



**DAYLIGHT AND SUNLIGHT  
REPORT**

**Carrow Works  
Norwich**

Client  
Fuel Properties

Dated  
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Prepared by  
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Version  
1

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## **1 INSTRUCTIONS AND BRIEF**

- 1.1 In accordance with your instructions, we have analysed the effect that the proposed development known as the Carrow Works (the 'development') will have on the daylight and sunlight amenity to the neighbouring properties.
- 1.2 The application is seeking outline planning permission for the development and we have been provided with Parameter Massing and Illustrative Massing models for the proposed scheme. Our assessment focuses on the effect that the Illustrative Massing would have on the neighbouring properties as this provides a more realistic future scenario and more accurately represents the scale of massing that will ultimately be delivered. The Parameter Massing provides flexibility for the designers and it is not anticipated that the Parameter Massing would be constructed to its full extent. Therefore, our conclusions are based upon the effect that the Illustrative Massing would have.
- 1.3 We have also considered the potential for adequate light to be received to the proposed residential accommodation within the development based upon the Illustrative Massing.
- 1.4 We have received the following documents and used them in preparing this report:
- JTP Studios Proposed Parameter Massing and Illustrative Massing Models;
  - JTP Studios Proposed Parameter Plans;
  - Z-Mapping Photogrammetric Model of the site and surrounding buildings.
- 1.5 Our study has been undertaken by preparing a three-dimensional computer model of the site and surrounding buildings and analysing the effect of the development on the daylight and sunlight levels received by the neighbouring buildings using our bespoke software. Our assessment is based on a visual inspection, the information detailed above and estimates of relevant distances, dimensions and levels which are as accurate as the circumstances allow.

## **2 THE DEVELOPMENT SITE**

- 2.1 The site is bound by the River Wensum to the north, King Street and Bracondale to the west and south and finally, by the railway to the east. The site was formerly known as the Carrow Works and was occupied by Colman's until 2020, it forms part of the East Norwich masterplan.
- 2.2 The development comprises a residential led, mixed use scheme that will provide approximately 1,800 homes and apartments.
- 2.3 On the north side of the River Wensum are a series of apartment blocks which have been constructed over the past 10 years or so, with the final block currently under construction. These buildings range in height from 6 to 10 storeys and many apartments have southerly aspects over the site.

2.4 Our 3D model of the surrounding buildings, existing site and proposed development are shown in images 1 and 2 below.



Image 1: 3D View of the site



Image 2: 3D View of the Illustrative Massing

## 3 PLANNING POLICY

### 3.1 National Policy

3.1.1 The revised National Planning Policy Framework ('NPPF') 2021 addresses the need for the flexible application of guidance relating to daylight and sunlight under Section 11 'Making effective use of land'. Paragraph 125(c) under subsection "*Achieving appropriate densities*" states the following;

*"c) local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards)."*

### 3.2 Local Policy – Norwich City Council ('NCC')

3.2.1 Policy DM2: 'Amenity' of NCC's Development Management Policies Plan (adopted December 2014) states the following in relation to daylight and sunlight amenity;

*"Existing occupiers:*

*Development will be permitted where it would not result in an unacceptable impact on the amenity of the area or the living or working conditions or operations of neighbouring occupants. Particular regard will be given to:*

- a) the prevention of overlooking and the loss of privacy;*
- b) the prevention of overshadowing and loss of light and outlook; and*
- c) the prevention of disturbance from noise, odour, vibration, air or artificial light pollution.*

*Future occupiers:*

*Development will only be permitted where:*

- a) it provides for a high standard of amenity, satisfactory living and working conditions, adequate protection from noise and pollution and adequate levels of light and outlook for future occupiers; and*
- b) such a standard can be achieved and maintained without preventing or unreasonably restricting the continued operation of established authorised uses and activities on adjacent sites."*

3.2.2 Whilst not specifically referenced in NCC’s planning policy, the most commonly applied guidance relating to daylight and sunlight amenity is provided in BRE Report “Site Layout Planning for Daylight and Sunlight; A Guide to Good Practice (2022)”.

3.2.3 The site forms part of the East Norwich masterplan.

## **4 BRE REPORT “SITE LAYOUT PLANNING FOR DAYLIGHT AND SUNLIGHT: A GUIDE TO GOOD PRACTICE” SECOND EDITION (2022) (‘THE BRE REPORT’)**

### 4.1 Principles

4.1.1 The BRE Report was updated in June 2022, with the 2011 version now withdrawn. Appendix A of this report provides an explanatory note which summarises the guidance provided in the BRE Report.

4.1.2 It is important to note that the introduction to the report stresses that the document is provided for guidance purposes only and it is not intended to be interpreted as a strict set of rules. It states that:

*“The advice given here is not mandatory and this document should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly because natural lighting is only one of many factors in site layout design. (para. 1.6)*

*“In special circumstances the Developer or Planning Authority may wish to use different target values.” (para. 1.6)*

*“Note that numerical values given here are purely advisory. Different criteria may be used, based upon the requirements for daylighting in an area viewed against other site layout constraints. Another important issue is whether the existing building is itself a good neighbour, standing a reasonable distance from the boundary and taking no more than its fair share of light”. (para. 2.2.3)*

4.1.3 Appendix F gives guidelines on determining and applying alternative target values for skylight and sunlight access in areas where the BRE generic numerical target-values are considered unsuitable. The alternative target-value methodology provides site-specific numerical data that can be used to measure the potential effect of new development on neighbouring daylight and sunlight amenity in a more suitable context.

4.1.4 To ensure that vacant land and designated development sites can fulfil their development potential and meet target housing allocations, it is important to also consider the retained quantum of daylight and sunlight, rather than solely focus on the extent of change from the current values. The retained values can then be compared against values received by windows elsewhere in the tested properties that do not overlook the site, together with windows in other neighbouring properties; being ‘alternative target-values’.

4.1.5 The BRE Report should be used in conjunction with the interior daylighting recommendations in BS EN 17037 *“Daylight in buildings”* and the CIBSE publication LG10 *“Daylighting – a guide for designers”*.

## 4.2 Glossary of Terms

4.2.1 Below is a simplified glossary of the daylight and sunlight terminology referred to in this report. Appendix A contains a technical glossary, together with a summary of the recommendations provided in the BRE Report:

4.2.2 **Vertical Sky Component (‘VSC’)** – the proportion of the sky dome that can be seen from a point in the centre of a window; the maximum VSC achievable from an unobstructed view from a vertical window is nearly 40%.

4.2.3 **No Sky Line (‘NSL’)** – the area of the working plane in a room that can and cannot receive direct skylight. This test is sometimes termed daylight distribution.

4.2.4 **Annual Probable Sunlight Hours (‘APSH’)** – the total number of hours in the year that the sun is expected to shine on a window, allowing for average levels of cloudiness.

4.2.5 **Sunlight Exposure (‘SE’)** – the total number of hours on 21 March that sunlight is expected to shine on a window.

4.2.6 **Sun Hours on Ground (‘SOG’)** – the total number of hours on a specific date that the sun could shine on the ground, assuming a cloudless sky. Usually assessed on 21 March.

4.2.7 **Transient Overshadowing** – Shadows cast by buildings at specific times and dates, depicted on drawings.

## 5 JUDGING ACCEPTIBILITY OF DAYLIGHT AND SUNLIGHT IMPACTS

5.1 As noted in Section 4, the BRE Report guidelines are not mandatory and should be considered flexibly depending on the local context. Indeed, numerous planning decisions and appeal decisions have made it clear that noticeable reductions in daylight and sunlight amenity should not be equated to “unacceptable losses”.

5.2 The site forms part of the East Norwich masterplan and therefore the area is expected to undergo significant regeneration and densification, which will inevitably lead to reductions in daylight and sunlight amenity to neighbouring residential properties. In the existing conditions, the site is occupied by low rise buildings and it is therefore inevitable that any substantial development will have some effects on the levels of light. National and local policy and guidance therefore calls for an assessment of whether the resulting living standards are appropriate and not unacceptable. Authorities need to apply a balanced and flexible approach relating to daylight and sunlight to avoid inhibiting the efficient use of sites.

5.3 The completed apartment blocks to the north of the River Wensum provide a useful comparison when considering what level of retained daylight and sunlight in the neighbouring properties is contextually

appropriate for the area. This is particularly the case where the apartment blocks have been designed facing one another, for example either side of Geoffrey Watling Way.

- 5.4 To meet planning policy, most modern developments of apartment blocks provide external amenity space in the form of projecting balconies and this is the case for the apartment blocks to the north of the site. Whilst balconies provide occupiers with important external amenity space, they do provide a significant obstruction to daylight and sunlight amenity. The BRE Report states the following in relation to balconies:

*“Because the balcony cuts out light from the top part of the sky, even a modest obstruction may result in a large relative impact on the VSC, and on the area receiving direct skylight.” (2.2.13)*

- 5.5 Professional judgement is required when determining what constitutes adequate levels of daylight and sunlight amenity, by reference to the BRE Report guidance, planning and appeal decisions and by comparison to what has been considered acceptable elsewhere in the locality.

- 5.6 In this case, the conclusions are based upon the Illustrative Massing. The additional impacts caused by the Parameter Massing, compared to the Illustrative Massing, are predominantly due to the gaps between the taller buildings being infilled. It is intended that this will give future designers sufficient flexibility when designing the individual buildings in detail over many years. As mentioned earlier in this report, it is envisaged that further detailed daylight and sunlight analysis will be undertaken at Reserved Matters Applications once the design for each new building is finalised.

## **6 ASSESSMENT OF SURROUNDING PROPERTIES**

- 6.1 We have analysed the effect of the development on the daylight and sunlight amenity to the properties with a reasonable expectation of daylight and sunlight amenity situated around the site. Properties further afield, including the residential and student accommodation to the west of the site, would comply with the initial 25-degree line test (using the Parameter Massing) and therefore do not require detailed assessment as the daylight and sunlight amenity to them would not be adversely affected.

- 6.2 The full list of assessed properties is as follows;

- Brennan Bank, Lockhead Bank, Robinson Bank, Nethercott Bank and Gavin Bank (also known as Riverside Heights);
- Block R1, Block R2, Richard Hawthorn House, Solace and Patricia Hollis House (also known as Carrow Quarter);
- Norada, White Moth and Olive, Geoffrey Watling Way (also known as Carrow View).



6.3 The location of these buildings is shown in Image 3 below, with the existing buildings on the site are shaded green.



Image 3: Locations of assessed properties

6.4 The results of our assessment for the Illustrative Massing are set out below on a property-by-property basis. Permission is being sought for the Parameter Massing to give future designers sufficient flexibility to develop a detailed design whilst responding to changes in the market, policy and legislation. Whilst the massing is not representative of the eventual scheme that will be delivered, for completeness we have analysed the impact of the Parameter Massing and provided a summary of the results below.

6.5 Brennan Bank, Lockhead Bank, Robinson Bank, Nethercott Bank and Gavin Bank (also known as Riverside Heights);



Image: 04

Location: North of the development.

Description: Five apartment buildings of 7 and 8 stores.

6.5.1 Floorplans and elevations have been obtained for these buildings from NCC's online planning database and these have been used to model the window positions and internal arrangements. We understand that the buildings were constructed between 2012 and 2015.

6.5.2 These buildings include car parking at ground floor level with apartments on the upper floors. Typical layouts include single aspect living/kitchen/dining rooms ('LKDs') and bedrooms set back beneath projecting balconies. Whilst the windows serving these buildings are large and designed to allow maximum daylight, the projecting balconies do provide a significant obstruction to daylight and sunlight amenity.

6.5.3 In total, we have assessed 170 windows serving 169 rooms.

*Illustrative Massing*

6.5.4 The analysis results show that all windows and rooms in Brennan Bank, Lochhead Bank and Nethercott Bank would comply with the BRE Report guidelines for daylight amenity. In Robinson Bank, one sixth floor window serving an LKD would retain 0.76 times the existing VSC, marginally transgressing the guidance figure of 0.80. All rooms in Robinson Bank would comply with the guidance using the NSL test.

6.5.5 At Gavin Bank, the Illustrative Massing would cause reductions in VSC to 20 windows, each retaining between 0.69 and 0.79 times the existing VSC however, all rooms tested would meet or exceed the guidance using the NSL test.

6.5.6 Turning to sunlight amenity, all tested rooms would comply with the BRE Report guidelines for winter sunlight. There would be reductions in annual sunlight to 15 rooms, including 9 LKD's and 6 bedrooms. These rooms are typically served by windows beneath projecting balconies and would receive between 19% and 27% APSH in the existing conditions, compared to the BRE Report recommendation of 25%. This is despite there being low rise buildings on the site to the to the south. Each room would retain between 0.65 and 0.79 times the existing APSH, retaining between 13% and 20% APSH, levels that are common in urban environments undergoing rapid transformation and intensification. Indeed, as noted in the following sections, assessment of apartment blocks further east has shown that these levels of APSH are higher than those received elsewhere in the locality.

6.5.7 The SOG test has been undertaken to the communal amenity areas at ground and podium levels between these buildings. The results are shown on drawing 401 under Appendix B and all 5 areas would comfortably meet the BRE Report guidelines, receiving at least 2 hours of direct sunlight to over 87% of the respective areas on 21<sup>st</sup> March. Accordingly, these areas will all remain well sunlit following completion of the development.

6.5.8 Appendix B also contains transient overshadowing drawings showing the shadows cast by the development at different times of day and year. As can be seen,

6.5.9 In summary, all the rooms in these buildings would comply with the BRE Report guidelines using the NSL test for daylight amenity. Whilst there would be some small transgressions of the BRE Report guidelines, the effects are considered minor and the retained levels of light are considered acceptable. The overshadowing analysis demonstrates that the occupiers will continue to enjoy good amounts of sunlight in the proposed conditions.

Parameter Massing

6.5.10 Using the Parameter Massing, 107 of the 170 windows (63%) would comply with the BRE Report guidelines using the VSC test and 128 of the 169 rooms (76%) would comply with the BRE Report guidelines using the NSL test.

6.5.11 The retained levels of VSC and NSL would be similar to the levels received in the existing conditions at Norada, White Moth and Olive buildings fronting Geoffrey Watling Way.

6.5.12 Turning to sunlight amenity, the APSH results show that 116 of the rooms would comply with the guidelines for annual sunlight and 158 with the guidelines for winter sunlight. The Parameter Massing would not result in any unacceptable overshadowing to the communal amenity areas, with the areas complying with the BRE Report guidelines.

6.6 Block R1, Block R2, Richard Hawthorn House, Solace and Patricia Hollis House (also known as Carrow Quarter)

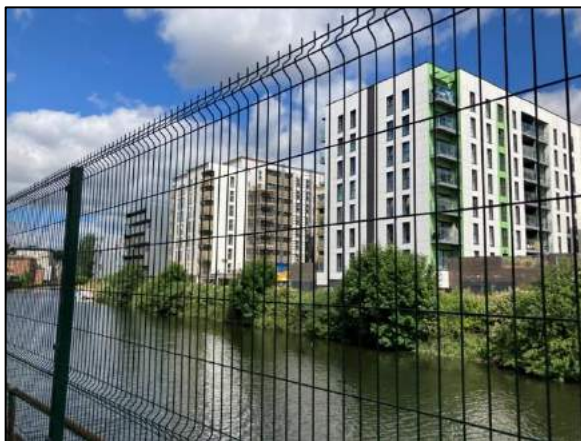


Image: 05  
 Location: North of the development.  
 Description: Six to nine storey apartment buildings.

6.6.1 Plans for these buildings have been obtained from NCC’s online planning database. Blocks R1 and R2 are currently under construction but will be complete prior to any works commencing on the development site. The proposed elevation facing the south is shown in Image 6 below, with Blocks R1 and R2 on the left hand side, Richard Hawthorn House and Solace in the centre and Patricia Hollis House to the rights hand side.



Image: 06

Description: Proposed south elevation

6.6.2 The windows facing the site serve a mixture of LKDs and bedrooms. The vast majority of LKDs are served by projecting balconies which obstruct daylight and sunlight amenity to the windows beneath.

6.6.3 In total, we have assessed 265 windows serving 169 rooms in these buildings.

Illustrative Massing

6.6.4 Using the VSC test, 214 windows (81%) would comply with the BRE Report guidelines and, using the NSL test, 160 (95%) would comply with the BRE Report guidelines.

6.6.5 Starting with Blocks R1 and R2, the 14 windows not meeting the guidelines for VSC are located beneath balconies and serve LKDs that benefit from windows facing east or west as well as south towards the site. These additional windows meet the BRE Report guidelines for VSC and all LKDs would comply with the BRE Report guidelines using the NSL test. There are two first floor bedrooms in Block R1 which would not meet the guidelines for NSL, retaining 0.74 and 0.72 times the existing NSL, only marginally below the 0.80 BRE Report recommendation.

6.6.6 At Richard Hawthorn House and Solace, the 14 windows not meeting the guidelines for VSC serve multi-aspect LKDs. Except for one first floor LKD (Ref. R2), at least one further window to each of these rooms would comply with the BRE Report guidelines for VSC. First floor room R2 would see reductions in VSC, however, two of the windows would retain more than 25% VSC and the room would comply with the BRE Report guidelines using the NSL test. There are two LKD's in Richard Hawthorn House that would not meet the BRE Report guidelines using the NSL test, retaining 0.71 and 0.72 times the NSL in the existing conditions. All the windows serving these two rooms would comply with the guidance for VSC.

6.6.7 Patricia Hollis House is the easternmost block in this development and the assessment results show that 23 windows would deviate from the default BRE Report guidelines using the VSC test. Fifteen of these windows serve LKD's, with the remaining eight serving bedrooms.

6.6.8 The eight windows serving bedrooms would retain between 25.27% and 26.98% VSC, very slightly below the default 27% recommendation. Five bedrooms would also transgress the BRE Report guidance using the NSL test, retaining direct skylight to between 60% and 76% of each rooms area, compared to the BRE Report recommendation of 80%.

6.6.9 Eleven of the adversely affected LKD windows serve rooms with multiple windows, where the remaining windows would comply with the BRE Report guidelines. The remaining four windows serve single aspect LKDs where the windows are set-back beneath projecting balconies (see Image 7). The NSL results show that all the LKDs assessed would comply with the BRE Report guidelines using this test.



Image: 07

Description: Patricia Hollis House

6.6.10 All the main living rooms would comply with the BRE Report guidelines using the NSL test. Where bedrooms experience losses of daylight beyond the default guidance, the vast majority are either minor, or to windows beneath projecting balconies meaning the actual quantum of loss is generally small. As such, it is considered that these apartments would retain adequate levels of daylight amenity.

6.6.11 Turning to sunlight amenity, 165 of the 169 rooms (98%) would comply with the BRE Report guidelines using the APSH test and all 169 would comply with the guidance for winter sunlight. The four rooms not meeting the guidelines are LKD's served by windows beneath projecting balconies that would see the APSH reduced from between 26% and 23% to between 14% and 18%. The retained levels of sunlight are considered appropriate in an urban location undergoing regeneration.

6.6.12 Turning to sunlight amenity, all rooms tested would comply with the BRE Report guidelines for winter sunlight. There would be reductions in annual sunlight to 15 rooms, including 9 LKD's and 6 bedrooms. These rooms are typically served by windows beneath projecting balconies and would receive between 19% and 27% APSH in the existing conditions, compared to the BRE Report recommendation of 25%. Each room would retain between 0.65 and 0.79 times the existing APSH retaining between 13% and 20% APSH, levels that are common in urban environments undergoing rapid transformation and intensification.

- 6.6.13 Overshadowing has been considered to the communal amenity areas at podium level between these buildings. The analysis demonstrates that both areas would comfortably exceed the guidance given in the BRE Report, with 94% and 96% of each area receiving at least 2 hours of direct sunlight on 21 March.
- 6.6.14 Appendix B also contains transient overshadowing drawings showing the shadows cast by the development at different times of day and year.
- 6.6.15 In summary, whilst the Illustrative Massing would cause some minor transgressions of the BRE Report guidelines, the impacts are considered acceptable and the retained levels of daylight and sunlight are contextually appropriate.

Parameter Massing

- 6.6.16 Using the Parameter Massing, 99 of the 265 windows (37%) would comply with the BRE Report guidelines using the VSC test and 52 of the 169 rooms (31%) would comply with the BRE Report guidelines using the NSL test.
- 6.6.17 Despite the lower level of compliance with the BRE guidance, the retained levels of VSC and NSL are generally consistent with levels currently experienced elsewhere in the area, with many receiving higher levels of VSC and NSL than in the neighbouring buildings, particularly those on the north side of Geoffrey Watling Way (see Section 6.7 below).
- 6.6.18 Turning to sunlight amenity, the APSH results show that 157 of the rooms would comply with the guidelines for annual sunlight and 142 with the guidelines for winter sunlight. The Parameter Massing would not result in any unacceptable overshadowing to the communal amenity areas, with the areas complying with the BRE Report guidelines.

6.7 Norada, White Moth and Olive, Geoffrey Watling Way (also known as Carrow View)



Image: 08  
Location: North of the development.  
Description: Six to ten storey buildings containing apartments. Image 3 shows the south elevation which faces the development.

6.7.1 These three blocks of apartments are located on the north side of Geoffrey Watling Way and have recently been completed. The floorplans and elevations have been obtained from NCC's online planning database.

6.7.2 As with the other properties analysed, the windows facing south serve a combination of LKDs and bedrooms. Most of the LKD windows are set-back beneath projecting balconies which restrict daylight and sunlight amenity in the existing conditions. Due to the projecting balconies and proximity to the buildings opposite, these rooms generally receive lower levels of light in the current conditions.

6.7.3 We have assessed a total of 134 windows serving 95 rooms.

### Illustrative Massing

6.7.4 The assessment results show that 125 windows (93%) and 91 rooms (96%) would comply with the BRE Report guidelines for daylight amenity.

6.7.5 The nine windows not meeting the guidelines each receive extremely low levels of VSC in the existing conditions, meaning that small absolute reductions generate larger ratio reductions. The average VSC to the nine windows not meeting the guidelines would be reduced from 1.61% to 1.16% VSC, an average reduction of just 0.45% VSC which will not be perceptible to the occupiers.

6.7.6 The four rooms not meeting the guidelines for NSL are located in Norada; the NSL to these rooms would be reduced from between 38% and 41% to between 18% and 30%. These retained figures are consistent with existing levels of NSL elsewhere in this development. For example, the second floor rooms at White Moth receive an average NSL of 11% and 23% at third floor.

6.7.7 Turning to sunlight amenity, all assessed rooms would comply with the BRE Report guidelines for both annual and winter sunlight.

6.7.8 In summary, the development would not have an unacceptable effect on daylight and sunlight amenity to these apartments.

### Parameter Massing

6.7.9 Using the Parameter Massing, 102 of the 134 windows (76%) would comply with the BRE Report guidelines using the VSC test and 81 of the 95 rooms (85%) would comply with the BRE Report guidelines using the NSL test. The windows would see an absolute maximum reduction in VSC of just 3.30%.

6.7.10 Turning to sunlight amenity, the APSH results show that all 95 rooms would comply with the guidelines for both annual and winter sunlight.

6.8 Riverside Walk



Image: 08

Location: North of the development.

Description: Riverside walk and seating areas on the north side of the River Wensum.

6.8.1 Overshadowing has also been considered to the riverside walk and seating areas on the north side of the River Wensum. The SOG and transient overshadowing assessments for this area can be seen on drawings 450 to 456 in Appendix B.

Illustrative Massing

6.8.2 This assessment demonstrates that the area would comply with the BRE Report guidelines, with 94% of the area receiving at least 2 hours of sun on 21 March. The transient overshadowing drawings show that the proposed development would cast some additional shadows, however, these would move throughout the day and the gaps between the new buildings would ensure that the area would remain well sunlit.

Parameter Massing

6.8.3 Using the Parameter Massing, additional levels of overshadowing would be caused by the development with 48% of the area receiving at least 2 hours of sunlight on 21 March, marginally below the recommended 50%. The area not meeting the guidelines is located in front of the Carrow Quarter development.

6.8.4 The transient overshadowing drawings show that the Parameter Massing would cast shadows in front of the Carrow Quarter development for most of the day on 21 March however, on 21<sup>st</sup> June, no shadow would be cast on the north side of the river.

**7 LIGHT LEVELS WITHIN THE PROPOSED SCHEME**

7.1 We have considered the potential for daylight and sunlight to be received to the residential accommodation within the development and for sunlight amenity to be received in the communal external amenity areas. Our assessment focuses on the areas of the development where daylight and sunlight amenity is likely to be most restricted. Other areas would generally have greater access to skylight and would therefore receive higher levels of daylight and sunlight amenity.



7.2 The assessment has been undertaken using the Illustrative Massing only as this presents one way in which a development could be brought forward and gives a more realistic representation of the eventual massing and effects.

7.3 It is envisaged that further technical analysis will accompany Reserved Matters Applications for the detailed elements of the development to demonstrate that adequate levels of natural light can be received.

#### 7.4 Daylight

7.4.1 To assess daylight availability in the early stages of the design process, prior to the detailed design of room layouts, window locations and balconies, the BRE Report recommends calculating the VSC at a series of points on the façade.

7.4.2 The BRE Report discusses VSC values and provides the following design guidance:

- VSC of 27% or above, conventional window design will usually allow reasonable daylight to enter rooms;
- VSC between 15% and 27%, larger windows and changes to room layout are usually needed to allow adequate daylight;
- VSC between 5% and 15%, very difficult to provide adequate daylight unless very large windows are used;
- VSC of 5% or less, often impossible to achieve reasonable daylight, even if the whole window wall is glazed.

7.4.3 The 3D model for the Illustrative Massing has been used to ascertain the VSC values that would be achieved at the façades of the illustrative residential buildings located to the north of the site where light would be most restricted due to the proposed density and height. The study assumes that the entirety of the façades will be residential, from ground floor upwards. However, some of the proposed blocks are likely to contain other uses at ground floor that are unlikely to have the same requirement for natural light. Our assessment therefore presents a worst case scenario.

7.4.4 The analysis produces façade images for each elevation showing the VSC value received. The façades are split into 1.5 metre square segments, the colour of which represents the VSC achieved at that location.

7.4.5 The 3D context model of the VSC façade study is shown in Image 9 below. The façade images for each building can be found in Appendix D.

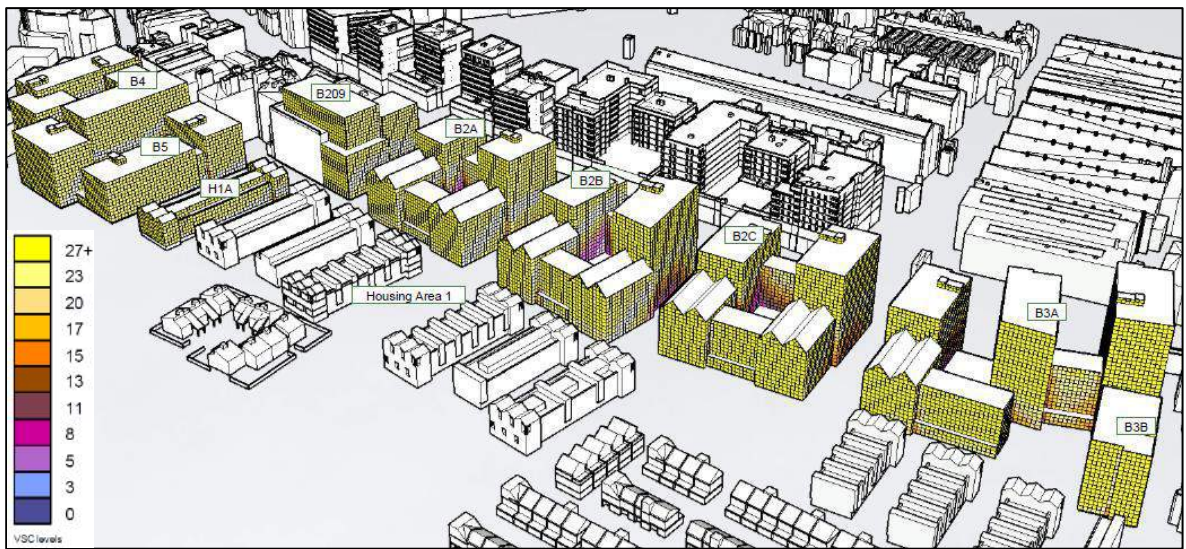


Image 9: VSC Façade Legend

7.4.6 Table 1 below summarises the VSC received to each residential block, illustrated as a percentage of the overall residential façade areas. As an example, 54.97% of the façades to the buildings within 2A would achieve a VSC value of 27% or higher, 33.57% would receive VSC values between 15% and 27%, 11.30% would receive a VSC value between 5% and 15% and 0.18% would receive a VSC value below 5%.

Plot	VSC (% of façade)			
	>27%	15%-26.99%	5%-14.99%	<5%
Building 209	76.21%	21.62%	2.17%	0%
Building 2A	54.97%	33.57%	11.30%	0.18%
Building 2B	51.04%	33.37%	15.45%	0.14%
Building 2C	52.44%	31.48%	15.99%	0.09%
Building 3A	53.46%	33.43%	13.02%	0.09%
Building 3B	73.48%	17.74%	8.78%	0%
Building 4	54.41%	27.27%	15.11%	3.22%
Building 5	50.92%	26.74%	15.15%	7.18%
Houses adjacent to Building 5	41.29%	44.60%	14.10%	0%

Table 1: VSC Façade Results

7.4.7 The results show that the overwhelming majority of the façades assessed will have good access to daylight. Between 77.66% and 97.83% of the façades to each building tested would receive at least 15% VSC, with only between 0% and 7.18% of the respective façades receiving less than 5%.

7.4.8 The isolated areas where daylight will be more restricted face into the central courtyards of the proposed buildings, with the outward facing elevations generally receiving high levels of VSC. The results demonstrate that, with good design, the vast majority of the proposed habitable rooms within the development would have the potential to receive acceptable levels of daylight amenity. Where daylight is more restricted, it will be important to ensure that the detailed design responds to the need to maximise daylight, for example, specifying larger windows.

7.5 Sunlight

7.5.1 In new buildings, the BRE Report recommends calculating the Sunlight Exposure to assess whether a dwelling will appear reasonably sunlit. This test measures the hours of sunlight that could be received at specific points on a façade or, at detailed design stage, the centre point of each window on 21 March.

7.5.2 In housing, the main requirement for sunlight is in living rooms. It is viewed as less important in kitchens and bedrooms.

7.5.3 The BRE Report recommends that:

- Site layout design aims to ensure that at least one main window wall faces within 90-degrees of due south.
- That a habitable room, preferably a main living room, can receive a total of at least 1.5 hours of sunlight on 21 March.
- Where groups of dwellings are planned, site layout design should aim to maximise the number of dwellings that meet the above recommendations.

7.5.4 Sunlight Exposure has been assessed to the same buildings of the Illustrative Massing as have been assessed for daylight. The assessment results include all areas of façade however, façades orientated within 90 degrees of due north would not be expected to achieve the BRE Report guidelines for sunlight amenity. The façade images can be found in Appendix E.

7.5.5 Table 02 below shows the percentage of each façade, calculated on a building-by-building basis, which receive at least 1.5 hours of sunlight on 21 March. It is important to note that these figures include the facades orientated in a northerly direction, where 1.5 hours of sunlight is unlikely to be achievable.

Plot	Sunlight Exposure (% of façade)	
	>1.5 hours	<1.5 hours
Building 209	69.26	30.74
Building 2A	67.06	32.94

Plot	Sunlight Exposure (% of façade)	
	>1.5 hours	<1.5 hours
Building 2B	72.44	27.56
Building 2C	70.57	29.43
Building 3A	72.85	27.15
Building 3B	81.99	18.01
Building 4	65.83	34.17
Building 5	61.40	38.60
Houses adjacent to Building 5	79.85	20.15

Table 2: Sunlight Exposure Façade Results

7.5.6 The layout of the proposed buildings gives the potential for sunlight to be received across most of the development and this is demonstrated by the results. Over 60% of each façade will meet or exceed the BRE Report guidelines for sunlight amenity with most buildings receiving more than 70%. The areas not meeting the guidelines are mostly orientated in a northerly direction and care will be needed at detailed design stage to ensure that access to sunlight is maximised.

7.6 Overshadowing

7.6.1 Overshadowing is assessed using the SOG assessment which plots the area of an amenity space that receives at least 2 hours of direct sunlight on 21 March. For an external amenity area to appear adequately sunlit throughout the year, the BRE Report recommends that at least half the amenity area should receive at least two hours of direct sunlight on 21 March.

7.6.2 The BRE Report notes that, as an addition, the results on 21 June can be helpful as they represent the best-case of minimum shadow.

7.6.3 The areas meeting the BRE Report guidance are shaded yellow on the plan in Image 10 below, with the numerical values given on the drawings in Appendix F, which show the assessment results on 21 March and 21 June.



Image 10: SOG assessment

- 7.6.4 The SOG test has been used to assess the amount of sunlight received to the internal courtyards to Buildings 2 to 5 and Building 209. The large communal amenity spaces at Abbey Grounds and Abbey Gardens have not been assessed as they would comfortably exceed the recommended minimum amounts of sunlight due to the largely unobstructed aspect to the south. The future residents will all have access to this well sun lit area.
- 7.6.5 This analysis shows that the ground level amenity areas assessed within the scheme would all comply with the BRE Report guidelines for sunlight amenity on both 21 March and 21 June.
- 7.6.6 On 21 March, sunlight would be restricted to some of the podium level courtyards within the proposed blocks. At detailed design stage, consideration should be given to locating the areas of amenity where sunlight is more valuable to the north where greater levels of sunlight should be available. In summer, the majority of the courtyards will receive some sun.

**8 CONCLUSION**

**8.1 Effect on Neighbouring Residential Properties**

- 8.1.1 Our analysis has considered the effect that the Illustrative Massing would have on daylight and sunlight amenity to the neighbouring residential properties. The only surrounding properties that could be adversely affected are located to the north of the site, on the northern bank of the River Wensum and comprise a series of recently constructed apartment buildings.
- 8.1.2 Technical analysis shows that that a high percentage of windows and rooms would meet or exceed the default BRE Report guidelines. Where deviation from the guidance occurs, it is predominantly to windows and rooms that are set beneath projecting balconies which, by their inherent design, restrict the amount of light that can be received to the room beneath. Consequently, even a small additional obstruction can lead to large percentage reduction beyond the default guidance whereas the absolute reduction in light is often modest.

- 8.1.3 In the existing conditions, the northern part of the site is occupied by low rise warehouse buildings and it is therefore inevitable that the proposed regeneration to provide a higher density residential led development. may lead to some noticeable reductions in the amount of light received. This does not necessarily mean that the effects unacceptable and consideration must be given to the retained levels in the local context, as well as the reductions. Indeed, analysis shows that the retained levels of daylight and sunlight are commensurate with the amounts of daylight and sunlight received by other neighbouring buildings in the current conditions.
- 8.1.4 Based on the Illustrative Massing, the neighbouring properties would, in our opinion, retain acceptable levels of daylight and sunlight amenity that are contextually appropriate and consistent with expectations in an urban environment undergoing rapid regeneration and densification.
- 8.1.5 Permission is being sought for the Parameter Massing to give future designers sufficient flexibility to develop a detailed design whilst responding to changes in the market, policy and legislation. Whilst the massing is not representative of the eventual scheme that will be delivered, for completeness we have analysed the impact of the Parameter Massing.
- 8.1.6 The Parameter Massing will inevitably lead to a greater number of windows and rooms in the neighbouring buildings that would not meet the BRE default guidance, predominantly due to the gaps between the taller buildings being infilled. However, it is considered that the retained levels of daylight and sunlight amenity would be contextually appropriate and directly comparable with the results for parts of other buildings located on the north side of the River Wensum. The final scheme design will include separation between the taller buildings, which will mitigate the effects caused by the Parameter Massing and likely result in effects that are similar to the Illustrative Massing.
- 8.1.7 It is envisaged that detailed daylight and sunlight analysis will accompany Reserved Matters Applications for each building to ensure that the detailed design of the buildings does not result in unacceptable effects on daylight and sunlight amenity to the neighbouring properties. Based on the results for the Illustrative Massing, this can be achieved.
- 8.1.8 In accordance with the NPPF, NCC's planning policy and BRE Report guidance, it is considered that the development would not have an unacceptable effect on daylight and sunlight amenity to the neighbouring residential properties. It is considered that, where minor transgressions of the BRE Report guidance occur, the neighbouring apartments will all retain adequate levels of daylight and sunlight amenity, consistent with occupier expectations in an area undergoing regeneration and densification.
- 8.2 Light Received within the Development
- 8.2.1 Whilst outline permission is being sought, we have considered the potential for adequate daylight and sunlight to be received for future occupiers. We have focused on those parts of the scheme where daylight and sunlight will be more restricted. Daylight façade studies show that a high percentage of units will have the potential

to receive adequate levels of daylight amenity and the sunlight exposure façade studies illustrate that approximately two thirds of the façades to each building tested would have the potential to receive at least 1.5 hours of sunlight on 21 March, with many areas receiving far more.

- 8.2.2 The façade studies also highlight areas of the scheme where daylight and / or sunlight availability will be more limited and design mechanisms will be required to maximise the amount of light received. At detailed design stage, a range of design measures can be incorporated, ranging from height, bulk and mass of buildings to window sizes and apartment layouts (e.g. placing stair cores or bathrooms where light is more restricted). By incorporating a range of these options into the final design, it is considered that acceptable levels of daylight and sunlight can be achieved.
- 8.2.3 Where lower levels of light cannot be avoided to a small proportion of apartments., through careful design, it should be possible to achieve adequate levels of light, commensurate for a large scale regeneration scheme such as this.
- 8.2.4 Turning to overshadowing, the Illustrative Massing has been designed so that future occupiers will benefit from well sunlit external areas. Whilst sunlight would be restricted to some of the podium level amenity spaces, careful positioning of those areas where sunlight is most valuable should ensure that good levels of amenity are achieved. Indeed, all of the future residents would have access to the ground level amenity areas, which would be well sun lit.
- 8.2.5 In accordance with national and local planning policy and the BRE Report guidelines, it is considered that adequate levels of daylight and sunlight amenity can be achieved within the proposed development, consistent with occupier expectations for an area undergoing regeneration.

**APPENDIX A**

**BRE REPORT EXPLANATORY NOTE**



## **BRE REPORT “SITE LAYOUT PLANNING FOR DAYLIGHT AND SUNLIGHT, A GUIDE TO GOOD PRACTICE” (2022) - EXPLANATORY NOTE AND METHODOLOGY**

The 2022 edition of the BRE Report took effect in June 2022 and superseded the 2011 version. The below note summarises the recommended assessment methodologies, guidance and advice within the BRE Report, in conjunction with other key guidance documents that can be used for assessing the acceptability of developments in terms of any impact on daylight and sunlight to surrounding buildings.

### **Introduction**

It is important to note that the introduction to the BRE Report stresses that the document is provided for guidance purposes only and it is not intended to be interpreted as a strict set of rules. It also suggests that it may be appropriate to adopt a flexible approach and alternative target values in dealing with “*special circumstances*” for example “*in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings.*” This is amplified by the following extracts from the introduction and Section 2.2:

*“The advice given here is not mandatory and this document should not be seen as an instrument of planning policy; Its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly because natural lighting is only one of many factors in site layout design...”*

*“In special circumstances the Developer or Planning Authority may wish to use different target values.”*

*“Note that numerical values given here are purely advisory. Different criteria may be used, based upon the requirements for daylighting in an area viewed against other site layout constraints. Another important issue is whether the existing building is itself a good neighbour, standing a reasonable distance from the boundary and taking no more than its fair share of light”.*

The examples given in the BRE Report can be applied to any part of the country: suburban, urban and rural areas. The inflexible application of the target values given in the Report may make reaching the BRE criteria difficult in a tight, urban environment where there is unlikely to be the same expectation of daylight and sunlight amenity as in a suburban or rural environment.

### **Daylight**

In summary, the BRE Report states that:

*“If any part of a new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building from the centre of the lowest window, subtends an angle of more than 25 degrees to the horizontal, then the diffuse daylighting of the existing building may be adversely affected. This will be the case if either:*

*the vertical sky component ['VSC'] measured at the centre of an existing main window is less than 27%, and less than 0.8 times its former value;*

*the area of the working plane (0.85m above floor level in residential properties) in a room which can receive direct skylight is reduced to less than 0.8 times its former value.*

*The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, store rooms, circulation areas and garages need not be analysed. The guidelines may also be applied to any existing non-domestic building where the occupants have a reasonable expectation of daylight; this would normally include, schools, hospitals, hotels and hostels, small workshops and some offices.”*

The Report also states that:

*“Where room layouts are known, the impact on the daylighting distribution in the existing building can be found by plotting the ‘no-sky line’ in each of the main rooms. For houses this would include living rooms, dining rooms and kitchens; bedrooms should also be analysed, although they are less important. In non-domestic buildings each main room where daylight is expected should be investigated.”*

*...Windows to bathrooms, toilets, store rooms, circulation areas and garages need not be analysed.”*

Guidance has been provided in the Second Edition of the report in relation to existing windows with balconies:

*“Existing windows with balconies above them typically receive less daylight. Because the balcony cuts out light from the top part of the sky, even a modest obstruction may result in a large relative impact on the VSC, and on the area receiving direct skylight. One way to demonstrate this would be to carry out an additional calculation of the VSC and area receiving direct skylight, for both the existing and proposed situations, without the balcony in place. For example, if the proposed VSC with the balcony was under 0.8 times the existing value with the balcony, but the same ratio for the values without the balcony was well over 0.8, this would show that the presence of the balcony, rather than the size of the new obstruction, was the main factor in the relative loss of light.”*

*A larger relative reduction in VSC may also be unavoidable if the existing window has projecting wings on one or both sides of it, or is recessed into the building so that it is obstructed on both sides as well as above.”*

Further guidance is provided in Appendix F on alternative target values when considering the loss of light to an existing building. F1 states the following:

*“These values are purely advisory and different targets may be used based on the special requirements of the proposed development or its location. Such alternative targets may be generated from the layout dimensions of existing development”*

## **Sunlight**

The BRE Report advises that new development should take care to safeguard access to sunlight for existing buildings and any non-domestic buildings where there is a particular requirement for sunlight. In summary, the report states:

*“If a living room of an existing dwelling has a main window facing within 90 degrees of due south, and any part of a new development subtends an angle of more than 25 degrees to the horizontal measured from the centre of the window in a vertical section perpendicular to the window, then the sunlighting of the existing dwelling may be adversely affected. This will be the case if the centre of the window:*

- *receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 March and*
- *receives less than 0.8 times its former sunlight hours during either period and*
- *has a reduction in sunlight over the whole year greater than 4% of annual probable sunlight hours”*

The report also states that:

*“...It is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within ninety-degrees of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun. In non-domestic buildings any spaces which are deemed to have a special requirement for sunlight should be checked; they will normally face within ninety-degrees of due south anyway.”*

## **Overshadowing**

Section 3.3 of the BRE Report gives guidelines for protecting the sunlight to open spaces where it will be required. This would normally include:

- Gardens, usually the main back garden of a house and allotments;
- 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; and
- Focal points for views such as a group of monuments or fountains.

In summary, the Report states that:

*“It is recommended that for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least 2 hours of sunlight on 21 March. If as a result of new development an existing garden or amenity area does not meet the above, and the area which can receive 2 hours of sun on 21 March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable. If a detailed calculation cannot be carried out, it is recommended that the centre of the area should receive at least 2 hours of sunlight on 21 March.”*

**APPENDIX B**

**DRAWINGS FOR SURROUNDING PROPERTIES**



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- KEY
- Existing buildings
  - Analysed properties
  - Surrounding buildings

REV	DETAILS	DATE	BY
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CLIENT  
 Fuel Properties

PROJECT  
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 Existing plan view

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Ordnance Datum Heights

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**PROJECT**  
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- Surrounding buildings

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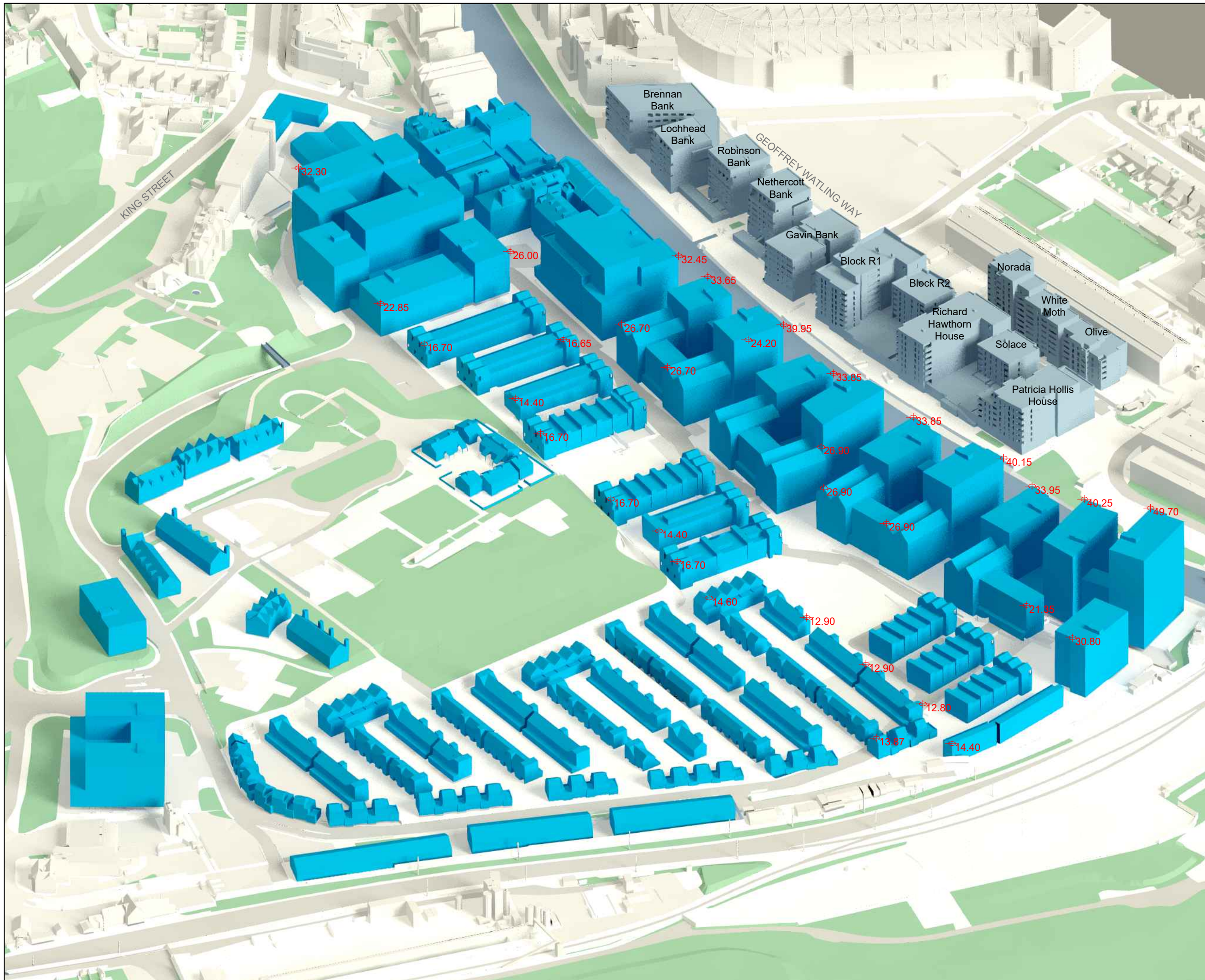
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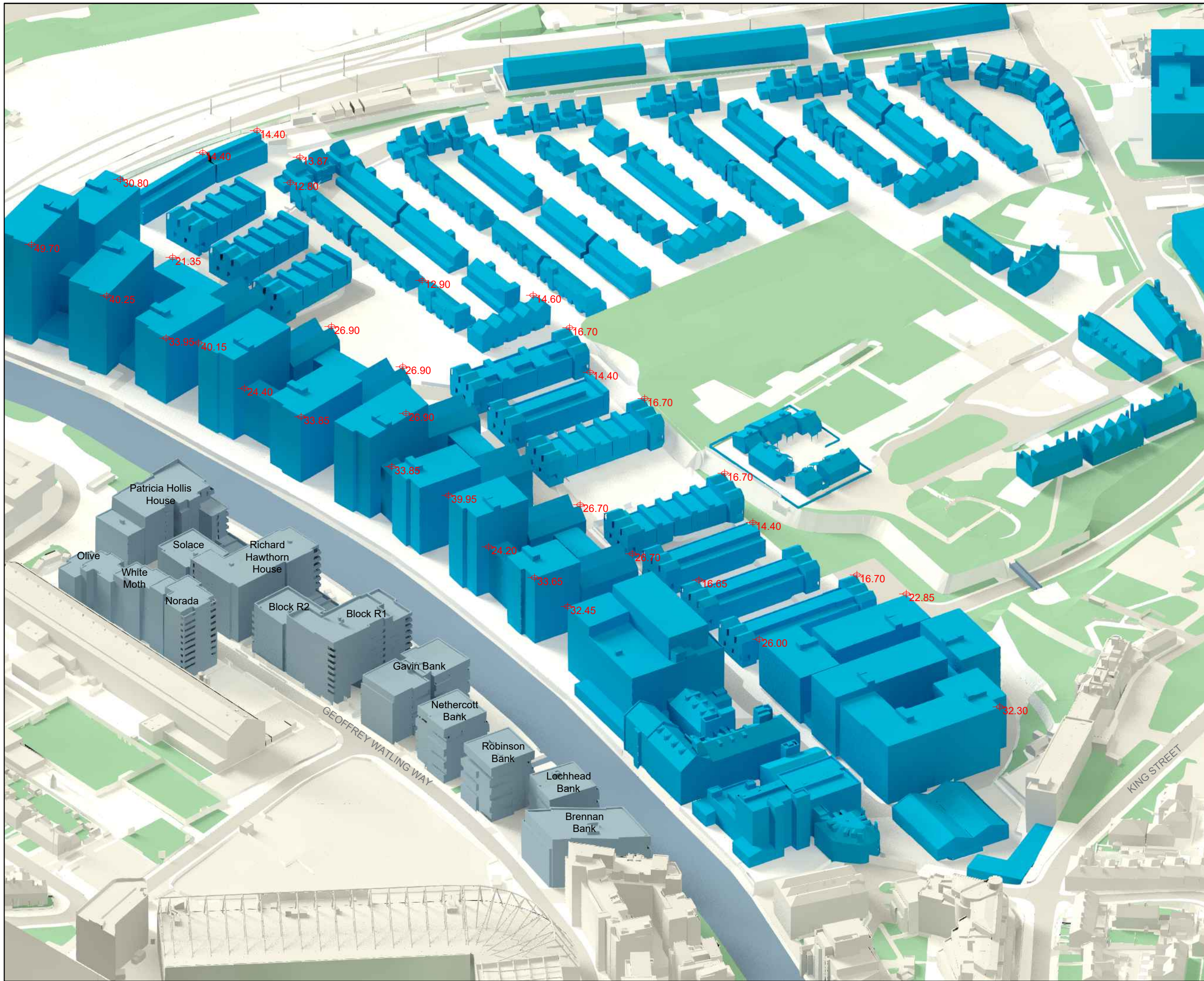
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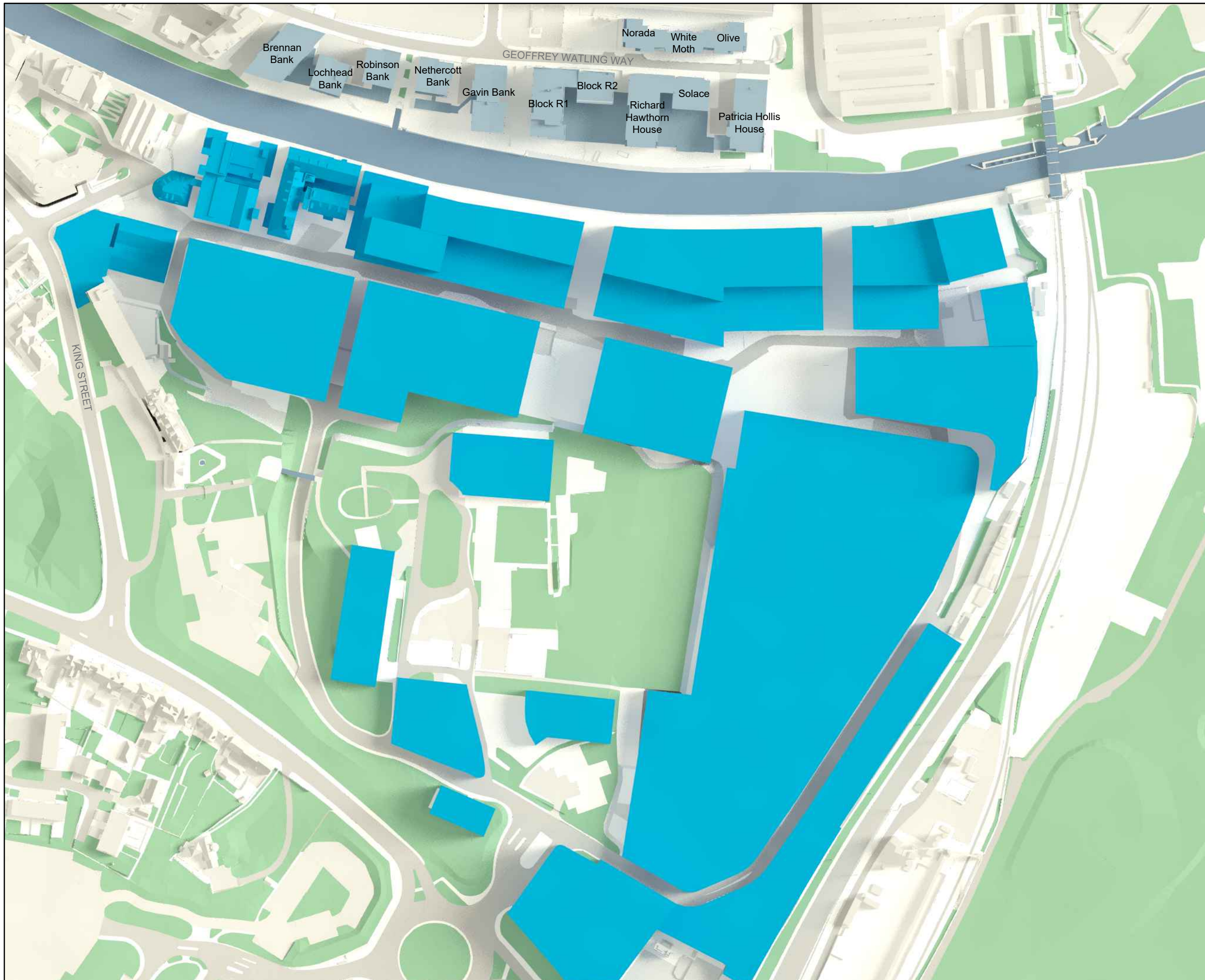
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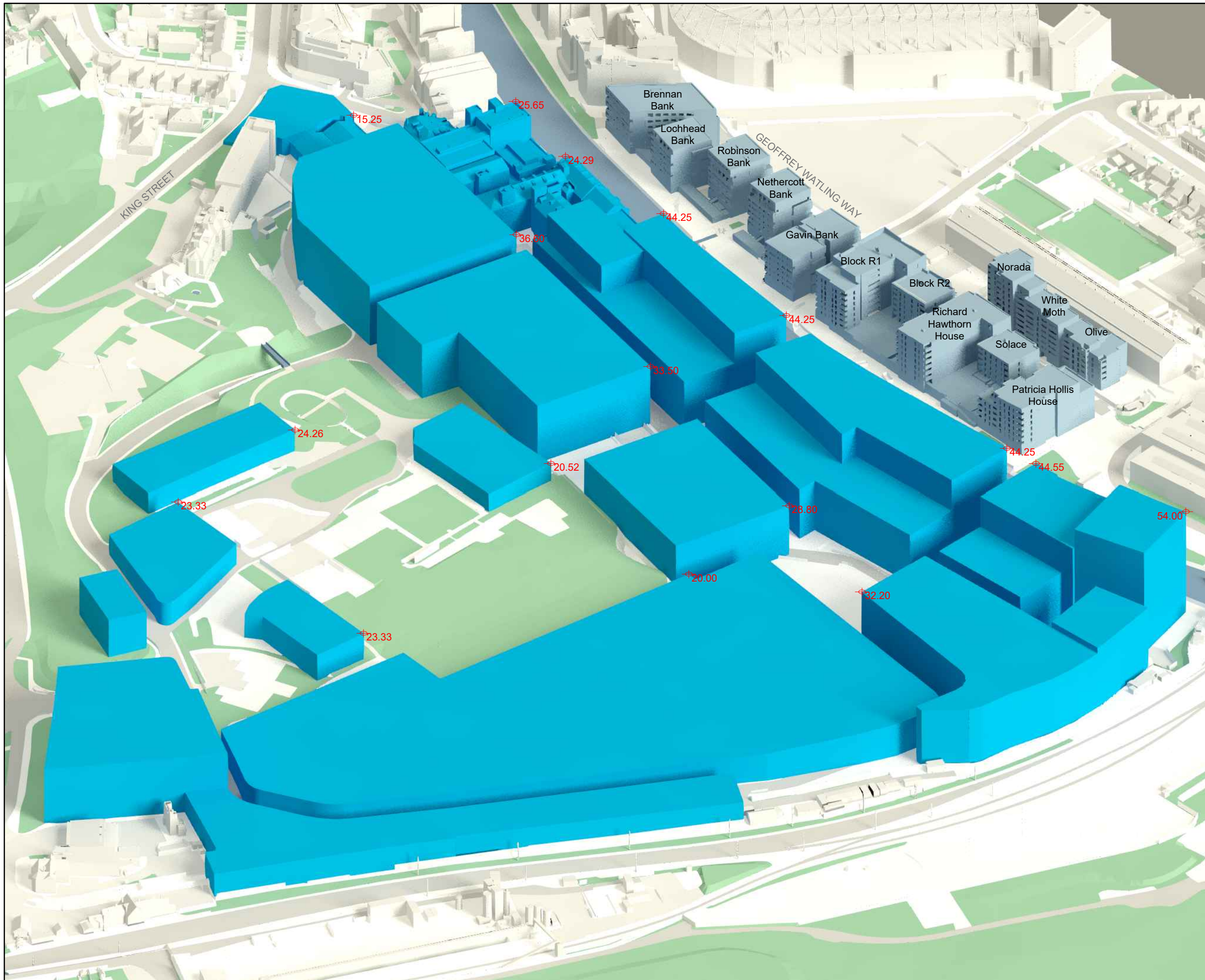
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Ordinance Datum Heights



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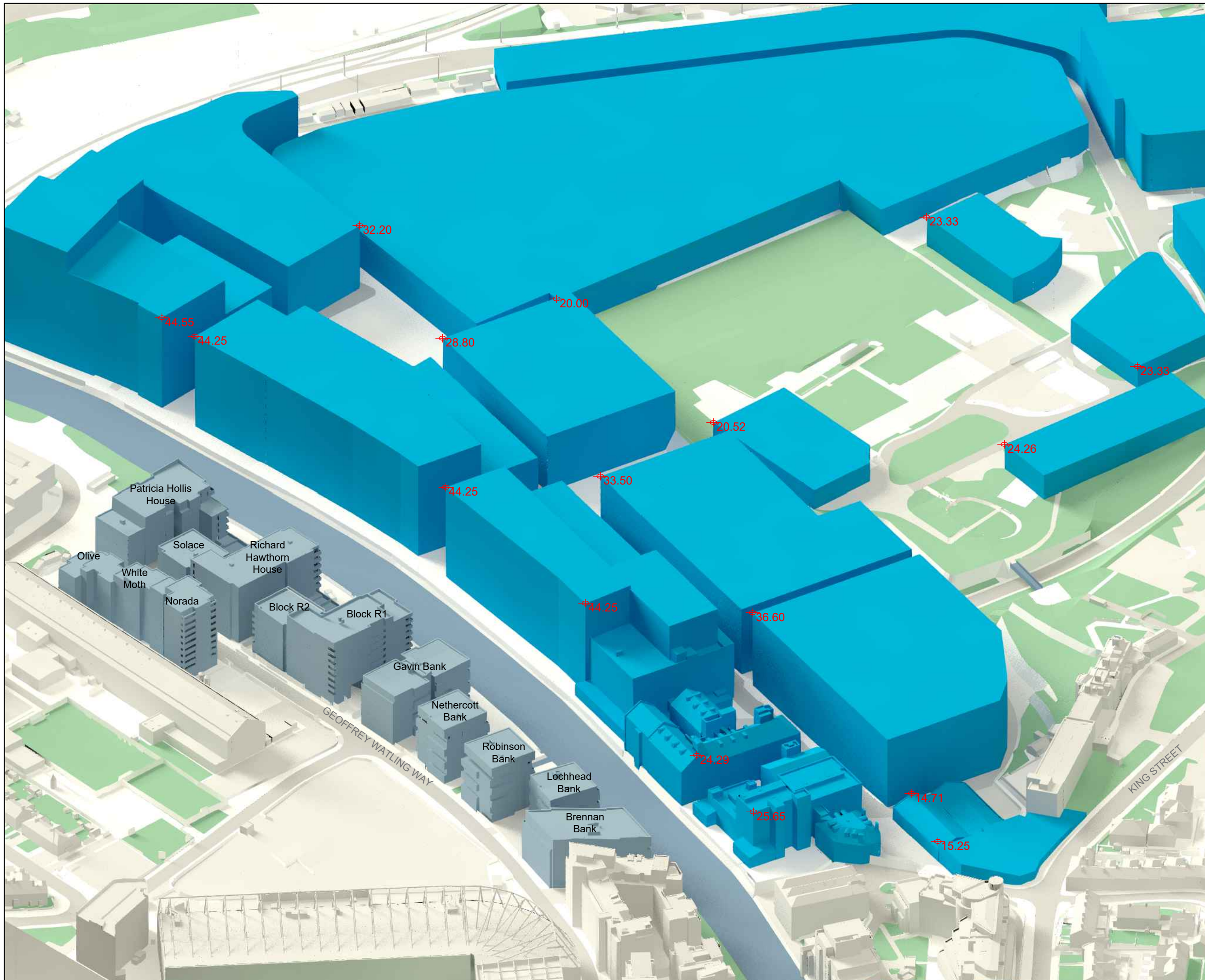
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 Parameter Massing

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- KEY**
- Proposed buildings
  - Analysed properties
  - Surrounding buildings

Ordinance Datum Heights



REV	DETAILS	DATE	BY
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**CLIENT**  
 Fuel Properties

**PROJECT**  
 Carrow Works

**DRAWING TITLE**  
 Proposed 3D view  
 Parameter Massing

<b>SCALE</b> Not to Scale	<b>DATE</b> Jul-22
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South-East Elevation

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 received on 10/06/2022

**KEY**

- Analysed properties
- Surrounding buildings
- Window Location



REV	DETAILS	DATE	BY
A	*	*	*

**CLIENT**  
 Fuel Properties

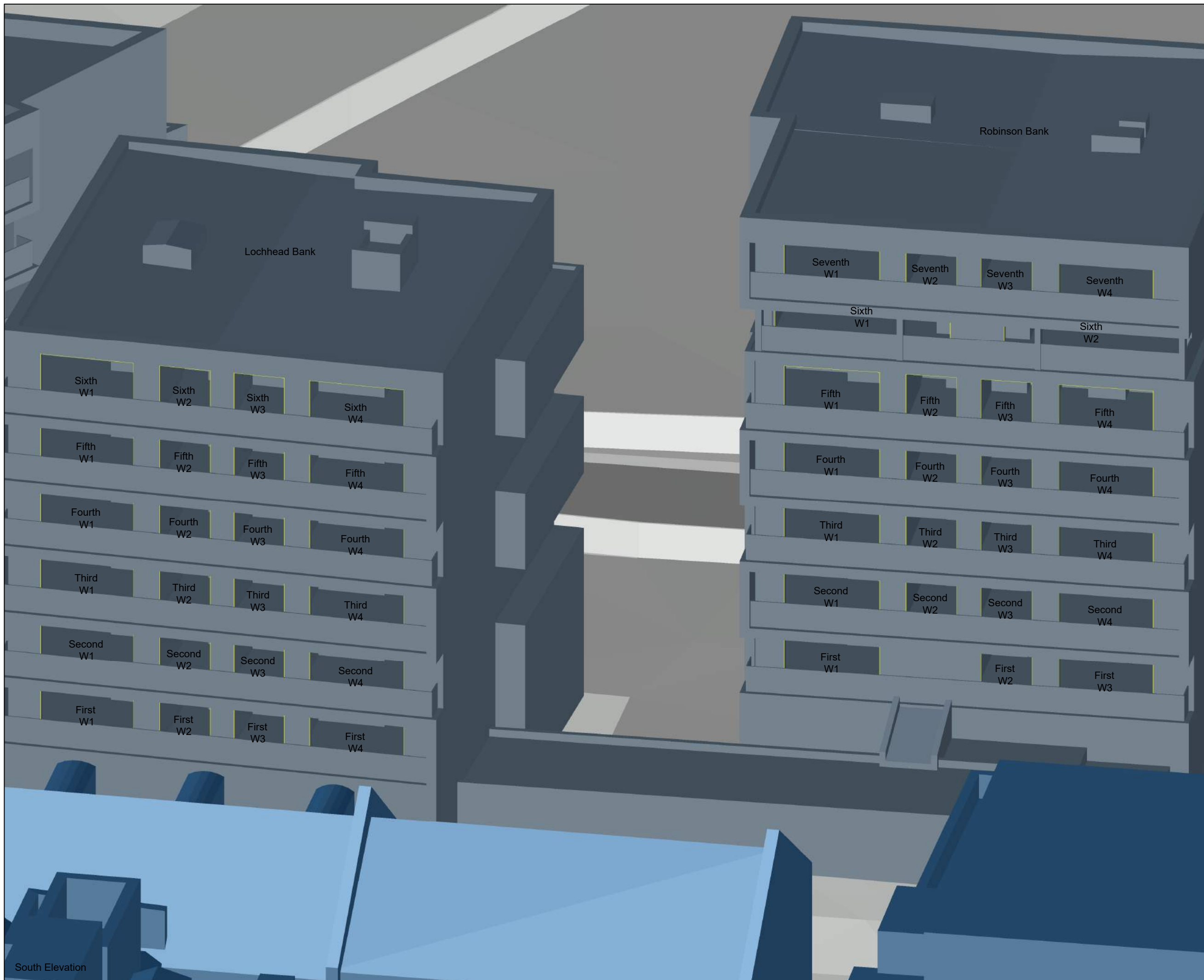
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 Brennan Bank

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Zmapping Limited 3d context model  
 received on 10/06/2022

**KEY**

- Analysed properties
- Surrounding buildings
- Window Location



REV	DETAILS	DATE	BY
A	*	*	*

**CLIENT**  
 Fuel Properties

**PROJECT**  
 Carrow Works

**DRAWING TITLE**  
 Window Maps  
 Lochhead Bank & Robinson Bank

<b>SCALE</b> Not to Scale	<b>DATE</b> Jul-22
<b>DRAWN BY</b> KB	<b>CHECKED BY</b> JW

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South Elevation





South Elevation

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 Zmapping Limited 3d context model  
 received on 10/06/2022

**KEY**  
 [Blue Box] Analysed properties  
 [White Box] Surrounding buildings  
 [Yellow Box with 'xxxx wx'] Window Location



REV	DETAILS	DATE	BY
A	*	*	*

**CLIENT**  
 Fuel Properties

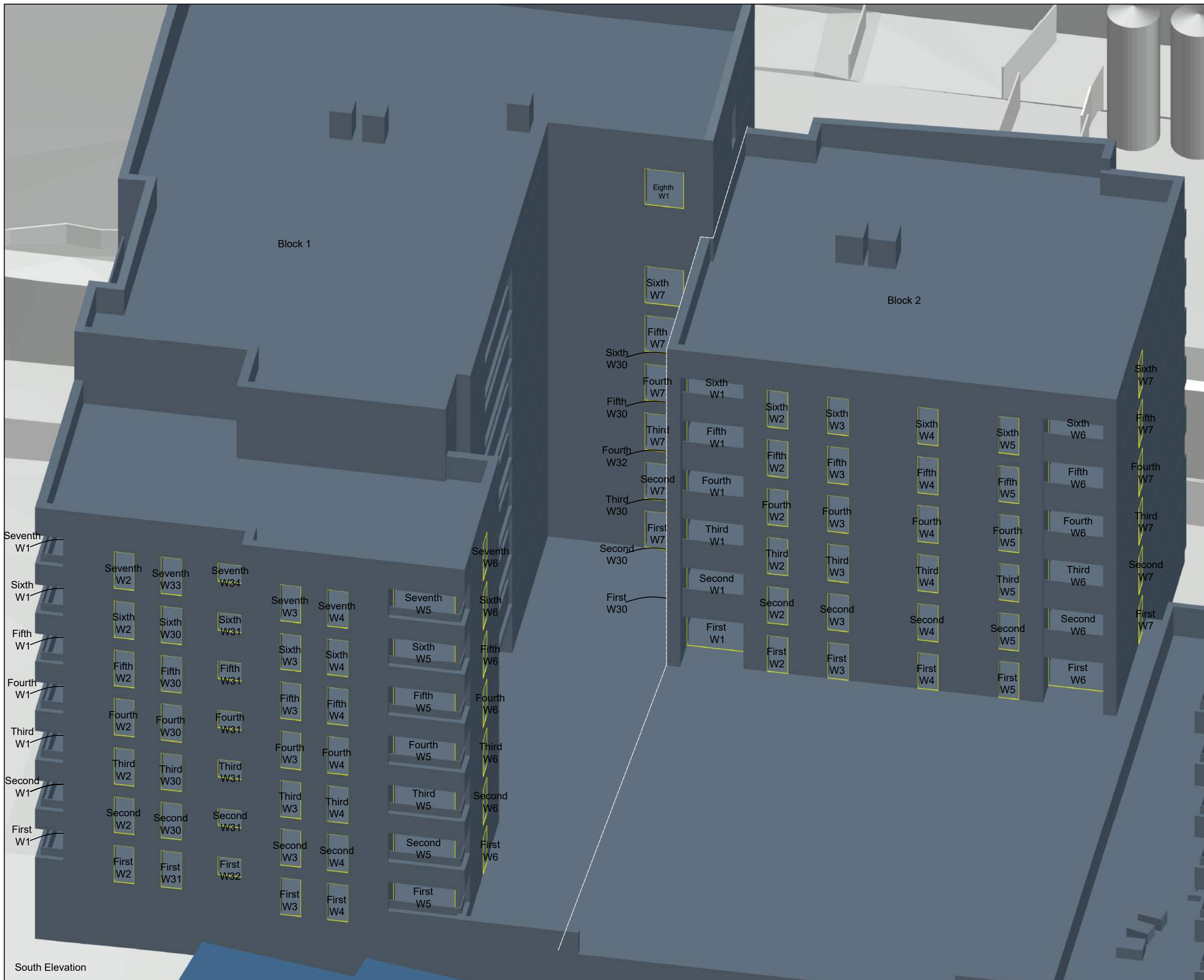
**PROJECT**  
 Carrow Works

**DRAWING TITLE**  
 Window Maps  
 Nethercott Bank & Gavin Bank

<b>SCALE</b> Not to Scale	<b>DATE</b> Jul-22
<b>DRAWN BY</b> KB	<b>CHECKED BY</b> JW

