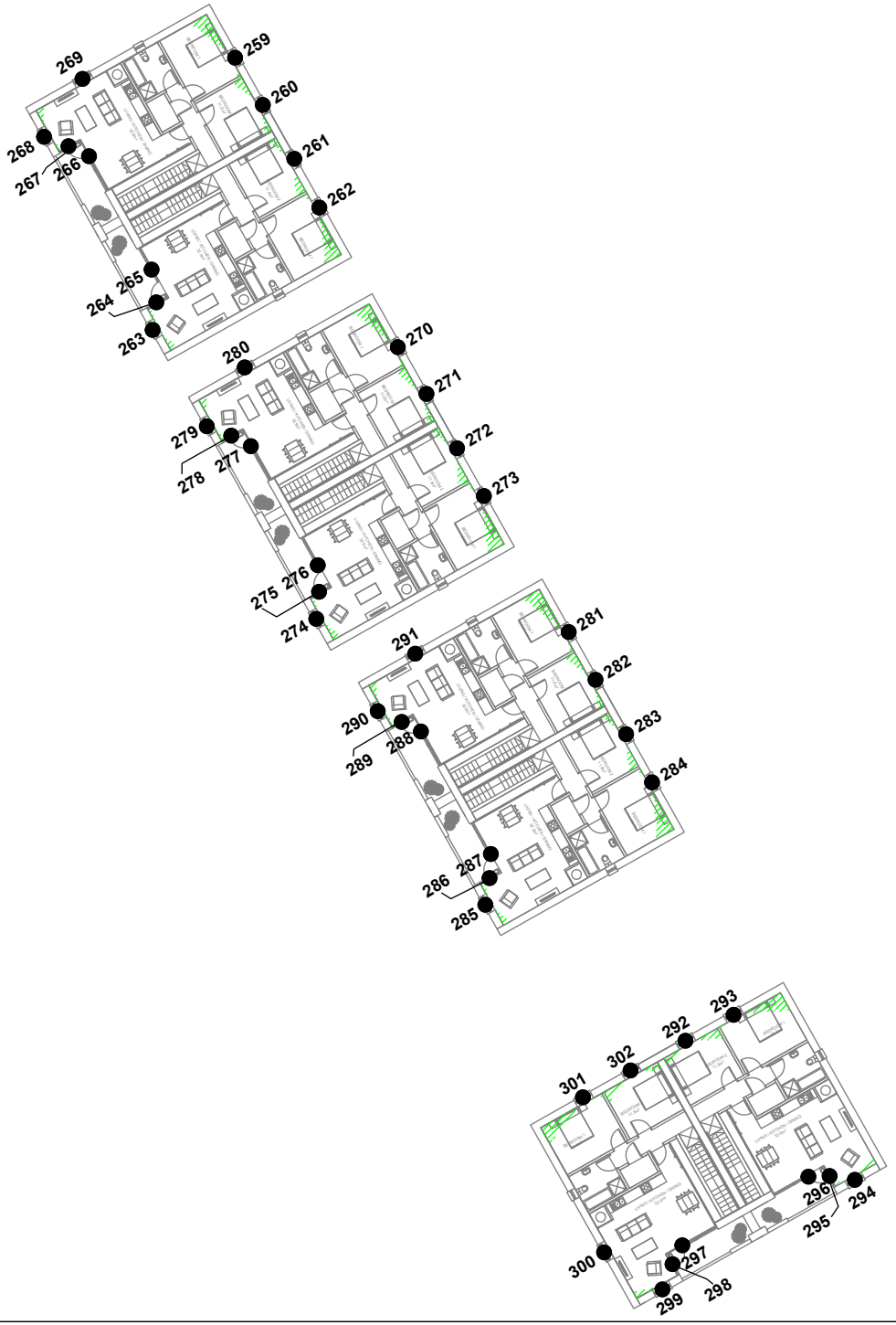
Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Proposed Urban Block 8 First Floor

Window Key and No Sky Line Contours



Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	11 of 14
Rev.	-

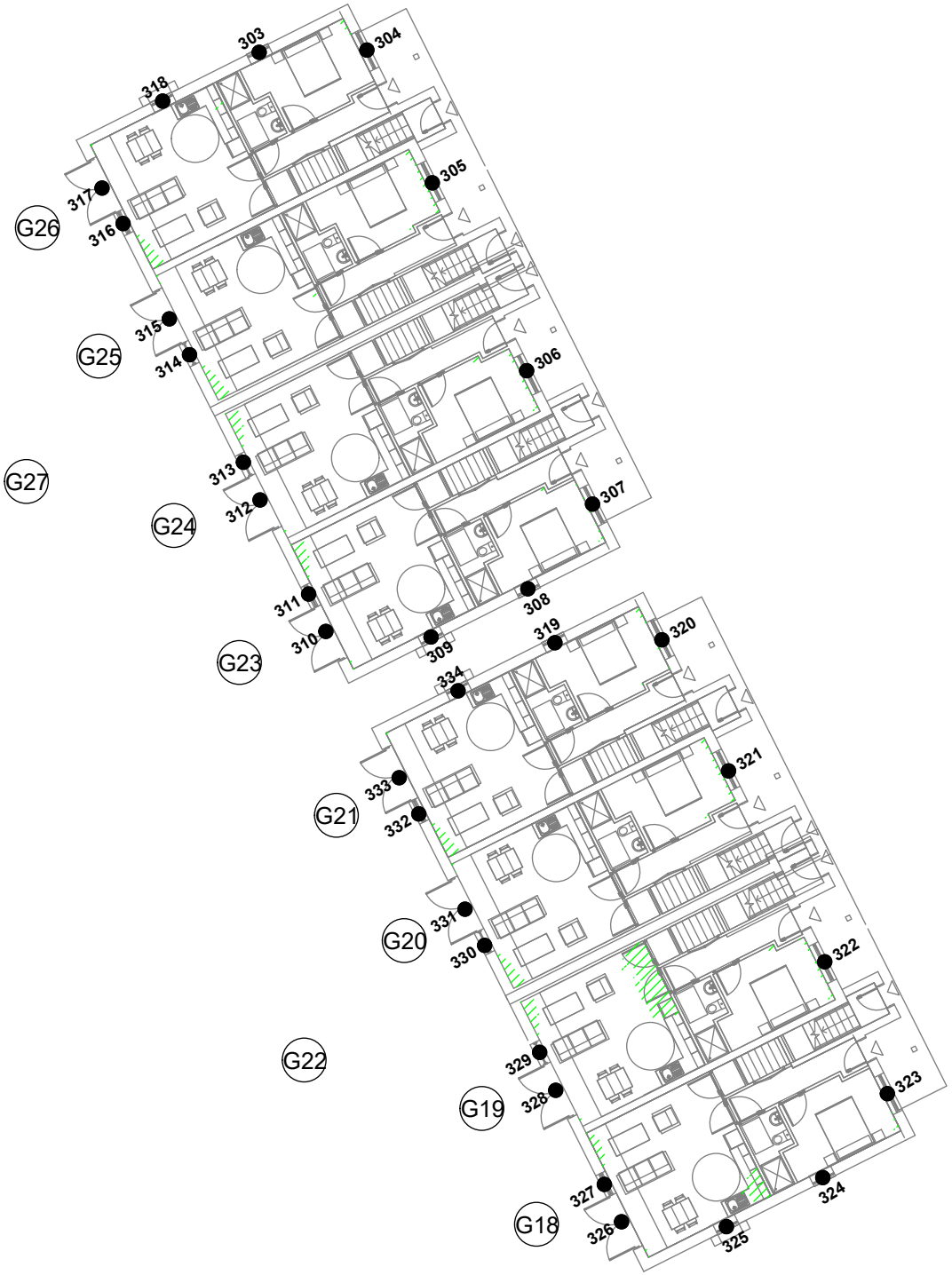
Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Proposed Urban Block 13 Ground Floor

Window Key and No Sky Line Contours



Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	12 of 14
Rev.	-

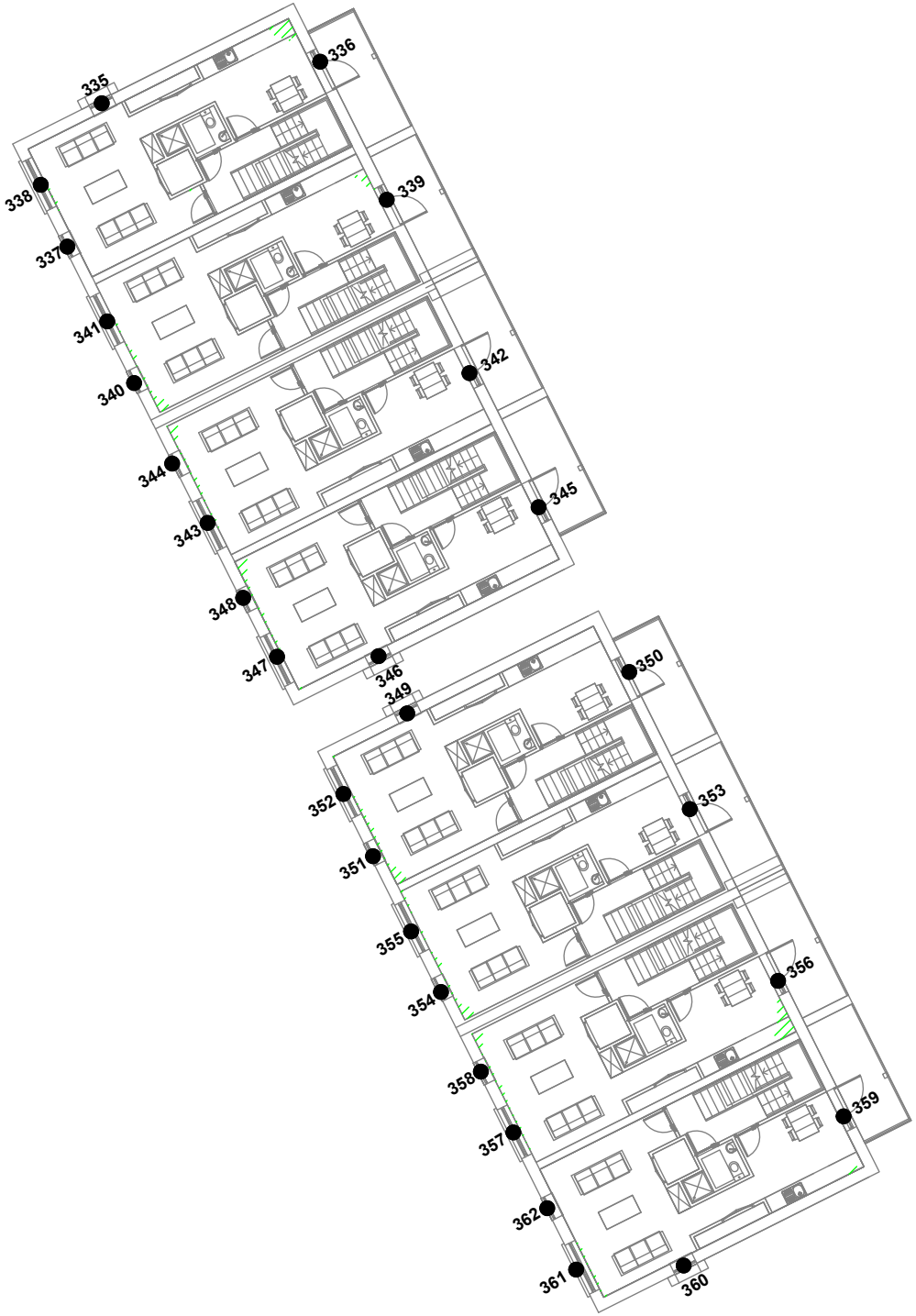
Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Proposed Urban Block 13 First Floor

Window Key and No Sky Line Contours



Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	13 of 14
Rev.	-

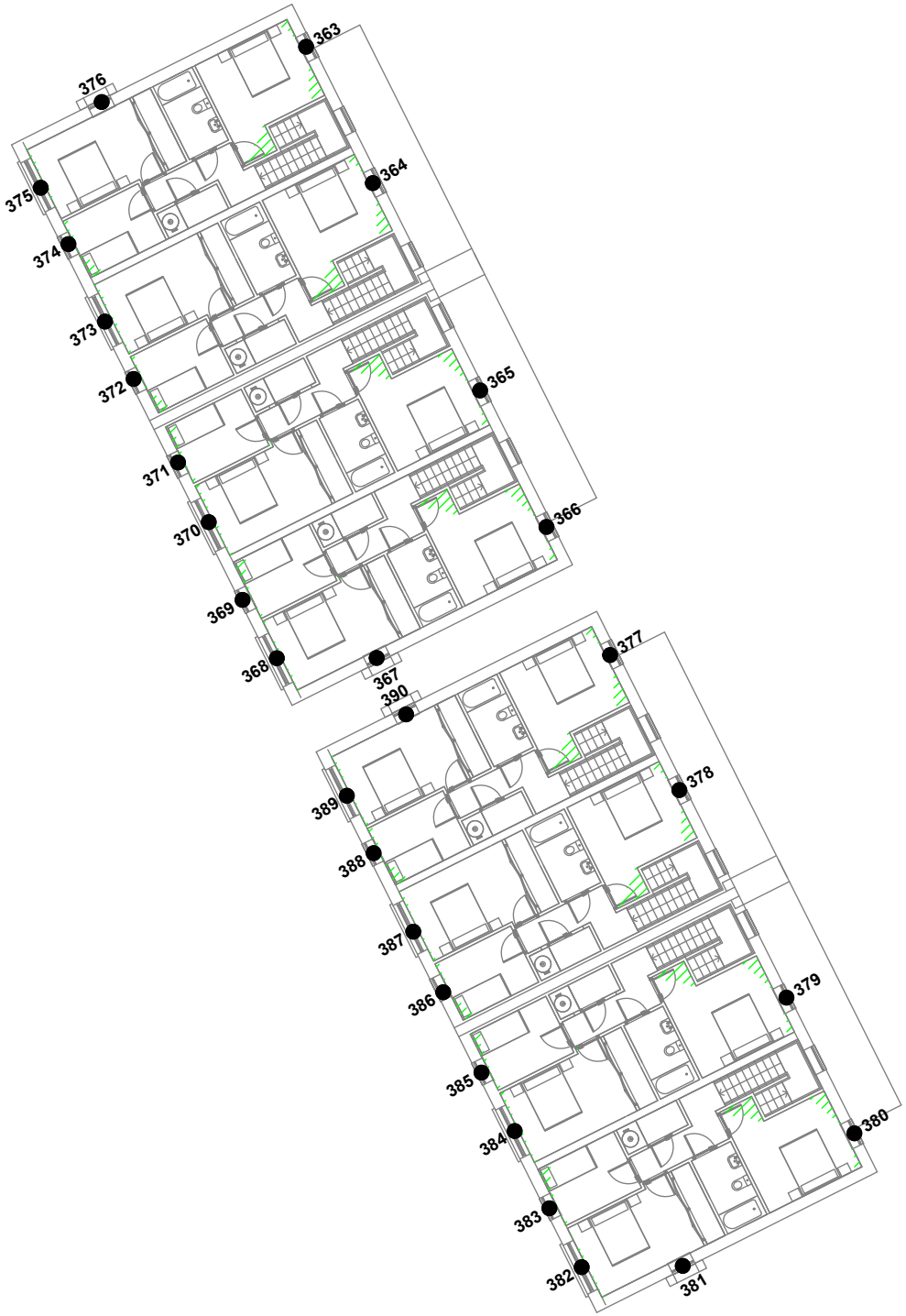
Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Proposed Urban Block 13 Second Floor

Window Key and No Sky Line Contours



Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Drawing Title:	Window Key and No Sky Line Contours
Scale:	Do not scale
Drawing No:	14 of 14
Rev.	-

Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

APPENDIX 2

DAYLIGHT & SUNLIGHT DATA

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Apartment Block									
Ground Floor									
Window 1 (lower)			0.68	1.07	72.4	0.71	84.3	0.7%	
Window 1 (upper)			0.68	1.76	72.4	0.71	84.3	2.8%	
Total ADF for room	Bedroom	1.0%						**3.5%**	**Pass**
Window 2 (lower)			0.68	1.84	130.97	0.65	84.6	0.6%	
Window 2 (upper)			0.68	3.02	130.97	0.65	84.6	2.3%	
Window 3 (lower)			0.68	1.85	130.97	0.65	77.2	0.5%	
Window 3 (upper)			0.68	3.69	130.97	0.65	88.8	3.0%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**6.4%**	**Pass**
Window 4 (lower)			0.68	1.07	59.87	0.7	85.9	0.8%	
Window 4 (upper)			0.68	2.14	59.87	0.7	86.7	4.1%	
Total ADF for room	Bedroom	1.0%						**4.9%**	**Pass**
Window 5 (lower)			0.68	1.07	75.27	0.7	79.6	0.6%	
Window 5 (upper)			0.68	2.14	75.27	0.7	79.4	3.0%	
Total ADF for room	Bedroom	1.0%						**3.6%**	**Pass**
Window 6 (lower)			0.68	1.07	60.67	0.7	40.7	0.4%	
Window 6 (upper)			0.68	2.14	60.67	0.7	30.1	1.4%	
Total ADF for room	Bedroom	1.0%						**1.8%**	**Pass**
Window 7 (lower)			0.68	0.99	123.05	0.67	31.5	0.1%	
Window 7 (upper)			0.68	1.97	123.05	0.67	23.6	0.5%	
Window 8 (lower)			0.68	1.84	123.05	0.67	89.8	0.7%	
Window 8 (upper)			0.68	3.67	123.05	0.67	89.6	3.3%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.6%**	**Pass**
Window 9 (lower)			0.68	1.84	123.05	0.67	89.8	0.7%	
Window 9 (upper)			0.68	3.67	123.05	0.67	89.6	3.3%	
Window 10 (lower)			0.68	0.99	123.05	0.67	30.2	0.1%	
Window 10 (upper)			0.68	1.97	123.05	0.67	29.7	0.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.7%**	**Pass**
Window 11 (lower)			0.68	1.07	60.67	0.7	43.8	0.4%	
Window 11 (upper)			0.68	2.14	60.67	0.7	34.9	1.6%	
Total ADF for room	Bedroom	1.0%						**2.0%**	**Pass**
Window 12 (lower)			0.68	1.07	145.41	0.68	51.1	0.2%	
Window 12 (upper)			0.68	2.14	145.41	0.68	40.1	0.8%	
Window 13 (lower)			0.68	1.07	145.41	0.68	51.3	0.2%	
Window 13 (upper)			0.68	2.14	145.41	0.68	40.4	0.8%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.0%**	**Pass**
Window 14 (lower)			0.68	1.07	62.21	0.7	47.9	0.4%	
Window 14 (upper)			0.68	1.76	62.21	0.7	38.2	1.5%	
Total ADF for room	Bedroom	1.0%						**1.9%**	**Pass**
Window 15 (lower)			0.68	1.07	63.82	0.7	48.5	0.4%	
Window 15 (upper)			0.68	1.76	63.82	0.7	38.4	1.4%	
Total ADF for room	Bedroom	1.0%						**1.8%**	**Pass**

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 16 (lower)			0.68	1.59	60.31	0.68	46.4	0.6%	
Window 16 (upper)			0.68	2.62	60.31	0.68	36.9	2.1%	
Total ADF for room	Bedroom	1.0%						**2.7%**	**Pass**
Window 17 (lower)			0.68	0.87	115.94	0.69	29.2	0.1%	
Window 17 (upper)			0.68	1.43	115.94	0.69	29.8	0.5%	
Window 18 (lower)			0.68	1.07	115.94	0.69	77.8	0.4%	
Window 18 (upper)			0.68	1.76	115.94	0.69	79.1	1.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.6%**	**Pass**
Window 19 (lower)			0.68	1.07	115.93	0.69	76.6	0.4%	
Window 19 (upper)			0.68	1.76	115.93	0.69	78.1	1.5%	
Window 20 (lower)			0.68	0.87	115.93	0.69	26.4	0.1%	
Window 20 (upper)			0.68	1.43	115.93	0.69	25.3	0.4%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.4%**	**Pass**
Window 21 (lower)			0.68	1.59	60.31	0.68	42.2	0.6%	
Window 21 (upper)			0.68	2.62	60.31	0.68	31.5	1.8%	
Total ADF for room	Bedroom	1.0%						**2.4%**	**Pass**
Window 22 (lower)			0.68	1.07	62.21	0.7	74.5	0.7%	
Window 22 (upper)			0.68	1.76	62.21	0.7	76.2	2.9%	
Total ADF for room	Bedroom	1.0%						**3.6%**	**Pass**
Window 23 (lower)			0.68	1.07	66.62	0.7	74.7	0.6%	
Window 23 (upper)			0.68	1.76	66.62	0.7	76.4	2.7%	
Total ADF for room	Bedroom	1.0%						**3.3%**	**Pass**
Window 24 (lower)			0.68	1.84	142.98	0.66	45.1	0.3%	
Window 24 (upper)			0.68	3.02	142.98	0.66	34.3	0.9%	
Window 25 (lower)			0.68	1.84	142.98	0.66	47.9	0.3%	
Window 25 (upper)			0.68	3.02	142.98	0.66	36.6	0.9%	
Window 26			0.68	1.3	142.98	0.66	84.3	0.9%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.3%**	**Pass**
First Floor									
Window 27 (lower)			0.68	1.07	60.92	0.7	47.5	0.4%	
Window 27 (upper)			0.68	1.76	60.92	0.7	39.7	1.5%	
Total ADF for room	Bedroom	1.0%						**1.9%**	**Pass**
Window 28 (lower)			0.68	1.84	132.56	0.66	50.5	0.3%	
Window 28 (upper)			0.68	3.02	132.56	0.66	42.5	1.2%	
Window 29 (lower)			0.68	1.84	132.56	0.66	88.9	0.6%	
Window 29 (upper)			0.68	3.67	132.56	0.66	88.8	3.0%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**5.1%**	**Pass**
Window 30 (lower)			0.68	1.07	67.11	0.7	87.1	0.7%	
Window 30 (upper)			0.68	2.14	67.11	0.7	87.2	3.7%	
Total ADF for room	Bedroom	1.0%						**4.4%**	**Pass**
Window 31 (lower)			0.68	1.07	69.26	0.7	79.8	0.7%	
Window 31 (upper)			0.68	2.14	69.26	0.7	79.7	3.3%	
Total ADF for room	Bedroom	1.0%						**4.0%**	**Pass**

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 32 (lower)			0.68	1.07	52.08	0.7	40.2	0.4%	
Window 32 (upper)			0.68	2.14	52.08	0.7	29.5	1.6%	
Total ADF for room	Bedroom	1.0%						**2.0%**	**Pass**
Window 33 (lower)			0.68	0.99	123.05	0.67	31.6	0.1%	
Window 33 (upper)			0.68	1.97	123.05	0.67	23.9	0.5%	
Window 34 (lower)			0.68	1.84	123.05	0.67	89.8	0.7%	
Window 34 (upper)			0.68	3.67	123.05	0.67	89.6	3.3%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.6%**	**Pass**
Window 35 (lower)			0.68	1.84	123.05	0.67	89.8	0.7%	
Window 35 (upper)			0.68	3.67	123.05	0.67	89.7	3.3%	
Window 36 (lower)			0.68	0.99	123.05	0.67	30.3	0.1%	
Window 36 (upper)			0.68	1.97	123.05	0.67	29.8	0.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.7%**	**Pass**
Window 37 (lower)			0.68	1.07	60.67	0.7	43.8	0.4%	
Window 37 (upper)			0.68	2.14	60.67	0.7	34.9	1.6%	
Total ADF for room	Bedroom	1.0%						**2.0%**	**Pass**
Window 38 (lower)			0.68	1.07	155.93	0.68	51.1	0.2%	
Window 38 (upper)			0.68	2.14	155.93	0.68	40.1	0.7%	
Window 39 (lower)			0.68	1.07	155.93	0.68	51.3	0.2%	
Window 39 (upper)			0.68	2.14	155.93	0.68	40.4	0.7%	
Window 40 (lower)			0.68	0.8	155.93	0.68	57.5	0.1%	
Window 40 (upper)			0.68	1.33	155.93	0.68	57.6	0.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.5%**	**Pass**
Window 41 (lower)			0.68	1.07	62.21	0.7	49.9	0.5%	
Window 41 (upper)			0.68	1.76	62.21	0.7	40.7	1.6%	
Total ADF for room	Bedroom	1.0%						**2.1%**	**Pass**
Window 42 (lower)			0.68	1.07	63.82	0.7	44.5	0.4%	
Window 42 (upper)			0.68	1.76	63.82	0.7	37.6	1.4%	
Total ADF for room	Bedroom	1.0%						**1.8%**	**Pass**
Window 43 (lower)			0.68	1.58	68.11	0.69	46.6	0.6%	
Window 43 (upper)			0.68	2.61	68.11	0.69	37.7	1.9%	
Total ADF for room	Bedroom	1.0%						**2.5%**	**Pass**
Window 44 (lower)			0.68	2.35	110.32	0.68	48.5	0.5%	
Window 44 (upper)			0.68	3.86	110.32	0.68	39.3	1.7%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.2%**	**Pass**
Window 45 (lower)			0.68	2.35	110.32	0.68	48.5	0.5%	
Window 45 (upper)			0.68	3.87	110.32	0.68	38.9	1.7%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.2%**	**Pass**
Window 46 (lower)			0.68	1.59	68.11	0.69	48.4	0.6%	
Window 46 (upper)			0.68	2.62	68.11	0.69	39.0	1.9%	
Total ADF for room	Bedroom	1.0%						**2.5%**	**Pass**
Window 47 (lower)			0.68	1.07	62.21	0.7	79.8	0.7%	
Window 47 (upper)			0.68	1.76	62.21	0.7	81.6	3.1%	

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Total ADF for room	Bedroom	1.0%						**3.8%**	**Pass**
Window 48 (lower)			0.68	1.07	66.62	0.7	80.0	0.7%	
Window 48 (upper)			0.68	1.76	66.62	0.7	81.8	2.9%	
Total ADF for room	Bedroom	1.0%						**3.6%**	**Pass**
Window 49 (lower)			0.68	1.84	142.98	0.66	46.3	0.3%	
Window 49 (upper)			0.68	3.02	142.98	0.66	38.3	1.0%	
Window 50 (lower)			0.68	1.84	142.98	0.66	49.0	0.3%	
Window 50 (upper)			0.68	3.02	142.98	0.66	40.2	1.0%	
Window 51			0.68	1.3	142.98	0.66	86.1	0.9%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.5%**	**Pass**
Second Floor									
Window 52 (lower)			0.68	1.07	60.92	0.7	47.9	0.5%	
Window 52 (upper)			0.68	1.76	60.92	0.7	40.5	1.6%	
Total ADF for room	Bedroom	1.0%						**2.1%**	**Pass**
Window 53 (lower)			0.68	1.84	132.56	0.66	50.9	0.3%	
Window 53 (upper)			0.68	3.02	132.56	0.66	43.5	1.2%	
Window 54 (lower)			0.68	1.84	132.56	0.66	89.2	0.6%	
Window 54 (upper)			0.68	3.67	132.56	0.66	89.1	3.0%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**5.1%**	**Pass**
Window 55 (lower)			0.68	1.07	67.11	0.7	87.7	0.7%	
Window 55 (upper)			0.68	2.14	67.11	0.7	87.8	3.7%	
Total ADF for room	Bedroom	1.0%						**4.4%**	**Pass**
Window 56 (lower)			0.68	1.07	69.26	0.7	80.5	0.7%	
Window 56 (upper)			0.68	2.14	69.26	0.7	81.1	3.4%	
Total ADF for room	Bedroom	1.0%						**4.1%**	**Pass**
Window 57 (lower)			0.68	1.07	52.08	0.7	40.2	0.4%	
Window 57 (upper)			0.68	2.14	52.08	0.7	29.5	1.6%	
Total ADF for room	Bedroom	1.0%						**2.0%**	**Pass**
Window 58 (lower)			0.68	0.99	123.05	0.67	31.7	0.1%	
Window 58 (upper)			0.68	1.97	123.05	0.67	24.1	0.5%	
Window 59 (lower)			0.68	1.84	123.05	0.67	89.8	0.7%	
Window 59 (upper)			0.68	3.67	123.05	0.67	89.7	3.3%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.6%**	**Pass**
Window 60 (lower)			0.68	1.84	123.05	0.67	89.9	0.7%	
Window 60 (upper)			0.68	3.67	123.05	0.67	89.7	3.3%	
Window 61 (lower)			0.68	0.99	123.05	0.67	30.3	0.1%	
Window 61 (upper)			0.68	1.97	123.05	0.67	29.8	0.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.7%**	**Pass**
Window 62 (lower)			0.68	1.07	60.67	0.7	43.8	0.4%	
Window 62 (upper)			0.68	2.14	60.67	0.7	34.9	1.6%	
Total ADF for room	Bedroom	1.0%						**2.0%**	**Pass**
Window 63 (lower)			0.68	1.07	155.93	0.68	51.1	0.2%	
Window 63 (upper)			0.68	2.14	155.93	0.68	40.1	0.7%	

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 64 (lower)			0.68	1.07	155.93	0.68	51.3	0.2%	
Window 64 (upper)			0.68	2.14	155.93	0.68	40.4	0.7%	
Window 65 (lower)			0.68	0.8	155.93	0.68	58.4	0.2%	
Window 65 (upper)			0.68	1.33	155.93	0.68	59.7	0.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.6%**	**Pass**
Window 66 (lower)			0.68	1.07	62.21	0.7	50.8	0.5%	
Window 66 (upper)			0.68	1.76	62.21	0.7	42.8	1.6%	
Total ADF for room	Bedroom	1.0%						**2.1%**	**Pass**
Window 67 (lower)			0.68	1.07	63.82	0.7	45.4	0.4%	
Window 67 (upper)			0.68	1.76	63.82	0.7	39.3	1.5%	
Total ADF for room	Bedroom	1.0%						**1.9%**	**Pass**
Window 68 (lower)			0.68	1.58	68.11	0.69	47.7	0.6%	
Window 68 (upper)			0.68	2.61	68.11	0.69	40.3	2.0%	
Total ADF for room	Bedroom	1.0%						**2.6%**	**Pass**
Window 69 (lower)			0.68	2.35	110.32	0.68	49.5	0.5%	
Window 69 (upper)			0.68	3.86	110.32	0.68	41.8	1.8%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.3%**	**Pass**
Window 70 (lower)			0.68	2.35	110.32	0.68	49.7	0.5%	
Window 70 (upper)			0.68	3.87	110.32	0.68	41.7	1.8%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.3%**	**Pass**
Window 71 (lower)			0.68	1.59	68.11	0.69	49.8	0.6%	
Window 71 (upper)			0.68	2.62	68.11	0.69	42.3	2.1%	
Total ADF for room	Bedroom	1.0%						**2.7%**	**Pass**
Window 72 (lower)			0.68	1.07	62.21	0.7	85.3	0.8%	
Window 72 (upper)			0.68	1.76	62.21	0.7	87.0	3.3%	
Total ADF for room	Bedroom	1.0%						**4.1%**	**Pass**
Window 73 (lower)			0.68	1.07	66.62	0.7	85.5	0.7%	
Window 73 (upper)			0.68	1.76	66.62	0.7	87.1	3.1%	
Total ADF for room	Bedroom	1.0%						**3.8%**	**Pass**
Window 74 (lower)			0.68	1.84	142.98	0.66	47.5	0.3%	
Window 74 (upper)			0.68	3.02	142.98	0.66	41.4	1.0%	
Window 75 (lower)			0.68	1.84	142.98	0.66	49.7	0.3%	
Window 75 (upper)			0.68	3.02	142.98	0.66	43.0	1.1%	
Window 76			0.68	1.3	142.98	0.66	87.7	1.0%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.7%**	**Pass**
Third Floor									
Window 77 (lower)			0.68	1.07	61.62	0.7	48.1	0.4%	
Window 77 (upper)			0.68	1.76	61.62	0.7	41.1	1.6%	
Total ADF for room	Bedroom	1.0%						**2.0%**	**Pass**
Window 78 (lower)			0.68	1.84	133.78	0.66	51.7	0.3%	
Window 78 (upper)			0.68	3.02	133.78	0.66	44.3	1.2%	
Window 79 (lower)			0.68	1.84	133.78	0.66	89.5	0.6%	
Window 79 (upper)			0.68	3.67	133.78	0.66	89.5	3.0%	