<b>DWG No.</b> D+S/1/ 303	<b>REV.</b>
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 schemes received on 28/06/2022

Zmapping Limited 3d context model  
 received on 10/06/2022

**KEY**

- Analysed properties
- Surrounding buildings
- Window Location



REV	DETAILS	DATE	BY
A	*	*	*

**CLIENT**  
 Fuel Properties

**PROJECT**  
 Carrow Works

**DRAWING TITLE**  
 Window Maps  
 Block 1 & Block 2 Geoffrey Watling Way

<b>SCALE</b> Not to Scale	<b>DATE</b> Jul-22
<b>DRAWN BY</b> KB	<b>CHECKED BY</b> JW

<b>DWG No.</b> D+S/1/ 304	<b>REV.</b>
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 Zmapping Limited 3d context model  
 received on 10/06/2022

**KEY**

- Analysed properties
- Surrounding buildings
- Window Location



REV	DETAILS	DATE	BY
A	*	*	*

**CLIENT**  
 Fuel Properties

**PROJECT**  
 Carrow Works

**DRAWING TITLE**  
 Window Maps  
 Richard Hawthorn House & Solace

<b>SCALE</b> Not to Scale	<b>DATE</b> Jul-22
<b>DRAWN BY</b> KB	<b>CHECKED BY</b> JW

<b>DWG No.</b> D+S/1/ 305	<b>REV.</b>
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South Elevation



South Elevation

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 Zmapping Limited 3d context model  
 received on 10/06/2022

**KEY**

- Analysed properties
- Surrounding buildings
- Window Location



REV	DETAILS	DATE	BY
A	*	*	*

**CLIENT**  
 Fuel Properties

**PROJECT**  
 Carrow Works

**DRAWING TITLE**  
 Window Maps  
 Patricia Hollis House

<b>SCALE</b> Not to Scale	<b>DATE</b> Jul-22
<b>DRAWN BY</b> KB	<b>CHECKED BY</b> JW

<b>DWG No.</b> D+S/1/ 306	<b>REV.</b>
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 received on 10/06/2022

KEY

- Analysed properties
- Surrounding buildings
- Window Location



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

DRAWING TITLE  
 Window Maps  
 Norada, White Moth, Olive

SCALE Not to Scale	DATE Jul-22
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DWG No. D+S/1/ 307	REV.
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South Elevation

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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT  
 Fuel Properties

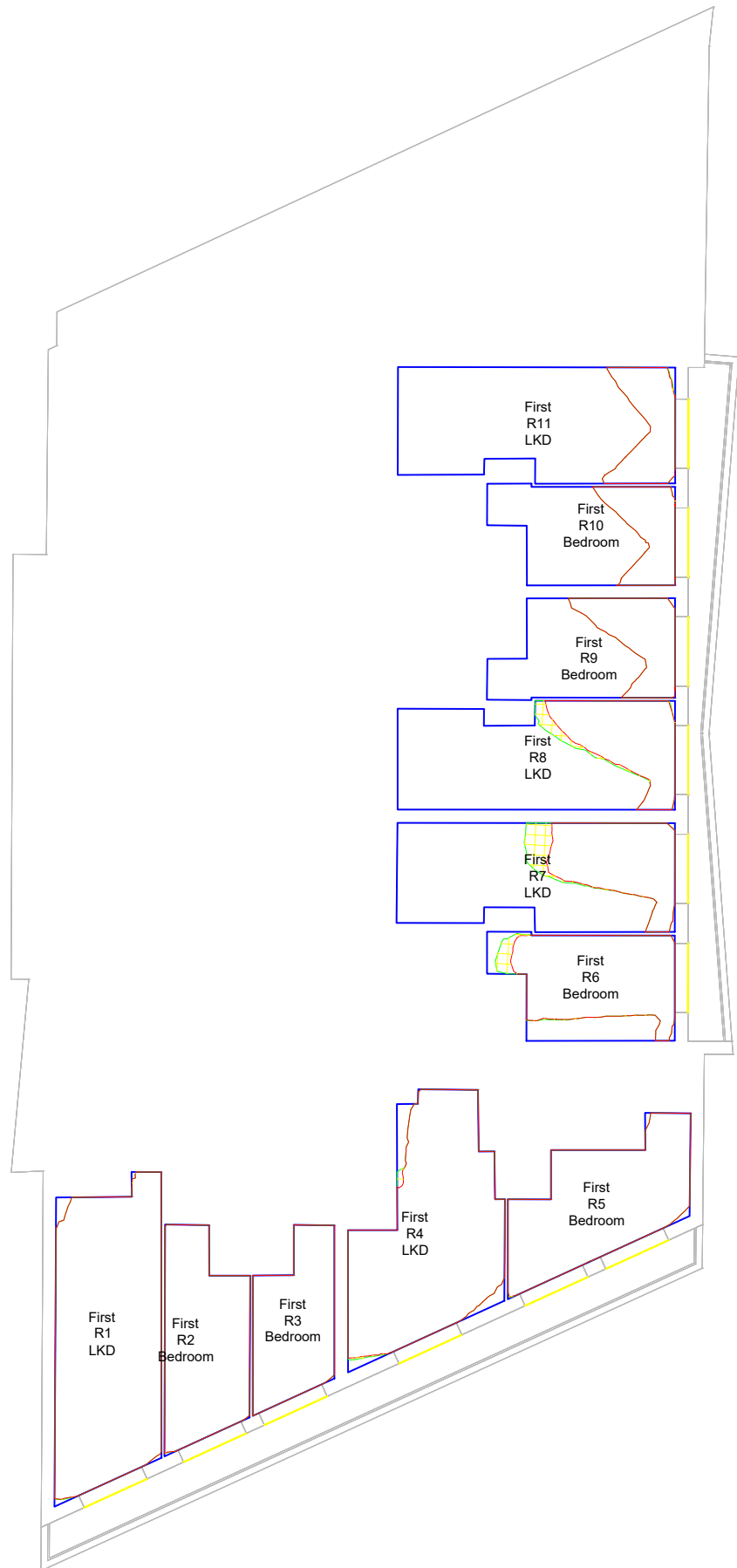
PROJECT  
 Carrow Works

DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Brennan Bank Geoffrey Watling Way

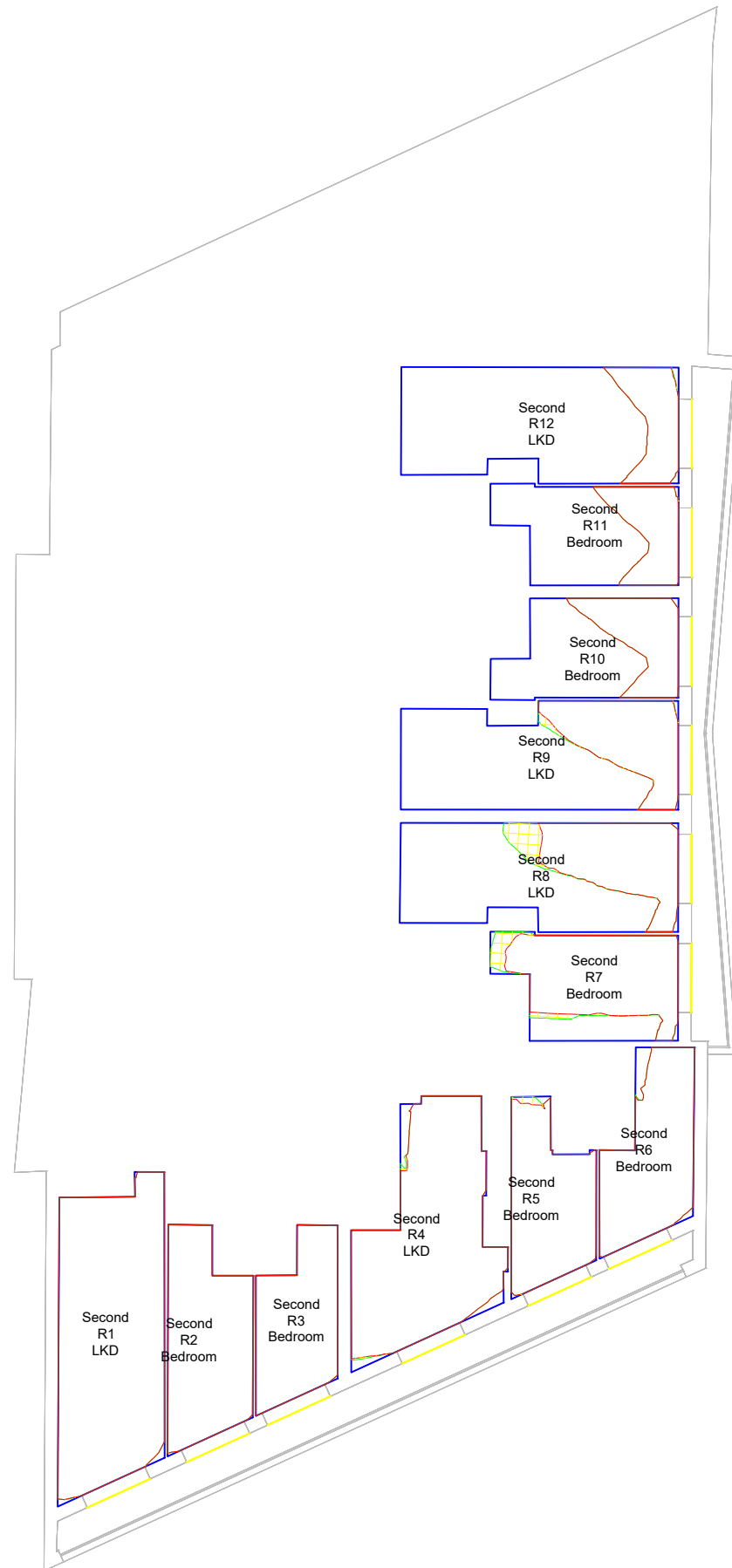
SCALE 1:200	DATE Jul-22
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DWG No. D+S/1/ 201	REV.
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CONSIL



First Floor



Second Floor

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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT  
 Fuel Properties

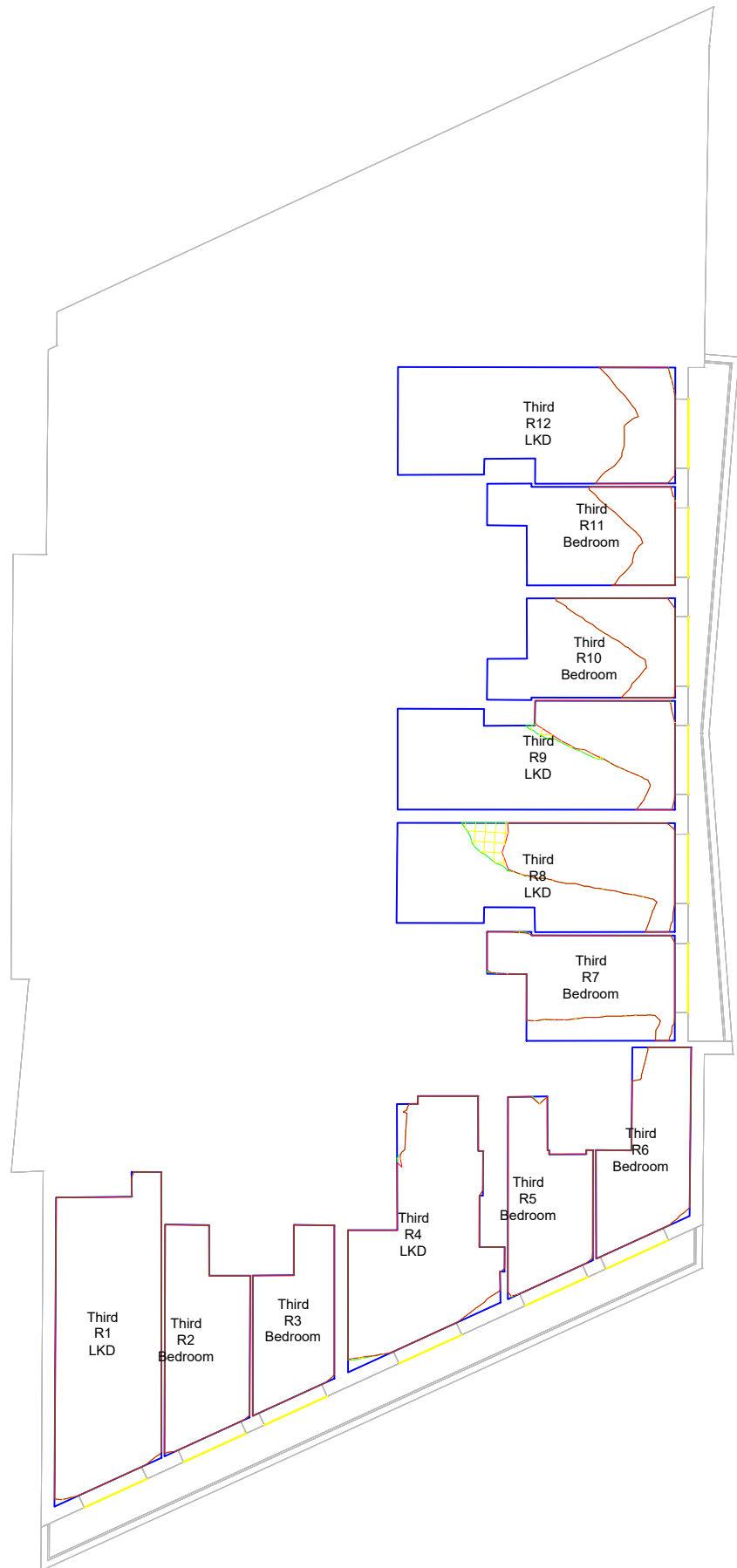
PROJECT  
 Carrow Works

DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Brennan Bank Geoffrey Watling Way

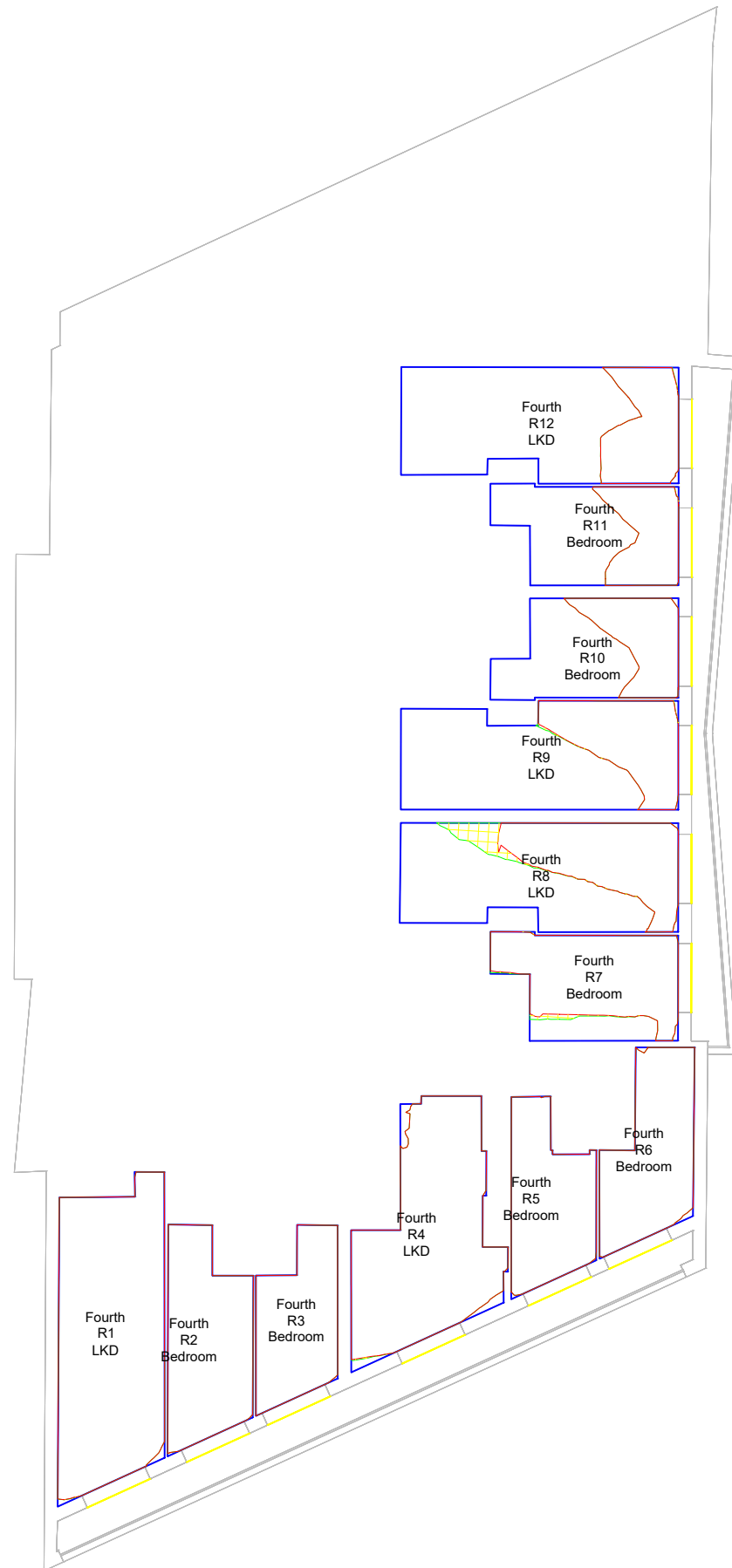
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CONSIL



Third Floor



Fourth Floor

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Zmapping Limited 3d context model  
received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
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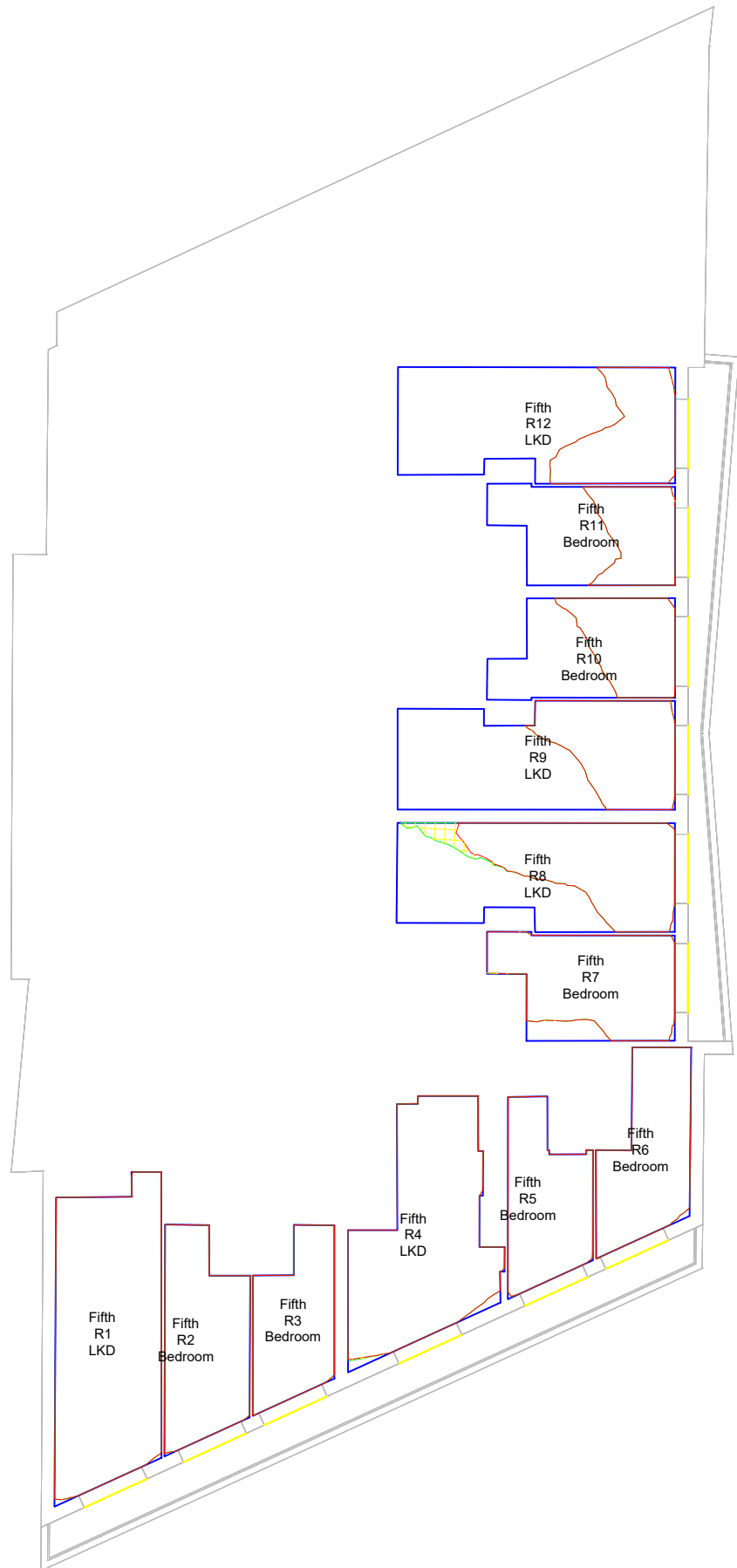
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Fuel Properties

PROJECT  
Carrow Works

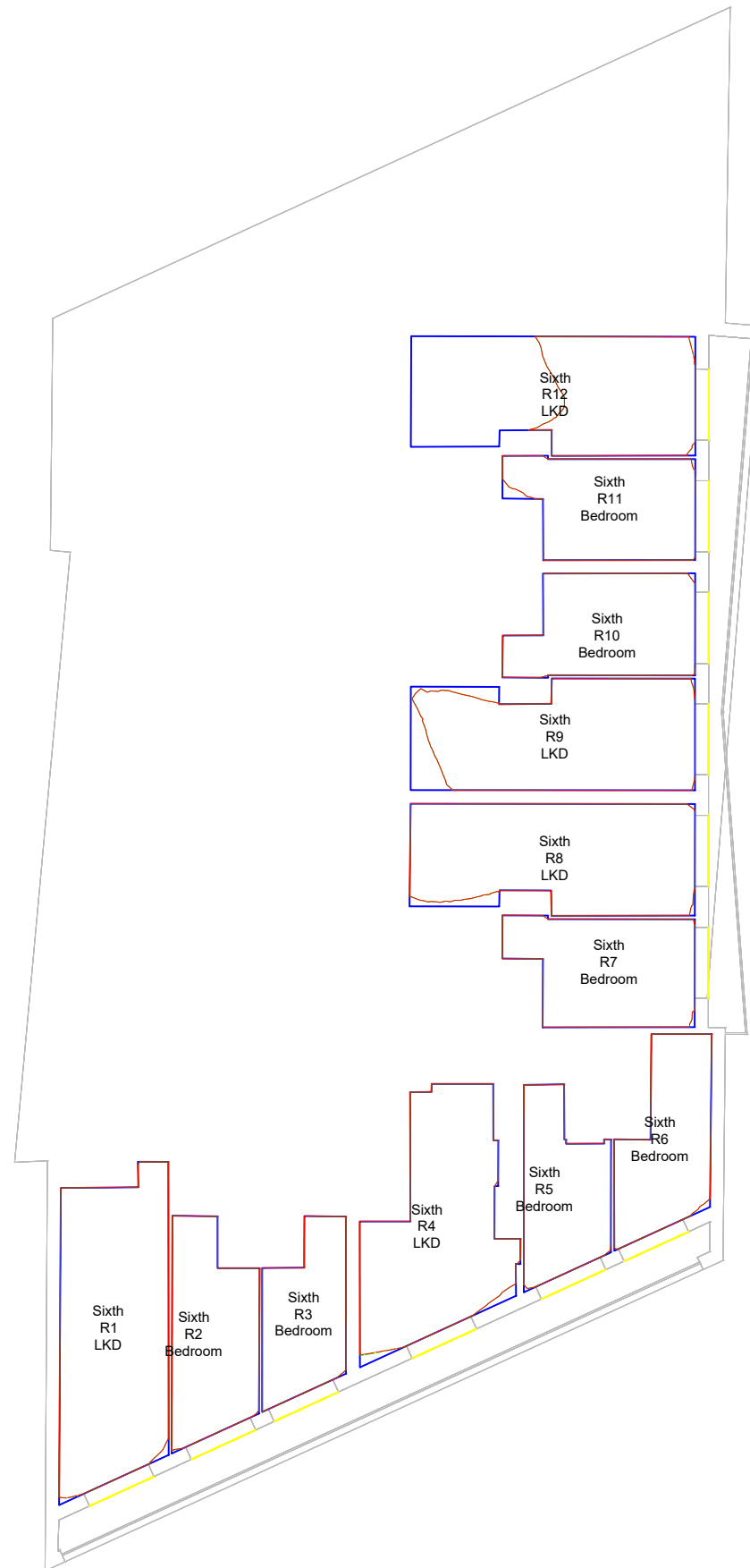
DRAWING TITLE  
Daylight Distribution contours  
Illustrative Massing  
Brennan Bank Geoffrey Watling Way

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

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Fifth Floor



Sixth Floor



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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
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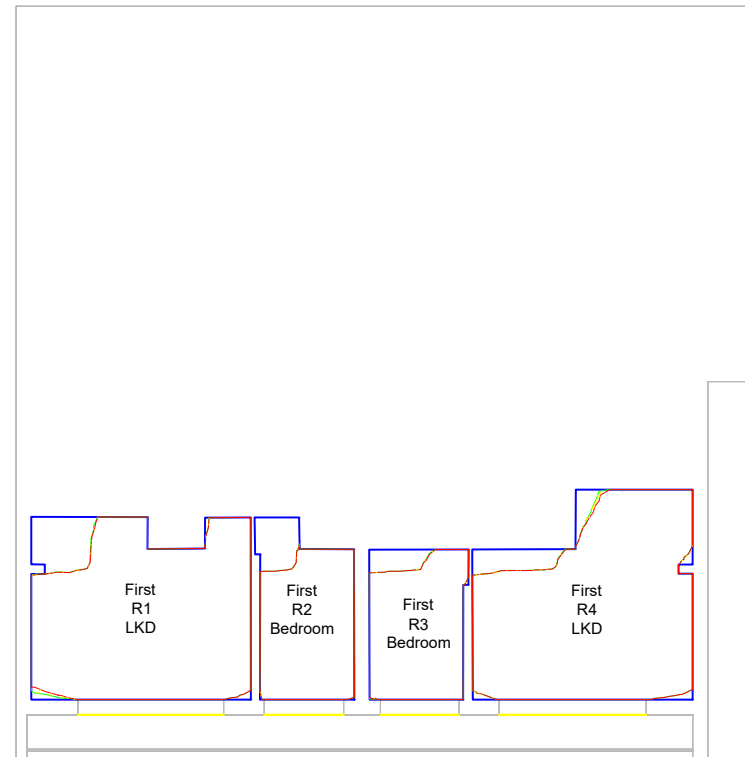
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 Fuel Properties

PROJECT  
 Carrow Works

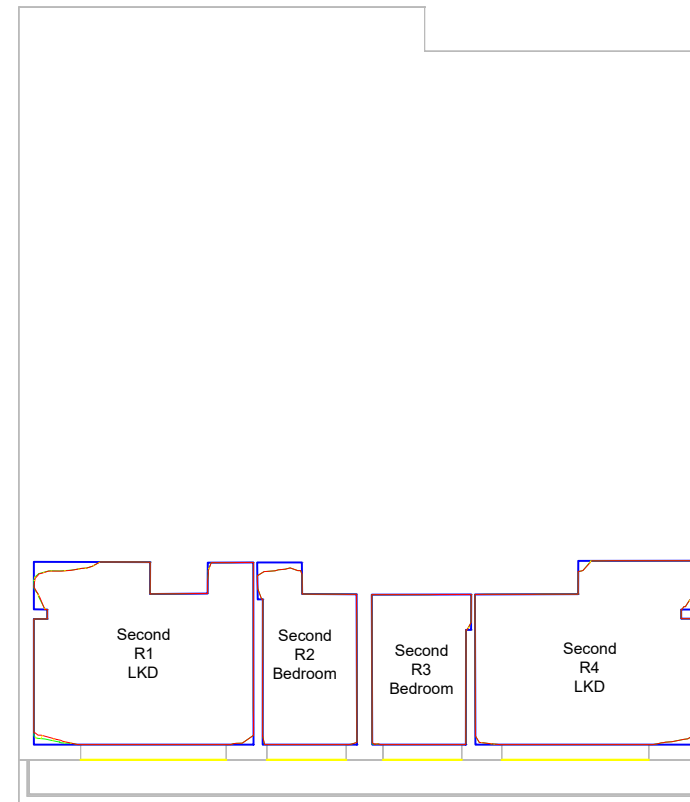
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 Daylight Distribution contours  
 Illustrative Massing  
 Lochhead Bank Geoffrey Watling Way

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

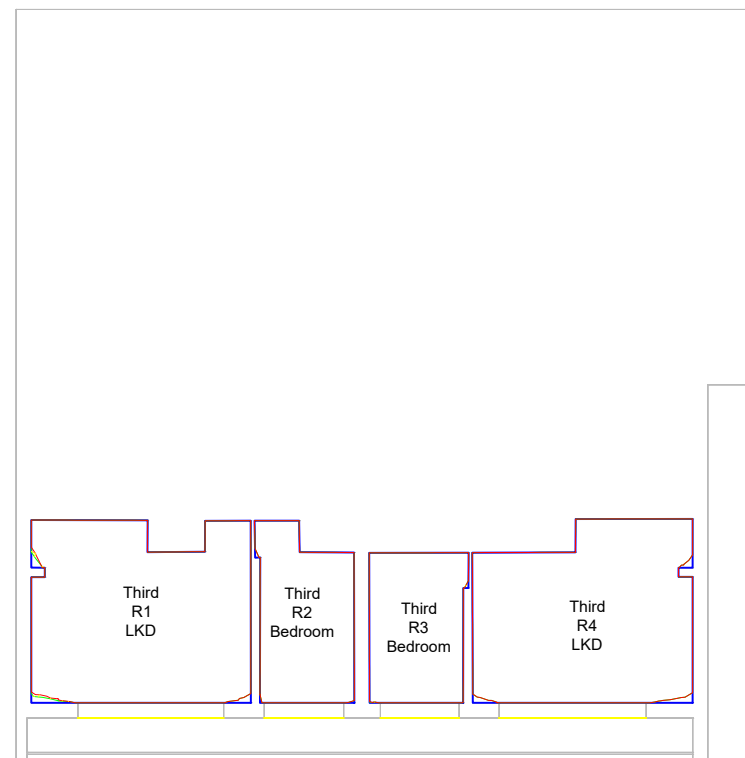
DWG No. D+S/1/ 204	REV.
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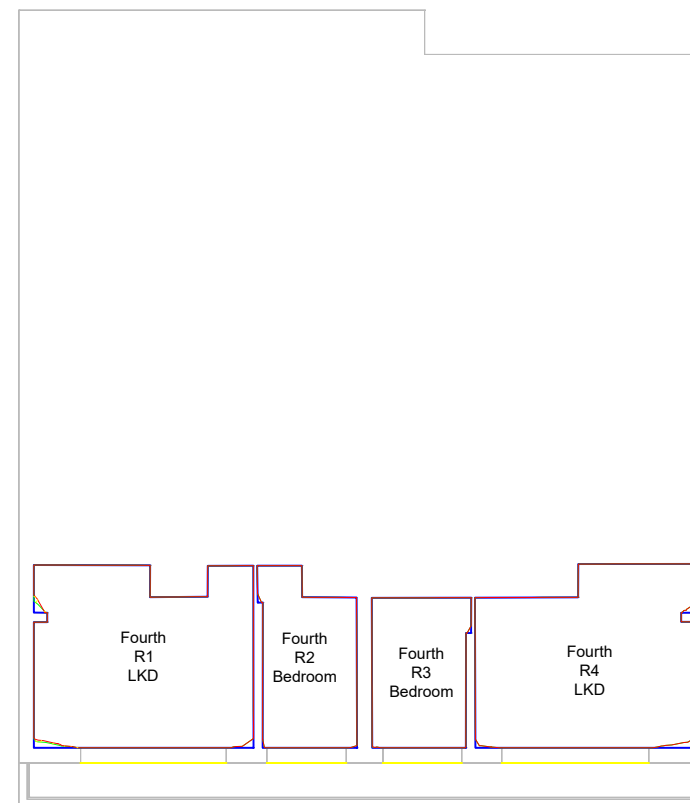
First Floor



Second Floor



Third Floor



Fourth Floor

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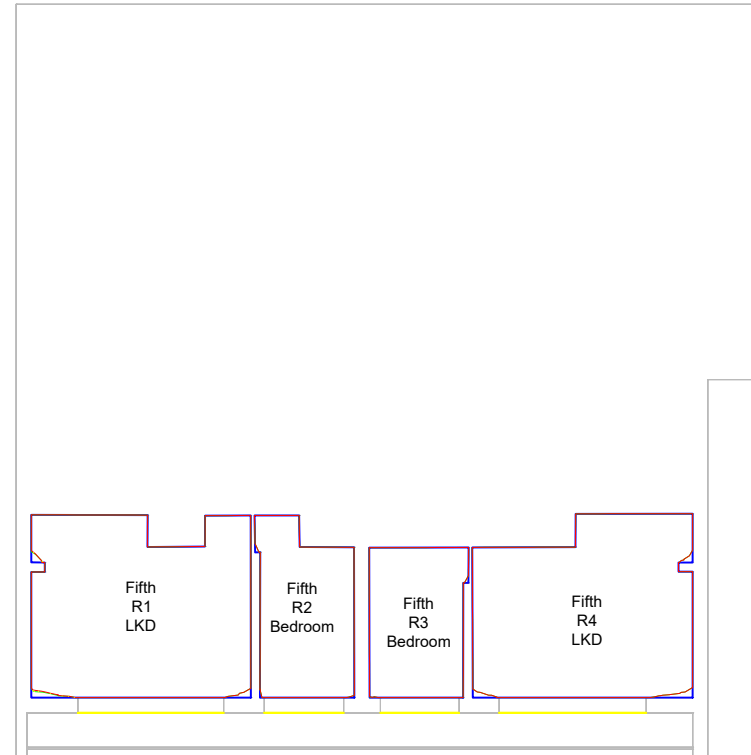
**SOURCES OF INFORMATION:**  
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Zmapping Limited 3d context model  
 received on 10/06/2022

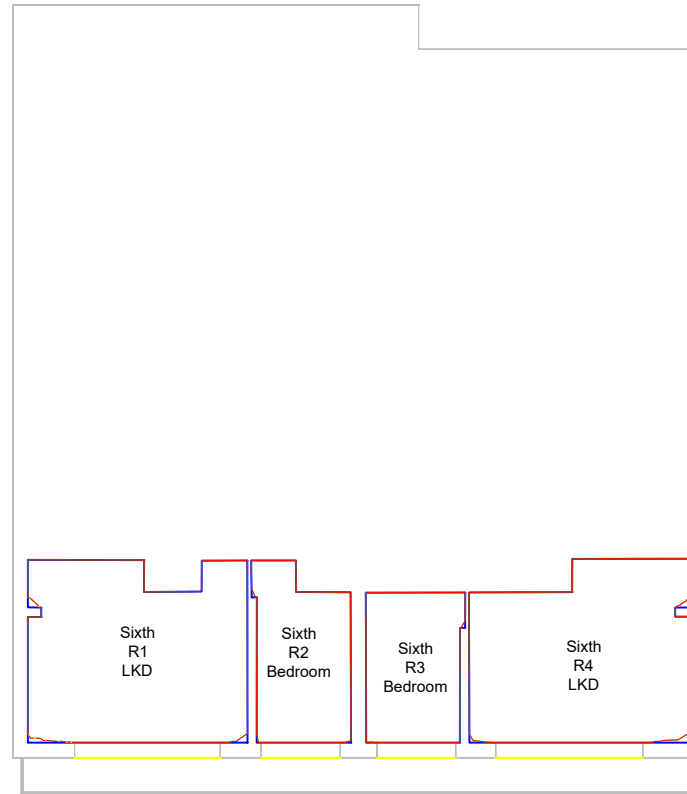


**KEY**

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



Fifth Floor



Sixth Floor

REV	DETAILS	DATE	BY
A	*	*	*

**CLIENT**  
 Fuel Properties

**PROJECT**  
 Carrow Works

**DRAWING TITLE**  
 Daylight Distribution contours  
 Illustrative Massing  
 Lochhead Bank Geoffrey Watling Way

<b>SCALE</b> 1:200	<b>DATE</b> Jul-22
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<b>DWG No.</b> D+S/1/ 205	<b>REV.</b>
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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
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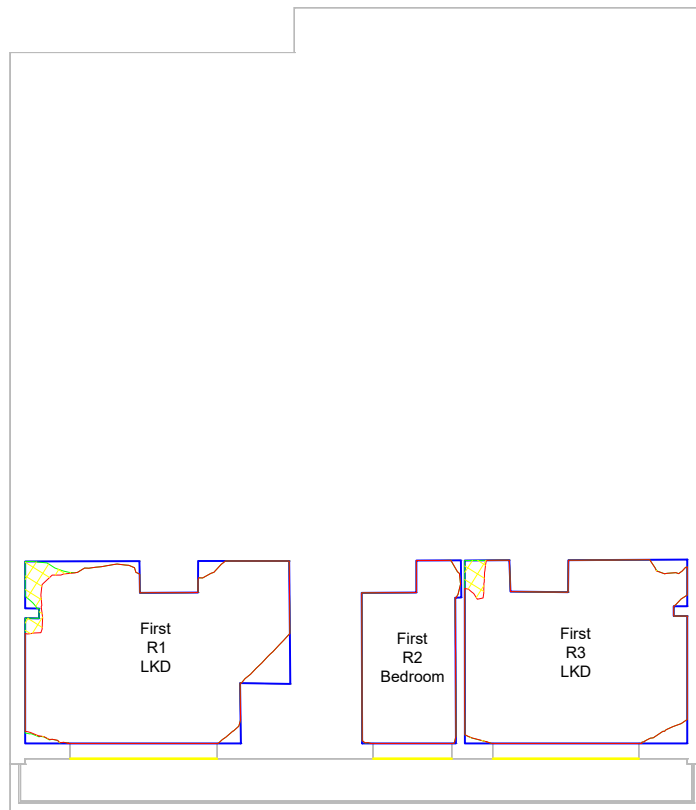
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 Fuel Properties

PROJECT  
 Carrow Works

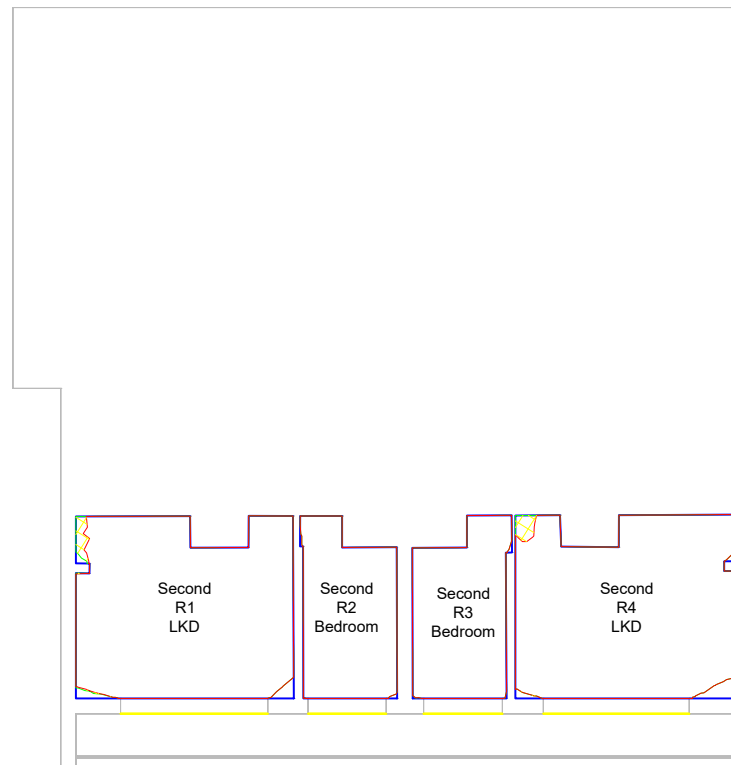
DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Robinson Bank Geoffrey Watling Way

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

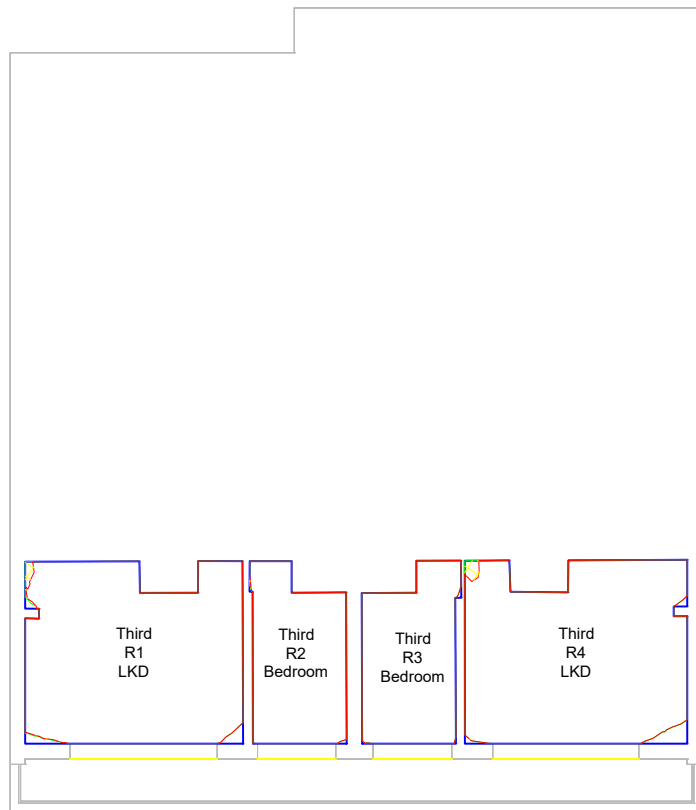
DWG No. D+S/1/ 206	REV.
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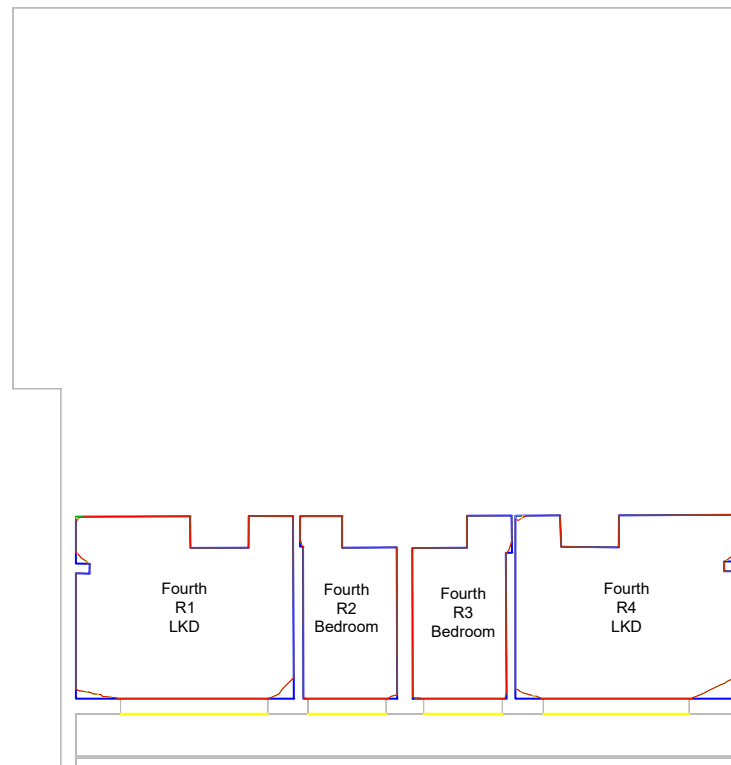
First Floor



Second Floor



Third Floor



Fourth Floor

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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
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CLIENT  
 Fuel Properties

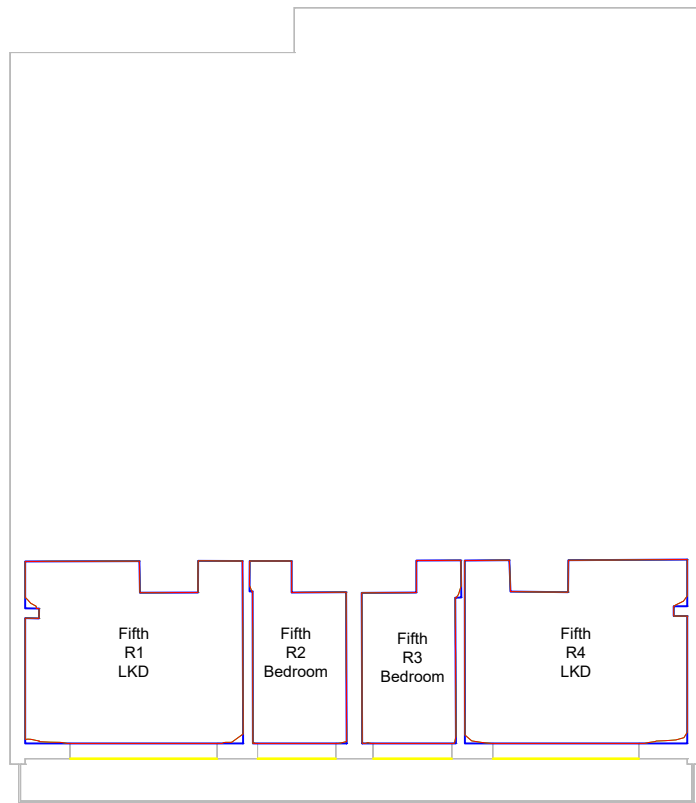
PROJECT  
 Carrow Works

DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Robinson Bank Geoffrey Watling Way

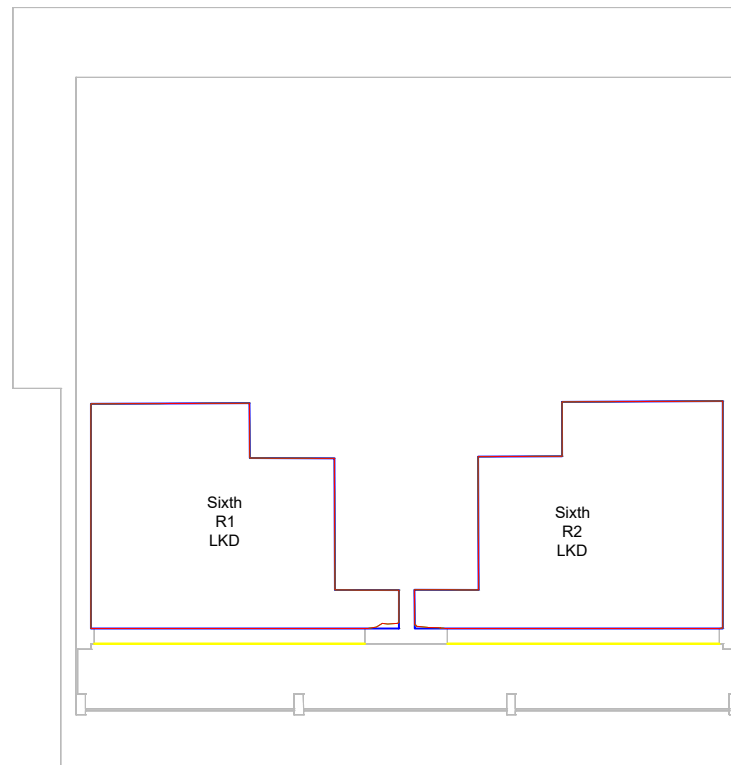
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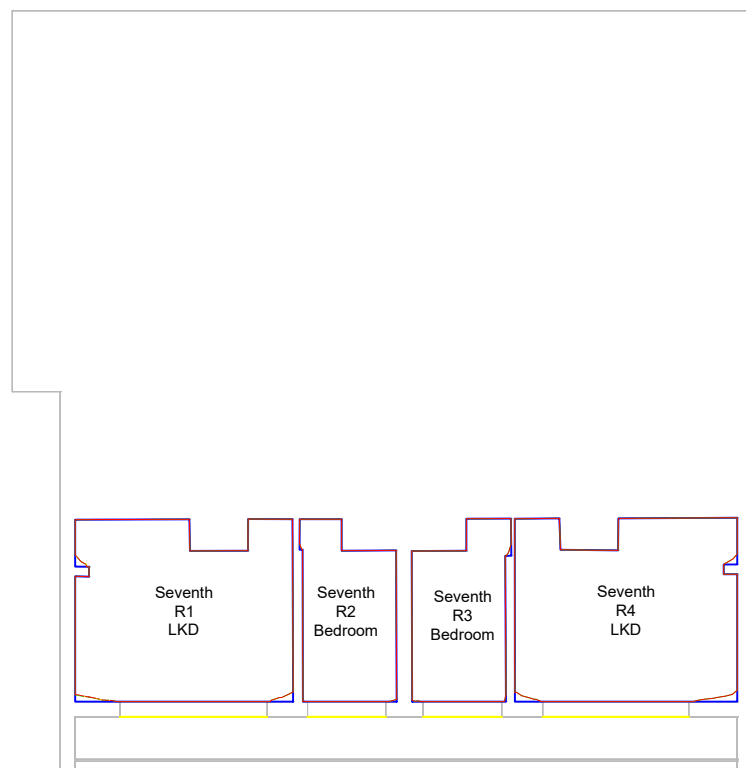
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Fifth Floor



Sixth Floor



Seventh Floor

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KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
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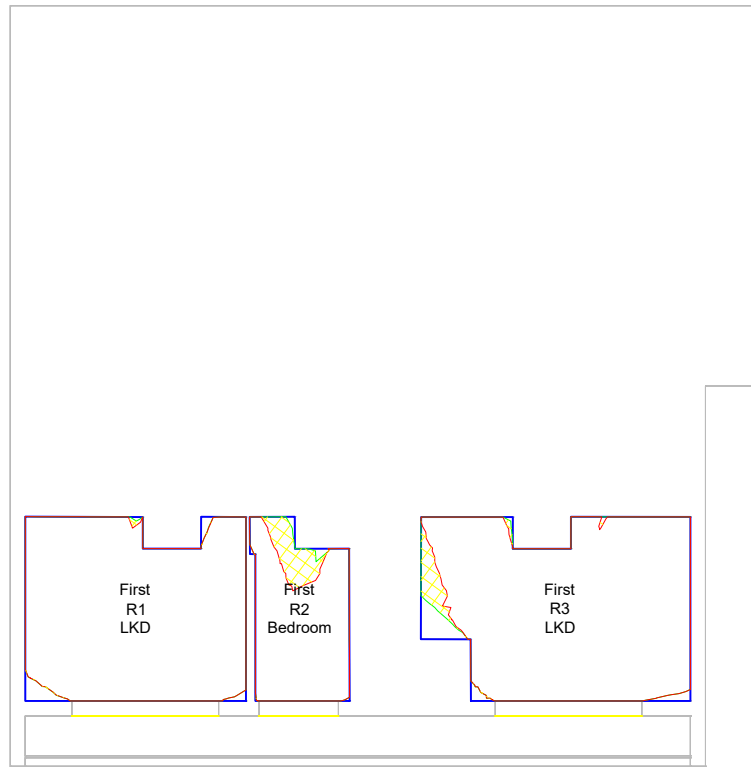
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PROJECT  
 Carrow Works

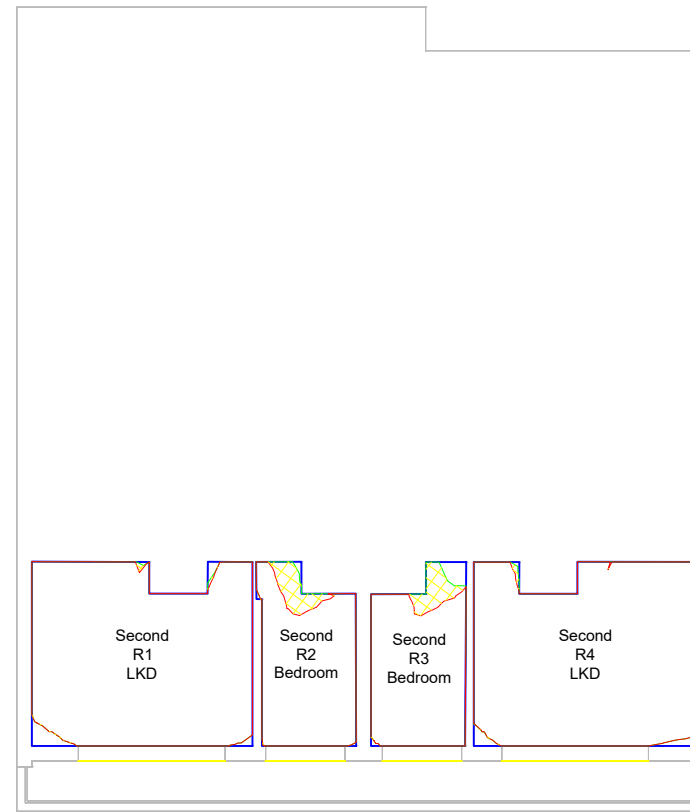
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 Daylight Distribution contours  
 Illustrative Massing  
 Nethercott Bank Geoffrey Watling Way

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

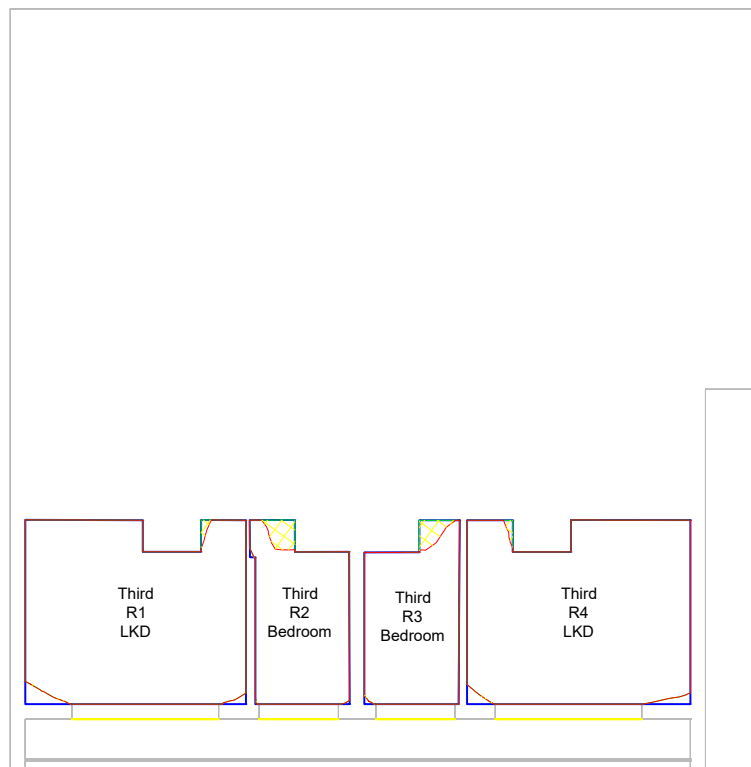
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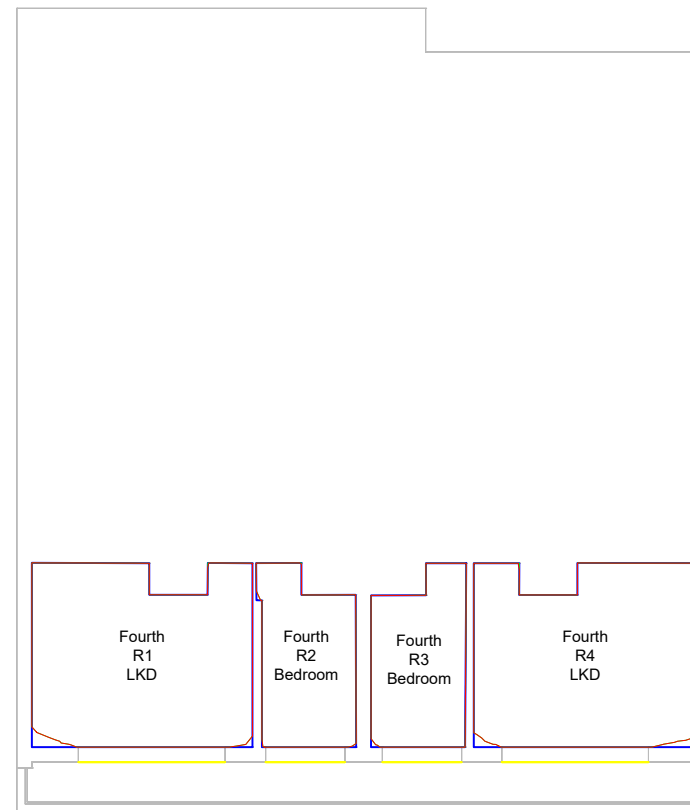
First Floor



Second Floor



Third Floor



Fourth Floor

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 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
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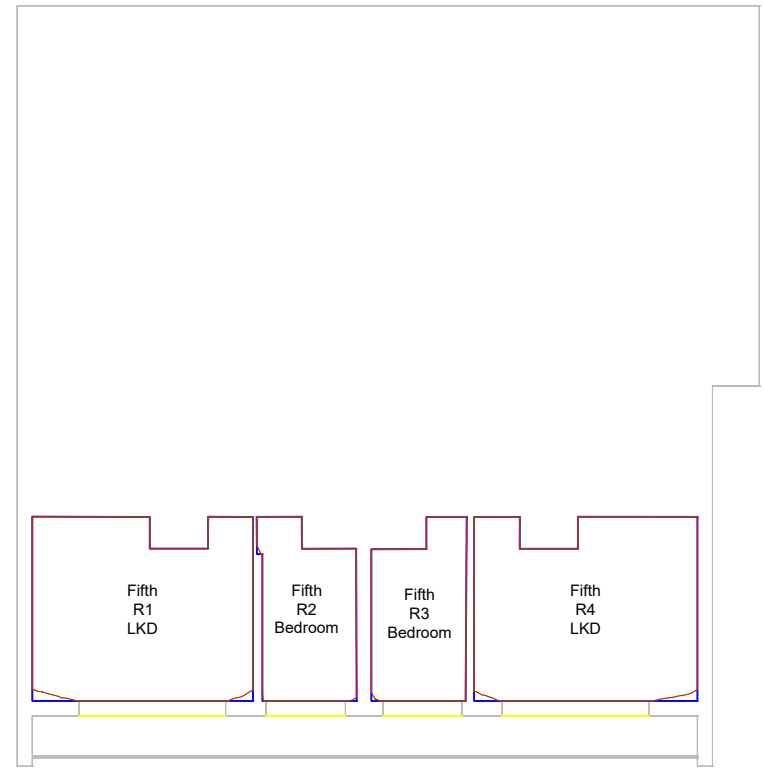
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PROJECT  
 Carrow Works

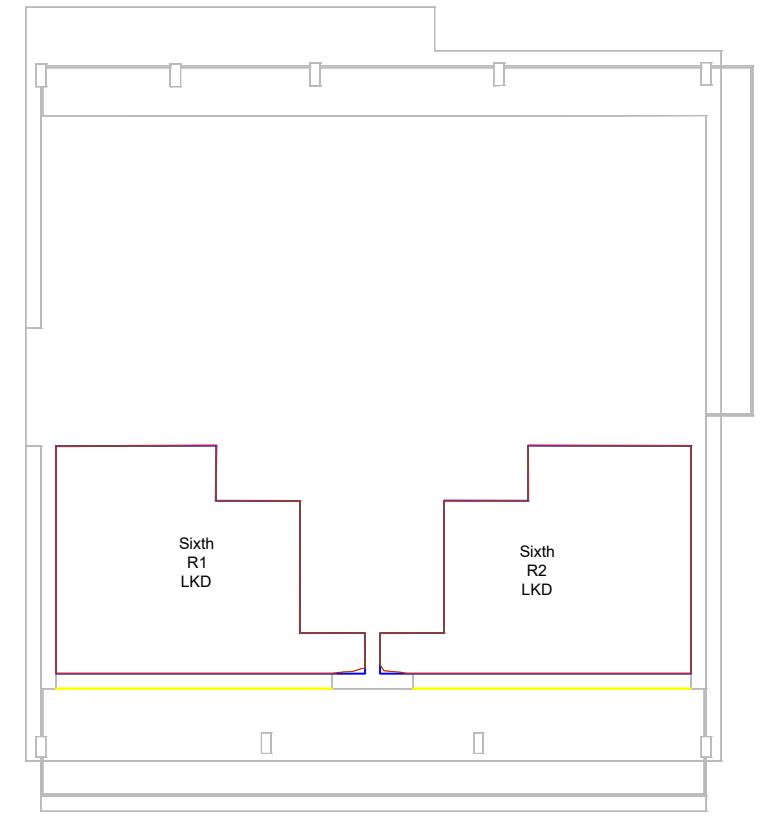
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 Illustrative Massing  
 Nethercott Bank Geoffrey Watling Way

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

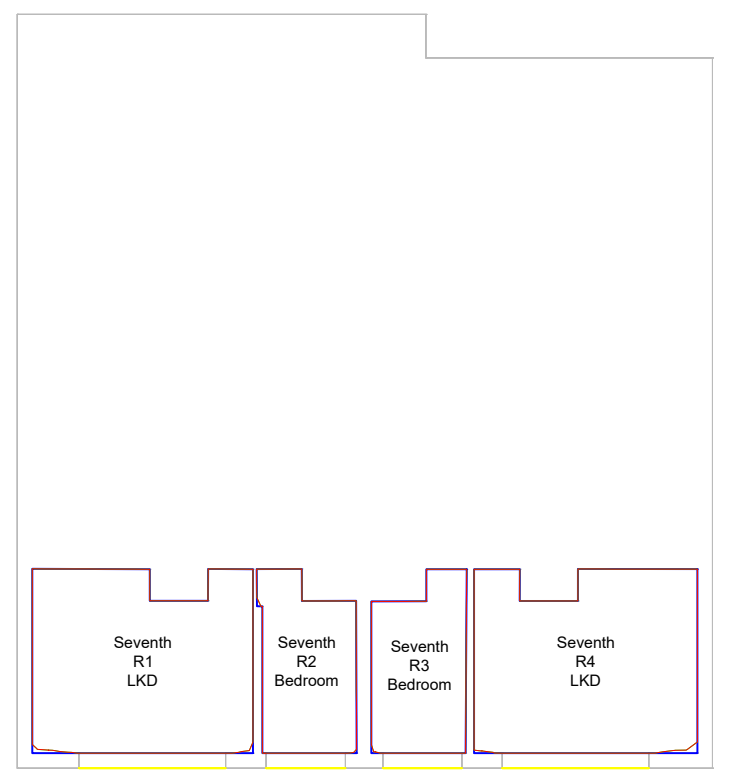
DWG No. D+S/1/ 209	REV.
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Fifth Floor



Sixth Floor



Seventh Floor

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Zmapping Limited 3d context model  
 received on 10/06/2022



**KEY**

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
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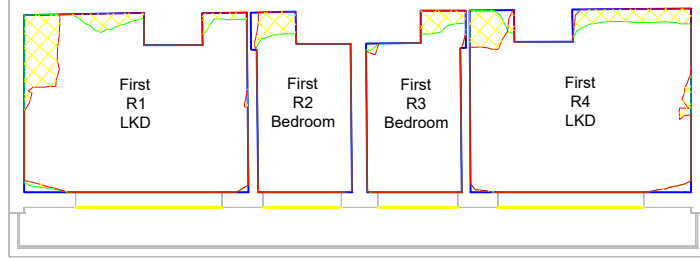
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 Fuel Properties

**PROJECT**  
 Carrow Works

**DRAWING TITLE**  
 Daylight Distribution contours  
 Illustrative Massing  
 Gavin Bank Geoffrey Watling Way

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<b>DRAWN BY</b> KB	<b>CHECKED BY</b> JW

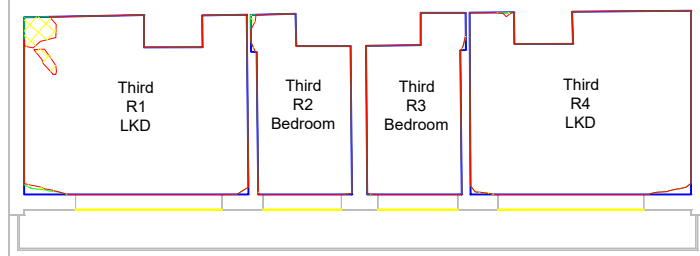
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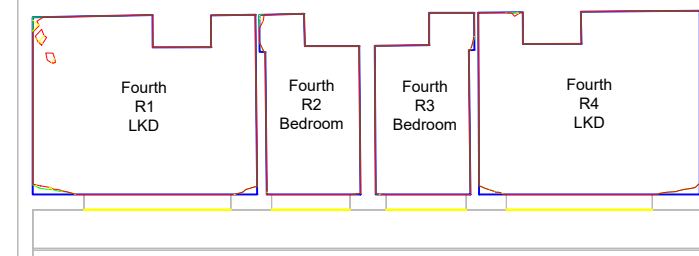
First Floor



Second Floor



Third Floor



Fourth Floor

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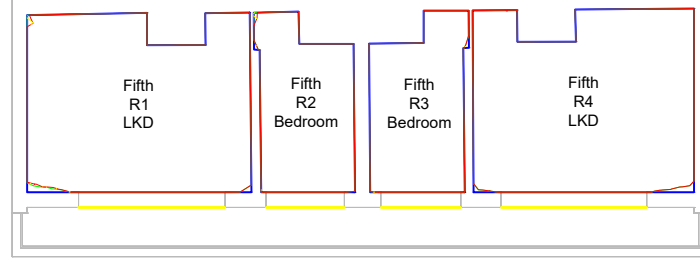
**SOURCES OF INFORMATION:**  
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 schemes received on 28/06/2022

Zmapping Limited 3d context model  
 received on 10/06/2022



**KEY**

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



Fifth Floor

Sixth Floor

REV	DETAILS	DATE	BY
A	*	*	*

**CLIENT**  
 Fuel Properties

**PROJECT**  
 Carrow Works

**DRAWING TITLE**  
 Daylight Distribution contours  
 Illustrative Massing  
 Gavin Bank Geoffrey Watling Way

<b>SCALE</b> 1:200	<b>DATE</b> Jul-22
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KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
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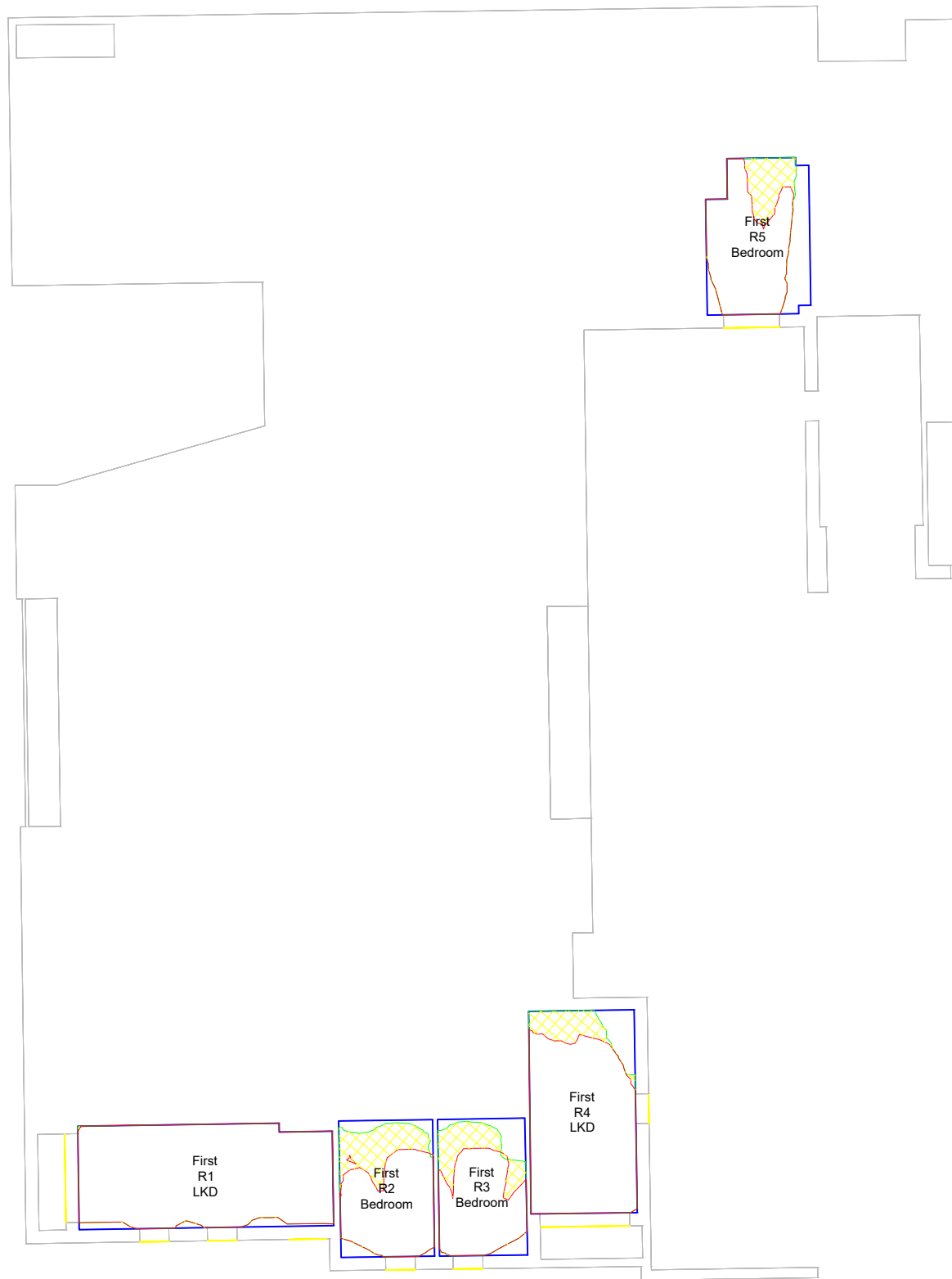
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PROJECT  
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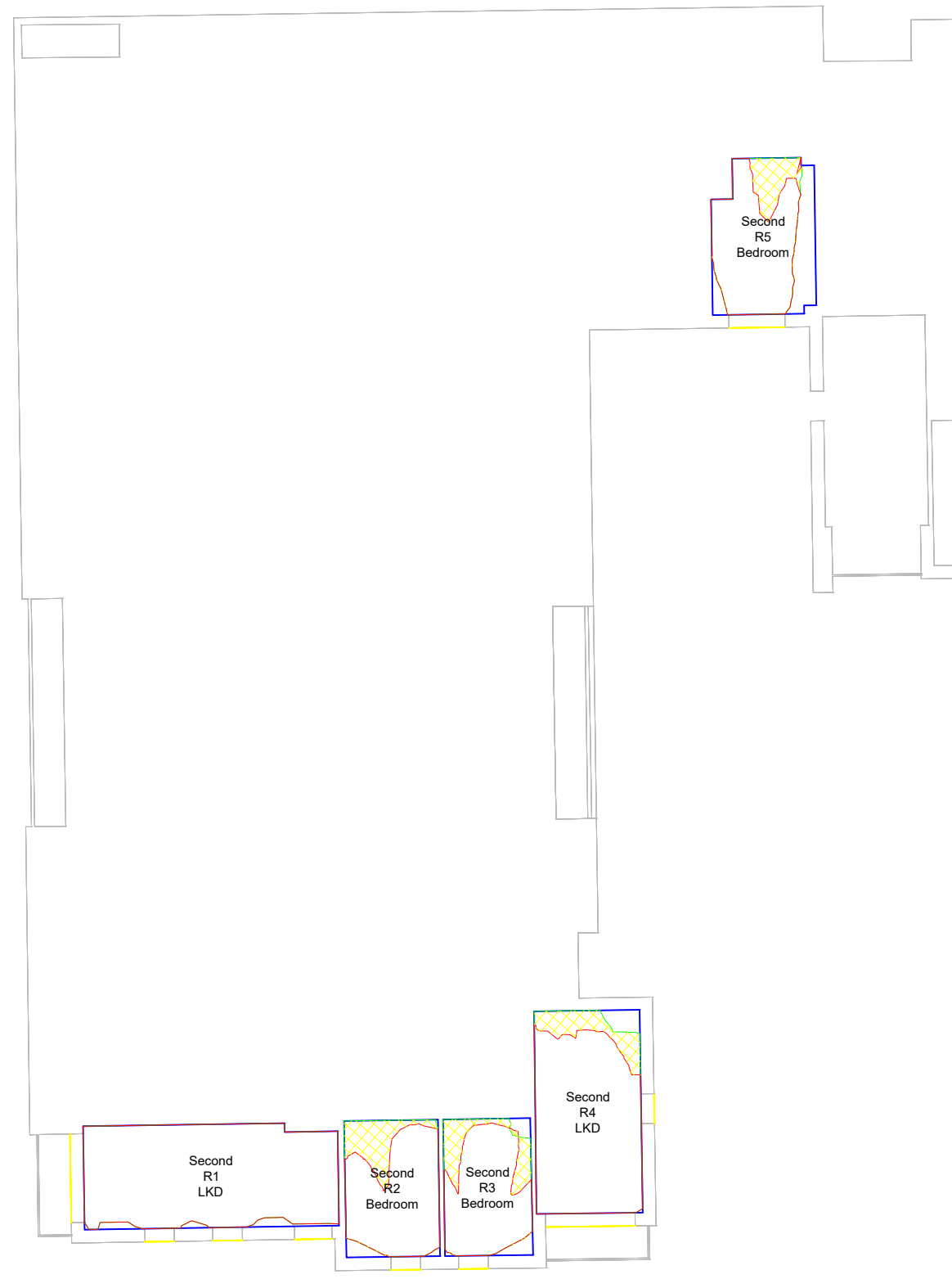
DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Block R1 Geoffrey Watling Way

SCALE 1:200	DATE Jul-22
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DWG No. D+S/1/ 212	REV.
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First Floor



Second Floor

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KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
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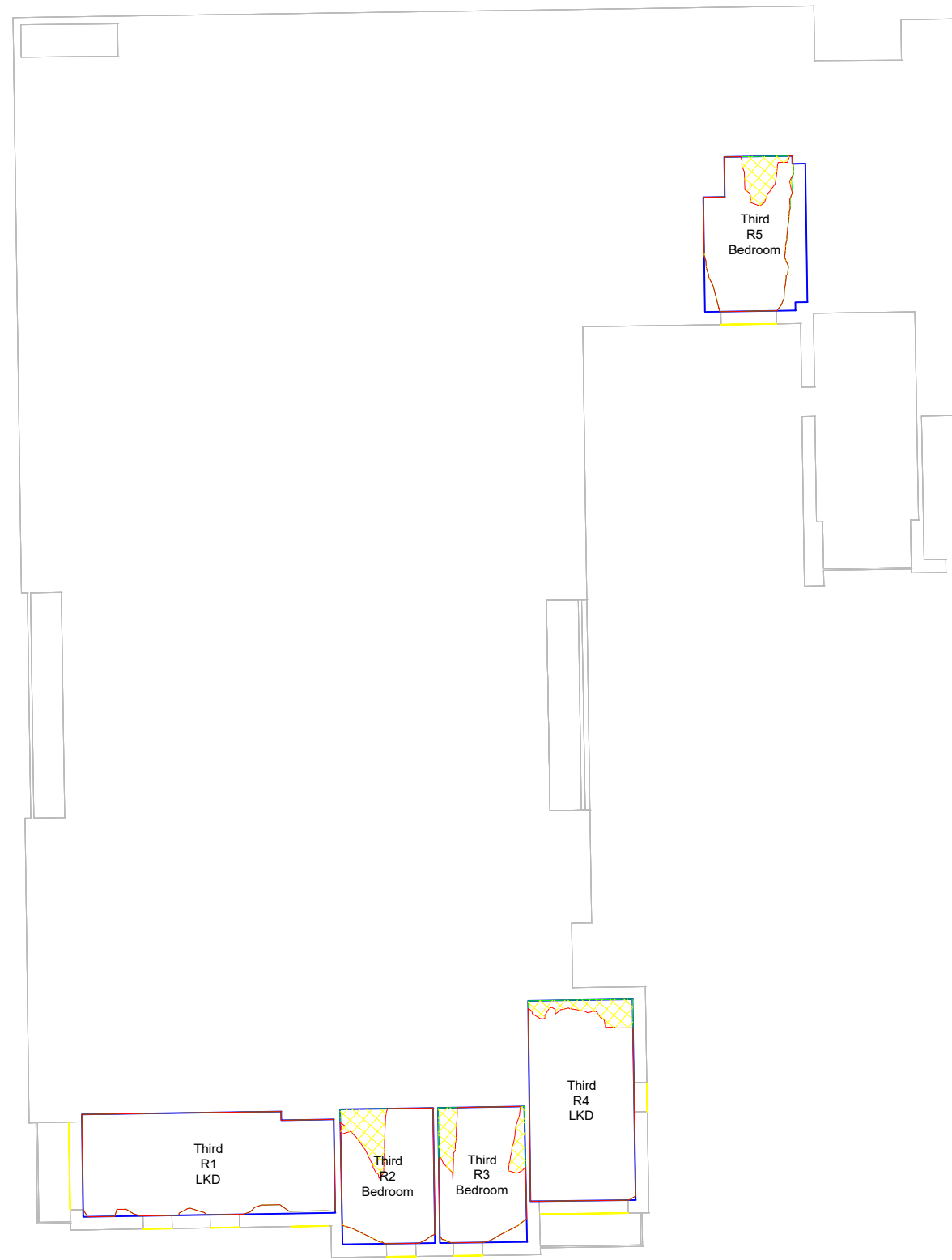
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PROJECT  
 Carrow Works

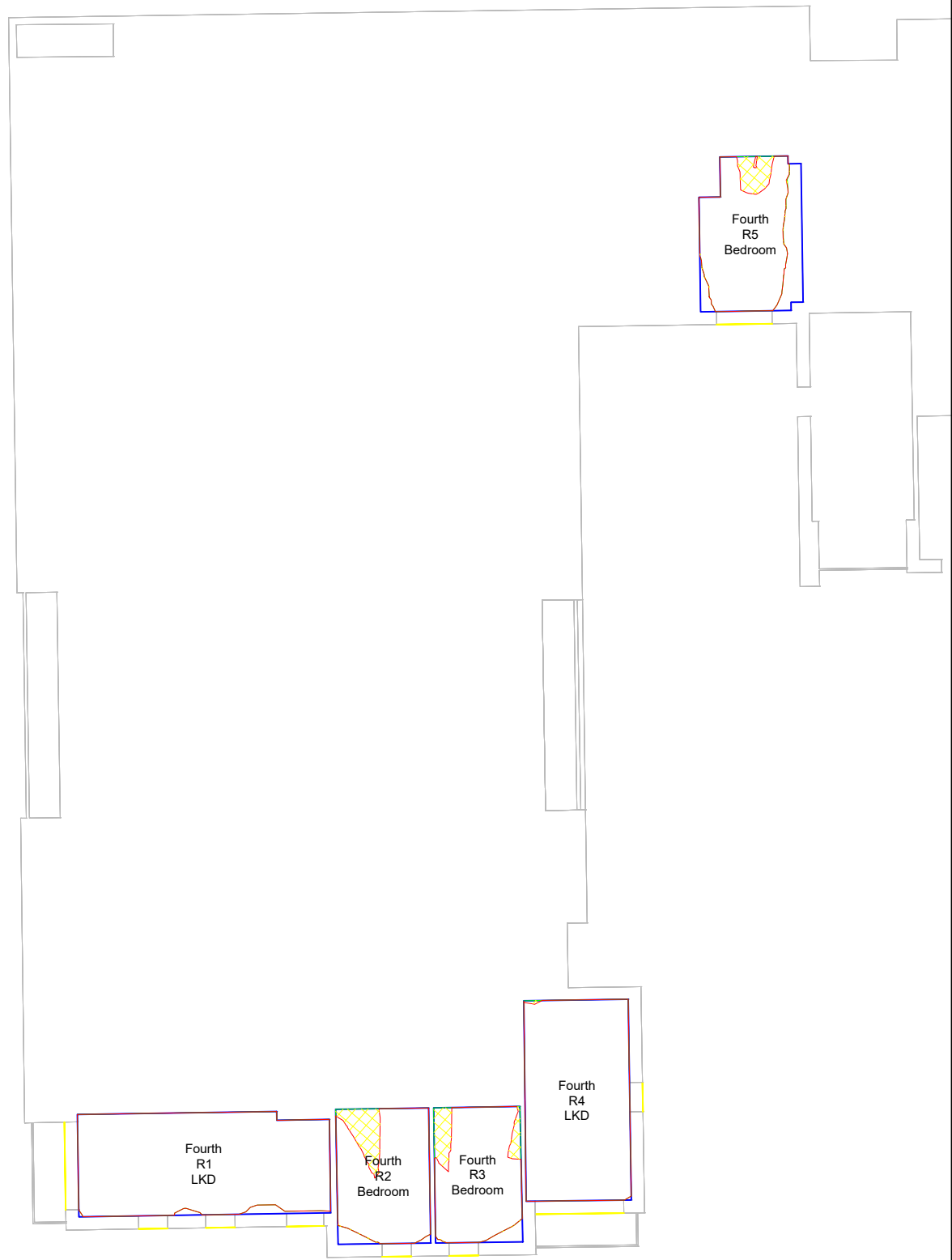
DRAWING TITLE  
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 Illustrative Massing  
 Block R1 Geoffrey Watling Way

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Third Floor



Fourth Floor



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 received on 10/06/2022



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- Proposed no-skyline
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REV	DETAILS	DATE	BY
A		*	*

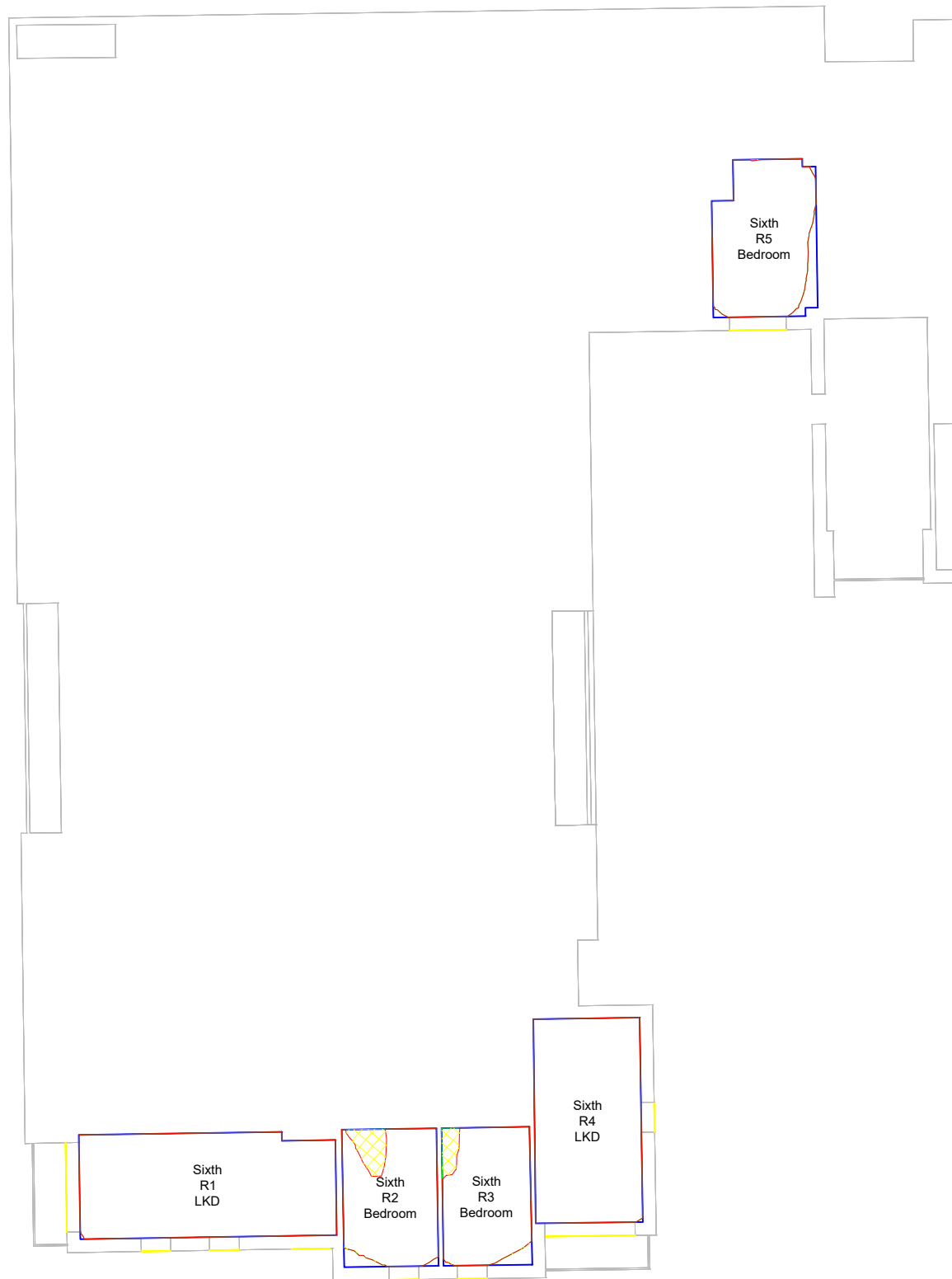
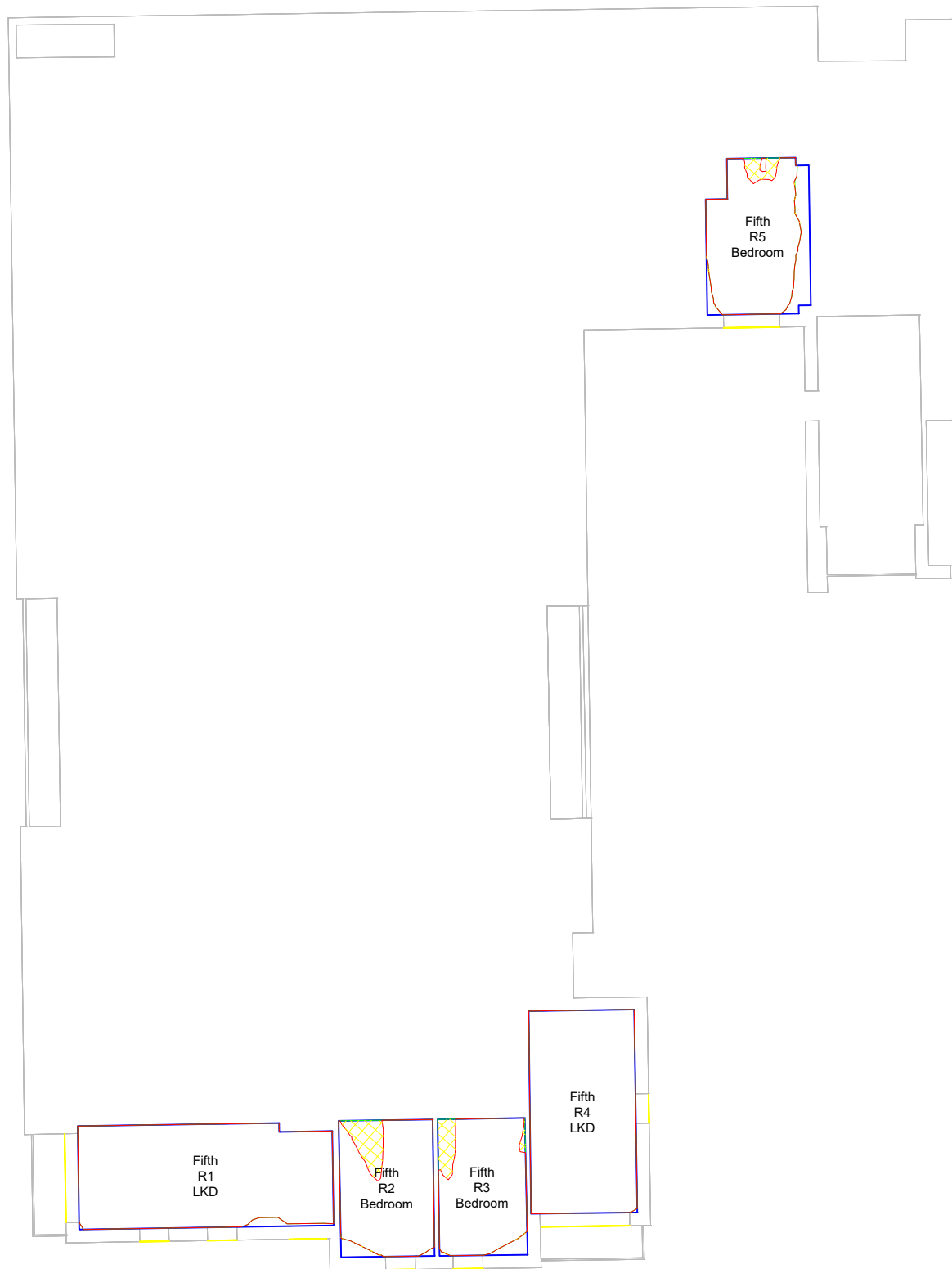
CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Block R1 Geoffrey Watling Way

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

DWG No. D+S/1/ 214	REV.
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Fifth Floor

Sixth Floor



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 schemes received on 28/06/2022

Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

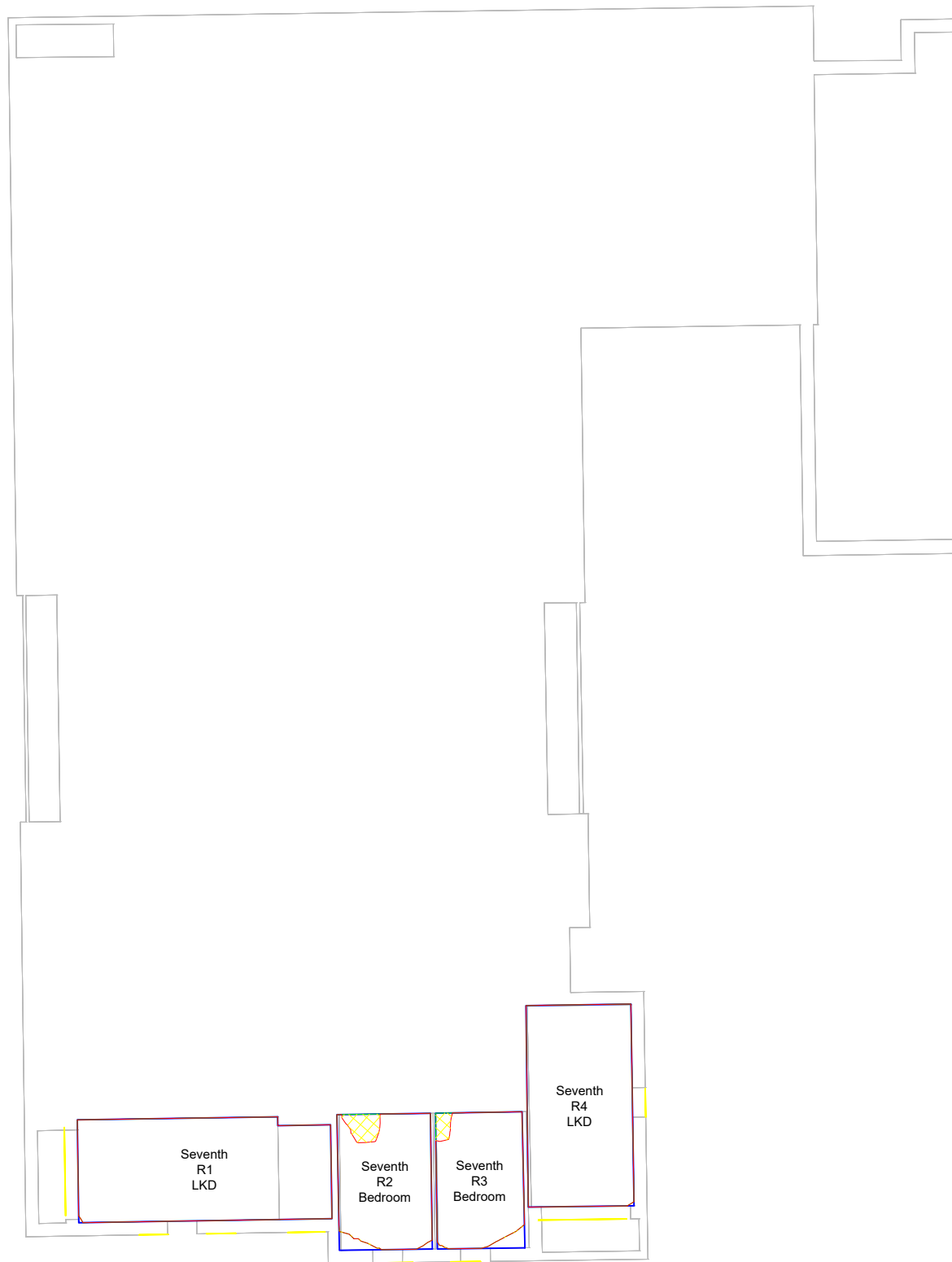
CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

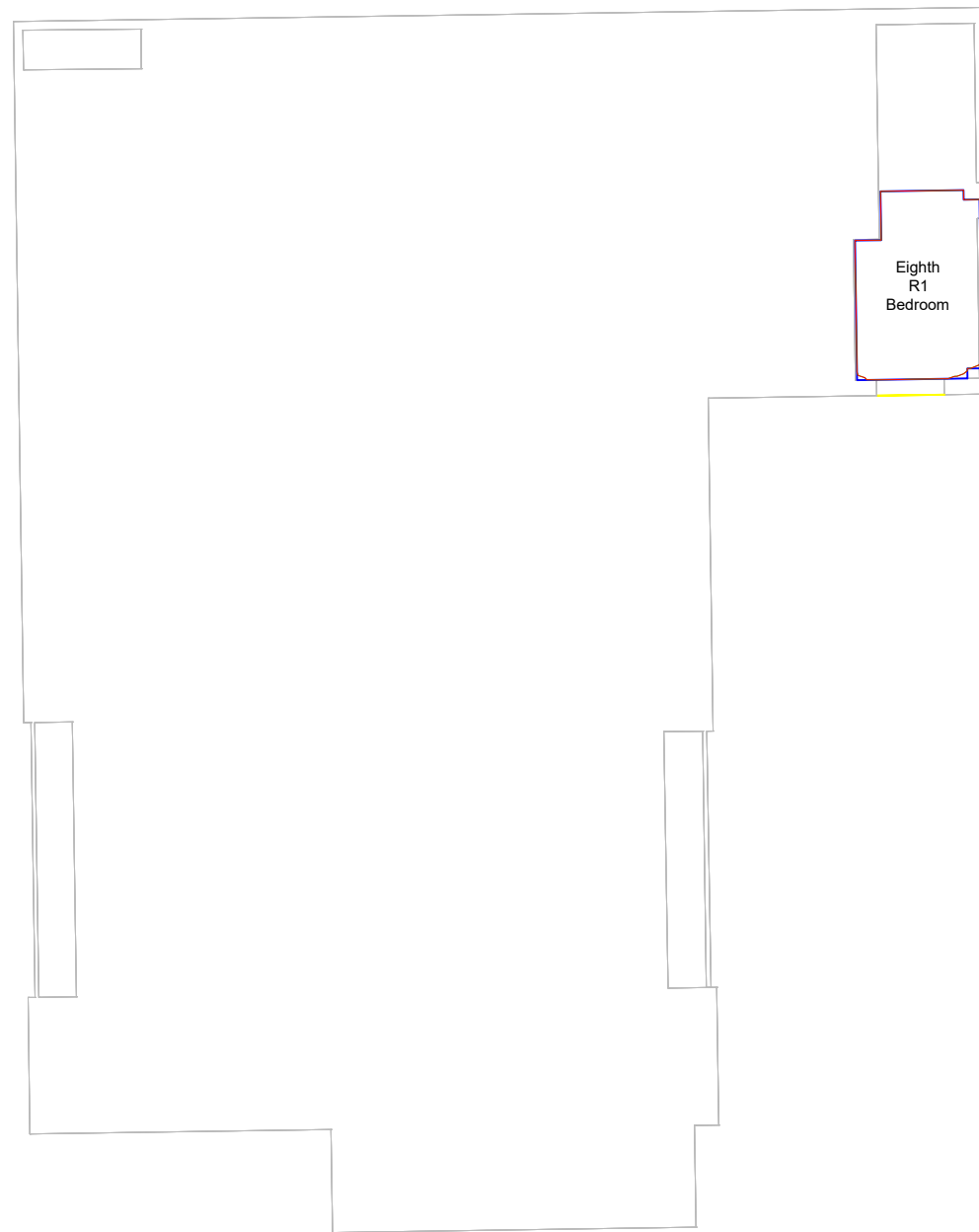
DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Block R1 Geoffrey Watling Way

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

DWG No. D+S/1/ 215	REV.
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Seventh Floor



Eighth Floor

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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Block R2 Geoffrey Watling Way

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

DWG No. D+S/1/ 216	REV.
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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Block R2 Geoffrey Watling Way

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

DWG No. D+S/1/ 217	REV.
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Fifth Floor

Sixth Floor

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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

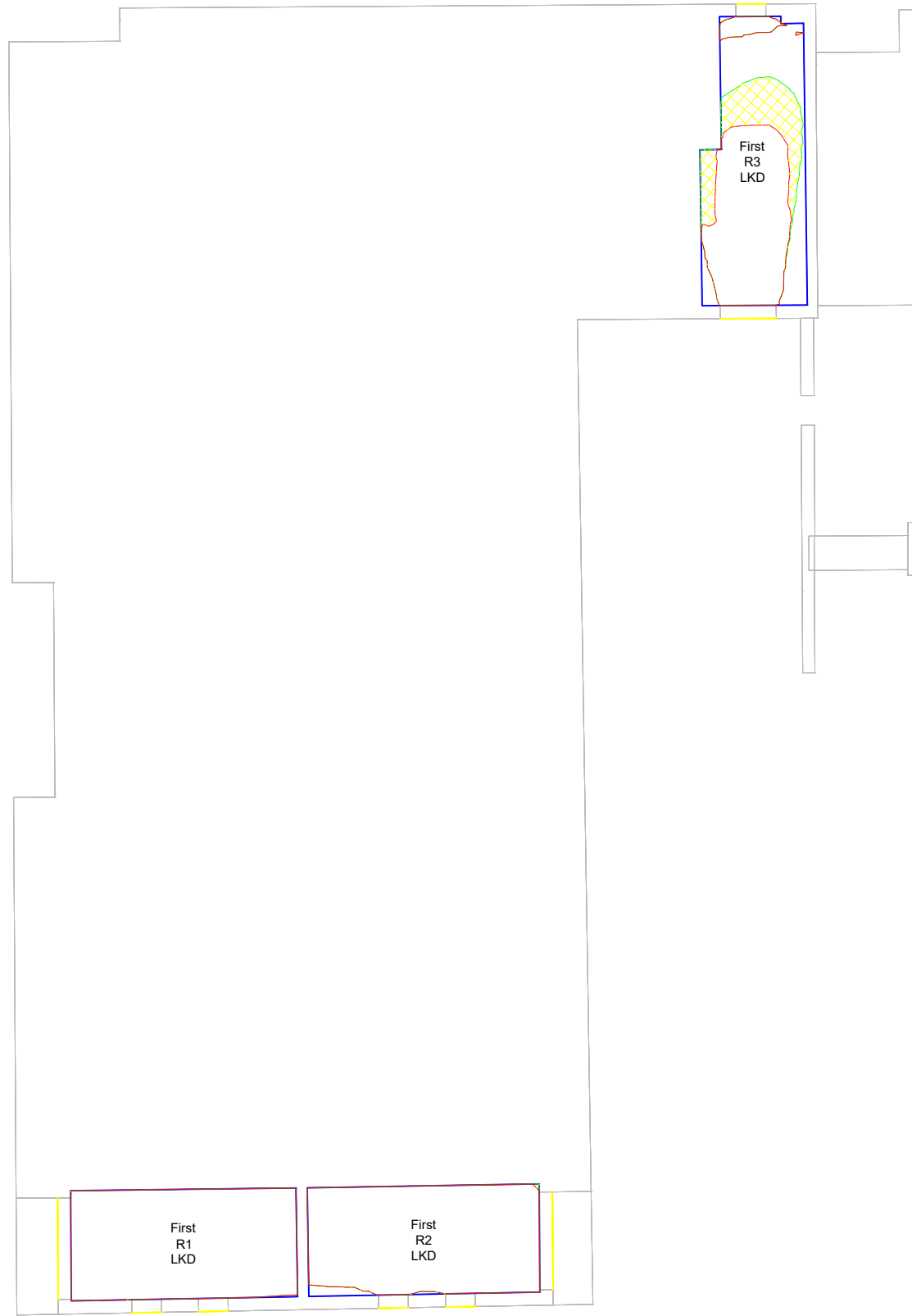
CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

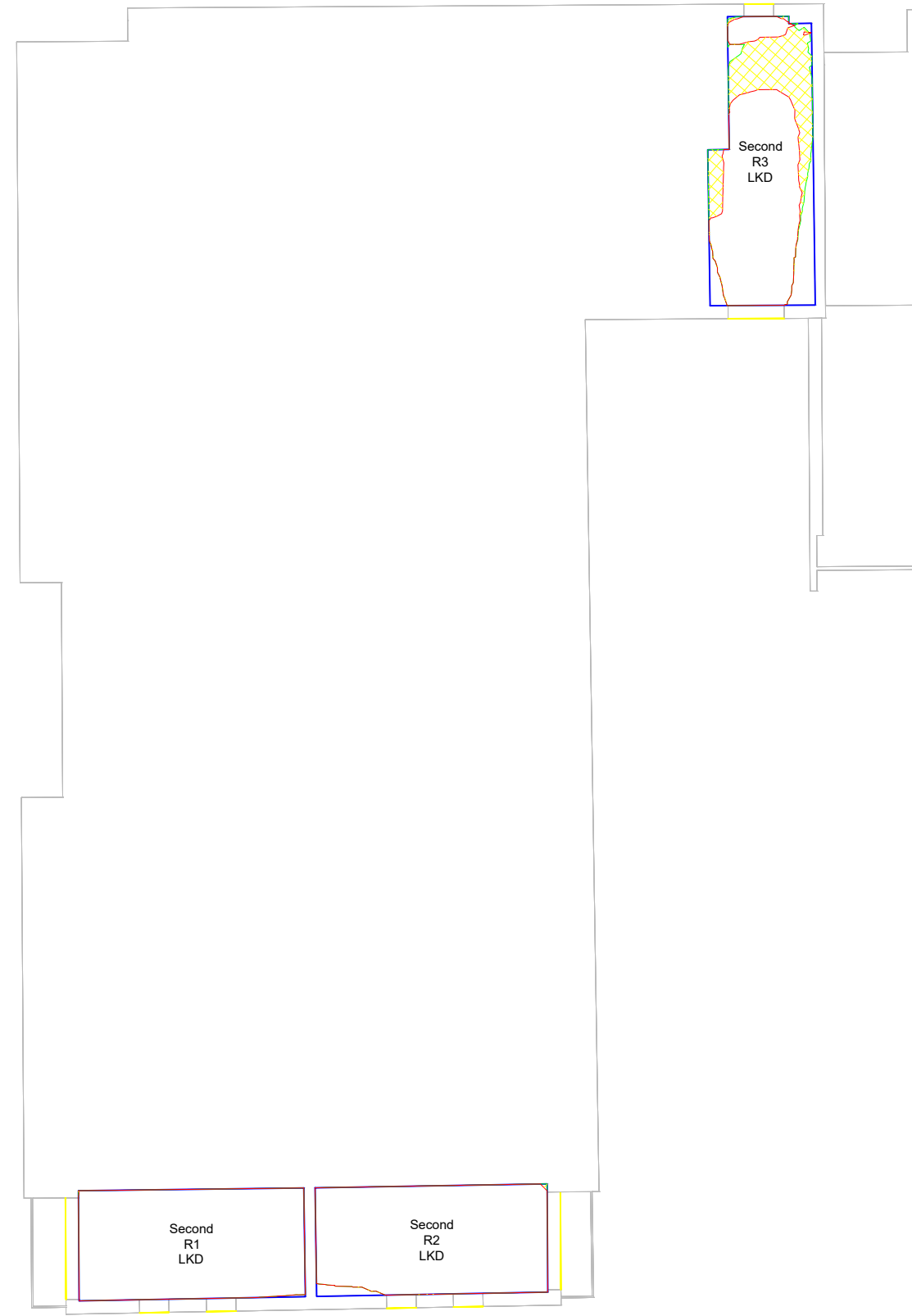
DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Richard Hawthorn House

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

DWG No. D+S/1/ 218	REV.
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First Floor



Second Floor

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 schemes received on 28/06/2022

Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A		*	*

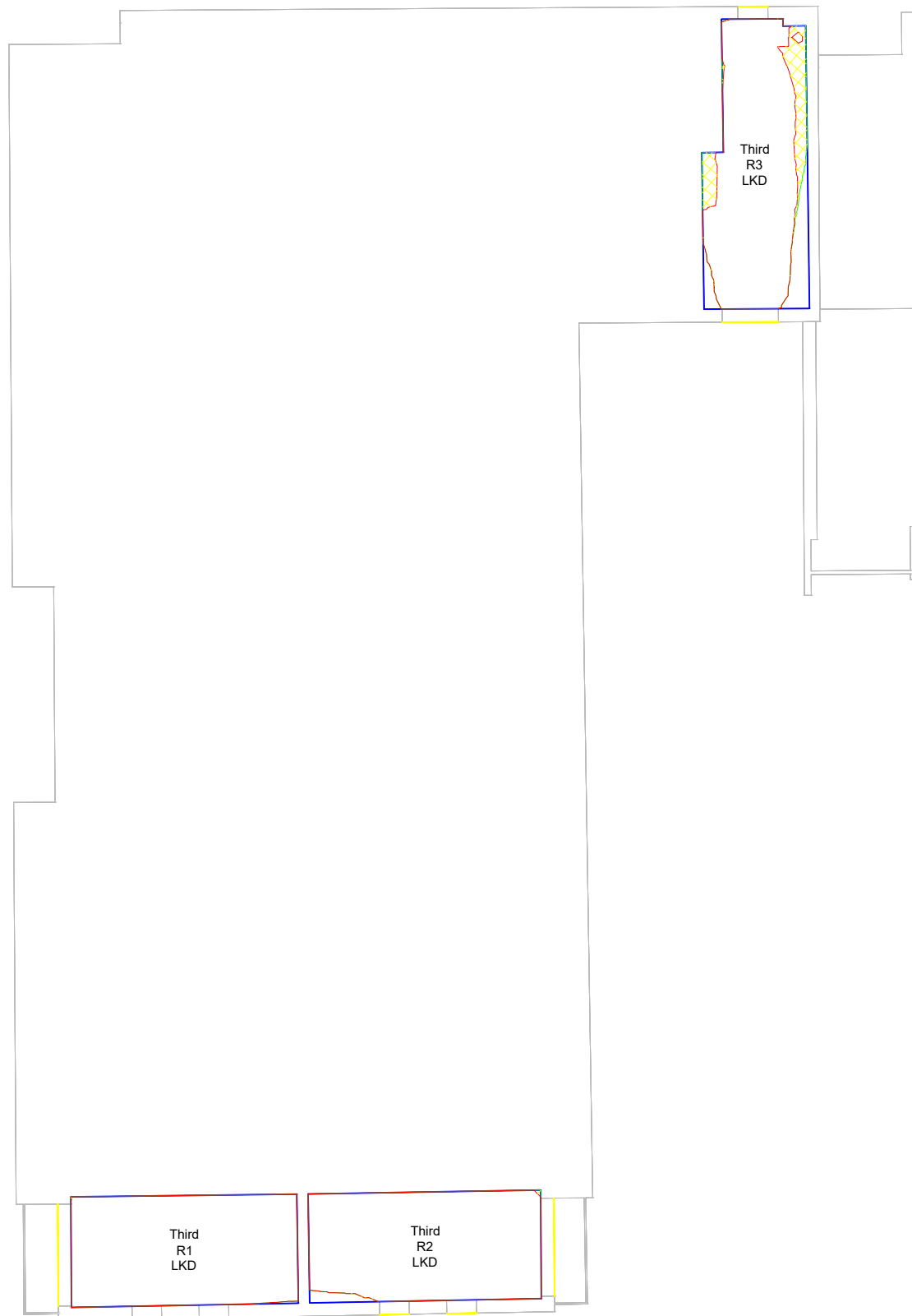
CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

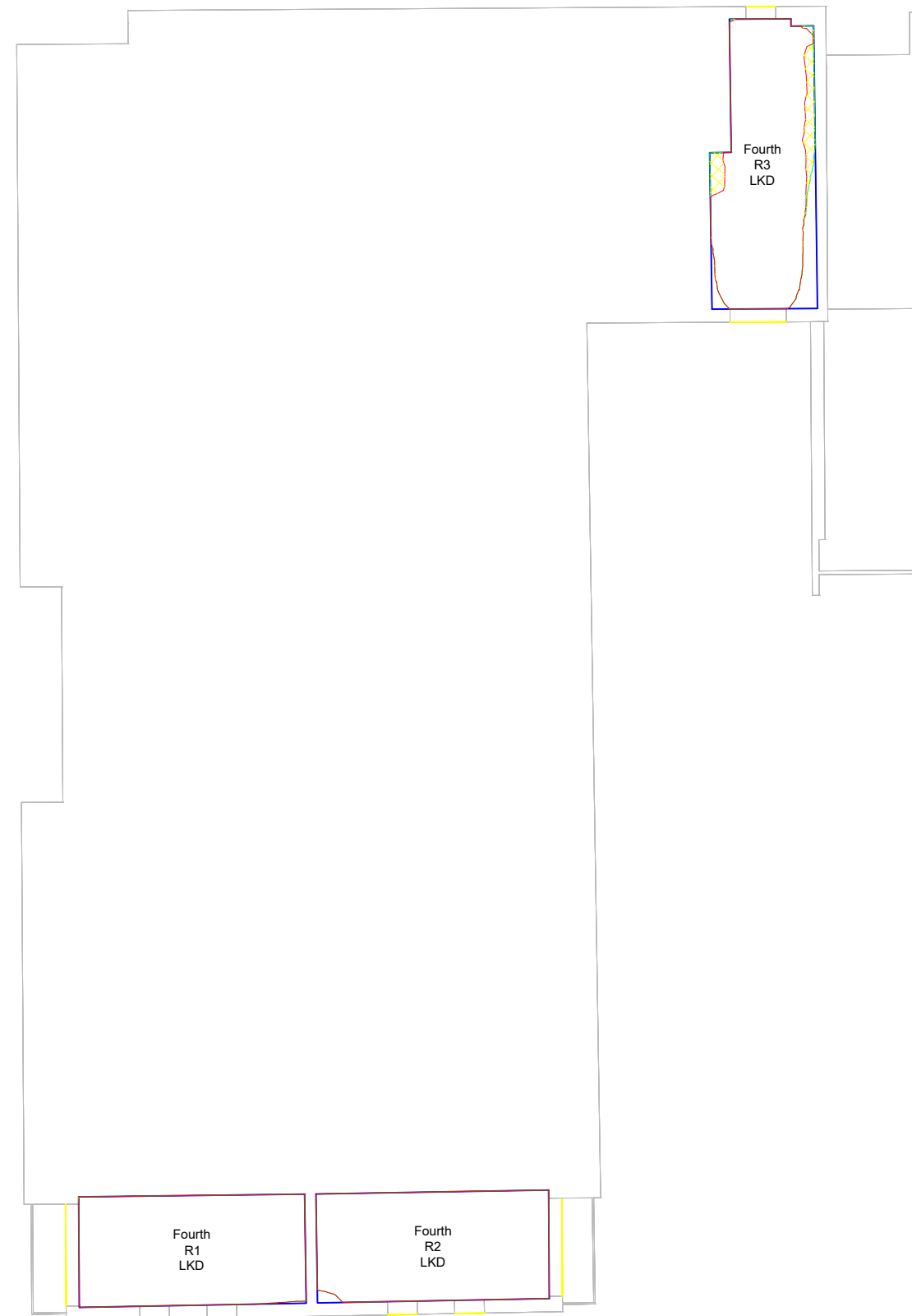
DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Richard Hawthorn House

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

DWG No. D+S/1/ 219	REV.
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Third Floor



Fourth Floor



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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

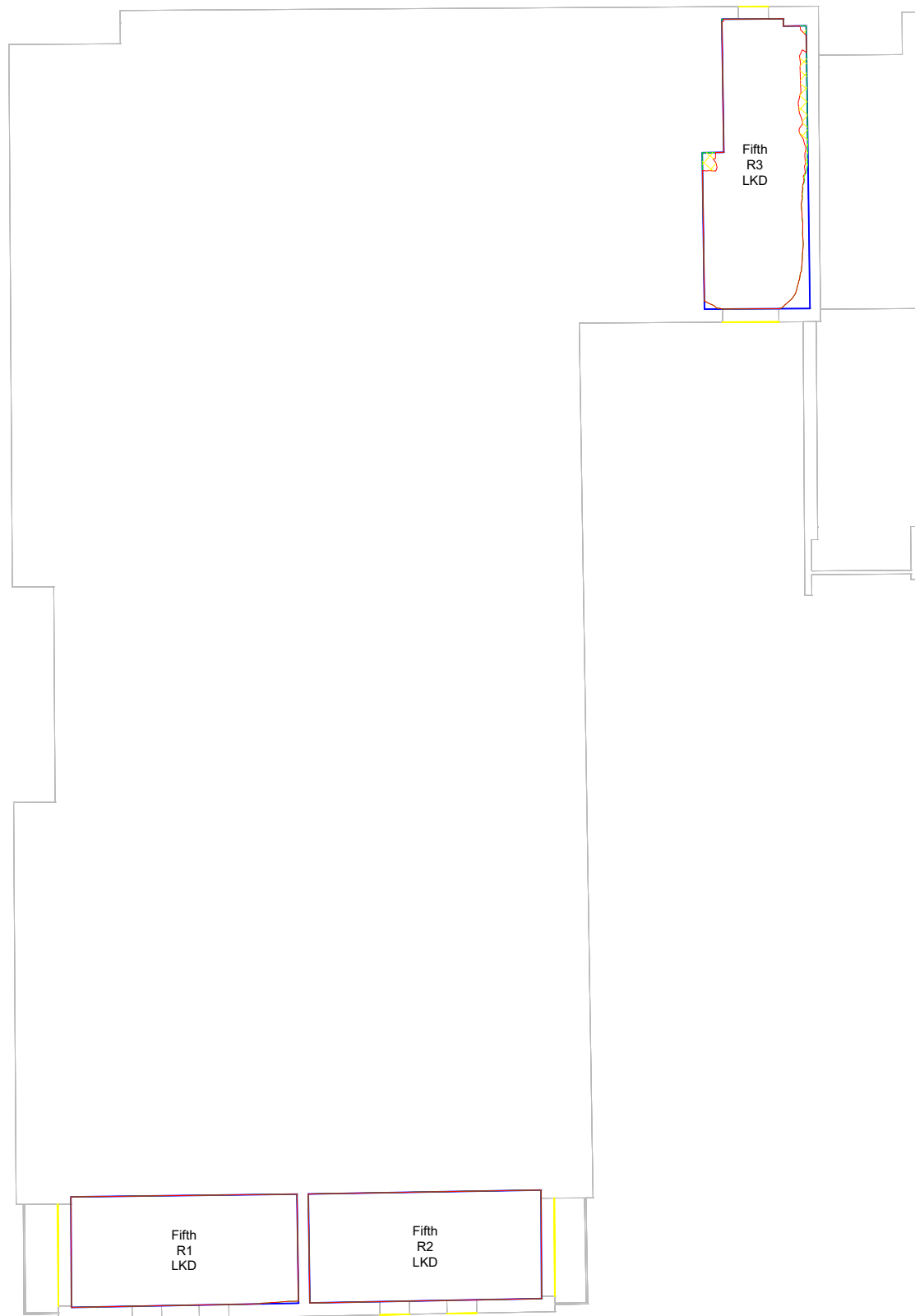
CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

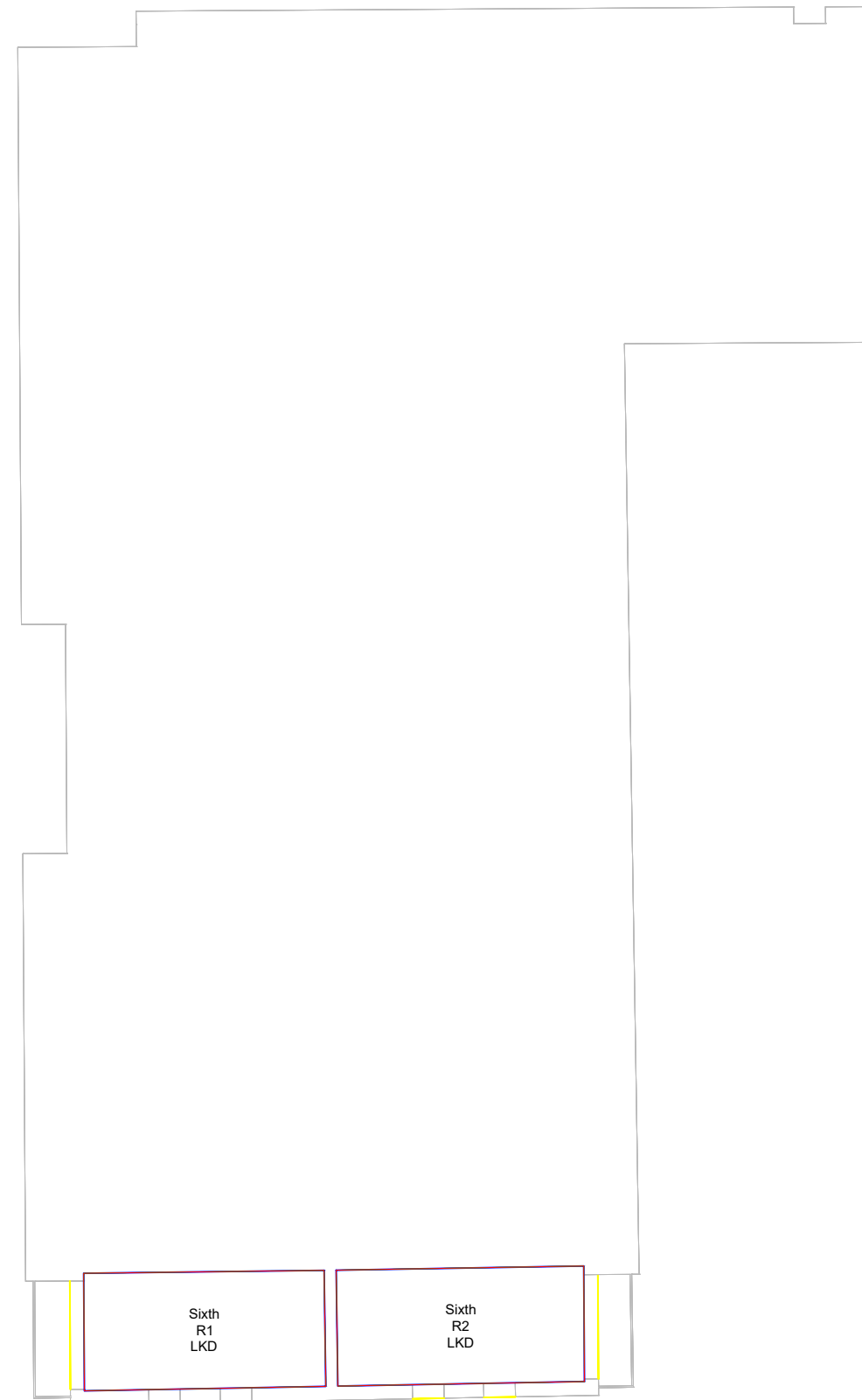
DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Richard Hawthorn House

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

DWG No. D+S/1/ 220	REV.
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Fifth Floor



Sixth Floor

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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

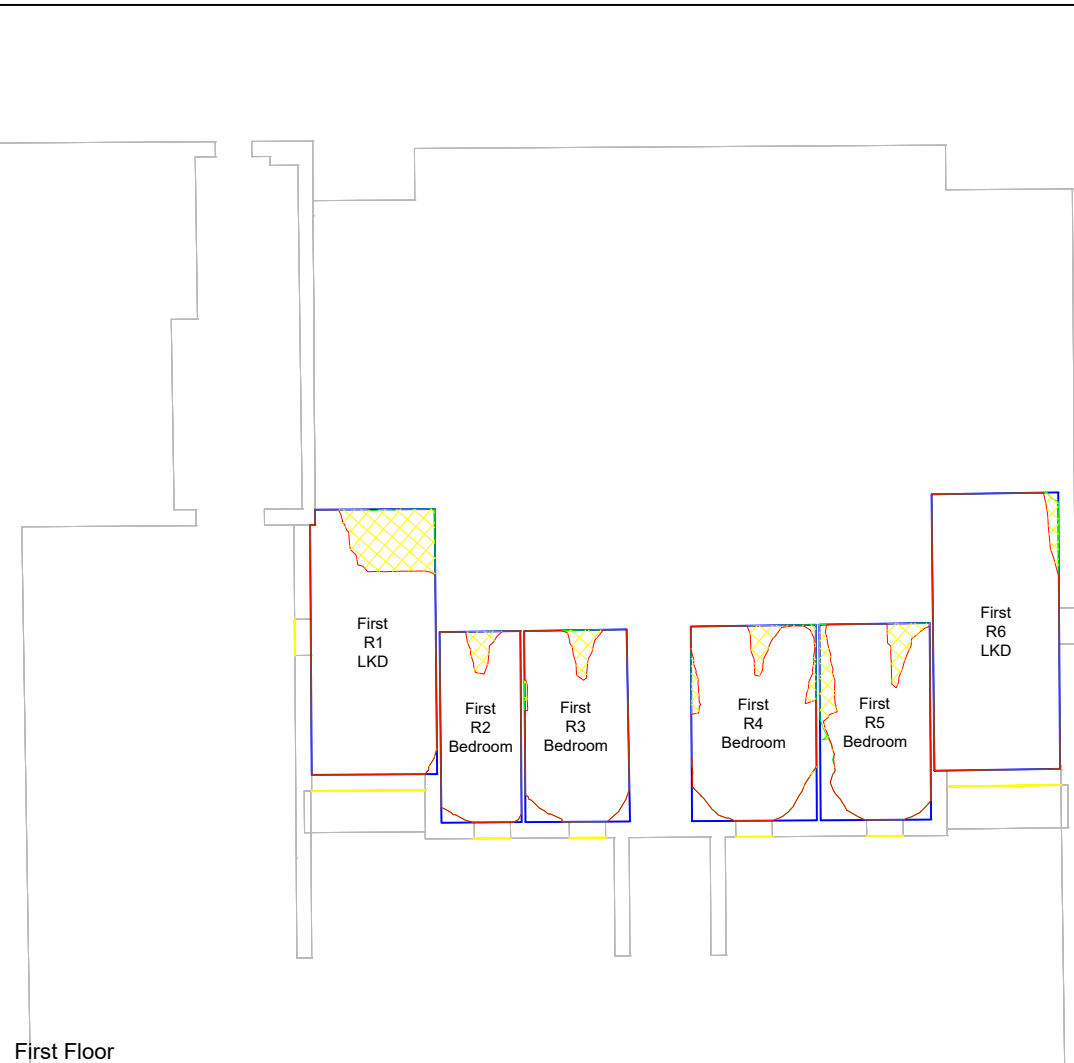
CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Solace Geoffrey Watling Way

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

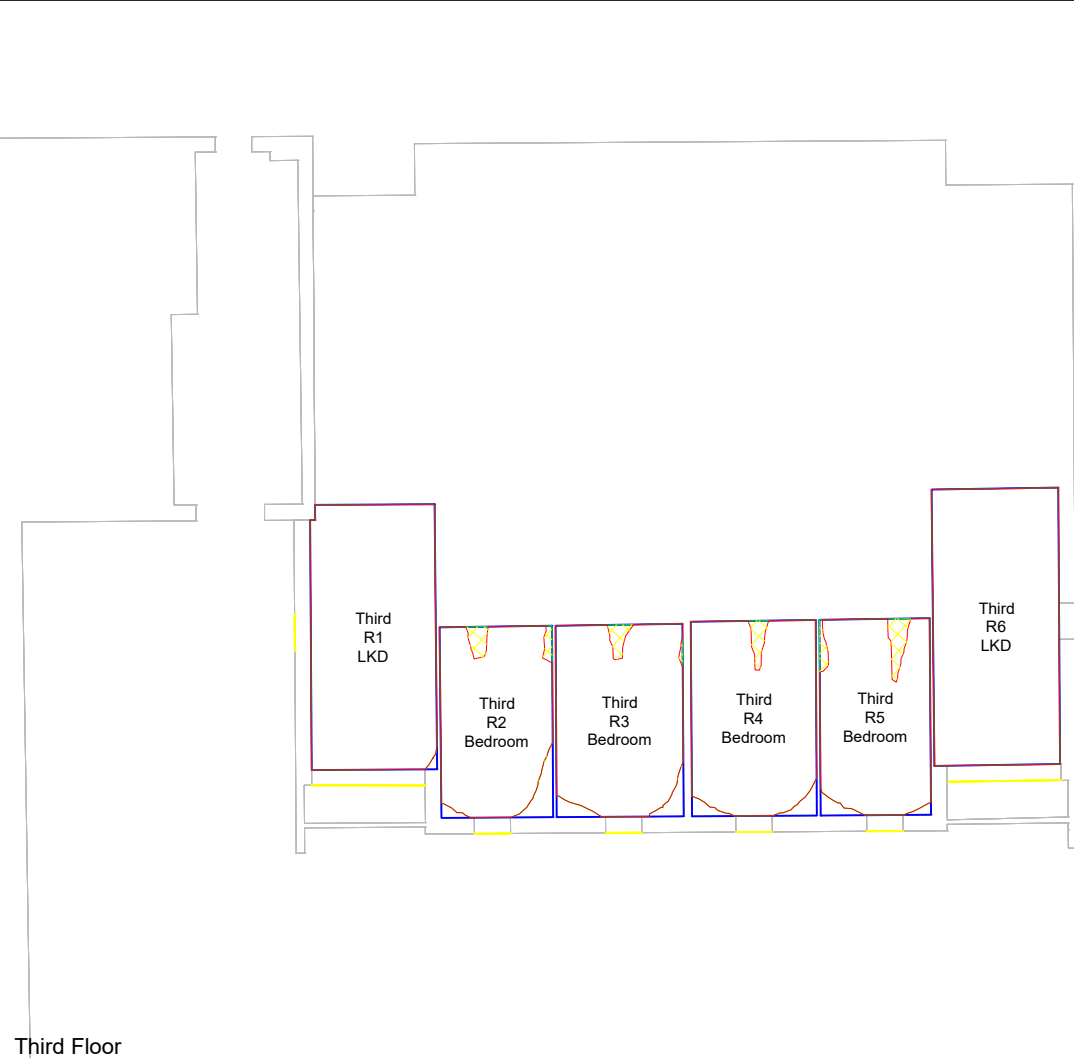
DWG No. D+S/1/ 221	REV.
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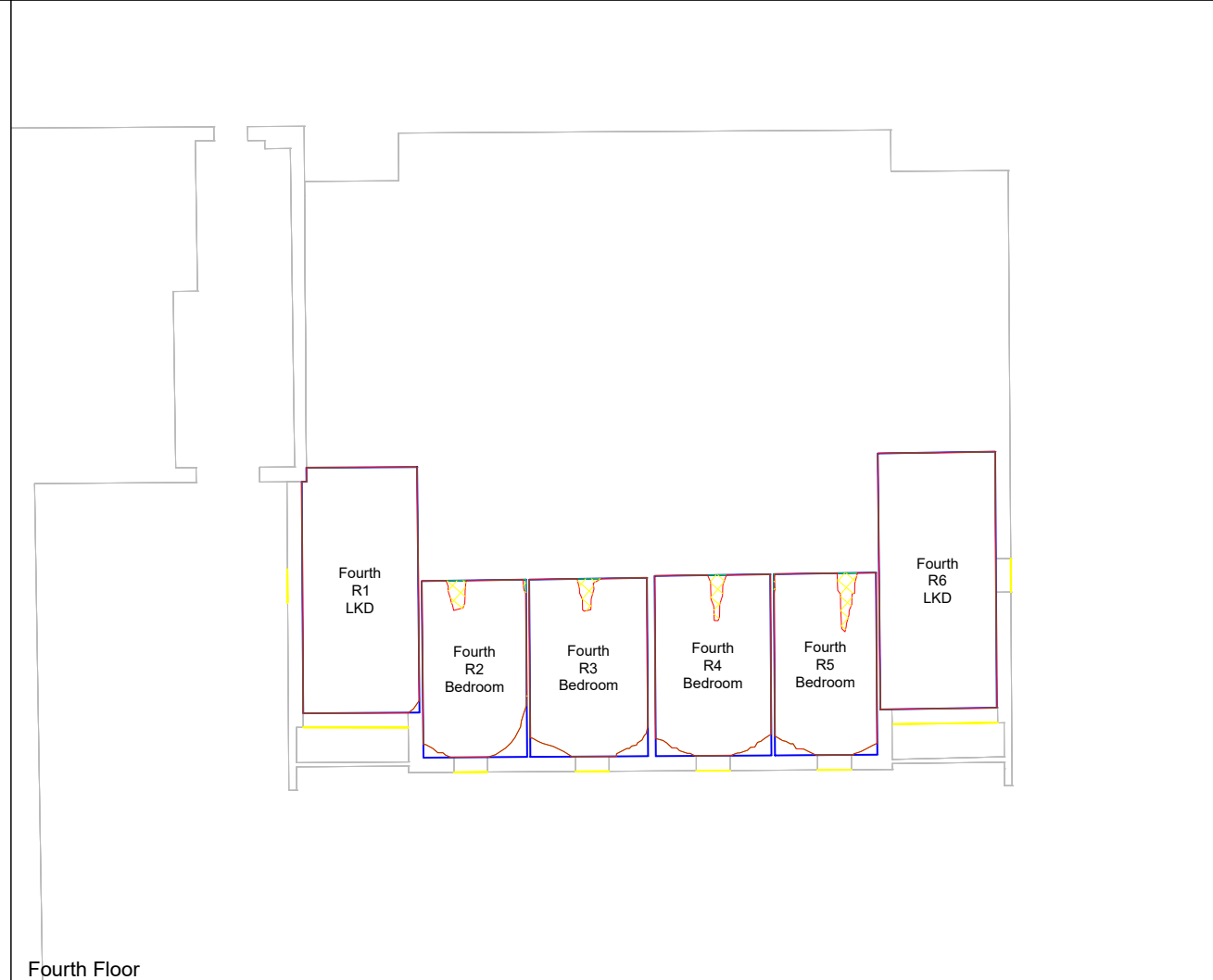
First Floor



Second Floor



Third Floor



Fourth Floor

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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Solace Geoffrey Watling Way

SCALE 1:200	DATE Jul-22
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DWG No. D+S/1/ 222	REV.
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CONSIL



Fifth Floor

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 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

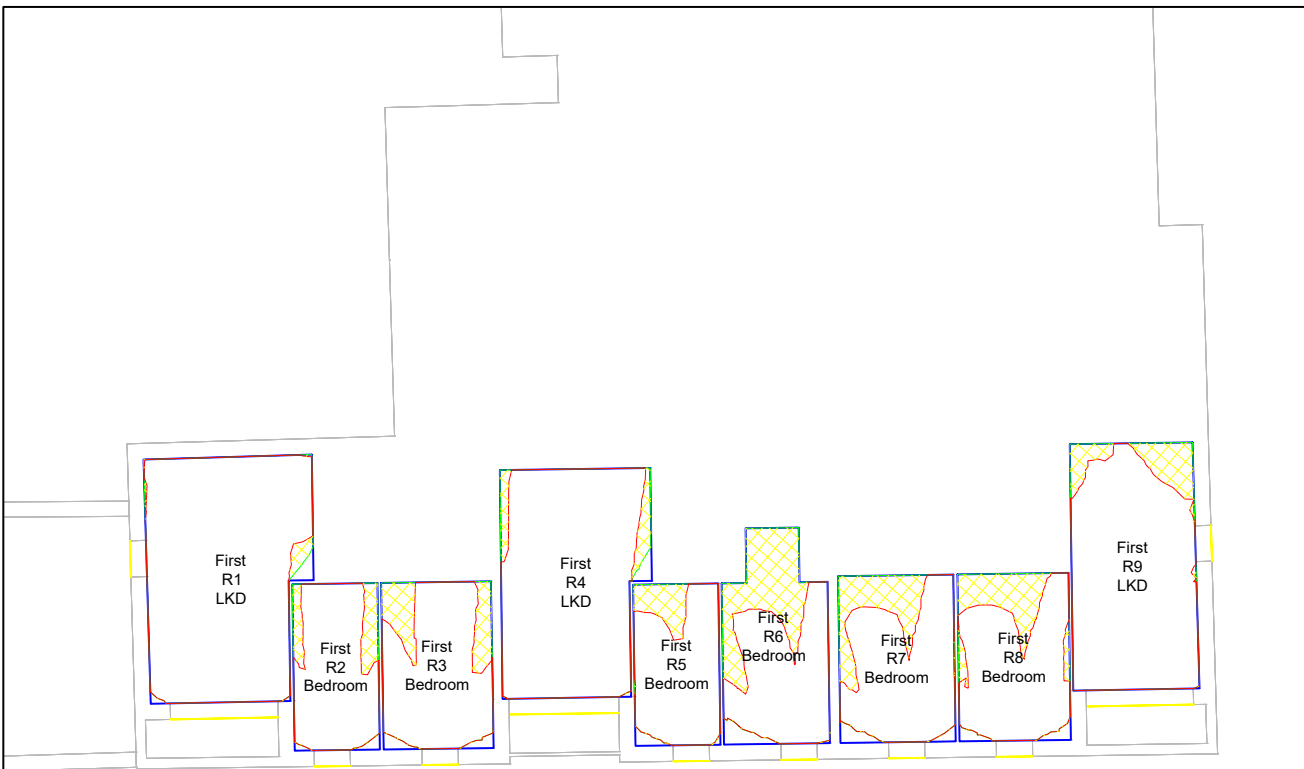
CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Patricia Hollis House Watling Way