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Total ADF for room	Living/Dining/Kitchen	2.0%						**5.1%**	**Pass**
Window 80 (lower)			0.68	1.07	67.87	0.7	88.5	0.7%	
Window 80 (upper)			0.68	2.14	67.87	0.7	88.8	3.7%	
Total ADF for room	Bedroom	1.0%						**4.4%**	**Pass**
Window 81 (lower)			0.68	1.07	70.05	0.7	83.8	0.7%	
Window 81 (upper)			0.68	2.14	70.05	0.7	86.5	3.5%	
Total ADF for room	Bedroom	1.0%						**4.2%**	**Pass**
Window 82 (lower)			0.68	1.07	52.7	0.7	52.4	0.6%	
Window 82 (upper)			0.68	2.14	52.7	0.7	46.1	2.5%	
Total ADF for room	Bedroom	1.0%						**3.1%**	**Pass**
Window 83 (lower)			0.68	0.99	124.22	0.67	44.1	0.2%	
Window 83 (upper)			0.68	1.97	124.22	0.67	46.3	0.9%	
Window 84 (lower)			0.68	1.84	124.22	0.67	89.9	0.7%	
Window 84 (upper)			0.68	3.67	124.22	0.67	89.7	3.3%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**5.1%**	**Pass**
Window 85 (lower)			0.68	1.84	124.23	0.67	89.9	0.7%	
Window 85 (upper)			0.68	3.67	124.23	0.67	89.7	3.3%	
Window 86 (lower)			0.68	0.99	124.23	0.67	34.9	0.1%	
Window 86 (upper)			0.68	1.97	124.23	0.67	32.0	0.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.7%**	**Pass**
Window 87 (lower)			0.68	1.07	61.37	0.7	45.5	0.4%	
Window 87 (upper)			0.68	2.14	61.37	0.7	36.0	1.7%	
Total ADF for room	Bedroom	1.0%						**2.1%**	**Pass**
Window 88 (lower)			0.68	1.58	68.86	0.69	48.7	0.6%	
Window 88 (upper)			0.68	2.61	68.86	0.69	41.8	2.0%	
Total ADF for room	Bedroom	1.0%						**2.6%**	**Pass**
Window 89 (lower)			0.68	2.35	111.4	0.68	50.4	0.5%	
Window 89 (upper)			0.68	3.86	111.4	0.68	43.2	1.9%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.4%**	**Pass**
Window 90 (lower)			0.68	2.35	111.4	0.68	50.4	0.5%	
Window 90 (upper)			0.68	3.87	111.4	0.68	43.1	1.9%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.4%**	**Pass**
Window 91 (lower)			0.68	1.59	68.86	0.69	50.4	0.6%	
Window 91 (upper)			0.68	2.62	68.86	0.69	43.6	2.1%	
Total ADF for room	Bedroom	1.0%						**2.7%**	**Pass**
Window 92 (lower)			0.68	1.07	62.94	0.7	89.2	0.8%	
Window 92 (upper)			0.68	1.76	62.94	0.7	89.1	3.4%	
Total ADF for room	Bedroom	1.0%						**4.2%**	**Pass**
Window 93 (lower)			0.68	1.07	67.36	0.7	89.1	0.8%	
Window 93 (upper)			0.68	1.76	67.36	0.7	89.1	3.1%	
Total ADF for room	Bedroom	1.0%						**3.9%**	**Pass**
Window 94 (lower)			0.68	1.84	144.26	0.66	48.0	0.3%	
Window 94 (upper)			0.68	3.02	144.26	0.66	42.7	1.1%	

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 95 (lower)			0.68	1.84	144.26	0.66	50.0	0.3%	
Window 95 (upper)			0.68	3.02	144.26	0.66	44.4	1.1%	
Window 96			0.68	1.3	144.26	0.66	88.9	1.0%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.8%**	**Pass**
Urban Block 14									
Ground Floor									
Window 97 (lower)			0.68	0.05	107.5	0.67	65.3	0.0%	
Window 97 (upper)			0.68	1.01	107.5	0.67	69.6	0.8%	
Window 98 (lower)			0.68	1.5	107.5	0.67	58.8	0.4%	
Window 98 (upper)			0.68	2.46	107.5	0.67	70.1	2.0%	
Window 99			0.68	0.97	107.5	0.67	50.4	0.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.8%**	**Pass**
Window 100			0.68	0.92	58.97	0.7	73.4	1.5%	
Window 101			0.68	2.25	58.97	0.7	43.8	2.2%	
Total ADF for room	Bedroom	1.0%						**3.7%**	**Pass**
Window 102	Bedroom	1.0%	0.68	2.24	58.97	0.71	29.5	**1.5%**	**Pass**
Window 103	Bedroom	1.0%	0.68	2.24	58.97	0.71	30.4	**1.6%**	**Pass**
Window 104			0.68	2.24	58.97	0.7	42.7	2.1%	
Window 105			0.68	0.92	58.97	0.7	72.0	1.5%	
Total ADF for room	Bedroom	1.0%						**3.6%**	**Pass**
Window 106			0.68	0.97	107.5	0.67	50.1	0.6%	
Window 107 (lower)			0.68	1.5	107.5	0.67	60.1	0.4%	
Window 107 (upper)			0.68	2.46	107.5	0.67	69.8	2.0%	
Window 108 (lower)			0.68	0.05	107.5	0.67	64.4	0.0%	
Window 108 (upper)			0.68	1.01	107.5	0.67	69.3	0.8%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.8%**	**Pass**
Window 109 (lower)			0.68	1.5	107.5	0.68	59.6	0.4%	
Window 109 (upper)			0.68	2.46	107.5	0.68	69.2	2.0%	
Window 110 (lower)			0.68	0.05	107.5	0.68	64.4	0.0%	
Window 110 (upper)			0.68	1.01	107.5	0.68	68.8	0.8%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.2%**	**Pass**
Window 111 (lower)			0.68	0.05	107.5	0.68	65.1	0.0%	
Window 111 (upper)			0.68	1.01	107.5	0.68	69.0	0.8%	
Window 112 (lower)			0.68	1.5	107.5	0.68	57.3	0.4%	
Window 112 (upper)			0.68	2.46	107.5	0.68	69.3	2.0%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.2%**	**Pass**
Window 113			0.68	0.97	107.5	0.67	49.6	0.6%	
Window 114 (lower)			0.68	1.5	107.5	0.67	58.9	0.4%	
Window 114 (upper)			0.68	2.46	107.5	0.67	72.9	2.1%	
Window 115 (lower)			0.68	0.05	107.5	0.67	66.8	0.0%	
Window 115 (upper)			0.68	1.01	107.5	0.67	72.4	0.8%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.9%**	**Pass**
Window 116 (lower)			0.68	1.5	107.5	0.68	57.4	0.4%	
Window 116 (upper)			0.68	2.46	107.5	0.68	72.1	2.1%	

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 117 (lower)			0.68	0.05	107.5	0.68	66.5	0.0%	
Window 117 (upper)			0.68	1.01	107.5	0.68	71.7	0.8%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.3%**	**Pass**
Window 118 (lower)			0.68	0.05	107.5	0.68	65.9	0.0%	
Window 118 (upper)			0.68	1.01	107.5	0.68	71.7	0.8%	
Window 119 (lower)			0.68	1.5	107.5	0.68	59.7	0.4%	
Window 119 (upper)			0.68	2.46	107.5	0.68	72.1	2.1%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.3%**	**Pass**
Window 120 (lower)			0.68	0.05	107.5	0.67	65.9	0.0%	
Window 120 (upper)			0.68	1.01	107.5	0.67	72.3	0.8%	
Window 121 (lower)			0.68	1.5	107.5	0.67	60.5	0.4%	
Window 121 (upper)			0.68	2.46	107.5	0.67	72.8	2.1%	
Window 122			0.68	0.97	107.5	0.67	46.3	0.5%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.8%**	**Pass**
Window 123			0.68	0.92	58.97	0.7	67.0	1.4%	
Window 124			0.68	1.7	58.97	0.7	37.5	1.5%	
Total ADF for room	Bedroom	1.0%						**2.9%**	**Pass**
Window 125	Bedroom	1.0%	0.68	1.7	58.97	0.71	31.0	**1.2%**	**Pass**
Window 126	Bedroom	1.0%	0.68	1.7	58.97	0.71	29.7	**1.2%**	**Pass**
Window 127			0.68	1.7	58.97	0.7	37.5	1.5%	
Window 128			0.68	0.92	58.97	0.7	71.8	1.5%	
Total ADF for room	Bedroom	1.0%						**3.0%**	**Pass**
First Floor									
Window 129			0.68	0.9	169.62	0.7	75.7	0.5%	
Window 130			0.68	2.0	169.62	0.7	76.3	1.2%	
Window 131 (lower)			0.68	0.29	169.62	0.7	59.1	0.1%	
Window 131 (upper)			0.68	1.01	169.62	0.7	55.8	0.4%	
Window 132 (lower)			0.68	1.11	169.62	0.7	52.9	0.2%	
Window 132 (upper)			0.68	1.82	169.62	0.7	33.1	0.5%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.9%**	**Pass**
Window 133			0.68	0.9	170.07	0.7	75.1	0.5%	
Window 134			0.68	2.0	170.07	0.7	75.5	1.2%	
Window 135 (lower)			0.68	1.11	170.07	0.7	45.0	0.2%	
Window 135 (upper)			0.68	1.82	170.07	0.7	28.2	0.4%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.3%**	**Pass**
Window 136			0.68	2.0	170.07	0.7	75.5	1.2%	
Window 137			0.68	0.9	170.07	0.7	75.2	0.5%	
Window 138 (lower)			0.68	1.11	170.07	0.7	45.6	0.2%	
Window 138 (upper)			0.68	1.82	170.07	0.7	28.8	0.4%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.3%**	**Pass**
Window 139			0.68	2.0	169.62	0.7	76.1	1.2%	
Window 140			0.68	0.9	169.62	0.7	75.5	0.5%	
Window 141 (lower)			0.68	1.11	169.62	0.7	52.3	0.2%	

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 141 (upper)			0.68	1.82	169.62	0.7	32.4	0.5%	
Window 142 (lower)			0.68	0.29	169.62	0.7	58.7	0.1%	
Window 142 (upper)			0.68	1.01	169.62	0.7	55.5	0.4%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.9%**	**Pass**
Window 143 (lower)			0.68	1.11	169.62	0.7	49.4	0.2%	
Window 143 (upper)			0.68	1.82	169.62	0.7	28.6	0.4%	
Window 144 (lower)			0.68	0.29	169.62	0.7	58.6	0.1%	
Window 144 (upper)			0.68	1.01	169.62	0.7	55.4	0.4%	
Window 145			0.68	2.0	169.62	0.7	79.4	1.2%	
Window 146			0.68	0.9	169.62	0.7	78.7	0.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.9%**	**Pass**
Window 147 (lower)			0.68	1.11	170.07	0.7	42.5	0.1%	
Window 147 (upper)			0.68	1.82	170.07	0.7	24.0	0.3%	
Window 148			0.68	2.0	170.07	0.7	78.5	1.2%	
Window 149			0.68	0.9	170.07	0.7	78.0	0.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.2%**	**Pass**
Window 150 (lower)			0.68	1.11	170.07	0.7	42.5	0.1%	
Window 150 (upper)			0.68	1.82	170.07	0.7	24.4	0.3%	
Window 151			0.68	0.9	170.07	0.7	77.9	0.6%	
Window 152			0.68	2.0	170.07	0.7	78.3	1.2%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.2%**	**Pass**
Window 153 (lower)			0.68	1.11	169.62	0.7	49.2	0.2%	
Window 153 (upper)			0.68	1.82	169.62	0.7	28.2	0.4%	
Window 154			0.68	0.9	169.62	0.7	78.4	0.5%	
Window 155			0.68	2.0	169.62	0.7	79.0	1.2%	
Window 156 (lower)			0.68	0.29	169.62	0.7	55.9	0.1%	
Window 156 (upper)			0.68	1.01	169.62	0.7	53.3	0.4%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.8%**	**Pass**
<u>Second Floor</u>									
Window 157	Bedroom	1.0%	0.68	0.9	41.24	0.72	80.7	**2.5%**	**Pass**
Window 158			0.68	2.0	60.06	0.69	81.2	3.5%	
Window 159 (lower)			0.68	0.29	60.06	0.69	64.3	0.2%	
Window 159 (upper)			0.68	1.01	60.06	0.69	60.6	1.3%	
Total ADF for room	Bedroom	1.0%						**5.0%**	**Pass**
Window 160 (lower)			0.68	0.47	65.57	0.71	87.6	0.3%	
Window 160 (upper)			0.68	1.12	65.57	0.71	86.9	2.1%	
Total ADF for room	Bedroom	1.0%						**2.4%**	**Pass**
Window 161 (lower)			0.68	0.47	65.79	0.71	87.5	0.3%	
Window 161 (upper)			0.68	1.12	65.79	0.71	87.0	2.1%	
Total ADF for room	Bedroom	1.0%						**2.4%**	**Pass**
Window 162 (lower)			0.68	0.47	65.79	0.71	87.3	0.3%	
Window 162 (upper)			0.68	1.12	65.79	0.71	86.9	2.0%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 163 (lower)			0.68	0.47	65.57	0.71	87.1	0.3%	
Window 163 (upper)			0.68	1.12	65.57	0.71	86.7	2.1%	
Total ADF for room	Bedroom	1.0%						**2.4%**	**Pass**
Window 164 (lower)			0.68	0.29	60.06	0.69	63.7	0.2%	
Window 164 (upper)			0.68	1.01	60.06	0.69	60.2	1.3%	
Window 165			0.68	2.0	60.06	0.69	81.2	3.5%	
Total ADF for room	Bedroom	1.0%						**5.0%**	**Pass**
Window 166	Bedroom	1.0%	0.68	0.9	41.24	0.72	80.7	**2.5%**	**Pass**
Window 167	Bedroom	1.0%	0.68	2.0	60.3	0.71	80.6	**3.6%**	**Pass**
Window 168	Bedroom	1.0%	0.68	0.9	41.24	0.72	80.3	**2.5%**	**Pass**
Window 169	Bedroom	1.0%	0.68	0.9	41.24	0.72	80.3	**2.5%**	**Pass**
Window 170	Bedroom	1.0%	0.68	2.0	60.3	0.71	80.6	**3.6%**	**Pass**
Window 171 (lower)			0.68	0.29	60.06	0.69	63.9	0.2%	
Window 171 (upper)			0.68	1.01	60.06	0.69	60.4	1.3%	
Window 172			0.68	2.0	60.06	0.69	83.8	3.6%	
Total ADF for room	Bedroom	1.0%						**5.1%**	**Pass**
Window 173	Bedroom	1.0%	0.68	0.9	41.24	0.72	83.3	**2.6%**	**Pass**
Window 174	Bedroom	1.0%	0.68	2.0	60.3	0.71	83.2	**3.8%**	**Pass**
Window 175	Bedroom	1.0%	0.68	0.9	41.24	0.72	82.9	**2.6%**	**Pass**
Window 176	Bedroom	1.0%	0.68	0.9	41.24	0.72	82.8	**2.6%**	**Pass**
Window 177	Bedroom	1.0%	0.68	2.0	60.3	0.71	83.1	**3.7%**	**Pass**
Window 178	Bedroom	1.0%	0.68	0.9	41.24	0.72	83.1	**2.6%**	**Pass**
Window 179			0.68	2.0	60.06	0.69	83.6	3.6%	
Window 180 (lower)			0.68	0.29	60.06	0.69	62.6	0.2%	
Window 180 (upper)			0.68	1.01	60.06	0.69	59.5	1.3%	
Total ADF for room	Bedroom	1.0%						**5.1%**	**Pass**
Window 181 (lower)			0.68	0.47	65.57	0.71	84.4	0.3%	
Window 181 (upper)			0.68	1.12	65.57	0.71	85.1	2.0%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 182 (lower)			0.68	0.47	65.79	0.71	84.5	0.3%	
Window 182 (upper)			0.68	1.12	65.79	0.71	85.1	2.0%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 183 (lower)			0.68	0.47	65.79	0.71	84.4	0.3%	
Window 183 (upper)			0.68	1.12	65.79	0.71	85.0	2.0%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 184 (lower)			0.68	0.47	65.57	0.71	84.3	0.3%	
Window 184 (upper)			0.68	1.12	65.57	0.71	85.1	2.0%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Urban Block 7									
Ground Floor									