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

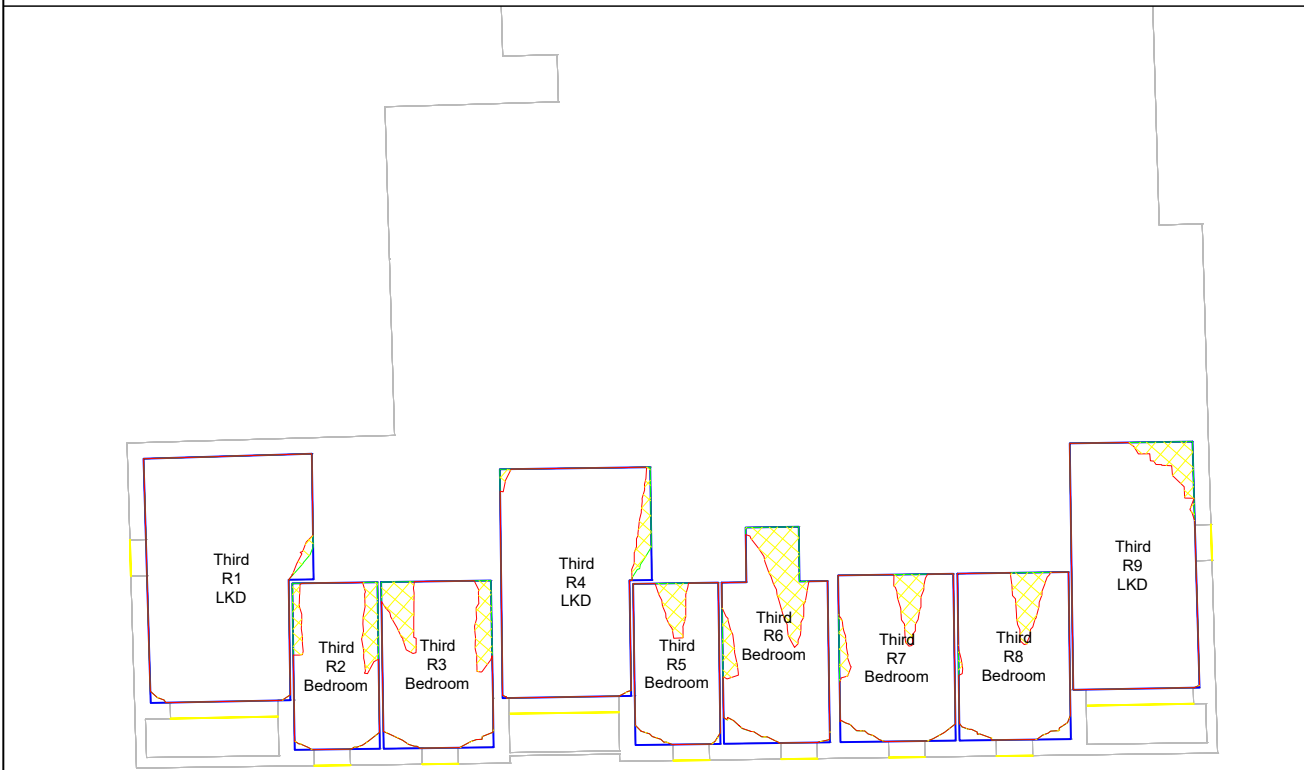
DWG No. D+S/1/ 223	REV.
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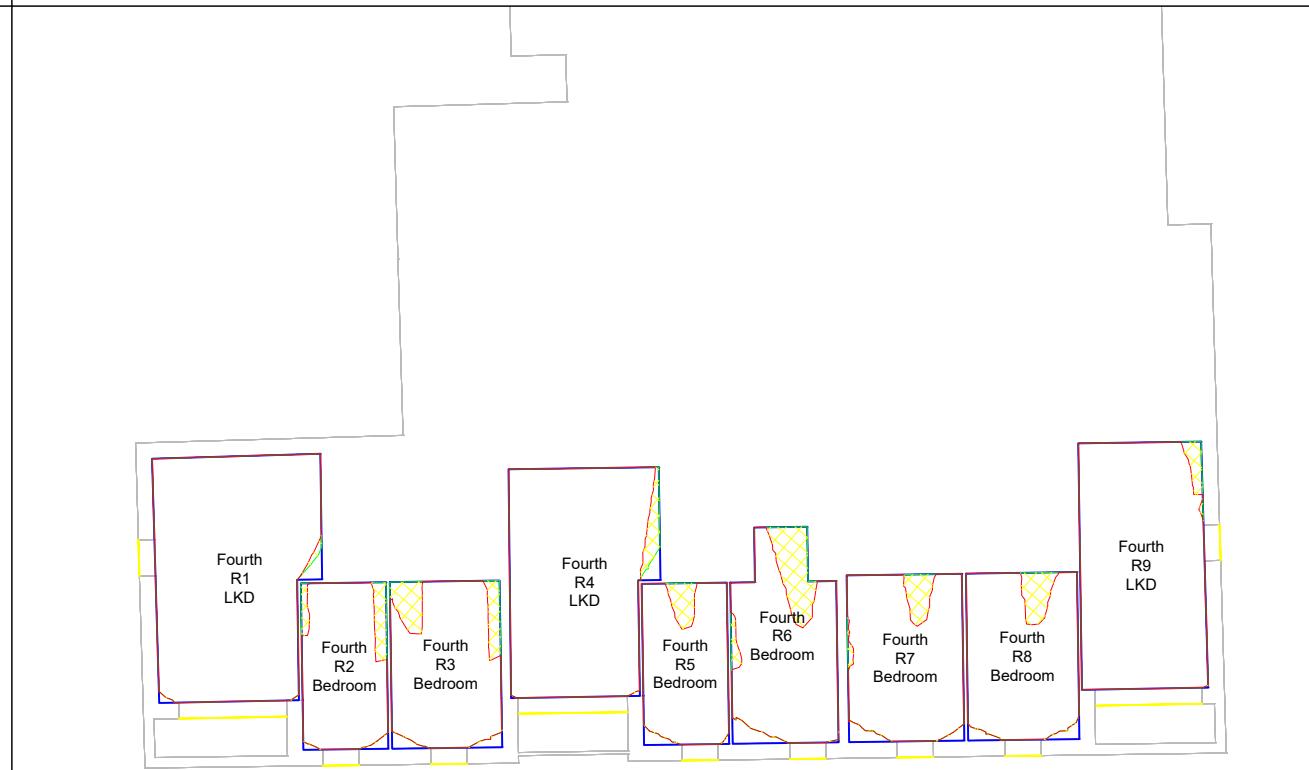
First Floor



Second Floor



Third Floor



Fourth Floor

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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

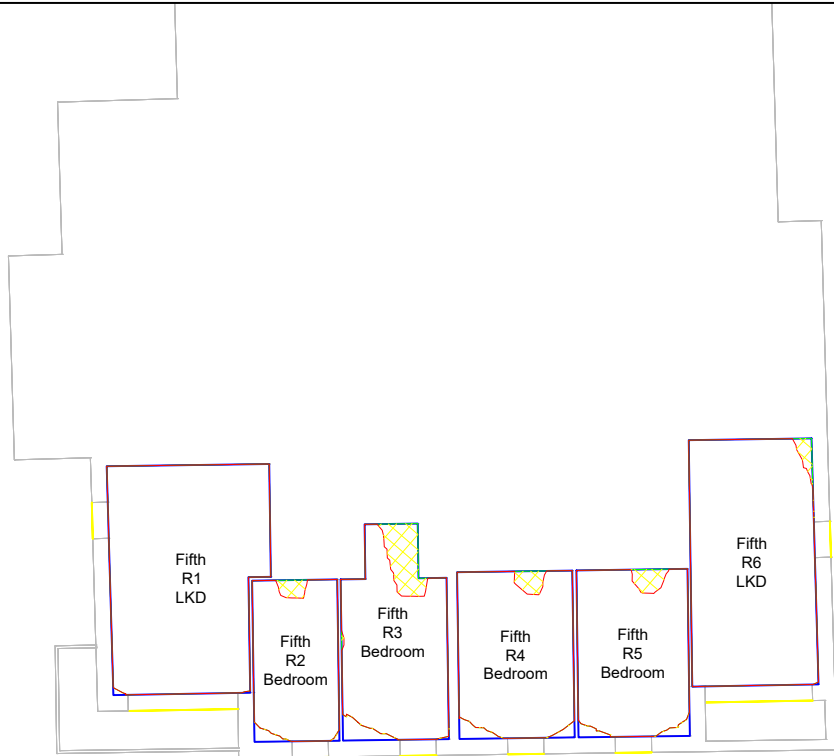
CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

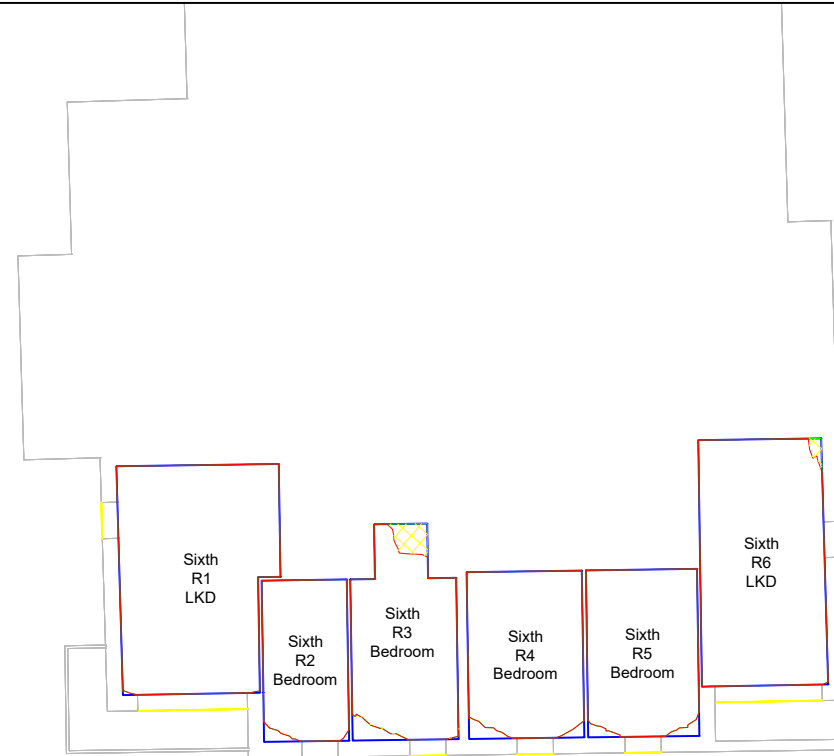
DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Patricia Hollis House Watling Way

SCALE 1:200	DATE Jul-22
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DWG No. D+S/1/ 224	REV.
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Fifth Floor



Sixth Floor



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Zmapping Limited 3d context model  
 received on 10/06/2022



- KEY
- R1 Room area
  - Existing no-skyline
  - Proposed no-skyline
  - Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

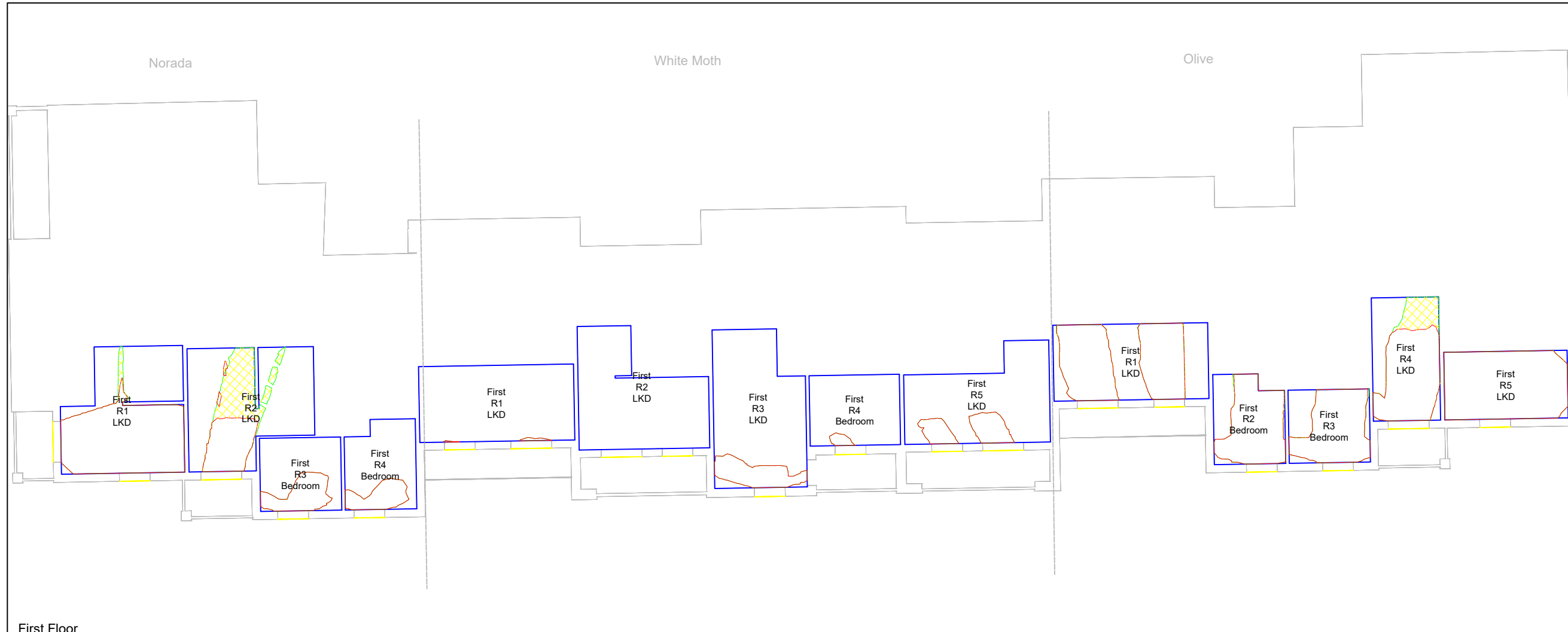
CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

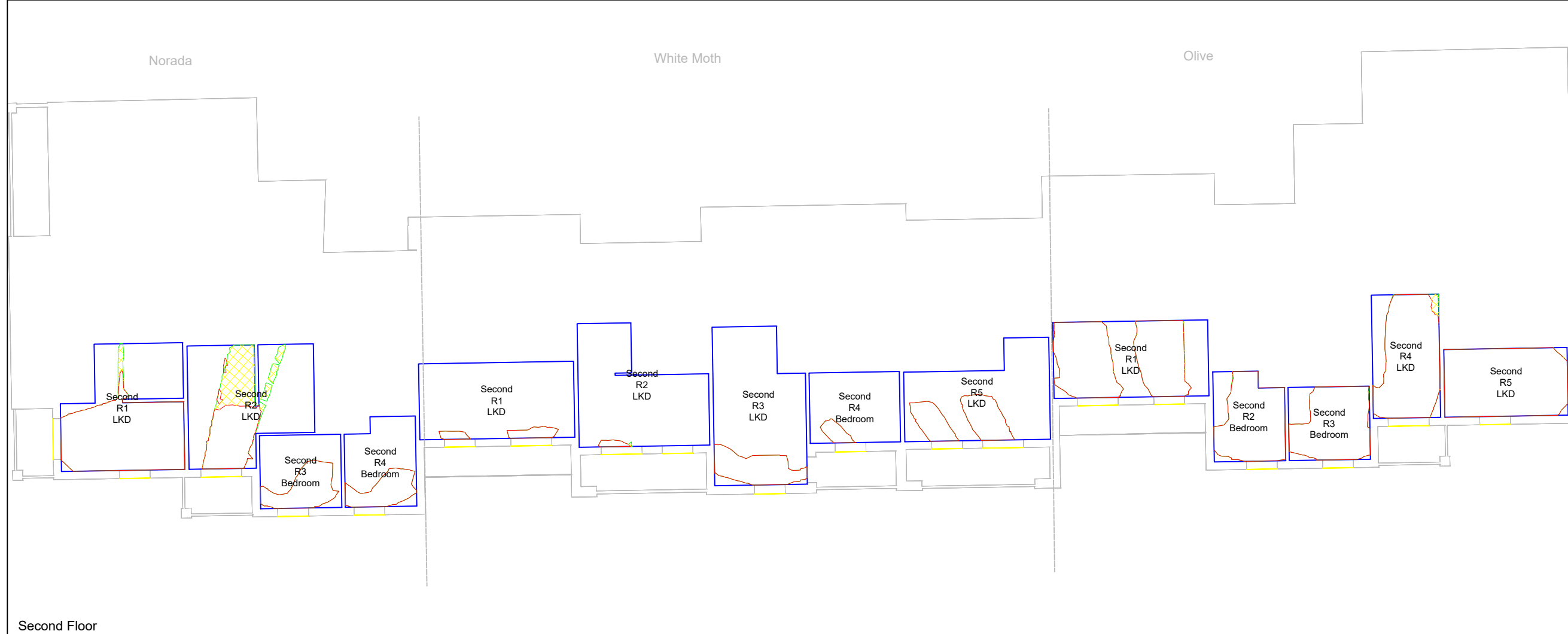
DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Norada, White Moth, Olive

SCALE 1:200	DATE Jul-22
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DWG No. D+S/1/ 225	REV.
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First Floor



Second Floor

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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT  
 Fuel Properties

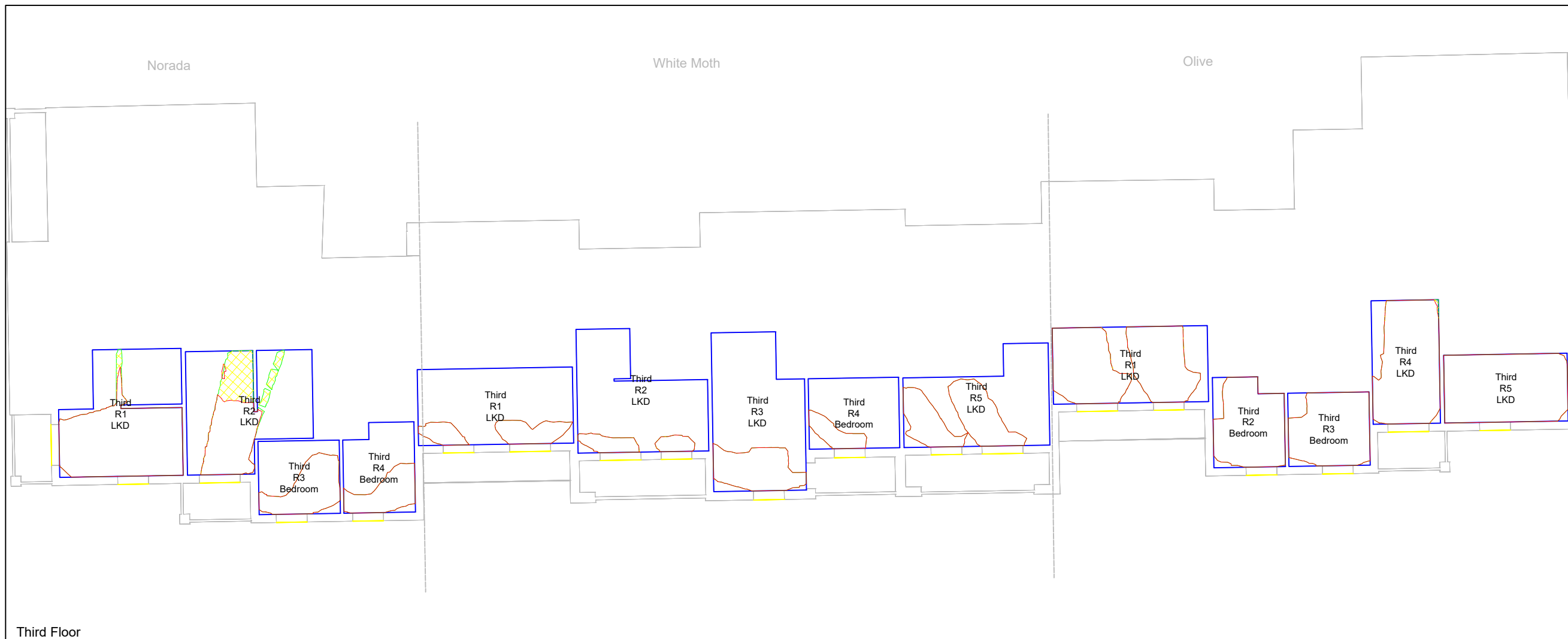
PROJECT  
 Carrow Works

DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Norada, White Moth, Olive

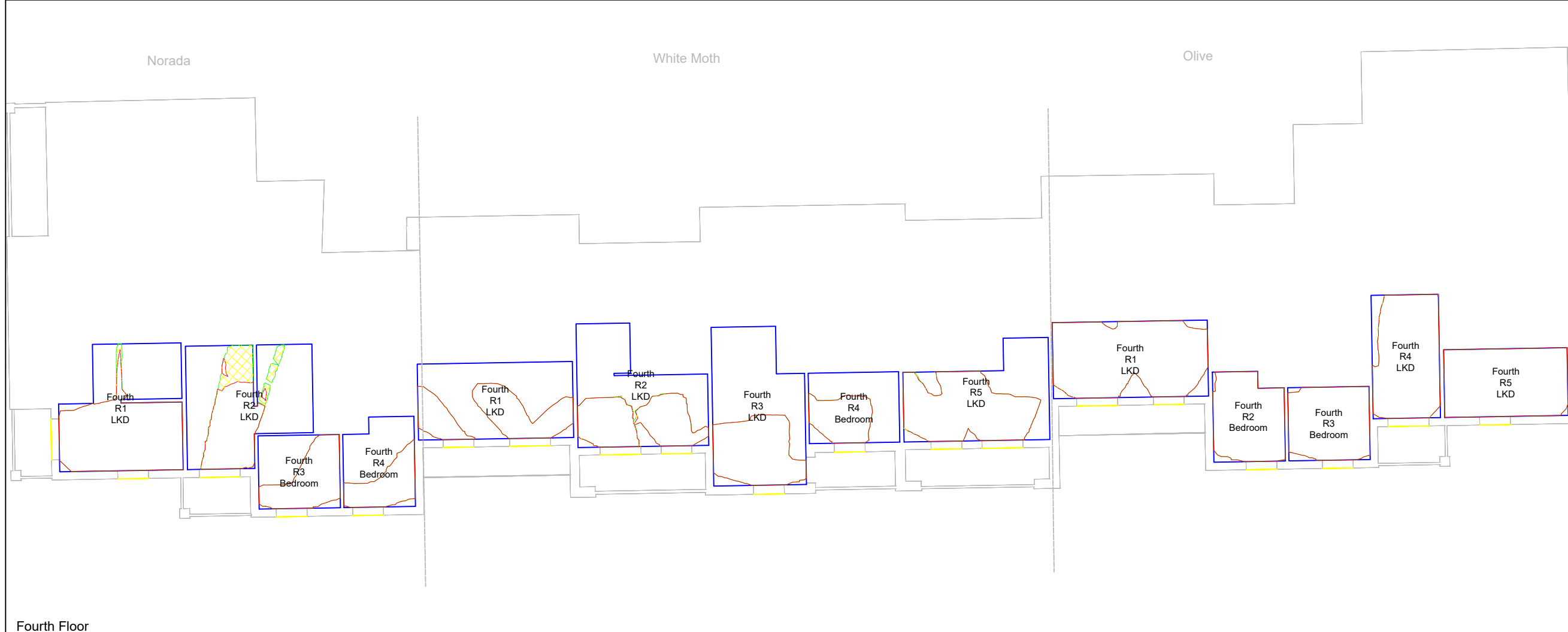
SCALE 1:200	DATE Jul-22
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CONSIL



Third Floor



Fourth Floor

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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

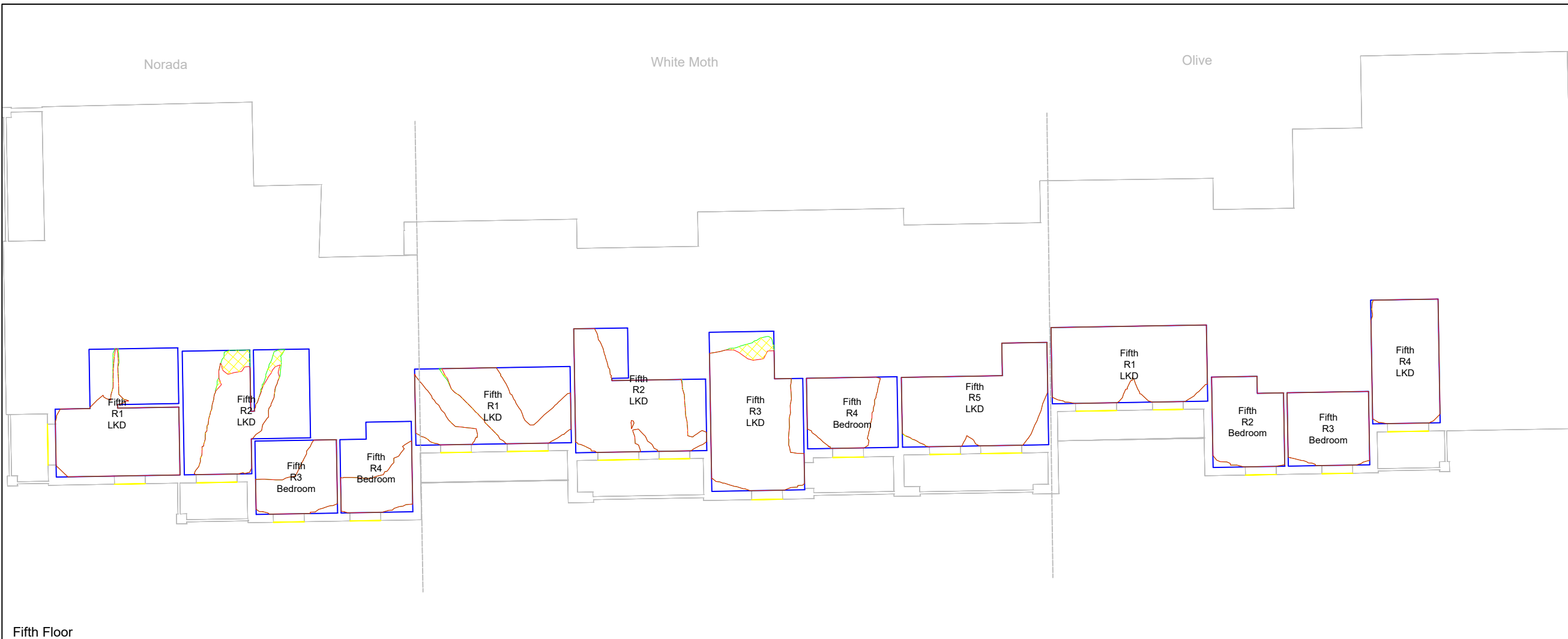
CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

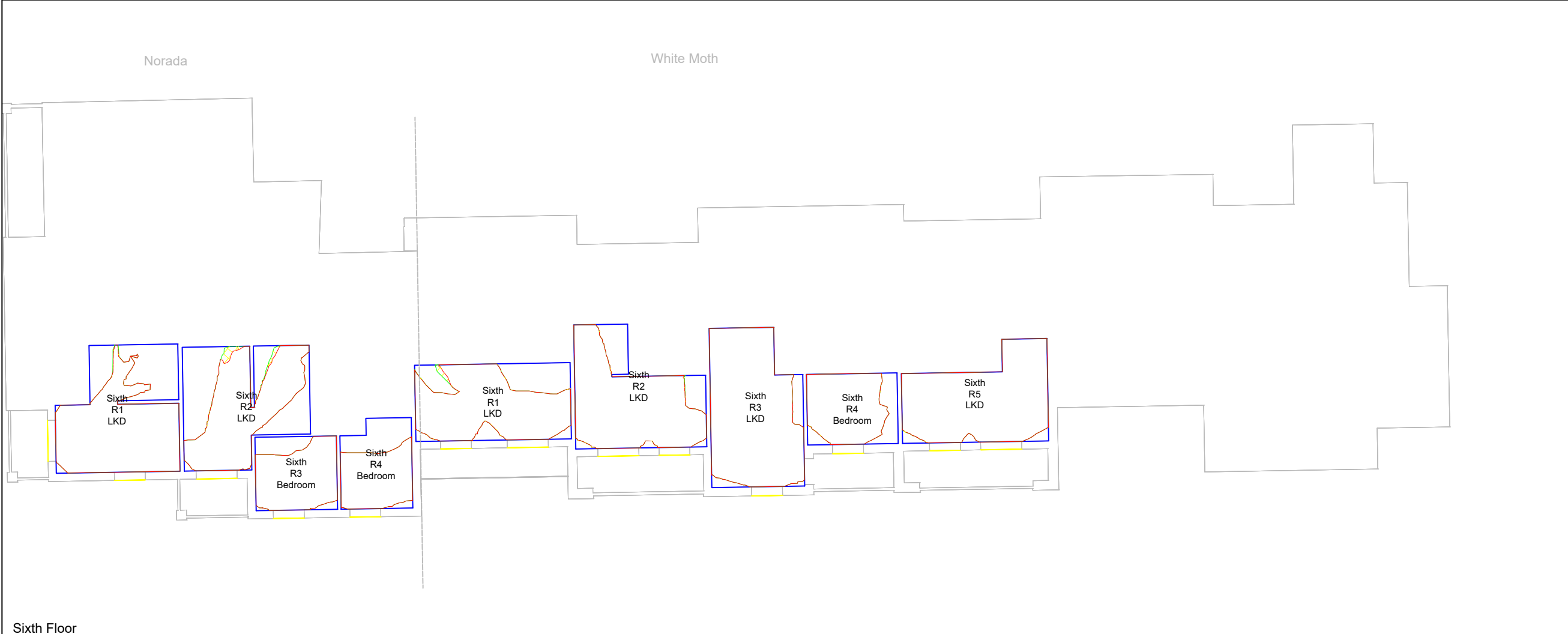
DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Norada, White Moth, Olive

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

DWG No. D+S/1/ 227	REV.
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Fifth Floor



Sixth Floor



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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Norada, White Moth, Olive

SCALE 1:200	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

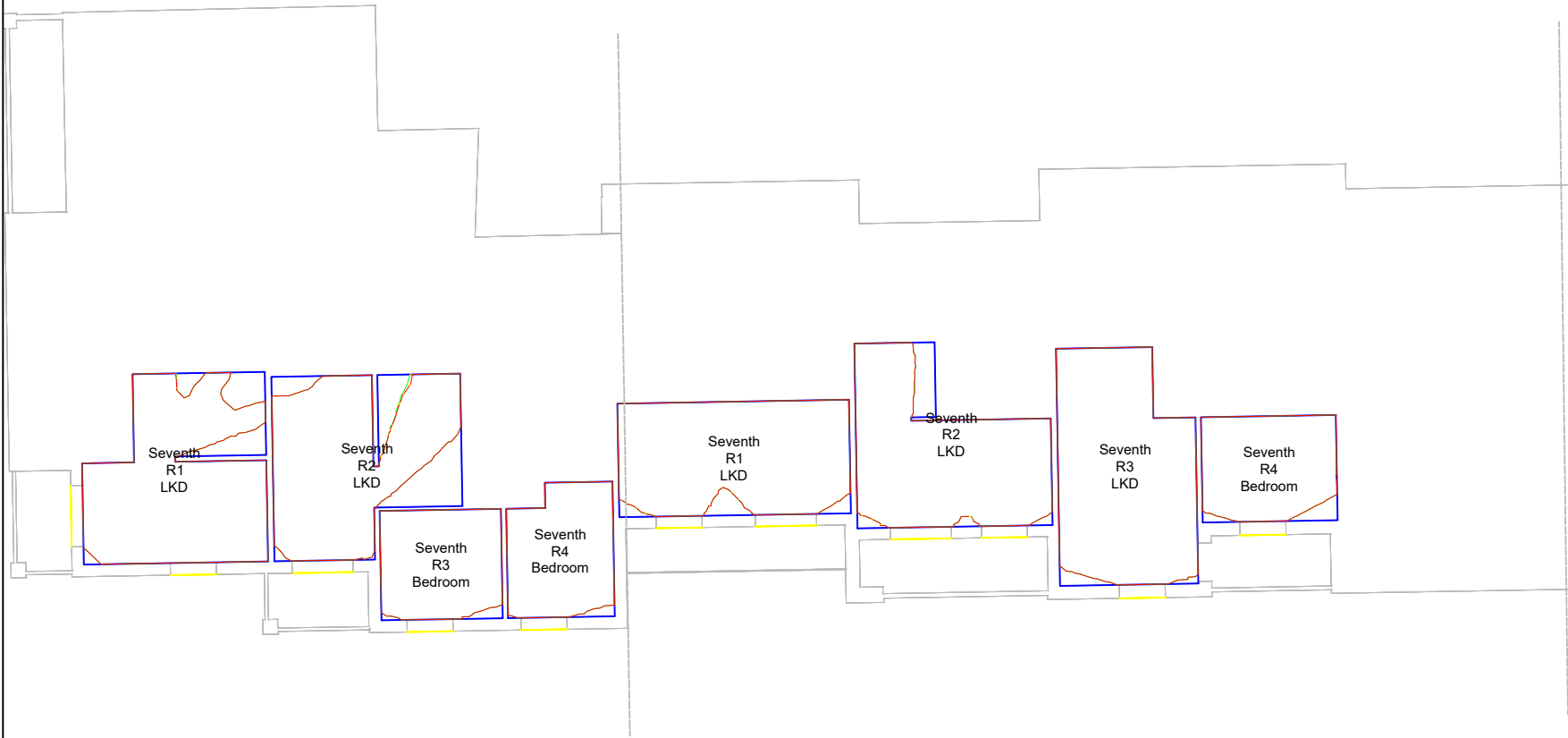
DWG No. D+S/1/ 228	REV.
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CONSIL

Norada

White Moth

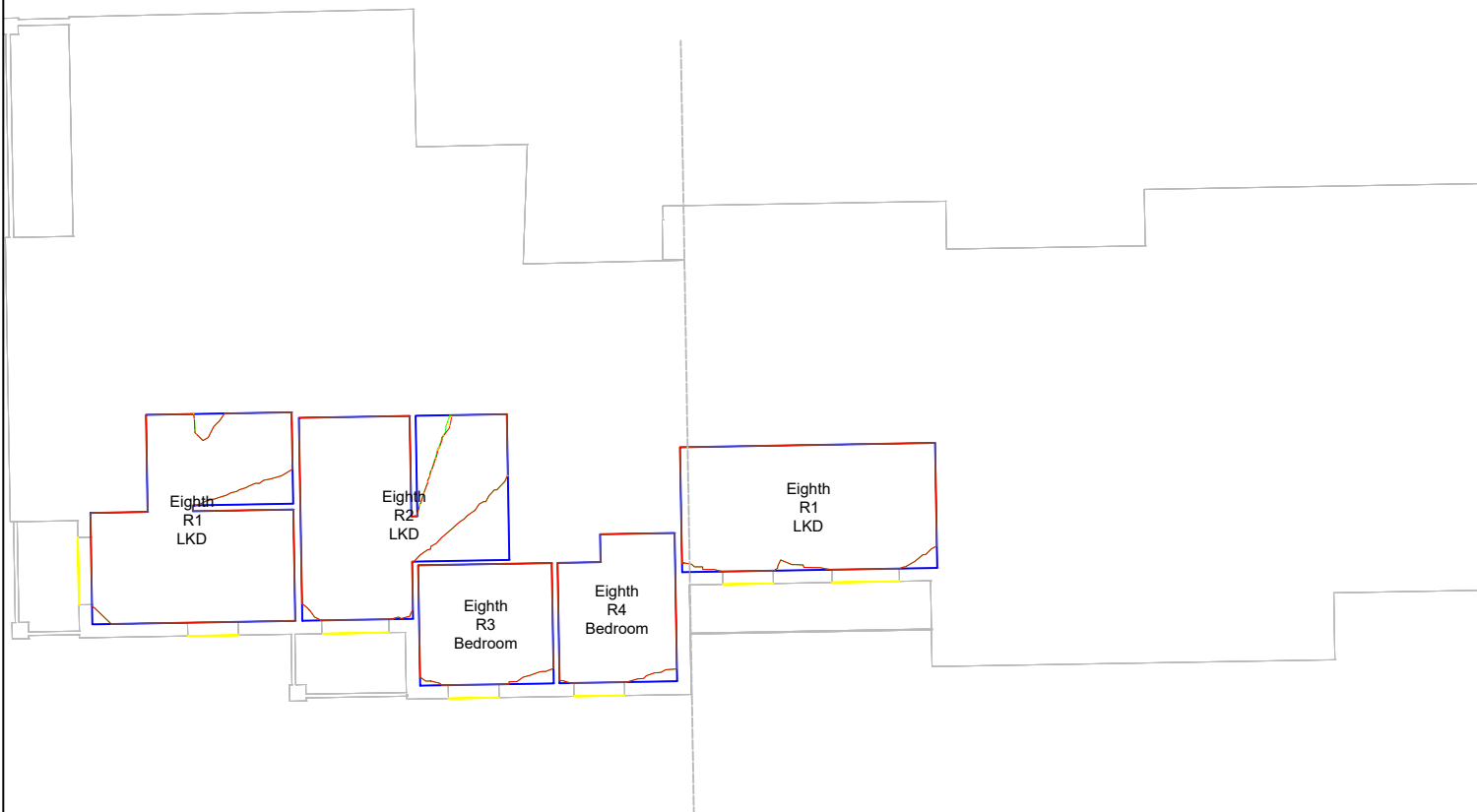
Olive



Seventh Floor

Norada

White Moth



Eighth Floor

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 Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT  
 Fuel Properties

PROJECT  
 Carrow Works

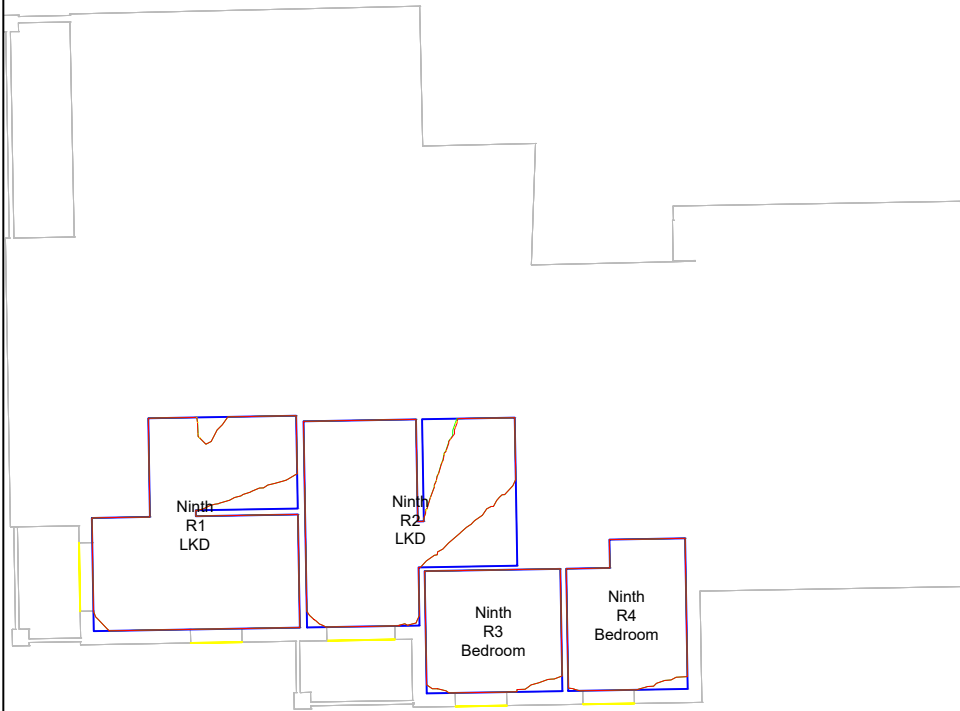
DRAWING TITLE  
 Daylight Distribution contours  
 Illustrative Massing  
 Norada, White Moth, Olive

SCALE 1:200	DATE Jul-22
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DWG No. D+S/1/ 229	REV.
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Norada



Ninth Floor

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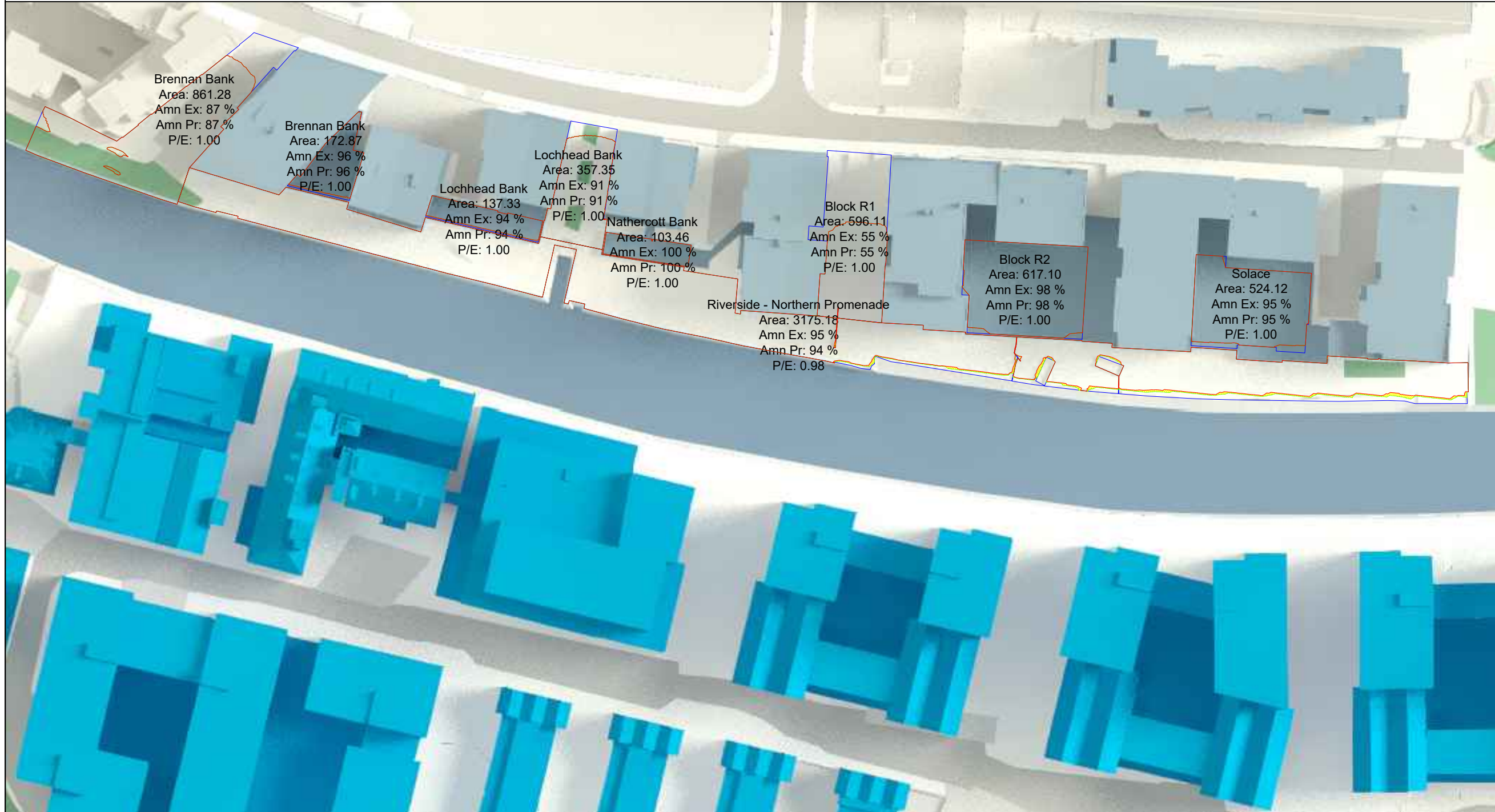
SOURCES OF INFORMATION:  
JTP Studios Illustrative and Parameter  
schemes received on 28/06/2022

Zmapping Limited 3d context model  
received on 10/06/2022



KEY

- ⬡ Amenity area
- ⬡ Existing area of direct sunlight
- ⬡ Proposed area of direct sunlight
- ⬡ Area of loss / gain



REV	DETAILS	DATE	BY
A	*	*	*

CLIENT  
Fuel Properties

PROJECT  
Carrow Works

DRAWING TITLE  
Permanent Overshadowing  
Illustrative Massing

SCALE [Not to Scale]	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

DWG No. D+S/1/ 401	REV.
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March 21st

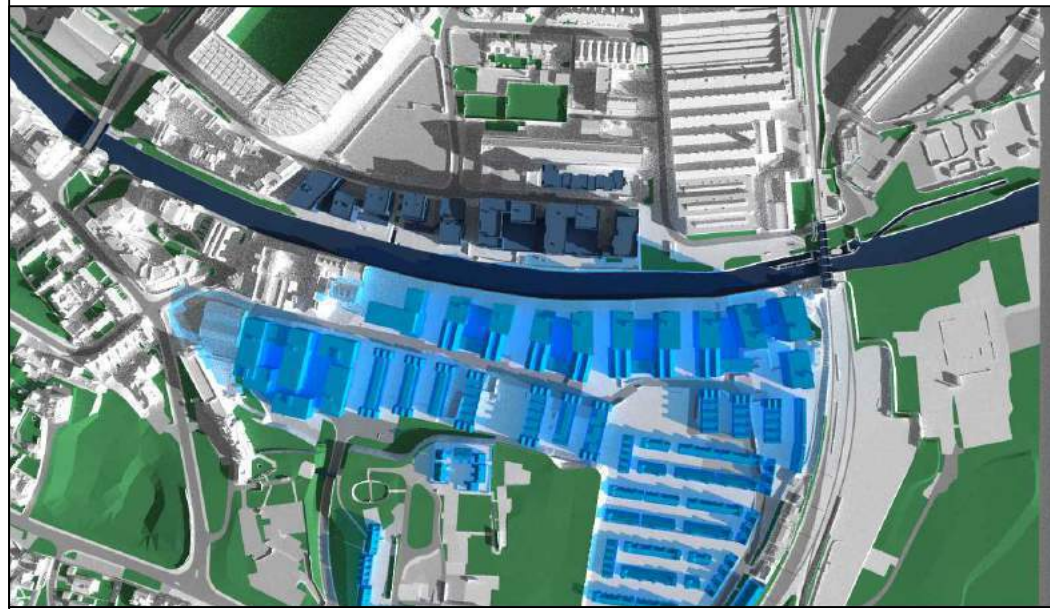


Existing scenario - March 21st

Proposed scenario - March 21st



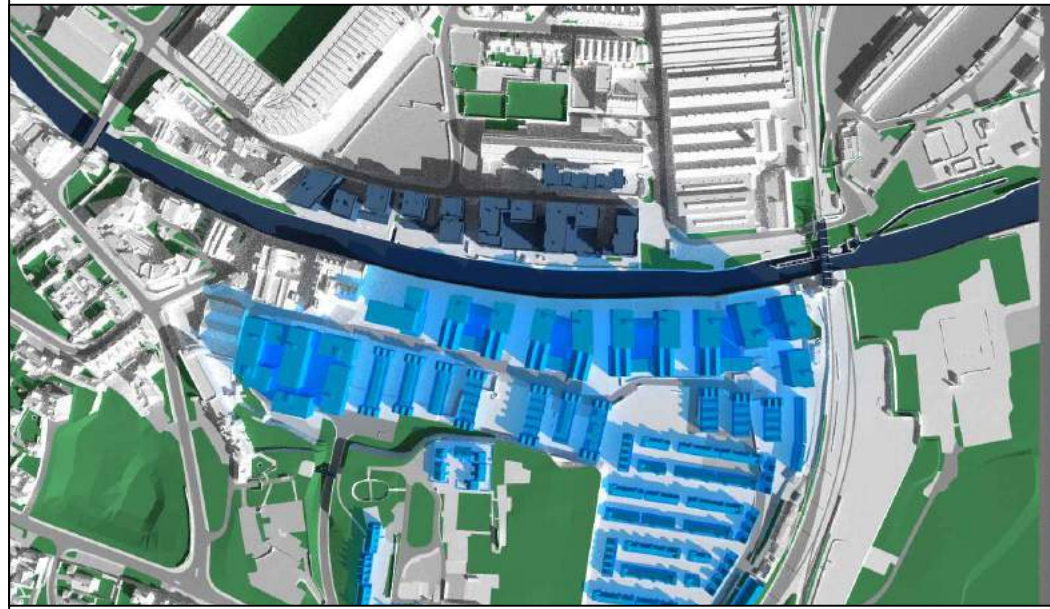
8:00 GMT



8:00 GMT



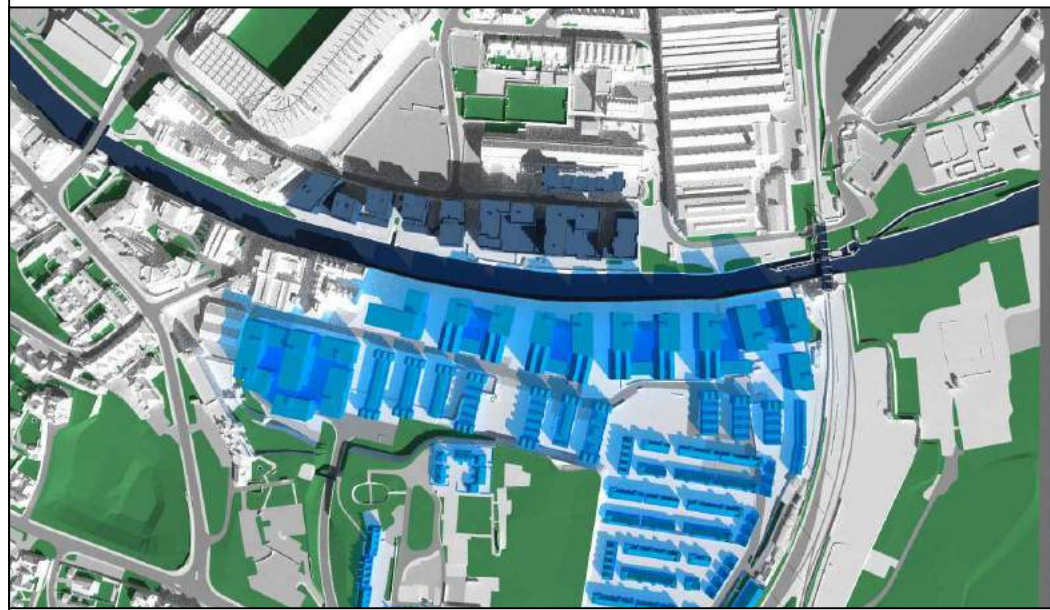
9:00 GMT



9:00 GMT



10:00 GMT



10:00 GMT

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schemes received on 28/06/2022

Zmapping Limited 3d context model  
received on 10/06/2022



**KEY**

- Existing buildings
- Proposed buildings
- Analysed properties
- Surrounding buildings

REV	DETAILS	DATE	BY
A	*	*	*

**CLIENT**  
Fuel Properties

**PROJECT**  
Carrow Works

**DRAWING TITLE**  
Transient Overshadowing  
Illustrative Massing

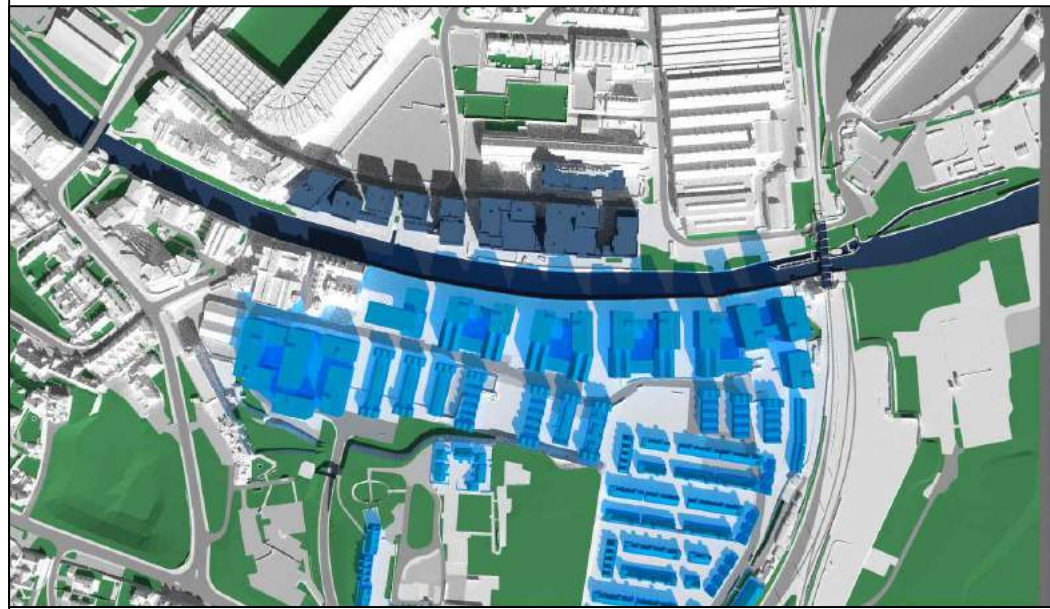
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<b>DRAWN BY</b> KB	<b>CHECKED BY</b> JW

<b>DWG No.</b> D+S/1/ 451	<b>REV.</b>
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**CONSIL**

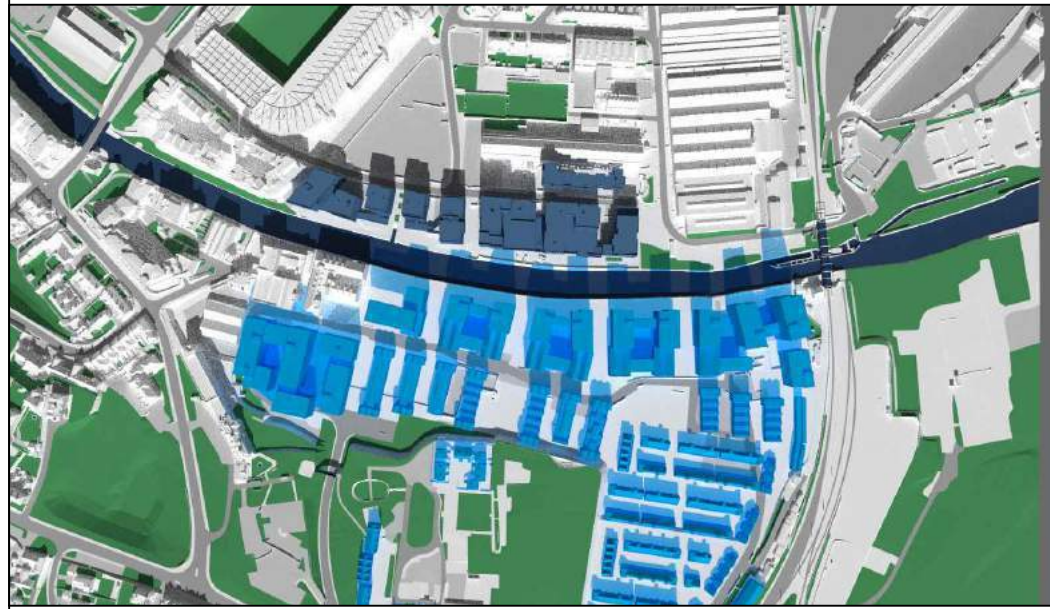
Existing scenario - March 21st

Proposed scenario - March 21st



11:00 GMT

11:00 GMT



12:00 GMT

12:00 GMT



13:00 GMT

13:00 GMT

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Zmapping Limited 3d context model  
received on 10/06/2022



**KEY**

- Existing buildings
- Proposed buildings
- Analysed properties
- Surrounding buildings

REV	DETAILS	DATE	BY
A	*	*	*

**CLIENT**  
Fuel Properties

**PROJECT**  
Carrow Works

**DRAWING TITLE**  
Transient Overshadowing  
Illustrative Massing

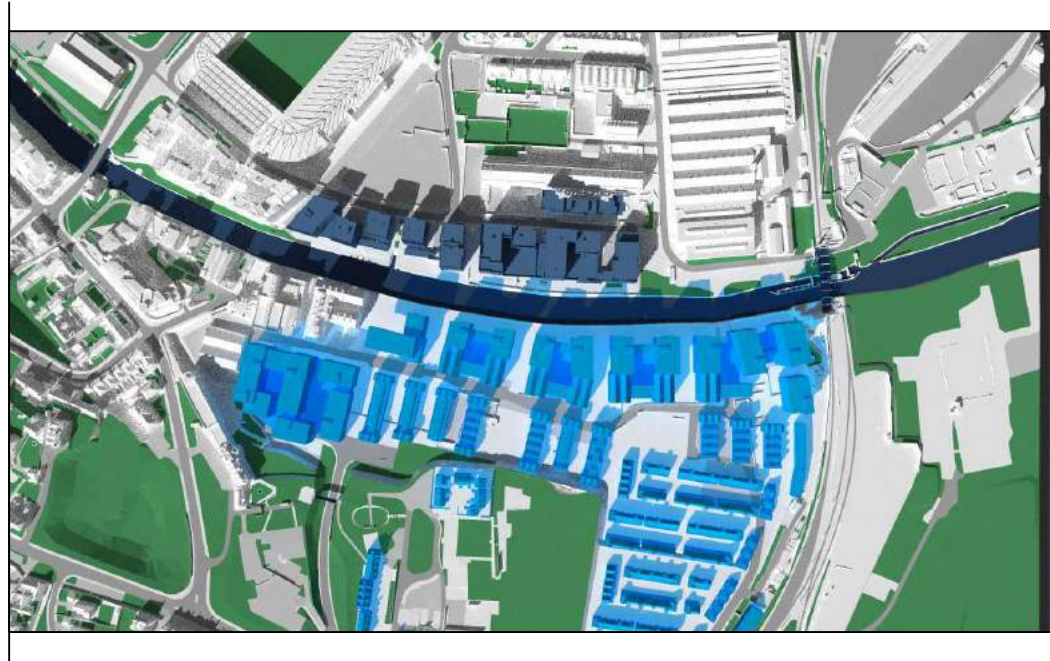
<b>SCALE</b> Not to Scale	<b>DATE</b> Jul-22
<b>DRAWN BY</b> KB	<b>CHECKED BY</b> JW

<b>DWG No.</b> D+S/1/ 452	<b>REV.</b>
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**CONSIL**

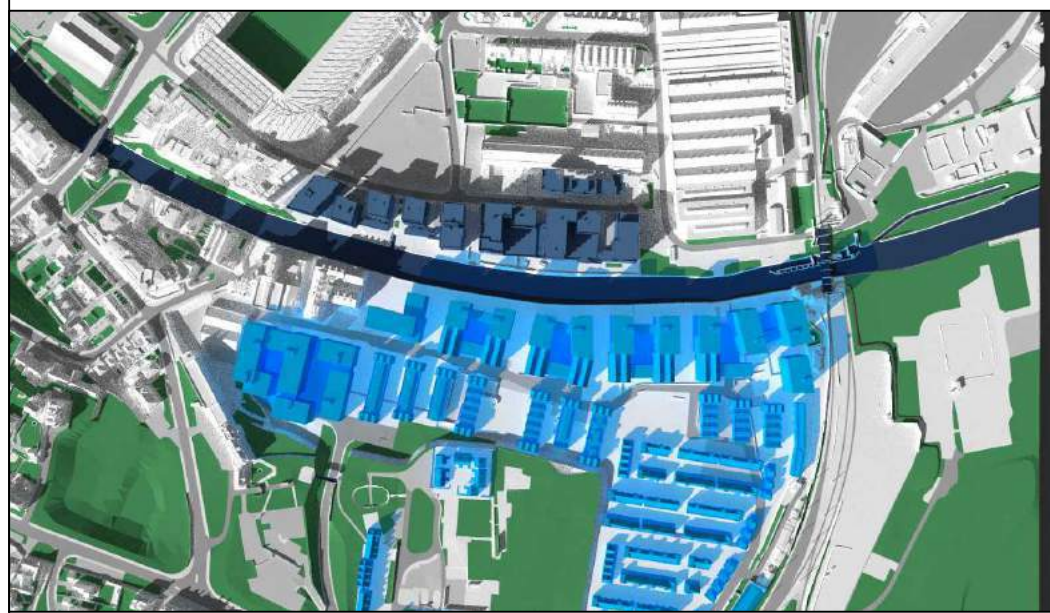
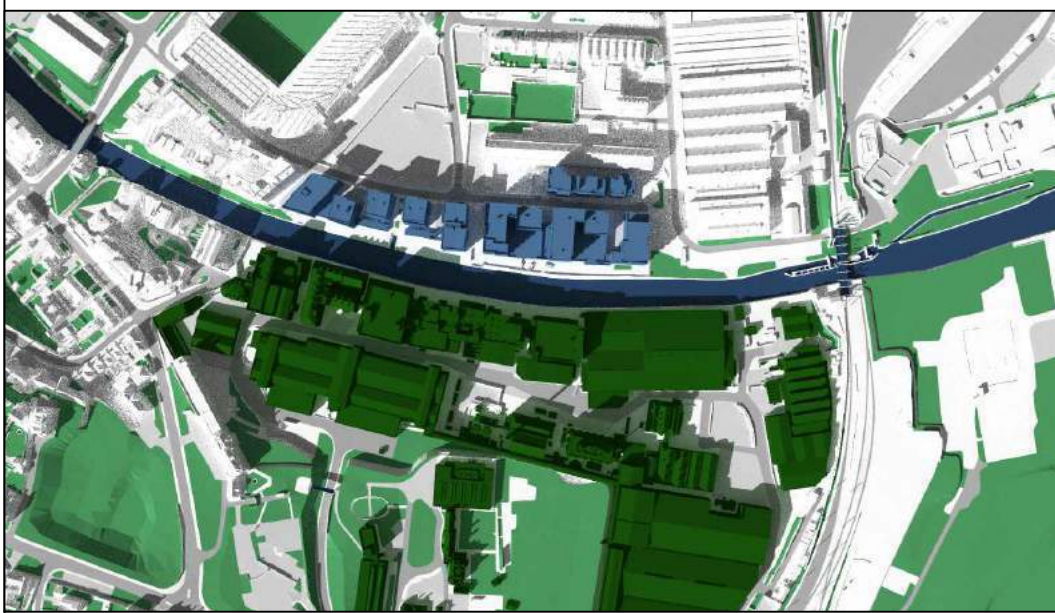
Existing scenario - March 21st

Proposed scenario - March 21st



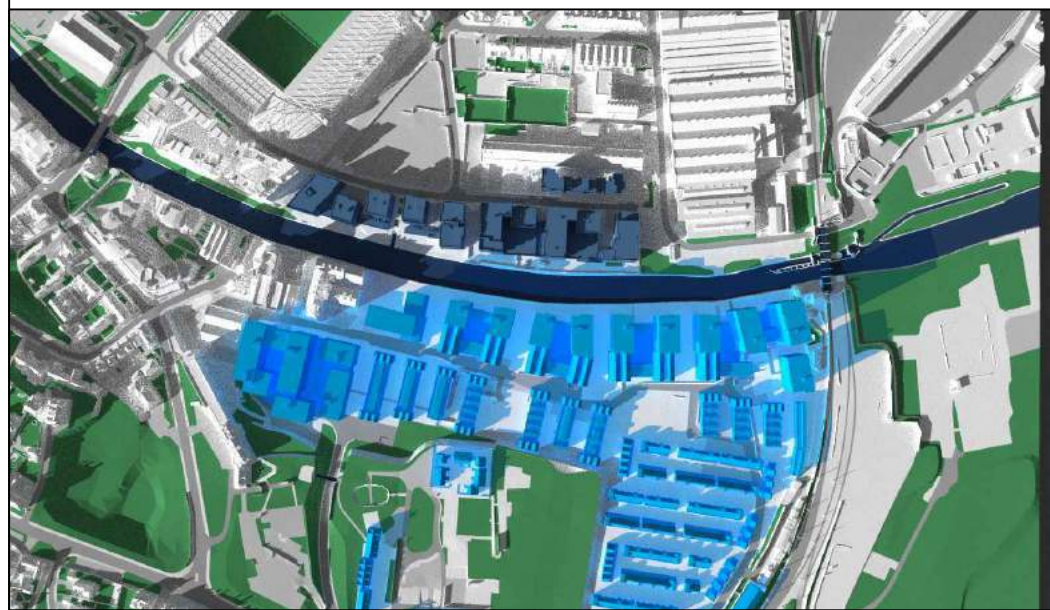
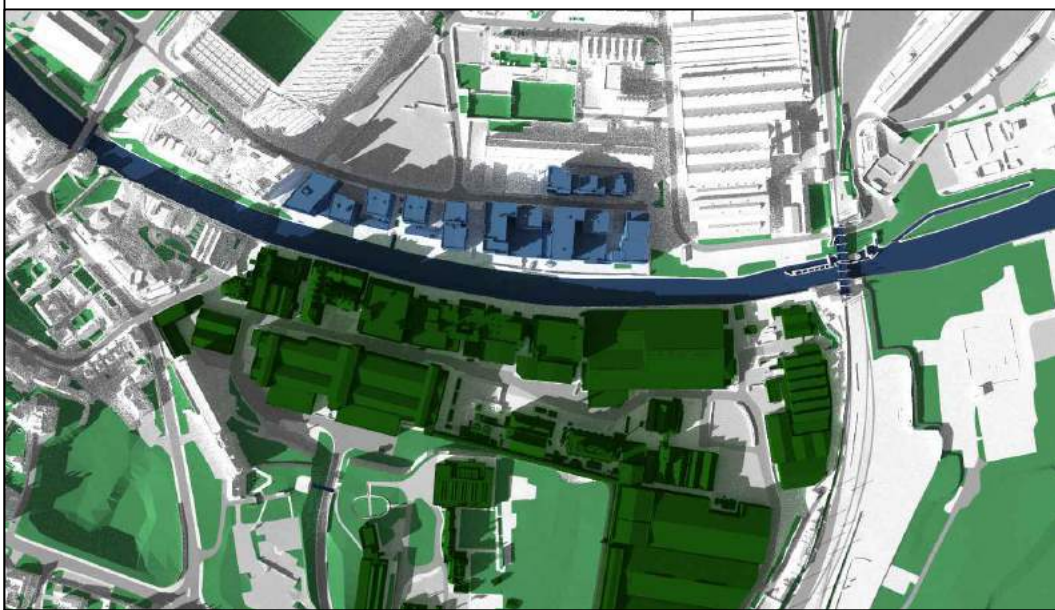
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Zmapping Limited 3d context model  
received on 10/06/2022



KEY

- Existing buildings
- Proposed buildings
- Analysed properties
- Surrounding buildings

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT  
Fuel Properties

PROJECT  
Carrow Works

DRAWING TITLE  
Transient Overshadowing  
Illustrative Massing

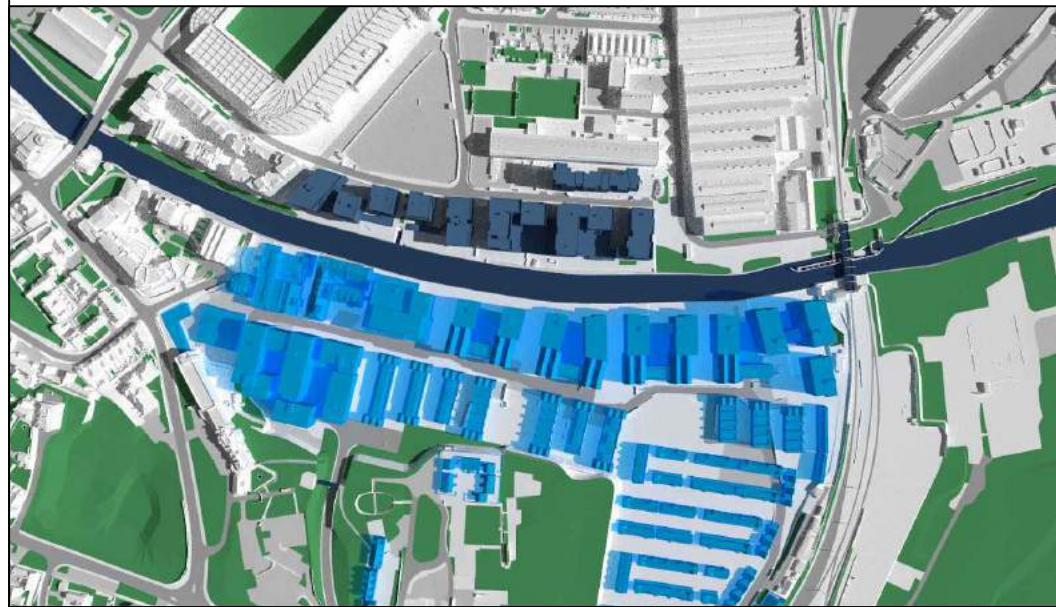
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DWG No. D+S/1/ 453	REV.
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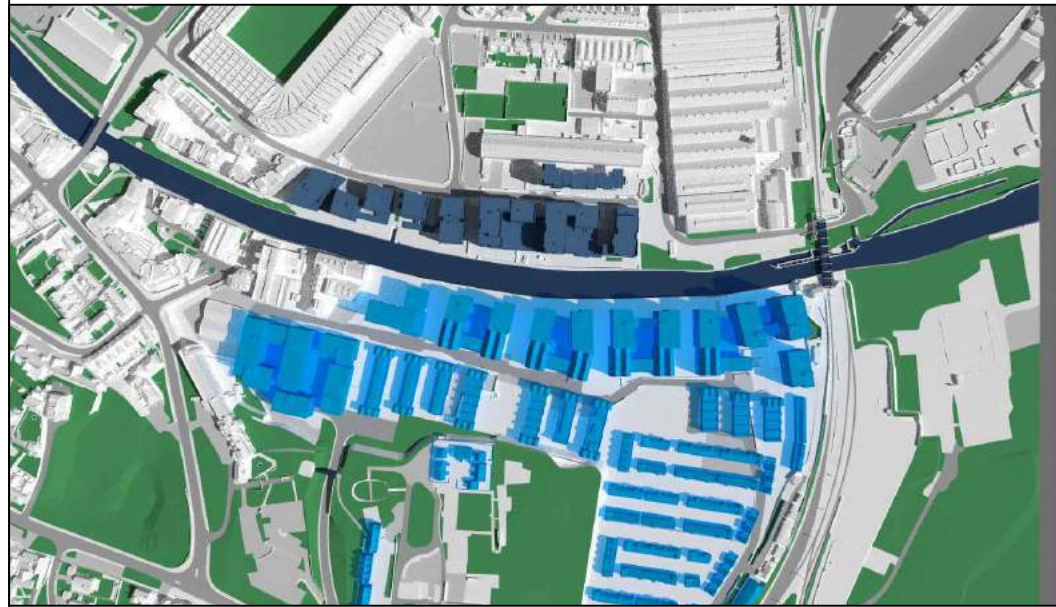
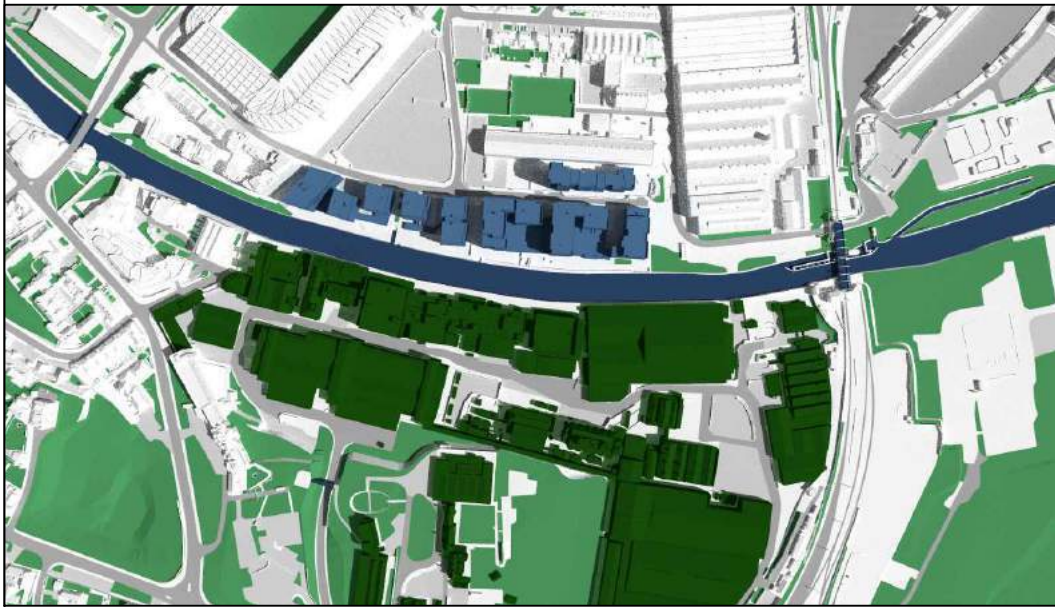
Existing scenario - June 21st