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 185 (lower)			0.68	1.07	53.38	0.7	53.5	0.6%	
Window 185 (upper)			0.68	1.96	53.38	0.7	73.6	3.6%	
Total ADF for room	Bedroom	1.0%						**4.2%**	**Pass**
Window 186 (lower)			0.68	0.58	108.15	0.68	53.4	0.1%	
Window 186 (upper)			0.68	2.02	108.15	0.68	55.9	1.3%	
Window 187 (lower)			0.68	1.38	108.15	0.68	48.4	0.3%	
Window 187 (upper)			0.68	2.51	108.15	0.68	56.3	1.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.3%**	**Pass**
Window 188 (lower)			0.68	1.38	108.15	0.69	51.6	0.3%	
Window 188 (upper)			0.68	2.51	108.15	0.69	62.6	1.9%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.2%**	**Pass**
Window 189 (lower)			0.68	1.38	108.15	0.69	53.0	0.4%	
Window 189 (upper)			0.68	2.51	108.15	0.69	60.6	1.8%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.2%**	**Pass**
Window 190 (lower)			0.68	1.38	108.15	0.69	49.1	0.3%	
Window 190 (upper)			0.68	2.51	108.15	0.69	60.8	1.9%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.2%**	**Pass**
Window 191 (lower)			0.68	1.38	108.15	0.69	51.7	0.3%	
Window 191 (upper)			0.68	2.51	108.15	0.69	62.6	1.9%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.2%**	**Pass**
Window 192 (lower)			0.68	1.38	108.15	0.69	53.0	0.4%	
Window 192 (upper)			0.68	2.51	108.15	0.69	62.6	1.9%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.3%**	**Pass**
Window 193 (lower)			0.68	1.38	108.15	0.69	51.7	0.3%	
Window 193 (upper)			0.68	2.51	108.15	0.69	62.9	1.9%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.2%**	**Pass**
Window 194 (lower)			0.68	1.38	108.15	0.69	53.3	0.4%	
Window 194 (upper)			0.68	2.51	108.15	0.69	62.6	1.9%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.3%**	**Pass**
Window 195 (lower)			0.68	1.07	53.39	0.7	54.2	0.6%	
Window 195 (upper)			0.68	1.96	53.39	0.7	74.5	3.6%	
Total ADF for room	Bedroom	1.0%						**4.2%**	**Pass**
Window 196 (lower)			0.68	1.07	53.38	0.7	52.4	0.6%	
Window 196 (upper)			0.68	1.96	53.38	0.7	76.0	3.7%	
Total ADF for room	Bedroom	1.0%						**4.3%**	**Pass**
Window 197 (lower)			0.68	1.07	53.39	0.7	54.1	0.6%	
Window 197 (upper)			0.68	1.96	53.39	0.7	75.5	3.7%	
Total ADF for room	Bedroom	1.0%						**4.3%**	**Pass**
Window 198 (lower)			0.68	1.07	53.38	0.7	52.4	0.6%	
Window 198 (upper)			0.68	1.96	53.38	0.7	75.2	3.7%	
Total ADF for room	Bedroom	1.0%						**4.3%**	**Pass**
Window 199 (lower)			0.68	1.07	53.39	0.7	51.9	0.6%	
Window 199 (upper)			0.68	1.96	53.39	0.7	72.5	3.5%	

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Total ADF for room	Bedroom	1.0%						**4.1%**	**Pass**
Window 200 (lower)			0.68	1.07	53.38	0.7	54.1	0.6%	
Window 200 (upper)			0.68	1.96	53.38	0.7	74.5	3.6%	
Total ADF for room	Bedroom	1.0%						**4.2%**	**Pass**
Window 201 (lower)			0.68	1.07	53.39	0.7	52.5	0.6%	
Window 201 (upper)			0.68	1.96	53.39	0.7	74.7	3.6%	
Total ADF for room	Bedroom	1.0%						**4.2%**	**Pass**
First Floor									
Window 202 (lower)			0.68	1.22	103.66	0.66	63.7	0.4%	
Window 202 (upper)			0.68	2.02	103.66	0.66	70.7	1.7%	
Window 203			0.68	2.16	103.66	0.66	73.7	1.9%	
Window 204 (lower)			0.68	0.89	103.66	0.66	56.2	0.2%	
Window 204 (upper)			0.68	2.51	103.66	0.66	72.8	2.1%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**6.3%**	**Pass**
Window 205 (lower)			0.68	0.89	103.66	0.69	56.2	0.2%	
Window 205 (upper)			0.68	2.51	103.66	0.69	74.2	2.3%	
Window 206			0.68	2.16	103.66	0.69	75.8	2.0%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.5%**	**Pass**
Window 207			0.68	2.16	103.66	0.69	76.3	2.0%	
Window 208 (lower)			0.68	0.89	103.66	0.69	56.2	0.2%	
Window 208 (upper)			0.68	2.51	103.66	0.69	74.8	2.3%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.5%**	**Pass**
Window 209 (lower)			0.68	0.89	103.66	0.69	56.2	0.2%	
Window 209 (upper)			0.68	2.51	103.66	0.69	75.6	2.4%	
Window 210			0.68	2.16	103.66	0.69	77.0	2.1%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.7%**	**Pass**
Window 211			0.68	2.16	103.66	0.69	77.4	2.1%	
Window 212 (lower)			0.68	0.89	103.66	0.69	56.2	0.2%	
Window 212 (upper)			0.68	2.51	103.66	0.69	75.6	2.4%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.7%**	**Pass**
Window 213 (lower)			0.68	0.89	103.66	0.69	56.2	0.2%	
Window 213 (upper)			0.68	2.51	103.66	0.69	75.6	2.4%	
Window 214			0.68	2.16	103.66	0.69	77.4	2.1%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.7%**	**Pass**
Window 215			0.68	2.16	103.66	0.69	77.4	2.1%	
Window 216 (lower)			0.68	0.89	103.66	0.69	56.2	0.2%	
Window 216 (upper)			0.68	2.51	103.66	0.69	75.7	2.4%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.7%**	**Pass**
Window 217 (lower)			0.68	0.89	103.66	0.69	56.2	0.2%	
Window 217 (upper)			0.68	2.51	103.66	0.69	74.8	2.3%	
Window 218			0.68	2.16	103.66	0.69	76.9	2.1%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.6%**	**Pass**
Window 219	Bedroom	1.0%	0.68	2.16	54.65	0.71	75.0	**4.1%**	**Pass**

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 220	Bedroom	1.0%	0.68	2.16	54.65	0.71	76.0	**4.1%**	**Pass**
Window 221	Bedroom	1.0%	0.68	2.16	54.65	0.71	75.6	**4.1%**	**Pass**
Window 222	Bedroom	1.0%	0.68	2.16	54.65	0.71	75.6	**4.1%**	**Pass**
Window 223	Bedroom	1.0%	0.68	2.16	54.65	0.71	74.8	**4.0%**	**Pass**
Window 224	Bedroom	1.0%	0.68	2.16	54.65	0.71	75.1	**4.1%**	**Pass**
Window 225	Bedroom	1.0%	0.68	2.16	54.65	0.71	75.2	**4.1%**	**Pass**
Window 226	Bedroom	1.0%	0.68	2.16	54.65	0.71	75.1	**4.1%**	**Pass**
Urban Block 8									
Ground Floor									
Window 227 (lower)			0.68	0.55	124.85	0.67	24.9	0.1%	
Window 227 (upper)			0.68	1.08	124.85	0.67	27.8	0.3%	
Window 228 (lower)			0.68	2.11	124.85	0.67	69.2	0.6%	
Window 228 (upper)			0.68	3.47	124.85	0.67	74.0	2.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.6%**	**Pass**
Window 229 (lower)			0.68	0.37	61.4	0.71	68.0	0.2%	
Window 229 (upper)			0.68	1.27	61.4	0.71	72.6	2.1%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 230 (lower)			0.68	0.37	61.4	0.71	66.2	0.2%	
Window 230 (upper)			0.68	1.27	61.4	0.71	71.8	2.0%	
Total ADF for room	Bedroom	1.0%						**2.2%**	**Pass**
Window 231 (lower)			0.68	2.11	124.85	0.67	66.4	0.6%	
Window 231 (upper)			0.68	3.47	124.85	0.67	71.8	2.5%	
Window 232 (lower)			0.68	0.55	124.85	0.67	21.4	0.0%	
Window 232 (upper)			0.68	1.08	124.85	0.67	23.6	0.3%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.4%**	**Pass**
Window 233 (lower)			0.68	0.4	68.02	0.71	73.3	0.2%	
Window 233 (upper)			0.68	1.24	68.02	0.71	75.1	1.9%	
Total ADF for room	Bedroom	1.0%						**2.1%**	**Pass**
Window 234 (lower)			0.68	0.4	68.02	0.71	73.1	0.2%	
Window 234 (upper)			0.68	1.24	68.02	0.71	74.7	1.9%	
Total ADF for room	Bedroom	1.0%						**2.1%**	**Pass**
Window 235 (lower)			0.68	0.55	124.85	0.67	22.4	0.0%	
Window 235 (upper)			0.68	1.08	124.85	0.67	24.2	0.3%	
Window 236 (lower)			0.68	2.11	124.85	0.67	67.8	0.6%	
Window 236 (upper)			0.68	3.47	124.85	0.67	73.3	2.5%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.4%**	**Pass**
Window 237 (lower)			0.68	0.37	61.4	0.71	68.1	0.2%	
Window 237 (upper)			0.68	1.27	61.4	0.71	72.9	2.1%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 238 (lower)			0.68	0.37	61.4	0.71	66.7	0.2%	
Window 238 (upper)			0.68	1.27	61.4	0.71	71.9	2.1%	

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 239 (lower)			0.68	2.11	124.85	0.67	65.4	0.5%	
Window 239 (upper)			0.68	3.47	124.85	0.67	70.3	2.4%	
Window 240 (lower)			0.68	0.55	124.85	0.67	20.1	0.0%	
Window 240 (upper)			0.68	1.08	124.85	0.67	21.7	0.2%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.1%**	**Pass**
Window 241 (lower)			0.68	0.4	68.02	0.71	74.1	0.2%	
Window 241 (upper)			0.68	1.24	68.02	0.71	75.7	1.9%	
Total ADF for room	Bedroom	1.0%						**2.1%**	**Pass**
Window 242 (lower)			0.68	0.4	68.02	0.71	75.0	0.2%	
Window 242 (upper)			0.68	1.24	68.02	0.71	76.5	1.9%	
Total ADF for room	Bedroom	1.0%						**2.1%**	**Pass**
Window 243 (lower)			0.68	0.55	124.85	0.67	23.4	0.1%	
Window 243 (upper)			0.68	1.08	124.85	0.67	25.5	0.3%	
Window 244 (lower)			0.68	2.11	124.85	0.67	62.8	0.5%	
Window 244 (upper)			0.68	3.47	124.85	0.67	66.4	2.3%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.2%**	**Pass**
Window 245 (lower)			0.68	0.37	61.4	0.71	61.0	0.2%	
Window 245 (upper)			0.68	1.27	61.4	0.71	64.9	1.9%	
Total ADF for room	Bedroom	1.0%						**2.1%**	**Pass**
Window 246 (lower)			0.68	0.37	61.4	0.71	60.4	0.2%	
Window 246 (upper)			0.68	1.27	61.4	0.71	64.2	1.8%	
Total ADF for room	Bedroom	1.0%						**2.0%**	**Pass**
Window 247 (lower)			0.68	2.11	124.85	0.67	60.5	0.5%	
Window 247 (upper)			0.68	3.47	124.85	0.67	63.6	2.2%	
Window 248 (lower)			0.68	0.55	124.85	0.67	50.4	0.1%	
Window 248 (upper)			0.68	1.08	124.85	0.67	61.5	0.7%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.5%**	**Pass**
Window 249 (lower)			0.68	0.4	68.02	0.71	69.8	0.2%	
Window 249 (upper)			0.68	1.24	68.02	0.71	72.3	1.8%	
Total ADF for room	Bedroom	1.0%						**2.0%**	**Pass**
Window 250 (lower)			0.68	0.4	68.02	0.71	72.7	0.2%	
Window 250 (upper)			0.68	1.24	68.02	0.71	74.5	1.9%	
Total ADF for room	Bedroom	1.0%						**2.1%**	**Pass**
Window 251 (lower)			0.68	2.11	124.85	0.67	64.1	0.5%	
Window 251 (upper)			0.68	3.47	124.85	0.67	68.1	2.3%	
Window 252 (lower)			0.68	0.55	124.85	0.67	62.0	0.1%	
Window 252 (upper)			0.68	1.08	124.85	0.67	64.8	0.7%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.6%**	**Pass**
Window 253 (lower)			0.68	0.4	68.02	0.71	77.6	0.2%	
Window 253 (upper)			0.68	1.24	68.02	0.71	78.9	2.0%	
Total ADF for room	Bedroom	1.0%						**2.2%**	**Pass**
Window 254 (lower)			0.68	0.4	68.02	0.71	81.0	0.3%	