Proposed scenario - June 21st



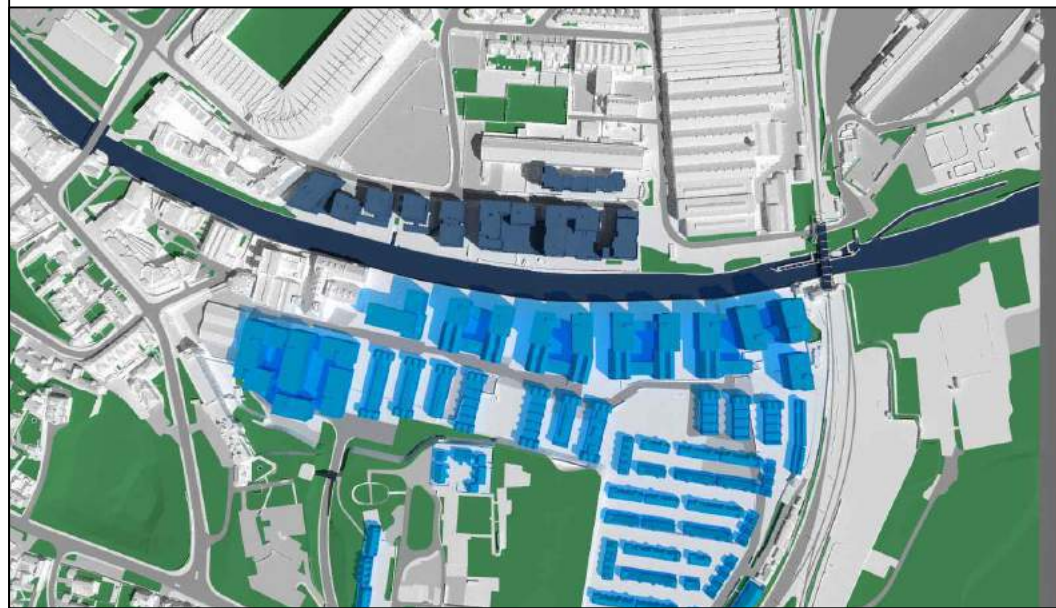
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Fuel Properties

PROJECT  
Carrow Works

DRAWING TITLE  
Transient Overshadowing  
Illustrative Massing

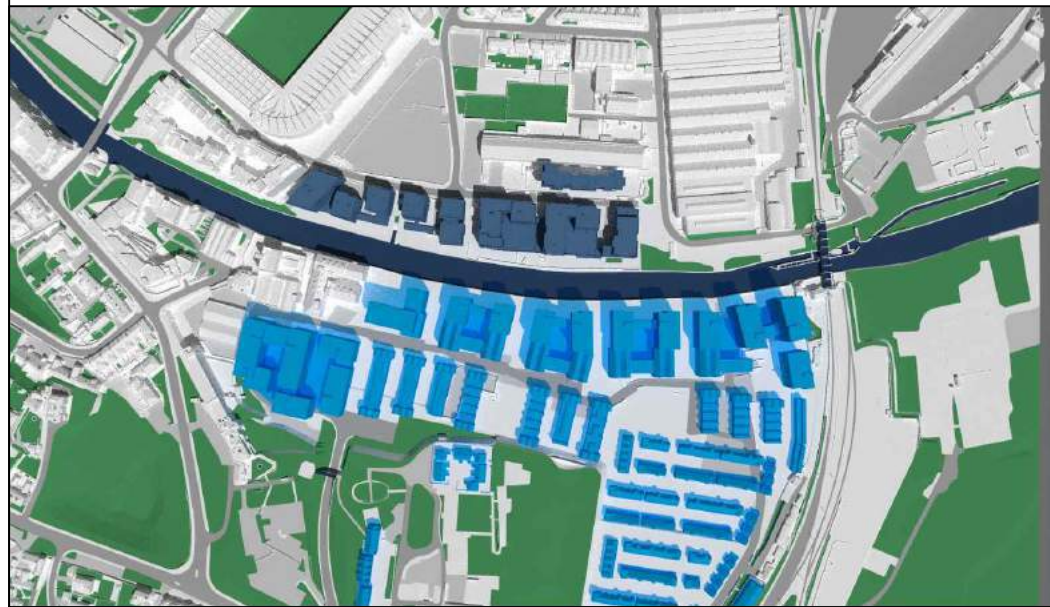
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DWG No. D+S/1/ 454	REV.
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Existing scenario - June 21st

Proposed scenario - June 21st



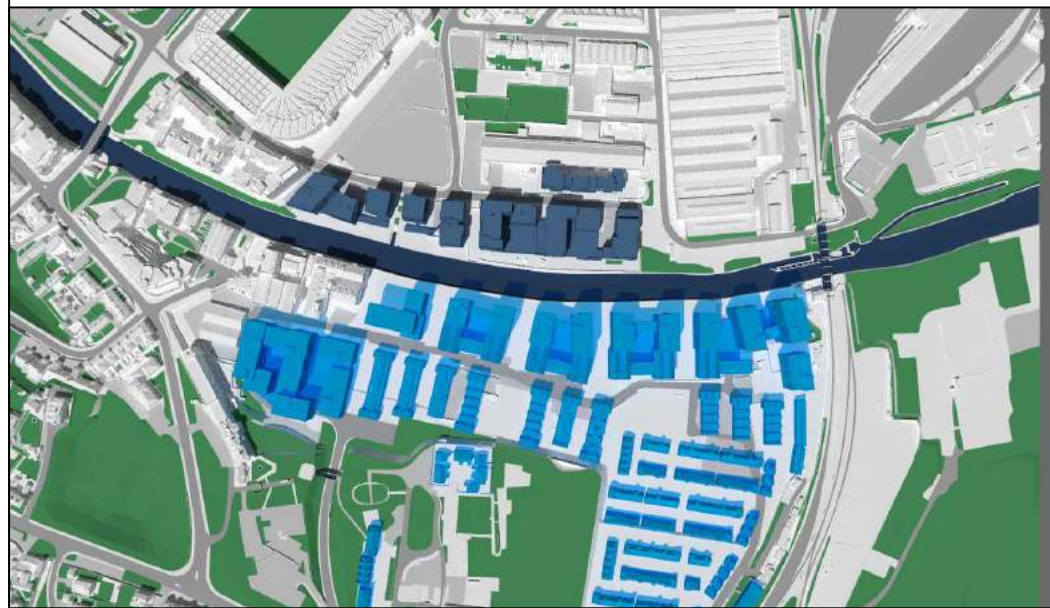
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Fuel Properties

PROJECT  
Carrow Works

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Transient Overshadowing  
Illustrative Massing

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DWG No. D+S/1/ 455	REV.
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Existing scenario - June 21st



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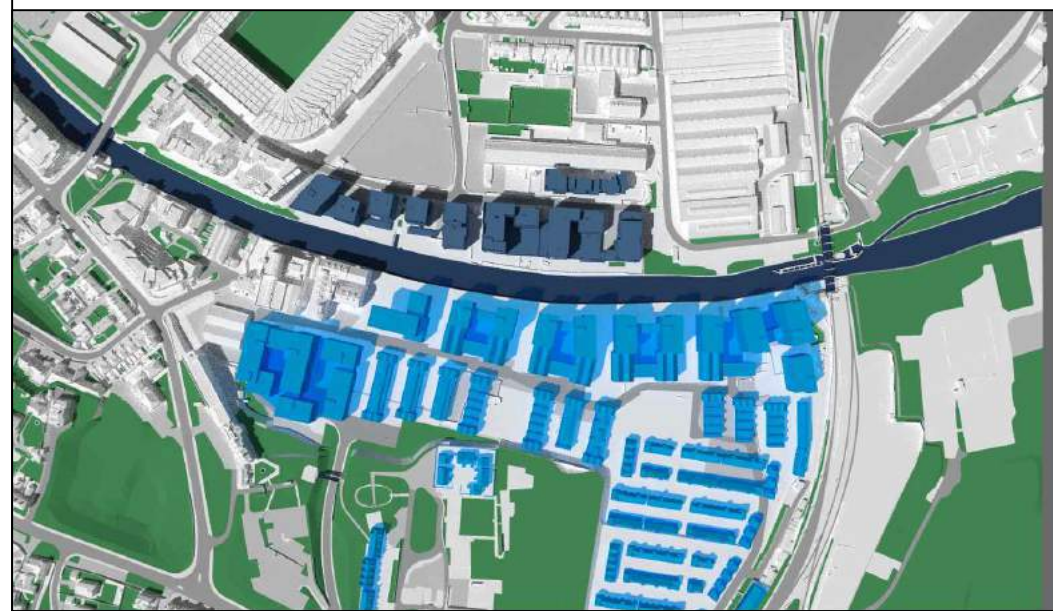


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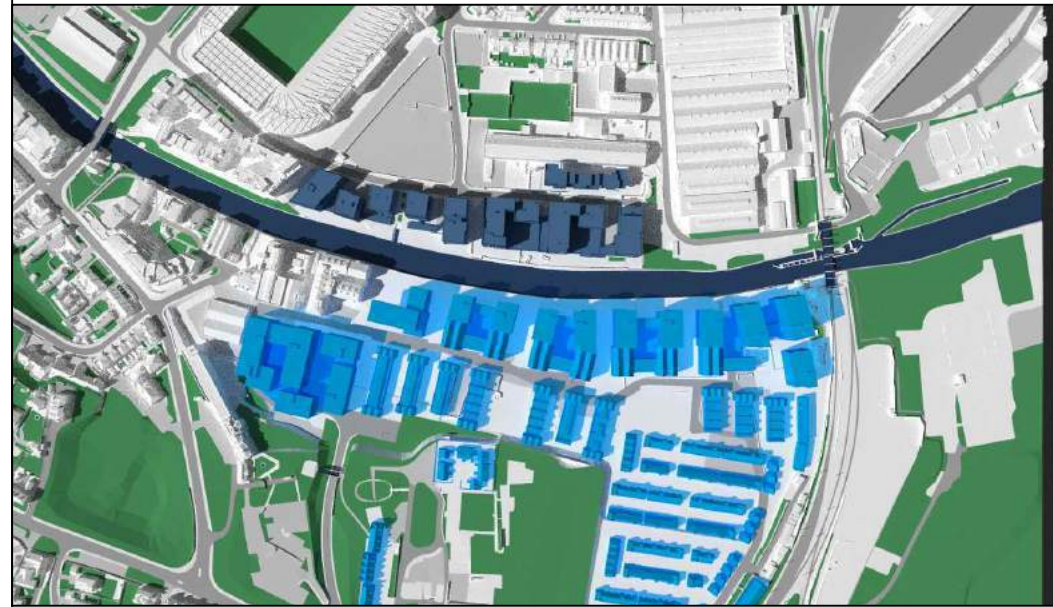


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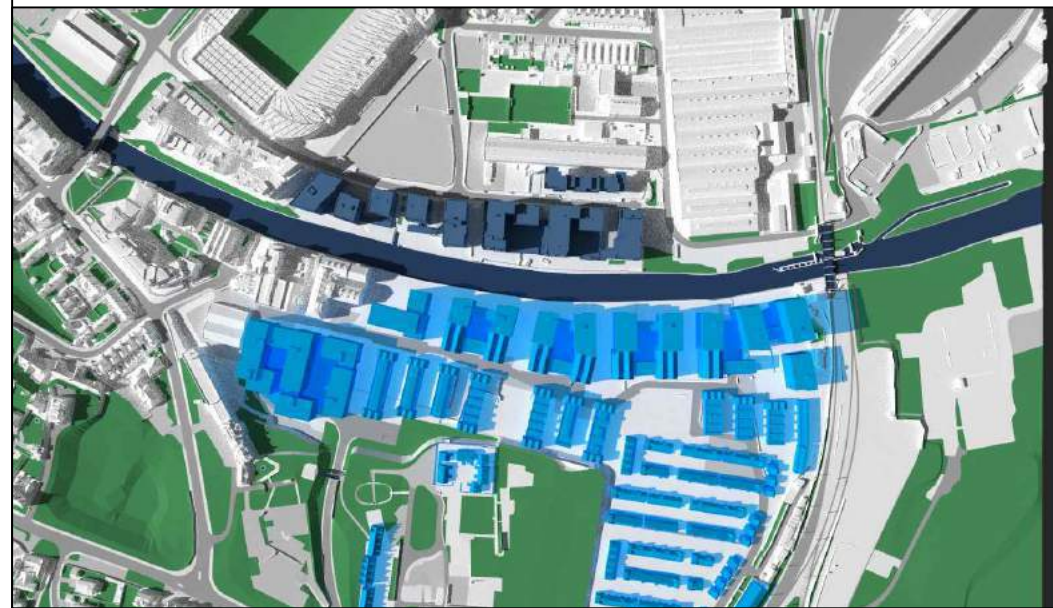
Proposed scenario - June 21st



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Zmapping Limited 3d context model  
received on 10/06/2022



KEY

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Fuel Properties

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Carrow Works

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Transient Overshadowing  
Illustrative Massing

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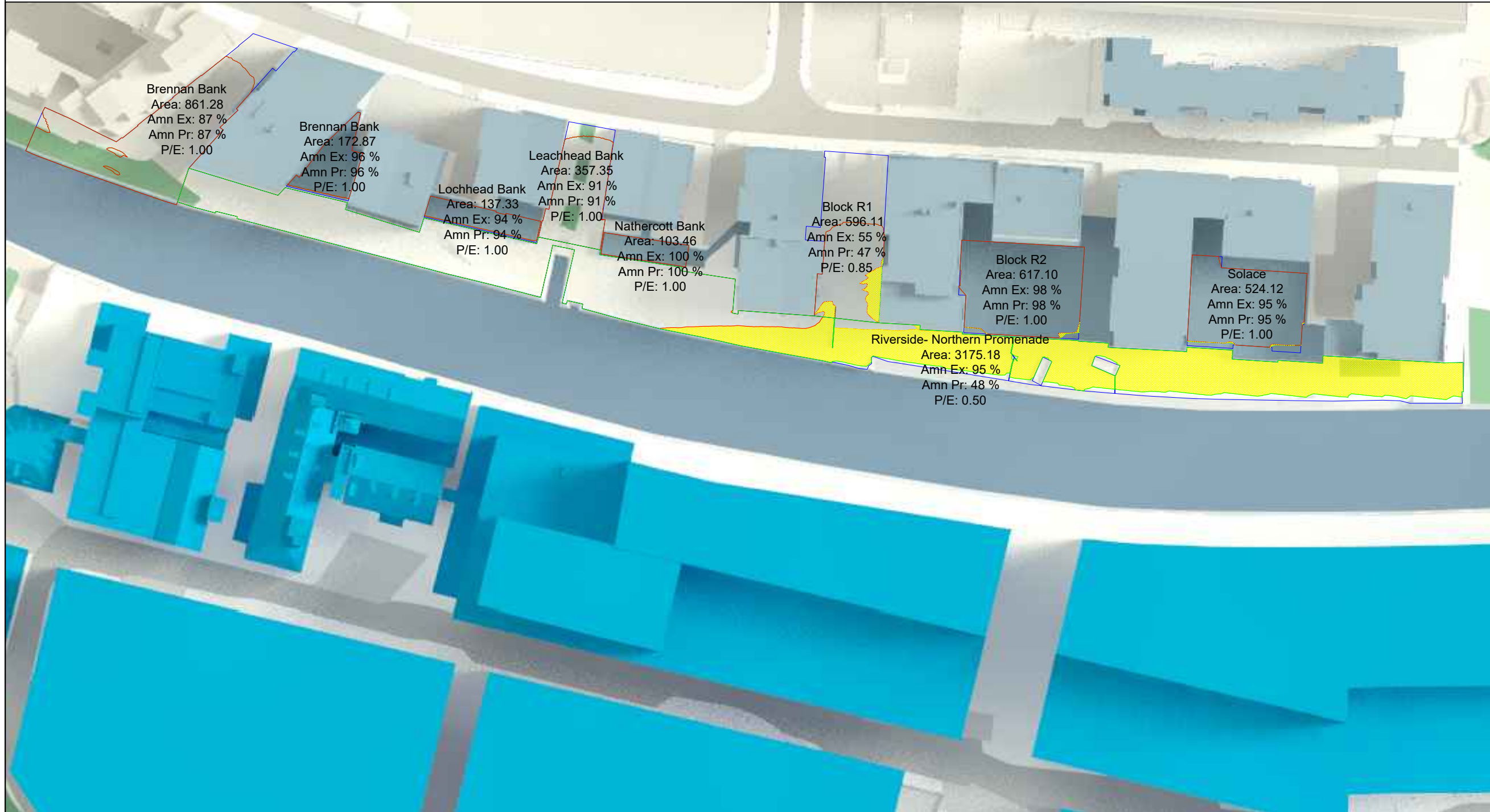
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Zmapping Limited 3d context model  
 received on 10/06/2022



KEY

- ⬡ Amenity area
- ⬡ Existing area of direct sunlight
- ⬡ Proposed area of direct sunlight
- ⬡ Area of loss / gain



Brennan Bank  
 Area: 861.28  
 Amn Ex: 87 %  
 Amn Pr: 87 %  
 P/E: 1.00

Brennan Bank  
 Area: 172.87  
 Amn Ex: 96 %  
 Amn Pr: 96 %  
 P/E: 1.00

Lochhead Bank  
 Area: 137.33  
 Amn Ex: 94 %  
 Amn Pr: 94 %  
 P/E: 1.00

Leachhead Bank  
 Area: 357.35  
 Amn Ex: 91 %  
 Amn Pr: 91 %  
 P/E: 1.00

Nathercott Bank  
 Area: 103.46  
 Amn Ex: 100 %  
 Amn Pr: 100 %  
 P/E: 1.00

Block R1  
 Area: 596.11  
 Amn Ex: 55 %  
 Amn Pr: 47 %  
 P/E: 0.85

Block R2  
 Area: 617.10  
 Amn Ex: 98 %  
 Amn Pr: 98 %  
 P/E: 1.00

Solace  
 Area: 524.12  
 Amn Ex: 95 %  
 Amn Pr: 95 %  
 P/E: 1.00

Riverside- Northern Promenade  
 Area: 3175.18  
 Amn Ex: 95 %  
 Amn Pr: 48 %  
 P/E: 0.50

REV	DETAILS	DATE	BY
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 Fuel Properties

PROJECT  
 Carrow Works

DRAWING TITLE  
 Permanent Overshadowing  
 Parameter Massing

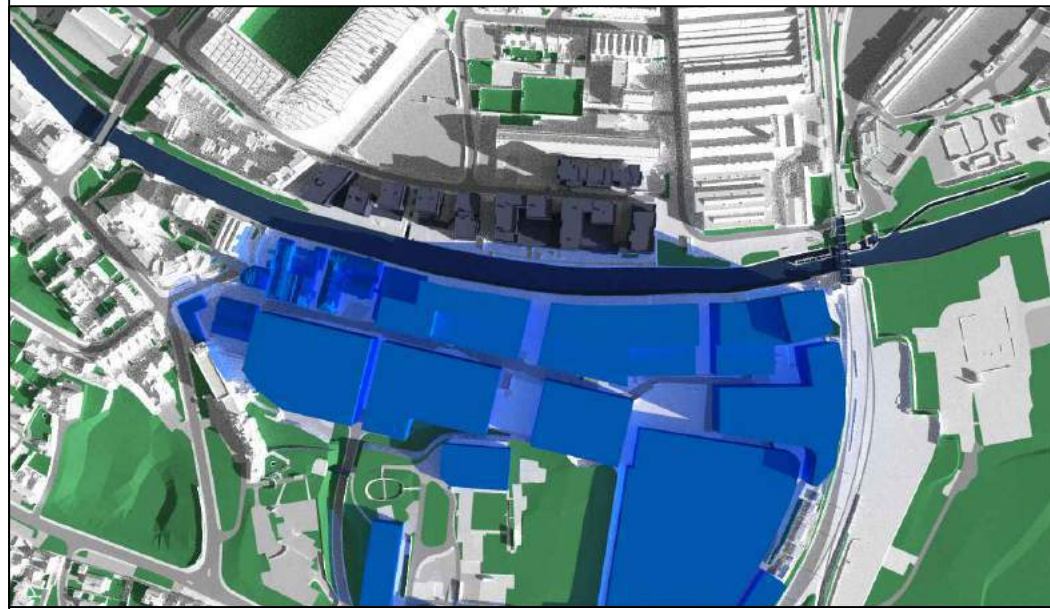
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DRAWN BY KB	CHECKED BY JW

DWG No. D+S/1/ 401	REV.
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March 21st

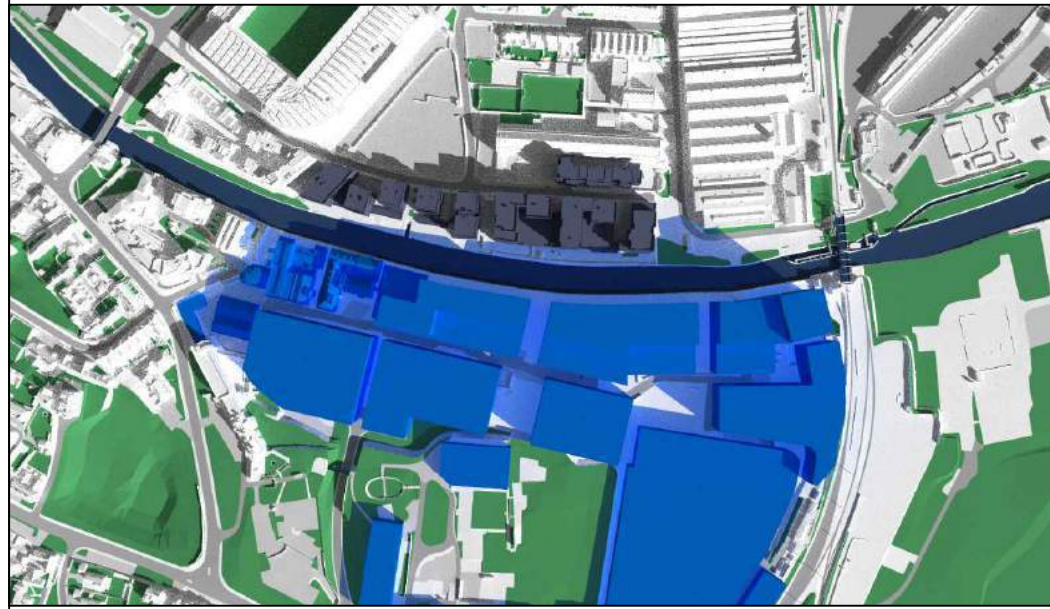
Existing scenario - March 21st

Proposed scenario - March 21st



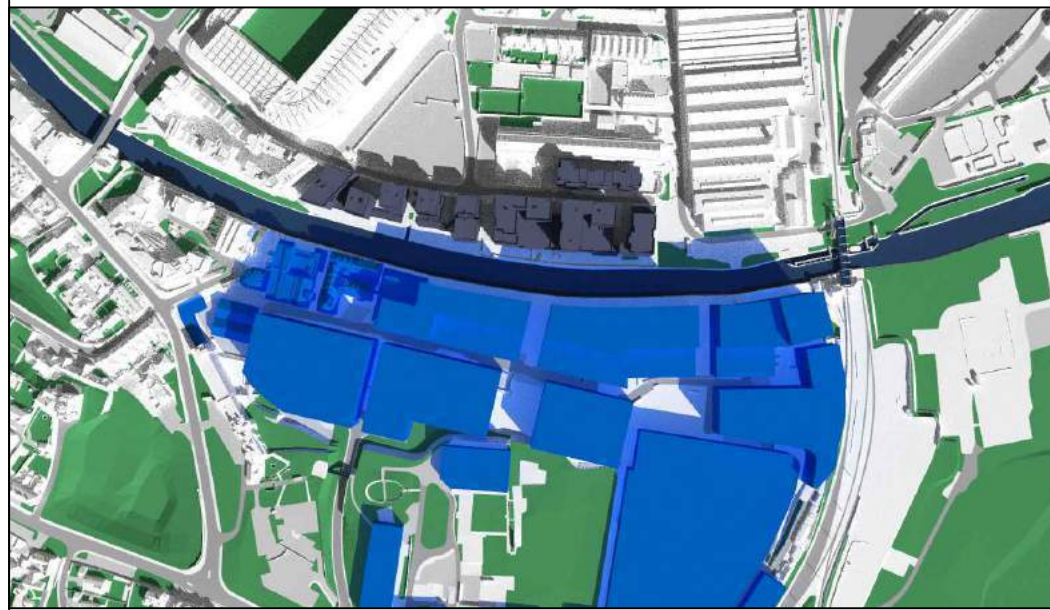
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received on 10/06/2022



KEY

- Existing buildings
- Proposed buildings
- Analysed properties
- Surrounding buildings

REV	DETAILS	DATE	BY
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CLIENT  
Fuel Properties

PROJECT  
Carrow Works

DRAWING TITLE  
Transient Overshadowing  
Parameter Massing

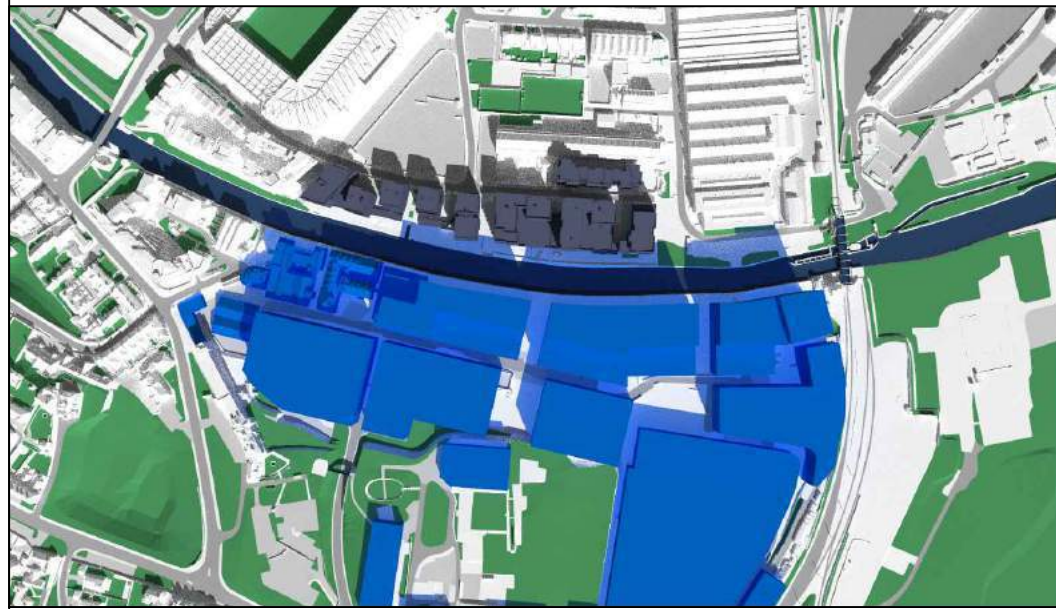
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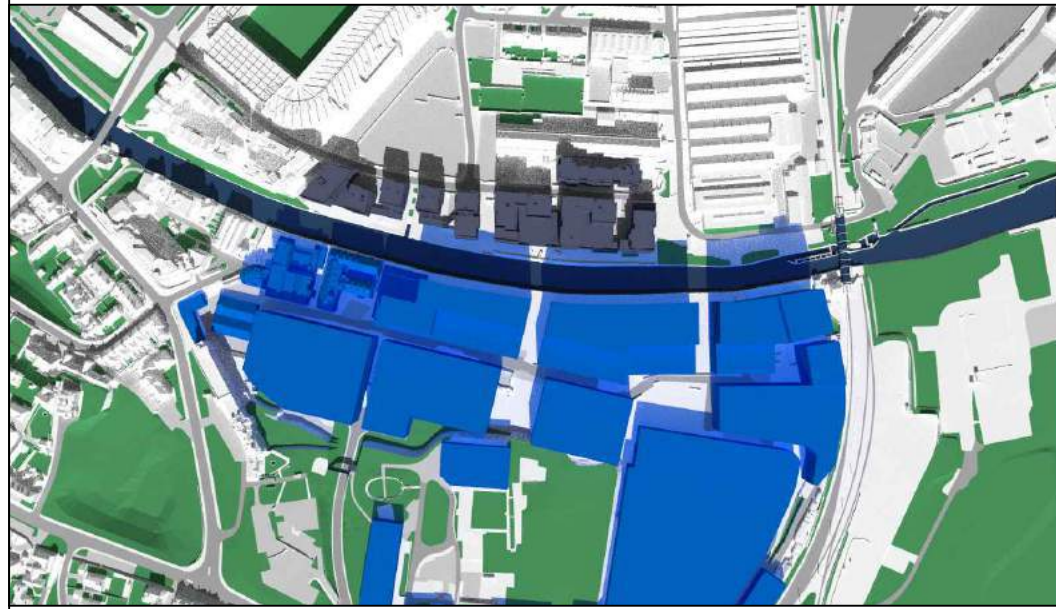
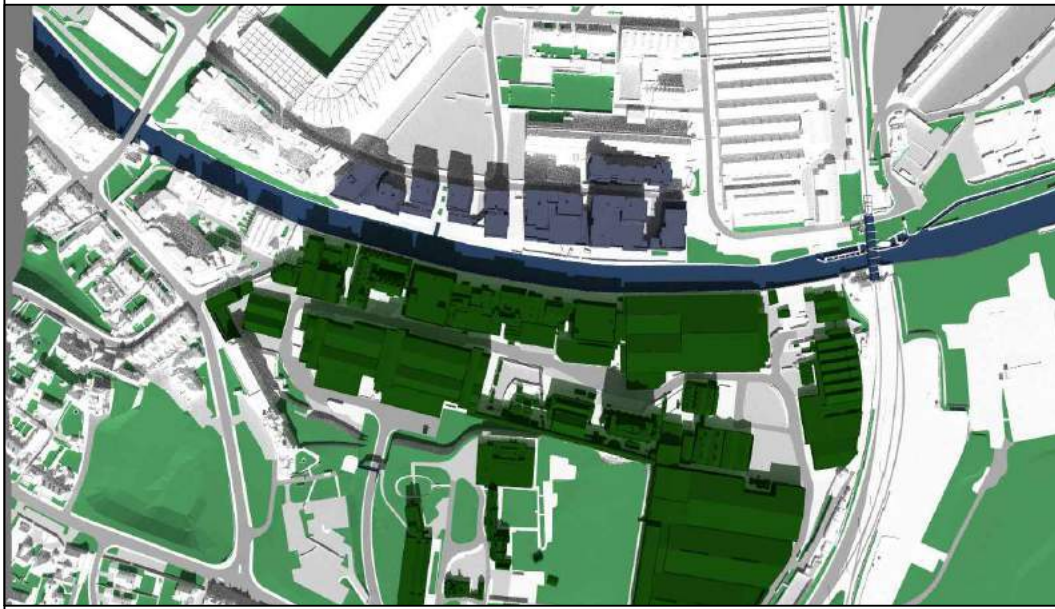
Existing scenario - March 21st

Proposed scenario - March 21st



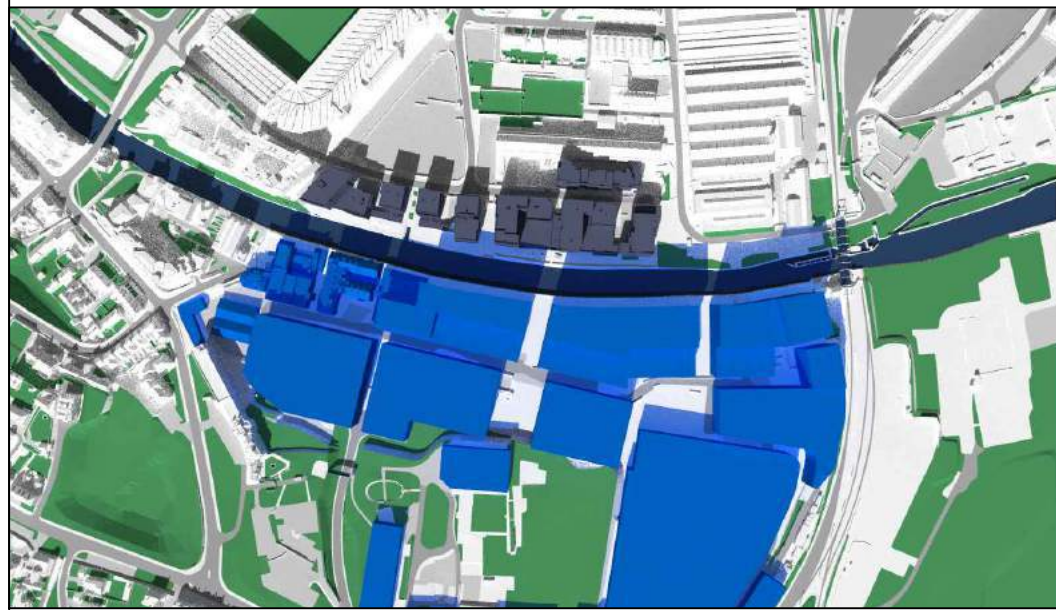
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REV	DETAILS	DATE	BY
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CLIENT  
Fuel Properties

PROJECT  
Carrow Works

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Parameter Massing

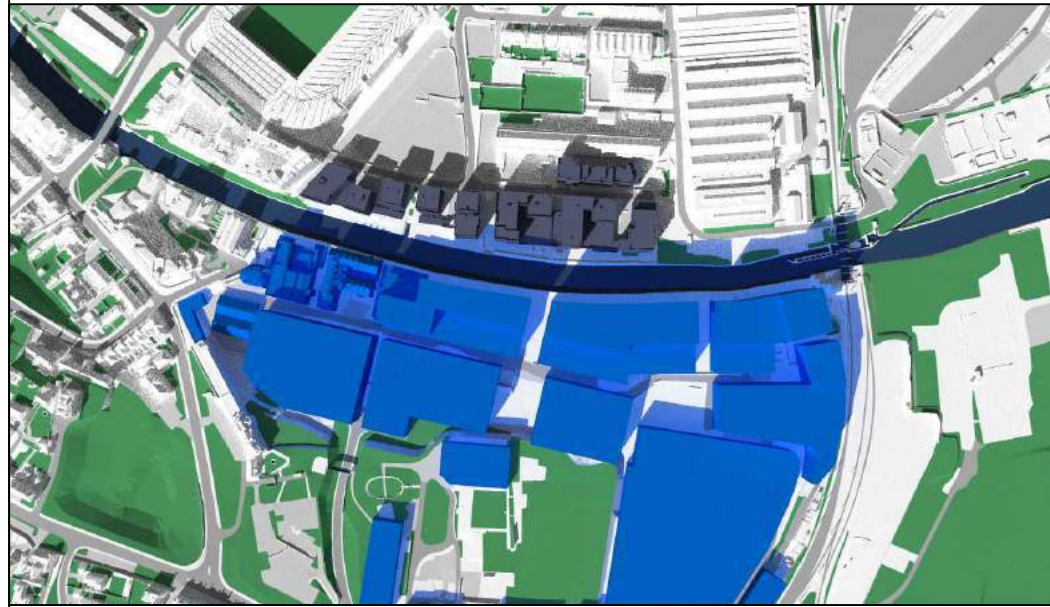
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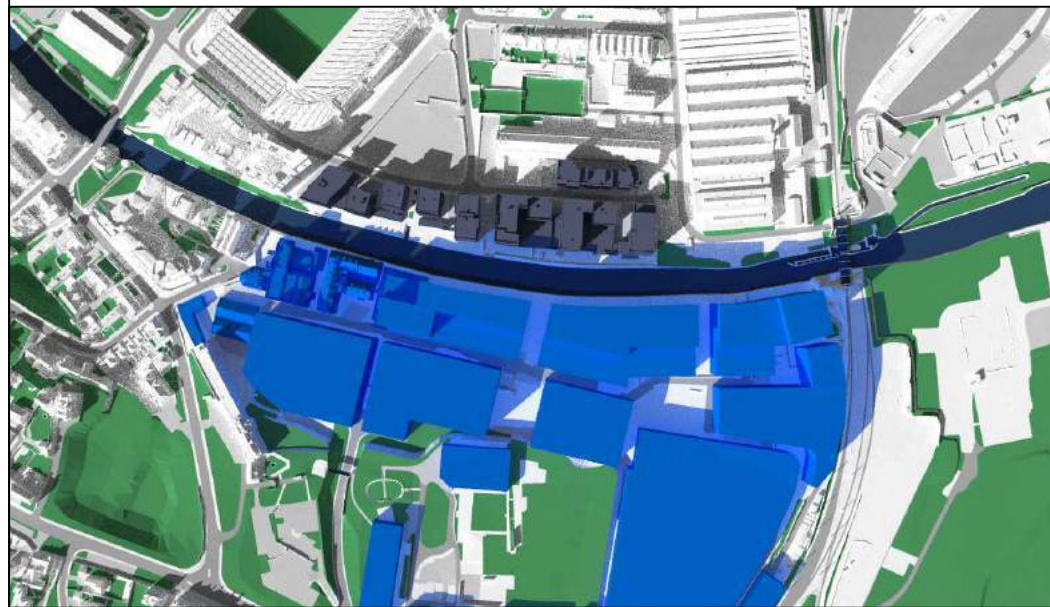
Existing scenario - March 21st

Proposed scenario - March 21st



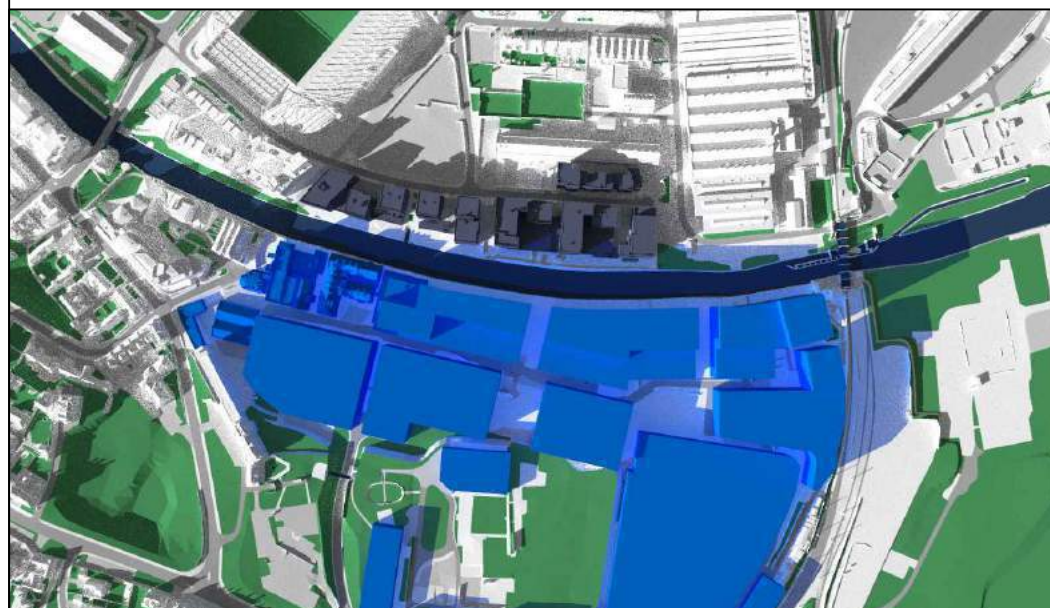
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Fuel Properties

PROJECT  
Carrow Works

DRAWING TITLE  
Transient Overshadowing  
Parameter Massing

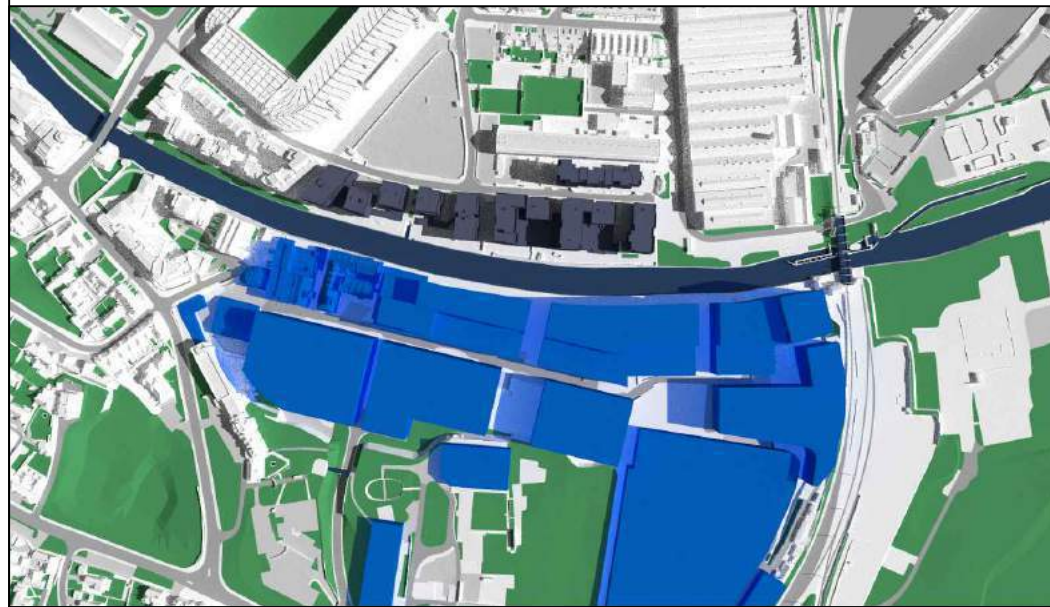
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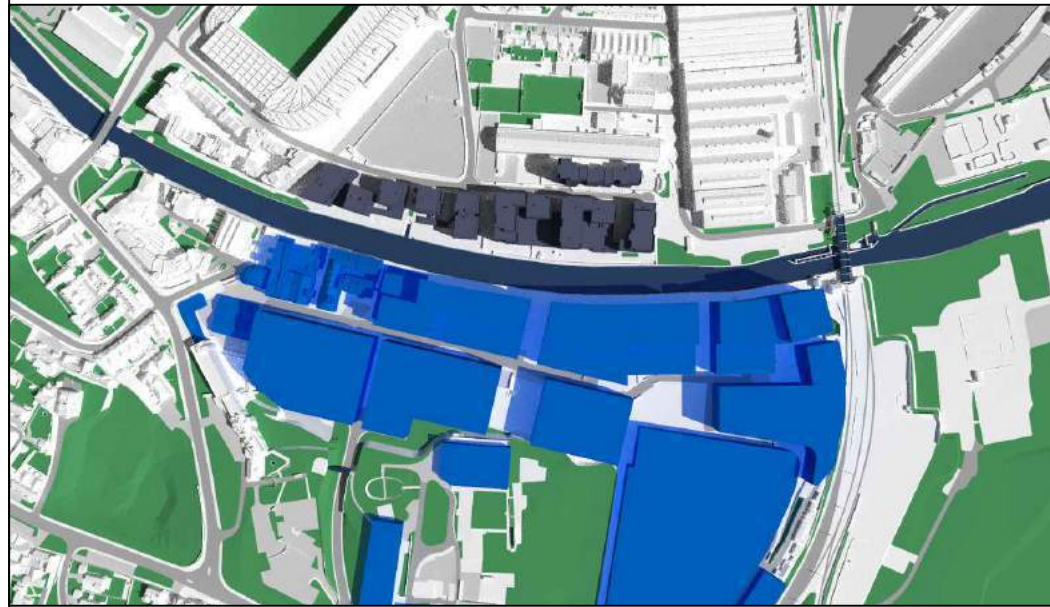
Existing scenario - June 21st

Proposed scenario - June 21st



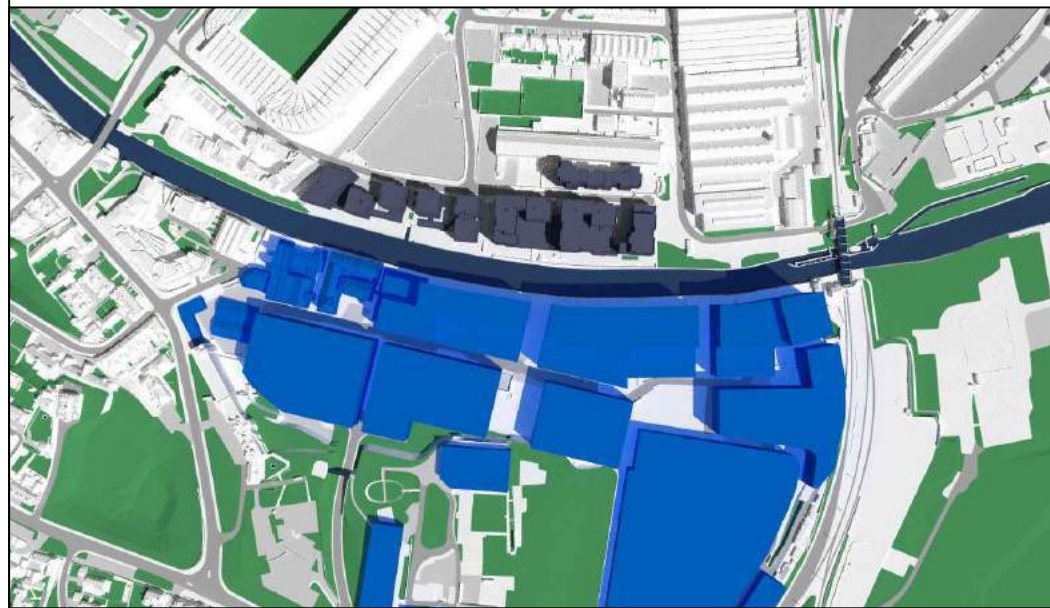
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Carrow Works

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Parameter Massing

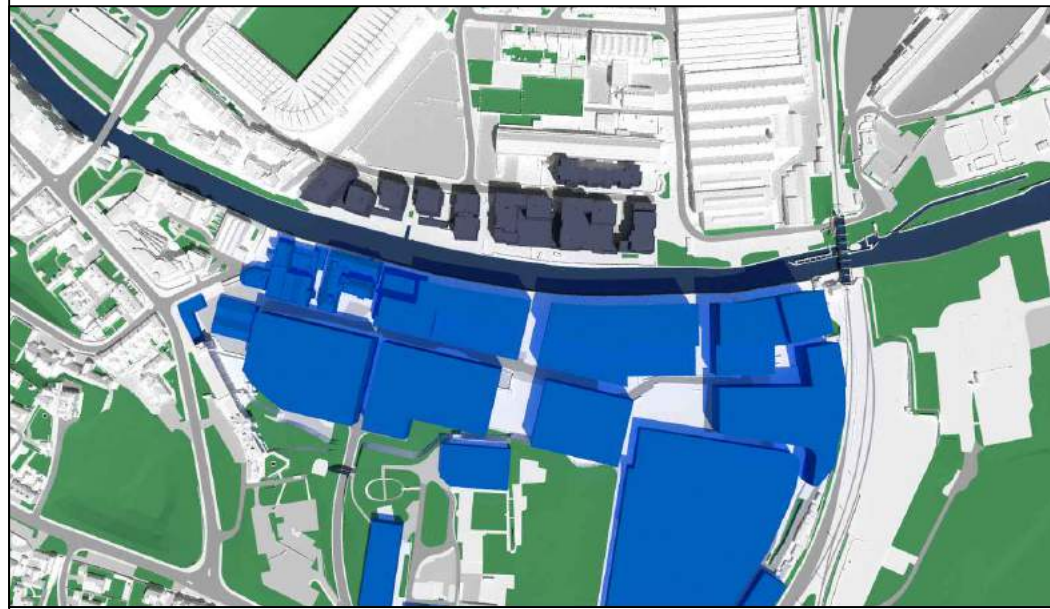
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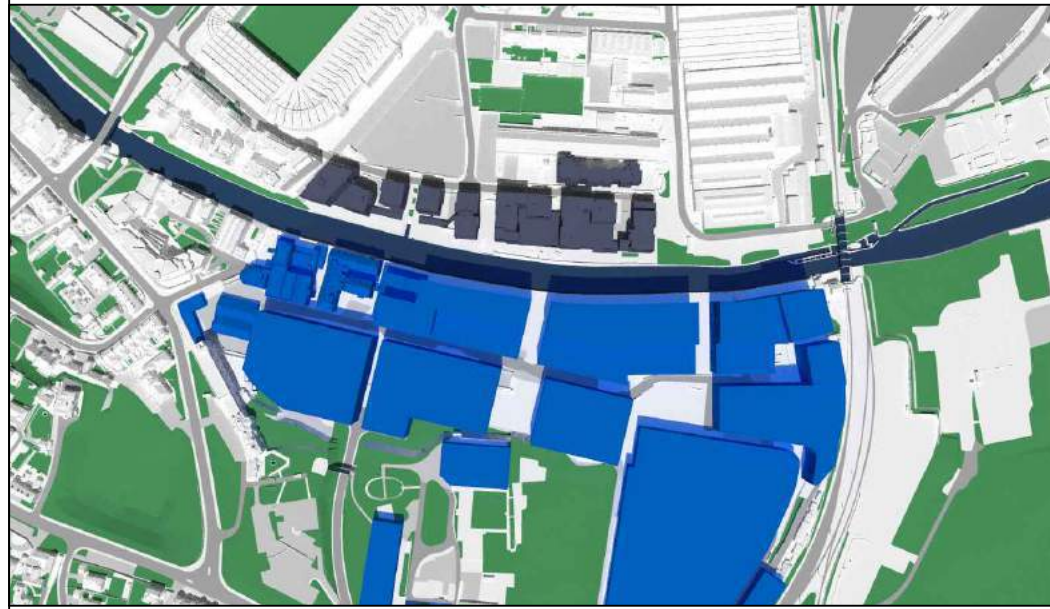
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Proposed scenario - June 21st



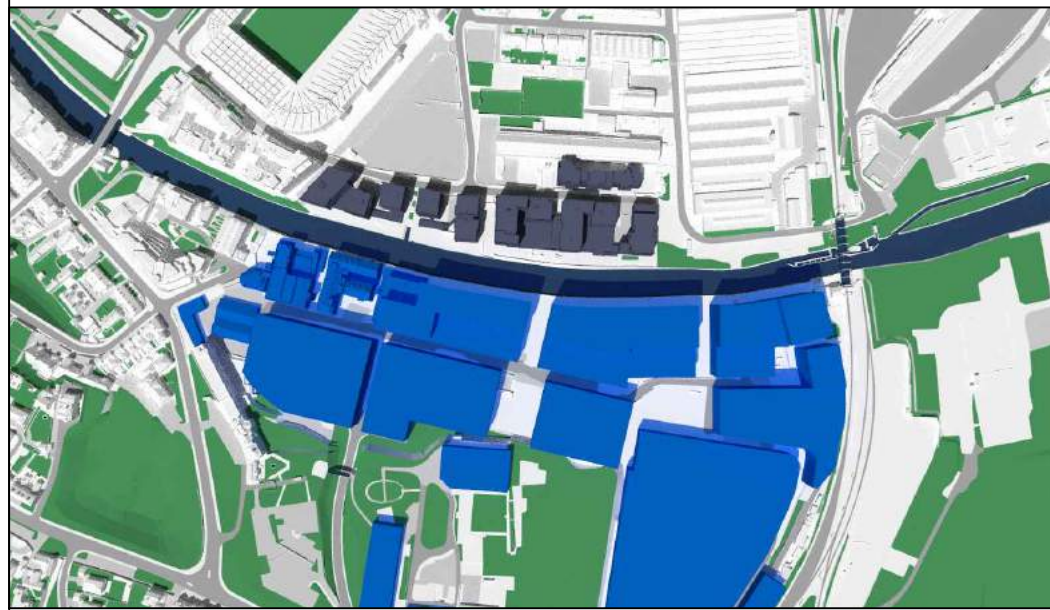
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Carrow Works

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Parameter Massing

SCALE Not to Scale	DATE Jul-22
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DWG No. D+S/1/ 455	REV.
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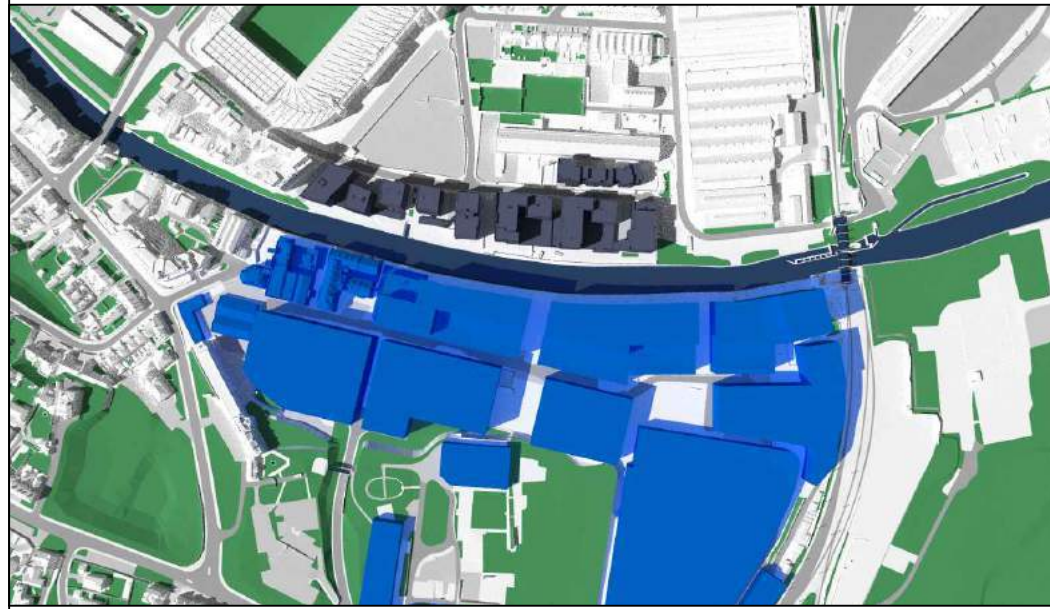
Existing scenario - June 21st

Proposed scenario - June 21st



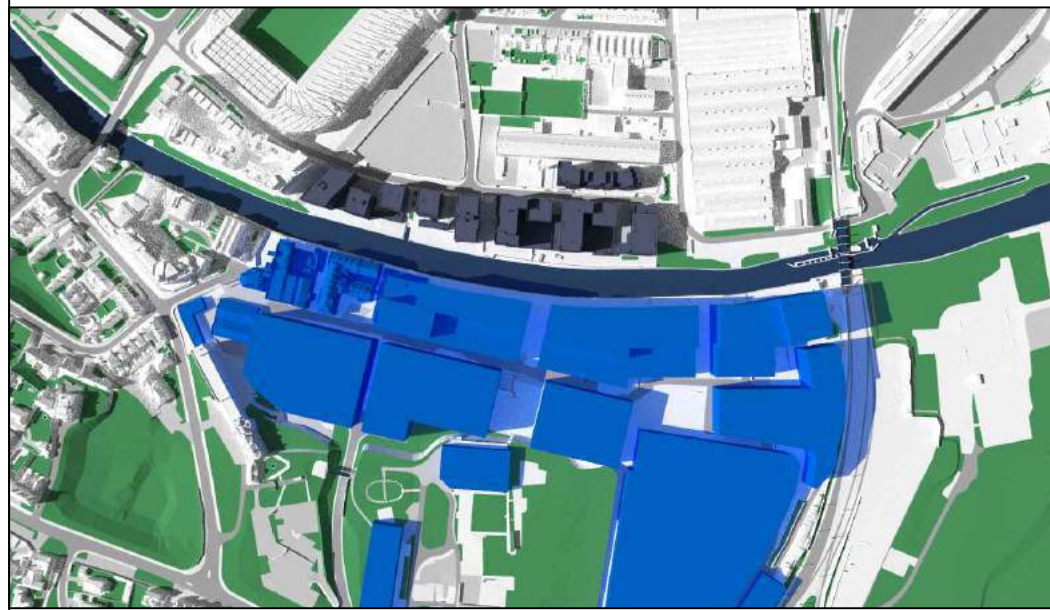
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SCALE Not to Scale	DATE Jul-22
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**APPENDIX C**

**VERTICAL SKY COMPONENT, NO SKY LINE AND ANNUAL PROBABLE SUNLIGHT HOURS RESULT SPREADSHEETS FOR SURROUNDING PROPERTIES**