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 254 (upper)			0.68	1.24	68.02	0.71	81.7	2.1%	
Total ADF for room	Bedroom	1.0%						**2.4%**	**Pass**
Window 255 (lower)			0.68	0.55	124.85	0.67	70.9	0.2%	
Window 255 (upper)			0.68	1.08	124.85	0.67	72.6	0.8%	
Window 256 (lower)			0.68	2.11	124.85	0.67	68.4	0.6%	
Window 256 (upper)			0.68	3.47	124.85	0.67	72.9	2.5%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**4.1%**	**Pass**
Window 257 (lower)			0.68	0.37	61.4	0.71	64.6	0.2%	
Window 257 (upper)			0.68	1.27	61.4	0.71	68.7	2.0%	
Total ADF for room	Bedroom	1.0%						**2.2%**	**Pass**
Window 258 (lower)			0.68	0.37	61.4	0.71	61.6	0.2%	
Window 258 (upper)			0.68	1.27	61.4	0.71	66.7	1.9%	
Total ADF for room	Bedroom	1.0%						**2.1%**	**Pass**
First Floor									
Window 259 (lower)			0.68	0.35	66.9	0.71	79.3	0.2%	
Window 259 (upper)			0.68	1.21	66.9	0.71	81.1	2.0%	
Total ADF for room	Bedroom	1.0%						**2.2%**	**Pass**
Window 260 (lower)			0.68	0.35	60.95	0.71	78.8	0.3%	
Window 260 (upper)			0.68	1.21	60.95	0.71	80.8	2.2%	
Total ADF for room	Bedroom	1.0%						**2.5%**	**Pass**
Window 261 (lower)			0.68	0.35	60.95	0.71	78.8	0.3%	
Window 261 (upper)			0.68	1.21	60.95	0.71	80.9	2.2%	
Total ADF for room	Bedroom	1.0%						**2.5%**	**Pass**
Window 262 (lower)			0.68	0.35	66.9	0.71	79.4	0.2%	
Window 262 (upper)			0.68	1.21	66.9	0.71	81.6	2.0%	
Total ADF for room	Bedroom	1.0%						**2.2%**	**Pass**
Window 263			0.68	0.99	136.28	0.67	81.4	0.7%	
Window 264 (lower)			0.68	0.82	136.28	0.67	28.3	0.1%	
Window 264 (upper)			0.68	1.34	136.28	0.67	27.7	0.3%	
Window 265 (lower)			0.68	2.2	136.28	0.67	44.6	0.4%	
Window 265 (upper)			0.68	3.62	136.28	0.67	36.7	1.2%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.7%**	**Pass**
Window 266 (lower)			0.68	2.2	136.28	0.66	44.3	0.3%	
Window 266 (upper)			0.68	3.62	136.28	0.66	36.4	1.2%	
Window 267 (lower)			0.68	0.82	136.28	0.66	28.6	0.1%	
Window 267 (upper)			0.68	1.34	136.28	0.66	27.3	0.3%	
Window 268			0.68	0.99	136.28	0.66	81.4	0.7%	
Window 269 (lower)			0.68	0.77	136.28	0.66	36.6	0.1%	
Window 269 (upper)			0.68	1.27	136.28	0.66	44.8	0.5%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.2%**	**Pass**
Window 270 (lower)			0.68	0.35	66.9	0.71	80.7	0.2%	
Window 270 (upper)			0.68	1.21	66.9	0.71	82.4	2.1%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 271 (lower)			0.68	0.35	60.95	0.71	80.6	0.3%	
Window 271 (upper)			0.68	1.21	60.95	0.71	82.4	2.3%	
Total ADF for room	Bedroom	1.0%						**2.6%**	**Pass**
Window 272 (lower)			0.68	0.35	60.95	0.71	79.9	0.3%	
Window 272 (upper)			0.68	1.21	60.95	0.71	81.9	2.3%	
Total ADF for room	Bedroom	1.0%						**2.6%**	**Pass**
Window 273 (lower)			0.68	0.35	66.9	0.71	78.4	0.2%	
Window 273 (upper)			0.68	1.21	66.9	0.71	80.8	2.0%	
Total ADF for room	Bedroom	1.0%						**2.2%**	**Pass**
Window 274			0.68	0.99	136.28	0.67	81.5	0.7%	
Window 275 (lower)			0.68	0.82	136.28	0.67	28.4	0.1%	
Window 275 (upper)			0.68	1.34	136.28	0.67	27.8	0.3%	
Window 276 (lower)			0.68	2.2	136.28	0.67	44.9	0.4%	
Window 276 (upper)			0.68	3.62	136.28	0.67	37.0	1.2%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.7%**	**Pass**
Window 277 (lower)			0.68	2.2	136.28	0.66	45.0	0.4%	
Window 277 (upper)			0.68	3.62	136.28	0.66	37.3	1.2%	
Window 278 (lower)			0.68	0.82	136.28	0.66	28.5	0.1%	
Window 278 (upper)			0.68	1.34	136.28	0.66	27.0	0.3%	
Window 279			0.68	0.99	136.28	0.66	82.3	0.7%	
Window 280 (lower)			0.68	0.77	136.28	0.66	34.3	0.1%	
Window 280 (upper)			0.68	1.27	136.28	0.66	41.5	0.5%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.3%**	**Pass**
Window 281 (lower)			0.68	0.35	66.9	0.71	73.8	0.2%	
Window 281 (upper)			0.68	1.21	66.9	0.71	77.6	1.9%	
Total ADF for room	Bedroom	1.0%						**2.1%**	**Pass**
Window 282 (lower)			0.68	0.35	60.95	0.71	73.1	0.2%	
Window 282 (upper)			0.68	1.21	60.95	0.71	77.0	2.1%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 283 (lower)			0.68	0.35	60.95	0.71	72.8	0.2%	
Window 283 (upper)			0.68	1.21	60.95	0.71	76.5	2.1%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 284 (lower)			0.68	0.35	66.9	0.71	72.7	0.2%	
Window 284 (upper)			0.68	1.21	66.9	0.71	76.4	1.9%	
Total ADF for room	Bedroom	1.0%						**2.1%**	**Pass**
Window 285			0.68	0.99	136.28	0.67	79.5	0.7%	
Window 286 (lower)			0.68	0.82	136.28	0.67	28.3	0.1%	
Window 286 (upper)			0.68	1.34	136.28	0.67	27.7	0.3%	
Window 287 (lower)			0.68	2.2	136.28	0.67	43.8	0.4%	
Window 287 (upper)			0.68	3.62	136.28	0.67	35.6	1.2%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.7%**	**Pass**
Window 288 (lower)			0.68	2.2	136.28	0.66	44.2	0.3%	
Window 288 (upper)			0.68	3.62	136.28	0.66	36.3	1.2%	
Window 289 (lower)			0.68	0.82	136.28	0.66	28.3	0.1%	

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 289 (upper)			0.68	1.34	136.28	0.66	26.9	0.3%	
Window 290			0.68	0.99	136.28	0.66	81.2	0.7%	
Window 291 (lower)			0.68	0.77	136.28	0.66	33.8	0.1%	
Window 291 (upper)			0.68	1.27	136.28	0.66	40.7	0.5%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.2%**	**Pass**
Window 292 (lower)			0.68	0.35	60.95	0.71	75.2	0.2%	
Window 292 (upper)			0.68	1.21	60.95	0.71	78.6	2.2%	
Total ADF for room	Bedroom	1.0%						**2.4%**	**Pass**
Window 293 (lower)			0.68	0.35	66.9	0.71	76.1	0.2%	
Window 293 (upper)			0.68	1.21	66.9	0.71	79.5	2.0%	
Total ADF for room	Bedroom	1.0%						**2.2%**	**Pass**
Window 294			0.68	0.99	136.28	0.67	83.2	0.8%	
Window 295 (lower)			0.68	0.82	136.28	0.67	28.9	0.1%	
Window 295 (upper)			0.68	1.34	136.28	0.67	28.8	0.4%	
Window 296 (lower)			0.68	2.2	136.28	0.67	46.0	0.4%	
Window 296 (upper)			0.68	3.62	136.28	0.67	38.7	1.3%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.0%**	**Pass**
Window 297 (lower)			0.68	2.2	136.28	0.66	46.2	0.4%	
Window 297 (upper)			0.68	3.62	136.28	0.66	39.2	1.3%	
Window 298 (lower)			0.68	0.82	136.28	0.66	28.8	0.1%	
Window 298 (upper)			0.68	1.34	136.28	0.66	26.9	0.3%	
Window 299			0.68	0.99	136.28	0.66	84.6	0.7%	
Window 300 (lower)			0.68	0.77	136.28	0.66	77.9	0.2%	
Window 300 (upper)			0.68	1.27	136.28	0.66	80.2	0.9%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.9%**	**Pass**
Window 301 (lower)			0.68	0.35	66.9	0.71	78.8	0.2%	
Window 301 (upper)			0.68	1.21	66.9	0.71	81.4	2.0%	
Total ADF for room	Bedroom	1.0%						**2.2%**	**Pass**
Window 302 (lower)			0.68	0.35	60.95	0.71	76.4	0.2%	
Window 302 (upper)			0.68	1.21	60.95	0.71	79.6	2.2%	
Total ADF for room	Bedroom	1.0%						**2.4%**	**Pass**
Urban Block 13									
Ground Floor									
Window 303			0.68	0.92	58.97	0.7	74.1	1.5%	
Window 304			0.68	2.24	58.97	0.7	39.1	2.0%	
Total ADF for room	Bedroom	1.0%						**3.5%**	**Pass**
Window 305	Bedroom	1.0%	0.68	2.24	58.97	0.71	28.1	**1.4%**	**Pass**
Window 306	Bedroom	1.0%	0.68	2.24	58.97	0.71	27.8	**1.4%**	**Pass**
Window 307			0.68	2.24	58.97	0.7	39.2	2.0%	
Window 308			0.68	0.92	58.97	0.7	18.6	0.4%	
Total ADF for room	Bedroom	1.0%						**2.4%**	**Pass**
Window 309			0.68	0.97	107.5	0.67	0.4	0.0%	
Window 310 (lower)			0.68	1.5	107.5	0.67	53.8	0.4%	

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 310 (upper)			0.68	2.46	107.5	0.67	74.3	2.1%	
Window 311 (lower)			0.68	0.05	107.5	0.67	62.0	0.0%	
Window 311 (upper)			0.68	1.01	107.5	0.67	73.9	0.9%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.4%**	**Pass**
Window 312 (lower)			0.68	1.5	107.5	0.68	53.1	0.4%	
Window 312 (upper)			0.68	2.46	107.5	0.68	73.4	2.1%	
Window 313 (lower)			0.68	0.05	107.5	0.68	61.7	0.0%	
Window 313 (upper)			0.68	1.01	107.5	0.68	72.6	0.9%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.4%**	**Pass**
Window 314 (lower)			0.68	0.05	107.5	0.68	61.1	0.0%	
Window 314 (upper)			0.68	1.01	107.5	0.68	70.5	0.8%	
Window 315 (lower)			0.68	1.5	107.5	0.68	52.4	0.4%	
Window 315 (upper)			0.68	2.46	107.5	0.68	70.2	2.0%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.2%**	**Pass**
Window 316 (lower)			0.68	0.05	107.5	0.67	61.0	0.0%	
Window 316 (upper)			0.68	1.01	107.5	0.67	70.0	0.8%	
Window 317 (lower)			0.68	1.5	107.5	0.67	53.3	0.4%	
Window 317 (upper)			0.68	2.46	107.5	0.67	70.9	2.0%	
Window 318			0.68	0.97	107.5	0.67	53.6	0.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.8%**	**Pass**
Window 319			0.68	0.92	58.97	0.7	18.9	0.4%	
Window 320			0.68	2.24	58.97	0.7	39.1	2.0%	
Total ADF for room	Bedroom	1.0%						**2.4%**	**Pass**
Window 321	Bedroom	1.0%	0.68	2.24	58.97	0.71	26.4	**1.4%**	**Pass**
Window 322	Bedroom	1.0%	0.68	2.24	58.97	0.71	26.3	**1.4%**	**Pass**
Window 323			0.68	2.24	58.97	0.7	37.3	1.9%	
Window 324			0.68	0.92	58.97	0.7	74.5	1.5%	
Total ADF for room	Bedroom	1.0%						**3.4%**	**Pass**
Window 325			0.68	0.97	107.5	0.67	54.0	0.6%	
Window 326 (lower)			0.68	1.5	107.5	0.67	53.7	0.4%	
Window 326 (upper)			0.68	2.46	107.5	0.67	66.2	1.9%	
Window 327 (lower)			0.68	0.05	107.5	0.67	60.2	0.0%	
Window 327 (upper)			0.68	1.01	107.5	0.67	66.0	0.8%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.7%**	**Pass**
Window 328 (lower)			0.68	1.5	107.5	0.68	53.0	0.4%	
Window 328 (upper)			0.68	2.46	107.5	0.68	67.4	1.9%	
Window 329 (lower)			0.68	0.05	107.5	0.68	60.5	0.0%	
Window 329 (upper)			0.68	1.01	107.5	0.68	68.0	0.8%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.1%**	**Pass**
Window 330 (lower)			0.68	0.05	107.5	0.68	61.4	0.0%	
Window 330 (upper)			0.68	1.01	107.5	0.68	70.8	0.8%	
Window 331 (lower)			0.68	1.5	107.5	0.68	52.4	0.4%	
Window 331 (upper)			0.68	2.46	107.5	0.68	71.9	2.1%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.3%**	**Pass**

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 332 (lower)			0.68	0.05	107.5	0.67	62.0	0.0%	
Window 332 (upper)			0.68	1.01	107.5	0.67	73.4	0.9%	
Window 333 (lower)			0.68	1.5	107.5	0.67	53.3	0.4%	
Window 333 (upper)			0.68	2.46	107.5	0.67	74.0	2.1%	
Window 334			0.68	0.97	107.5	0.67	0.4	0.0%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**3.4%**	**Pass**
First Floor									
Window 335 (lower)			0.68	0.29	169.62	0.7	61.2	0.1%	
Window 335 (upper)			0.68	1.01	169.62	0.7	57.5	0.5%	
Window 336 (lower)			0.68	1.11	169.62	0.7	50.4	0.2%	
Window 336 (upper)			0.68	1.82	169.62	0.7	30.0	0.4%	
Window 337			0.68	0.9	169.62	0.7	78.0	0.5%	
Window 338			0.68	2.0	169.62	0.7	78.8	1.2%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.9%**	**Pass**
Window 339 (lower)			0.68	1.11	170.07	0.7	44.2	0.2%	
Window 339 (upper)			0.68	1.82	170.07	0.7	27.0	0.4%	
Window 340			0.68	0.9	170.07	0.7	78.5	0.6%	
Window 341			0.68	2.0	170.07	0.7	78.3	1.2%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.4%**	**Pass**
Window 342 (lower)			0.68	1.11	170.07	0.7	44.4	0.2%	
Window 342 (upper)			0.68	1.82	170.07	0.7	26.7	0.4%	
Window 343			0.68	2.0	170.07	0.7	80.0	1.3%	
Window 344			0.68	0.9	170.07	0.7	79.5	0.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.5%**	**Pass**
Window 345 (lower)			0.68	1.11	169.62	0.7	50.8	0.2%	
Window 345 (upper)			0.68	1.82	169.62	0.7	30.6	0.4%	
Window 346 (lower)			0.68	0.29	169.62	0.7	2.1	0.0%	
Window 346 (upper)			0.68	1.01	169.62	0.7	0.4	0.0%	
Window 347			0.68	2.0	169.62	0.7	80.3	1.2%	
Window 348			0.68	0.9	169.62	0.7	79.9	0.6%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.4%**	**Pass**
Window 349 (lower)			0.68	0.29	169.62	0.7	1.9	0.0%	
Window 349 (upper)			0.68	1.01	169.62	0.7	0.4	0.0%	
Window 350 (lower)			0.68	1.11	169.62	0.7	50.5	0.2%	
Window 350 (upper)			0.68	1.82	169.62	0.7	30.1	0.4%	
Window 351			0.68	0.9	169.62	0.7	79.5	0.6%	
Window 352			0.68	2.0	169.62	0.7	80.1	1.2%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.4%**	**Pass**
Window 353 (lower)			0.68	1.11	170.07	0.7	43.5	0.2%	
Window 353 (upper)			0.68	1.82	170.07	0.7	26.0	0.4%	
Window 354			0.68	0.9	170.07	0.7	78.3	0.6%	
Window 355			0.68	2.0	170.07	0.7	79.4	1.2%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.4%**	**Pass**
Window 356 (lower)			0.68	1.11	170.07	0.7	43.4	0.2%	