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing		Proposed	% Loss	Meets BRE criteria?	
<b>Brennan Bank Geoffrey Watling Way</b>																		
First R1 / W1	LKD	8.80	8.51	0.29	3	Yes	99	99	0	Yes	17	17	0	Yes	14	14	0	Yes
First R2 / W2	Bedroom	8.62	8.31	0.31	4	Yes	100	100	0	Yes	15	15	0	Yes	14	14	0	Yes
First R3 / W3	Bedroom	8.51	8.20	0.31	4	Yes	100	100	0	Yes	15	15	0	Yes	14	14	0	Yes
First R4 / W4	LKD	8.39	8.03	0.36	4	Yes	95	95	1	Yes	14	14	0	Yes	13	13	0	Yes
First R5 / W5	Bedroom	8.30	7.84	0.46	6	Yes	99	99	0	Yes	13	13	0	Yes	12	12	0	Yes
First R5 / W6		8.58	8.07	0.51	6	Yes					15	15	0	Yes	14	14	0	Yes
First R6 / W7	Bedroom	3.42	3.20	0.22	6	Yes	78	75	4	Yes	7	7	0	Yes	6	6	0	Yes
First R7 / W8	LKD	3.76	3.48	0.28	7	Yes	36	32	12	Yes	9	9	0	Yes	8	8	0	Yes
First R8 / W9	LKD	4.03	3.88	0.15	4	Yes	31	29	9	Yes	7	7	0	Yes	6	6	0	Yes
First R9 / W10	Bedroom	3.05	2.95	0.10	3	Yes	36	36	0	Yes	9	9	0	Yes	8	8	0	Yes
First R10 / W11	Bedroom	1.95	1.86	0.09	5	Yes	30	30	0	Yes	7	7	0	Yes	3	3	0	Yes
First R11 / W12	LKD	1.46	1.38	0.08	5	Yes	18	18	0	Yes	5	5	0	Yes	2	2	0	Yes
Second R1 / W1	LKD	10.02	9.60	0.42	4	Yes	99	99	0	Yes	16	16	0	Yes	15	15	0	Yes
Second R2 / W2	Bedroom	10.05	9.59	0.46	5	Yes	100	100	0	Yes	17	16	6	Yes	16	15	6	Yes
Second R3 / W3	Bedroom	9.97	9.48	0.49	5	Yes	100	100	0	Yes	16	15	6	Yes	15	14	7	Yes
Second R4 / W4	LKD	9.87	9.31	0.56	6	Yes	96	96	0	Yes	16	15	6	Yes	15	14	7	Yes
Second R5 / W5	Bedroom	9.71	9.13	0.58	6	Yes	99	98	1	Yes	15	14	7	Yes	14	13	7	Yes
Second R6 / W6	Bedroom	8.82	8.36	0.46	5	Yes	95	95	0	Yes	13	13	0	Yes	12	12	0	Yes
Second R7 / W7	Bedroom	4.43	4.02	0.41	9	Yes	81	75	7	Yes	11	11	0	Yes	10	10	0	Yes
Second R8 / W8	LKD	4.29	3.99	0.30	7	Yes	38	33	11	Yes	10	10	0	Yes	9	9	0	Yes
Second R9 / W9	LKD	4.53	4.38	0.15	3	Yes	32	31	2	Yes	9	9	0	Yes	8	8	0	Yes
Second R10 / W10	Bedroom	3.55	3.43	0.12	3	Yes	37	37	0	Yes	11	11	0	Yes	8	8	0	Yes
Second R11 / W11	Bedroom	2.14	2.04	0.10	5	Yes	31	31	0	Yes	7	7	0	Yes	3	3	0	Yes
Second R12 / W12	LKD	0.96	0.87	0.09	9	Yes	17	17	0	Yes	4	4	0	Yes	2	2	0	Yes
Third R1 / W1	LKD	11.51	11.01	0.50	4	Yes	100	100	0	Yes	20	20	0	Yes	17	17	0	Yes
Third R2 / W2	Bedroom	11.38	10.81	0.57	5	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes
Third R3 / W3	Bedroom	11.31	10.70	0.61	5	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes
Third R4 / W4	LKD	11.22	10.54	0.68	6	Yes	96	96	0	Yes	19	18	5	Yes	18	17	6	Yes
Third R5 / W5	Bedroom	11.17	10.41	0.76	7	Yes	99	99	0	Yes	19	18	5	Yes	18	17	6	Yes
Third R6 / W6	Bedroom	11.48	10.69	0.79	7	Yes	97	97	0	Yes	21	20	5	Yes	20	19	5	Yes
Third R7 / W7	Bedroom	4.65	4.32	0.33	7	Yes	82	82	0	Yes	9	9	0	Yes	8	8	0	Yes
Third R8 / W8	LKD	4.93	4.58	0.35	7	Yes	45	41	10	Yes	10	10	0	Yes	9	9	0	Yes
Third R9 / W9	LKD	5.62	5.42	0.20	4	Yes	33	32	3	Yes	10	10	0	Yes	8	8	0	Yes
Third R10 / W10	Bedroom	3.94	3.81	0.13	3	Yes	37	37	0	Yes	9	9	0	Yes	8	8	0	Yes
Third R11 / W11	Bedroom	2.52	2.40	0.12	5	Yes	32	32	0	Yes	7	7	0	Yes	3	3	0	Yes
Third R12 / W12	LKD	1.98	1.89	0.09	5	Yes	21	21	0	Yes	5	5	0	Yes	2	2	0	Yes
Fourth R1 / W1	LKD	12.36	11.80	0.56	5	Yes	99	99	0	Yes	21	20	5	Yes	20	19	5	Yes
Fourth R2 / W2	Bedroom	12.52	11.89	0.63	5	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes
Fourth R3 / W3	Bedroom	12.49	11.82	0.67	5	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes
Fourth R4 / W4	LKD	12.44	11.70	0.74	6	Yes	97	97	0	Yes	20	19	5	Yes	19	18	5	Yes
Fourth R5 / W5	Bedroom	12.33	11.58	0.75	6	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes
Fourth R6 / W6	Bedroom	11.06	10.48	0.58	5	Yes	99	99	0	Yes	17	17	0	Yes	16	16	0	Yes
Fourth R7 / W7	Bedroom	5.92	5.39	0.53	9	Yes	82	81	2	Yes	11	11	0	Yes	10	10	0	Yes
Fourth R8 / W8	LKD	6.34	5.97	0.37	6	Yes	44	40	11	Yes	11	11	0	Yes	9	9	0	Yes
Fourth R9 / W9	LKD	8.50	8.32	0.18	2	Yes	33	33	1	Yes	19	19	0	Yes	10	10	0	Yes
Fourth R10 / W10	Bedroom	5.38	5.24	0.14	3	Yes	40	40	0	Yes	13	13	0	Yes	9	9	0	Yes
Fourth R11 / W11	Bedroom	3.12	2.99	0.13	4	Yes	38	38	0	Yes	7	7	0	Yes	3	3	0	Yes
Fourth R12 / W12	LKD	1.77	1.66	0.11	6	Yes	25	25	0	Yes	4	4	0	Yes	2	2	0	Yes
Fifth R1 / W1	LKD	13.69	13.12	0.57	4	Yes	100	100	0	Yes	23	22	4	Yes	20	19	5	Yes
Fifth R2 / W2	Bedroom	13.59	12.94	0.65	5	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes
Fifth R3 / W3	Bedroom	13.58	12.87	0.71	5	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing		Proposed	% Loss	Meets BRE criteria?	
Fifth R4 / W4	LKD	13.55	12.78	0.77	6	Yes	98	98	0	Yes	21	20	5	Yes	20	19	5	Yes
Fifth R5 / W5	Bedroom	13.56	12.72	0.84	6	Yes	100	100	0	Yes	21	20	5	Yes	20	19	5	Yes
Fifth R6 / W6	Bedroom	13.93	13.06	0.87	6	Yes	99	99	0	Yes	23	22	4	Yes	22	21	5	Yes
Fifth R7 / W7	Bedroom	8.10	7.71	0.39	5	Yes	91	91	0	Yes	13	13	0	Yes	9	9	0	Yes
Fifth R8 / W8	LKD	10.51	10.14	0.37	4	Yes	57	54	6	Yes	19	19	0	Yes	10	10	0	Yes
Fifth R9 / W9	LKD	13.69	13.50	0.19	1	Yes	42	41	0	Yes	29	29	0	Yes	10	10	0	Yes
Fifth R10 / W10	Bedroom	9.42	9.27	0.15	2	Yes	51	51	0	Yes	20	20	0	Yes	11	11	0	Yes
Fifth R11 / W11	Bedroom	4.65	4.51	0.14	3	Yes	43	43	0	Yes	11	11	0	Yes	6	6	0	Yes
Fifth R12 / W12	LKD	3.54	3.41	0.13	4	Yes	33	33	0	Yes	9	9	0	Yes	4	4	0	Yes
Sixth R1 / W1	LKD	14.21	13.66	0.55	4	Yes	99	99	0	Yes	21	21	0	Yes	20	20	0	Yes
Sixth R2 / W2	Bedroom	14.45	13.84	0.61	4	Yes	100	100	0	Yes	21	21	0	Yes	20	20	0	Yes
Sixth R3 / W3	Bedroom	14.46	13.80	0.66	5	Yes	100	100	0	Yes	21	21	0	Yes	20	20	0	Yes
Sixth R4 / W4	LKD	14.46	13.74	0.72	5	Yes	98	98	0	Yes	21	21	0	Yes	20	20	0	Yes
Sixth R5 / W5	Bedroom	14.37	13.67	0.70	5	Yes	100	100	0	Yes	21	21	0	Yes	20	20	0	Yes
Sixth R6 / W6	Bedroom	12.79	12.30	0.49	4	Yes	99	99	0	Yes	18	18	0	Yes	17	17	0	Yes
Sixth R7 / W7	Bedroom	35.27	34.70	0.57	2	Yes	100	100	0	Yes	63	63	0	Yes	20	20	0	Yes
Sixth R8 / W8	LKD	30.74	30.33	0.41	1	Yes	97	97	0	Yes	61	61	0	Yes	22	22	0	Yes
Sixth R9 / W9	LKD	23.13	22.93	0.20	1	Yes	91	91	0	Yes	50	50	0	Yes	20	20	0	Yes
Sixth R10 / W10	Bedroom	16.30	16.17	0.13	1	Yes	100	100	0	Yes	35	35	0	Yes	16	16	0	Yes
Sixth R11 / W11	Bedroom	11.05	10.92	0.13	1	Yes	98	98	0	Yes	21	21	0	Yes	12	12	0	Yes
Sixth R12 / W12	LKD	7.04	6.94	0.10	1	Yes	54	54	0	Yes	13	13	0	Yes	9	9	0	Yes
<b>Lochhead Bank Geoffrey Watling Way</b>																		
First R1 / W1	LKD	10.15	9.66	0.49	5	Yes	91	90	0	Yes	16	15	6	Yes	14	13	7	Yes
First R2 / W2	Bedroom	9.90	9.40	0.50	5	Yes	86	86	0	Yes	17	16	6	Yes	14	13	7	Yes
First R3 / W3	Bedroom	9.65	9.19	0.46	5	Yes	91	91	0	Yes	17	16	6	Yes	14	13	7	Yes
First R4 / W4	LKD	9.30	8.95	0.35	4	Yes	93	92	0	Yes	15	15	0	Yes	12	12	0	Yes
Second R1 / W1	LKD	11.91	11.31	0.60	5	Yes	98	97	0	Yes	21	18	14	Yes	18	15	17	Yes
Second R2 / W2	Bedroom	11.62	11.01	0.61	5	Yes	97	97	0	Yes	21	18	14	Yes	18	15	17	Yes
Second R3 / W3	Bedroom	11.41	10.84	0.57	5	Yes	100	100	0	Yes	20	18	10	Yes	17	15	12	Yes
Second R4 / W4	LKD	11.23	10.69	0.54	5	Yes	99	99	0	Yes	20	19	5	Yes	17	16	6	Yes
Third R1 / W1	LKD	13.37	12.68	0.69	5	Yes	99	99	0	Yes	24	23	4	Yes	22	21	5	Yes
Third R2 / W2	Bedroom	13.26	12.57	0.69	5	Yes	100	100	0	Yes	25	23	8	Yes	22	20	9	Yes
Third R3 / W3	Bedroom	13.10	12.46	0.64	5	Yes	100	100	0	Yes	25	23	8	Yes	22	20	9	Yes
Third R4 / W4	LKD	12.81	12.29	0.52	4	Yes	99	99	0	Yes	22	21	5	Yes	19	18	5	Yes
Fourth R1 / W1	LKD	15.01	14.26	0.75	5	Yes	99	99	0	Yes	25	24	4	Yes	22	21	5	Yes
Fourth R2 / W2	Bedroom	14.84	14.09	0.75	5	Yes	100	100	0	Yes	25	24	4	Yes	22	21	5	Yes
Fourth R3 / W3	Bedroom	14.74	14.00	0.74	5	Yes	100	100	0	Yes	25	24	4	Yes	22	21	5	Yes
Fourth R4 / W4	LKD	14.66	13.96	0.70	5	Yes	99	99	0	Yes	26	24	8	Yes	23	21	9	Yes
Fifth R1 / W1	LKD	16.15	15.33	0.82	5	Yes	99	99	0	Yes	25	24	4	Yes	23	22	4	Yes
Fifth R2 / W2	Bedroom	16.19	15.36	0.83	5	Yes	100	100	0	Yes	26	25	4	Yes	23	22	4	Yes
Fifth R3 / W3	Bedroom	16.13	15.30	0.83	5	Yes	100	100	0	Yes	26	25	4	Yes	23	22	4	Yes
Fifth R4 / W4	LKD	15.92	15.14	0.78	5	Yes	99	99	0	Yes	25	25	0	Yes	22	22	0	Yes
Sixth R1 / W1	LKD	38.29	37.41	0.88	2	Yes	99	99	0	Yes	86	85	1	Yes	30	29	3	Yes
Sixth R2 / W2	Bedroom	38.25	37.34	0.91	2	Yes	100	100	0	Yes	86	85	1	Yes	30	29	3	Yes
Sixth R3 / W3	Bedroom	38.24	37.28	0.96	3	Yes	100	100	0	Yes	86	85	1	Yes	30	29	3	Yes
Sixth R4 / W4	LKD	38.19	37.19	1.00	3	Yes	99	99	0	Yes	86	85	1	Yes	30	29	3	Yes
<b>Robinson Bank Geoffrey Watling Way</b>																		
First R1 / W1	LKD	10.19	9.35	0.84	8	Yes	94	91	3	Yes	20	17	15	Yes	19	16	16	Yes
First R2 / W2	Bedroom	10.80	9.84	0.96	9	Yes	99	99	0	Yes	21	18	14	Yes	19	16	16	Yes
First R3 / W3	LKD	11.01	9.95	1.06	10	Yes	97	95	2	Yes	22	19	14	Yes	20	17	15	Yes
Second R1 / W1	LKD	11.48	10.57	0.91	8	Yes	99	97	1	Yes	22	20	9	Yes	21	19	10	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing		Proposed	% Loss	Meets BRE criteria?	
Second R2 / W2	Bedroom	11.93	10.96	0.97	8	Yes	100	100	0	Yes	22	20	9	Yes	21	19	10	Yes
Second R3 / W3	Bedroom	12.13	11.10	1.03	8	Yes	100	100	0	Yes	24	22	8	Yes	22	20	9	Yes
Second R4 / W4	LKD	12.17	11.11	1.06	9	Yes	98	97	1	Yes	22	21	5	Yes	20	19	5	Yes
Third R1 / W1	LKD	12.76	11.79	0.97	8	Yes	99	98	1	Yes	24	22	8	Yes	23	21	9	Yes
Third R2 / W2	Bedroom	13.22	12.19	1.03	8	Yes	100	100	0	Yes	23	21	9	Yes	22	20	9	Yes
Third R3 / W3	Bedroom	13.43	12.33	1.10	8	Yes	100	100	0	Yes	25	23	8	Yes	23	21	9	Yes
Third R4 / W4	LKD	13.68	12.47	1.21	9	Yes	98	98	1	Yes	26	22	15	Yes	24	20	17	Yes
Fourth R1 / W1	LKD	14.02	12.97	1.05	7	Yes	99	99	0	Yes	25	24	4	Yes	24	23	4	Yes
Fourth R2 / W2	Bedroom	14.50	13.38	1.12	8	Yes	100	100	0	Yes	25	24	4	Yes	24	23	4	Yes
Fourth R3 / W3	Bedroom	14.70	13.51	1.19	8	Yes	100	100	0	Yes	26	25	4	Yes	24	23	4	Yes
Fourth R4 / W4	LKD	14.71	13.49	1.22	8	Yes	98	98	0	Yes	25	25	0	Yes	23	23	0	Yes
Fifth R1 / W1	LKD	32.72	31.53	1.19	4	Yes	99	99	0	Yes	74	73	1	Yes	28	27	4	Yes
Fifth R2 / W2	Bedroom	33.05	31.78	1.27	4	Yes	100	100	0	Yes	75	74	1	Yes	28	27	4	Yes
Fifth R3 / W3	Bedroom	33.25	31.91	1.34	4	Yes	100	100	0	Yes	77	76	1	Yes	30	29	3	Yes
Fifth R4 / W4	LKD	33.60	32.15	1.45	4	Yes	99	99	0	Yes	81	80	1	Yes	30	29	3	Yes
Sixth R1 / W1	LKD	5.73	4.61	1.12	20	Yes	100	100	0	Yes	6	5	17	Yes	6	5	17	Yes
Sixth R2 / W2	LKD	6.01	4.54	1.47	24	No	100	100	0	Yes	7	7	0	Yes	7	7	0	Yes
Seventh R1 / W1	LKD	17.71	16.49	1.22	7	Yes	99	99	0	Yes	28	27	4	Yes	26	25	4	Yes
Seventh R2 / W2	Bedroom	17.95	16.65	1.30	7	Yes	100	100	0	Yes	28	27	4	Yes	26	25	4	Yes
Seventh R3 / W3	Bedroom	17.95	16.59	1.36	8	Yes	100	100	0	Yes	28	27	4	Yes	26	25	4	Yes
Seventh R4 / W4	LKD	17.72	16.35	1.37	8	Yes	99	99	0	Yes	27	27	0	Yes	25	25	0	Yes
<b>Nethercott Bank Geoffrey Watling Way</b>																		
First R1 / W1	LKD	11.91	10.21	1.70	14	Yes	98	98	0	Yes	21	19	10	Yes	19	17	11	Yes
First R2 / W2	Bedroom	11.93	10.18	1.75	15	Yes	98	85	13	Yes	21	18	14	Yes	19	16	16	Yes
First R3 / W3	LKD	11.57	9.93	1.64	14	Yes	97	93	3	Yes	21	16	24	No	19	14	26	Yes
Second R1 / W1	LKD	13.37	11.58	1.79	13	Yes	98	98	0	Yes	22	21	5	Yes	20	19	5	Yes
Second R2 / W2	Bedroom	13.21	11.37	1.84	14	Yes	99	90	9	Yes	23	21	9	Yes	21	19	10	Yes
Second R3 / W3	Bedroom	13.07	11.25	1.82	14	Yes	97	88	9	Yes	23	21	9	Yes	21	19	10	Yes
Second R4 / W4	LKD	12.80	11.06	1.74	14	Yes	99	98	0	Yes	22	19	14	Yes	20	17	15	Yes
Third R1 / W1	LKD	14.48	12.64	1.84	13	Yes	98	98	0	Yes	25	22	12	Yes	23	20	13	Yes
Third R2 / W2	Bedroom	14.51	12.59	1.92	13	Yes	100	95	5	Yes	25	22	12	Yes	23	20	13	Yes
Third R3 / W3	Bedroom	14.36	12.44	1.92	13	Yes	100	96	4	Yes	26	24	8	Yes	24	22	8	Yes
Third R4 / W4	LKD	14.07	12.22	1.85	13	Yes	99	98	0	Yes	24	22	8	Yes	22	20	9	Yes
Fourth R1 / W1	LKD	16.01	14.07	1.94	12	Yes	99	99	0	Yes	26	25	4	Yes	24	23	4	Yes
Fourth R2 / W2	Bedroom	15.83	13.82	2.01	13	Yes	100	100	0	Yes	26	25	4	Yes	24	23	4	Yes
Fourth R3 / W3	Bedroom	15.70	13.70	2.00	13	Yes	100	100	0	Yes	26	25	4	Yes	24	23	4	Yes
Fourth R4 / W4	LKD	15.43	13.49	1.94	13	Yes	99	99	0	Yes	25	24	4	Yes	23	22	4	Yes
Fifth R1 / W1	LKD	17.01	14.96	2.05	12	Yes	99	99	0	Yes	28	28	0	Yes	26	26	0	Yes
Fifth R2 / W2	Bedroom	17.12	15.01	2.11	12	Yes	100	100	0	Yes	27	27	0	Yes	25	25	0	Yes
Fifth R3 / W3	Bedroom	17.03	14.93	2.10	12	Yes	100	100	0	Yes	27	27	0	Yes	25	25	0	Yes
Fifth R4 / W4	LKD	16.84	14.80	2.04	12	Yes	99	99	0	Yes	27	27	0	Yes	25	25	0	Yes
Sixth R1 / W1	LKD	11.78	10.02	1.76	15	Yes	100	100	0	Yes	16	15	6	Yes	16	15	6	Yes
Sixth R2 / W2	LKD	11.83	9.75	2.08	18	Yes	100	100	0	Yes	17	16	6	Yes	17	16	6	Yes
Seventh R1 / W1	LKD	38.77	36.84	1.93	5	Yes	100	100	0	Yes	88	88	0	Yes	30	30	0	Yes
Seventh R2 / W2	Bedroom	38.80	36.78	2.02	5	Yes	100	100	0	Yes	88	88	0	Yes	30	30	0	Yes
Seventh R3 / W3	Bedroom	38.83	36.76	2.07	5	Yes	100	100	0	Yes	88	88	0	Yes	30	30	0	Yes
Seventh R4 / W4	LKD	38.86	36.73	2.13	5	Yes	100	100	0	Yes	88	88	0	Yes	30	30	0	Yes
<b>Gavin Bank Geoffrey Watling Way</b>																		
First R1 / W1	LKD	11.21	8.14	3.07	27	No	96	92	4	Yes	19	13	32	No	19	13	32	Yes
First R2 / W2	Bedroom	11.31	8.07	3.24	29	No	92	99	-7	Yes	19	13	32	No	19	13	32	Yes
First R3 / W3	Bedroom	11.44	8.08	3.36	29	No	94	99	-5	Yes	19	15	21	Yes	19	15	21	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing		Proposed	% Loss	Meets BRE criteria?	
First R4 / W4	LKD	11.67	8.11	3.56	31	No	94	95	-1	Yes	21	15	29	No	21	15	29	Yes
Second R1 / W1	LKD	12.76	9.43	3.33	26	No	99	94	5	Yes	24	17	29	No	24	17	29	Yes
Second R2 / W2	Bedroom	12.99	9.53	3.46	27	No	100	99	1	Yes	24	16	33	No	24	16	33	Yes
Second R3 / W3	Bedroom	13.09	9.53	3.56	27	No	100	100	0	Yes	23	17	26	No	23	17	26	Yes
Second R4 / W4	LKD	13.03	9.39	3.64	28	No	99	99	0	Yes	23	15	35	No	23	15	35	Yes
Third R1 / W1	LKD	14.59	11.05	3.54	24	No	99	97	3	Yes	25	19	24	No	25	19	24	Yes
Third R2 / W2	Bedroom	14.65	10.99	3.66	25	No	100	99	0	Yes	26	18	31	No	26	18	31	Yes
Third R3 / W3	Bedroom	14.74	10.97	3.77	26	No	100	100	0	Yes	26	19	27	No	26	19	27	Yes
Third R4 / W4	LKD	14.94	10.97	3.97	27	No	99	99	0	Yes	27	20	26	No	27	20	26	Yes
Fourth R1 / W1	LKD	15.93	12.28	3.65	23	No	99	98	1	Yes	27	20	26	No	27	20	26	Yes
Fourth R2 / W2	Bedroom	16.17	12.42	3.75	23	No	100	100	0	Yes	27	22	19	Yes	27	22	19	Yes
Fourth R3 / W3	Bedroom	16.24	12.40	3.84	24	No	100	100	0	Yes	27	22	19	Yes	27	22	19	Yes
Fourth R4 / W4	LKD	16.12	12.23	3.89	24	No	99	99	0	Yes	27	20	26	No	27	20	26	Yes
Fifth R1 / W1	LKD	17.57	13.94	3.63	21	No	99	99	0	Yes	27	24	11	Yes	27	24	11	Yes
Fifth R2 / W2	Bedroom	17.59	13.85	3.74	21	No	100	100	0	Yes	28	24	14	Yes	28	24	14	Yes
Fifth R3 / W3	Bedroom	17.66	13.82	3.84	22	No	100	100	0	Yes	28	24	14	Yes	28	24	14	Yes
Fifth R4 / W4	LKD	17.62	13.84	3.98	22	No	99	99	0	Yes	29	26	10	Yes	29	26	10	Yes
Sixth R1 / W1	LKD	18.16	14.64	3.52	19	Yes	99	99	0	Yes	28	26	7	Yes	28	26	7	Yes
Sixth R2 / W2	Bedroom	18.38	14.75	3.63	20	Yes	100	100	0	Yes	28	26	7	Yes	28	26	7	Yes
Sixth R3 / W3	Bedroom	18.42	14.73	3.69	20	Yes	100	100	0	Yes	28	26	7	Yes	28	26	7	Yes
Sixth R4 / W4	LKD	18.26	14.55	3.71	20	Yes	99	99	0	Yes	28	25	11	Yes	28	25	11	Yes
<b>Block R1</b>																		
First R1 / W1	LKD	5.63	5.07	0.56	10	Yes	97	97	0	Yes	North Facing							
First R1 / W2		31.40	25.93	5.47	17	Yes					76	65	14	Yes	23	12	48	Yes
First R1 / W31		30.97	25.40	5.57	18	Yes					73	61	16	Yes	22	10	55	Yes
First R1 / W32		24.03	19.69	4.34	18	Yes					53	46	13	Yes	17	10	41	Yes
First R2 / W3	Bedroom	31.87	25.71	6.16	19	Yes	90	64	28	No	80	70	13	Yes	22	12	45	Yes
First R3 / W4	Bedroom	31.97	25.73	6.24	20	Yes	84	62	26	No	80	69	14	Yes	22	11	50	Yes
First R4 / W5	LKD	11.22	5.32	5.90	53	No	93	83	11	Yes	23	13	43	No	21	11	48	Yes
First R4 / W6		26.07	23.26	2.81	11	Yes					43	35	19	Yes	15	7	53	Yes
First R5 / W7	Bedroom	7.38	6.43	0.95	13	Yes	78	63	20	Yes	13	11	15	Yes	5	3	40	Yes
Second R1 / W1	LKD	6.21	5.53	0.68	11	Yes	97	97	0	Yes	North Facing							
Second R1 / W2		32.99	27.43	5.56	17	Yes					79	70	11	Yes	26	17	35	Yes
Second R1 / W30		32.54	26.90	5.64	17	Yes					77	68	12	Yes	26	17	35	Yes
Second R1 / W31		25.39	20.95	4.44	17	Yes					56	50	11	Yes	20	14	30	Yes
Second R2 / W3	Bedroom	33.46	27.23	6.23	19	Yes	96	76	20	Yes	84	73	13	Yes	26	15	42	Yes
Second R3 / W4	Bedroom	33.55	27.25	6.30	19	Yes	93	74	20	Yes	85	73	14	Yes	27	15	44	Yes
Second R4 / W5	LKD	12.61	6.64	5.97	47	No	96	85	12	Yes	26	14	46	No	24	12	50	Yes
Second R4 / W6		28.11	25.37	2.74	10	Yes					44	37	16	Yes	15	8	47	Yes
Second R5 / W7	Bedroom	8.14	7.18	0.96	12	Yes	79	66	16	Yes	13	12	8	Yes	5	4	20	Yes
Third R1 / W1	LKD	7.51	6.73	0.78	10	Yes	97	97	0	Yes	North Facing							
Third R1 / W2		34.50	28.96	5.54	16	Yes					81	72	11	Yes	28	19	32	Yes
Third R1 / W30		34.03	28.42	5.61	16	Yes					78	70	10	Yes	27	19	30	Yes
Third R1 / W31		26.67	22.23	4.44	17	Yes					57	52	9	Yes	21	16	24	Yes
Third R2 / W3	Bedroom	34.96	28.79	6.17	18	Yes	96	81	15	Yes	85	77	9	Yes	27	19	30	Yes
Third R3 / W4	Bedroom	35.04	28.79	6.25	18	Yes	96	81	15	Yes	85	78	8	Yes	27	20	26	Yes
Third R4 / W5	LKD	13.89	8.00	5.89	42	No	100	92	8	Yes	26	18	31	No	24	16	33	Yes
Third R4 / W6		30.26	27.66	2.60	9	Yes					45	40	11	Yes	15	10	33	Yes
Third R5 / W7	Bedroom	9.15	8.20	0.95	10	Yes	79	70	12	Yes	14	13	7	Yes	5	4	20	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)				Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing	Proposed	% Loss	Meets BRE criteria?	Existing	
Fourth R1 / W1	LKD	10.13	9.33	0.80	8	Yes	98	98	0	Yes	North Facing							
Fourth R1 / W2		35.90	30.51	5.39	15	Yes					81	74	9	Yes	28	21	25	Yes
Fourth R1 / W30		35.42	29.96	5.46	15	Yes					79	71	10	Yes	28	20	29	Yes
Fourth R1 / W31		27.89	23.54	4.35	16	Yes					58	52	10	Yes	22	16	27	Yes
Fourth R2 / W3	Bedroom	36.32	30.36	5.96	16	Yes	96	83	13	Yes	86	77	10	Yes	28	19	32	Yes
Fourth R3 / W4	Bedroom	36.38	30.36	6.02	17	Yes	96	84	12	Yes	86	78	9	Yes	28	20	29	Yes
Fourth R4 / W5	LKD	15.06	9.37	5.69	38	No	100	100	0	Yes	27	19	30	No	25	17	32	Yes
Fourth R4 / W6		32.49	30.08	2.41	7	Yes					47	43	9	Yes	15	11	27	Yes
Fourth R5 / W7		Bedroom	10.63	9.69	0.94	9					Yes	81	73	9	Yes	14	13	7
Fifth R1 / W1	LKD	12.94	12.14	0.80	6	Yes	98	98	0	Yes	North Facing							
Fifth R1 / W2		37.19	32.04	5.15	14	Yes					81	76	6	Yes	28	23	18	Yes
Fifth R1 / W30		36.69	31.48	5.21	14	Yes					79	73	8	Yes	28	22	21	Yes
Fifth R1 / W31		29.01	24.82	4.19	14	Yes					58	54	7	Yes	22	18	18	Yes
Fifth R2 / W3	Bedroom	37.57	31.91	5.66	15	Yes	96	85	12	Yes	87	81	7	Yes	29	23	21	Yes
Fifth R3 / W4	Bedroom	37.60	31.90	5.70	15	Yes	96	87	9	Yes	87	81	7	Yes	29	23	21	Yes
Fifth R4 / W5	LKD	16.09	10.73	5.36	33	No	100	100	0	Yes	28	22	21	No	26	20	23	Yes
Fifth R4 / W6		34.68	32.53	2.15	6	Yes					49	46	6	Yes	15	12	20	Yes
Fifth R5 / W7		Bedroom	13.15	12.23	0.92	7					Yes	84	80	5	Yes	22	22	0
Sixth R1 / W1	LKD	15.57	14.76	0.81	5	Yes	100	100	0	Yes	North Facing							
Sixth R1 / W2		38.28	33.51	4.77	12	Yes					82	77	6	Yes	29	24	17	Yes
Sixth R1 / W30		37.77	32.98	4.79	13	Yes					80	75	6	Yes	29	24	17	Yes
Sixth R1 / W31		29.92	26.06	3.86	13	Yes					60	56	7	Yes	24	20	17	Yes
Sixth R2 / W3	Bedroom	38.55	33.40	5.15	13	Yes	96	86	10	Yes	88	82	7	Yes	30	24	20	Yes
Sixth R3 / W4	Bedroom	38.57	33.39	5.18	13	Yes	96	90	6	Yes	88	82	7	Yes	30	24	20	Yes
Sixth R4 / W5	LKD	16.89	12.05	4.84	29	No	100	100	0	Yes	28	23	18	Yes	26	21	19	Yes
Sixth R4 / W6		36.56	34.67	1.89	5	Yes					50	48	4	Yes	15	13	13	Yes
Sixth R5 / W7	Bedroom	18.80	17.96	0.84	4	Yes	93	93	0	Yes	32	32	0	Yes	10	10	0	Yes
Seventh R1 / W1	LKD	17.13	16.40	0.73	4	Yes	100	100	0	Yes	North Facing							
Seventh R1 / W2		38.97	34.93	4.04	10	Yes					87	83	5	Yes	30	26	13	Yes
Seventh R1 / W33		38.59	34.54	4.05	10	Yes					82	77	6	Yes	30	25	17	Yes
Seventh R1 / W34		30.65	27.40	3.25	11	Yes					60	56	7	Yes	24	20	17	Yes
Seventh R2 / W3	Bedroom	39.09	34.78	4.31	11	Yes	96	90	7	Yes	88	83	6	Yes	30	25	17	Yes
Seventh R3 / W4	Bedroom	39.10	34.77	4.33	11	Yes	96	93	4	Yes	88	83	6	Yes	30	25	17	Yes
Seventh R4 / W5	LKD	17.26	13.26	4.00	23	No	100	100	0	Yes	28	23	18	Yes	26	21	19	Yes
Seventh R4 / W6		38.06	36.44	1.62	4	Yes					51	50	2	Yes	15	14	7	Yes
Eighth R1 / W1	Bedroom	35.84	34.40	1.44	4	Yes	99	99	0	Yes	81	81	0	Yes	26	26	0	Yes
<b>Block R2</b>																		
First R1 / W1	LKD	9.92	6.98	2.94	30	No	97	93	5	Yes	16	12	25	Yes	16	12	25	Yes
First R1 / W30		1.69	1.64	0.05	3	Yes					North Facing							
First R2 / W2		Bedroom	24.23	21.12	3.11	13					Yes	97	93	4	Yes	50	44	12
First R3 / W3	Bedroom	25.09	21.95	3.14	13	Yes	94	83	12	Yes	48	41	15	Yes	18	11	39	Yes
First R4 / W4	Bedroom	25.46	22.47	2.99	12	Yes	90	81	10	Yes	48	41	15	Yes	18	11	39	Yes
First R5 / W5	Bedroom	24.80	22.15	2.65	11	Yes	89	80	11	Yes	49	43	12	Yes	18	12	33	Yes
First R6 / W6	LKD	10.28	8.04	2.24	22	No	100	98	2	Yes	16	11	31	No	16	11	31	Yes
First R6 / W7		4.80	4.68	0.12	3	Yes					11	10	9	Yes	4	3	25	Yes
Second R1 / W1	LKD	10.48	7.60	2.88	27	No	100	96	3	Yes	16	13	19	Yes	16	13	19	Yes
Second R1 / W30		2.16	2.11	0.05	2	Yes					North Facing							
Second R2 / W2		Bedroom	25.81	22.75	3.06	12					Yes	88	86	3	Yes	53	48	9
Second R3 / W3	Bedroom	26.75	23.65	3.10	12	Yes	81	77	5	Yes	52	47	10	Yes	18	13	28	Yes
Second R4 / W4	Bedroom	27.17	24.20	2.97	11	Yes	92	85	8	Yes	52	46	12	Yes	19	13	32	Yes
Second R5 / W5	Bedroom	26.50	23.85	2.65	10	Yes	90	83	8	Yes	52	48	8	Yes	20	16	20	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)				APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing	Proposed		% Loss	Meets BRE criteria?	Existing	
Second R6 / W6	LKD	10.97	8.72	2.25	21	No	100	99	1	Yes	17	13	24	Yes	17	13	24	Yes	
Second R6 / W7		6.09	5.99	0.10	2	Yes					12	11	8	Yes	4	3	25	Yes	
Third R1 / W1	LKD	11.06	8.31	2.75	25	No	100	100	0	Yes	16	15	6	Yes	16	15	6	Yes	
Third R1 / W30		2.87	2.82	0.05	2	Yes					North Facing								
Third R2 / W2	Bedroom	27.54	24.59	2.95	11	Yes	89	87	2	Yes	58	55	5	Yes	19	16	16	Yes	
Third R3 / W3	Bedroom	28.55	25.55	3.00	11	Yes	82	79	4	Yes	57	54	5	Yes	18	15	17	Yes	
Third R4 / W4	Bedroom	29.03	26.14	2.89	10	Yes	93	89	5	Yes	59	55	7	Yes	19	15	21	Yes	
Third R5 / W5	Bedroom	28.39	25.78	2.61	9	Yes	91	86	5	Yes	57	53	7	Yes	20	16	20	Yes	
Third R6 / W6	LKD	11.72	9.48	2.24	19	Yes	100	100	0	Yes	18	14	22	Yes	18	14	22	Yes	
Third R6 / W7		7.98	7.88	0.10	1	Yes					16	16	0	Yes	5	5	0	Yes	
Fourth R1 / W1	LKD	11.82	9.22	2.60	22	No	100	100	0	Yes	17	16	6	Yes	17	16	6	Yes	
Fourth R1 / W32		3.98	3.94	0.04	1	Yes					North Facing								
Fourth R2 / W2	Bedroom	29.47	26.66	2.81	10	Yes	91	89	2	Yes	62	60	3	Yes	20	18	10	Yes	
Fourth R3 / W3	Bedroom	30.51	27.64	2.87	9	Yes	83	82	2	Yes	64	62	3	Yes	20	18	10	Yes	
Fourth R4 / W4	Bedroom	31.03	28.24	2.79	9	Yes	95	93	2	Yes	65	62	5	Yes	20	17	15	Yes	
Fourth R5 / W5	Bedroom	30.43	27.89	2.54	8	Yes	93	91	2	Yes	62	59	5	Yes	20	17	15	Yes	
Fourth R6 / W6	LKD	12.57	10.41	2.16	17	Yes	100	100	0	Yes	21	17	19	Yes	21	17	19	Yes	
Fourth R6 / W7		10.83	10.74	0.09	1	Yes					18	18	0	Yes	5	5	0	Yes	
Fifth R1 / W1	LKD	12.82	10.39	2.43	19	Yes	100	100	0	Yes	18	17	6	Yes	18	17	6	Yes	
Fifth R1 / W30		5.82	5.77	0.05	1	Yes					North Facing								
Fifth R2 / W2	Bedroom	31.49	28.86	2.63	8	Yes	94	92	2	Yes	66	64	3	Yes	20	18	10	Yes	
Fifth R3 / W3	Bedroom	32.49	29.80	2.69	8	Yes	87	86	2	Yes	69	67	3	Yes	21	19	10	Yes	
Fifth R4 / W4	Bedroom	33.02	30.38	2.64	8	Yes	96	94	2	Yes	71	68	4	Yes	23	20	13	Yes	
Fifth R5 / W5	Bedroom	32.54	30.14	2.40	7	Yes	96	95	2	Yes	70	68	3	Yes	21	19	10	Yes	
Fifth R6 / W6	LKD	13.61	11.58	2.03	15	Yes	100	100	0	Yes	21	19	10	Yes	21	19	10	Yes	
Fifth R6 / W7		15.21	15.13	0.08	1	Yes					22	22	0	Yes	7	7	0	Yes	
Sixth R1 / W1	LKD	9.61	7.45	2.16	22	No	100	100	0	Yes	11	11	0	Yes	11	11	0	Yes	
Sixth R1 / W30		9.03	8.99	0.04	0	Yes					North Facing								
Sixth R2 / W2	Bedroom	29.94	27.59	2.35	8	Yes	96	95	1	Yes	67	66	1	Yes	23	22	4	Yes	
Sixth R3 / W3	Bedroom	30.77	28.33	2.44	8	Yes	92	91	1	Yes	69	69	0	Yes	24	24	0	Yes	
Sixth R4 / W4	Bedroom	31.23	28.81	2.42	8	Yes	96	96	1	Yes	69	68	1	Yes	24	23	4	Yes	
Sixth R5 / W5	Bedroom	30.94	28.73	2.21	7	Yes	97	96	0	Yes	70	70	0	Yes	24	24	0	Yes	
Sixth R6 / W6	LKD	10.19	8.34	1.85	18	Yes	100	100	0	Yes	13	12	8	Yes	13	12	8	Yes	
Sixth R6 / W7		21.81	21.75	0.06	0	Yes					30	30	0	Yes	8	8	0	Yes	
<b>Richard Hawthorn</b>																			
First R1 / W3	LKD	33.75	26.25	7.50	22	No	100	100	0	Yes	85	71	16	Yes	27	13	52	Yes	
First R1 / W2		33.66	26.34	7.32	22	No					85	74	13	Yes	27	16	41	Yes	
First R1 / W1	LKD	9.29	8.06	1.23	13	Yes	North Facing												
First R2 / W6		14.09	10.25	3.84	27	No	98	98	0	Yes	23	16	30	No	11	4	64	No	
First R2 / W5		34.11	25.93	8.18	24	No	84	68	19	Yes	26	10	62	Yes					
First R2 / W4		34.01	25.98	8.03	24	No	84	70	17	Yes	26	12	54	Yes					
First R3 / W7	LKD	8.25	7.36	0.89	11	Yes	72	52	28	No	13	12	8	Yes	5	4	20	Yes	
First R3 / W8	LKD	10.99	10.99	0.00	0	Yes	North Facing												
Second R1 / W3		35.25	27.72	7.53	21	Yes	100	100	0	Yes	85	75	12	Yes	27	17	37	Yes	
Second R1 / W2		35.17	27.79	7.38	21	Yes	85	77	9	Yes	27	19	30	Yes					
Second R1 / W1		10.82	9.42	1.40	13	Yes	North Facing												
Second R2 / W6	LKD	15.51	11.75	3.76	24	No	98	98	0	Yes	24	18	25	No	11	5	55	Yes	
Second R2 / W5		35.55	27.45	8.10	23	Yes					85	70	18	Yes	27	12	56	Yes	
Second R2 / W4		35.47	27.48	7.99	23	Yes					85	72	15	Yes	27	14	48	Yes	
Second R3 / W7	LKD	9.22	8.38	0.84	9	Yes	88	63	29	No	14	14	0	Yes	5	5	0	Yes	
Second R3 / W8		13.19	13.19	0.00	0	Yes					North Facing								

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)				APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing	Proposed		% Loss	Meets BRE criteria?	Existing	
Third R1 / W3	LKD	36.53	29.21	7.32	20	Yes	100	100	0	Yes	87	76	13	Yes	29	18	38	Yes	
Third R1 / W2		36.47	29.27	7.20	20	Yes					87	77	11	Yes	29	19	34	Yes	
Third R1 / W1		12.41	10.88	1.53	12	Yes					<i>North Facing</i>								
Third R2 / W6	LKD	16.82	13.25	3.57	21	No	98	98	0	Yes	26	21	19	Yes	11	6	45	Yes	
Third R2 / W5		36.80	29.00	7.80	21	Yes					87	74	15	Yes	29	16	45	Yes	
Third R2 / W4		36.72	29.02	7.70	21	Yes					87	75	14	Yes	29	17	41	Yes	
Third R3 / W7	LKD	10.72	9.95	0.77	7	Yes	90	79	12	Yes	14	14	0	Yes	5	5	0	Yes	
Third R3 / W8		16.07	16.07	0.00	0	Yes					<i>North Facing</i>								
Fourth R1 / W3	LKD	37.64	30.73	6.91	18	Yes	100	100	0	Yes	88	77	13	Yes	30	19	37	Yes	
Fourth R1 / W2		37.59	30.77	6.82	18	Yes					88	78	11	Yes	30	20	33	Yes	
Fourth R1 / W1		13.96	12.38	1.58	11	Yes					<i>North Facing</i>								
Fourth R2 / W6	LKD	18.03	14.77	3.26	18	Yes	99	99	0	Yes	27	23	15	Yes	11	7	36	Yes	
Fourth R2 / W5		37.83	30.56	7.27	19	Yes					88	75	15	Yes	30	17	43	Yes	
Fourth R2 / W4		37.77	30.57	7.20	19	Yes					88	76	14	Yes	30	18	40	Yes	
Fourth R3 / W7	LKD	13.56	12.87	0.69	5	Yes	92	85	7	Yes	23	23	0	Yes	7	7	0	Yes	
Fourth R3 / W8		19.80	19.80	0.00	0	Yes					<i>North Facing</i>								
Fifth R1 / W3	LKD	38.51	32.23	6.28	16	Yes	100	100	0	Yes	88	79	10	Yes	30	21	30	Yes	
Fifth R1 / W2		38.48	32.26	6.22	16	Yes					88	80	9	Yes	30	22	27	Yes	
Fifth R1 / W1		15.42	13.92	1.50	10	Yes					<i>North Facing</i>								
Fifth R2 / W6	LKD	19.06	16.26	2.80	15	Yes	100	100	0	Yes	28	25	11	Yes	11	8	27	Yes	
Fifth R2 / W5		38.62	32.12	6.50	17	Yes					88	78	11	Yes	30	20	33	Yes	
Fifth R2 / W4		38.59	32.11	6.48	17	Yes					88	78	11	Yes	30	20	33	Yes	
Fifth R3 / W7	LKD	21.19	20.57	0.62	3	Yes	95	92	4	Yes	40	40	0	Yes	12	12	0	Yes	
Fifth R3 / W8		24.44	24.44	0.00	0	Yes					<i>North Facing</i>								
Sixth R1 / W3	LKD	38.99	33.68	5.31	14	Yes	100	100	0	Yes	88	81	8	Yes	30	23	23	Yes	
Sixth R1 / W2		38.99	33.70	5.29	14	Yes					88	81	8	Yes	30	23	23	Yes	
Sixth R1 / W1		16.76	15.41	1.35	8	Yes					<i>North Facing</i>								
Sixth R2 / W6	LKD	19.86	17.54	2.32	12	Yes	100	100	0	Yes	28	25	11	Yes	11	8	27	Yes	
Sixth R2 / W5		39.01	33.63	5.38	14	Yes					88	80	9	Yes	30	22	27	Yes	
Sixth R2 / W4		39.00	33.61	5.39	14	Yes					88	80	9	Yes	30	22	27	Yes	
Seventh R1 / W3	LKD	39.17	35.03	4.14	11	Yes	100	100	0	Yes	88	86	2	Yes	30	28	7	Yes	
Seventh R1 / W2		39.17	35.05	4.12	11	Yes					88	86	2	Yes	30	28	7	Yes	
Seventh R1 / W1		35.19	34.11	1.08	3	Yes					<i>North Facing</i>								
Seventh R2 / W6	LKD	36.53	34.66	1.87	5	Yes	100	100	0	Yes	52	49	6	Yes	15	12	20	Yes	
Seventh R2 / W5		39.18	35.01	4.17	11	Yes					88	83	6	Yes	30	25	17	Yes	
Seventh R2 / W4		39.17	34.99	4.18	11	Yes					88	83	6	Yes	30	25	17	Yes	
Seventh R3 / W7	LKD	37.07	35.53	1.54	4	Yes	100	100	0	Yes	85	85	0	Yes	27	27	0	Yes	
Seventh R3 / W8		34.67	34.67	0.00	0	Yes					<i>North Facing</i>								
<b>Solace Geoffrey Watling Way</b>																			
First R1 / W2	LKD	12.71	9.26	3.45	27	No	100	84	16	Yes	22	18	18	Yes	17	13	24	Yes	
First R1 / W1		2.25	2.18	0.07	3	Yes					<i>North Facing</i>								
First R2 / W3	Bedroom	26.43	22.86	3.57	14	Yes	98	93	6	Yes	55	49	11	Yes	19	13	32	Yes	
First R3 / W4	Bedroom	27.20	23.77	3.43	13	Yes	96	91	5	Yes	55	50	9	Yes	18	13	28	Yes	
First R4 / W5	Bedroom	27.55	24.17	3.38	12	Yes	94	87	7	Yes	56	51	9	Yes	19	14	26	Yes	
First R5 / W6	Bedroom	26.91	23.72	3.19	12	Yes	92	82	12	Yes	56	49	13	Yes	20	13	35	Yes	
First R6 / W7	LKD	12.05	9.43	2.62	22	No	100	98	2	Yes	22	18	18	Yes	17	13	24	Yes	
First R6 / W8		15.36	15.35	0.01	0	Yes					16	16	0	Yes	3	3	0	Yes	
Second R1 / W2	LKD	13.27	9.94	3.33	25	No	100	94	5	Yes	23	22	4	Yes	17	16	6	Yes	
Second R1 / W1		3.00	2.93	0.07	2	Yes					<i>North Facing</i>								
Second R2 / W3	Bedroom	28.17	24.76	3.41	12	Yes	93	88	6	Yes	60	57	5	Yes	20	17	15	Yes	
Second R3 / W4	Bedroom	29.28	26.02	3.26	11	Yes	94	90	4	Yes	61	58	5	Yes	20	17	15	Yes	
Second R4 / W5	Bedroom	29.58	26.38	3.20	11	Yes	95	92	3	Yes	62	59	5	Yes	19	16	16	Yes	



Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)				APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing	Proposed		% Loss	Meets BRE criteria?	Existing	
Second R5 / W6	Bedroom	29.11	26.08	3.03	10	Yes	96	88	8	Yes	62	57	8	Yes	20	15	25	Yes	
Second R6 / W7	LKD	11.65	9.15	2.50	21	No	100	99	1	Yes	20	15	25	No	20	15	25	Yes	
Second R6 / W8		18.88	18.88	0.00	0	Yes					24	24	0	Yes	5	5	0	Yes	
Third R1 / W2	LKD	14.02	10.88	3.14	22	No	100	100	0	Yes	25	25	0	Yes	19	19	0	Yes	
Third R1 / W1		4.22	4.15	0.07	2	Yes					<i>North Facing</i>								
Third R2 / W3	Bedroom	30.02	26.69	3.33	11	Yes	94	90	4	Yes	63	62	2	Yes	20	19	5	Yes	
Third R3 / W4	Bedroom	31.24	28.01	3.23	10	Yes	95	93	2	Yes	67	64	4	Yes	21	18	14	Yes	
Third R4 / W5	Bedroom	31.68	28.61	3.07	10	Yes	96	94	2	Yes	69	67	3	Yes	22	20	9	Yes	
Third R5 / W6	Bedroom	31.41	28.53	2.88	9	Yes	97	92	5	Yes	67	63	6	Yes	21	17	19	Yes	
Third R6 / W7	LKD	13.16	10.77	2.39	18	Yes	100	100	0	Yes	21	16	24	No	21	16	24	Yes	
Third R6 / W8		23.25	23.22	0.03	0	Yes					29	28	3	Yes	8	7	13	Yes	
Fourth R1 / W2	LKD	14.93	12.06	2.87	19	Yes	100	100	0	Yes	25	25	0	Yes	19	19	0	Yes	
Fourth R1 / W1		6.36	6.29	0.07	1	Yes					<i>North Facing</i>								
Fourth R2 / W3	Bedroom	31.91	28.73	3.18	10	Yes	96	93	3	Yes	68	67	1	Yes	20	19	5	Yes	
Fourth R3 / W4	Bedroom	33.15	29.96	3.19	10	Yes	96	94	2	Yes	70	69	1	Yes	21	20	5	Yes	
Fourth R4 / W5	Bedroom	33.69	30.56	3.13	9	Yes	97	95	2	Yes	74	73	1	Yes	24	23	4	Yes	
Fourth R5 / W6	Bedroom	33.68	30.65	3.03	9	Yes	97	94	4	Yes	74	71	4	Yes	24	21	13	Yes	
Fourth R6 / W7	LKD	14.71	12.09	2.62	18	Yes	100	100	0	Yes	22	18	18	Yes	22	18	18	Yes	
Fourth R6 / W8		28.35	28.20	0.15	1	Yes					39	39	0	Yes	10	10	0	Yes	
Fifth R1 / W2	LKD	10.09	7.55	2.54	25	No	100	100	0	Yes	14	14	0	Yes	14	14	0	Yes	
Fifth R1 / W1		10.33	10.26	0.07	1	Yes					<i>North Facing</i>								
Fifth R2 / W3	Bedroom	29.43	26.54	2.89	10	Yes	97	95	2	Yes	65	65	0	Yes	22	22	0	Yes	
Fifth R3 / W4	Bedroom	30.47	27.49	2.98	10	Yes	96	95	2	Yes	70	70	0	Yes	25	25	0	Yes	
Fifth R4 / W5	Bedroom	30.98	27.94	3.04	10	Yes	97	95	2	Yes	70	70	0	Yes	25	25	0	Yes	
Fifth R5 / W6	Bedroom	31.13	28.07	3.06	10	Yes	97	94	3	Yes	71	70	1	Yes	25	24	4	Yes	
Fifth R6 / W7	LKD	11.67	8.91	2.76	24	No	100	100	0	Yes	17	15	12	Yes	17	15	12	Yes	
Fifth R6 / W8		33.58	33.36	0.22	1	Yes					45	45	0	Yes	12	12	0	Yes	
<b>Patricia Hollis House Watling Way</b>																			
First R1 / W1	LKD	26.00	23.83	2.17	8	Yes	99	97	2	Yes	<i>North Facing</i>								
First R1 / W2		15.41	7.61	7.80	51	No					24	13	46	No	23	12	48	Yes	
First R2 / W3	Bedroom	35.59	26.24	9.35	26	No	98	83	15	Yes	85	68	20	Yes	27	10	63	Yes	
First R3 / W4	Bedroom	35.66	26.18	9.48	27	No	97	79	19	Yes	85	67	21	Yes	27	9	67	Yes	
First R4 / W5	LKD	14.82	6.98	7.84	53	No	99	93	6	Yes	24	14	42	No	22	12	45	Yes	
First R5 / W6	Bedroom	35.79	25.74	10.05	28	No	97	83	15	Yes	85	69	19	Yes	27	12	56	Yes	
First R6 / W7	Bedroom	35.86	25.55	10.31	29	No	96	60	38	No	85	70	18	Yes	27	13	52	Yes	
First R7 / W8	Bedroom	35.93	25.40	10.53	29	No	96	74	24	No	85	67	21	Yes	27	10	63	Yes	
First R8 / W9	Bedroom	35.99	25.27	10.72	30	No	97	74	24	No	85	68	20	Yes	27	11	59	Yes	
First R9 / W10	LKD	16.42	6.39	10.03	61	No	100	89	11	Yes	29	14	52	No	26	12	54	Yes	
First R9 / W11		37.88	33.65	4.23	11	Yes					49	42	14	Yes	15	8	47	Yes	
Second R1 / W1	LKD	28.36	26.23	2.13	8	Yes	99	98	1	Yes	<i>North Facing</i>								
Second R1 / W3		16.39	8.90	7.49	46	No					25	14	44	No	24	13	46	Yes	
Second R2 / W4	Bedroom	36.69	27.69	9.00	25	Yes	98	84	14	Yes	86	72	16	Yes	28	14	50	Yes	
Second R3 / W5	Bedroom	36.75	27.64	9.11	25	Yes	97	80	18	Yes	86	72	16	Yes	28	14	50	Yes	
Second R4 / W6	LKD	15.68	8.17	7.51	48	No	99	94	5	Yes	24	16	33	No	22	14	36	Yes	
Second R5 / W7	Bedroom	36.86	27.25	9.61	26	Yes	97	88	9	Yes	85	73	14	Yes	27	15	44	Yes	
Second R6 / W8	Bedroom	36.91	27.10	9.81	27	Yes	96	70	28	No	86	74	14	Yes	28	16	43	Yes	
Second R7 / W9	Bedroom	36.97	26.98	9.99	27	No	96	85	12	Yes	86	70	19	Yes	28	13	54	Yes	
Second R8 / W10	Bedroom	37.02	26.87	10.15	27	No	97	86	12	Yes	87	71	18	Yes	29	14	52	Yes	
Second R9 / W11	LKD	17.30	7.84	9.46	55	No	100	92	8	Yes	30	16	47	No	27	13	52	Yes	
Second R9 / W12		38.68	34.68	4.00	10	Yes					50	45	10	Yes	15	10	33	Yes	
Third R1 / W1	LKD	30.79	28.73	2.06	7	Yes	99	98	1	Yes	<i>North Facing</i>								
Third R1 / W2		17.22	10.22	7.00	41	No					27	16	41	No	26	15	42	Yes	

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing		Proposed	% Loss	Meets BRE criteria?	
Third R2 / W3	Bedroom	37.58	29.18	8.40	22	Yes	98	85	13	Yes	88	74	16	Yes	30	16	47	Yes
Third R3 / W4	Bedroom	37.63	29.12	8.51	23	Yes	97	81	16	Yes	88	76	14	Yes	30	18	40	Yes
Third R4 / W5	LKD	16.38	9.38	7.00	43	No	99	95	4	Yes	26	18	31	No	24	16	33	Yes
Third R5 / W6	Bedroom	37.72	28.79	8.93	24	Yes	97	89	8	Yes	88	74	16	Yes	30	16	47	Yes
Third R6 / W7	Bedroom	37.78	28.68	9.10	24	Yes	96	76	21	No	88	75	15	Yes	30	17	43	Yes
Third R7 / W8	Bedroom	37.84	28.60	9.24	24	Yes	96	87	10	Yes	88	73	17	Yes	30	15	50	Yes
Third R8 / W9	Bedroom	37.88	28.50	9.38	25	Yes	97	88	9	Yes	88	75	15	Yes	30	17	43	Yes
Third R9 / W10	LKD	18.02	9.32	8.70	48	No	100	94	6	Yes	31	18	42	No	28	15	46	Yes
Third R9 / W11		39.27	35.56	3.71	9	Yes					50	45	10	Yes	15	10	33	Yes
Fourth R1 / W1	LKD	33.22	31.26	1.96	6	Yes	99	98	0	Yes	North Facing							
Fourth R1 / W2		17.91	11.54	6.37	36	No					27	18	33	No	26	17	35	Yes
Fourth R2 / W3	Bedroom	38.28	30.67	7.61	20	Yes	98	89	9	Yes	88	78	11	Yes	30	20	33	Yes
Fourth R3 / W4	Bedroom	38.32	30.62	7.70	20	Yes	97	84	13	Yes	88	78	11	Yes	30	20	33	Yes
Fourth R4 / W5	LKD	16.92	10.63	6.29	37	No	99	96	3	Yes	26	21	19	Yes	24	19	21	Yes
Fourth R5 / W6	Bedroom	38.39	30.38	8.01	21	Yes	97	90	7	Yes	88	77	13	Yes	30	19	37	Yes
Fourth R6 / W7	Bedroom	38.42	30.29	8.13	21	Yes	96	80	17	Yes	88	78	11	Yes	30	20	33	Yes
Fourth R7 / W8	Bedroom	38.45	30.22	8.23	21	Yes	96	90	7	Yes	88	77	13	Yes	30	19	37	Yes
Fourth R8 / W9	Bedroom	38.48	30.16	8.32	22	Yes	97	90	7	Yes	88	77	13	Yes	30	19	37	Yes
Fourth R9 / W10	LKD	18.48	10.82	7.66	41	No	100	98	2	Yes	31	20	35	No	28	17	39	Yes
Fourth R9 / W11		39.56	36.27	3.29	8	Yes					50	46	8	Yes	15	11	27	Yes
Fifth R1 / W1	LKD	18.96	13.07	5.89	31	No	100	100	0	Yes	28	22	21	No	26	20	23	Yes
Fifth R1 / W8		29.72	28.00	1.72	6	Yes					North Facing							
Fifth R2 / W2	Bedroom	38.83	31.94	6.89	18	Yes	97	94	4	Yes	88	80	9	Yes	30	22	27	Yes
Fifth R3 / W3	Bedroom	38.84	31.88	6.96	18	Yes	96	85	12	Yes	88	79	10	Yes	30	21	30	Yes
Fifth R4 / W4	Bedroom	38.86	31.84	7.02	18	Yes	96	93	3	Yes	88	78	11	Yes	30	20	33	Yes
Fifth R5 / W5	Bedroom	38.87	31.80	7.07	18	Yes	97	93	4	Yes	88	77	13	Yes	30	19	37	Yes
Fifth R6 / W6	LKD	18.79	12.31	6.48	34	No	100	99	1	Yes	31	22	29	No	28	19	32	Yes
Fifth R6 / W7		39.60	36.77	2.83	7	Yes					50	46	8	Yes	15	11	27	Yes
Sixth R1 / W1	LKD	35.68	30.87	4.81	13	Yes	100	100	0	Yes	71	69	3	Yes	26	24	8	Yes
Sixth R1 / W8		33.94	32.43	1.51	4	Yes					North Facing							
Sixth R2 / W2	Bedroom	39.07	33.46	5.61	14	Yes	97	97	0	Yes	88	84	5	Yes	30	26	13	Yes
Sixth R3 / W3	Bedroom	39.08	33.44	5.64	14	Yes	96	91	5	Yes	88	83	6	Yes	30	25	17	Yes
Sixth R4 / W4	Bedroom	39.08	33.43	5.65	14	Yes	96	96	0	Yes	88	83	6	Yes	30	25	17	Yes
Sixth R5 / W5	Bedroom	39.09	33.41	5.68	15	Yes	97	97	0	Yes	88	82	7	Yes	30	24	20	Yes
Sixth R6 / W6	LKD	18.97	13.78	5.19	27	No	100	99	1	Yes	31	25	19	Yes	28	22	21	Yes
Sixth R6 / W7		39.61	37.25	2.36	6	Yes					50	47	6	Yes	15	12	20	Yes
<b>Norada Geoffrey Watling Way</b>																		
First R1 / W1	LKD	4.04	4.05	-0.01	0	Yes	62	61	2	Yes	North Facing							
First R1 / W2		12.97	12.88	0.09	1	Yes					31	31	0	Yes	5	5	0	Yes
First R2 / W3	LKD	0.56	0.28	0.28	50	No	38	18	52	No	1	1	0	Yes	1	1	0	Yes
First R3 / W4	Bedroom	10.72	10.72	0.00	0	Yes	29	29	0	Yes	30	30	0	Yes	0	0	100	Yes
First R4 / W5	Bedroom	10.31	10.31	0.00	0	Yes	22	22	0	Yes	33	33	0	Yes	0	0	100	Yes
Second R1 / W1	LKD	4.45	4.46	-0.01	0	Yes	62	61	2	Yes	North Facing							
Second R1 / W2		15.02	14.90	0.12	1	Yes					34	34	0	Yes	5	5	0	Yes
Second R2 / W3	LKD	0.61	0.34	0.27	44	No	39	22	44	No	1	1	0	Yes	1	1	0	Yes
Second R3 / W4	Bedroom	12.95	12.95	0.00	0	Yes	36	36	0	Yes	40	40	0	Yes	0	0	100	Yes
Second R4 / W5	Bedroom	12.48	12.48	0.00	0	Yes	29	29	0	Yes	40	40	0	Yes	1	1	0	Yes
Third R1 / W1	LKD	4.86	4.87	-0.01	0	Yes	63	62	2	Yes	North Facing							
Third R1 / W2		17.55	17.40	0.15	1	Yes					43	43	0	Yes	7	7	0	Yes
Third R2 / W3	LKD	0.73	0.47	0.26	36	No	40	26	35	No	1	1	0	Yes	1	1	0	Yes
Third R3 / W4	Bedroom	15.77	15.77	0.00	0	Yes	50	50	0	Yes	48	48	0	Yes	1	1	0	Yes
Third R4 / W5	Bedroom	15.25	15.25	0.00	0	Yes	36	36	0	Yes	48	48	0	Yes	3	3	0	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing		Proposed	% Loss	Meets BRE criteria?	
Fourth R1 / W1	LKD	5.32	5.33	-0.01	0	Yes	64	63	1	Yes	North Facing							
Fourth R1 / W2		20.61	20.43	0.18	1	Yes					49	49	0	Yes	9	9	0	Yes
Fourth R2 / W3	LKD	1.01	0.76	0.25	25	No	41	30	27	No	1	1	0	Yes	1	1	0	Yes
Fourth R3 / W4	Bedroom	19.34	19.34	0.00	0	Yes	59	59	0	Yes	55	55	0	Yes	3	3	0	Yes
Fourth R4 / W5	Bedroom	18.80	18.80	0.00	0	Yes	42	42	0	Yes	57	57	0	Yes	5	5	0	Yes
Fifth R1 / W1	LKD	6.04	6.04	0.00	0	Yes	66	66	1	Yes	North Facing							
Fifth R1 / W2		24.22	23.95	0.27	1	Yes					53	53	0	Yes	12	12	0	Yes
Fifth R2 / W3	LKD	1.69	1.42	0.27	16	Yes	45	39	14	Yes	2	2	0	Yes	1	1	0	Yes
Fifth R3 / W4	Bedroom	23.77	23.71	0.06	0	Yes	66	66	0	Yes	66	66	0	Yes	8	8	0	Yes
Fifth R4 / W5	Bedroom	23.28	23.23	0.05	0	Yes	49	49	0	Yes	64	64	0	Yes	6	6	0	Yes
Sixth R1 / W1	LKD	7.10	7.08	0.02	0	Yes	71	71	0	Yes	North Facing							
Sixth R1 / W2		28.11	27.69	0.42	1	Yes					59	59	0	Yes	18	18	0	Yes
Sixth R2 / W3	LKD	2.51	2.23	0.28	11	Yes	61	59	3	Yes	3	3	0	Yes	2	2	0	Yes
Sixth R3 / W4	Bedroom	28.92	28.79	0.13	0	Yes	82	82	0	Yes	76	76	0	Yes	18	18	0	Yes
Sixth R4 / W5	Bedroom	28.49	28.33	0.16	1	Yes	67	67	0	Yes	74	73	1	Yes	16	15	6	Yes
Seventh R1 / W1	LKD	8.04	7.90	0.14	2	Yes	89	89	0	Yes	North Facing							
Seventh R1 / W2		31.71	31.10	0.61	2	Yes					65	65	0	Yes	24	24	0	Yes
Seventh R2 / W3	LKD	5.83	5.47	0.36	6	Yes	81	81	0	Yes	10	10	0	Yes	9	9	0	Yes
Seventh R3 / W4	Bedroom	34.25	33.96	0.29	1	Yes	97	97	0	Yes	86	86	0	Yes	28	28	0	Yes
Seventh R4 / W5	Bedroom	34.02	33.76	0.26	1	Yes	98	98	0	Yes	86	86	0	Yes	28	28	0	Yes
Eighth R1 / W1	LKD	8.61	8.48	0.13	2	Yes	94	94	0	Yes	North Facing							
Eighth R1 / W2		34.74	33.66	1.08	3	Yes					67	67	0	Yes	26	26	0	Yes
Eighth R2 / W3	LKD	8.63	7.88	0.75	9	Yes	84	84	0	Yes	11	11	0	Yes	10	10	0	Yes
Eighth R3 / W4	Bedroom	38.85	37.69	1.16	3	Yes	97	97	0	Yes	88	88	0	Yes	30	30	0	Yes
Eighth R4 / W5	Bedroom	38.90	37.70	1.20	3	Yes	98	98	0	Yes	88	88	0	Yes	30	30	0	Yes
Ninth R1 / W1	LKD	21.14	21.05	0.09	0	Yes	94	94	0	Yes	North Facing							
Ninth R1 / W2		37.38	36.46	0.92	2	Yes					80	80	0	Yes	26	26	0	Yes
Ninth R2 / W3	LKD	21.54	20.92	0.62	3	Yes	84	84	0	Yes	34	34	0	Yes	10	10	0	Yes
Ninth R3 / W4	Bedroom	39.43	38.41	1.02	3	Yes	97	97	0	Yes	88	88	0	Yes	30	30	0	Yes
Ninth R4 / W5	Bedroom	39.43	38.42	1.01	3	Yes	98	98	0	Yes	88	88	0	Yes	30	30	0	Yes
<b>White Moth Geoffrey Watling Way</b>																		
First R1 / W1	LKD	0.00	0.00	0.00	100	Yes	1	1	0	Yes	0	0	100	Yes	0	0	100	Yes
First R1 / W2		0.00	0.00	0.00	100	Yes					0	0	100	Yes	0	0	100	Yes
First R2 / W3	LKD	0.00	0.00	0.00	100	Yes	0	0	100	Yes	0	0	100	Yes	0	0	100	Yes
First R2 / W4		0.03	0.00	0.03	100	No					0	0	100	Yes	0	0	100	Yes
First R3 / W5	LKD	12.88	12.88	0.00	0	Yes	14	14	0	Yes	38	38	0	Yes	1	1	0	Yes
First R4 / W6	Bedroom	0.00	0.00	0.00	100	Yes	3	3	0	Yes	0	0	100	Yes	0	0	100	Yes
First R5 / W7	LKD	0.00	0.00	0.00	100	Yes	14	14	0	Yes	0	0	100	Yes	0	0	100	Yes
First R5 / W8		0.01	0.01	0.00	0	Yes					0	0	100	Yes	0	0	100	Yes
Second R1 / W1	LKD	0.00	0.00	0.00	100	Yes	6	6	0	Yes	0	0	100	Yes	0	0	100	Yes
Second R1 / W2		0.00	0.00	0.00	100	Yes					0	0	100	Yes	0	0	100	Yes
Second R2 / W3	LKD	0.00	0.00	0.00	100	Yes	1	1	5	Yes	0	0	100	Yes	0	0	100	Yes
Second R2 / W4		0.03	0.03	0.00	0	Yes					0	0	100	Yes	0	0	100	Yes
Second R3 / W5	LKD	15.85	15.85	0.00	0	Yes	18	18	0	Yes	48	48	0	Yes	2	2	0	Yes
Second R4 / W6	Bedroom	0.00	0.00	0.00	100	Yes	7	7	0	Yes	0	0	100	Yes	0	0	100	Yes
Second R5 / W7	LKD	0.05	0.05	0.00	0	Yes	24	24	0	Yes	0	0	100	Yes	0	0	100	Yes
Second R5 / W8		0.11	0.11	0.00	0	Yes					0	0	100	Yes	0	0	100	Yes
Third R1 / W1	LKD	0.00	0.00	0.00	100	Yes	18	18	0	Yes	0	0	100	Yes	0	0	100	Yes
Third R1 / W2		0.00	0.00	0.00	100	Yes					0	0	100	Yes	0	0	100	Yes
Third R2 / W3	LKD	0.00	0.00	0.00	100	Yes	12	12	0	Yes	0	0	100	Yes	0	0	100	Yes
Third R2 / W4		0.03	0.03	0.00	0	Yes					0	0	100	Yes	0	0	100	Yes
Third R3 / W5	LKD	19.63	19.63	0.00	0	Yes	24	24	0	Yes	56	56	0	Yes	5	5	0	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)				APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing	Proposed		% Loss	Meets BRE criteria?	Existing	
Third R4 / W6	Bedroom	0.05	0.05	0.00	0	Yes	17	17	0	Yes	1	1	0	Yes	1	1	0	Yes	
Third R5 / W7	LKD	0.18	0.18	0.00	0	Yes	40	40	0	Yes	0	0	100	Yes	0	0	100	Yes	
Third R5 / W8		0.31	0.31	0.00	0	Yes					1	1	0	Yes	1	1	0	Yes	
Fourth R1 / W1	LKD	0.48	0.48	0.00	0	Yes	40	40	0	Yes	1	1	0	Yes	1	1	0	Yes	
Fourth R1 / W2		0.38	0.38	0.00	0	Yes					1	1	0	Yes	1	1	0	Yes	
Fourth R2 / W3	LKD	0.38	0.37	0.01	3	Yes	42	42	1	Yes	0	0	100	Yes	0	0	100	Yes	
Fourth R2 / W4		0.38	0.38	0.00	0	Yes					0	0	100	Yes	0	0	100	Yes	
Fourth R3 / W5	LKD	24.22	24.22	0.00	0	Yes	39	39	0	Yes	65	65	0	Yes	12	12	0	Yes	
Fourth R4 / W6	Bedroom	0.98	0.98	0.00	0	Yes	40	40	0	Yes	2	2	0	Yes	2	2	0	Yes	
Fourth R5 / W7	LKD	1.14	1.09	0.05	4	Yes	63	62	0	Yes	2	2	0	Yes	2	2	0	Yes	
Fourth R5 / W8		1.13	1.11	0.02	2	Yes					1	1	0	Yes	1	1	0	Yes	
Fifth R1 / W1	LKD	1.08	0.97	0.11	10	Yes	57	56	0	Yes	1	1	0	Yes	1	1	0	Yes	
Fifth R1 / W2		0.88	0.87	0.01	1	Yes					1	1	0	Yes	1	1	0	Yes	
Fifth R2 / W3	LKD	1.88	1.81	0.07	4	Yes	77	77	0	Yes	2	2	0	Yes	2	2	0	Yes	
Fifth R2 / W4		1.73	1.67	0.06	3	Yes					3	3	0	Yes	3	3	0	Yes	
Fifth R3 / W5	LKD	29.39	29.33	0.06	0	Yes	84	80	5	Yes	75	75	0	Yes	19	19	0	Yes	
Fifth R4 / W6	Bedroom	3.85	3.76	0.09	2	Yes	69	69	0	Yes	7	7	0	Yes	7	7	0	Yes	
Fifth R5 / W7	LKD	4.45	4.23	0.22	5	Yes	93	93	0	Yes	7	7	0	Yes	7	7	0	Yes	
Fifth R5 / W8		4.07	3.92	0.15	4	Yes					7	7	0	Yes	7	7	0	Yes	
Sixth R1 / W1	LKD	3.19	2.85	0.34	11	Yes	73	73	1	Yes	4	3	25	Yes	4	3	25	Yes	
Sixth R1 / W2		3.21	3.03	0.18	6	Yes					4	4	0	Yes	4	4	0	Yes	
Sixth R2 / W3	LKD	3.19	2.47	0.72	23	No	82	82	0	Yes	3	2	33	Yes	3	2	33	Yes	
Sixth R2 / W4		2.97	2.48	0.49	16	Yes					4	4	0	Yes	4	4	0	Yes	
Sixth R3 / W5	LKD	34.06	32.94	1.12	3	Yes	94	94	0	Yes	80	79	1	Yes	24	23	4	Yes	
Sixth R4 / W6	Bedroom	6.44	5.44	1.00	16	Yes	78	78	0	Yes	8	8	0	Yes	8	8	0	Yes	
Sixth R5 / W7	LKD	7.18	5.99	1.19	17	Yes	96	96	0	Yes	8	7	13	Yes	8	7	13	Yes	
Sixth R5 / W8		6.60	5.63	0.97	15	Yes					8	8	0	Yes	8	8	0	Yes	
Seventh R1 / W1	LKD	6.68	6.25	0.43	6	Yes	95	95	0	Yes	11	10	9	Yes	11	10	9	Yes	
Seventh R1 / W2		6.97	6.79	0.18	3	Yes					10	10	0	Yes	10	10	0	Yes	
Seventh R2 / W3	LKD	6.01	5.24	0.77	13	Yes	92	92	0	Yes	8	7	13	Yes	8	7	13	Yes	
Seventh R2 / W4		5.94	5.49	0.45	8	Yes					8	8	0	Yes	8	8	0	Yes	
Seventh R3 / W5	LKD	36.98	35.84	1.14	3	Yes	98	98	0	Yes	85	84	1	Yes	28	27	4	Yes	
Seventh R4 / W6	Bedroom	32.42	31.20	1.22	4	Yes	94	94	0	Yes	69	68	1	Yes	26	25	4	Yes	
Eighth R1 / W1	LKD	29.29	28.19	1.10	4	Yes	98	98	0	Yes	62	62	0	Yes	23	23	0	Yes	
Eighth R1 / W2		36.90	35.64	1.26	3	Yes					77	77	0	Yes	28	28	0	Yes	
<b>Olive Geoffrey Watling Way</b>																			
First R1 / W1	LKD	1.04	1.00	0.04	4	Yes	59	59	0	Yes	2	2	0	Yes	2	2	0	Yes	
First R1 / W2		1.78	1.84	-0.06	-3	Yes					2	2	0	Yes	2	2	0	Yes	
First R2 / W3	Bedroom	21.29	21.06	0.23	1	Yes	76	76	0	Yes	60	59	2	Yes	9	8	11	Yes	
First R3 / W4	Bedroom	22.02	21.50	0.52	2	Yes	74	74	0	Yes	59	58	2	Yes	9	8	11	Yes	
First R4 / W5	LKD	2.28	1.53	0.75	33	No	74	60	19	Yes	7	5	29	Yes	5	3	40	Yes	
First R5 / W6	LKD	21.11	20.22	0.89	4	Yes	98	98	0	Yes	56	54	4	Yes	11	9	18	Yes	
First R5 / W7		5.75	5.35	0.40	7	Yes					9	8	11	Yes	3	2	33	Yes	
Second R1 / W1	LKD	1.46	1.36	0.10	7	Yes	65	65	0	Yes	2	2	0	Yes	2	2	0	Yes	
Second R1 / W2		2.23	2.25	-0.02	-1	Yes					2	2	0	Yes	2	2	0	Yes	
Second R2 / W3	Bedroom	24.44	24.20	0.24	1	Yes	83	83	0	Yes	64	64	0	Yes	11	11	0	Yes	
Second R3 / W4	Bedroom	25.22	24.71	0.51	2	Yes	83	83	0	Yes	66	65	2	Yes	12	11	8	Yes	
Second R4 / W5	LKD	2.72	1.97	0.75	28	No	82	80	2	Yes	8	6	25	Yes	6	4	33	Yes	
Second R5 / W6	LKD	23.95	23.04	0.91	4	Yes	98	98	0	Yes	59	57	3	Yes	14	12	14	Yes	
Second R5 / W7		6.64	6.26	0.38	6	Yes					10	9	10	Yes	3	2	33	Yes	
Third R1 / W1	LKD	2.91	2.76	0.15	5	Yes	74	74	0	Yes	4	4	0	Yes	4	4	0	Yes	
Third R1 / W2		3.31	3.28	0.03	1	Yes					4	4	0	Yes	4	4	0	Yes	

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss	Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)	% Loss	Meets BRE criteria?	Existing	Proposed	% Loss	Meets BRE criteria?	Existing	Proposed	% Loss	Meets BRE criteria?
Third R2 / W3	Bedroom	27.79	27.55	0.24	1	Yes	90	90	0	Yes	72	72	0	Yes	17	17	0	Yes
Third R3 / W4	Bedroom	28.52	28.03	0.49	2	Yes	90	90	0	Yes	72	71	1	Yes	17	16	6	Yes
Third R4 / W5	LKD	3.32	2.60	0.72	22	No	88	87	0	Yes	9	8	11	Yes	7	6	14	Yes
Third R5 / W6	LKD	26.59	25.66	0.93	3	Yes	99	99	0	Yes	64	63	2	Yes	19	18	5	Yes
Third R5 / W7		7.37	7.01	0.36	5	Yes					10	9	10	Yes	3	2	33	Yes
Fourth R1 / W1	LKD	5.43	5.21	0.22	4	Yes	90	90	0	Yes	8	8	0	Yes	8	8	0	Yes
Fourth R1 / W2		5.46	5.39	0.07	1	Yes					5	5	0	Yes	5	5	0	Yes
Fourth R2 / W3	Bedroom	31.25	30.91	0.34	1	Yes	97	97	0	Yes	76	76	0	Yes	20	20	0	Yes
Fourth R3 / W4	Bedroom	31.78	31.26	0.52	2	Yes	96	96	0	Yes	77	77	0	Yes	21	21	0	Yes
Fourth R4 / W5	LKD	4.61	3.96	0.65	14	Yes	92	92	0	Yes	9	8	11	Yes	7	6	14	Yes
Fourth R5 / W6	LKD	29.55	28.64	0.91	3	Yes	100	100	0	Yes	68	67	1	Yes	23	22	4	Yes
Fourth R5 / W7		20.14	19.81	0.33	2	Yes					29	28	3	Yes	5	4	20	Yes
Fifth R1 / W1	LKD	24.75	24.32	0.43	2	Yes	95	95	0	Yes	56	55	2	Yes	21	20	5	Yes
Fifth R1 / W2		25.13	24.89	0.24	1	Yes					46	46	0	Yes	19	19	0	Yes
Fifth R2 / W3	Bedroom	34.65	34.09	0.56	2	Yes	98	98	0	Yes	83	82	1	Yes	26	25	4	Yes
Fifth R3 / W4	Bedroom	34.93	34.27	0.66	2	Yes	97	97	0	Yes	85	84	1	Yes	27	26	4	Yes
Fifth R4 / W5	LKD	18.26	17.62	0.64	4	Yes	99	99	0	Yes	38	37	3	Yes	11	10	9	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing		Proposed	% Loss	Meets BRE criteria?	
<b>Brennan Bank Geoffrey Watling Way</b>																		
First R1 / W1	LKD	8.80	7.89	0.91	10	Yes	99	98	0	Yes	17	15	12	Yes	14	12	14	Yes
First R2 / W2	Bedroom	8.62	7.65	0.97	11	Yes	100	100	0	Yes	15	12	20	Yes	14	11	21	Yes
First R3 / W3	Bedroom	8.51	7.50	1.01	12	Yes	100	100	0	Yes	15	12	20	Yes	14	11	21	Yes
First R4 / W4	LKD	8.39	7.29	1.10	13	Yes	95	94	2	Yes	14	12	14	Yes	13	11	15	Yes
First R5 / W5	Bedroom	8.30	7.09	1.21	15	Yes	99	99	0	Yes	13	11	15	Yes	12	10	17	Yes
First R5 / W6		8.58	7.14	1.44	17	Yes					15	11	27	Yes	14	10	29	Yes
First R6 / W7	Bedroom	3.42	2.64	0.78	23	No	78	48	39	No	7	5	29	Yes	6	4	33	Yes
First R7 / W8	LKD	3.76	3.13	0.63	17	Yes	36	26	28	No	9	7	22	Yes	8	6	25	Yes
First R8 / W9	LKD	4.03	3.71	0.32	8	Yes	31	27	14	Yes	7	6	14	Yes	6	5	17	Yes
First R9 / W10	Bedroom	3.05	2.82	0.23	8	Yes	36	36	0	Yes	9	9	0	Yes	8	8	0	Yes
First R10 / W11	Bedroom	1.95	1.75	0.20	10	Yes	30	30	0	Yes	7	7	0	Yes	3	3	0	Yes
First R11 / W12	LKD	1.46	1.31	0.15	10	Yes	18	18	1	Yes	5	5	0	Yes	2	2	0	Yes
Second R1 / W1	LKD	10.02	8.91	1.11	11	Yes	99	99	0	Yes	16	16	0	Yes	15	15	0	Yes
Second R2 / W2	Bedroom	10.05	8.85	1.20	12	Yes	100	100	0	Yes	17	15	12	Yes	16	14	13	Yes
Second R3 / W3	Bedroom	9.97	8.72	1.25	13	Yes	100	100	0	Yes	16	14	13	Yes	15	13	13	Yes
Second R4 / W4	LKD	9.87	8.52	1.35	14	Yes	96	95	1	Yes	16	13	19	Yes	15	12	20	Yes
Second R5 / W5	Bedroom	9.71	8.32	1.39	14	Yes	99	90	9	Yes	15	12	20	Yes	14	11	21	Yes
Second R6 / W6	Bedroom	8.82	7.80	1.02	12	Yes	95	95	0	Yes	13	12	8	Yes	12	11	8	Yes
Second R7 / W7	Bedroom	4.43	3.39	1.04	23	No	81	55	32	No	11	10	9	Yes	10	9	10	Yes
Second R8 / W8	LKD	4.29	3.65	0.64	15	Yes	38	29	23	No	10	9	10	Yes	9	8	11	Yes
Second R9 / W9	LKD	4.53	4.20	0.33	7	Yes	32	29	8	Yes	9	9	0	Yes	8	8	0	Yes
Second R10 / W10	Bedroom	3.55	3.30	0.25	7	Yes	37	37	0	Yes	11	11	0	Yes	8	8	0	Yes
Second R11 / W11	Bedroom	2.14	1.92	0.22	10	Yes	31	31	0	Yes	7	7	0	Yes	3	3	0	Yes
Second R12 / W12	LKD	0.96	0.77	0.19	20	Yes	17	17	1	Yes	4	4	0	Yes	2	2	0	Yes
Third R1 / W1	LKD	11.51	10.27	1.24	11	Yes	100	100	0	Yes	20	20	0	Yes	17	17	0	Yes
Third R2 / W2	Bedroom	11.38	10.03	1.35	12	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes
Third R3 / W3	Bedroom	11.31	9.89	1.42	13	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes
Third R4 / W4	LKD	11.22	9.70	1.52	14	Yes	96	95	1	Yes	19	18	5	Yes	18	17	6	Yes
Third R5 / W5	Bedroom	11.17	9.54	1.63	15	Yes	99	96	4	Yes	19	18	5	Yes	18	17	6	Yes
Third R6 / W6	Bedroom	11.48	9.73	1.75	15	Yes	97	97	0	Yes	21	20	5	Yes	20	19	5	Yes
Third R7 / W7	Bedroom	4.65	3.71	0.94	20	Yes	82	61	25	No	9	9	0	Yes	8	8	0	Yes
Third R8 / W8	LKD	4.93	4.13	0.80	16	Yes	45	32	29	No	10	10	0	Yes	9	9	0	Yes
Third R9 / W9	LKD	5.62	5.12	0.50	9	Yes	33	29	10	Yes	10	10	0	Yes	8	8	0	Yes
Third R10 / W10	Bedroom	3.94	3.59	0.35	9	Yes	37	37	0	Yes	9	9	0	Yes	8	8	0	Yes
Third R11 / W11	Bedroom	2.52	2.22	0.30	12	Yes	32	32	0	Yes	7	7	0	Yes	3	3	0	Yes
Third R12 / W12	LKD	1.98	1.74	0.24	12	Yes	21	21	1	Yes	5	5	0	Yes	2	2	0	Yes
Fourth R1 / W1	LKD	12.36	11.01	1.35	11	Yes	99	99	0	Yes	21	20	5	Yes	20	19	5	Yes
Fourth R2 / W2	Bedroom	12.52	11.04	1.48	12	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes
Fourth R3 / W3	Bedroom	12.49	10.94	1.55	12	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes
Fourth R4 / W4	LKD	12.44	10.77	1.67	13	Yes	97	96	1	Yes	20	19	5	Yes	19	18	5	Yes
Fourth R5 / W5	Bedroom	12.33	10.62	1.71	14	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes
Fourth R6 / W6	Bedroom	11.06	9.82	1.24	11	Yes	99	99	0	Yes	17	17	0	Yes	16	16	0	Yes
Fourth R7 / W7	Bedroom	5.92	4.61	1.31	22	No	82	69	16	Yes	11	11	0	Yes	10	10	0	Yes
Fourth R8 / W8	LKD	6.34	5.45	0.89	14	Yes	44	34	23	No	11	11	0	Yes	9	9	0	Yes
Fourth R9 / W9	LKD	8.50	7.94	0.56	7	Yes	33	32	3	Yes	19	19	0	Yes	10	10	0	Yes
Fourth R10 / W10	Bedroom	5.38	4.94	0.44	8	Yes	40	40	0	Yes	13	13	0	Yes	9	9	0	Yes
Fourth R11 / W11	Bedroom	3.12	2.77	0.35	11	Yes	38	38	0	Yes	7	7	0	Yes	3	3	0	Yes
Fourth R12 / W12	LKD	1.77	1.49	0.28	16	Yes	25	25	0	Yes	4	4	0	Yes	2	2	0	Yes
Fifth R1 / W1	LKD	13.69	12.26	1.43	10	Yes	100	100	0	Yes	23	22	4	Yes	20	19	5	Yes
Fifth R2 / W2	Bedroom	13.59	12.01	1.58	12	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes
Fifth R3 / W3	Bedroom	13.58	11.88	1.70	13	Yes	100	100	0	Yes	20	19	5	Yes	19	18	5	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing		Proposed	% Loss	Meets BRE criteria?	
Fifth R4 / W4	LKD	13.55	11.71	1.84	14	Yes	98	98	0	Yes	21	20	5	Yes	20	19	5	Yes
Fifth R5 / W5	Bedroom	13.56	11.60	1.96	14	Yes	100	100	0	Yes	21	20	5	Yes	20	19	5	Yes
Fifth R6 / W6	Bedroom	13.93	11.88	2.05	15	Yes	99	99	0	Yes	23	22	4	Yes	22	21	5	Yes
Fifth R7 / W7	Bedroom	8.10	6.91	1.19	15	Yes	91	87	4	Yes	13	13	0	Yes	9	9	0	Yes
Fifth R8 / W8	LKD	10.51	9.49	1.02	10	Yes	57	48	16	Yes	19	19	0	Yes	10	10	0	Yes
Fifth R9 / W9	LKD	13.69	13.00	0.69	5	Yes	42	41	1	Yes	29	29	0	Yes	10	10	0	Yes
Fifth R10 / W10	Bedroom	9.42	8.91	0.51	5	Yes	51	51	0	Yes	20	20	0	Yes	11	11	0	Yes
Fifth R11 / W11	Bedroom	4.65	4.26	0.39	8	Yes	43	43	0	Yes	11	11	0	Yes	6	6	0	Yes
Fifth R12 / W12	LKD	3.54	3.23	0.31	9	Yes	33	33	0	Yes	9	9	0	Yes	4	4	0	Yes
Sixth R1 / W1	LKD	14.21	12.69	1.52	11	Yes	99	99	0	Yes	21	20	5	Yes	20	19	5	Yes
Sixth R2 / W2	Bedroom	14.45	12.82	1.63	11	Yes	100	100	0	Yes	21	20	5	Yes	20	19	5	Yes
Sixth R3 / W3	Bedroom	14.46	12.75	1.71	12	Yes	100	100	0	Yes	21	20	5	Yes	20	19	5	Yes
Sixth R4 / W4	LKD	14.46	12.61	1.85	13	Yes	98	98	0	Yes	21	20	5	Yes	20	19	5	Yes
Sixth R5 / W5	Bedroom	14.37	12.51	1.86	13	Yes	100	100	0	Yes	21	20	5	Yes	20	19	5	Yes
Sixth R6 / W6	Bedroom	12.79	11.45	1.34	10	Yes	99	99	0	Yes	18	18	0	Yes	17	17	0	Yes
Sixth R7 / W7	Bedroom	35.27	33.59	1.68	5	Yes	100	100	0	Yes	63	63	0	Yes	20	20	0	Yes
Sixth R8 / W8	LKD	30.74	29.51	1.23	4	Yes	97	89	9	Yes	61	61	0	Yes	22	22	0	Yes
Sixth R9 / W9	LKD	23.13	22.29	0.84	4	Yes	91	83	9	Yes	50	50	0	Yes	20	20	0	Yes
Sixth R10 / W10	Bedroom	16.30	15.70	0.60	4	Yes	100	100	0	Yes	35	35	0	Yes	16	16	0	Yes
Sixth R11 / W11	Bedroom	11.05	10.64	0.41	4	Yes	98	98	0	Yes	21	21	0	Yes	12	12	0	Yes
Sixth R12 / W12	LKD	7.04	6.75	0.29	4	Yes	54	54	0	Yes	13	13	0	Yes	9	9	0	Yes
<b>Lochhead Bank Geoffrey Watling Way</b>																		
First R1 / W1	LKD	10.15	8.92	1.23	12	Yes	91	88	3	Yes	16	14	13	Yes	14	12	14	Yes
First R2 / W2	Bedroom	9.90	8.72	1.18	12	Yes	86	85	0	Yes	17	15	12	Yes	14	12	14	Yes
First R3 / W3	Bedroom	9.65	8.53	1.12	12	Yes	91	91	0	Yes	17	15	12	Yes	14	12	14	Yes
First R4 / W4	LKD	9.30	8.28	1.02	11	Yes	93	90	2	Yes	15	14	7	Yes	12	11	8	Yes
Second R1 / W1	LKD	11.91	10.50	1.41	12	Yes	98	97	1	Yes	21	17	19	Yes	18	14	22	Yes
Second R2 / W2	Bedroom	11.62	10.26	1.36	12	Yes	97	97	0	Yes	21	17	19	Yes	18	14	22	Yes
Second R3 / W3	Bedroom	11.41	10.10	1.31	11	Yes	100	100	0	Yes	20	17	15	Yes	17	14	18	Yes
Second R4 / W4	LKD	11.23	9.91	1.32	12	Yes	99	99	0	Yes	20	17	15	Yes	17	14	18	Yes
Third R1 / W1	LKD	13.37	11.77	1.60	12	Yes	99	98	1	Yes	24	20	17	Yes	22	18	18	Yes
Third R2 / W2	Bedroom	13.26	11.71	1.55	12	Yes	100	100	0	Yes	25	20	20	Yes	22	17	23	Yes
Third R3 / W3	Bedroom	13.10	11.59	1.51	12	Yes	100	100	0	Yes	25	20	20	Yes	22	17	23	Yes
Third R4 / W4	LKD	12.81	11.42	1.39	11	Yes	99	99	0	Yes	22	18	18	Yes	19	15	21	Yes
Fourth R1 / W1	LKD	15.01	12.98	2.03	14	Yes	99	99	0	Yes	25	21	16	Yes	22	18	18	Yes
Fourth R2 / W2	Bedroom	14.84	12.79	2.05	14	Yes	100	100	0	Yes	25	21	16	Yes	22	18	18	Yes
Fourth R3 / W3	Bedroom	14.74	12.67	2.07	14	Yes	100	100	0	Yes	25	21	16	Yes	22	18	18	Yes
Fourth R4 / W4	LKD	14.66	12.54	2.12	14	Yes	99	99	0	Yes	26	20	23	No	23	17	26	Yes
Fifth R1 / W1	LKD	16.15	13.79	2.36	15	Yes	99	99	0	Yes	25	24	4	Yes	23	22	4	Yes
Fifth R2 / W2	Bedroom	16.19	13.75	2.44	15	Yes	100	100	0	Yes	26	24	8	Yes	23	21	9	Yes
Fifth R3 / W3	Bedroom	16.13	13.63	2.50	15	Yes	100	100	0	Yes	26	24	8	Yes	23	21	9	Yes
Fifth R4 / W4	LKD	15.92	13.47	2.45	15	Yes	99	99	0	Yes	25	24	4	Yes	22	21	5	Yes
Sixth R1 / W1	LKD	38.29	35.80	2.49	7	Yes	99	99	0	Yes	86	85	1	Yes	30	29	3	Yes
Sixth R2 / W2	Bedroom	38.25	35.66	2.59	7	Yes	100	100	0	Yes	86	85	1	Yes	30	29	3	Yes
Sixth R3 / W3	Bedroom	38.24	35.53	2.71	7	Yes	100	100	0	Yes	86	85	1	Yes	30	29	3	Yes
Sixth R4 / W4	LKD	38.19	35.37	2.82	7	Yes	99	99	0	Yes	86	85	1	Yes	30	29	3	Yes
<b>Robinson Bank Geoffrey Watling Way</b>																		
First R1 / W1	LKD	10.19	7.97	2.22	22	No	94	87	7	Yes	20	16	20	Yes	19	15	21	Yes
First R2 / W2	Bedroom	10.80	8.09	2.71	25	No	99	97	2	Yes	21	16	24	No	19	14	26	Yes
First R3 / W3	LKD	11.01	7.99	3.02	27	No	97	90	7	Yes	22	16	27	No	20	14	30	Yes
Second R1 / W1	LKD	11.48	9.19	2.29	20	Yes	99	94	4	Yes	22	17	23	No	21	16	24	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing		Proposed	% Loss	Meets BRE criteria?	
Second R2 / W2	Bedroom	11.93	9.36	2.57	22	No	100	100	0	Yes	22	17	23	No	21	16	24	Yes
Second R3 / W3	Bedroom	12.13	9.34	2.79	23	No	100	100	0	Yes	24	19	21	No	22	17	23	Yes
Second R4 / W4	LKD	12.17	9.20	2.97	24	No	98	94	5	Yes	22	18	18	Yes	20	16	20	Yes
Third R1 / W1	LKD	12.76	10.16	2.60	20	Yes	99	96	3	Yes	24	19	21	No	23	18	22	Yes
Third R2 / W2	Bedroom	13.22	10.37	2.85	22	No	100	100	0	Yes	23	18	22	No	22	17	23	Yes
Third R3 / W3	Bedroom	13.43	10.37	3.06	23	No	100	100	0	Yes	25	20	20	Yes	23	18	22	Yes
Third R4 / W4	LKD	13.68	10.34	3.34	24	No	98	95	3	Yes	26	20	23	No	24	18	25	Yes
Fourth R1 / W1	LKD	14.02	11.09	2.93	21	No	99	97	1	Yes	25	20	20	Yes	24	19	21	Yes
Fourth R2 / W2	Bedroom	14.50	11.34	3.16	22	No	100	100	0	Yes	25	20	20	Yes	24	19	21	Yes
Fourth R3 / W3	Bedroom	14.70	11.36	3.34	23	No	100	100	0	Yes	26	21	19	Yes	24	19	21	Yes
Fourth R4 / W4	LKD	14.71	11.23	3.48	24	No	98	96	2	Yes	25	20	20	Yes	23	18	22	Yes
Fifth R1 / W1	LKD	32.72	29.52	3.20	10	Yes	99	99	0	Yes	74	71	4	Yes	28	25	11	Yes
Fifth R2 / W2	Bedroom	33.05	29.65	3.40	10	Yes	100	100	0	Yes	75	71	5	Yes	28	24	14	Yes
Fifth R3 / W3	Bedroom	33.25	29.70	3.55	11	Yes	100	100	0	Yes	77	72	6	Yes	30	25	17	Yes
Fifth R4 / W4	LKD	33.60	29.83	3.77	11	Yes	99	99	0	Yes	81	75	7	Yes	30	24	20	Yes
Sixth R1 / W1	LKD	5.73	3.25	2.48	43	No	100	100	0	Yes	6	5	17	Yes	6	5	17	Yes
Sixth R2 / W2	LKD	6.01	2.78	3.23	54	No	100	100	0	Yes	7	6	14	Yes	7	6	14	Yes
Seventh R1 / W1	LKD	17.71	14.66	3.05	17	Yes	99	99	0	Yes	28	27	4	Yes	26	25	4	Yes
Seventh R2 / W2	Bedroom	17.95	14.74	3.21	18	Yes	100	100	0	Yes	28	27	4	Yes	26	25	4	Yes
Seventh R3 / W3	Bedroom	17.95	14.61	3.34	19	Yes	100	100	0	Yes	28	27	4	Yes	26	25	4	Yes
Seventh R4 / W4	LKD	17.72	14.32	3.40	19	Yes	99	99	0	Yes	27	26	4	Yes	25	24	4	Yes
<b>Nethercott Bank Geoffrey Watling Way</b>																		
First R1 / W1	LKD	11.91	7.27	4.64	39	No	98	69	30	No	21	12	43	No	19	10	47	Yes
First R2 / W2	Bedroom	11.93	7.07	4.86	41	No	98	67	32	No	21	12	43	No	19	10	47	Yes
First R3 / W3	LKD	11.57	6.45	5.12	44	No	97	62	36	No	21	12	43	No	19	10	47	Yes
Second R1 / W1	LKD	13.37	8.62	4.75	36	No	98	74	25	No	22	16	27	No	20	14	30	Yes
Second R2 / W2	Bedroom	13.21	8.24	4.97	38	No	99	74	26	No	23	15	35	No	21	13	38	Yes
Second R3 / W3	Bedroom	13.07	7.96	5.11	39	No	97	68	30	No	23	15	35	No	21	13	38	Yes
Second R4 / W4	LKD	12.80	7.56	5.24	41	No	99	77	22	No	22	14	36	No	20	12	40	Yes
Third R1 / W1	LKD	14.48	9.59	4.89	34	No	98	78	21	No	25	16	36	No	23	14	39	Yes
Third R2 / W2	Bedroom	14.51	9.40	5.11	35	No	100	79	21	No	25	15	40	No	23	13	43	Yes
Third R3 / W3	Bedroom	14.36	9.12	5.24	36	No	100	78	22	No	26	16	38	No	24	14	42	Yes
Third R4 / W4	LKD	14.07	8.72	5.35	38	No	99	83	16	Yes	24	15	38	No	22	13	41	Yes
Fourth R1 / W1	LKD	16.01	11.03	4.98	31	No	99	83	16	Yes	26	18	31	No	24	16	33	Yes
Fourth R2 / W2	Bedroom	15.83	10.64	5.19	33	No	100	84	16	Yes	26	18	31	No	24	16	33	Yes
Fourth R3 / W3	Bedroom	15.70	10.39	5.31	34	No	100	86	14	Yes	26	18	31	No	24	16	33	Yes
Fourth R4 / W4	LKD	15.43	10.03	5.40	35	No	99	86	13	Yes	25	17	32	No	23	15	35	Yes
Fifth R1 / W1	LKD	17.01	11.96	5.05	30	No	99	88	11	Yes	28	21	25	No	26	19	27	Yes
Fifth R2 / W2	Bedroom	17.12	11.90	5.22	30	No	100	91	9	Yes	27	20	26	No	25	18	28	Yes
Fifth R3 / W3	Bedroom	17.03	11.70	5.33	31	No	100	95	5	Yes	27	20	26	No	25	18	28	Yes
Fifth R4 / W4	LKD	16.84	11.39	5.45	32	No	99	91	8	Yes	27	20	26	No	25	18	28	Yes
Sixth R1 / W1	LKD	11.78	7.32	4.46	38	No	100	94	5	Yes	16	12	25	Yes	16	12	25	Yes
Sixth R2 / W2	LKD	11.83	6.59	5.24	44	No	100	98	1	Yes	17	12	29	No	17	12	29	Yes
Seventh R1 / W1	LKD	38.77	34.06	4.71	12	Yes	100	99	0	Yes	88	85	3	Yes	30	27	10	Yes
Seventh R2 / W2	Bedroom	38.80	33.86	4.94	13	Yes	100	100	0	Yes	88	85	3	Yes	30	27	10	Yes
Seventh R3 / W3	Bedroom	38.83	33.71	5.12	13	Yes	100	100	0	Yes	88	85	3	Yes	30	27	10	Yes
Seventh R4 / W4	LKD	38.86	33.52	5.34	14	Yes	100	99	0	Yes	88	84	5	Yes	30	26	13	Yes
<b>Gavin Bank Geoffrey Watling Way</b>																		
First R1 / W1	LKD	11.21	1.13	10.08	90	No	96	28	70	No	19	3	84	No	19	3	84	No
First R2 / W2	Bedroom	11.31	0.93	10.38	92	No	92	24	74	No	19	3	84	No	19	3	84	No
First R3 / W3	Bedroom	11.44	0.86	10.58	92	No	94	23	75	No	19	3	84	No	19	3	84	No



Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing		Proposed	% Loss	Meets BRE criteria?	
First R4 / W4	LKD	11.67	0.84	10.83	93	No	94	30	68	No	21	4	81	No	21	4	81	No
Second R1 / W1	LKD	12.76	1.69	11.07	87	No	99	34	66	No	24	3	88	No	24	3	88	No
Second R2 / W2	Bedroom	12.99	1.66	11.33	87	No	100	26	73	No	24	4	83	No	24	4	83	No
Second R3 / W3	Bedroom	13.09	1.60	11.49	88	No	100	26	74	No	23	4	83	No	23	4	83	No
Second R4 / W4	LKD	13.03	1.53	11.50	88	No	99	35	65	No	23	4	83	No	23	4	83	No
Third R1 / W1	LKD	14.59	3.18	11.41	78	No	99	41	58	No	25	4	84	No	25	4	84	No
Third R2 / W2	Bedroom	14.65	3.00	11.65	80	No	100	30	70	No	26	4	85	No	26	4	85	No
Third R3 / W3	Bedroom	14.74	2.95	11.79	80	No	100	29	71	No	26	4	85	No	26	4	85	No
Third R4 / W4	LKD	14.94	2.98	11.96	80	No	99	41	58	No	27	6	78	No	27	6	78	Yes
Fourth R1 / W1	LKD	15.93	4.52	11.41	72	No	99	47	52	No	27	9	67	No	27	9	67	Yes
Fourth R2 / W2	Bedroom	16.17	4.55	11.62	72	No	100	34	66	No	27	10	63	No	27	10	63	Yes
Fourth R3 / W3	Bedroom	16.24	4.51	11.73	72	No	100	33	67	No	27	9	67	No	27	9	67	Yes
Fourth R4 / W4	LKD	16.12	4.42	11.70	73	No	99	46	53	No	27	8	70	No	27	8	70	Yes
Fifth R1 / W1	LKD	17.57	6.39	11.18	64	No	99	53	46	No	27	12	56	No	27	12	56	Yes
Fifth R2 / W2	Bedroom	17.59	6.21	11.38	65	No	100	40	60	No	28	12	57	No	28	12	57	Yes
Fifth R3 / W3	Bedroom	17.66	6.16	11.50	65	No	100	38	62	No	28	12	57	No	28	12	57	Yes
Fifth R4 / W4	LKD	17.82	6.20	11.62	65	No	99	51	48	No	29	12	59	No	29	12	59	Yes
Sixth R1 / W1	LKD	18.16	7.46	10.70	59	No	99	59	41	No	28	15	46	No	28	15	46	Yes
Sixth R2 / W2	Bedroom	18.38	7.53	10.85	59	No	100	46	54	No	28	14	50	No	28	14	50	Yes
Sixth R3 / W3	Bedroom	18.42	7.49	10.93	59	No	100	45	55	No	28	14	50	No	28	14	50	Yes
Sixth R4 / W4	LKD	18.26	7.37	10.89	60	No	99	56	44	No	28	13	54	No	28	13	54	Yes
<b>Block R1</b>																		
First R1 / W1	LKD	5.63	4.01	1.62	29	No	97	97	0	Yes	North Facing							
First R1 / W2		31.40	18.86	12.54	40	No					76	50	34	Yes	23	0	100	No
First R1 / W31		30.97	18.48	12.49	40	No					73	50	32	Yes	22	1	95	No
First R1 / W32		24.03	13.77	10.26	43	No					53	35	34	Yes	17	1	94	No
First R2 / W3	Bedroom	31.87	19.03	12.84	40	No	90	27	70	No	80	56	30	Yes	22	2	91	No
First R3 / W4	Bedroom	31.97	19.13	12.84	40	No	84	23	72	No	80	57	29	Yes	22	2	91	No
First R4 / W5	LKD	11.22	0.87	10.35	92	No	93	70	25	No	23	3	87	No	21	1	95	No
First R4 / W6		26.07	21.90	4.17	16	Yes					43	32	26	Yes	15	4	73	No
First R5 / W7	Bedroom	7.38	6.00	1.38	19	Yes	78	53	33	No	13	11	15	Yes	5	3	40	Yes
Second R1 / W1	LKD	6.21	4.30	1.91	31	No	97	97	0	Yes	North Facing							
Second R1 / W2		32.99	20.21	12.78	39	No					79	56	29	Yes	26	4	85	No
Second R1 / W30		32.54	19.83	12.71	39	No					77	54	30	Yes	26	4	85	No
Second R1 / W31		25.39	14.88	10.51	41	No					56	38	32	Yes	20	2	90	No
Second R2 / W3	Bedroom	33.46	20.39	13.07	39	No	96	30	68	No	84	62	26	Yes	26	5	81	Yes
Second R3 / W4	Bedroom	33.55	20.49	13.06	39	No	93	26	72	No	85	62	27	Yes	27	5	81	Yes
Second R4 / W5	LKD	12.61	1.21	11.40	90	No	96	73	25	No	26	4	85	No	24	2	92	No
Second R4 / W6		28.11	24.01	4.10	15	Yes					44	35	20	Yes	15	6	60	Yes
Second R5 / W7	Bedroom	8.14	6.75	1.39	17	Yes	79	54	31	No	13	11	15	Yes	5	3	40	Yes
Third R1 / W1	LKD	7.51	5.35	2.16	29	No	97	97	0	Yes	North Facing							
Third R1 / W2		34.50	21.66	12.84	37	No					81	58	28	Yes	28	5	82	Yes
Third R1 / W30		34.03	21.26	12.77	38	No					78	56	28	Yes	27	5	81	Yes
Third R1 / W31		26.67	16.07	10.60	40	No					57	39	32	Yes	21	3	86	No
Third R2 / W3	Bedroom	34.96	21.83	13.13	38	No	96	34	64	No	85	63	26	Yes	27	5	81	Yes
Third R3 / W4	Bedroom	35.04	21.93	13.11	37	No	96	30	69	No	85	64	25	Yes	27	6	78	Yes
Third R4 / W5	LKD	13.89	2.11	11.78	85	No	100	76	24	No	26	5	81	No	24	3	88	No
Third R4 / W6		30.26	26.33	3.93	13	Yes					45	36	20	Yes	15	6	60	Yes
Third R5 / W7	Bedroom	9.15	7.78	1.37	15	Yes	79	57	29	No	14	12	14	Yes	5	3	40	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)				Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing	Proposed	% Loss	Meets BRE criteria?	Existing	
Fourth R1 / W1	LKD	10.13	7.76	2.37	23	No	98	98	0	Yes	North Facing							
Fourth R1 / W2		35.90	23.20	12.70	35	No					81	61	25	Yes	28	8	71	Yes
Fourth R1 / W30		35.42	22.79	12.63	36	No					79	59	25	Yes	28	8	71	Yes
Fourth R1 / W31		27.89	17.34	10.55	38	No					58	42	28	Yes	22	6	73	Yes
Fourth R2 / W3	Bedroom	36.32	23.37	12.95	36	No	96	39	59	No	86	66	23	Yes	28	8	71	Yes
Fourth R3 / W4	Bedroom	36.38	23.46	12.92	36	No	96	33	65	No	86	66	23	Yes	28	8	71	Yes
Fourth R4 / W5	LKD	15.06	3.43	11.63	77	No	100	80	20	Yes	27	7	74	No	25	5	80	Yes
Fourth R4 / W6		32.49	28.77	3.72	11	Yes					47	40	15	Yes	15	8	47	Yes
Fourth R5 / W7		Bedroom	10.63	9.29	1.34	13					Yes	81	61	25	No	14	13	7
Fifth R1 / W1	LKD	12.94	10.41	2.53	20	Yes	98	98	0	Yes	North Facing							
Fifth R1 / W2		37.19	24.82	12.37	33	No					81	64	21	Yes	28	11	61	Yes
Fifth R1 / W30		36.69	24.40	12.29	33	No					79	62	22	Yes	28	11	61	Yes
Fifth R1 / W31		29.01	18.67	10.34	36	No					58	44	24	Yes	22	8	64	Yes
Fifth R2 / W3	Bedroom	37.57	24.98	12.59	34	No	96	45	53	No	87	69	21	Yes	29	11	62	Yes
Fifth R3 / W4	Bedroom	37.60	25.07	12.53	33	No	96	38	61	No	87	69	21	Yes	29	11	62	Yes
Fifth R4 / W5	LKD	16.09	4.84	11.25	70	No	100	84	16	Yes	28	12	57	No	26	10	62	Yes
Fifth R4 / W6		34.68	31.26	3.42	10	Yes					49	42	14	Yes	15	8	47	Yes
Fifth R5 / W7		Bedroom	13.15	11.84	1.31	10					Yes	84	67	20	Yes	22	21	5
Sixth R1 / W1	LKD	15.57	12.94	2.63	17	Yes	100	100	0	Yes	North Facing							
Sixth R1 / W2		38.28	26.53	11.75	31	No					82	67	18	Yes	29	14	52	Yes
Sixth R1 / W30		37.77	26.11	11.66	31	No					80	65	19	Yes	29	14	52	Yes
Sixth R1 / W31		29.92	20.08	9.84	33	No					60	48	20	Yes	24	12	50	Yes
Sixth R2 / W3	Bedroom	38.55	26.65	11.90	31	No	96	51	47	No	88	73	17	Yes	30	15	50	Yes
Sixth R3 / W4	Bedroom	38.57	26.73	11.84	31	No	96	43	55	No	88	72	18	Yes	30	14	53	Yes
Sixth R4 / W5	LKD	16.89	6.31	10.58	63	No	100	88	12	Yes	28	12	57	No	26	10	62	Yes
Sixth R4 / W6		36.56	33.46	3.10	8	Yes					50	43	14	Yes	15	8	47	Yes
Sixth R5 / W7	Bedroom	18.80	17.44	1.36	7	Yes	93	77	17	Yes	32	30	6	Yes	10	8	20	Yes
Seventh R1 / W1	LKD	17.13	14.56	2.57	15	Yes	100	100	0	Yes	North Facing							
Seventh R1 / W2		38.97	28.33	10.64	27	Yes					87	75	14	Yes	30	18	40	Yes
Seventh R1 / W33		38.59	28.04	10.55	27	Yes					82	70	15	Yes	30	18	40	Yes
Seventh R1 / W34		30.65	21.72	8.93	29	No					60	51	15	Yes	24	15	38	Yes
Seventh R2 / W3	Bedroom	39.09	28.36	10.73	27	Yes	96	58	39	No	88	77	13	Yes	30	19	37	Yes
Seventh R3 / W4	Bedroom	39.10	28.44	10.66	27	Yes	96	51	47	No	88	77	13	Yes	30	19	37	Yes
Seventh R4 / W5	LKD	17.26	7.82	9.44	55	No	100	91	9	Yes	28	19	32	No	26	17	35	Yes
Seventh R4 / W6		38.06	35.27	2.79	7	Yes					51	48	6	Yes	15	12	20	Yes
Eighth R1 / W1	Bedroom	35.84	32.52	3.32	9	Yes	99	99	0	Yes	81	80	1	Yes	26	25	4	Yes
<b>Block R2</b>																		
First R1 / W1	LKD	9.92	4.64	5.28	53	No	97	74	24	No	16	8	50	No	16	8	50	Yes
First R1 / W30		1.69	1.58	0.11	7	Yes					North Facing							
First R2 / W2	Bedroom	24.23	18.35	5.88	24	No	97	74	24	No	50	41	18	Yes	19	10	47	Yes
First R3 / W3	Bedroom	25.09	19.12	5.97	24	No	94	65	31	No	48	39	19	Yes	18	9	50	Yes
First R4 / W4	Bedroom	25.46	19.59	5.87	23	No	90	55	39	No	48	38	21	Yes	18	8	56	Yes
First R5 / W5	Bedroom	24.80	19.30	5.50	22	No	89	59	34	No	49	40	18	Yes	18	9	50	Yes
First R6 / W6	LKD	10.28	5.41	4.87	47	No	100	94	6	Yes	16	8	50	No	16	8	50	Yes
First R6 / W7		4.80	4.58	0.22	5	Yes					11	9	18	Yes	4	2	50	Yes
Second R1 / W1	LKD	10.48	5.28	5.20	50	No	100	81	18	Yes	16	9	44	No	16	9	44	Yes
Second R1 / W30		2.16	2.05	0.11	5	Yes					North Facing							
Second R2 / W2	Bedroom	25.81	20.02	5.79	22	No	88	57	35	No	53	44	17	Yes	19	10	47	Yes
Second R3 / W3	Bedroom	26.75	20.85	5.90	22	No	81	49	39	No	52	43	17	Yes	18	9	50	Yes
Second R4 / W4	Bedroom	27.17	21.35	5.82	21	No	92	59	35	No	52	42	19	Yes	19	9	53	Yes
Second R5 / W5	Bedroom	26.50	21.02	5.48	21	No	90	62	31	No	52	42	19	Yes	20	10	50	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)				APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing	Proposed		% Loss	Meets BRE criteria?	Existing	
Second R6 / W6	LKD	10.97	6.12	4.85	44	No	100	95	5	Yes	17	8	53	No	17	8	53	Yes	
Second R6 / W7		6.09	5.88	0.21	3	Yes					12	10	17	Yes	4	2	50	Yes	
Third R1 / W1	LKD	11.06	6.03	5.03	45	No	100	83	16	Yes	16	9	44	No	16	9	44	Yes	
Third R1 / W30		2.87	2.76	0.11	4	Yes					North Facing								
Third R2 / W2	Bedroom	27.54	21.89	5.65	21	No	89	61	32	No	58	50	14	Yes	19	11	42	Yes	
Third R3 / W3	Bedroom	28.55	22.79	5.76	20	Yes	82	52	37	No	57	49	14	Yes	18	10	44	Yes	
Third R4 / W4	Bedroom	29.03	23.31	5.72	20	Yes	93	65	31	No	59	50	15	Yes	19	10	47	Yes	
Third R5 / W5	Bedroom	28.39	22.97	5.42	19	Yes	91	66	27	No	57	49	14	Yes	20	12	40	Yes	
Third R6 / W6	LKD	11.72	6.91	4.81	41	No	100	96	4	Yes	18	11	39	No	18	11	39	Yes	
Third R6 / W7		7.98	7.78	0.20	3	Yes					16	14	13	Yes	5	3	40	Yes	
Fourth R1 / W1	LKD	11.82	6.98	4.84	41	No	100	85	15	Yes	17	12	29	No	17	12	29	Yes	
Fourth R1 / W32		3.98	3.88	0.10	3	Yes					North Facing								
Fourth R2 / W2	Bedroom	29.47	24.02	5.45	18	Yes	91	65	28	No	62	56	10	Yes	20	14	30	Yes	
Fourth R3 / W3	Bedroom	30.51	24.93	5.58	18	Yes	83	56	33	No	64	58	9	Yes	20	14	30	Yes	
Fourth R4 / W4	Bedroom	31.03	25.48	5.55	18	Yes	95	71	26	No	65	57	12	Yes	20	12	40	Yes	
Fourth R5 / W5	Bedroom	30.43	25.16	5.27	17	Yes	93	72	22	No	62	56	10	Yes	20	14	30	Yes	
Fourth R6 / W6	LKD	12.57	7.90	4.67	37	No	100	97	3	Yes	21	13	38	No	21	13	38	Yes	
Fourth R6 / W7		10.83	10.64	0.19	2	Yes					18	17	6	Yes	5	4	20	Yes	
Fifth R1 / W1	LKD	12.82	8.23	4.59	36	No	100	86	14	Yes	18	14	22	Yes	18	14	22	Yes	
Fifth R1 / W30		5.82	5.71	0.11	2	Yes					North Facing								
Fifth R2 / W2	Bedroom	31.49	26.30	5.19	16	Yes	94	74	22	No	66	60	9	Yes	20	14	30	Yes	
Fifth R3 / W3	Bedroom	32.49	27.16	5.33	16	Yes	87	63	27	No	69	63	9	Yes	21	15	29	Yes	
Fifth R4 / W4	Bedroom	33.02	27.68	5.34	16	Yes	96	76	21	No	71	63	11	Yes	23	15	35	Yes	
Fifth R5 / W5	Bedroom	32.54	27.46	5.08	16	Yes	96	79	17	Yes	70	63	10	Yes	21	14	33	Yes	
Fifth R6 / W6	LKD	13.61	9.10	4.51	33	No	100	97	2	Yes	21	14	33	No	21	14	33	Yes	
Fifth R6 / W7		15.21	15.02	0.19	1	Yes					22	21	5	Yes	7	6	14	Yes	
Sixth R1 / W1	LKD	9.61	5.29	4.32	45	No	100	86	14	Yes	11	7	36	Yes	11	7	36	Yes	
Sixth R1 / W30		9.03	8.90	0.13	1	Yes					North Facing								
Sixth R2 / W2	Bedroom	29.94	25.00	4.94	16	Yes	96	80	16	Yes	67	62	7	Yes	23	18	22	Yes	
Sixth R3 / W3	Bedroom	30.77	25.67	5.10	17	Yes	92	74	20	Yes	69	64	7	Yes	24	19	21	Yes	
Sixth R4 / W4	Bedroom	31.23	26.10	5.13	16	Yes	96	82	15	Yes	69	63	9	Yes	24	18	25	Yes	
Sixth R5 / W5	Bedroom	30.94	26.04	4.90	16	Yes	97	85	12	Yes	70	66	6	Yes	24	20	17	Yes	
Sixth R6 / W6	LKD	10.19	5.90	4.29	42	No	100	98	2	Yes	13	8	38	No	13	8	38	Yes	
Sixth R6 / W7		21.81	21.61	0.20	1	Yes					30	28	7	Yes	8	6	25	Yes	
<b>Richard Hawthorn</b>																			
First R1 / W3	LKD	33.75	21.13	12.62	37	No	100	100	0	Yes	85	59	31	Yes	27	3	89	No	
First R1 / W2		33.66	21.32	12.34	37	No					85	61	28	Yes	27	5	81	Yes	
First R1 / W1	LKD	9.29	6.60	2.69	29	No	North Facing												
First R2 / W6		14.09	8.82	5.27	37	No	98	98	0	Yes	23	12	48	No	11	0	100	No	
First R2 / W5	LKD	34.11	20.28	13.83	41	No	North Facing												
First R2 / W4		34.01	20.50	13.51	40	No	84	58	31	Yes	26	2	92	No					
First R3 / W7	LKD	8.25	6.33	1.92	23	No	72	23	69	No	13	11	15	Yes	5	3	40	Yes	
First R3 / W8	LKD	10.99	10.99	0.00	0	Yes	North Facing												
Second R1 / W3		35.25	22.50	12.75	36	No	100	100	0	Yes	85	60	29	Yes	27	3	89	No	
Second R1 / W2	LKD	35.17	22.68	12.49	36	No	North Facing												
Second R1 / W1		10.82	7.93	2.89	27	No	85	62	27	Yes	27	5	81	Yes					
Second R2 / W6	LKD	15.51	10.23	5.28	34	No	98	98	0	Yes	24	14	42	No	11	1	91	No	
Second R2 / W5		35.55	21.69	13.86	39	No					85	61	28	Yes	27	3	89	No	
Second R2 / W4	LKD	35.47	21.90	13.57	38	No	North Facing												
Second R3 / W7		9.22	7.35	1.87	20	Yes	88	26	70	No	14	12	14	Yes	5	3	40	Yes	
Second R3 / W8	LKD	13.19	13.19	0.00	0	Yes	North Facing												

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)				APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing	Proposed		% Loss	Meets BRE criteria?	Existing	
Third R1 / W3	LKD	36.53	23.95	12.58	34	No	100	100	0	Yes	87	66	24	Yes	29	8	72	Yes	
Third R1 / W2		36.47	24.12	12.35	34	No					87	68	22	Yes	29	10	66	Yes	
Third R1 / W1	LKD	12.41	9.36	3.05	25	No	98	98	0	Yes	North Facing								
Third R2 / W6		16.82	11.67	5.15	31	No					26	17	35	No	11	2	82	No	
Third R2 / W5		36.80	23.19	13.61	37	No					87	65	25	Yes	29	7	76	Yes	
Third R2 / W4		36.72	23.39	13.33	36	No					87	65	25	Yes	29	7	76	Yes	
Third R3 / W7	LKD	10.72	8.93	1.79	17	Yes	90	32	65	No	14	12	14	Yes	5	3	40	Yes	
Third R3 / W8		16.07	16.07	0.00	0	Yes					North Facing								
Fourth R1 / W3	LKD	37.64	25.48	12.16	32	No	100	100	0	Yes	88	68	23	Yes	30	10	67	Yes	
Fourth R1 / W2		37.59	25.63	11.96	32	No					88	70	20	Yes	30	12	60	Yes	
Fourth R1 / W1	LKD	13.96	10.84	3.12	22	No	99	99	0	Yes	North Facing								
Fourth R2 / W6		18.03	13.11	4.92	27	No					27	18	33	No	11	2	82	No	
Fourth R2 / W5		37.83	24.77	13.06	35	No					88	67	24	Yes	30	9	70	Yes	
Fourth R2 / W4		37.77	24.95	12.82	34	No					88	67	24	Yes	30	9	70	Yes	
Fourth R3 / W7	LKD	13.56	11.87	1.69	12	Yes	92	40	57	No	23	22	4	Yes	7	6	14	Yes	
Fourth R3 / W8		19.80	19.80	0.00	0	Yes					North Facing								
Fifth R1 / W3	LKD	38.51	27.05	11.46	30	Yes	100	100	0	Yes	88	71	19	Yes	30	13	57	Yes	
Fifth R1 / W2		38.48	27.19	11.29	29	Yes					88	73	17	Yes	30	15	50	Yes	
Fifth R1 / W1		15.42	12.33	3.09	20	Yes					North Facing								
Fifth R2 / W6	LKD	19.06	14.50	4.56	24	No	100	100	0	Yes	28	20	29	No	11	3	73	No	
Fifth R2 / W5		38.62	26.40	12.22	32	No					88	69	22	Yes	30	11	63	Yes	
Fifth R2 / W4		38.59	26.57	12.02	31	No					88	69	22	Yes	30	11	63	Yes	
Fifth R3 / W7		LKD	21.19	19.49	1.70	8					Yes	95	54	43	No	40	38	5	Yes
Fifth R3 / W8	24.44		24.44	0.00	0	Yes	North Facing												
Sixth R1 / W3	LKD	38.99	28.67	10.32	26	Yes	100	100	0	Yes	88	73	17	Yes	30	15	50	Yes	
Sixth R1 / W2		38.99	28.80	10.19	26	Yes					88	75	15	Yes	30	17	43	Yes	
Sixth R1 / W1		16.76	13.86	2.90	17	Yes					North Facing								
Sixth R2 / W6	LKD	19.86	15.86	4.00	20	Yes	100	100	0	Yes	28	21	25	No	11	4	64	No	
Sixth R2 / W5		39.01	28.09	10.92	28	Yes					88	71	19	Yes	30	13	57	Yes	
Sixth R2 / W4		39.00	28.24	10.76	28	Yes					88	71	19	Yes	30	13	57	Yes	
Seventh R1 / W3	LKD	39.17	30.31	8.86	23	Yes	100	100	0	Yes	88	76	14	Yes	30	18	40	Yes	
Seventh R1 / W2		39.17	30.42	8.75	22	Yes					88	77	13	Yes	30	19	37	Yes	
Seventh R1 / W1		35.19	32.67	2.52	7	Yes					North Facing								
Seventh R2 / W6	LKD	36.53	33.10	3.43	9	Yes	100	100	0	Yes	52	47	10	Yes	15	10	33	Yes	
Seventh R2 / W5		39.18	29.81	9.37	24	Yes					88	76	14	Yes	30	18	40	Yes	
Seventh R2 / W4		39.17	29.94	9.23	24	Yes					88	75	15	Yes	30	17	43	Yes	
Seventh R3 / W7	LKD	37.07	33.02	4.05	11	Yes	100	99	1	Yes	85	82	4	Yes	27	24	11	Yes	
Seventh R3 / W8		34.67	34.67	0.00	0	Yes					North Facing								
<b>Solace Geoffrey Watling Way</b>																			
First R1 / W2	LKD	12.71	5.92	6.79	53	No	100	29	71	No	22	11	50	No	17	6	65	Yes	
First R1 / W1		2.25	2.08	0.17	8	Yes					North Facing								
First R2 / W3	Bedroom	26.43	19.17	7.26	27	No	98	37	62	No	55	45	18	Yes	19	9	53	Yes	
First R3 / W4	Bedroom	27.20	20.01	7.19	26	No	96	36	63	No	55	45	18	Yes	18	8	56	Yes	
First R4 / W5	Bedroom	27.55	20.54	7.01	25	No	94	34	64	No	56	46	18	Yes	19	9	53	Yes	
First R5 / W6	Bedroom	26.91	20.28	6.63	25	No	92	31	67	No	56	45	20	Yes	20	9	55	Yes	
First R6 / W7	LKD	12.05	6.36	5.69	47	No	100	40	60	No	22	13	41	No	17	8	53	Yes	
First R6 / W8		15.36	15.24	0.12	1	Yes					16	15	6	Yes	3	2	33	Yes	
Second R1 / W2	LKD	13.27	6.67	6.60	50	No	100	33	67	No	23	13	43	No	17	7	59	Yes	
Second R1 / W1		3.00	2.83	0.17	6	Yes					North Facing								
Second R2 / W3	Bedroom	28.17	21.03	7.14	25	No	93	40	56	No	60	50	17	Yes	20	10	50	Yes	
Second R3 / W4	Bedroom	29.28	22.21	7.07	24	No	94	39	59	No	61	52	15	Yes	20	11	45	Yes	
Second R4 / W5	Bedroom	29.58	22.68	6.90	23	No	95	39	59	No	62	52	16	Yes	19	9	53	Yes	

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)				APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing	Proposed		% Loss	Meets BRE criteria?	Existing	
Second R5 / W6	Bedroom	29.11	22.59	6.52	22	No	96	37	61	No	62	52	16	Yes	20	10	50	Yes	
Second R6 / W7	LKD	11.65	6.06	5.59	48	No	100	45	55	No	20	10	50	No	20	10	50	Yes	
Second R6 / W8		18.88	18.70	0.18	1	Yes					24	23	4	Yes	5	4	20	Yes	
Third R1 / W2	LKD	14.02	7.68	6.34	45	No	100	37	63	No	25	17	32	No	19	11	42	Yes	
Third R1 / W1		4.22	4.05	0.17	4	Yes					North Facing								
Third R2 / W3	Bedroom	30.02	23.04	6.98	23	No	94	45	52	No	63	55	13	Yes	20	12	40	Yes	
Third R3 / W4	Bedroom	31.24	24.24	7.00	22	No	95	44	54	No	67	59	12	Yes	21	13	38	Yes	
Third R4 / W5	Bedroom	31.68	24.74	6.94	22	No	96	44	54	No	69	60	13	Yes	22	13	41	Yes	
Third R5 / W6	Bedroom	31.41	24.75	6.66	21	No	97	44	55	No	67	59	12	Yes	21	13	38	Yes	
Third R6 / W7	LKD	13.16	7.26	5.90	45	No	100	55	45	No	21	13	38	No	21	13	38	Yes	
Third R6 / W8		23.25	22.90	0.35	2	Yes					29	26	10	Yes	8	5	38	Yes	
Fourth R1 / W2	LKD	14.93	8.96	5.97	40	No	100	44	55	No	25	18	28	No	19	12	37	Yes	
Fourth R1 / W1		6.36	6.20	0.16	3	Yes					North Facing								
Fourth R2 / W3	Bedroom	31.91	25.20	6.71	21	No	96	52	46	No	68	60	12	Yes	20	12	40	Yes	
Fourth R3 / W4	Bedroom	33.15	26.29	6.86	21	No	96	51	47	No	70	62	11	Yes	21	13	38	Yes	
Fourth R4 / W5	Bedroom	33.69	26.77	6.92	21	No	97	50	48	No	74	66	11	Yes	24	16	33	Yes	
Fourth R5 / W6	Bedroom	33.68	26.84	6.84	20	Yes	97	50	49	No	74	65	12	Yes	24	15	38	Yes	
Fourth R6 / W7	LKD	14.71	8.42	6.29	43	No	100	66	34	No	22	13	41	No	22	13	41	Yes	
Fourth R6 / W8		28.35	27.81	0.54	2	Yes					39	36	8	Yes	10	7	30	Yes	
Fifth R1 / W2	LKD	10.09	4.54	5.55	55	No	100	51	49	No	14	9	36	No	14	9	36	Yes	
Fifth R1 / W1		10.33	10.16	0.17	2	Yes					North Facing								
Fifth R2 / W3	Bedroom	29.43	23.02	6.41	22	No	97	60	38	No	65	59	9	Yes	22	16	27	Yes	
Fifth R3 / W4	Bedroom	30.47	23.86	6.61	22	No	96	58	40	No	70	64	9	Yes	25	19	24	Yes	
Fifth R4 / W5	Bedroom	30.98	24.24	6.74	22	No	97	57	41	No	70	64	9	Yes	25	19	24	Yes	
Fifth R5 / W6	Bedroom	31.13	24.35	6.78	22	No	97	57	41	No	71	64	10	Yes	25	18	28	Yes	
Fifth R6 / W7	LKD	11.67	5.32	6.35	54	No	100	87	13	Yes	17	9	47	No	17	9	47	Yes	
Fifth R6 / W8		33.58	32.85	0.73	2	Yes					45	43	4	Yes	12	10	17	Yes	
<b>Patricia Hollis House Watling Way</b>																			
First R1 / W1	LKD	26.00	22.23	3.77	15	Yes	99	49	51	No	North Facing								
First R1 / W2		15.41	1.02	14.39	93	No					24	1	96	No	23	0	100	No	
First R2 / W3	Bedroom	35.59	19.00	16.59	47	No	98	25	74	No	85	57	33	Yes	27	0	100	No	
First R3 / W4	Bedroom	35.66	18.95	16.71	47	No	97	23	76	No	85	57	33	Yes	27	0	100	No	
First R4 / W5	LKD	14.82	0.89	13.93	94	No	99	10	89	No	24	2	92	No	22	0	100	No	
First R5 / W6	Bedroom	35.79	18.78	17.01	48	No	97	24	75	No	85	58	32	Yes	27	1	96	No	
First R6 / W7	Bedroom	35.86	18.73	17.13	48	No	96	19	80	No	85	58	32	Yes	27	1	96	No	
First R7 / W8	Bedroom	35.93	18.70	17.23	48	No	96	23	76	No	85	58	32	Yes	27	1	96	No	
First R8 / W9	Bedroom	35.99	18.65	17.34	48	No	97	23	76	No	85	57	33	Yes	27	0	100	No	
First R9 / W10	LKD	16.42	0.65	15.77	96	No	100	73	27	No	29	2	93	No	26	0	100	No	
First R9 / W11		37.88	31.97	5.91	16	Yes					49	34	31	Yes	15	0	100	No	
Second R1 / W1	LKD	28.36	24.65	3.71	13	Yes	99	57	42	No	North Facing								
Second R1 / W3		16.39	2.29	14.10	86	No					25	1	96	No	24	0	100	No	
Second R2 / W4	Bedroom	36.69	20.47	16.22	44	No	98	28	71	No	86	57	34	Yes	28	0	100	No	
Second R3 / W5	Bedroom	36.75	20.42	16.33	44	No	97	27	72	No	86	57	34	Yes	28	0	100	No	
Second R4 / W6	LKD	15.68	2.07	13.61	87	No	99	14	86	No	24	2	92	No	22	0	100	No	
Second R5 / W7	Bedroom	36.86	20.25	16.61	45	No	97	27	72	No	85	58	32	Yes	27	1	96	No	
Second R6 / W8	Bedroom	36.91	20.19	16.72	45	No	96	22	77	No	86	58	33	Yes	28	1	96	No	
Second R7 / W9	Bedroom	36.97	20.16	16.81	45	No	96	26	73	No	86	58	33	Yes	28	1	96	No	
Second R8 / W10	Bedroom	37.02	20.11	16.91	46	No	97	26	73	No	87	58	33	Yes	29	1	97	No	
Second R9 / W11	LKD	17.30	1.75	15.55	90	No	100	76	24	No	30	2	93	No	27	0	100	No	
Second R9 / W12		38.68	32.99	5.69	15	Yes					50	36	28	Yes	15	1	93	No	
Third R1 / W1	LKD	30.79	27.17	3.62	12	Yes	99	70	29	No	North Facing								
Third R1 / W2		17.22	3.68	13.54	79	No					27	6	78	No	26	5	81	Yes	

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing		Proposed	% Loss	Meets BRE criteria?	
Third R2 / W3	Bedroom	37.58	22.02	15.56	41	No	98	32	67	No	88	64	27	Yes	30	6	80	Yes
Third R3 / W4	Bedroom	37.63	21.98	15.65	42	No	97	31	68	No	88	63	28	Yes	30	6	80	Yes
Third R4 / W5	LKD	16.38	3.33	13.05	80	No	99	18	82	No	26	7	73	No	24	5	79	Yes
Third R5 / W6	Bedroom	37.72	21.81	15.91	42	No	97	31	68	No	88	61	31	Yes	30	4	87	No
Third R6 / W7	Bedroom	37.78	21.76	16.02	42	No	96	25	74	No	88	61	31	Yes	30	4	87	No
Third R7 / W8	Bedroom	37.84	21.73	16.11	43	No	96	29	70	No	88	61	31	Yes	30	4	87	No
Third R8 / W9	Bedroom	37.88	21.68	16.20	43	No	97	30	69	No	88	62	30	Yes	30	5	83	Yes
Third R9 / W10	LKD	18.02	3.14	14.88	83	No	100	79	21	No	31	8	74	No	28	6	79	Yes
Third R9 / W11		39.27	33.89	5.38	14	Yes					50	38	24	Yes	15	3	80	No
Fourth R1 / W1	LKD	33.22	29.73	3.49	11	Yes	99	84	15	Yes	North Facing							
Fourth R1 / W2		17.91	5.16	12.75	71	No					27	8	70	No	26	7	73	Yes
Fourth R2 / W3	Bedroom	38.28	23.67	14.61	38	No	98	37	62	No	88	65	26	Yes	30	7	77	Yes
Fourth R3 / W4	Bedroom	38.32	23.63	14.69	38	No	97	35	63	No	88	64	27	Yes	30	6	80	Yes
Fourth R4 / W5	LKD	16.92	4.69	12.23	72	No	99	23	77	No	26	9	65	No	24	7	71	Yes
Fourth R5 / W6	Bedroom	38.39	23.49	14.90	39	No	97	36	63	No	88	64	27	Yes	30	6	80	Yes
Fourth R6 / W7	Bedroom	38.42	23.44	14.98	39	No	96	29	70	No	88	64	27	Yes	30	6	80	Yes
Fourth R7 / W8	Bedroom	38.45	23.40	15.05	39	No	96	34	65	No	88	64	27	Yes	30	6	80	Yes
Fourth R8 / W9	Bedroom	38.48	23.34	15.14	39	No	97	34	65	No	88	65	26	Yes	30	7	77	Yes
Fourth R9 / W10	LKD	18.48	4.63	13.85	75	No	100	84	16	Yes	31	10	68	No	28	7	75	Yes
Fourth R9 / W11		39.56	34.63	4.93	12	Yes					50	41	18	Yes	15	6	60	Yes
Fifth R1 / W1	LKD	18.96	6.98	11.98	63	No	100	87	13	Yes	28	12	57	No	26	10	62	Yes
Fifth R1 / W8		29.72	26.75	2.97	10	Yes					North Facing							
Fifth R2 / W2	Bedroom	38.83	25.24	13.59	35	No	97	42	57	No	88	69	22	Yes	30	11	63	Yes
Fifth R3 / W3	Bedroom	38.84	25.18	13.66	35	No	96	34	65	No	88	69	22	Yes	30	11	63	Yes
Fifth R4 / W4	Bedroom	38.86	25.14	13.72	35	No	96	39	59	No	88	69	22	Yes	30	11	63	Yes
Fifth R5 / W5	Bedroom	38.87	25.09	13.78	35	No	97	40	59	No	88	70	20	Yes	30	12	60	Yes
Fifth R6 / W6	LKD	18.79	6.22	12.57	67	No	100	88	12	Yes	31	14	55	No	28	11	61	Yes
Fifth R6 / W7		39.60	35.17	4.43	11	Yes					50	42	16	Yes	15	7	53	Yes
Sixth R1 / W1	LKD	35.68	25.09	10.59	30	No	100	94	6	Yes	71	57	20	Yes	26	12	54	Yes
Sixth R1 / W8		33.94	31.06	2.88	8	Yes					North Facing							
Sixth R2 / W2	Bedroom	39.07	27.05	12.02	31	Yes	97	50	48	No	88	72	18	Yes	30	14	53	Yes
Sixth R3 / W3	Bedroom	39.08	27.00	12.08	31	Yes	96	41	58	No	88	72	18	Yes	30	14	53	Yes
Sixth R4 / W4	Bedroom	39.08	26.96	12.12	31	No	96	47	51	No	88	72	18	Yes	30	14	53	Yes
Sixth R5 / W5	Bedroom	39.09	26.91	12.18	31	No	97	48	51	No	88	71	19	Yes	30	13	57	Yes
Sixth R6 / W6	LKD	18.97	7.86	11.11	59	No	100	92	8	Yes	31	15	52	No	28	12	57	Yes
Sixth R6 / W7		39.61	35.72	3.89	10	Yes					50	43	14	Yes	15	8	47	Yes
<b>Norada Geoffrey Watling Way</b>																		
First R1 / W1	LKD	4.04	4.05	-0.01	0	Yes	62	60	4	Yes	North Facing							
First R1 / W2		12.97	12.70	0.27	2	Yes					31	30	3	Yes	5	4	20	Yes
First R2 / W3	LKD	0.56	0.21	0.35	63	No	38	14	63	No	1	0	100	Yes	1	0	100	Yes
First R3 / W4	Bedroom	10.72	10.72	0.00	0	Yes	29	29	0	Yes	30	30	0	Yes	0	0	100	Yes
First R4 / W5	Bedroom	10.31	10.31	0.00	0	Yes	22	22	0	Yes	33	33	0	Yes	0	0	100	Yes
Second R1 / W1	LKD	4.45	4.46	-0.01	0	Yes	62	60	4	Yes	North Facing							
Second R1 / W2		15.02	14.73	0.29	2	Yes					34	34	0	Yes	5	5	0	Yes
Second R2 / W3	LKD	0.61	0.27	0.34	56	No	39	16	58	No	1	0	100	Yes	1	0	100	Yes
Second R3 / W4	Bedroom	12.95	12.95	0.00	0	Yes	36	36	0	Yes	40	40	0	Yes	0	0	100	Yes
Second R4 / W5	Bedroom	12.48	12.48	0.00	0	Yes	29	29	0	Yes	40	40	0	Yes	1	1	0	Yes
Third R1 / W1	LKD	4.86	4.87	-0.01	0	Yes	63	61	3	Yes	North Facing							
Third R1 / W2		17.55	17.23	0.32	2	Yes					43	43	0	Yes	7	7	0	Yes
Third R2 / W3	LKD	0.73	0.39	0.34	47	No	40	20	50	No	1	1	0	Yes	1	1	0	Yes
Third R3 / W4	Bedroom	15.77	15.77	0.00	0	Yes	50	50	0	Yes	48	48	0	Yes	1	1	0	Yes
Third R4 / W5	Bedroom	15.25	15.25	0.00	0	Yes	36	36	0	Yes	48	48	0	Yes	3	3	0	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing		Proposed	% Loss	Meets BRE criteria?	
Fourth R1 / W1	LKD	5.32	5.33	-0.01	0	Yes	64	62	3	Yes	North Facing							
Fourth R1 / W2		20.61	20.25	0.36	2	Yes					49	49	0	Yes	9	9	0	Yes
Fourth R2 / W3	LKD	1.01	0.68	0.33	33	No	41	25	39	No	1	1	0	Yes	1	1	0	Yes
Fourth R3 / W4	Bedroom	19.34	19.33	0.01	0	Yes	59	59	0	Yes	55	55	0	Yes	3	3	0	Yes
Fourth R4 / W5	Bedroom	18.80	18.80	0.00	0	Yes	42	42	0	Yes	57	56	2	Yes	5	4	20	Yes
Fifth R1 / W1	LKD	6.04	6.04	0.00	0	Yes	66	65	2	Yes	North Facing							
Fifth R1 / W2		24.22	23.71	0.51	2	Yes					53	53	0	Yes	12	12	0	Yes
Fifth R2 / W3	LKD	1.69	1.27	0.42	25	No	45	31	31	No	2	2	0	Yes	1	1	0	Yes
Fifth R3 / W4	Bedroom	23.77	23.58	0.19	1	Yes	66	66	0	Yes	66	65	2	Yes	8	7	13	Yes
Fifth R4 / W5	Bedroom	23.28	23.11	0.17	1	Yes	49	49	0	Yes	64	63	2	Yes	6	5	17	Yes
Sixth R1 / W1	LKD	7.10	6.95	0.15	2	Yes	71	70	2	Yes	North Facing							
Sixth R1 / W2		28.11	27.16	0.95	3	Yes					59	58	2	Yes	18	17	6	Yes
Sixth R2 / W3	LKD	2.51	1.81	0.70	28	No	61	46	25	No	3	2	33	Yes	2	1	50	Yes
Sixth R3 / W4	Bedroom	28.92	28.36	0.56	2	Yes	82	82	0	Yes	76	74	3	Yes	18	16	11	Yes
Sixth R4 / W5	Bedroom	28.49	28.04	0.45	2	Yes	67	67	0	Yes	74	73	1	Yes	16	15	6	Yes
Seventh R1 / W1	LKD	8.04	7.61	0.43	5	Yes	89	88	2	Yes	North Facing							
Seventh R1 / W2		31.71	30.25	1.46	5	Yes					65	64	2	Yes	24	23	4	Yes
Seventh R2 / W3	LKD	5.83	4.96	0.87	15	Yes	81	75	7	Yes	10	9	10	Yes	9	8	11	Yes
Seventh R3 / W4	Bedroom	34.25	33.45	0.80	2	Yes	97	97	0	Yes	86	83	3	Yes	28	25	11	Yes
Seventh R4 / W5	Bedroom	34.02	33.44	0.58	2	Yes	98	98	0	Yes	86	84	2	Yes	28	26	7	Yes
Eighth R1 / W1	LKD	8.61	8.22	0.39	5	Yes	94	93	1	Yes	North Facing							
Eighth R1 / W2		34.74	31.90	2.84	8	Yes					67	66	1	Yes	26	25	4	Yes
Eighth R2 / W3	LKD	8.63	6.44	2.19	25	No	84	83	2	Yes	11	11	0	Yes	10	10	0	Yes
Eighth R3 / W4	Bedroom	38.85	35.77	3.08	8	Yes	97	97	0	Yes	88	86	2	Yes	30	28	7	Yes
Eighth R4 / W5	Bedroom	38.90	35.79	3.11	8	Yes	98	98	0	Yes	88	86	2	Yes	30	28	7	Yes
Ninth R1 / W1	LKD	21.14	20.80	0.34	2	Yes	94	94	0	Yes	North Facing							
Ninth R1 / W2		37.38	34.82	2.56	7	Yes					80	79	1	Yes	26	25	4	Yes
Ninth R2 / W3	LKD	21.54	19.57	1.97	9	Yes	84	84	1	Yes	34	34	0	Yes	10	10	0	Yes
Ninth R3 / W4	Bedroom	39.43	36.61	2.82	7	Yes	97	97	0	Yes	88	86	2	Yes	30	28	7	Yes
Ninth R4 / W5	Bedroom	39.43	36.60	2.83	7	Yes	98	98	0	Yes	88	86	2	Yes	30	28	7	Yes
<b>White Moth Geoffrey Watling Way</b>																		
First R1 / W1	LKD	0.00	0.00	0.00	100	Yes	1	1	0	Yes	0	0	100	Yes	0	0	100	Yes
First R1 / W2		0.00	0.00	0.00	100	Yes					0	0	100	Yes	0	0	100	Yes
First R2 / W3	LKD	0.00	0.00	0.00	100	Yes	0	0	100	Yes	0	0	100	Yes	0	0	100	Yes
First R2 / W4		0.03	0.00	0.03	100	No					0	0	100	Yes	0	0	100	Yes
First R3 / W5	LKD	12.88	12.88	0.00	0	Yes	14	14	0	Yes	38	38	0	Yes	1	1	0	Yes
First R4 / W6	Bedroom	0.00	0.00	0.00	100	Yes	3	3	0	Yes	0	0	100	Yes	0	0	100	Yes
First R5 / W7	LKD	0.00	0.00	0.00	100	Yes	14	14	0	Yes	0	0	100	Yes	0	0	100	Yes
First R5 / W8		0.01	0.01	0.00	0	Yes					0	0	100	Yes	0	0	100	Yes
Second R1 / W1	LKD	0.00	0.00	0.00	100	Yes	6	6	0	Yes	0	0	100	Yes	0	0	100	Yes
Second R1 / W2		0.00	0.00	0.00	100	Yes					0	0	100	Yes	0	0	100	Yes
Second R2 / W3	LKD	0.00	0.00	0.00	100	Yes	1	1	5	Yes	0	0	100	Yes	0	0	100	Yes
Second R2 / W4		0.03	0.00	0.03	100	No					0	0	100	Yes	0	0	100	Yes
Second R3 / W5	LKD	15.85	15.85	0.00	0	Yes	18	18	0	Yes	48	48	0	Yes	2	2	0	Yes
Second R4 / W6	Bedroom	0.00	0.00	0.00	100	Yes	7	7	0	Yes	0	0	100	Yes	0	0	100	Yes
Second R5 / W7	LKD	0.05	0.05	0.00	0	Yes	24	23	1	Yes	0	0	100	Yes	0	0	100	Yes
Second R5 / W8		0.11	0.11	0.00	0	Yes					0	0	100	Yes	0	0	100	Yes
Third R1 / W1	LKD	0.00	0.00	0.00	100	Yes	18	18	0	Yes	0	0	100	Yes	0	0	100	Yes
Third R1 / W2		0.00	0.00	0.00	100	Yes					0	0	100	Yes	0	0	100	Yes
Third R2 / W3	LKD	0.00	0.00	0.00	100	Yes	12	11	2	Yes	0	0	100	Yes	0	0	100	Yes
Third R2 / W4		0.03	0.00	0.03	100	No					0	0	100	Yes	0	0	100	Yes
Third R3 / W5	LKD	19.63	19.63	0.00	0	Yes	24	24	0	Yes	56	56	0	Yes	5	5	0	Yes

Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)				APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss		Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)		% Loss	Meets BRE criteria?	Existing	Proposed		% Loss	Meets BRE criteria?	Existing	
Third R4 / W6	Bedroom	0.05	0.05	0.00	0	Yes	17	17	0	Yes	1	1	0	Yes	1	1	0	Yes	
Third R5 / W7	LKD	0.18	0.16	0.02	11	Yes	40	36	12	Yes	0	0	100	Yes	0	0	100	Yes	
Third R5 / W8		0.31	0.26	0.05	16	Yes					1	1	0	Yes	1	1	0	Yes	
Fourth R1 / W1	LKD	0.48	0.46	0.02	4	Yes	40	40	0	Yes	1	1	0	Yes	1	1	0	Yes	
Fourth R1 / W2		0.38	0.38	0.00	0	Yes					1	1	0	Yes	1	1	0	Yes	
Fourth R2 / W3	LKD	0.38	0.36	0.02	5	Yes	42	41	3	Yes	0	0	100	Yes	0	0	100	Yes	
Fourth R2 / W4		0.38	0.35	0.03	8	Yes					0	0	100	Yes	0	0	100	Yes	
Fourth R3 / W5	LKD	24.22	24.20	0.02	0	Yes	39	39	0	Yes	65	65	0	Yes	12	12	0	Yes	
Fourth R4 / W6	Bedroom	0.98	0.97	0.01	1	Yes	40	40	0	Yes	2	2	0	Yes	2	2	0	Yes	
Fourth R5 / W7	LKD	1.14	1.00	0.14	12	Yes	63	59	6	Yes	2	2	0	Yes	2	2	0	Yes	
Fourth R5 / W8		1.13	0.97	0.16	14	Yes					1	1	0	Yes	1	1	0	Yes	
Fifth R1 / W1	LKD	1.08	0.76	0.32	30	No	57	54	4	Yes	1	1	0	Yes	1	1	0	Yes	
Fifth R1 / W2		0.88	0.71	0.17	19	Yes					1	1	0	Yes	1	1	0	Yes	
Fifth R2 / W3	LKD	1.88	1.24	0.64	34	No	77	67	13	Yes	2	2	0	Yes	2	2	0	Yes	
Fifth R2 / W4		1.73	1.19	0.54	31	No					3	3	0	Yes	3	3	0	Yes	
Fifth R3 / W5	LKD	29.39	28.63	0.76	3	Yes	84	62	27	No	75	75	0	Yes	19	19	0	Yes	
Fifth R4 / W6	Bedroom	3.85	2.91	0.94	24	No	69	68	1	Yes	7	7	0	Yes	7	7	0	Yes	
Fifth R5 / W7	LKD	4.45	3.21	1.24	28	No	93	90	3	Yes	7	7	0	Yes	7	7	0	Yes	
Fifth R5 / W8		4.07	3.03	1.04	26	No					7	7	0	Yes	7	7	0	Yes	
Sixth R1 / W1	LKD	3.19	2.62	0.57	18	Yes	73	71	3	Yes	4	3	25	Yes	4	3	25	Yes	
Sixth R1 / W2		3.21	2.80	0.41	13	Yes					4	4	0	Yes	4	4	0	Yes	
Sixth R2 / W3	LKD	3.19	1.70	1.49	47	No	82	76	8	Yes	3	2	33	Yes	3	2	33	Yes	
Sixth R2 / W4		2.97	1.65	1.32	44	No					4	4	0	Yes	4	4	0	Yes	
Sixth R3 / W5	LKD	34.06	31.47	2.59	8	Yes	94	73	22	No	80	79	1	Yes	24	23	4	Yes	
Sixth R4 / W6	Bedroom	6.44	3.78	2.66	41	No	78	78	0	Yes	8	8	0	Yes	8	8	0	Yes	
Sixth R5 / W7	LKD	7.18	4.04	3.14	44	No	96	96	0	Yes	8	7	13	Yes	8	7	13	Yes	
Sixth R5 / W8		6.60	3.92	2.68	41	No					8	8	0	Yes	8	8	0	Yes	
Seventh R1 / W1	LKD	6.68	6.01	0.67	10	Yes	95	95	0	Yes	11	10	9	Yes	11	10	9	Yes	
Seventh R1 / W2		6.97	6.51	0.46	7	Yes					10	10	0	Yes	10	10	0	Yes	
Seventh R2 / W3	LKD	6.01	4.51	1.50	25	No	92	92	0	Yes	8	7	13	Yes	8	7	13	Yes	
Seventh R2 / W4		5.94	4.69	1.25	21	No					8	8	0	Yes	8	8	0	Yes	
Seventh R3 / W5	LKD	36.98	34.39	2.59	7	Yes	98	86	12	Yes	85	84	1	Yes	28	27	4	Yes	
Seventh R4 / W6	Bedroom	32.42	29.46	2.96	9	Yes	94	94	0	Yes	69	68	1	Yes	26	25	4	Yes	
Eighth R1 / W1	LKD	29.29	26.73	2.56	9	Yes	98	98	0	Yes	62	61	2	Yes	23	22	4	Yes	
Eighth R1 / W2		36.90	33.70	3.20	9	Yes					77	75	3	Yes	28	26	7	Yes	
<b>Olive Geoffrey Watling Way</b>																			
First R1 / W1	LKD	1.04	0.81	0.23	22	No	59	42	29	No	2	1	50	Yes	2	1	50	Yes	
First R1 / W2		1.78	1.17	0.61	34	No					2	2	0	Yes	2	2	0	Yes	
First R2 / W3	Bedroom	21.29	20.46	0.83	4	Yes	76	65	15	Yes	60	59	2	Yes	9	8	11	Yes	
First R3 / W4	Bedroom	22.02	21.02	1.00	5	Yes	74	70	6	Yes	59	57	3	Yes	9	7	22	Yes	
First R4 / W5	LKD	2.28	1.04	1.24	54	No	74	31	58	No	7	4	43	Yes	5	2	60	Yes	
First R5 / W6	LKD	21.11	19.63	1.48	7	Yes	98	98	0	Yes	56	53	5	Yes	11	8	27	Yes	
First R5 / W7		5.75	5.27	0.48	8	Yes					9	8	11	Yes	3	2	33	Yes	
Second R1 / W1	LKD	1.46	1.15	0.31	21	No	65	54	18	Yes	2	1	50	Yes	2	1	50	Yes	
Second R1 / W2		2.23	1.55	0.68	30	No					2	2	0	Yes	2	2	0	Yes	
Second R2 / W3	Bedroom	24.44	23.56	0.88	4	Yes	83	76	8	Yes	64	63	2	Yes	11	10	9	Yes	
Second R3 / W4	Bedroom	25.22	24.16	1.06	4	Yes	83	82	1	Yes	66	64	3	Yes	12	10	17	Yes	
Second R4 / W5	LKD	2.72	1.43	1.29	47	No	82	38	54	No	8	5	38	Yes	6	3	50	Yes	
Second R5 / W6	LKD	23.95	22.44	1.51	6	Yes	98	98	0	Yes	59	57	3	Yes	14	12	14	Yes	
Second R5 / W7		6.64	6.18	0.46	7	Yes					10	9	10	Yes	3	2	33	Yes	
Third R1 / W1	LKD	2.91	2.45	0.46	16	Yes	74	70	5	Yes	4	2	50	Yes	4	2	50	Yes	
Third R1 / W2		3.31	2.50	0.81	24	No					4	2	50	Yes	4	2	50	Yes	



Room / Window Reference Number	Room Use. (Assumed*)	Vertical Sky Component (VSC) Results				VSC	No Sky Line (NSL) Results			NSL	Annual Probable Sunlight Hours (APSH) Results (per window)			APSH (per window)	Winter Probable Sunlight Hours (WPSH) Results (per window)			WPSH (per window)
		Existing VSC (%)	Proposed VSC (%)	Loss	% Loss	Meets BRE criteria?	Existing Lit Area (%)	Proposed Lit Area (%)	% Loss	Meets BRE criteria?	Existing	Proposed	% Loss	Meets BRE criteria?	Existing	Proposed	% Loss	Meets BRE criteria?
Third R2 / W3	Bedroom	27.79	26.78	1.01	4	Yes	90	86	5	Yes	72	71	1	Yes	17	16	6	Yes
Third R3 / W4	Bedroom	28.52	27.34	1.18	4	Yes	90	89	0	Yes	72	70	3	Yes	17	15	12	Yes
Third R4 / W5	LKD	3.32	1.94	1.38	42	No	88	47	46	No	9	6	33	Yes	7	4	43	Yes
Third R5 / W6	LKD	26.59	25.01	1.58	6	Yes	99	99	0	Yes	64	61	5	Yes	19	16	16	Yes
Third R5 / W7		7.37	6.94	0.43	6	Yes					10	9	10	Yes	3	2	33	Yes
Fourth R1 / W1	LKD	5.43	4.75	0.68	13	Yes	90	90	0	Yes	8	7	13	Yes	8	7	13	Yes
Fourth R1 / W2		5.46	4.50	0.96	18	Yes					5	4	20	Yes	5	4	20	Yes
Fourth R2 / W3	Bedroom	31.25	29.93	1.32	4	Yes	97	96	1	Yes	76	75	1	Yes	20	19	5	Yes
Fourth R3 / W4	Bedroom	31.78	30.28	1.50	5	Yes	96	96	0	Yes	77	76	1	Yes	21	20	5	Yes
Fourth R4 / W5	LKD	4.61	3.08	1.53	33	No	92	57	38	No	9	7	22	Yes	7	5	29	Yes
Fourth R5 / W6	LKD	29.55	27.67	1.88	6	Yes	100	100	0	Yes	68	66	3	Yes	23	21	9	Yes
Fourth R5 / W7		20.14	19.64	0.50	2	Yes					29	28	3	Yes	5	4	20	Yes
Fifth R1 / W1	LKD	24.75	23.03	1.72	7	Yes	95	95	0	Yes	56	55	2	Yes	21	20	5	Yes
Fifth R1 / W2		25.13	23.45	1.68	7	Yes					46	45	2	Yes	19	18	5	Yes
Fifth R2 / W3	Bedroom	34.65	32.59	2.06	6	Yes	98	98	0	Yes	83	82	1	Yes	26	25	4	Yes
Fifth R3 / W4	Bedroom	34.93	32.75	2.18	6	Yes	97	97	0	Yes	85	84	1	Yes	27	26	4	Yes
Fifth R4 / W5	LKD	18.26	16.29	1.97	11	Yes	99	71	29	No	38	37	3	Yes	11	10	9	Yes

**APPENDIX D**

**VSC FAÇADE STUDIES WITHIN THE PROPOSED SCHEME**

**D1 PROPOSED DEVELOPMENT – PLAN AND 3D VIEW IDENTIFYING VSC TEST AREAS**



Figure 1 – Plan view of proposed development

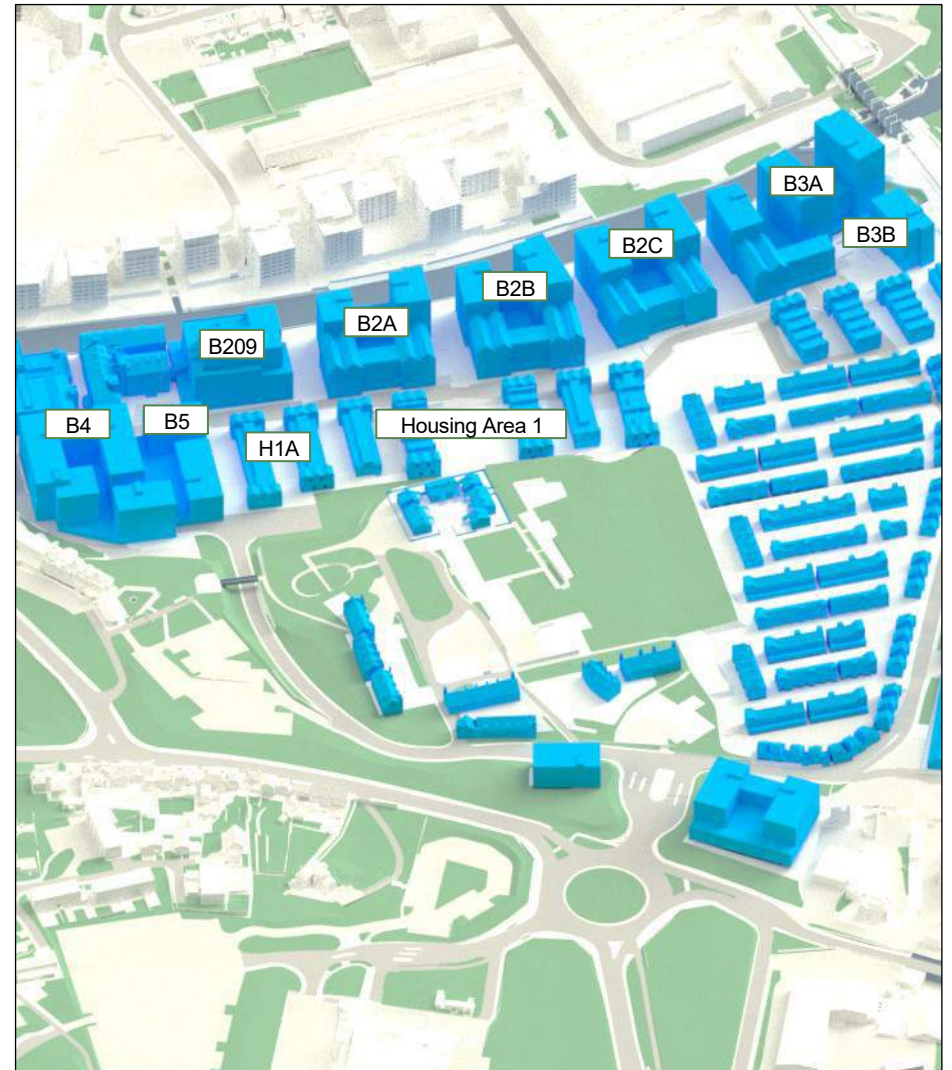


Figure 2 – View from south towards proposed development

D2 SITE-WIDE VERTICAL SKY COMPONENT (VSC) VALUES



Figure 3 – View from south-east towards proposed development

D3 SITE-WIDE VERTICAL SKY COMPONENT (VSC) VALUES



Figure 4 – View from north-west towards proposed development

D4 DAYLIGHT POTENTIAL – B209

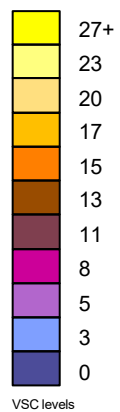
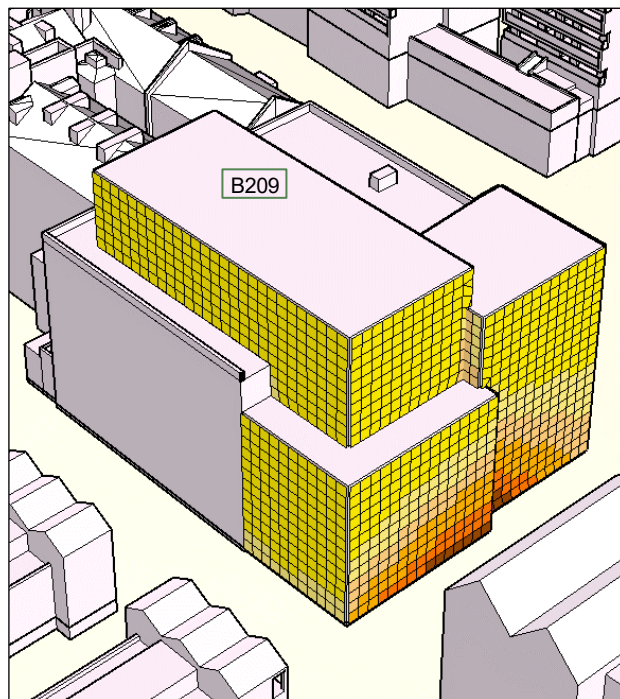
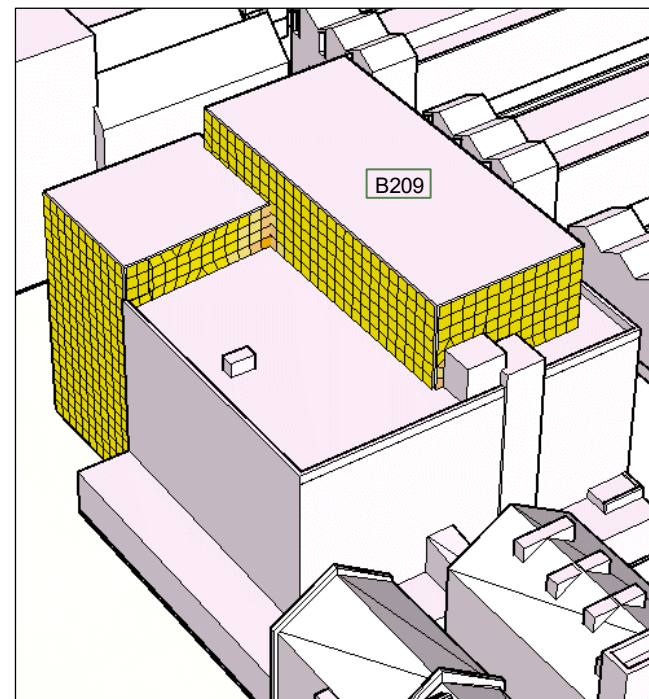


Figure 5 – Location of B209



View 1 from south-east



View 2 from north-west

D5 DAYLIGHT POTENTIAL – B2A

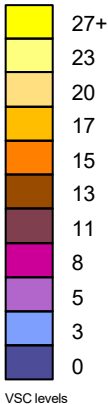
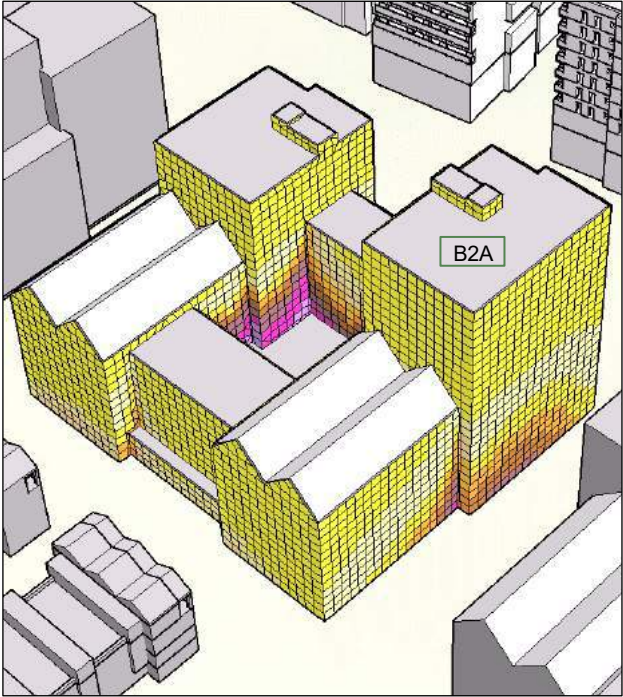
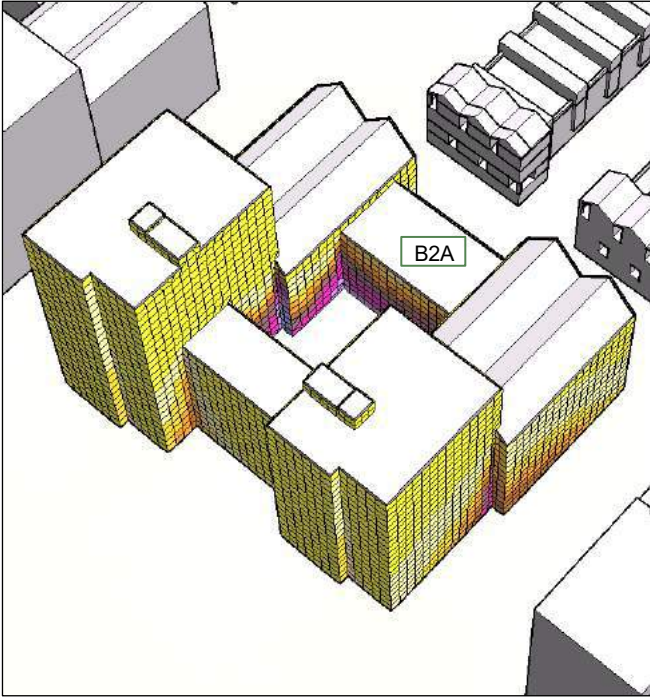


Figure 6 – Location of B2A



View 1 from south-east



View 2 from north-west

D6 DAYLIGHT POTENTIAL – B2B

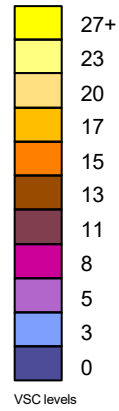
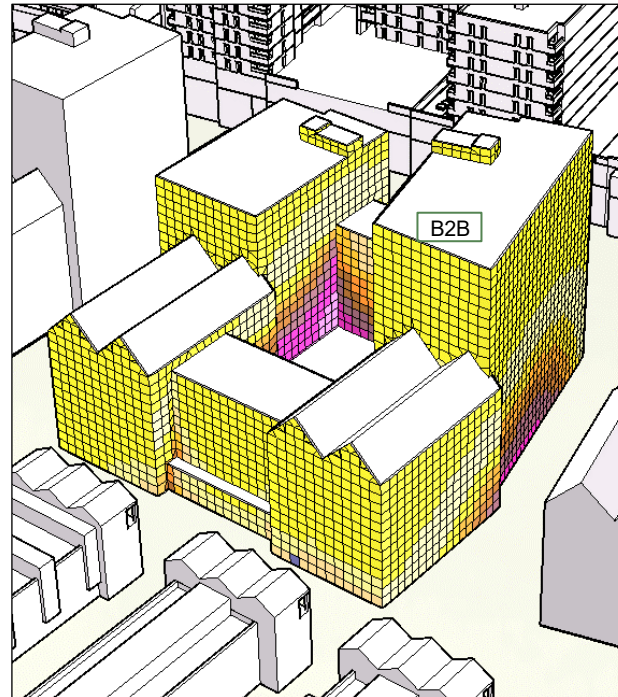
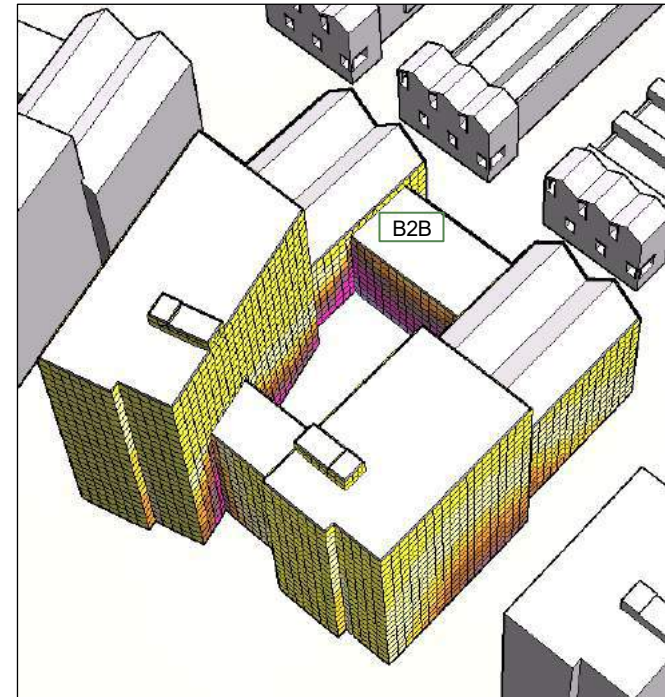


Figure 7 – Location of B2B



View 1 from south-east



View 2 from north-west



D7 DAYLIGHT POTENTIAL – B2C

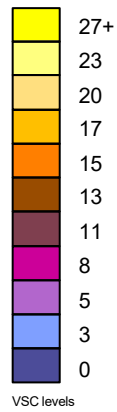
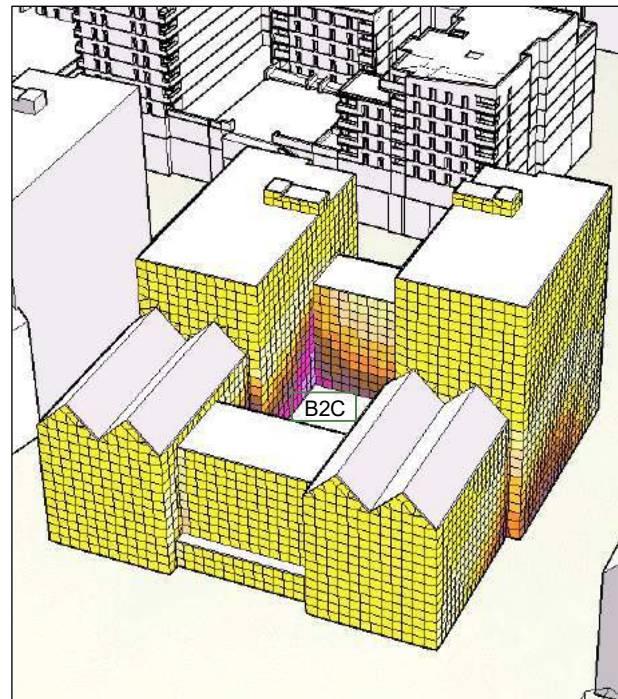
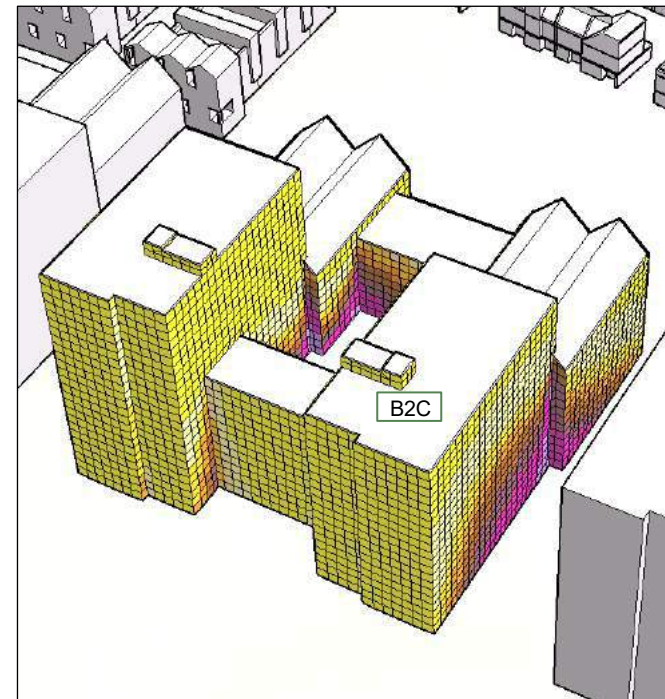


Figure 8 – Location of B2C



View 1 from south-east

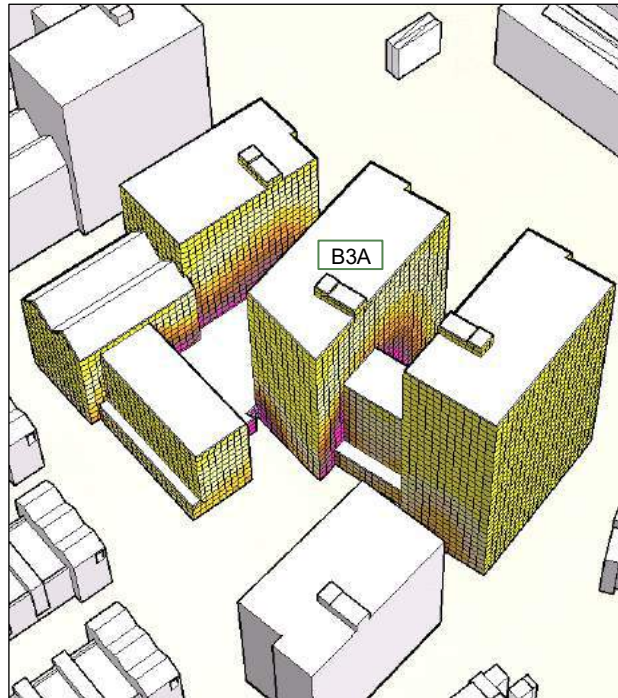


View 2 from north-west

D8 DAYLIGHT POTENTIAL – B3A



Figure 9 – Location of B3A



View 1 from south-east

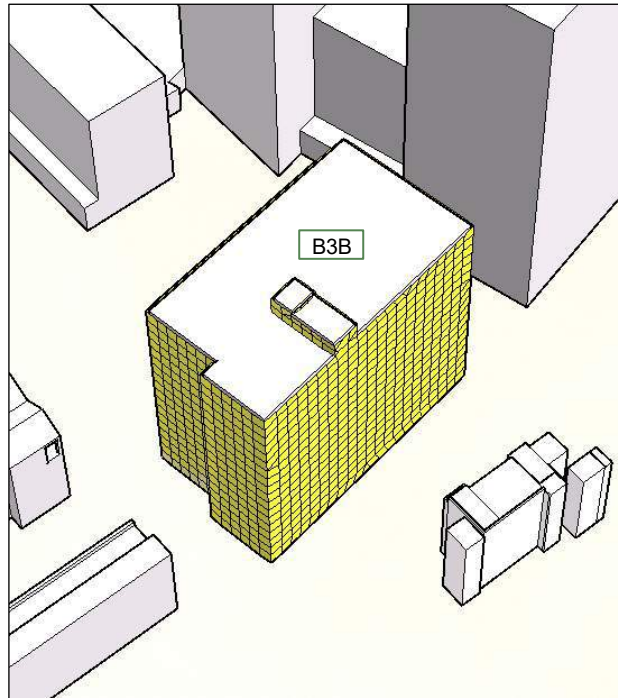


View 2 from north-west

D9 DAYLIGHT POTENTIAL – B3B



Figure 10 – Location of B3B



View 1 from south-east



View 2 from north-west

D10 DAYLIGHT POTENTIAL – B4

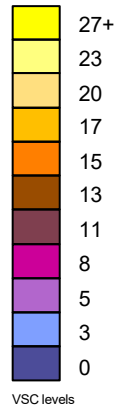
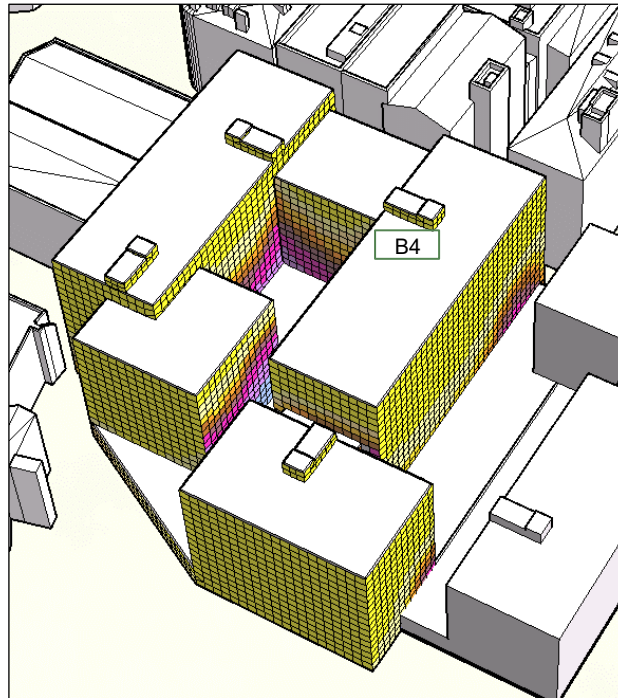
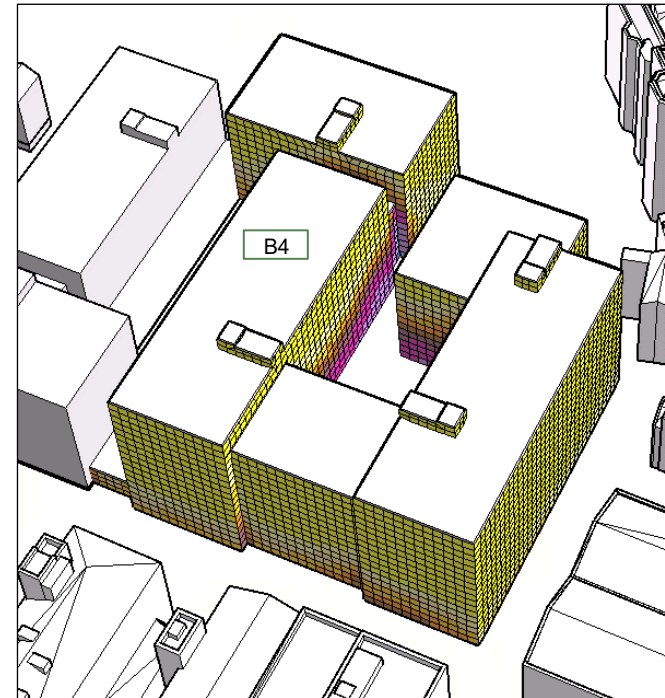


Figure 11 – Location of B4



View 1 from south-east



View 2 from north-west

D11 DAYLIGHT POTENTIAL – B5

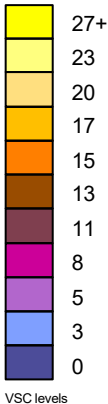
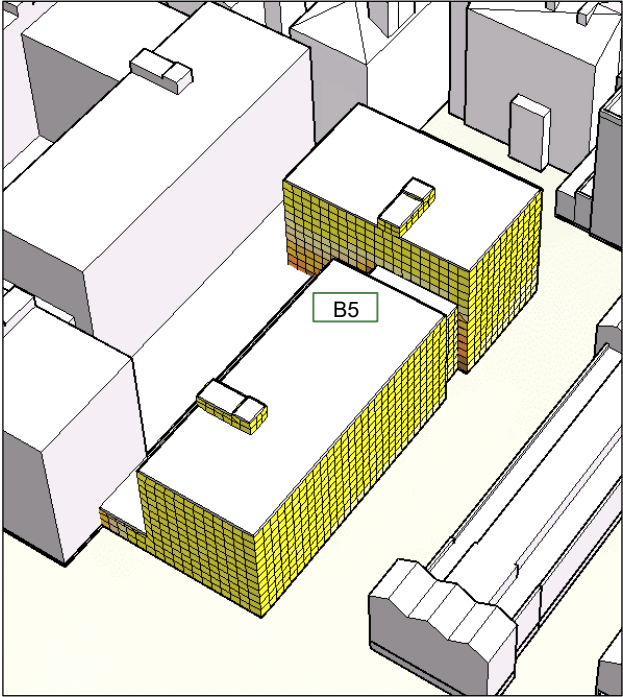
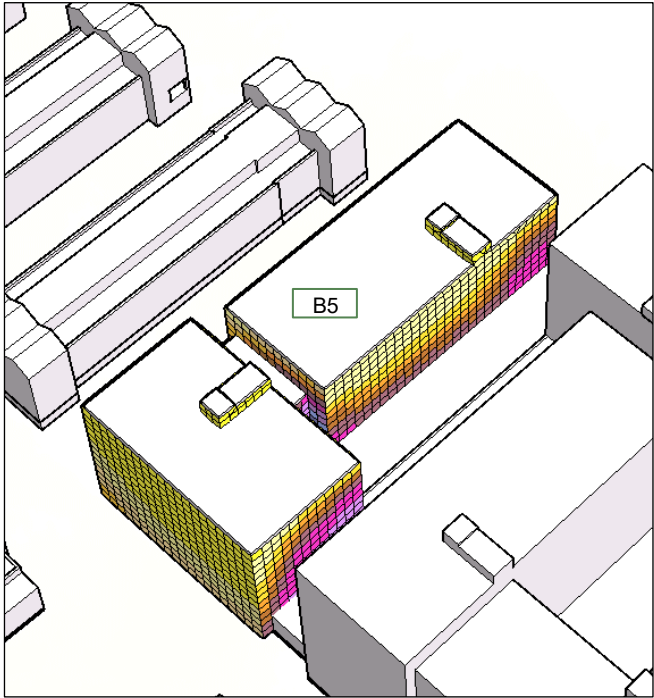


Figure 12 – Location of B5



View 1 from south-east



View 2 from north-west

D12 DAYLIGHT POTENTIAL – H1A (HOUSING AREA 1)

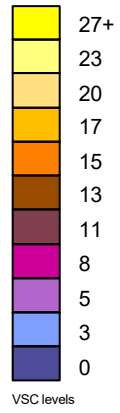
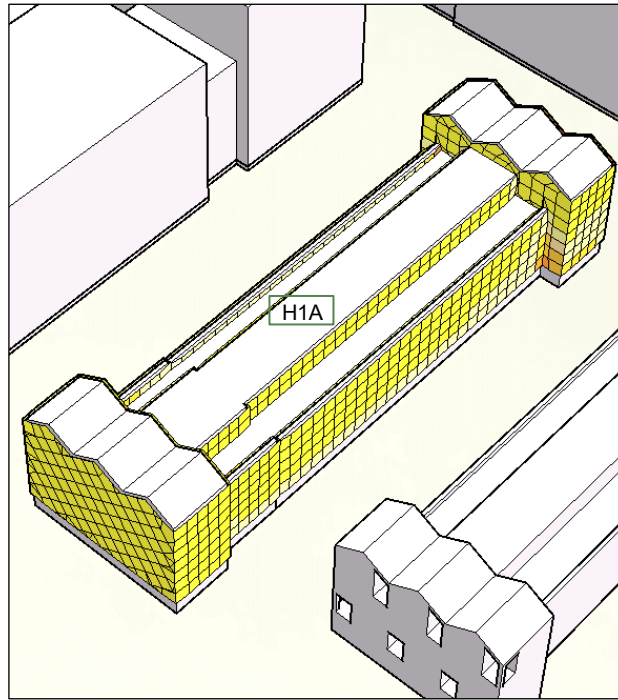
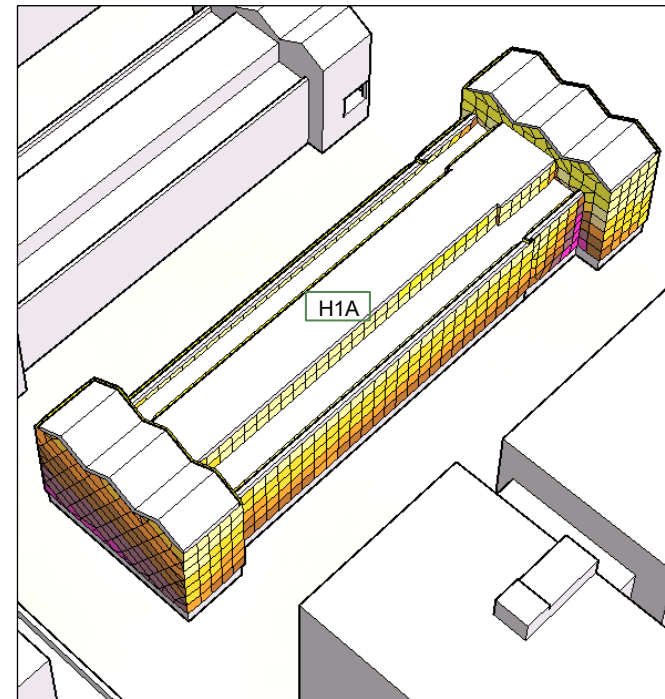


Figure 13 – Location of H1A



View 1 from south-east



View 2 from north-west

**APPENDIX E**

**SUNLIGHT EXPOSURE FAÇADE STUDIES WITHIN THE PROPOSED SCHEME**

E1 SUNLIGHT EXPOSURE – B209

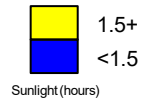
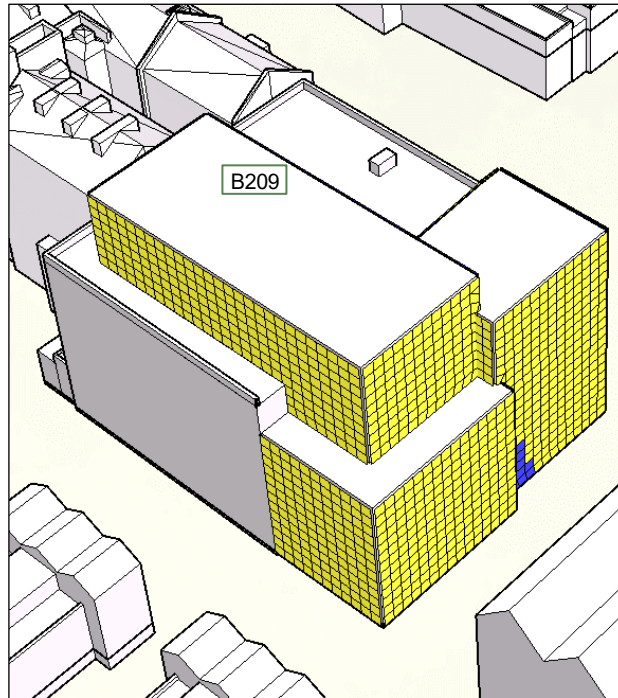
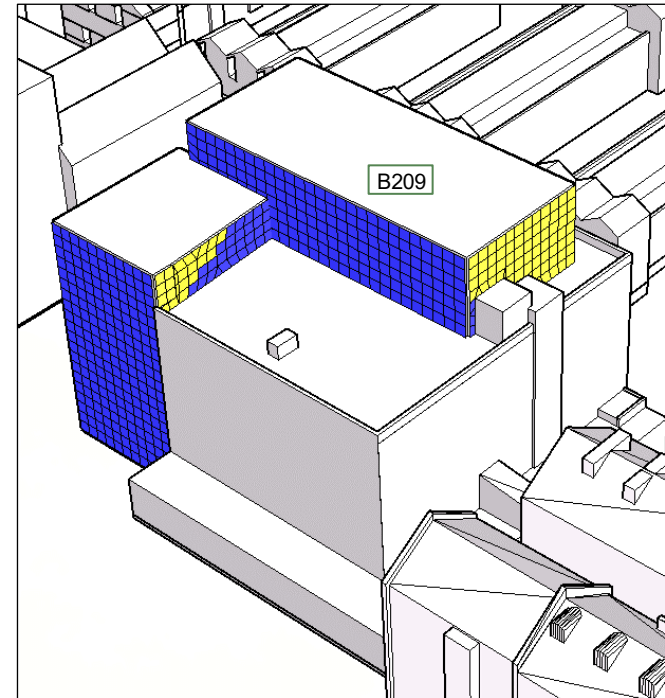


Figure 14 – Location of B209



View 1 from south-east



View 2 from north-west



### E2 SUNLIGHT EXPOSURE – B2A

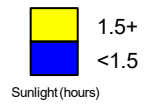
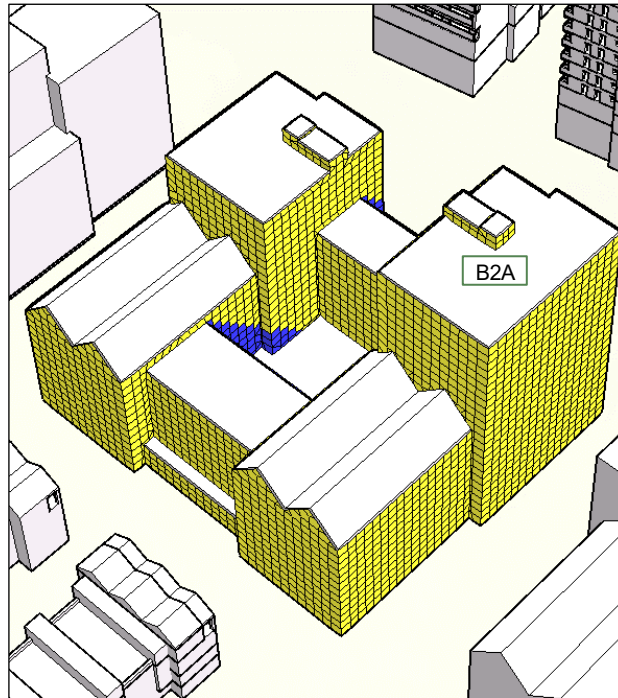
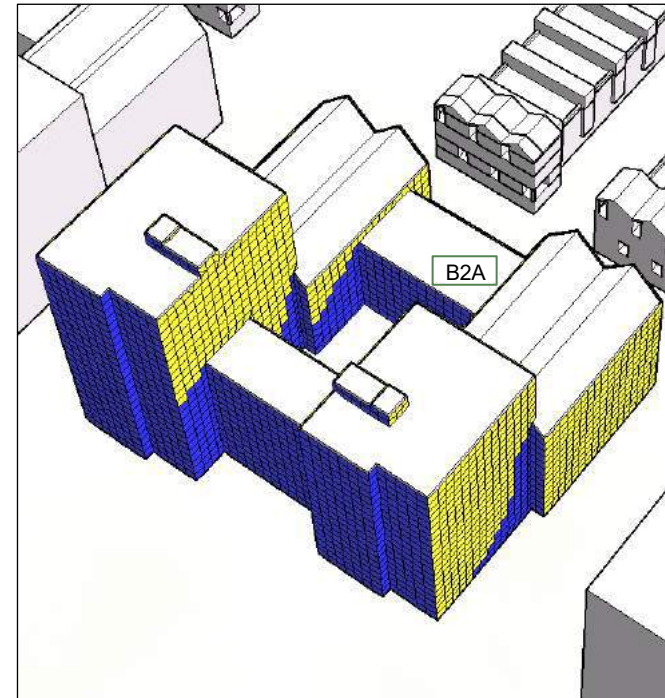


Figure 15 – Location of B2A



View 1 from south-east



View 2 from north-west

E3 SUNLIGHT EXPOSURE – B2B

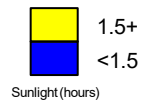
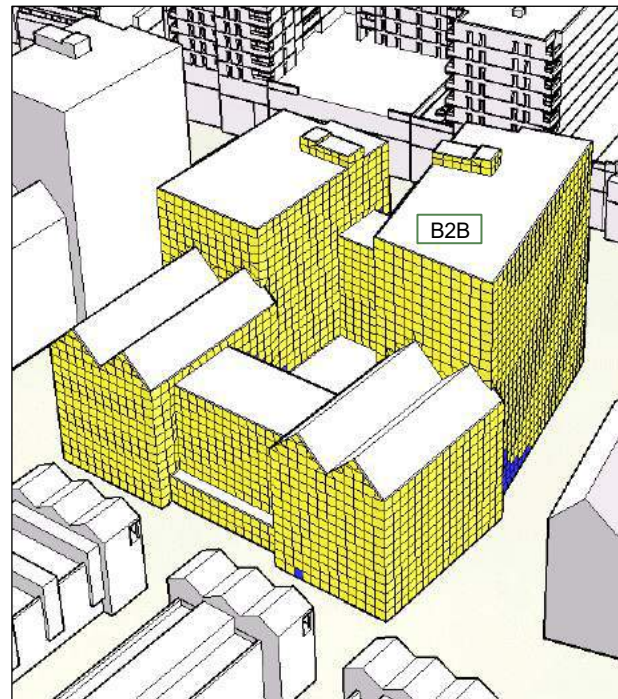
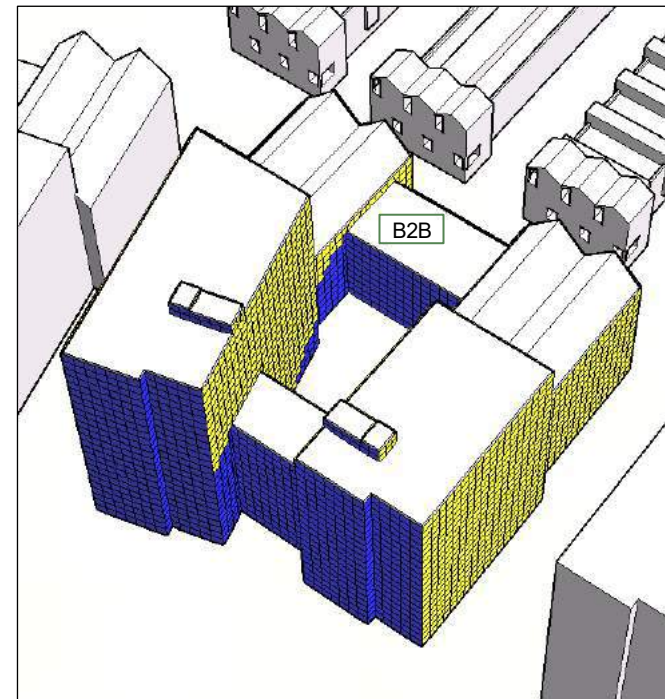


Figure 16 – Location of B2B



View 1 from south-east



View 2 from north-west

### E4 SUNLIGHT EXPOSURE – B2C

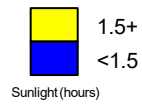
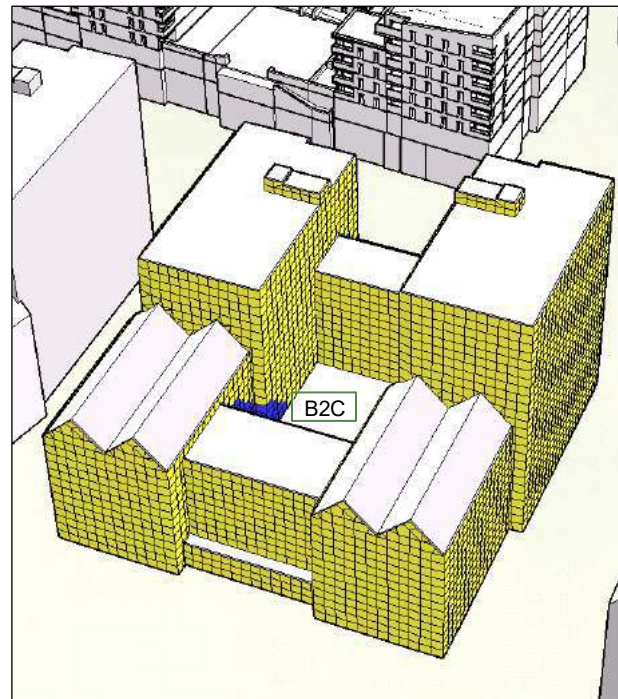
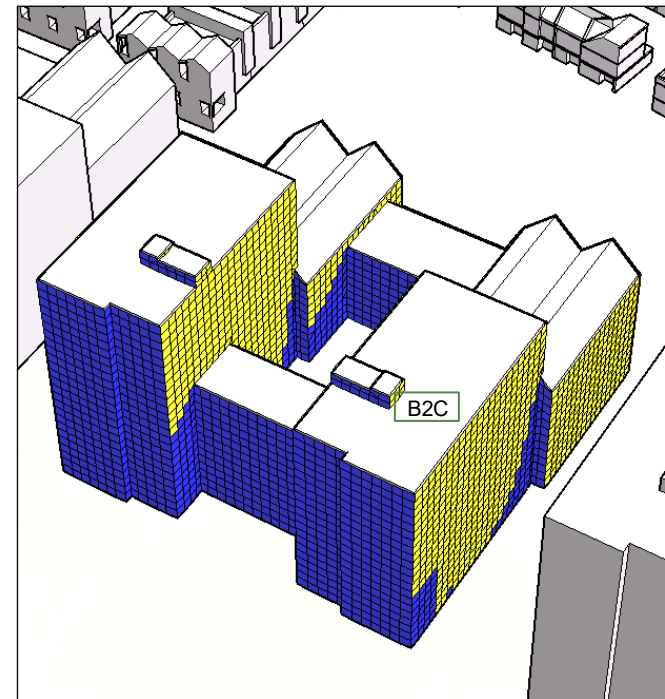


Figure 17 – Location of B2C



View 1 from south-east



View 2 from north-west

E5 SUNLIGHT EXPOSURE – B3A

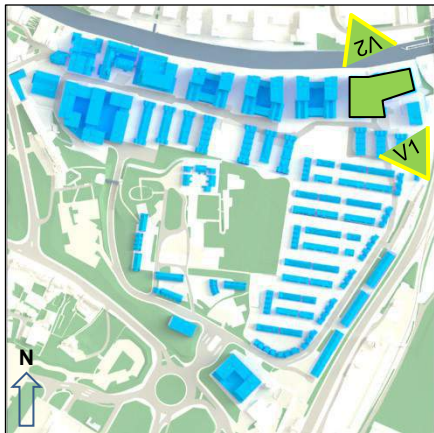
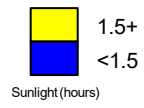
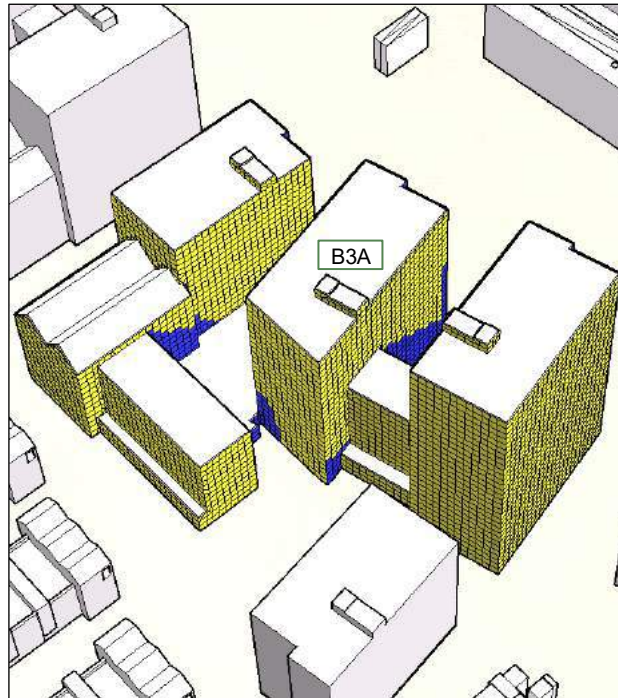
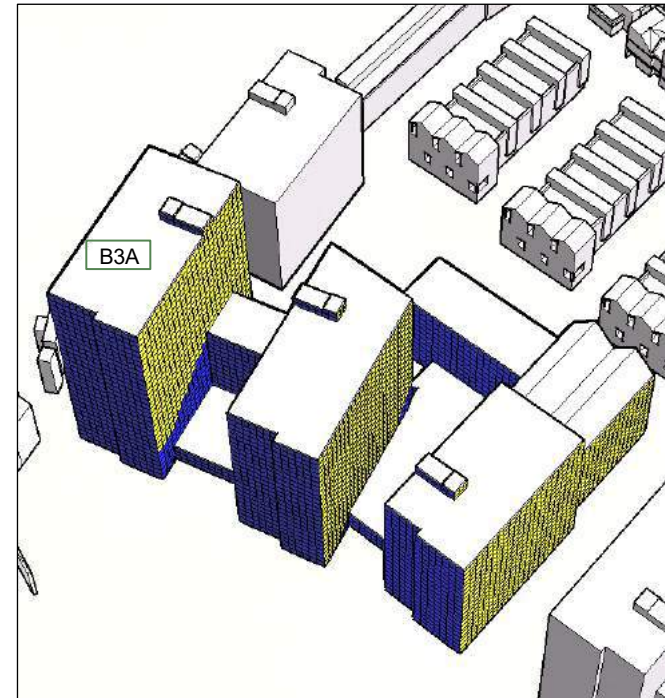


Figure 18 – Location of B3A



View 1 from south-east



View 2 from north-west

E6 SUNLIGHT EXPOSURE – B3B

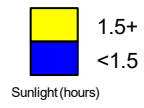
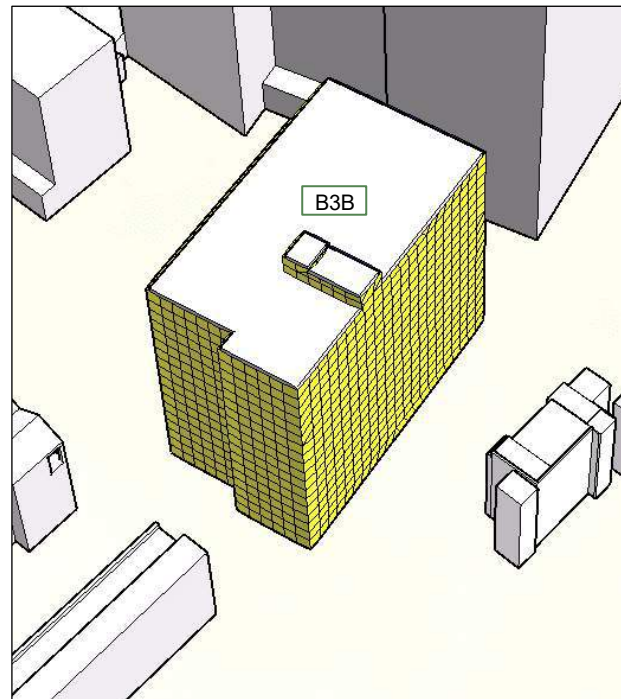
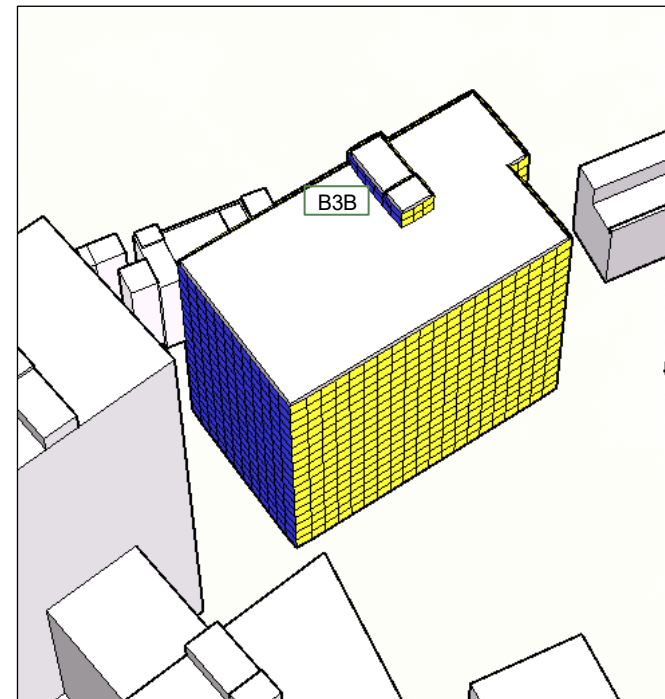


Figure 19 – Location of B3B



View 1 from south-east



View 2 from north-west

E7 SUNLIGHT EXPOSURE – B4

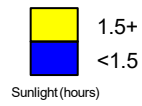
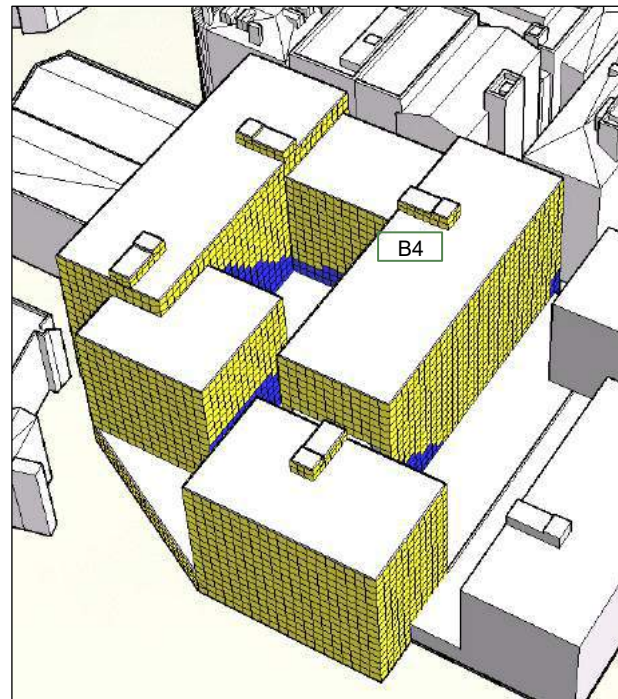
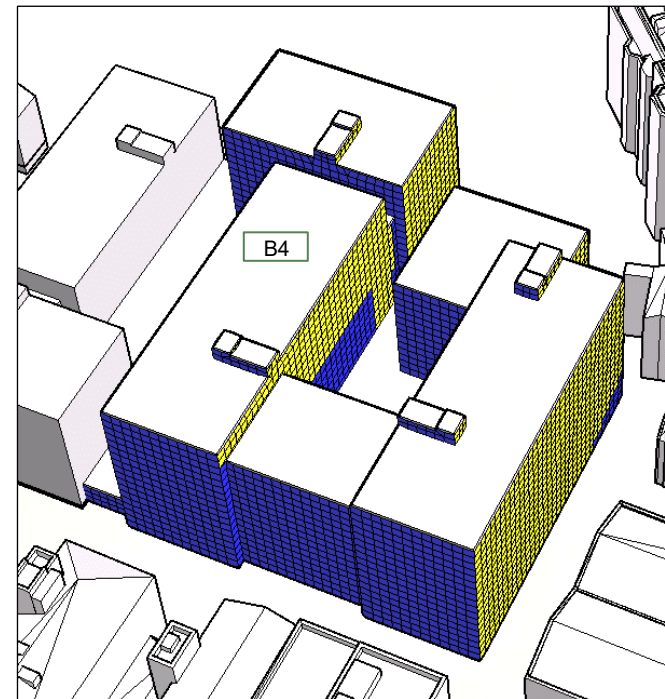


Figure 20 – Location of B4



View 1 from south-east



View 2 from north-west

**E8 SUNLIGHT EXPOSURE – B5**

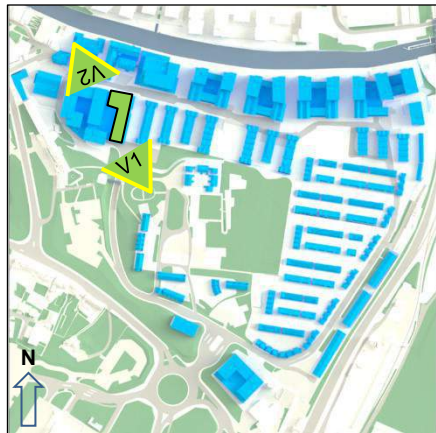
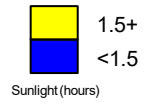
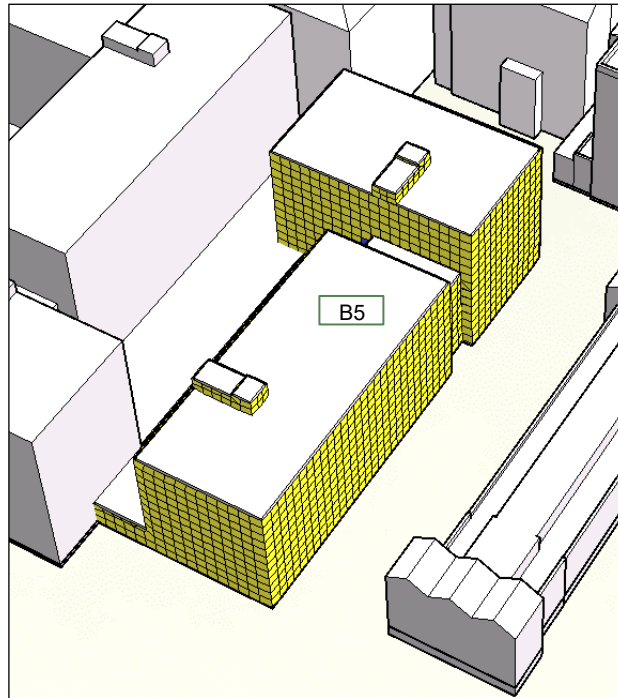
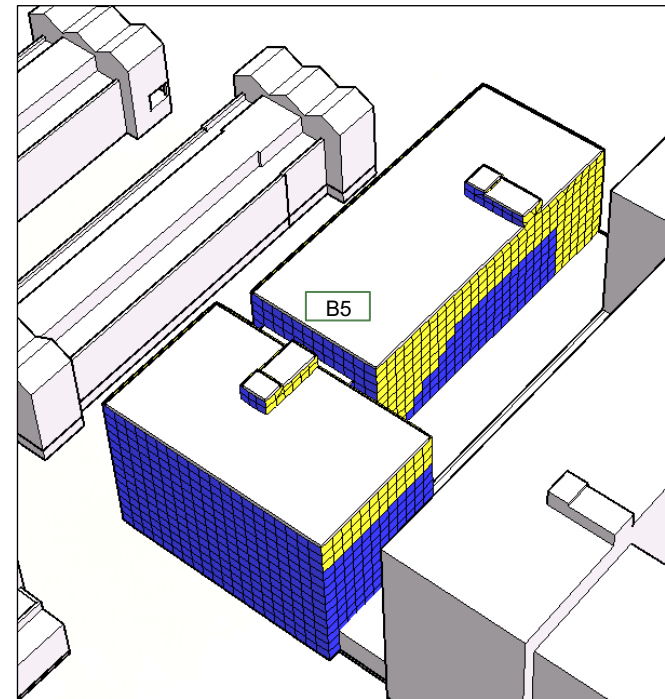


Figure 21 – Location of B5



View 1 from south-east



View 2 from north-west

E9 SUNLIGHT EXPOSURE – H1A (HOUSING AREA 1)

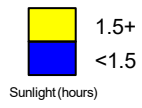
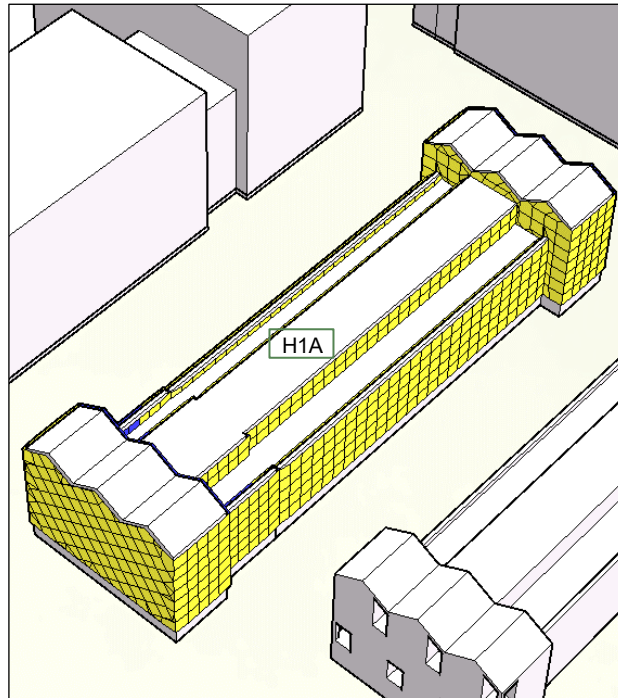
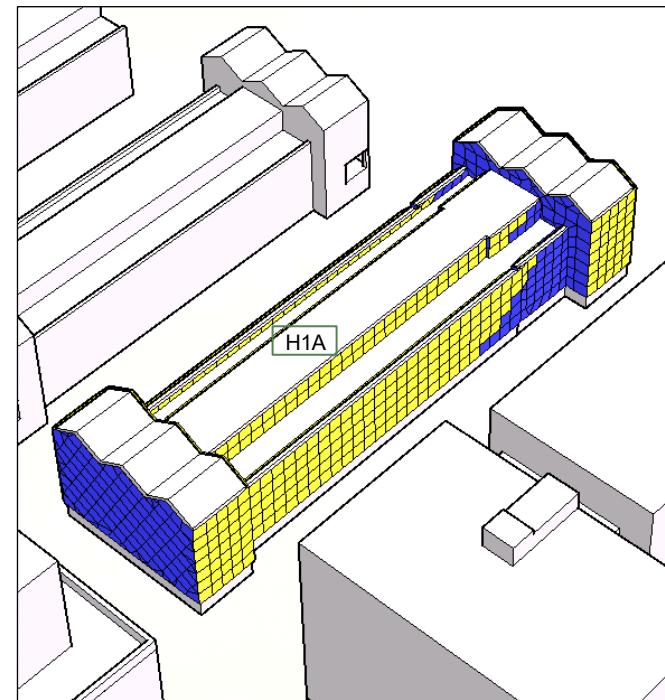


Figure 22 – Location of H1A



View 1 from south-east

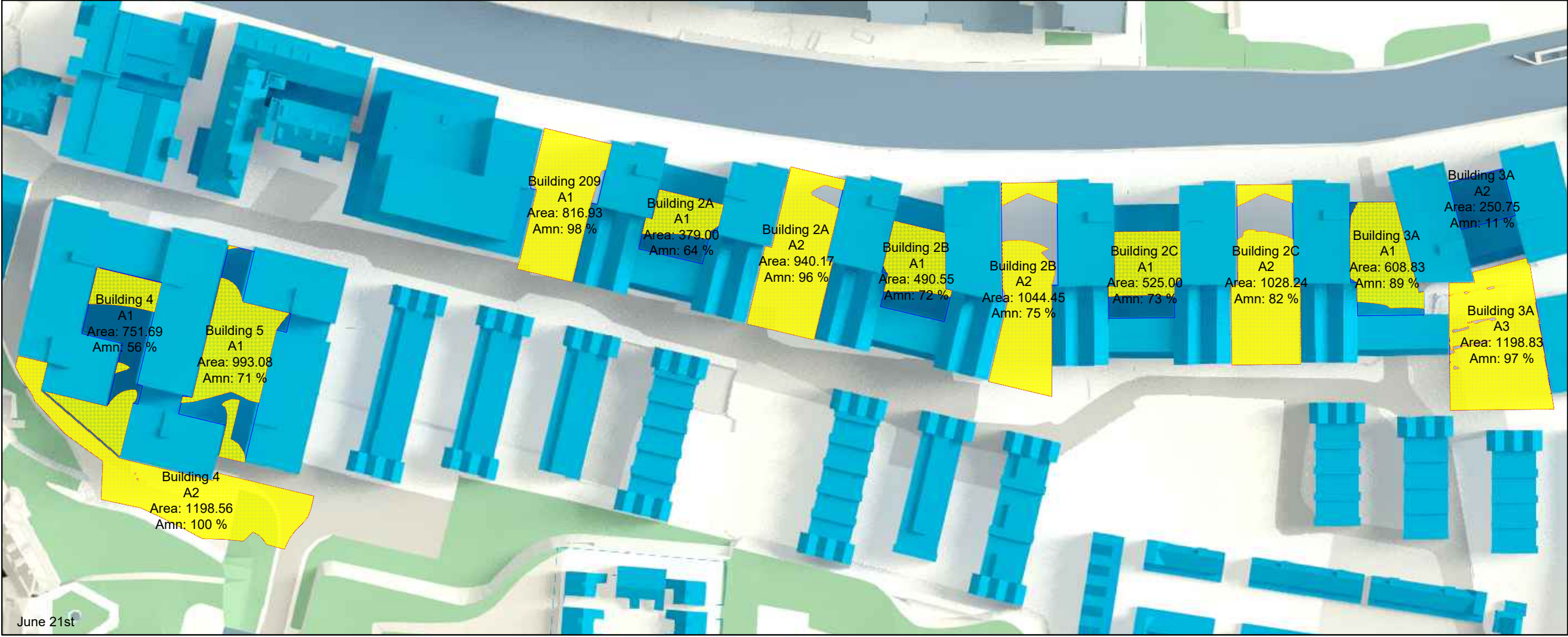


View 2 from north-west



**APPENDIX F**

**OVERSHADOWING DRAWINGS WITHIN THE PROPOSED SCHEME**

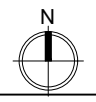




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DO NOT SCALE

SOURCES OF INFORMATION:  
JTP Studios Illustrative and Parameter  
schemes received on 28/06/2022

Zmapping Limited 3d context model  
received on 10/06/2022



KEY  
 Amenity area  
 Proposed area of direct sunlight

REV	DETAILS	DATE	BY
A	*	*	*

CLIENT  
Fuel Properties

PROJECT  
Carrow Works

DRAWING TITLE  
Permanent Overshadowing  
Illustrative Massing

SCALE [Not to Scale]	DATE Jul-22
DRAWN BY KB	CHECKED BY JW

DWG No. D+S/1/ 701	REV.
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