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 356 (upper)			0.68	1.82	170.07	0.7	25.5	0.4%	
Window 357			0.68	2.0	170.07	0.7	76.9	1.2%	
Window 358			0.68	0.9	170.07	0.7	77.1	0.5%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.3%**	**Pass**
Window 359 (lower)			0.68	1.11	169.62	0.7	49.2	0.2%	
Window 359 (upper)			0.68	1.82	169.62	0.7	28.5	0.4%	
Window 360 (lower)			0.68	0.29	169.62	0.7	61.3	0.1%	
Window 360 (upper)			0.68	1.01	169.62	0.7	57.4	0.4%	
Window 361			0.68	2.0	169.62	0.7	76.6	1.2%	
Window 362			0.68	0.9	169.62	0.7	76.5	0.5%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.8%**	**Pass**
<u>Second Floor</u>									
Window 363 (lower)			0.68	0.47	65.57	0.71	85.8	0.3%	
Window 363 (upper)			0.68	1.12	65.57	0.71	86.2	2.0%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 364 (lower)			0.68	0.47	65.79	0.71	86.1	0.3%	
Window 364 (upper)			0.68	1.12	65.79	0.71	86.4	2.0%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 365 (lower)			0.68	0.47	65.79	0.71	86.2	0.3%	
Window 365 (upper)			0.68	1.12	65.79	0.71	86.4	2.0%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 366 (lower)			0.68	0.47	65.57	0.71	86.0	0.3%	
Window 366 (upper)			0.68	1.12	65.57	0.71	86.2	2.0%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 367 (lower)			0.68	0.29	60.06	0.69	15.6	0.0%	
Window 367 (upper)			0.68	1.01	60.06	0.69	12.9	0.3%	
Window 368			0.68	2.0	60.06	0.69	84.5	3.7%	
Total ADF for room	Bedroom	1.0%						**4.0%**	**Pass**
Window 369	Bedroom	1.0%	0.68	0.9	41.24	0.72	84.3	**2.6%**	**Pass**
Window 370	Bedroom	1.0%	0.68	2.0	60.3	0.71	84.4	**3.8%**	**Pass**
Window 371	Bedroom	1.0%	0.68	0.9	41.24	0.72	84.2	**2.6%**	**Pass**
Window 372	Bedroom	1.0%	0.68	0.9	41.24	0.72	84.3	**2.6%**	**Pass**
Window 373	Bedroom	1.0%	0.68	2.0	60.3	0.71	84.5	**3.8%**	**Pass**
Window 374	Bedroom	1.0%	0.68	0.9	41.24	0.72	84.2	**2.6%**	**Pass**
Window 375			0.68	2.0	60.06	0.69	84.3	3.7%	
Window 376 (lower)			0.68	0.29	60.06	0.69	64.9	0.2%	
Window 376 (upper)			0.68	1.01	60.06	0.69	61.0	1.3%	
Total ADF for room	Bedroom	1.0%						**5.2%**	**Pass**
Window 377 (lower)			0.68	0.47	65.57	0.71	85.7	0.3%	
Window 377 (upper)			0.68	1.12	65.57	0.71	86.0	2.0%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**

Appendix 2 - Average Daylight Factor (ADF)

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					ADF	Result
	Primary room use	ADF	T	Aw	A	R	θ		
Window 378 (lower)			0.68	0.47	65.79	0.71	85.4	0.3%	
Window 378 (upper)			0.68	1.12	65.79	0.71	85.7	2.0%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 379 (lower)			0.68	0.47	65.79	0.71	84.7	0.3%	
Window 379 (upper)			0.68	1.12	65.79	0.71	85.2	2.0%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 380 (lower)			0.68	0.47	65.57	0.71	84.3	0.3%	
Window 380 (upper)			0.68	1.12	65.57	0.71	84.9	2.0%	
Total ADF for room	Bedroom	1.0%						**2.3%**	**Pass**
Window 381 (lower)			0.68	0.29	60.06	0.69	64.5	0.2%	
Window 381 (upper)			0.68	1.01	60.06	0.69	60.4	1.3%	
Window 382			0.68	2.0	60.06	0.69	83.8	3.6%	
Total ADF for room	Bedroom	1.0%						**5.1%**	**Pass**
Window 383	Bedroom	1.0%	0.68	0.9	41.24	0.72	83.7	**2.6%**	**Pass**
Window 384	Bedroom	1.0%	0.68	2.0	60.3	0.71	84.1	**3.8%**	**Pass**
Window 385	Bedroom	1.0%	0.68	0.9	41.24	0.72	84.0	**2.6%**	**Pass**
Window 386	Bedroom	1.0%	0.68	0.9	41.24	0.72	84.0	**2.6%**	**Pass**
Window 387	Bedroom	1.0%	0.68	2.0	60.3	0.71	84.3	**3.8%**	**Pass**
Window 388	Bedroom	1.0%	0.68	0.9	41.24	0.72	84.2	**2.6%**	**Pass**
Window 389			0.68	2.0	60.06	0.69	84.4	3.7%	
Window 390 (lower)			0.68	0.29	60.06	0.69	15.4	0.0%	
Window 390 (upper)			0.68	1.01	60.06	0.69	12.5	0.3%	
Total ADF for room	Bedroom	1.0%						**4.0%**	**Pass**

Appendix 2 - Room Depth Calculation
Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Room Depth Coefficients				Room Depth Calculation		
	L	W	H	Rb	L/W + L/H	<=	2/1-Rb
Apartment Block							
Ground Floor							
Window 1	5.8	2.8	2.2	0.71	4.71	<=	6.89
Window 4	4.1	2.8	2.6	0.7	3.04	<=	6.59
Window 5	5.4	3.2	2.6	0.7	3.76	<=	6.73
Window 6	3.7	3.3	2.6	0.7	2.54	<=	6.61
Window 11	3.7	3.3	2.5	0.7	2.6	<=	6.61
Window 12	6.2	6.2	2.6	0.68	3.38	<=	6.3
Window 13	6.2	6.2	2.6	0.68	3.38	<=	6.3
Window 14	4.3	3.0	2.2	0.7	3.39	<=	6.75
Window 15	4.3	2.9	2.2	0.7	3.44	<=	6.69
Window 16	3.3	3.5	2.2	0.68	2.44	<=	6.33
Window 21	3.3	3.5	2.2	0.68	2.44	<=	6.33
Window 22	4.3	3.0	2.2	0.7	3.39	<=	6.75
Window 23	4.3	3.1	2.2	0.7	3.34	<=	6.68
First Floor							
Window 27	4.2	2.8	2.2	0.7	3.41	<=	6.69
Window 30	4.2	3.4	2.6	0.7	2.85	<=	6.65
Window 31	4.6	3.3	2.6	0.7	3.16	<=	6.69
Window 32	3.7	2.5	2.6	0.7	2.9	<=	6.56
Window 37	3.7	3.3	2.5	0.7	2.6	<=	6.61
Window 41	4.3	2.9	2.2	0.7	3.44	<=	6.75
Window 42	4.3	2.9	2.2	0.7	3.44	<=	6.69
Window 43	3.3	4.2	2.3	0.69	2.22	<=	6.38
Window 44	5.2	5.2	2.2	0.68	3.36	<=	6.23
Window 45	5.2	5.2	2.2	0.68	3.36	<=	6.23
Window 46	3.3	4.2	2.2	0.69	2.29	<=	6.38
Window 47	4.3	3.0	2.2	0.7	3.39	<=	6.75
Window 48	4.3	3.1	2.2	0.7	3.34	<=	6.68
Second Floor							
Window 52	4.2	2.8	2.2	0.7	3.41	<=	6.69
Window 55	4.2	3.4	2.6	0.7	2.85	<=	6.65
Window 56	4.6	3.3	2.6	0.7	3.16	<=	6.69
Window 57	3.7	2.5	2.5	0.7	2.96	<=	6.56
Window 62	3.7	3.3	2.5	0.7	2.6	<=	6.61
Window 66	4.3	3.0	2.2	0.7	3.39	<=	6.75
Window 67	4.3	2.9	2.2	0.7	3.44	<=	6.69
Window 68	3.3	4.2	2.3	0.69	2.22	<=	6.38
Window 69	5.2	5.2	2.2	0.68	3.36	<=	6.23

Appendix 2 - Room Depth Calculation

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Room Depth Coefficients				Room Depth Calculation		
	L	W	H	Rb	L/W + L/H	<=	2/1-Rb
Window 70	5.2	5.2	2.2	0.68	3.36	<=	6.23
Window 71	3.3	4.2	2.2	0.69	2.29	<=	6.38
Window 72	4.3	3.0	2.2	0.7	3.39	<=	6.75
Window 73	4.3	3.1	2.2	0.7	3.34	<=	6.68
Third Floor							
Window 77	4.2	2.8	2.2	0.7	3.41	<=	6.71
Window 80	4.2	3.4	2.6	0.7	2.85	<=	6.67
Window 81	4.6	3.3	2.6	0.7	3.16	<=	6.72
Window 82	3.7	2.5	2.5	0.7	2.96	<=	6.59
Window 87	3.7	3.3	2.5	0.7	2.6	<=	6.64
Window 88	3.3	4.2	2.3	0.69	2.22	<=	6.41
Window 89	5.2	5.2	2.2	0.68	3.36	<=	6.25
Window 90	5.2	5.2	2.2	0.68	3.36	<=	6.25
Window 91	3.3	4.2	2.2	0.69	2.29	<=	6.4
Window 92	4.3	3.0	2.2	0.7	3.39	<=	6.78
Window 93	4.3	3.1	2.2	0.7	3.34	<=	6.71
Urban Block 14							
Ground Floor							
Window 102	4.4	2.9	2.2	0.71	3.52	<=	6.81
Window 103	4.4	2.9	2.2	0.71	3.52	<=	6.81
Window 125	4.4	2.9	2.2	0.71	3.52	<=	6.96
Window 126	4.4	2.9	2.2	0.71	3.52	<=	6.96
Second Floor							
Window 157	3.1	2.3	2.3	0.72	2.7	<=	7.26
Window 160	3.8	4.1	2.2	0.71	2.65	<=	6.99
Window 161	3.8	4.1	2.2	0.71	2.65	<=	6.98
Window 162	3.8	4.1	2.2	0.71	2.65	<=	6.98
Window 163	3.8	4.1	2.2	0.71	2.65	<=	6.99
Window 166	3.1	2.3	2.3	0.72	2.7	<=	7.26
Window 167	4.2	3.0	2.3	0.71	3.23	<=	6.82
Window 168	3.1	2.3	2.3	0.72	2.7	<=	7.26
Window 169	3.1	2.3	2.3	0.72	2.7	<=	7.26
Window 170	4.2	3.0	2.3	0.71	3.23	<=	6.82
Window 173	3.1	2.3	2.3	0.72	2.7	<=	7.26
Window 174	4.2	3.0	2.3	0.71	3.23	<=	6.82
Window 175	3.1	2.3	2.3	0.72	2.7	<=	7.26
Window 176	3.1	2.3	2.3	0.72	2.7	<=	7.26
Window 177	4.2	3.0	2.2	0.71	3.31	<=	6.82
Window 178	3.1	2.3	2.2	0.72	2.76	<=	7.26

Appendix 2 - Room Depth Calculation

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Room Depth Coefficients				Room Depth Calculation		
	L	W	H	Rb	L/W + L/H	<=	2/1-Rb
Window 181	3.8	4.1	2.2	0.71	2.65	<=	6.99
Window 182	3.8	4.1	2.2	0.71	2.65	<=	6.98
Window 183	3.8	4.1	2.2	0.71	2.65	<=	6.98
Window 184	3.8	4.1	2.2	0.71	2.65	<=	6.99
Urban Block 7							
Ground Floor							
Window 185	2.8	3.5	2.4	0.7	1.97	<=	6.6
Window 188	4.6	5.5	2.4	0.69	2.75	<=	6.53
Window 189	4.6	5.5	2.4	0.69	2.75	<=	6.53
Window 190	4.6	5.5	2.4	0.69	2.75	<=	6.53
Window 191	4.6	5.5	2.4	0.69	2.75	<=	6.53
Window 192	4.6	5.5	2.4	0.69	2.75	<=	6.53
Window 193	4.6	5.5	2.4	0.69	2.75	<=	6.53
Window 194	4.6	5.5	2.4	0.69	2.75	<=	6.53
Window 195	2.8	3.5	2.4	0.7	1.97	<=	6.6
Window 196	2.8	3.5	2.4	0.7	1.97	<=	6.6
Window 197	2.8	3.5	2.4	0.7	1.97	<=	6.6
Window 198	2.8	3.5	2.4	0.7	1.97	<=	6.6
Window 199	2.8	3.5	2.4	0.7	1.97	<=	6.6
Window 200	2.8	3.5	2.4	0.7	1.97	<=	6.6
Window 201	2.8	3.5	2.4	0.7	1.97	<=	6.6
First Floor							
Window 205	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 206	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 207	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 208	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 209	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 210	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 211	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 212	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 213	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 214	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 215	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 216	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 217	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 218	4.6	5.5	2.4	0.69	2.75	<=	6.36
Window 219	2.8	3.6	2.4	0.71	1.94	<=	6.86
Window 220	2.8	3.6	2.4	0.71	1.94	<=	6.86
Window 221	2.8	3.6	2.4	0.71	1.94	<=	6.86
Window 222	2.8	3.6	2.4	0.71	1.94	<=	6.86
Window 223	2.8	3.6	2.4	0.71	1.94	<=	6.86

Appendix 2 - Room Depth Calculation

Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Room Depth Coefficients				Room Depth Calculation		
	L	W	H	Rb	L/W + L/H	<=	2/1-Rb
Window 224	2.8	3.6	2.4	0.71	1.94	<=	6.86
Window 225	2.8	3.6	2.4	0.71	1.94	<=	6.86
Window 226	2.8	3.6	2.4	0.71	1.94	<=	6.86
Urban Block 8							
Ground Floor							
Window 229	3.7	3.3	2.2	0.71	2.8	<=	6.98
Window 230	3.7	3.3	2.2	0.71	2.8	<=	6.98
Window 233	3.0	4.6	2.2	0.71	2.02	<=	6.98
Window 234	3.0	4.6	2.2	0.71	2.02	<=	6.98
Window 237	3.7	3.2	2.2	0.71	2.84	<=	6.98
Window 238	3.7	3.2	2.2	0.71	2.84	<=	6.98
Window 241	3.0	4.6	2.2	0.71	2.02	<=	6.98
Window 242	3.0	4.6	2.2	0.71	2.02	<=	6.98
Window 245	3.7	3.3	2.2	0.71	2.8	<=	6.98
Window 246	3.7	3.3	2.2	0.71	2.8	<=	6.98
Window 249	3.0	4.6	2.2	0.71	2.02	<=	6.98
Window 250	3.0	4.6	2.2	0.71	2.02	<=	6.98
Window 253	3.0	4.6	2.2	0.71	2.02	<=	6.98
Window 254	3.0	4.6	2.2	0.71	2.02	<=	6.98
Window 257	3.7	3.3	2.2	0.71	2.8	<=	6.98
Window 258	3.7	3.3	2.2	0.71	2.8	<=	6.98
First Floor							
Window 259	3.2	4.2	2.2	0.71	2.22	<=	6.98
Window 260	3.2	3.7	2.2	0.71	2.32	<=	7.0
Window 261	3.2	3.7	2.2	0.71	2.32	<=	7.0
Window 262	3.2	4.2	2.2	0.71	2.22	<=	6.98
Window 270	3.2	4.2	2.2	0.71	2.22	<=	6.98
Window 271	3.2	3.7	2.2	0.71	2.32	<=	7.0
Window 272	3.2	3.7	2.2	0.71	2.32	<=	7.0
Window 273	3.2	4.2	2.2	0.71	2.22	<=	6.98
Window 281	3.2	4.2	2.2	0.71	2.22	<=	6.98
Window 282	3.2	3.7	2.2	0.71	2.32	<=	7.0
Window 283	3.2	3.7	2.2	0.71	2.32	<=	7.0
Window 284	3.2	4.2	2.2	0.71	2.22	<=	6.98
Window 292	3.2	3.7	2.2	0.71	2.32	<=	7.0
Window 293	3.2	4.2	2.2	0.71	2.22	<=	6.98
Window 301	3.2	4.2	2.2	0.71	2.22	<=	6.98
Window 302	3.2	3.7	2.2	0.71	2.32	<=	7.0

Appendix 2 - Room Depth Calculation
Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Room Depth Coefficients				Room Depth Calculation		
	L	W	H	Rb	L/W + L/H	<=	2/1-Rb
Urban Block 13							
Ground Floor							
Window 305	4.4	2.9	2.2	0.71	3.52	<=	6.81
Window 306	4.4	2.9	2.2	0.71	3.52	<=	6.81
Window 321	4.4	2.9	2.2	0.71	3.52	<=	6.81
Window 322	4.4	2.9	2.2	0.71	3.52	<=	6.81
Second Floor							
Window 363	3.8	4.1	2.2	0.71	2.65	<=	6.99
Window 364	3.8	4.1	2.2	0.71	2.65	<=	6.98
Window 365	3.8	4.1	2.2	0.71	2.65	<=	6.98
Window 366	3.8	4.1	2.2	0.71	2.65	<=	6.99
Window 369	3.1	2.3	2.2	0.72	2.76	<=	7.26
Window 370	4.2	3.0	2.2	0.71	3.31	<=	6.82
Window 371	3.1	2.3	2.2	0.72	2.76	<=	7.26
Window 372	3.1	2.3	2.2	0.72	2.76	<=	7.26
Window 373	4.2	3.0	2.2	0.71	3.31	<=	6.82
Window 374	3.1	2.3	2.2	0.72	2.76	<=	7.26
Window 377	3.8	4.1	2.2	0.71	2.65	<=	6.99
Window 378	3.8	4.1	2.2	0.71	2.65	<=	6.98
Window 379	3.8	4.1	2.2	0.71	2.65	<=	6.98
Window 380	3.8	4.1	2.2	0.71	2.65	<=	6.99
Window 383	3.1	2.3	2.2	0.72	2.76	<=	7.26
Window 384	4.2	3.0	2.2	0.71	3.31	<=	6.82
Window 385	3.1	2.3	2.2	0.72	2.76	<=	7.26
Window 386	3.1	2.3	2.2	0.72	2.76	<=	7.26
Window 387	4.2	3.0	2.2	0.71	3.31	<=	6.82
Window 388	3.1	2.3	2.2	0.72	2.76	<=	7.26

Appendix 2 - Sunlight to Windows
Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Room Use	APSH		At Least 1 Window South Facing
		Total	Winter	
Apartment Block				
Ground Floor				
Window 2	Living/Dining/Kitchen	57%	24%	Yes
Window 3	Living/Dining/Kitchen	53%	20%	
Window 7	Living/Dining/Kitchen	3%	3%	Yes
Window 8	Living/Dining/Kitchen	53%	20%	
Window 9	Living/Dining/Kitchen	53%	20%	Yes
Window 10	Living/Dining/Kitchen	8%	0%	
Window 12	Living/Dining/Kitchen	14%	8%	Yes
Window 13	Living/Dining/Kitchen	12%	9%	
Window 17	Living/Dining/Kitchen	0%	0%	No
Window 18	Living/Dining/Kitchen	18%	2%	
Window 19	Living/Dining/Kitchen	16%	2%	Yes
Window 20	Living/Dining/Kitchen	8%	3%	
Window 24	Living/Dining/Kitchen	6%	1%	Yes
Window 25	Living/Dining/Kitchen	7%	2%	
Window 26	Living/Dining/Kitchen	48%	20%	
First Floor				
Window 28	Living/Dining/Kitchen	13%	12%	Yes
Window 29	Living/Dining/Kitchen	53%	20%	
Window 33	Living/Dining/Kitchen	3%	3%	Yes
Window 34	Living/Dining/Kitchen	53%	20%	
Window 35	Living/Dining/Kitchen	53%	20%	Yes
Window 36	Living/Dining/Kitchen	8%	0%	
Window 38	Living/Dining/Kitchen	14%	8%	Yes
Window 39	Living/Dining/Kitchen	12%	9%	
Window 40	Living/Dining/Kitchen	25%	4%	
Window 44	Living/Dining/Kitchen	5%	0%	No
Window 45	Living/Dining/Kitchen	8%	2%	No
Window 49	Living/Dining/Kitchen	7%	1%	Yes
Window 50	Living/Dining/Kitchen	8%	3%	
Window 51	Living/Dining/Kitchen	48%	20%	
Second Floor				
Window 53	Living/Dining/Kitchen	13%	12%	Yes
Window 54	Living/Dining/Kitchen	53%	20%	
Window 58	Living/Dining/Kitchen	3%	3%	Yes
Window 59	Living/Dining/Kitchen	53%	20%	
Window 60	Living/Dining/Kitchen	53%	20%	Yes
Window 61	Living/Dining/Kitchen	8%	0%	
Window 63	Living/Dining/Kitchen	14%	8%	Yes
Window 64	Living/Dining/Kitchen	12%	9%	
Window 65	Living/Dining/Kitchen	27%	4%	
Window 69	Living/Dining/Kitchen	5%	0%	No
Window 70	Living/Dining/Kitchen	8%	2%	No
Window 74	Living/Dining/Kitchen	7%	1%	Yes
Window 75	Living/Dining/Kitchen	8%	3%	

Appendix 2 - Sunlight to Windows
Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Room Use	APSH		At Least 1 Window South Facing
		Total	Winter	
Window 76	Living/Dining/Kitchen	48%	20%	
Third Floor				
Window 78	Living/Dining/Kitchen	13%	12%	Yes
Window 79	Living/Dining/Kitchen	53%	20%	
Window 83	Living/Dining/Kitchen	21%	14%	Yes
Window 84	Living/Dining/Kitchen	53%	20%	
Window 85	Living/Dining/Kitchen	53%	20%	Yes
Window 86	Living/Dining/Kitchen	8%	0%	
Window 89	Living/Dining/Kitchen	5%	0%	No
Window 90	Living/Dining/Kitchen	8%	2%	No
Window 94	Living/Dining/Kitchen	7%	1%	Yes
Window 95	Living/Dining/Kitchen	8%	3%	
Window 96	Living/Dining/Kitchen	48%	20%	
Urban Block 14				
Ground Floor				
Window 97	Living/Dining/Kitchen	42%	12%	Yes
Window 98	Living/Dining/Kitchen	59%	17%	
Window 99	Living/Dining/Kitchen	16%	5%	
Window 106	Living/Dining/Kitchen	2%	0%	Yes
Window 107	Living/Dining/Kitchen	57%	18%	
Window 108	Living/Dining/Kitchen	43%	13%	
Window 109	Living/Dining/Kitchen	58%	17%	Yes
Window 110	Living/Dining/Kitchen	42%	12%	
Window 111	Living/Dining/Kitchen	41%	11%	Yes
Window 112	Living/Dining/Kitchen	59%	17%	
Window 113	Living/Dining/Kitchen	15%	3%	Yes
Window 114	Living/Dining/Kitchen	10%	0%	
Window 115	Living/Dining/Kitchen	3%	0%	
Window 116	Living/Dining/Kitchen	10%	0%	No
Window 117	Living/Dining/Kitchen	3%	0%	
Window 118	Living/Dining/Kitchen	2%	0%	No
Window 119	Living/Dining/Kitchen	10%	0%	
Window 120	Living/Dining/Kitchen	1%	0%	No
Window 121	Living/Dining/Kitchen	9%	0%	
Window 122	Living/Dining/Kitchen	0%	0%	
First Floor				
Window 129	Living/Dining/Kitchen	40%	16%	Yes
Window 130	Living/Dining/Kitchen	52%	21%	
Window 131	Living/Dining/Kitchen	22%	5%	
Window 132	Living/Dining/Kitchen	4%	0%	
Window 133	Living/Dining/Kitchen	39%	15%	Yes
Window 134	Living/Dining/Kitchen	51%	20%	
Window 135	Living/Dining/Kitchen	1%	0%	

Appendix 2 - Sunlight to Windows
Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Room Use	APSH		At Least 1 Window South Facing
		Total	Winter	
Window 136	Living/Dining/Kitchen	52%	21%	Yes
Window 137	Living/Dining/Kitchen	39%	15%	
Window 138	Living/Dining/Kitchen	2%	0%	
Window 139	Living/Dining/Kitchen	50%	19%	Yes
Window 140	Living/Dining/Kitchen	40%	16%	
Window 141	Living/Dining/Kitchen	2%	0%	
Window 142	Living/Dining/Kitchen	4%	0%	
Window 143	Living/Dining/Kitchen	6%	6%	Yes
Window 144	Living/Dining/Kitchen	23%	6%	
Window 145	Living/Dining/Kitchen	10%	0%	
Window 146	Living/Dining/Kitchen	3%	0%	
Window 147	Living/Dining/Kitchen	4%	4%	Yes
Window 148	Living/Dining/Kitchen	10%	0%	
Window 149	Living/Dining/Kitchen	3%	0%	
Window 150	Living/Dining/Kitchen	4%	4%	Yes
Window 151	Living/Dining/Kitchen	2%	0%	
Window 152	Living/Dining/Kitchen	9%	0%	
Window 153	Living/Dining/Kitchen	8%	4%	Yes
Window 154	Living/Dining/Kitchen	2%	0%	
Window 155	Living/Dining/Kitchen	9%	0%	
Window 156	Living/Dining/Kitchen	3%	0%	
Urban Block 7				
Ground Floor				
Window 186	Living/Dining/Kitchen	0%	0%	No
Window 187	Living/Dining/Kitchen	3%	0%	
Window 188	Living/Dining/Kitchen	17%	0%	No
Window 189	Living/Dining/Kitchen	2%	0%	No
Window 190	Living/Dining/Kitchen	16%	0%	No
Window 191	Living/Dining/Kitchen	3%	0%	No
Window 192	Living/Dining/Kitchen	17%	0%	No
Window 193	Living/Dining/Kitchen	3%	0%	No
Window 194	Living/Dining/Kitchen	17%	0%	No
First Floor				
Window 202	Living/Dining/Kitchen	1%	0%	No
Window 203	Living/Dining/Kitchen	18%	2%	
Window 204	Living/Dining/Kitchen	15%	0%	
Window 205	Living/Dining/Kitchen	19%	2%	No
Window 206	Living/Dining/Kitchen	18%	2%	
Window 207	Living/Dining/Kitchen	18%	2%	No
Window 208	Living/Dining/Kitchen	15%	0%	
Window 209	Living/Dining/Kitchen	19%	2%	No
Window 210	Living/Dining/Kitchen	18%	2%	
Window 211	Living/Dining/Kitchen	18%	2%	No
Window 212	Living/Dining/Kitchen	15%	0%	
Window 213	Living/Dining/Kitchen	19%	2%	No

Appendix 2 - Sunlight to Windows
Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Room Use	APSH		At Least 1 Window South Facing
		Total	Winter	
Window 214	Living/Dining/Kitchen	18%	2%	
Window 215	Living/Dining/Kitchen	18%	2%	No
Window 216	Living/Dining/Kitchen	15%	0%	
Window 217	Living/Dining/Kitchen	18%	1%	No
Window 218	Living/Dining/Kitchen	17%	1%	
Urban Block 8				
Ground Floor				
Window 227	Living/Dining/Kitchen	0%	0%	No
Window 228	Living/Dining/Kitchen	18%	3%	
Window 231	Living/Dining/Kitchen	18%	2%	Yes
Window 232	Living/Dining/Kitchen	0%	0%	
Window 235	Living/Dining/Kitchen	0%	0%	No
Window 236	Living/Dining/Kitchen	18%	1%	
Window 239	Living/Dining/Kitchen	12%	1%	Yes
Window 240	Living/Dining/Kitchen	0%	0%	
Window 243	Living/Dining/Kitchen	0%	0%	No
Window 244	Living/Dining/Kitchen	13%	1%	
Window 247	Living/Dining/Kitchen	12%	1%	Yes
Window 248	Living/Dining/Kitchen	34%	7%	
Window 251	Living/Dining/Kitchen	7%	0%	No
Window 252	Living/Dining/Kitchen	11%	0%	
Window 255	Living/Dining/Kitchen	37%	9%	Yes
Window 256	Living/Dining/Kitchen	7%	0%	
First Floor				
Window 263	Living/Dining/Kitchen	34%	10%	Yes
Window 264	Living/Dining/Kitchen	12%	0%	
Window 265	Living/Dining/Kitchen	15%	6%	
Window 266	Living/Dining/Kitchen	15%	6%	Yes
Window 267	Living/Dining/Kitchen	15%	12%	
Window 268	Living/Dining/Kitchen	34%	10%	
Window 269	Living/Dining/Kitchen	1%	0%	
Window 274	Living/Dining/Kitchen	35%	11%	Yes
Window 275	Living/Dining/Kitchen	12%	0%	
Window 276	Living/Dining/Kitchen	16%	7%	
Window 277	Living/Dining/Kitchen	16%	7%	Yes
Window 278	Living/Dining/Kitchen	15%	12%	
Window 279	Living/Dining/Kitchen	35%	11%	
Window 280	Living/Dining/Kitchen	1%	0%	
Window 285	Living/Dining/Kitchen	34%	10%	Yes
Window 286	Living/Dining/Kitchen	12%	0%	
Window 287	Living/Dining/Kitchen	16%	7%	
Window 288	Living/Dining/Kitchen	15%	6%	Yes
Window 289	Living/Dining/Kitchen	15%	12%	
Window 290	Living/Dining/Kitchen	34%	10%	
Window 291	Living/Dining/Kitchen	1%	0%	
Window 294	Living/Dining/Kitchen	42%	20%	Yes
Window 295	Living/Dining/Kitchen	15%	14%	
Window 296	Living/Dining/Kitchen	13%	13%	

Appendix 2 - Sunlight to Windows
Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Room Use	APSH		At Least 1 Window South Facing
		Total	Winter	
Window 297	Living/Dining/Kitchen	13%	13%	Yes
Window 298	Living/Dining/Kitchen	18%	5%	
Window 299	Living/Dining/Kitchen	42%	20%	
Window 300	Living/Dining/Kitchen	37%	11%	
Urban Block 13				
Ground Floor				
Window 309	Living/Dining/Kitchen	0%	0%	Yes
Window 310	Living/Dining/Kitchen	44%	15%	
Window 311	Living/Dining/Kitchen	32%	8%	
Window 312	Living/Dining/Kitchen	45%	17%	Yes
Window 313	Living/Dining/Kitchen	30%	8%	
Window 314	Living/Dining/Kitchen	30%	7%	Yes
Window 315	Living/Dining/Kitchen	44%	16%	
Window 316	Living/Dining/Kitchen	28%	3%	Yes
Window 317	Living/Dining/Kitchen	43%	12%	
Window 318	Living/Dining/Kitchen	0%	0%	
Window 325	Living/Dining/Kitchen	14%	10%	Yes
Window 326	Living/Dining/Kitchen	41%	12%	
Window 327	Living/Dining/Kitchen	27%	4%	
Window 328	Living/Dining/Kitchen	44%	13%	Yes
Window 329	Living/Dining/Kitchen	27%	2%	
Window 330	Living/Dining/Kitchen	32%	5%	Yes
Window 331	Living/Dining/Kitchen	44%	12%	
Window 332	Living/Dining/Kitchen	32%	6%	Yes
Window 333	Living/Dining/Kitchen	46%	15%	
Window 334	Living/Dining/Kitchen	0%	0%	

Appendix 2 - Sunlight to Windows
Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

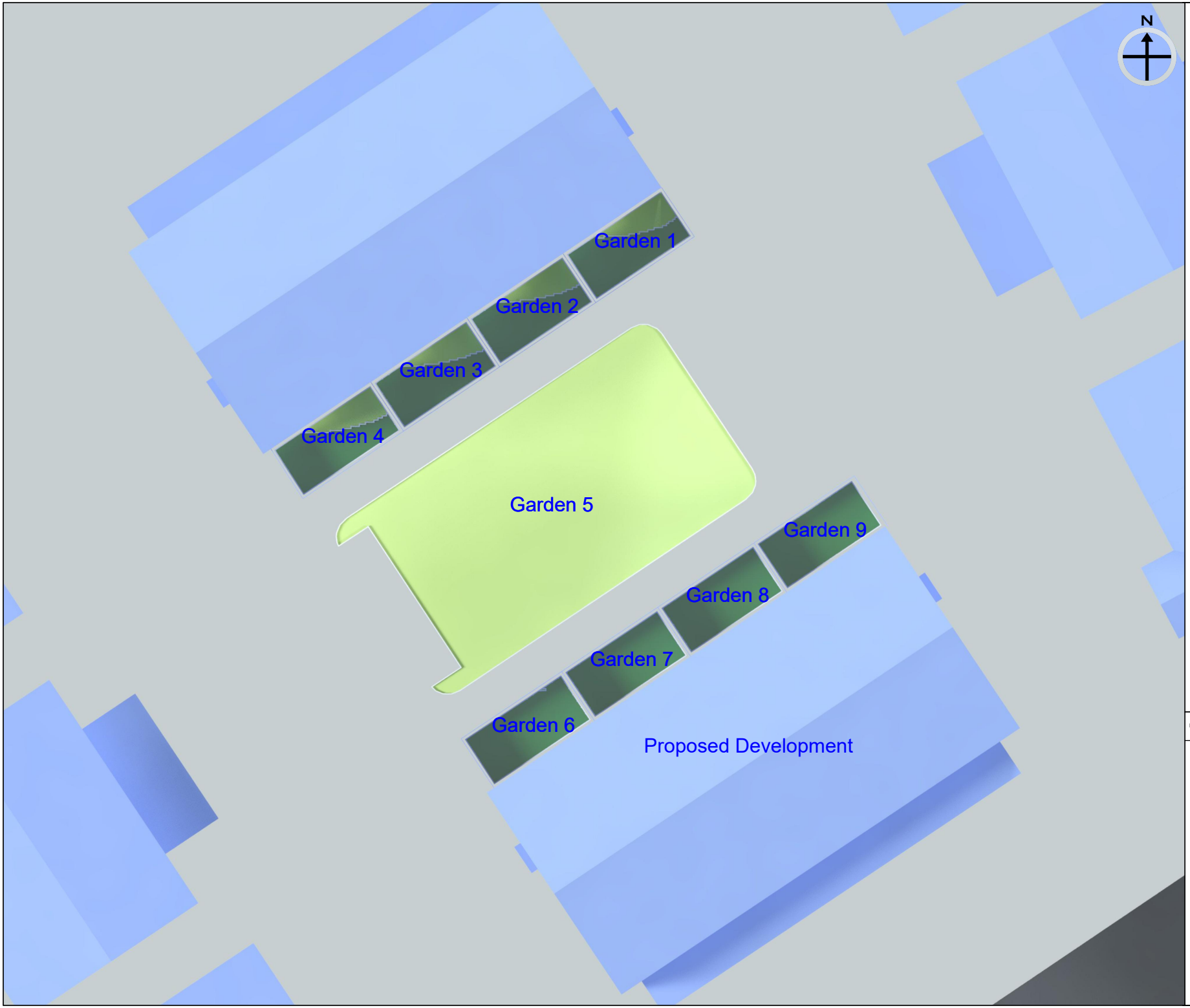
Reference	Room Use	APSH		At Least 1 Window
		Total	Winter	South Facing
First Floor				
Window 335	Living/Dining/Kitchen	0%	0%	Yes
Window 336	Living/Dining/Kitchen	3%	1%	
Window 337	Living/Dining/Kitchen	34%	7%	
Window 338	Living/Dining/Kitchen	42%	13%	
Window 339	Living/Dining/Kitchen	3%	1%	Yes
Window 340	Living/Dining/Kitchen	34%	8%	
Window 341	Living/Dining/Kitchen	41%	13%	
Window 342	Living/Dining/Kitchen	1%	0%	Yes
Window 343	Living/Dining/Kitchen	42%	14%	
Window 344	Living/Dining/Kitchen	35%	10%	
Window 345	Living/Dining/Kitchen	5%	3%	Yes
Window 346	Living/Dining/Kitchen	0%	0%	
Window 347	Living/Dining/Kitchen	42%	14%	
Window 348	Living/Dining/Kitchen	34%	8%	
Window 349	Living/Dining/Kitchen	0%	0%	Yes
Window 350	Living/Dining/Kitchen	3%	1%	
Window 351	Living/Dining/Kitchen	34%	7%	
Window 352	Living/Dining/Kitchen	43%	15%	
Window 353	Living/Dining/Kitchen	3%	1%	Yes
Window 354	Living/Dining/Kitchen	33%	6%	
Window 355	Living/Dining/Kitchen	42%	13%	
Window 356	Living/Dining/Kitchen	1%	0%	Yes
Window 357	Living/Dining/Kitchen	41%	12%	
Window 358	Living/Dining/Kitchen	35%	8%	
Window 359	Living/Dining/Kitchen	3%	2%	Yes
Window 360	Living/Dining/Kitchen	20%	12%	
Window 361	Living/Dining/Kitchen	41%	13%	
Window 362	Living/Dining/Kitchen	33%	6%	

Appendix 2 - Overshadowing to Gardens and Open Spaces
Site at BallyMany, Ballymany Road, Newbridge, Kildare, Ireland W12 T925

Reference	Total Area	Area receiving at least 2 hours of sunlight on 21 March	
Urban Block 14			
Ground Floor			
Garden 1	13.53 m2	4.33 m2	32%
Garden 2	13.17 m2	4.13 m2	31%
Garden 3	13.17 m2	4.18 m2	32%
Garden 4	13.85 m2	4.66 m2	34%
Garden 5	168.64 m2	168.63 m2	100%
Garden 6	13.85 m2	0.29 m2	2%
Garden 7	13.17 m2	0.0 m2	0%
Garden 8	13.17 m2	0.0 m2	0%
Garden 9	13.53 m2	0.0 m2	0%
Urban Block 8			
Ground Floor			
Garden 10	100.48 m2	78.2 m2	78%
Garden 11	102.15 m2	75.64 m2	74%
Garden 12	101.77 m2	79.58 m2	78%
Garden 13	100.02 m2	72.27 m2	72%
Garden 14	94.27 m2	73.59 m2	78%
Garden 15	103.8 m2	86.19 m2	83%
Garden 16	88.25 m2	44.28 m2	50%
Garden 17	68.55 m2	38.19 m2	56%
Urban Block 13			
Ground Floor			
Garden 18	9.74 m2	3.96 m2	41%
Garden 19	9.28 m2	2.18 m2	23%
Garden 20	9.47 m2	2.07 m2	22%
Garden 21	9.73 m2	2.14 m2	22%
Garden 22	146.66 m2	146.63 m2	100%
Garden 23	9.75 m2	2.14 m2	22%
Garden 24	9.5 m2	2.15 m2	23%
Garden 25	9.3 m2	1.99 m2	21%
Garden 26	9.75 m2	2.15 m2	22%
Garden 27	124.34 m2	124.32 m2	100%

APPENDIX 3

OVERSHADOWING TO GARDENS & OPEN SPACES



Key

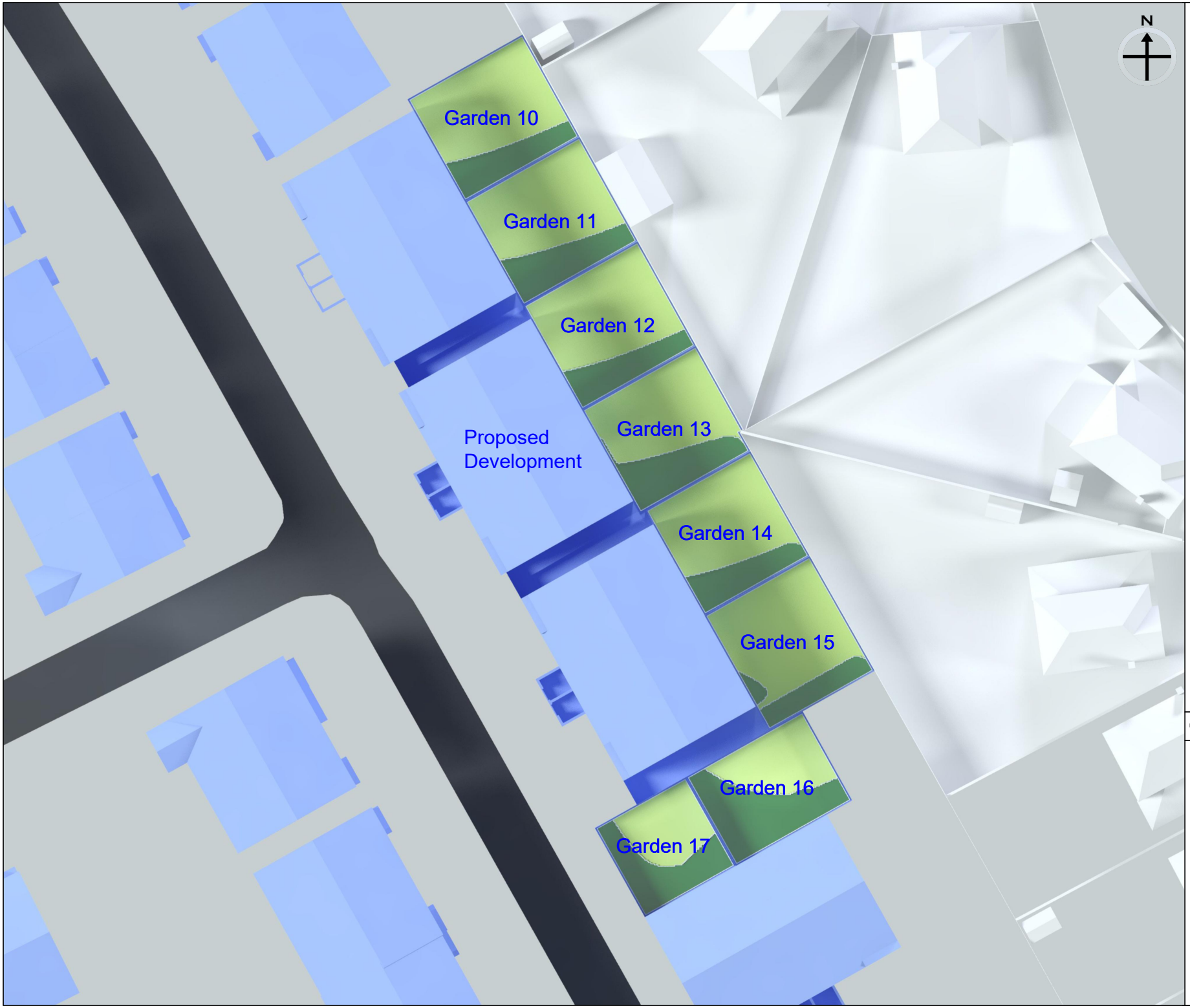
Receives under two hours sunlight on 21st March before and after the development.

Receives at least two hours sunlight on 21st March before and after the development.

Drawing Title: Appendix 3 - Overshadowing to Gardens and Open Spaces

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk



Key

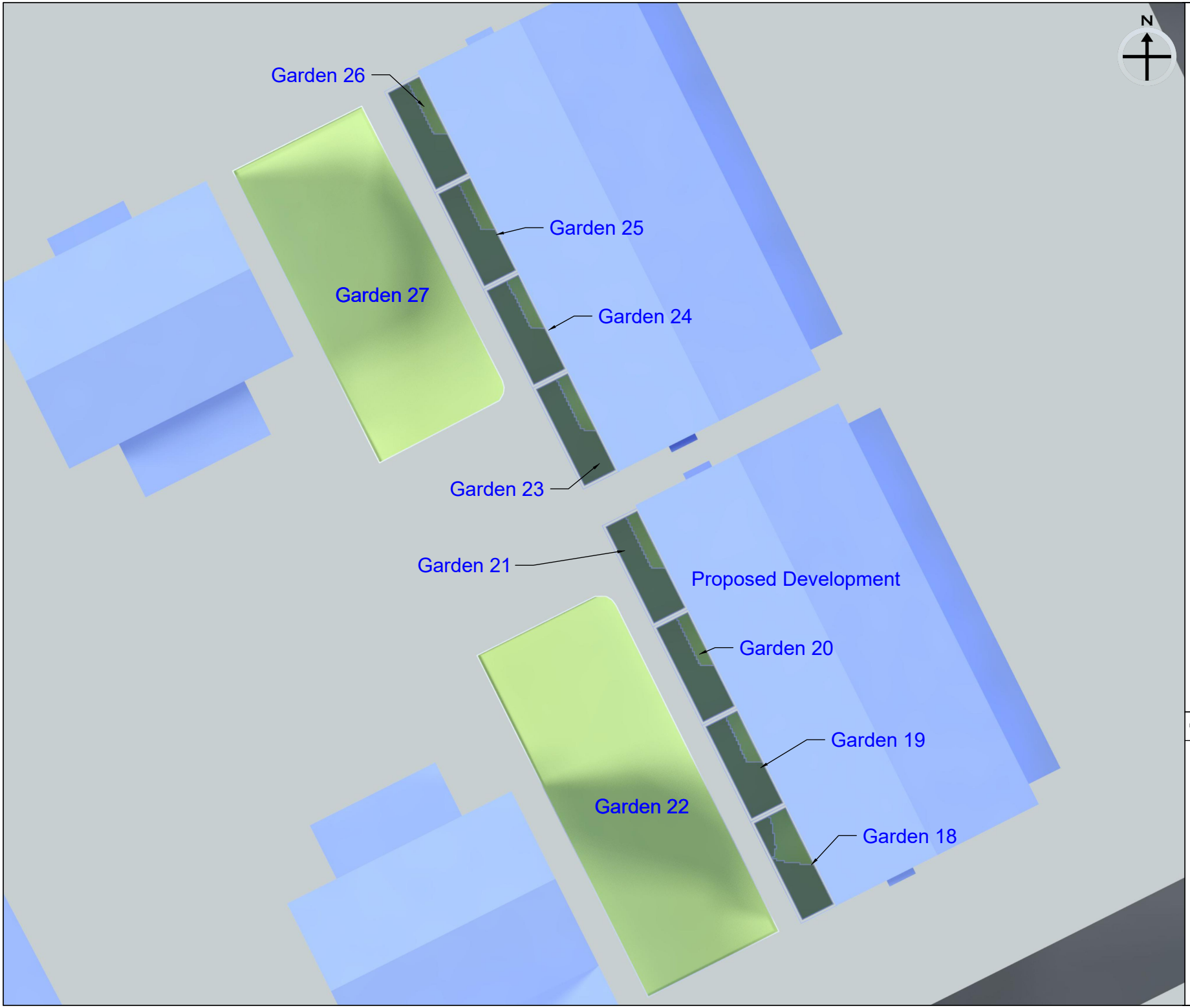
Receives under two hours sunlight on 21st March before and after the development.

Receives at least two hours sunlight on 21st March before and after the development.

Drawing Title: Appendix 3 - Overshadowing to Gardens and Open Spaces

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk



Key

Receives under two hours sunlight on 21st March before and after the development.

Receives at least two hours sunlight on 21st March before and after the development.

Drawing Title: Appendix 3 - Overshadowing to Gardens and Open Spaces

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15 - 17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk