APPENDIX A.30 KEELEY ROAD DAYLIGHT, SUNLIGHT AND OVERSHADOWING IMPACT ASSESSMENT

gia CHARTERED SURVEYORS

DAYLIGHT & SUNLIGHT

IMPACT ON NEIGHBOURING PROPERTIES REPORT

KR-GIA-XX-XX-EN-0000

32-44 Keeley Road And 31-57 Drummond Road

BDW Trading Limited

27 April 2023

GIA No: **18002**

PROJECT DATA:

Client	**BDW Trading Limited**
Architect	**Pollard Thomas Edwards**
Project Title	**32-44 Keeley Road And 31-57 Drummond Road**
Project Number	**18002**

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gia CHARTERED SURVEYORS

1 EXECUTIVE SUMMARY

GIA have assessed the "Proposed Development" for the Citiscape site designed by Pollard Thomas Edwards to understand the potential effect of the development on the daylight and sunlight amenity of the relevant neighbouring properties. This report should be read in accordance with the Internal Daylight, Sunlight and Overshadowing Assessment prepared for the scheme.

1.1 The National Planning Policy Framework (July 2021) ("NPPF") outlines that 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 an efficient use of a site". When considering daylight and sunlight for future occupants, the NPPG asks local planning authorities to consider whether "satisfactory living conditions" are achieved within future development and whether there would be an "unreasonable impact" on daylight and sunlight amenity to neighbouring occupiers.

1.2 In considering the potential impact to neighbouring properties, Part D of Policy D6 of the London Plan (March 2021) advises that the design of development should *"provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst…minimising overshadowing and maximising the usability of outside amenity space"* (our emphasis).

1.3 It is clear that the GLA's focus is on sufficient or retained daylight and sunlight to neighbouring properties and highlights that context will be a consideration to determine sufficiency.

1.4 Policy DM10.6 (Design and Character) of the Croydon Local Plan 2018 seeks to protect amenity and states that the Council will support proposals which respect the amenity of future and existing neighbouring occupiers. Criterion 'e' states that proposals should not *"result in significant loss of existing sunlight or daylight levels of adjoining occupiers"* (our emphasis). The policy recognises that a loss of daylight and sunlight levels within neighbouring properties can occur, but it is to be considered whether the loss is "significant".

1.5 The Daylight and Sunlight analysis has been considered by reference to the criteria and methodology within the BRE Guidelines (2022), which when published, recognised that it should not form a mandatory set of criteria, rather it should be used to help and inform design.

1.6 As confirmed in recent appeal decisions, such as the Buckle Street decision in December 2018 (APP/E5900/W/17/3191757) and Graphite Square decision in September 2019 (APP/N5660/W/18/3211223), a two-stage process should be followed when assessing the Daylight and Sunlight impacts on neighbouring properties. At stage one the question to ask is whether there is material deterioration, and at stage two it is necessary to consider whether any material deterioration is acceptable. In order to answer the stage one question, the BRE Guidelines can be applied. In answering the stage two question, wider amenity considerations are to be taken into account in arriving at a balanced judgement.

1.7 Within this report, we have also considered recent decisions from the GLA and Planning Inspectorate in which a flexible approach to the BRE Guidelines is employed and wherein a mid-teen value is considered an "acceptable" level of VSC and a value of 20% VSC or more is considered "reasonably good" for an urban context. We have also considered other material factors which are relevant when determining whether the harm or material deterioration of daylight and sunlight is acceptable, such as the architectural design of the bay windows of the Frith Road terraced houses.

1.8 The impact of the Proposed Development on the neighbouring residential receptors is outlined in Section 5.0.

1.9 It is our opinion that the Proposed Development is appropriate in its context. Any loss of to daylight and sunlight, upon implementation of the Proposed Development, is not considered to be significant and sufficient daylight and sunlight is retained, thus satisfying the Croydon Local Plan 2018 and London Plan (2021) tests.

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2 THE SITE

GIA have been instructed to review and advise on the daylight and sunlight impacts associated with the implementation of the Proposed Development at 32-44 Keeley Road And 31-57 Drummond Road.

THE SITE

2.1 The Site is located at Citiscape Building, Land at Frith Road, Keeley Road and Drummond Road, Croydon CR0 1TH ("the Site"). The Site is situated within the jurisdiction of the London Borough of Croydon ("LBC"). The Site is bound by Drummond Street to the north, Keeley Road to the east, Keeley House and Keeley Road to the south and Frith Road to the west. The Site is also located in the Croydon Opportunity Area and the Croydon Metropolitan Centre.

2.2 The existing building was approved in July 2000 under application ref. 99/03014/P for a development of 11 storeys plus podium (2 equivalent) comprising of 96 homes and 76 car parking spaces.

2.3 A subsequent section 73 application was consented in February 2002 under application ref. 01/02845/RE, amending the housing mix resulting in a reduction to 75 units and reducing the number of car parking spaces to 73.

2.4 The Site is located 400 metres (3-minute walk) from Centrale Tram Station and 1.3 kilometres (7-minute walk) from West Croydon Station. As a result the PTAL rating for the Site is 6b. Figure 01 below illustrates the Site. Further drawings are enclosed at Appendix 03 of this report.

Figure 01: 3D model of the Site and Existing Property

PROPOSED DEVELOPMENT

2.5 The Proposed Development comprises the comprehensive redevelopment of the Site comprising the demolition of the existing buildings and structures; site preparation works; and the phased development of two new buildings containing residential uses, basement, private and communal amenity space, associated car parking, cycle parking, refuse storage, plant and other associated works

2.6 GIA's understanding of the Proposed Development is illustrated in Figure 02 and further drawings are enclosed at Appendix 03.

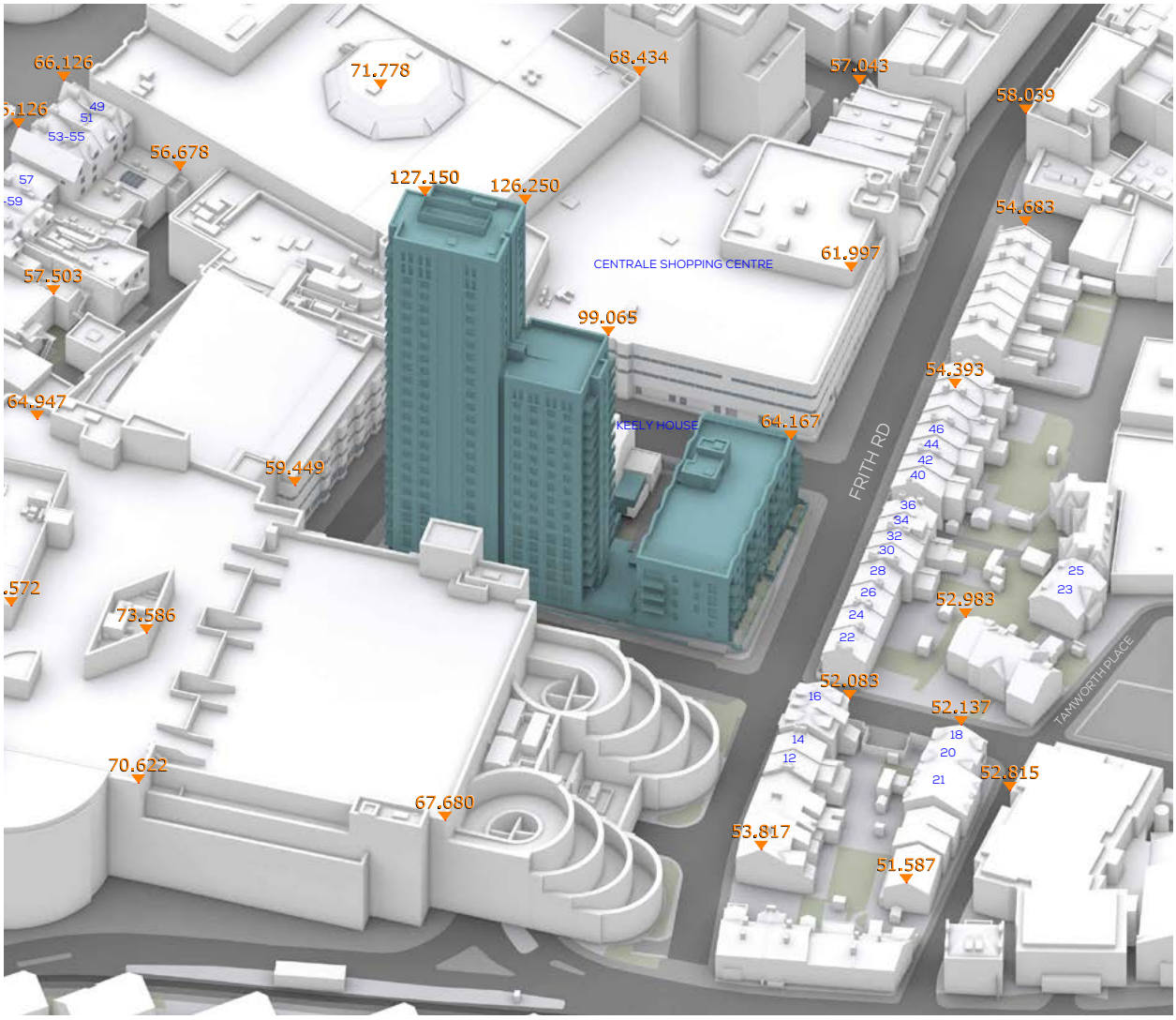

Figure 02: 3D Perspective View of the Proposed Development

3 POLICY & THE WIDER CONTEXT

3.1 Below we have detailed sections from the following documents as they are, in our opinion, the most pertinent in relation to daylight and sunlight matters and how we have approached the effects of the Proposed Development on the relevant neighbouring properties:

- National Planning Policy Framework (NPPF) (July 2021) (Ministry of Housing Communities and Local Government (MHCLG));
- National Planning Practice Guidance (NPPG) (updated June 2021) (MHCLG);
- The London Plan (March 2021) (Greater London Authority);
- The London Plan Housing SPG (March 2016, updated 2017) (Greater London Authority);
- Croydon Local Plan 2018 (February 2018) (London Borough of Croydon); and
- Building Research Establishment Guidelines 2022.

NATIONAL PLANNING POLICY FRAMEWORK (JULY 2021)

3.2 The NPPF (July 2021) states that local planning authorities should refuse applications which they consider fail to make efficient use of land. The discussion in relation to daylight and sunlight highlights the Government's recognition that increased flexibility is required in response to the requirement for higher density development.

> *"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)"*

NATIONAL PLANNING PRACTICE GUIDANCE (UPDATED JUNE 2021)

3.3 In light of the update to the Government's Planning Practice Guidance, we have considered the relevant paragraphs on daylight and sunlight.

3.4 Paragraph 6 of the NPPG (Ref ID: 66-006-20190722) acknowledges that new development may cause an impact on daylight and sunlight levels enjoyed by neighbouring occupiers. It requires local authorities to assess whether the impact to neighbouring occupiers would be "unreasonable".

THE LONDON PLAN (MARCH 2021)

3.5 The London Plan was published in March 2021 and sets out the integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years.

3.6 Part D of Policy D6 (Housing Quality and Standards) states that the design of development "should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space."

3.7 It is clear that the GLA's focus is on sufficient or retained daylight and sunlight to neighbouring properties and highlights that context will be a consideration to determine sufficiency.

HOUSING SUPPLEMENTARY PLANNING GUIDANCE "HOUSING SPG" (LONDON PLAN, MARCH 2016, UPDATED IN 2017)

3.8 The Mayor published a Supplementary Planning Guidance on Housing in March 2016. The London Plan sets out the policy framework for development in London. The Supplementary Planning Guidance, 'provides guidance on a range of strategic policies including housing supply, residential density, housing standards, build to rent developments, student accommodation and viability appraisals.'

3.9 The Housing SPG moves away from the rigid application of the national numerical values provided in the BRE Handbook. Paragraph 1.3.45 states that:

> *"an appropriate degree of flexibility needs to be applied when using BRE Guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres, large sites and accessible locations, where*

BRE advice suggests considering the use of alternative targets. This should take into account local circumstances; the need to optimise housing capacity; and scope for the character and form of an area to change over time."

3.10 Paragraph 1.3.46 further states that:

"The degree of harm on adjacent properties and the daylight targets within a proposed scheme should be assessed drawing on broadly comparable residential typologies within the area and of a similar nature across London. Decision makers should recognise that fully optimising housing potential on large sites may necessitate standards which depart from those presently experienced, but which still achieve satisfactory levels of residential amenity and avoid unacceptable harm."

3.11 To optimise development the GLA recognises that the definition of acceptable living environments should be based on the wider concept of amenity. Paragraph 1.2.41 states that:

"planned redevelopment can also deliver a higher standard of new accommodation, improved residential amenity and design quality, together with affordable housing provision. Boroughs and other partners are encouraged to take this."

3.12 Paragraph 2.3.46 suggests that:

"Where direct sunlight cannot be achieved in line with Standard 32, developers should demonstrate how the daylight standards proposed within a scheme and individual units will achieve good amenity for residents. They should also demonstrate how the design has sought to optimise the amount of daylight and amenity available to residents, for example, through the design, colour and landscaping of surrounding buildings and spaces within a development."

3.13 Paragraph 2.3.47 further suggests that the:

"BRE guidelines on assessing daylight and sunlight should be applied sensitively to higher density development in London, particularly in central and urban settings, recognising the London Plan's strategic approach to optimise housing output (Policy 3.4) and the need to accommodate additional housing supply in locations with good accessibility suitable for higher density development (Policy 3.3). Quantitative standards on daylight and sunlight should not be applied rigidly, without carefully considering the location and context and standards experienced in broadly comparable housing typologies in London."

3.14 A more flexible and holistic approach to the national numerical standards should be applied. The Housing SPG policy states that "broadly comparable residential typologies" should be the alternative targets. This is a reasoned approach and there are many areas in London that do not achieve the national numerical values provided in the BRE guidelines, but which provide successful living environments.

3.15 To summarise, the SPG;

- Calls for an appropriate degree of flexibility in the application of the BRE guidance to the particular circumstances of London;
- Recommends that the BRE guidance is applied sensitively to high density development, especially in areas such as town centres, where alternative targets (from the normal standards) may be more appropriate;
- Suggests that the application of the BRE guidance needs to be consistent with optimising housing capacity and growth generally in recognition of the need for change in an area;
- Advises that comparisons should be made with the daylight and sunlight values achieved in comparable areas and typologies across London (rather than strictly with the national numerical values); and
- Notes that to fully optimise housing potential on large sites may necessitate a departure from the current "standards".

CROYDON LOCAL PLAN (2018)

3.16 The Croydon Local Plan 2018 was adopted on 27th February 2018 and comprises the strategic and development management policies which will be used to inform development in the borough to 2036.

3.17 Policy DM10.6 refers specifically to daylight and

sunlight and seeks to ensure that developments "do not result in significant loss of existing sunlight or daylight levels of adjoining occupiers" (our emphasis). Again, a two staged approach should be considered when applying this policy:

1 Whether there is any "loss" to existing daylight and sunlight levels of adjoining properties; and

2 Whether the level of "loss" is significant.

3.18 Supporting text requires applicants to refer to the BRE Guidelines (para 6.83).

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4 BRE GUIDELINES & CONTEXT METHODOLOGY

The Building Research Establishment (BRE) have set out in their handbook *'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice (2022)'*, guidelines and methodology for the measurement and assessment of daylight and sunlight.

BUILDING RESEARCH ESTABLISHMENT GUIDELINES 2022

4.1 The BRE Guidelines note that the document is intended to be used in conjunction with the daylight recommendations found within the BS EN 17037 (2019) and UK annex and The Applications Manual on Window Design of the Chartered Institution of Building Services Engineers (CIBSE).

4.2 The BRE Guidelines provides two methodologies for daylight assessment of neighbouring properties, namely;

1 The Vertical Sky Component (VSC); and

2 The No Sky Line (NSL).

4.3 For daylight to be compliant (in accordance with figure 20 of the Guide), both the VSC and NSL tests have to be met.

4.4 There is one methodology provided by the BRE Guidelines for sunlight assessment, denoted as Annual Probable Sunlight Hours (APSH).

4.5 It is an inevitable consequence of the built-up urban environment that daylight and sunlight will be more limited in dense urban areas. It is well acknowledged that in such situations there may be many planning and urban design matters to consider other than daylight and sunlight.

4.6 The BRE Guidelines provide alternative assessments to better understand the impact on a neighbouring property in such situations. The relevant assessments for the purpose of this report are detailed within the BRE Guidelines and summarised below.

4.7 The Guidelines provide a calculation for the VSC and APSH analysis to quantify an appropriate alternative value based on the context of an environment. This approach is commonly known as the 'mirror image' analysis.

4.8 Although not used for this report, the BRE Guidelines also provide an alternative assessment where there are existing windows with balconies above them. This test determines whether it is the presence of the existing balcony that is the reason for the large relative impact on daylight (VSC).

4.9 The Guidelines outline that a VSC value is calculated for each window; however – "If a room has two or more windows of equal size, the mean of their VSC's may be taken"

4.10 Where a room is served by two or more windows of the same or different sizes, the VSC value to the room has been calculated by applying an average weighting calculation to understand the VSC value to the room. It is GIA's opinion that this is a reasonable method to follow in that it follows the principles of the Guidelines. The BRE also provide a methodology to calculate APSH in relation to the room and window.

4.11 "If a room has multiple windows on the same walls or adjacent walls, the highest value of APSH should be taken. If a room has two windows on opposite walls, the APSH due to each can be added together."

4.12 The above extract from the BRE Guidelines is in relation to proposed units rather than existing buildings. It does, however, make sense to apply this methodology to existing rooms. A room served by multiple windows could receive the benefit of sunlight entering from all of them and not just one.

4.13 Evaluating per-room Probable Sunlight Hours is meant to be carried out with diagrams and acetate overlays, which makes accounting for individual spots challenging if not impossible. APSH assessments are now typically done using specialised computer software which allows the assessment of rooms with multiple windows to be completed more accurately than what is suggested in the BRE Guidelines.

4.14 Appendix 02 of this report elaborates on the mechanics of each of the above assessment criteria, explains the appropriateness of their use and the parameters of each specific recommendation.

CONTEXT METHODOLOGY

4.15 As established earlier, when considering the policies and guidance listed in Section 3.0, Policy DM10.6 of Croydon's Local Plan (February 2018) acknowledges that new development can cause some degree of "loss" to neighbouring amenity. The question asked by this policy is whether the loss would be "significant". Finally, it is industry practice to review changes in light by reference to the Building Research Establishment (BRE) methodology and criteria.

4.16 The BRE notes that while Guidance offers numerical target values in assessing how much light from the sky is blocked by obstructing buildings, "*these values are purely advisory and different targets may be used based on the special requirements of the proposed development or its location*". It is well-established and accepted that the BRE Guidelines are predicated on a relatively low-rise suburban environment. In essence, the BRE Guidelines offers the opportunity to consider alternative target values in certain circumstances. GIA would suggest that such circumstances extend to urban environments.

4.17 This approach reflects the aspirations of the GLA via the Housing SPG (2016) which requires a more flexible and holistic approach to the strict national numerical standards if they are to make their appropriate contribution to meeting spatial needs.

4.18 By way of a relevant example the Former Biscuit Factory and Bermondsey Campus masterplan in the London Borough of Southwark in February 2020, the Representation Hearing Report (GLA Ref: GLA/3776a/03) noted that; "the 27% VSC recommended guideline is based on a low-density suburban housing model and in an urban environment it is recognised that VSC values in excess of 20% are considered as reasonably good, and that VSC values in the mid-teens are deemed acceptable."

4.19 In a February 2018 Appeal Decision for the Whitechapel Estate scheme (Appeal Ref: APP/E5900/W/17/3171437), the Inspector noted that "residual Vertical Sky Component ("VSC") values in the mid-teens have been found acceptable in major developments across London. This echoes the Mayor's endorsement in the pre-SPG decision at Monmouth, Islington that VSC values in the mid-teens are acceptable in an inner urban environment... The appeal proposal would therefore appear to be in compliance with the LP as amplified by the SPG and as it is being interpreted by the Mayor. The GLA responses to the planning application did not raise any concern about neighbours' amenity."

4.20 In this case, the Inspector has placed significant weight on the GLA's application of the Housing SPG and that a mid-teen VSC value is "acceptable" in an inner urban environment. This alternative target value is also used in other schemes in dense urban environments in London.

4.21 Given that the Site is located within the Croydon Opportunity Area and Croydon Metropolitan Centre, GIA has reviewed if the retained values demonstrated within our assessment are in excess of 20% and can be considered to be "reasonably good" or a mid-teen value and can therefore be considered "acceptable". In addition, other material considerations have been investigated to demonstrate that no significant loss has been caused.

4.22 All kitchens have been assessed as part of GIA's assessment, regardless of their size. However, it is noted that in the Housing SPG (London Plan March 2016, updated in 2017) that all kitchens smaller than 13 sqm are considered to be non-habitable rooms as they are not large enough to accommodate a dining table and chairs.

5 DAYLIGHT & SUNLIGHT IMPACTS TO NEIGHBOURING PROPERTIES

This section details the daylight and sunlight impacts in relation to the relevant properties neighbouring the Site.

5.1 A three-dimensional computer model of the Site and surrounding properties was produced to carry out the relevant technical studies. All relevant assumptions made in producing this model can be found in Appendix 01.

SURROUNDING PROPERTIES

5.2 GIA have identified the following residential properties as relevant for daylight and sunlight assessment:

- 16 Frith Road (plan ref: 12);
- 22-36 Frith Road (plan ref: 4-11);
- 40-46 Frith Road (plan ref:13-16);
- Keeley House (plan ref: 3);
- 23- 25 Tamworth Place (plan ref: 17); and
- 51 North End (plan ref: 26).

5.3 The following properties adhere to the numerical values set out within the BRE Guidelines and are not discussed further:

- 16 Frith Road (plan ref: 12);
- 40-46 Frith Road (plan ref:13-16);
- 23-25 Tamworth Place (plan ref: 17); and
- 51 North End (plan ref: 26).

5.4 The remaining properties are fully discussed in the following sections. All results can be found in Appendix 04.

5.5 To assist the readers understanding of the surrounding properties and window locations, we have produced contour plots and window maps which are enclosed at Appendix 04 and 05 of this report.

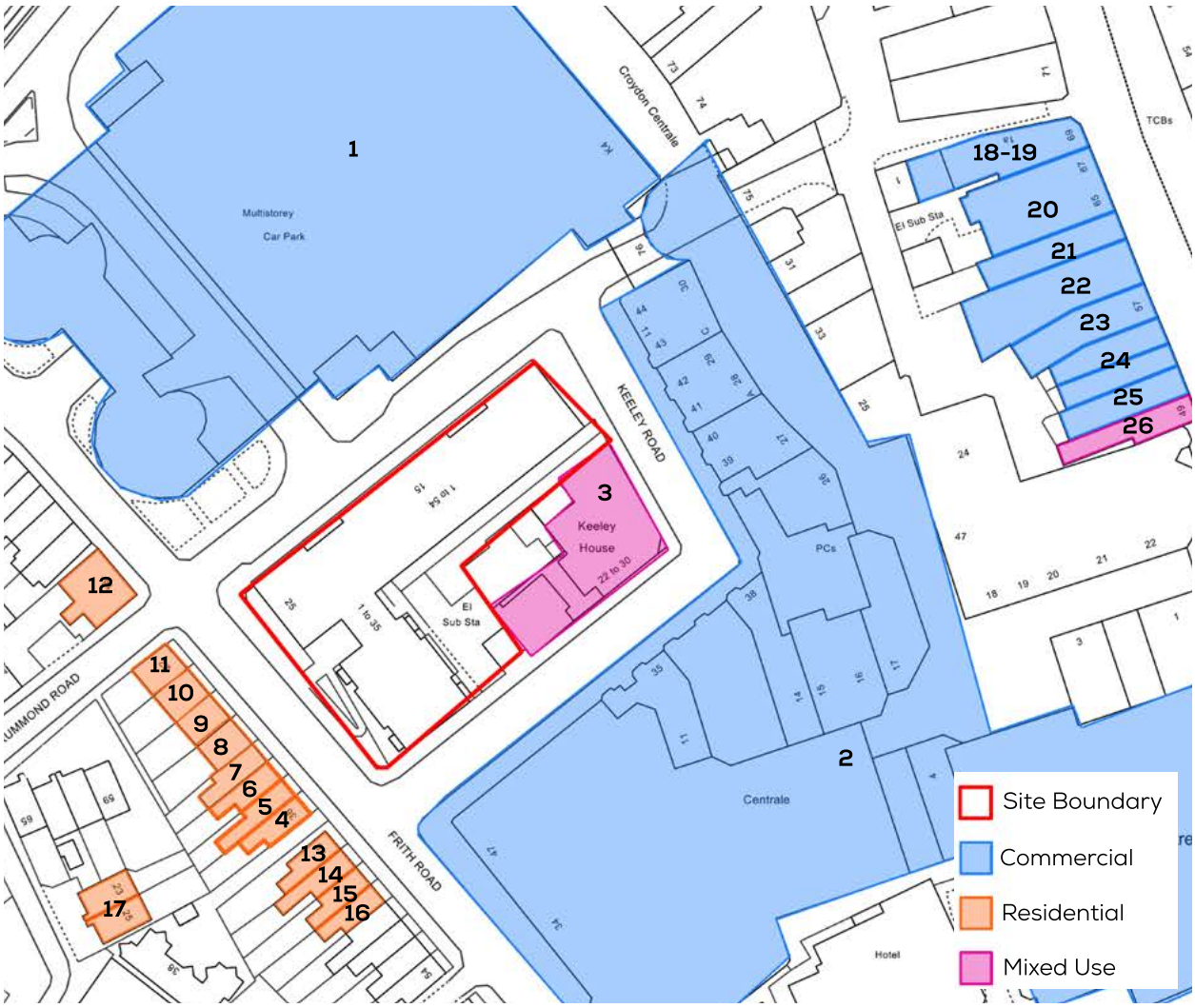

Figure 03: 3D model of the Site and Existing Property

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DISCUSSION OF RESULTS

Figure 04: Site plan

22-36 Frith Road (Plan ref: 4-11)

5.6 22-36 Frith Road are a row of terraced houses located directly opposite the Proposed Development to the west. The properties are solely residential in use. Internal layouts have been assumed in line with Appendix 01, however site observations suggest that the ground floor rooms are living rooms and the remaining floors overlooking the Site are bedrooms.

5.7 Below, GIA have summarised the daylight and sunlight results in table format for the terraced houses:

No. of Windows	No. of Rooms	Compliant for VSC	Compliant for NSL	Compliant for APSH
42	18	11/42 (26%)	7/18 (39%)	6/8 (75%)

Daylight (VSC & NSL)

5.9 Of the 42 windows tested for VSC, 11 (26%) remain BRE compliant. Of the 31 windows which do not meet the BRE requirements three (W3/F00 - 22 Frith Road & W4/F00 and W5/F00 - 36 Frith Road), will remain compliant against the supplementary VSC to the room assessment.

5.10 Of the remaining 28 windows, 20 will experience what GIA consider to be minor changes of between 22-29%. Six of these 20 windows will retain in excess of 20% VSC which the GLA and Planning Inspectorate have previously considered "reasonably good". A further ten of these windows will retain a mid-teen VSC value in excess of 15% which the GLA and Planning Inspectorate have previously considered "acceptable". The remaining four of these 17 windows (W5/F00 - 28 Frith Road, W1/F00 - 30 Frith Road, W5/F00 - 24 Frith Road and W5/F00 - 34 Frith Road) are all located on the ground floors. As can be seen in Figure 05 all windows are partially obstructed by the protruding bay windows which restricts their access to daylight. Further to this, the bay windows also benefit from two additional window panes and as a result the rooms will retain in excess of 15% VSC against the supplementary VSC to the room assessment.

5.11 The final eight windows will experience what GIA consider to be moderate changes in between 30-33%. All eight windows will retain a mid-teen VSC value in excess of 15% which as established has previously been considered "acceptable" by the GLA and Planning Inspectorate.

5.12 Of the 18 rooms assessed, seven (39%) experience no noticeable alteration in daylight distribution. Of the 11 rooms that do not meet the requirements, 10 will experience what GIA consider to be minor and moderate adverse impacts of between 22-38% and all retain in excess of 36% NSL which in GIA's opinion is acceptable given the Site's location in the Croydon Opportunity Area and Croydon Metropolitan Centre. The remaining room experiences a major adverse impact of 46%. Notwithstanding this, the room will retain in excess of 51% daylight distribution which in GIA's opinion is good given the Site's location in the Croydon Opportunity Area and Croydon Metropolitan Centre.

Sunlight (APSH)

5.13 Eight windows have been considered relevant for assessment as they are oriented within 90 degrees due south. Of these eight windows, six (75%) remain BRE compliant. The two windows which do not meet

Figure 05: Window Map

the target values for APSH serve 24 and 26 Frith Road and experience what GIA consider to be minor reductions of 30% and 26% respectively. These windows will retain 14% and 17% APSH, however these windows are oriented at 84 and 82 degrees from due south and as a result they only have an oblique access to sunlight and therefore it is difficult for these windows to meet the target values for APSH.

Conclusion

5.14 In consideration of the above, although there is a breach of the BRE Guidelines in relation to daylight and sunlight, these properties generally retain strong daylight and sunlight values. Where this is not the case it is to an extent due to the self limiting form of the bay windows and we therefore do not consider there to be a significant loss. It is our opinion that sufficient daylight and sunlight is also retained given the location within the Croydon Opportunity Area and Croydon Metropolitan Centre.

DISCUSSION OF RESULTS

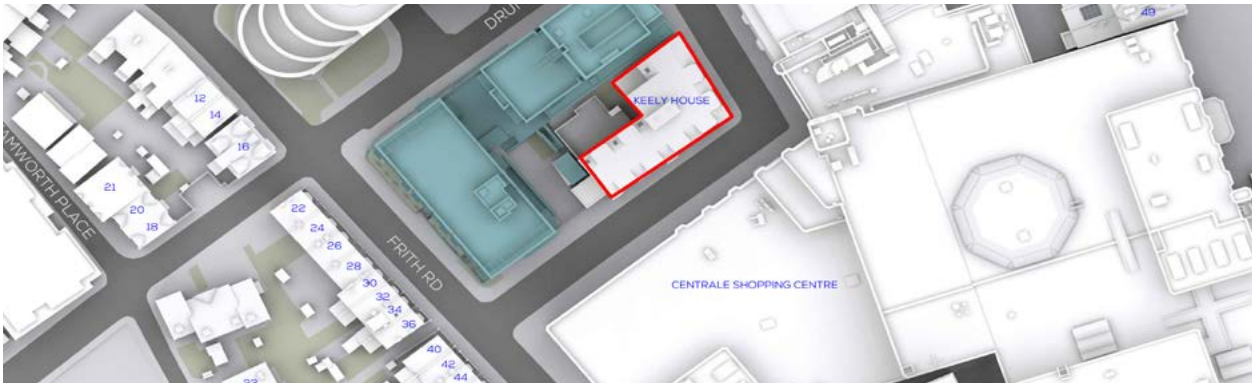

Figure 06: Site plan

Keeley House (Plan ref: 3)

5.15 Keeley House is a mixed-use property located to the south and east of the Proposed Development. The ground floor of this property is in commercial use with the remaining floors comprising residential accommodation. GIA have acquired internal layouts for this property from LBC Planning Permission Ref: 04/04754/P. This property was however modelled of the building control plans shared by Croydon.

5.16 It is understood that this property was originally designed primarily as a commercial building with two residential units located on the upper floors, with a full change of use to first and second floors to residential granted in 2005. As part of this Permission a daylight and sunlight assessment was undertaken in line with the existing Citiscape building in situ which identified that this property would experience low levels of daylight, which was accepted by the Council at the time. The site facing windows rooms that are of habitable use generally have low levels of daylight in their existing condition due to the proximity of the existing massing on the Site. As such any change in massing on the Site, will inevitably result in larger proportional reductions.

5.17 Below, GIA have summarised the daylight and sunlight results in table format. This property will remain BRE compliant for sunlight.

No. of Windows	No. of Rooms	Compliant for VSC	Compliant for NSL	Compliant for APSH
22	16	11/22 (50%)	14/16 (88%)	7/7 (100%)

Daylight (VSC & NSL)

5.18 Of the 22 windows tested for VSC, 11 (50%) remain BRE compliant. Of the 11 windows which do not meet the BRE requirements one (W9/F01) will remain compliant against the supplementary VSC to the room assessment.

5.19 Four (W1/F01, W8/F01, W11.F02 and W12/F02) of the remaining ten windows will experience what GIA consider to be minor proportional changes in between 23-30%. A further four windows (W6/F01, W7/F01, W7/F02 and W8/F02) will experience moderate changes in between 31-39% and the final two windows (W2/F01 and W2/F02) will experience changes of 63% and 45% respectively. All of these windows with the exception of one (W11/F02) however have low levels of VSC in the existing condition (2-11%) and therefore the small absolute changes between 1.5-3.6% cause disproportionately large percentage changes. GIA are of the opinion that these changes are unlikely to give rise to noticeable changes. The final window (W11/F02) will see an absolute change in VSC of 4% which again we consider is unlikely to give rise to a noticeable change. Additionally, this room is served by two further windows and whilst the room will not remain compliant against the VSC to the room assessment the absolute change will be 2.6% which we would not consider to be a noticeable change.

5.20 Of the 16 rooms assessed, 14 (88%) experience no noticeable alteration in daylight distribution; in fact, seven of these 16 will see an improvement in their sky visibility of between 21-209%. The two

rooms which do not meet the recommendations will experience changes in excess of 40% and are both bedrooms (R2/F01 and R2/F02). The bedrooms will experience absolute changea of 3.9% and 4.4% which we consider is unlikely to give rise to a noticeable change. Furthermore, the BRE acknowledge at para. 2.2.10 that bedrooms are less important than the other habitable room uses.

Conclusion

5.21 In consideration of the above, although there is a breach of the BRE Guidelines in relation to daylight, given that the VSC changes are low in absolute terms and there are significant improvements in daylight distribution to seven rooms we do not consider there to be a significant loss. It is our opinion that sufficient daylight and sunlight is also retained given the location within the Croydon Opportunity Area and Croydon Metropolitan Centre.

6 CONCLUSIONS

GIA have undertaken a daylight and sunlight assessment in relation to the Proposed Development at 32-44 Keeley Road And 31-57 Drummond Road. The technical analysis has been undertaken in accordance with the BRE Guidelines.

6.1 Throughout the design process, the scheme has been subjected to extensive testing to minimise the daylight and sunlight impacts to the surrounding residential properties.

6.2 When constructing buildings in an urban environment, alterations in daylight and sunlight to adjoining properties are often unavoidable. The numerical guidance given in the BRE document should be treated flexibly, especially in dense urban environments and particularly where neighbouring properties have existing architectural features which restrict the availability of daylight and sunlight.

6.3 A two-stage process has been followed when assessing the impacts on neighbouring properties. At stage one the question to ask is whether there is a loss, and at stage two it is necessary to consider whether the loss is significant. In order to answer the stage one question, the BRE Guidelines can be applied. In answering the stage two questions, wider amenity considerations are to be taken into account in arriving at a balanced judgement.

6.4 Our technical analysis shows that following implementation of the Proposed Development some surrounding properties will experience changes outside of the BRE recommendations. These changes however have been identified as being driven by low existing daylight levels, such that larger proportional reductions are inevitable, even when absolute changes are negligible, and high existing values, which will maintain acceptable daylight levels in the proposed scenario.

6.5 The impacts to neighbouring properties do not amount to "significant" loss of daylight and sunlight amenity. Sufficient daylight and sunlight will be retained by the neighbouring residential properties.

6.6 It is our opinion, that the Proposed Development complies with the relevant Croydon Local Plan (2018) and London Plan (2021) policies on daylight and sunlight.

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APPENDIX A.31 CROYDON PARK HOTEL DAYLIGHT, SUNLIGHT AND OVERSHADOWING IMPACT ASSESSMENT

BOTANICAL HOUSE

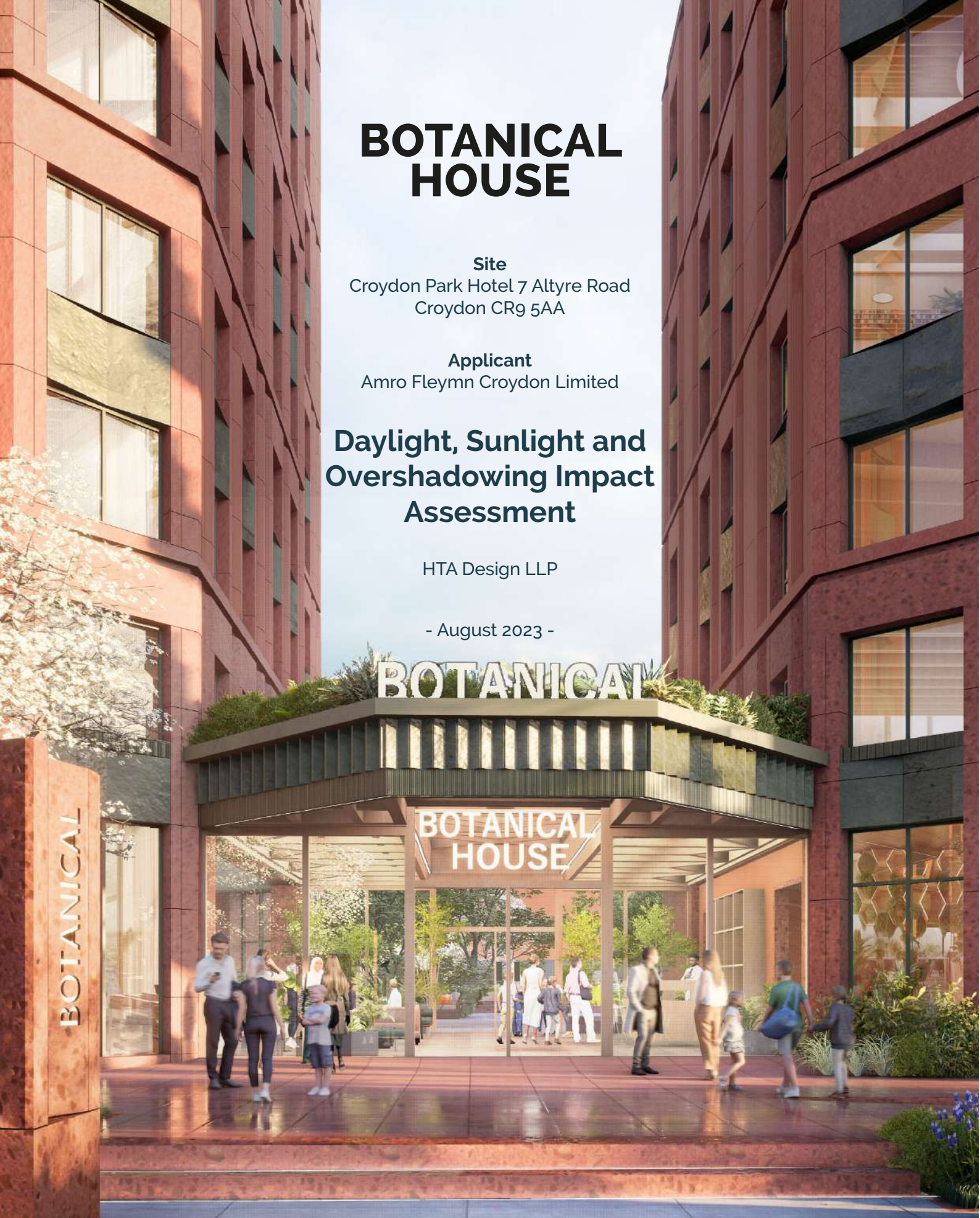
Site
Croydon Park Hotel 7 Altyre Road
Croydon CR9 5AA

Applicant
Amro Fleymn Croydon Limited

Daylight, Sunlight and Overshadowing Impact Assessment

HTA Design LLP

- August 2023 -



hta AMRO PARTNERS FLEMYN AVISON YOUNG KMHeritage

Report presented by HTA Design LLP
Status: Final Planning Submission
Issue: 13
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File name *Croydon Park Hotel Daylight, Sunlight and overshadowing Assessment - Impact Assessment*
Author **AZI**
Checked by **HF**
Approved by **DB**

Contents to be updated

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Executive Summary

HTA Sustainable Futures have been appointed to carry out a Daylight, Sunlight and Overshadowing Assessment for the proposed development at Croydon Park Hotel, in the London Borough for Croydon as well as the assessing the impact of the new development on the existing surrounding properties. The assessment of the proposed scheme is described in a separate report.

The development proposes the demolition/deconstruction of the existing hotel building and the comprehensive redevelopment of the site to provide residential units across two buildings with associated internal and external communal amenity space. Further to comments during the determination process, the proposals have been amended to address the feedback received. The description of development has now been amended to the following:

"Demolition of the existing buildings and retention of the existing basement, site preparation and enabling works to allow for the erection of a residential building (Use Class C3) comprising a maximum of 447 homes with a maximum height of 36 storeys and community floor space (Use Class F.1/F.2) on the ground floor, highways and access works, landscaping, car and cycle parking, and other associated works. The building heights range from 9, 33, and 36 storeys. The development includes 3 distinctive buildings typologies, with an asymmetric tower form (36 and 33 floors) located at the key corner to create a celebratory entrance point, a linear shorter block (9 floors) and a 9 storey attached villa As part of the resubmitted proposals. The entrance space has been relocated to the greenhouse to provide more generous and green sense of arrival between the two building forms"

The existing ground floor slab and basement will be maintained to provide a highly sustainable design solution with reduced carbon emissions by innovative re-use of the existing basement structure. All opportunities for recycling materials have been highlighted in the pre-demolition audit assessment.

The analysis has been carried out in accordance with the new BRE's guide 'Site Layout Planning for Sunlight and Daylight: A Guide to Good Practice', P J Littlefair (2022). According to the BRE guide:

> '...*the advice given here is not mandatory and this document should not be seen as an instrument of planning policy. Although it gives numerical guidelines, these should be interpreted flexibly since 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' such as a dense urban environment*.'

The Daylight and Sunlight assessment was carried out using the following checks in accordance with the BRE Guide (2022):

Daylight Assessment:

- **Existing properties:**
  - 25 degree angular check, and
  - Vertical Sky Component (VSC)
  - No-Sky Line (NSL) (Additional)

Sunlight Assessment:

- **Existing properties and proposed dwellings**:
  - 25 degree angular check
  - Annual Probable Sunlight Hours (APSH) and Winter Probable Sunlight Hours (WPSH)

External spaces:

- **Existing properties:**
  - Sunlight on the ground and Overshadowing.

The National Planning Policy Framework (NPPF) (July 2021) states that 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 an efficient use of a site. The NPPF sets out at paragraph 11 that planning policies and decisions should promote the effective use of land in meeting the need for new homes, whilst safeguarding and improving the environment and ensuring safe and healthy living conditions.

In the case of the Proposed Development, a mid to high-rise scheme is proposed in front of a low to high-rise urban configuration. Preliminary studies were conducted to provide the design team with feedback in relation to the daylight/sunlight availability.

The massing was adjusted according to the initial studies to ensure that adequate daylight and sunlight access is provided to the properties adjacent to the scheme as well as ensuring the daylight availability of the proposed units.

Daylight

Impact on the existing buildings

The daylight analysis considered all the **surrounding buildings** with main windows facing the development. The following properties were assessed against the daylight criteria:

- Croydon Crown Court
- Harrington Court
- 13 Addiscombe Grove
- Latitude Apartment Croydon
- 86-90 Granville Cl
- 93 Granville Cl
- 138 Granville Cl
- 104 - 108 Granville Cl

Initial analyses were conducted to assess the likely impact that the existing properties surrounding the site would receive from the Proposed Development. As the BRE guide explains, it is important to apply the BRE targets sensibly and flexibly, with careful consideration of the specific site context. The BRE also notes that alternative targets might be set depending on the urban context of the site.

The NPPF asks local planning authorities to consider whether satisfactory living conditions are achieved within future developments. Mayoral Decisions have confirmed that alternative targets can be set to suit the urban context of the development.

In the case of the Proposed Development, the nature of the proposed scheme suggests that VSC values lower than 27% are likely to be achieved and it is therefore considered appropriate to have regard to alternative values.

The results of the analysis show that 69% of the analysed windows achieve VSC levels in line with the BRE recommendations. This means that either they achieve a VSC value of at least 27% or that the reduction is no more than 20% of their former value.

An alternative target (15% VSC) has been set for the purpose of this assessment due to the density of the site. In this regard, through a number of planning applications and appeals, as shown in table 03, it has been established that alternative targets may be set having regard to site context, with 15% VSC being an appropriate benchmark/an established indicator in many cases.

Accordingly, a range of examples (including statements made by LBC's DSO advisor, Delva Patman Redler), have been provided overleaf where 15% VSC has been considered as an appropriate value, with commentary against each of the schemes' relevance to the Croydon Park Hotel in respect of the relative characteristics of urban context (including character, relevant planning allocations and town centre locations). Please refer to table 03. More detailed explanations could be found on pages 9, 10 and 11 regarding the alternative target.

The detailed VSC analysis conducted at the centre of windows. The results of 13 Addiscombe Road, Croydon Crown Court and Latitude Apartment show that 80%, 91% and 93% of the tested windows meet or exceed the alternative target respectively. It should be noted that 13 Addiscombe Road and Croydon Crown Court are non-residential buildings. Hence, the VSC values could be considered less important. The results show that all the tested rooms at Harrington Court, 86-90, 93, 104-108 and 138 Granville Cl achieve the 15% VSC target. There are some reductions shown at the centre of some of the windows in close proximity to the corners or on the ground floors, where a lower VSC value is expected as a result of reduced daylight penetration and increased shading. The design team increased the opportunities to ensure that the retained values of the units of the existing building are appropriate to its context. Overall, 94% of the analysed windows achieve the alternative target (VSC of 15%). This means that either they achieve a VSC value of at least 15% or that the reduction is no more than 20% of their former value. The results are deemed 'acceptable'.

This report has been updated following the Council's review undertaken by Delva Patman Redler on the Council's behalf as well as the resubmitted development. All the comments have been addressed. As such, Latitude balconies have been added to the 3D model which do not affect the overall results of the impact assessment. As stated in the results, only 3 more windows fall below the alternative target (15%) after including the balconies. The other 3 windows that are overshadowed by the balconies pass the 15% target. The 3 windows falling below the alternative target serve 3 dual aspect rooms. Therefore, the reductions are deemed marginal and do not affect the daylight availability of the rooms significantly.

When reviewing the impact of the proposals on adjoining properties, only 21 failing windows belong to the residential property (Latitude Apartment Croydon) out of 472 windows assessed (4.4%). Thus, the scheme has a very high pass rate at 94%. The other 2% failing windows belong to non-residential buildings located to the north of the site.

Summary of the 21 failing windows at Latitude Apartment Croydon:

- These impacts occur only to 11 units, all of which lie within the Latitude Apartment Block;
- Only 4 windows within living/kitchen/dining rooms are affected: These corner windows (797, 802, 808 and 826) are located at the ground, first, and second floors - these windows maintain VSC values close to 15%, at 13.88%, 12.67%, 13.38% and 14.57% respectively. These windows also serve dual aspect rooms with unobstructed secondary windows which meet the VSC requirements, therefore they considered to be acceptable and maintain a good level of light overall. Please see Appendix A.

- Of the 17 windows that are bedrooms, these comprise losses ranging from 0.42 times to 0.79 times, against a BRE benchmark of 0.8, which is considered commensurate to the urban context of the site, and noting that bedrooms do not need to be as well-lit as living/kitchen/dining rooms. In addition:

1. A total of 2 windows (82, 925) lose around 4% in absolute terms, which is generally considered to be a small impact and therefore acceptable;
2. A total of 5 (No. 799, 747, 746, 822, 1234) windows maintain a VSC that is close to 14% and above, thereby only marginally below the minimum target;
3. The remaining 10 windows (79, 1232, 71, 820, 819, 800, 821, 1233, 823, 867) at ground, levels 1, 2, 3 and 4 are to some extent impeded by the projections of the building itself, thereby resulting in a worse material impact resulting from the poor design of the existing blocks. Furthermore, a conscious effort has been made to maximise light to living/ kitchen/ dining rooms through the design of this building, hence why there is a higher degree of impact to bedrooms

In conclusion, the impact of the proposed development is considered acceptable and commensurate to the context of the site in daylight terms within an urban location.

Upon comparing the daylight results from the submitted Planning Application report, it is noted that there have been 7% improvement in the number of passing windows.

It is our position that the numerical assessments against the BRE Guidelines only assess performance against technical targets, and that, alone, should not determine the outcome. It is also necessary to look at wider contextual considerations in order to arrive at a balanced planning judgement, and this is especially so in the context of urban sites, like the site of the Proposed Development.

In this regard, it is also noted there are substantial improvements to outlook from neighbouring buildings which have also been considered.

In this report, we therefore carry out a two-stage assessment, where technical impacts and wider contextual considerations are considered together.

In this report, we apply professional judgement to critically examine whether the internal light levels of the Proposed Development would still be considered acceptable notwithstanding any derogation from the technical targets set out in the prevailing guidance.

Table 01: Daylight Assessment: Impact on the surrounding buildings - NSL

Property	Number of Rooms Tested	Rooms that meet BRE Guidelines	
		No.	%
Harrington Court	46	34	74%
Latitude Apartment Croydon	263	236	90%
93 Granville Cl	1	1	100%
86-90 Granville Cl	12	12	100%
104 - 106 Granville Cl	5	5	100%
138 Granville Cl	2	2	100%
13 Addiscombe Grove	6	6	100%
Croydon Crown Court	75	51	68%
Total	**410**	**347**	**85%**

Table 02: Daylight Assessment: Impact on the surrounding buildings - VSC

			Windows that meet BRE Guidelines		No. of Windows Experiencing Adverse Impacts -BRE Guidelines			Windows that meet 15% Target			Rooms that meet BRE Guidelines	
	Property	No. of Windows Tested	No.	%	20-29.99% loss (minor losses)	30-39.99% loss (moderate losses)	>40% loss (substantial losses)	No.	%	No. of Rooms Tested	No.	%
Residential	Harrington Court	72	39	54%	0	4	29	72	100%	46	28	61%
	Latitude Apartment Croydon	293	242	83%	27	6	19	272	93%	263	212	81%
	93 Granville Cl	1	1	100%	0	0	0	1	100%	1	1	100%
	86-90 Granville Cl	12	12	100%	0	0	0	12	100%	12	12	100%
	104 - 106 Granville Cl	5	5	100%	0	0	0	5	100%	5	5	100%
	138 Granville Cl	2	2	100%	0	0	0	2	100%	2	2	100%
Non - Residential	13 Addiscombe Road	10	2	20%	6	2	0	8	80%	6	**1**	**17%**
	Croydon Crown Court	77	22	29%	19	30	6	70	91%	75	**22**	**29%**
	Total	**472**	**325**	**69%**	**52**	**42**	**54**	**442**	**94%**	**410**	**283**	**69%**

Sunlight

Impact on the existing buildings

The impact of the proposed development on the **existing surrounding buildings** has been assessed in terms of sunlight provision. The annual and winter APSH analysis was carried out on the south-facing windows of the existing surrounding property next to the Proposed Development. The following properties were assessed:

- Harrington Court
- Latitude Apartment Croydon

The results show that 90% and 94% of the assessed rooms meet the APSH (Annual Probable Sunlight Hours) and WPSH (Winter Probable Sunlight Hours) targets respectively. The results are deemed good.

Sunlight on the ground - Overshadowing

Impact on the existing buildings

The existing external spaces have been tested in terms of sunlight provision. The analysis was carried out for both configurations, existing and proposed. 19 spaces have been tested. The results show that 18 spaces achieve sunlight availability in line with the BRE criteria. Meaning that at least 50% of the spaces achieve 2 hours of direct sunlight on 21 March or there is no more than 20% loss compared to the former value.

Space 19 is the only amenity area that does not meet the BRE target. This space is located to the north of the Crown Court immediately and it is adjacent to a car parking area. It is not a garden, park/playing field, or playground. It is also not considered to be a sitting out area or focal point of views, but given it lies adjacent to a publicly accessible building (the Court) it has been assessed for completeness. Taking this into account, the reduction is deemed acceptable when considered in the round with the performance achieved on the other assessed areas.

All the spaces would achieve adequate sunlight condition on 21 June.

The results are deemed good as all spaces which are designed and used as amenity spaces (such as communal gardens and front gardens) meet the BRE target.

Balancing Daylight and Sunlight with Energy and Overheating

The new Part O of Schedule 1 to the Building Regulations deals with overheating in buildings and sets a number of requirements for windows and ventilation. This is a fundamental change in the design of buildings in the UK and brings regulatory power to bear on the problem of overheating in buildings. While there has been an overheating test in GLA policy for some time, there has not been an equivalent in Building Regulations, until now. This means that designers have a higher priority to design for overheating than for daylight, as compliance with overheating is now a mandatory requirement, whereas compliance with daylight guidance is not. This means inevitably that where there is a choice to be made between meeting overheating criteria in a design and meeting daylight guidance, the designer is forced to meet the overheating criteria. It is also true to say that the consequences of overheating are more serious for residents than the consequences of lower levels of daylight.

The design and sizing of windows is now a complex exercise where three sets of conflicting requirements must be balanced, the need to reduce CO_2 emissions which suggests smaller, higher performing windows, the need to provide shade and ventilation to reduce risk of overheating, which suggests smaller but openable windows, and finally daylight which usually suggests larger, and less shaded windows.

The design team have sought to carefully balance all of these criteria, while still protecting the architecture of the project and ensuring an optimal number of windows that can be manufactured, supplied and cleaned. Inevitably there are some locations where either overheating is more likely, or some energy efficiency has been sacrificed, or where daylight targets are not met. The difference in measurement and analysis means that homes with very good daylight are more likely to be at risk of overheating, whereas those with lower daylight levels will not be at risk of overheating. Therefore, there are no apartments where residents will experience the combination of high risk of overheating and low daylight levels.

The scheme has sought to achieve a balance between these competing factors as well as other planning and design considerations in order to deliver housing which is of a high quality and sustainable.

Conclusion

Overall, the proposed development will offer good levels of daylight to future occupants and good levels of sunlight to the living spaces and to the external amenity area throughout the year. In terms of impact on the surrounding properties, the proposed development will not cause unacceptable harm to the surrounding residential amenities considering the scheme and its environment. The daylight and sunlight levels are appropriate to the urban context and the overall results are, therefore, considered acceptable against the relevant planning policies and guidance.

1.0 Introduction

HTA Sustainable Futures have been instructed to prepare a Daylight and Sunlight study to assess the impact of the proposed development at Croydon Park Hotel, in the London Borough of Croydon, on the existing surrounding properties and open spaces in terms of daylight and sunlight availability. Furthermore, this report has been updated following the Council's review undertaken by Delva Patman Redler on the Council's behalf as well as the the resubmitted development.

Daylight and sunlight studies are taking in main living areas, i.e. kitchens, living rooms and bedrooms KLB), of the proposed development as well as sunlight provision in outdoor amenity spaces have been also assessed.

Daylight and sunlight calculations have been carried out in accordance with BRE's 'Site Layout Planning for Sunlight and Daylight: A Guide to Good Practice' (2022) by P J Littlefair, which is generally accepted as good practice by planning authorities.

The BRE Guide gives advice on site layout to achieve provision of daylight and sunlight both within buildings and in the open spaces between them. It aims to aid designers in considering the relationship between new and existing buildings to ensure that each retains the potential to achieve good daylight and sunlight levels.

Section 4 of this report briefly describes the BRE methodology and the design standards. Sections 6, 7 and 8 provide a summary of the outcome of the analysis.

BRE guidelines have been drafted primarily for use with low-density suburban developments and should be used flexibly when dealing with dense urban sites and extensions to existing buildings. The Guide states in the introduction:

> "The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design. In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings."

Current design challenges, particularly within the London area but increasingly across the UK revolve around achieving a design balance between daylight, energy, and overheating requirements.

Within the London area many standards and guidance documents, as well as building regulations, revolve around facades and windows, making the task of designers very complex and increasingly time consuming. Recent contradictory changes in daylight guidance and overheating, is making designers work much harder.

To explain, there are some specific performance requirements for buildings in new guidance and regulations that are at odds with each other and which need careful and timely analysis during design stages of residential buildings.

Firstly, GLA guidance on energy performance requires a 10% reduction in CO2 emissions before heating systems are considered. The purpose of this is to seek improvements in building fabric before other improvements are applied, otherwise known as a 'fabric first approach'. This requirement tends to push down on window sizes and to push up the energy performance of the facade.

Secondly, BRE Daylight standards, recently revised in 2022 to align with other European standards, seeks to equalise the daylight within rooms and pushes windows to be larger. Whilst it is clear that the numerical advice offered by the BRE is not mandatory and that a practical application of the target values is required as natural lighting is only one of

many factors that should be considered, there is often variation in the weight applied to daylight and sunlight performance by Councils in determining applications. Performance is highly dependent on the density, building shape and location. Towers usually meet the guidance more easily than dense urban streets and courtyards.

Finally, the Building Regulations Part O has been introduced in 2022 which applies to all residential buildings across the UK and requires designers to demonstrate that the home will not overheat under the specific conditions laid out in the document. This has the effect of reducing window sizes but increasing the ventilation requirements, and it is affected by local acoustic conditions.

The balancing of these issues is complex and not obvious, and requires in-depth analysis at an early stage of design. In London, dynamic modelling is required as London is an area of higher risk than much of the UK due to the higher temperatures in urban areas.

These changes will require careful consideration by local planning authorities to ensure that appropriate weight is given to both daylighting and energy matters. The link between design quality and daylight seem more obvious to clients and planners alike than the link between low energy buildings and design quality.

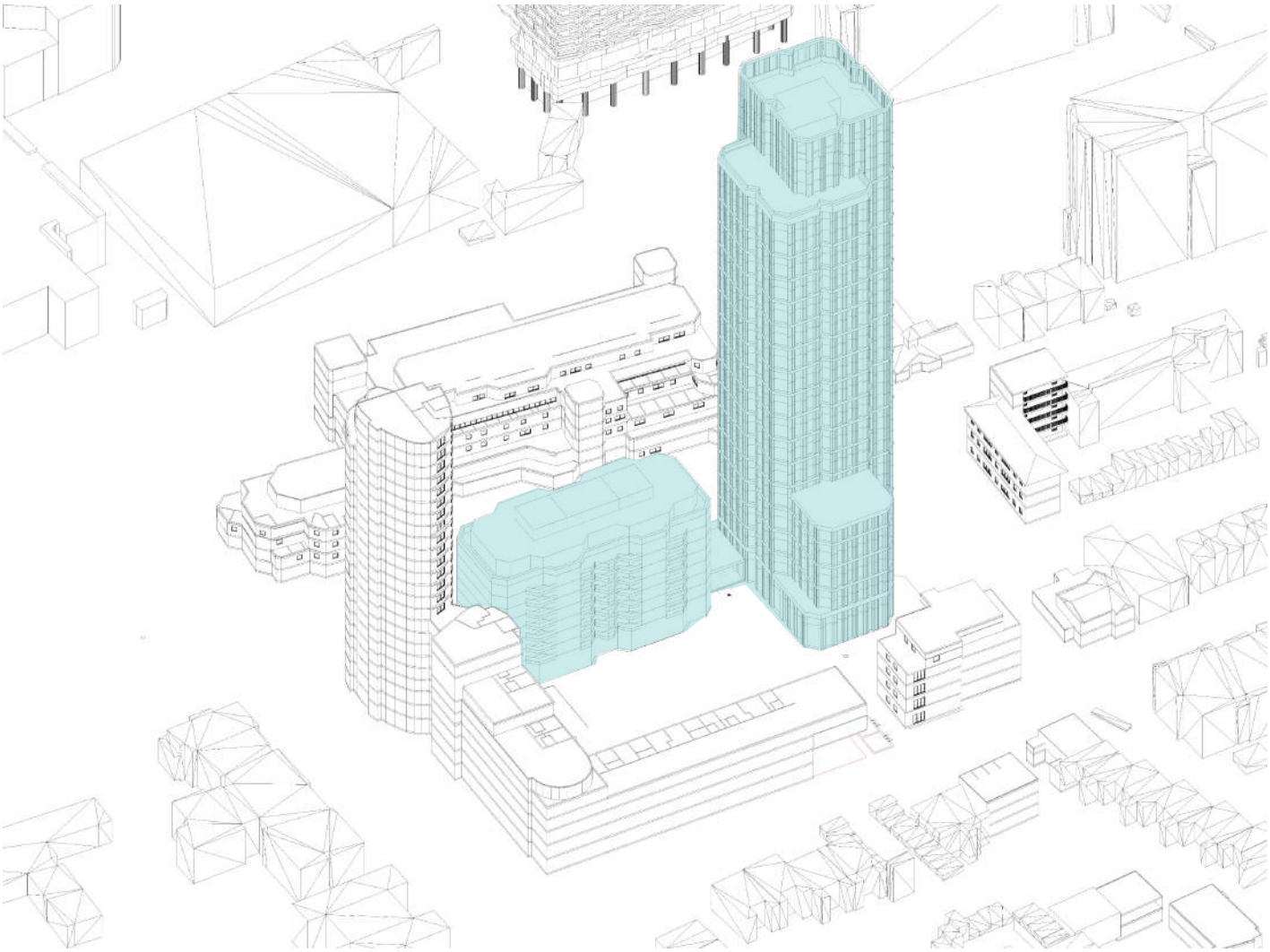


Figure 1 - 3D view

Contextual approach to Daylight – Urban setting:

It is an established principle in daylight and sunlight testing that whilst the BRE Guidelines suggest that existing daylight may be noticeable if windows achieve a VSC below 27%, the BRE Guidelines are not fixed standards and should be applied flexibly to take account of the specific circumstances of each case.
As the BRE guides states, this guidance "is not mandatory and should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer". Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design and in special circumstances the developer or planning authority may wish to use different target values.

In this regard, through a number of planning applications and appeals, as noted below, it has been established that alternative targets may be set having regard to site context, with 15% VSC being an appropriate benchmark/an established indicator in many cases.

Accordingly, a range of examples (including statements made by LBC's DSO advisor, Delva Patman Redler), have been provided overleaf where 15% VSC has been considered as an appropriate value, with commentary against each of the schemes' relevance to the Croydon Park Hotel in respect of the relative characteristics of urban context (including character, relevant planning allocations and town centre locations). Please refer to table 03.

This has been accepted by officers at the London Borough of Croydon (LBC), and from reviewing these case studies, is considered that the site cannot objectively be considered any other than an 'urban' context, noting the 15% VSC measuring stick has been widely and consistently applied to sites in less urban locations than the Croydon Park Hotel (i.e. not in town centres, not in Opportunity Areas and with a poorer PTAL etc.). We would also note that whilst the Further Alterations to the London Plan (2015) has since been replaced by the London Plan (2021), through its adoption it characterised central, urban and suburban locations. This was partly to assist in setting appropriate densities for development but was also to guide the spatial development strategy and assisted in the process of designating appropriate growth allocations, including 'Opportunity Areas' – a well established principle with every version of the London Plan.

Accordingly, the supporting text of Table 3.2, 'Sustainable residential quality (SRQ) density matrix habitable rooms/ site area (ha); dwellings/ site area (ha)', states:

"Appropriate density ranges are related to setting in terms of location, existing building form and massing, and the index of public transport accessibility (PTAL). The setting can be defined as:

- Central – areas with very dense development, a mix of different uses, large building footprints and typically buildings of four to six storeys, located within 800 metres walking distance of an International, Metropolitan or Major town centre.
- Urban – areas with predominantly dense development such as, for example, terraced houses, mansion blocks, a mix of different uses, medium building footprints and typically buildings of two to four storeys, located within 800 metres walking distance of a District centre or, along main arterial routes.
- Suburban – areas with predominantly lower density development such as, for example, detached and semi-detached houses, predominantly residential, small building footprints and typically buildings of two to three storeys.

Additionally, London Plan Policy SD6 states: 'Town centres are usually transport hubs, served by rail, tram and bus networks, and are accessible for people walking and cycling. Town centres and high streets have social value, providing access to a range of shops and services, employment opportunities, social contact, and information and support.. .This need for adaptation and diversification, together with their good public transport accessibility, makes many town centres appropriate locations for residential-led intensification or mixed-use development that makes best use of land'

Based on the description above, the site would clearly lie within a Central location as opposed to an Urban location – and therefore for the purposes of daylight and sunlight analysis, an Central context for the purposes of daylight and sunlight is wholly appropriate. This is further reinforced by the examples included in Table 03 below.

We have, therefore, applied the 15% VSC benchmarks for the purposes of the remainder of the daylight analysis within this letter to assist in design development. However, on resubmission, a full set of VSC analysis based on both 27% VSC and 15% VSC will be provided.

Table 03: *Comparison schemes where 15% VSC was considered appropriate (including details of urban context & relevance of site allocations)*

Application Address & Local Authority a	***Application/ Appeal Reference***	***Daylight & Sunlight Commentary***	***Site Context (planning policy considerations and character)***	***Relevance to Croydon Park Hotel***
Aberfeldy Estate, LB Tower Hamlets	**PA/21/02377/ A1**	Committee Report notes: "*a further 23% (88.5% in total) would see VSC levels in excess of 15%, which would allow for good internal levels of light with wider windows and consideration of balcony locations. The remaining 11.5% of facades would see VSC levels below 15% of which 1% of facades achieve below 5% VSC.Overall, Delva Patman Redler confirmed in their initial review that the development appeared to provide a very good level of adherence to daylight guidelines for a dense housing development".* The report also notes that "*19 windows affected serve LKDs of which 6 retain VSC levels of between 17-26% whilst the remaining 12 LDK windows retain VSC levels of between 5-10, however these living rooms are served by one or two further windows which are not affected by the proposed development, thus seeing good levels of VSC overall*".	PTAL rating of 1b to 4 (very poor to good); lies partly within the Aberfeldy Street Neighbourhood Centre, a lower tier town centre location. Surrounding heights of 2 to 8 storeys.	*Croydon Park Hotel is in a* ***more urban location*** *(PTAL is higher, it is in a Town Centre, building context is taller and it is in an Opportunity Area)*
103 to 111A High Street, Croydon, CR0 1QG	LB Croydon **20/03841/FUL**	Appeal Decision notes: "*for the reasons given at IR104-105, the Secretary of State agrees with the two-stage approach which has been agreed as appropriate by the appellant, the Council and the Inspector. He has taken into account that it has been agreed that 50 windows would have a VSC less than 15% and that affected flats would therefore suffer significant light loss. For the reasons given at IR107-111, he agrees that the use of the 27% ideal is inappropriate in this instance*".	PTAL of 6b (excellent). Located within the Croydon Metropolitan Centre, a higher tier town centre. Building heights range between 3 to 13 storeys in immediate vicinity.	*Croydon Park Hotel is in a* ***very similar urban location****.*
11 to 21 Banstead Road, Purley, CR8 3EB, LB Croydon	**21/02832/FUL**	Committee Report notes that Officers consider it is a site where "*flexibility to BRE standards should be applied."* Officers considered that "w*indows within the approved Mosaic Place development will generally either retain a VSC greater than 18%, which is generally held as acceptable in urban environments, or would already have very poor light conditions due to the building's design with existing VSC values of less than 6%. In regards to the latter, these windows are generally located within recessed courtyards and in some instances behind deep recessed balconies. The development would result in many of these windows experience significant VSC ratio reductions,*	PTAL score of 5 (very good). Located on the immediate edge of district centre of Purley, a middle tier town centre location. Building heights range between 1 and 4 storeys in immediate vicinity.	*Croydon Park Hotel is in a* ***more urban location*** *(PTAL is higher, building context is taller and it is in an Opportunity Area)*

		however the actual VSC value reduction would be very small. As such it would not significantly alter the quality of accommodation provided or the way it was used and experienced".		
22-23 Tileyard Road and 196-228 York Way, LB Islington	*Appeal Ref: APP/V5570/W/19/3224373*	*Para 44: "There appears to be a growing recognition in heavily built up areas of London that a VSC of 20% is now regarded as reasonably good, with a VSC of 15% being considered acceptable in most instances"*	*PTAL rating of 2 (low); not in a town centre; within a Locally Significant Industrial Site (LSIS)*	*Croydon Park Hotel is in a **more urban location** (PTAL is higher, building context is taller and it is in an Opportunity Area)*
The Whitechapel Estate, Varden Street and Ashfield Street, LB Tower Hamlets	*Appeal Ref: APP/E5900/W/17/3171437*	*Para 112: "The figures show that a proportion of residual Vertical Sky Component ('VSC') values in the mid-teens have been found acceptable in major developments across London. This echoes the Mayor's endorsement in the pre SPG decision at Monmouth House, Islington that VSC values in the mid-teens are acceptable in an inner urban environment. They also show a smaller proportion in the bands below 15%. Even if there were some discrepancy in the appellants' figures for this lower band at Whitechapel Central, which is disputed, the VSC outcomes for the appeal proposal would in general be very similar to those of the other major schemes. The appeal proposal would therefore appear to be in compliance with the LP as amplified by the SPG and as it is being interpreted by the Mayor."*	*PTAL rating of 6a (Excellent); not in a town centre; in an Opportunity Area. Immediate local heights range from 2-11 storeys.*	*Croydon Park Hotel is in a **more urban location** Croydon Park Hotel is in a **more urban location** (PTAL and building context is similar, both sites lie within an5Opportunity Area but additionally, Croydon Park Hotel lies within a Town Centre).*
Sainsbury's, 1 Cambridge Heath Road, LB Tower Hamlets	*APP/E5900/W/17/3190685*	*Para 16: ".The Secretary of State notes that the BRE guidelines recommend a vertical sky component (VSC) of 27%. However, the guidelines, the Mayor's Housing SPG and paragraph 123© of the Framework all expect a flexible approach. The Secretary of State notes that the appellant aimed for retained levels of VSC of at least 15%, while achieving a high density".*	*PTAL rating of 6b (Excellent); within Whitechapel District Centre, a middle tier town centre location; in an Opportunity Area. Immediate surrounding heights range from 3-6 storeys.*	*Croydon Park Hotel is in a **more urban location** (similar allocations/ PTAL ratings, but lower maximum surrounding heights).*

2.0 Site description

Site Overview

The site is located in the London Borough of Croydon to the south of George Street and East Croydon Station.

Historically the site was a local hotel with a pay to park car park located at grade level and in an under-croft level of the hotel. In recent years the hotel has closed and become disused and dilapidated.

The site is well connected with a Public Transport Accessibility Level PTAL 6b which is the highest level of connectivity.

The Croydon Opportunity Area planning framework (OAPF) was adopted by the council on 22 April 2013. The OAPF was prepared jointly by the Greater London Authority (GLA) and London Borough of Croydon (LBC) in partnership with Transport for London (TfL). It provides guidance for the planning, design and regeneration of Croydon's metropolitan centre and is underpinned by a suite of town centre masterplans that provide guidance for specific areas. These include:

- East Croydon masterplan
- West Croydon masterplan
- Mid Croydon masterplan
- Fairfield/College Green masterplan
- Old Town masterplan

The site is located to the east of College Green Masterplan, which contains the cultural quarter

Location

The site for the development is set on Altyre Road, a north-south road connecting East Croydon Station to Park Hill Park. To the north is Hazledean road, a future route into the Fairfield Masterplan which will provide a lateral connection over the railway line which bisects the city.

Sited primarily in a residential area, it is bounded by Altitude 25, Latitude and Longitude Apartments which range from 25 to 5 storeys in height. To the west, the Croydon Law Courts buffers the railway edge at 6 storeys.

In close proximity, a cluster of high development running along the railway and George Street gives an indication of the upcoming development potential in Croydon.

The majority of the site is currently unoccupied, and provides poor quality outlook/amenity for the local residents, particularly the centre of the site which consists of a unsightly sawtooth roof and car park.

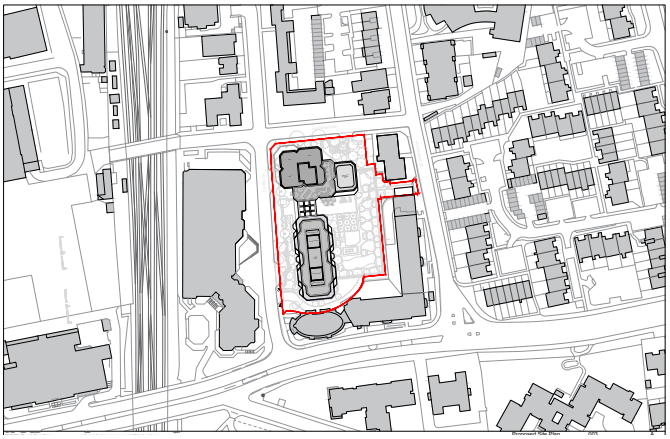


Figure 2 - Top view of the site

3.0 Planning policy

National Planning Policy Framework (2021)

The National Planning Policy Framework was revised in July 2021 and paragraph 125, part C states that:

> [...] 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.

National Planning Practice Guidance

This was last revised on 22.07.2019. Paragraph 006 of Reference ID: 66-006-20190722 states that:

> Where a planning application is submitted, local planning authorities will need to consider whether the proposed development would have an unreasonable impact on the daylight and sunlight levels enjoyed by neighbouring occupiers, as well as assessing whether daylight and sunlight within the development itself will provide satisfactory living conditions for future occupants. [...].

The London Plan (2021)

Policy D6 - Housing quality and standards states that:

> The design of development should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space.

Single aspect dwellings are more difficult to ventilate naturally and are more likely to overheat, and therefore should normally be avoided. Single aspect dwellings that are north facing, contain three or more bedrooms or are exposed to noise levels above which significant adverse effects on health and quality of life occur, should be avoided. The design of single aspect dwellings must demonstrate that all habitable rooms and the kitchen are provided with adequate passive ventilation, privacy and daylight, and that the orientation enhances amenity, including views. It must also demonstrate how they will avoid overheating without reliance on energy intensive mechanical cooling systems.

Policy D9 - Tall buildings states that:

> Environmental impact
> [...] 3) environmental impact
> a) wind, daylight, sunlight penetration and temperature conditions around the building(s) and neighbourhood must be carefully considered and not compromise comfort and the enjoyment of open spaces, including water spaces, around the building

Housing Supplementary Planning Guidance (2016)

The Mayor published Supplementary Planning Guidance on Housing in March 2016.
The Housing SPG moves away from the rigid application of the national numerical values provided in the BRE Guidance. Paragraph 1.3.45 states that:

> "an appropriate degree of flexibility needs to be applied when using BRE Guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres, large sites and accessible locations, where BRE advice suggests considering the use of alternative targets.
> This should take into account local circumstances; the need to optimise housing capacity; and scope for the character and form of an area to change over time."

Paragraph 1.3.45 states that:

> "The degree of harm on adjacent properties and the daylight targets within a proposed scheme should be assessed drawing on broadly comparable residential typologies within the area and of a similar nature across London. Decision makers should recognise that fully optimising housing potential on large sites may necessitate standards which depart from those presently experienced but which still achieve satisfactory levels of residential amenity and avoid unacceptable harm."

London Plan Guidance
Housing Design Standards (June 2023)

A - Placemaking and the public realm states that:

A1.7 The most favourable orientation for each new building will be heavily influenced by the site-specific opportunities and constraints. Layouts should optimise the orientation of new buildings to maximise the quality of daylight and thermal comfort for residents, minimise overheating, and optimise thermal efficiency, by utilising and controlling solar gains [NB].

B9 Shared outside amenity space states that:

B9.5: Maximise the quality and availability of daylight and sunlight in communal outside spaces, particularly in winter. It is particularly important that spaces designed for frequent use (including sitting and play spaces) receive direct sunlight through the day, particularly at times they are most likely to be used [NB, CoU].

C2 Internal space standards states that:

C2.3: A minimum ceiling height of 2.5m is required for at least 75 per cent of the gross internal area (GIA) of each dwelling to enhance the spatial quality; improve daylight penetration and ventilation; and assist with cooling. Any reduction (from 2.5m) in floor-to-ceiling heights should only be for essential equipment in the ceiling voids above kitchens and bathrooms. [NB, CoU]

C6 Thermal comfort states that:

C6.2: Daylight and overheating assessments should be analysed together to determine the optimal balance. South and west-facing facades are most at risk to overheating, and the use of shading should be used to prevent direct sunlight from entering the home during at-risk periods. [All]

Croydon's Local Development Scheme (2023)

This document sets out Croydon Council's future programme of preparing and reviewing Croydon's Development Plan (excluding the London Plan). It also sets out which Supplementary Planning Documents (which provide supporting guidance to the existing Croydon Local Plan 2018) the Council intends to prepare.

Croydon Local Plan (2018-Being reviewed by the council)

DM10.6 The Council will support proposals for development that ensure that;
d. Provide adequate sunlight and daylight to potential future occupants; and that
e. They do not result in significant loss of existing sunlight or daylight levels of adjoining occupiers.

Layout

6.71 The Council considers the health and wellbeing of those living and working within the borough to be of the upmost importance. New developments can impact upon the amenity of the occupants of neighbouring properties. Site layouts should be designed to protect or improve conditions for occupants of nearby properties and future occupants. In line with the Housing Supplementary Planning Guidance, when assessing site layouts the Council will consider a development's impact on visual amenity, overlooking, outlook, and sunlight and daylight.

4.0 Methodology - Assessment criteria

The Daylight and Sunlight Assessment, presented in this report, has been carried out in compliance with the methodology outlined in the Building Research Establishment (BRE) Guide 'Site Layout Planning for Sunlight and Daylight: A Guide to Good Practice' by P J Littlefair (2022). The third BRE guide edition has introduced new methodology for the assessment of the proposed development. The strategy for the impact assessment remains unchanged.

4.1 Daylight - Impact on existing properties

The design of a new development should safeguard potential for daylight to nearby buildings. Otherwise, obstruction caused by new built sites may make surrounding properties look gloomy and unattractive.

BRE guidelines are intended for use for living areas in adjoining dwellings or main occupied spaces in non domestic buildings where daylight is required. The methodology to assess the impact on daylight access of the properties surrounding the development is as follows:

Angular check

This test should only be used where the proposed development is of a reasonably uniform profile and is directly opposite the existing building. A plane is drawn at 25 degrees from the horizontal at the centre of an existing window. If the new development intersects with this plane, i.e. the obstruction angle is greater than 25o, daylight access of the assessed window may be reduced. A more detailed assessment should be then carried out to calculate the loss of daylight to the existing window.

Buildings that are not directly facing the new development may still experience a change to their lighting condition and therefore the 45o approach method should be applied to assess the impact. A horizontal plane should be drawn from the highest point of the proposed development angled at 45 degrees downward. If existing windows fall within the area created by the existing building, proposed development and the angled plane, these should be also included in the assessment.

Vertical Sky Component method (VSC)

The Vertical Sky Component (VSC) quantifies the amount of available daylight, received at a particular window and measured on the outer pane of the window. This is the ratio, expressed as a percentage, of the direct illuminance falling on a reference point (usually the centre of the window) to the simultaneous horizontal illuminance under an unobstructed sky (overcast sky conditions). The maximum value of VSC for a completed unobstructed vertical window pane is 40%.

In order to maintain good levels of daylight the BRE guidance recommend that the VSC of a window should be 27% or greater. However, the 2022 BRE Handbook makes allowance for different target values in cases where a higher degree of obstruction may be unavoidable such as historic city centres or modern high rise buildings. The guide states that the 27% value is:

> "..purely advisory and different targets may be used on the special requirements of the proposed development or its location".

If the VSC is less than 27% then further assessment should be carried out to compare existing and proposed daylight levels received by an existing window.

Comparison method

The comparison test considers the VSC results of the baseline/existing condition and the VSC results assuming that the new development is in place. The 2022 BRE Handbook states that where the proposed VSC is less than 27%, the comparison with the existing situation should be analysed and if the VSC is less than 0.8 times its former value, occupants of the existing building may notice a reduction in the amount of daylight.

An alternative target (15% VSC) has been set for the purpose of this assessment due to the density of the site. In this regard, through a number of planning applications and appeals, as shown in table 03, it has been established that alternative targets may be set having regard to site context, with 15% VSC being an appropriate benchmark/an established indicator in many cases. Please refer to table 03. More detailed explanations could be found on pages 9, 10 and 11 regarding the alternative target.

Position of the No-Sky Line

A measure to assess the distribution of daylight in a space is the percentage of area that lays beyond the no-sky line i.e. The area that receives no direct skylight. This is important as it indicates how good the distribution of daylight is in a room. If more than 20% of the working plane lies beyond the no-sky line poor daylight levels are expected within the space.

4.2 Sunlight - Impact of existing properties

The impact of the new development on the sunlight levels received by the neighbouring residential buildings has been carried out in accordance with the BRE Guide.

The methodology is based on guidelines set out in the 2022 BRE Handbook. Only windows facing 90° of due south have been considered in the analysis. The methodology to assess the impact on the sunlight access of the properties surrounding the new development is as follows:

Angular check

This test should only be used where the proposed development is of a reasonably uniform profile and is directly opposite the existing building. A plane is drawn at 25 degrees from the horizontal at the centre of an existing window. If the new development intersects with this plane, i.e. the obstruction angle is greater than 25°, daylight access of the assessed window may be reduced. A more detailed assessment should be then carried out to calculate the loss of daylight to the existing window.

Annual Probable Sunlight Hours

BRE have produced sunlight templates for London, Manchester and Edinburgh indicating the Annual Probable Sunlight Hours (APSH) for these regions. The London template has been selected for this study which has an APSH of 1,486 hours and a Winter Probable Sunlight Hours of 446 hours. The same VSC reference points are used for the calculation of the APSH and WPSH. It should be considered that sunlight is deemed less important in kitchens and bedrooms. The 2022 BRE Handbook states:

> "In houses, the main requirement for sunlight is in living rooms, where it is valued at any time of day, but especially in the afternoon".

The 2022 BRE Handbook also states:

> "...a south facing window will, in general, receive most sunlight, while a north facing one will receive it only on a handful of occasions. East and west facing windows will receive sunlight only at certain times of day".

According to the BRE guide, for a space to be reasonably sunlit:

- At least one main window wall should face within 90° of due south and
- The centre of at least one window to a main living room should receive 25% of annual probable sunlight hours, including at least 5% of annual probable sunlight hours in the winter months between 21 September and 21 March. If a room has multiple windows on the same wall or on adjacent walls, the highest value of APSH should be taken. If a room has two windows on opposite walls, the APSH due to each can be added together.

Comparison method

The comparison test considers the APSH and WPSH results of the baseline condition and the APSH and WPSH results of the Development in place. The BRE guidance say that if the reduction in sunlight between the baseline condition and the future one results in an APSH and WPSH of at least 0.8 times its former value, then it is considered that the sunlight received is adequate.

4.3 Overshadowing - Gardens and open spaces

Existing spaces

The methodology is based on guidelines set out in the 2022 BRE Handbook that states the following:

> "The availability of sunlight should be checked for all open spaces where it will be required. This would normally include: private gardens (usually the main back garden of a house), parks and playing fields, children's playgrounds..."

The BRE Guide recommends that for a garden or amenity to appear adequately sunlit throughout the year, at least half of it should receive at least two hours of sunlight on 21 March (Spring Equinox).

The Guide suggests that where large buildings are proposed which may affect a number of amenity spaces it is useful to plot a shadow plan to show the location of shadows at different times of the day on 21st March. Shadow plans for the 21st of March, 21st of June and 21st of December can be found in Appendix C.

The methodology to assess the sunlight impact of the amenity spaces is as follows: sunlight provision is considered adequate if at least 50% of the amenity space receives two hours of sunlight on 21 March. If otherwise, then a comparison between the existing and proposed conditions is required to test whether the amenity space receives at least 80% of sunlight of its former value. If this is the case the BRE guidance states that the loss of sunlight is negligible.

5.0 Site model

The Daylight/Sunlight analysis was carried out by creating a three-dimensional model of the proposed development and its surroundings (Figure 3).

A detailed model of the proposed living spaces was also created. All of the residential rooms have been analysed and assessed against the BRE standard. For each unit only kitchens, dining rooms, living rooms and bedrooms were assessed in terms of daylight and sunlight provision.

The model was also used to assess the impact on the surrounding buildings in terms of daylight, sunlight and overshadowing.

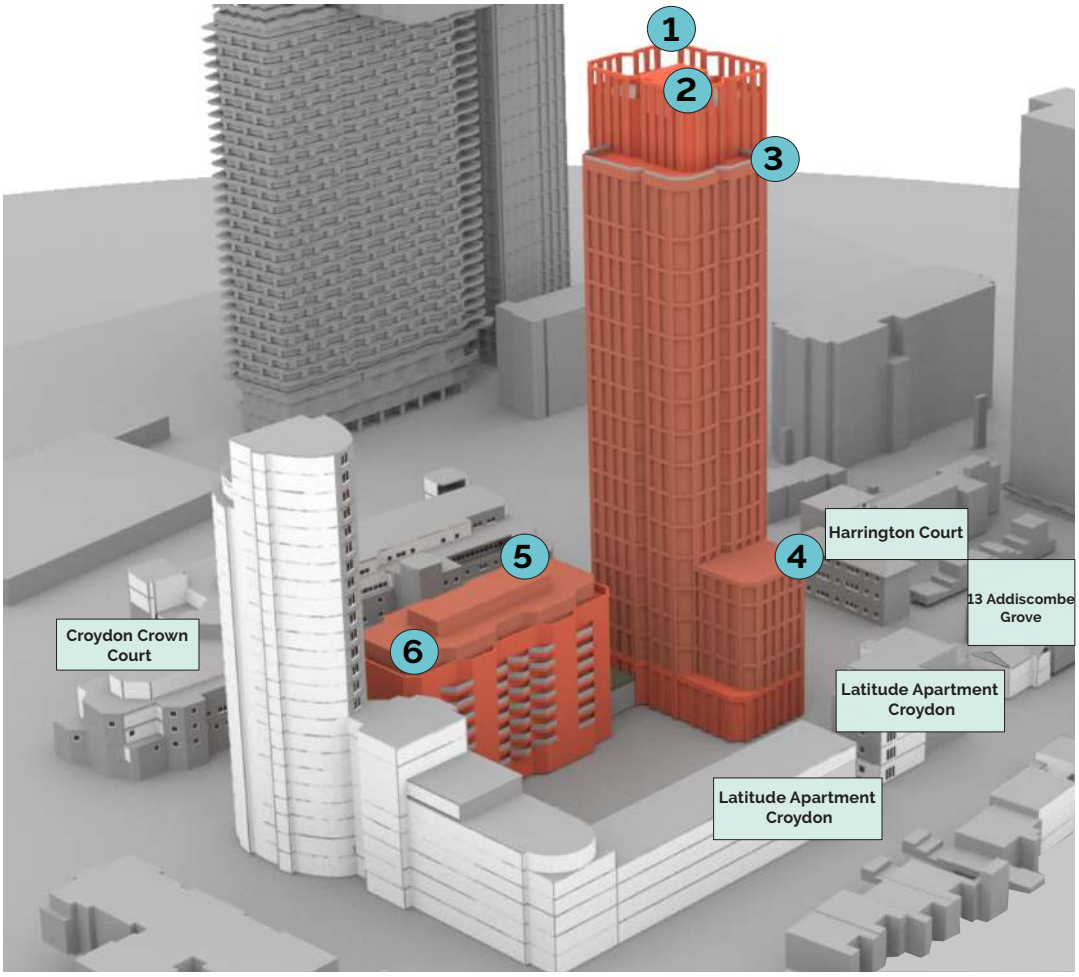
The surrounding properties have been modelled based on Google map images, site visits and educated assumptions.

The calculations were based on the following assumptions:

- Daylight provision in new rooms has been checked using the method in BS EN 17037 Daylight in Buildings[1]: direct prediction of illuminance levels using hourly climate data
- The working plane was set at 0.85m above the floor as per BRE guidance for dwelling

The coordinates shown on the image below are the detailed site latitude and longitude measures. However, it should be noted that MBS plug-in uses the climate file to determine the location and the coordinates of the project which are as follows:

- Location: London, Gatwick
- Latitude 51.1500 and Longitude -0.1800



1 E=532928.9189 N=165549.4716 AOD=187.9

2 E=532955.9884 N=165531.5567 AOD=187.9

3 E=532960.4623 N=165546.5468 AOD=173.725

4 E=532973.3983 N=165546.3328 AOD=96.25

5 E=532944.7439 N=165501.1768 AOD=99.4

6 E=532961.0315 N=165461.4981 AOD=93.83

Figure 3 - 3D model of the proposed development and its surroundings

6.0 Daylight assessment

6.1 Impact on existing properties

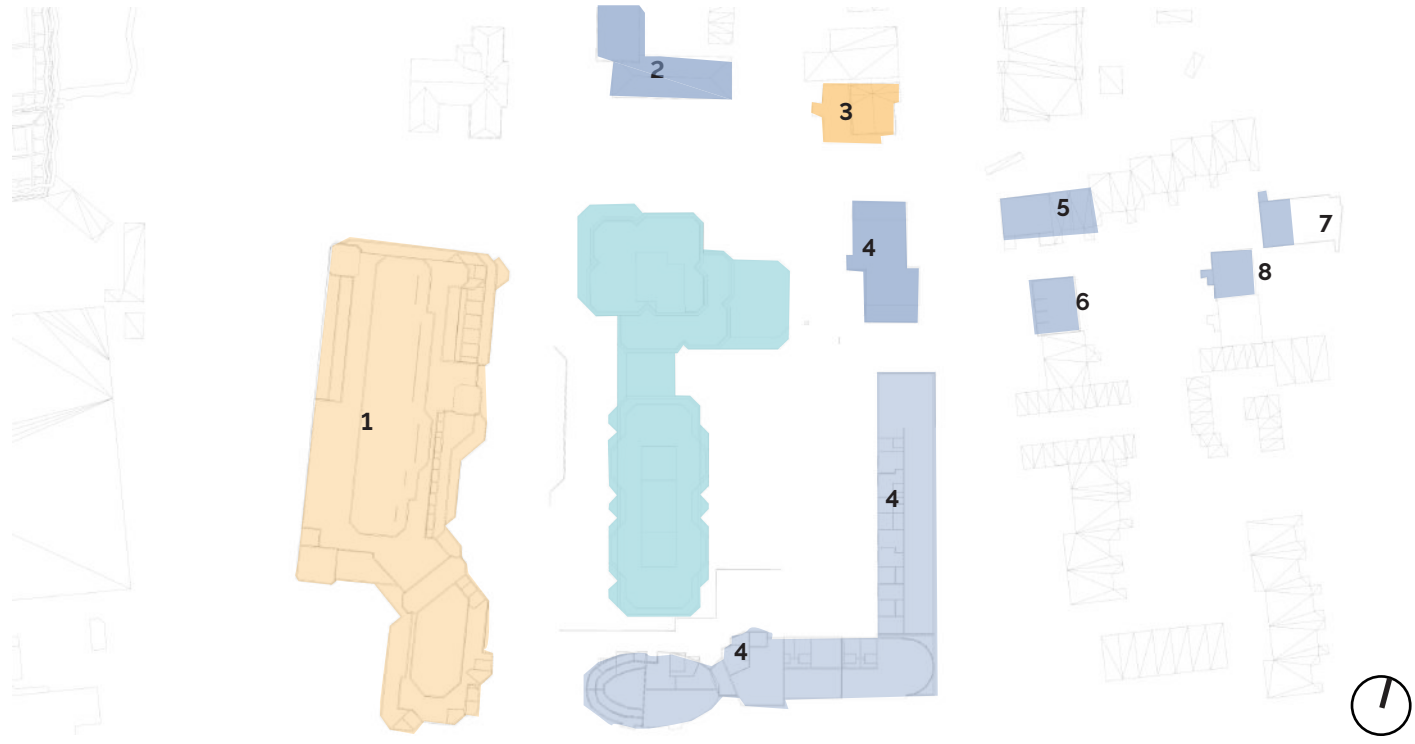
A daylight analysis has been carried out to assess the impact of the new development on the surrounding existing properties in terms of availability of daylight. Figure 4 shows the location of the existing buildings that surround the proposed development and whose daylight availability may be affected by the new blocks.

Vertical Sky Component (VSC)

The design of a new development should safeguard potential for daylight to nearby buildings. Otherwise, obstruction caused by new built sites may negatively affect neighbouring sites. The Vertical Sky Component (VSC) quantifies the amount of available daylight, received at a particular window and measured on the outer pane of the window. The maximum VSC value for a completely unobstructed vertical window pane is 40%. In order to maintain good levels of daylight the BRE guidance recommends that the VSC of a window should be 27%.

The properties analysed in this study are the residential buildings and non domestic building which are located around the site and which might be affected by the Proposed Development. Several initial studies were conducted to assess the likely impact of the proposed massing to the existing properties with the intention of guiding the design team and provide advice on opportunities for reducing the impact while maximising daylight and sunlight availability within the proposed scheme. Following the review of the preliminary studies, the design was adapted to reduce the impact on the properties. The proposed massing is the result of adjustments which try to reduce the impact on the surrounding properties as much as practical.

An alternative target (15% VSC) has been set for the purpose of this assessment due to the density of the site.



Surrounding residential buildings

Proposed buildings

Non-residential buildings

1: Croydon Crown Court
2: Harrington Court
3: 13 Addiscombe Grove
4: Latitude Apartment Croydon
5: 93 Granville Cl
6: 86-90 Granville Cl
7: 138 Granville Cl
8: 104 - 108 Granville Cl

Figure 4 - Site plan with surrounding buildings

In this regard, through a number of planning applications and appeals, as shown in table 03, it has been established that alternative targets may be set having regard to site context, with 15% VSC being an appropriate benchmark/an established indicator in many similar cases.

Accordingly, a range of examples (including statements made by LBC's DSO advisor, Delva Patman Redler), have been provided overleaf where 15% VSC has been considered as an appropriate value, with commentary against each of the schemes' relevance to the Croydon Park Hotel in respect of the relative characteristics of urban context (including character, relevant planning allocations and town centre locations). Please refer to table 03. More detailed explanations could be found on pages 9, 10 and 11 regarding the alternative target.

The conservative targets described in the BRE guide which are typical for low rise configurations are applied for this assessment. However, results are also compared against an alternative target which is deemed more appropriate for this site.

The following properties are considered relevant for this development and have been analysed in detail.

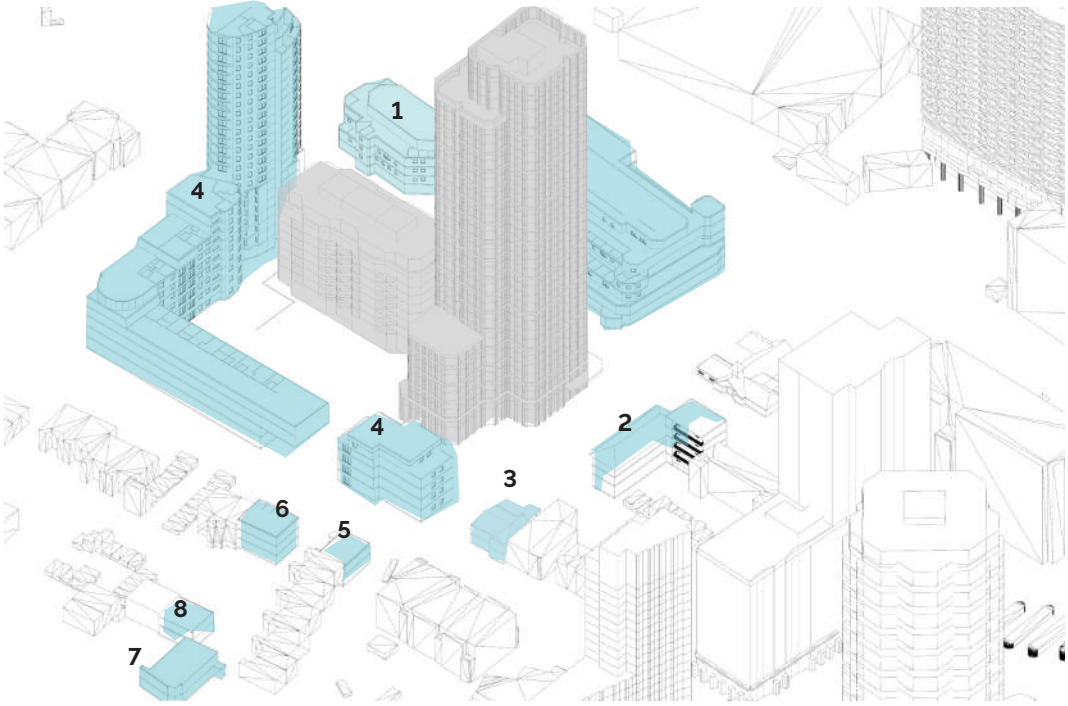
- Harrington Court (Residential)
- Latitude Apartment Croydon (Residential)
- 93 Granville Cl (Residential)
- 86-90 Granville Cl (Residential)
- 104 - 106 Granville Cl (Residential)
- 138 Granville Cl (Residential)
- 13 Addiscombe Road (Non-residential)
- Croydon Crown Court (Non-residential)

When assessing the impact on the existing surrounding buildings, it is important to establish if any loss caused by the proposed development is acceptable. If the loss is significant, then the loss should be classified as unacceptable. The BRE guide explains that any reduction of more than 20% of the former value would be perceived by the human eye and careful considerations are required in assessing the degree of impact caused by the new obstructing element. Daylight and sunlight is usually more limited in urban contexts given the proximity to the adjacent buildings and the higher levels of obstructions. Therefore, a flexible approach is required in assessing the impact to the existing surrounding buildings.

The No-Sky Line (NSL) assessment has been carried out as an additional test. The overall NSL results indicate that 85% of the rooms comply with the BRE recommendations. The results are deemed 'good'.

Where no internal layout information could be sourced, assumptions of the rooms behind the fenestration have been made. Unless the building form or research for similar nearby properties dictates otherwise, as per industry practice we have assumed a standard room size for residential properties. Internal layouts are only relevant for the No Sky Line (daylight distribution) impact assessment; the other daylight (Vertical Sky Component) and sunlight (Annual Probable Sunlight Hours) impact assessments are calculated at the window face and therefore, not dependent upon floor plans. Floor levels have been assumed for those adjoining properties where drawing information was not obtained. This dictates the level of the working plane which is relevant for the No Sky Line assessment.

As is standard practice when assessing daylight and sunlight effects, HTA have not sought access to any of the existing neighbouring properties. However, typical floor plans were sourced for properties within Latitude Apartments.



1: Croydon Crown Court
2: Harrington Court
3: 13 Addiscombe Grove
4: Latitude Apartment Croydon
5: 93 Granville Cl
6: 86-90 Granville Cl
7: 138 Granville Cl
8: 104 - 108 Granville Cl

Figure 5 - 3D view of the model used for the analysis and its surrounding buildings

The VSC results are as follows:

Harrington Court

This residential building is located to the north of the site. According to the internal layout of the residential units that we managed to assume, a detailed assessment was conducted by assessing the VSC at the centre of each windows. The overall retained VSC values in the rooms have also been calculated. The results of the analysis show that 54% of the analysed windows achieve VSC levels in line with the BRE recommendations. This means that either they achieve a VSC value of at least 27% or that the reduction is no more than 20% of their former value.
Due to the density of the site, a retained daylight level (VSC) of 15% or above would be considered acceptable. A retained value above 20% would be considered 'good'. Therefore, an alternative target has been set.
A detailed analysis of the results shows 100% of the assessed windows achieve VSC values of more than 15%, which is the condition usually found in urban configurations. Overall, the impact from the proposed development on this building is considered acceptable for this scheme and its environment.

13 Addiscombe Road

This is a two storey school of Philosophy located on the north-east of the proposed development site, which is a non-residential building. The internal layout is modelled based on assumptions due to unavailability of the layout reference. The results of the analysis show that 20% of the analysed windows achieve VSC levels in line with the BRE recommendations. This means that either they achieve a VSC value of at least 27% or that the reduction is no more than 20% of their former value. A detailed analysis of the results shows that 80% of the tested windows satisfy the alternative 15% target. There are two windows in the building that are positioned slightly below the desired target level. The building has two windows situated at the internal corner of its structure. These windows fall slightly below the desired target level and a consequence of their positioning, they cast shadows on each other. It's important to note that the spaces associated with these windows are non-residential areas. Considering this, it is recommended to provide additional technical lighting in these areas. Overall, the impact of the proposed development on this building is considered acceptable for this scheme and its environment.

Croydon Crown Court

This is a non-residential building located on the west side of proposed development. Since the building is expected to have office rooms, the daylight calculations have been conducted. Given that the detailed model was not available for these buildings, the internal layout is assumed for the perimeter areas next to the windows.
The results of the analysis show that 29% of the analysed windows achieve VSC levels in line with the BRE recommendations. This means that either they achieve a VSC value of at least 27% or that the reduction is no more than 20% of their former value. A detailed analysis of the results shows that among 77 tested windows, 70 (91%) windows achieve VSC values of more than 15%, which is the condition usually found in urban configurations.
The results show that 7 windows fall below the alternative target (15% VSC target). The reductions are mainly on the lower floor and near the corners where usually less daylight values are expected. It should be noted that the functions of the rooms are not clear from available public records, albeit it is expected that they are either office or ancillary to office. Given the use is non-residential in nature, the daylight results are considered acceptable for a use of this type within a town centre (urban) location. Overall, the impact from the proposed development on this building is considered acceptable for this scheme and its environment.

Latitude Apartment Croydon

Latitude Apartment Croydon are residential buildings consist of 3 different block massing. These buildings are located from east to south side of the proposed development. The daylight simulation is based on the floor plans found on the Croydon Council website.
The results of the analysis show that 82% of the analysed windows achieve VSC levels in line with the BRE recommendations. This means that either they achieve a VSC value of at least 27% or that the reduction is no more than 20% of their former value. A detailed analysis of the results shows that among 293 tested windows, 272 windows (93%) achieve VSC values of more than 15%, which is the condition usually found in urban configurations.
The results show that 21 windows achieve VSC values below 15% in the existing configuration. These impacts occur only to 11 units,

Of these 21 windows, only 4 dual aspect living/kitchen/dining rooms are affected on the ground, first and second floors. These windows maintain VSC values close to 15%, at 13.88%, 12.67%, 13.38% and 14.57% respectively. Given that the secondary window to the north is unobstructed and meets the VSC requirements, therefore the result is acceptable.
17 bedroom windows have a daylight reduction of ranging from 0.42 times to 0.79 times of their former values, against a BRE benchmark of 0.8, which is considered commensurate to the urban context of the site.

A total of 7 windows maintain a VSC that is close to 14% and above, thereby only marginally below the minimum target. The remaining 10 windows are to some extent impeded by the projections of the building itself, thereby resulting in a worse material impact resulting from the poor design of the existing blocks.

Most of the failing windows are located either close to the corners, staggered walls or recessed walls, where a lower daylight value is expected. Moreover, the windows falling below the alternative target are primarily located in the northeastern part of the residential blocks, which is in close proximity to the proposed development. Overall, the impact from the proposed development on this building is considered acceptable for this scheme and its environment.

86 - 90, 93, 104-106, and 138 Granville Cl

These are residential buildings on the east side of the proposed building. The detailed interior layout is modelled for the perimeter areas next to the windows.
The result of the analysis shows that 100% of the analysed windows achieve VSC levels in line with the BRE recommendation. This means that either they achieve a VSC value of at least 27% or that the reduction is no more than 20% of their former value. Overall, the proposed development will not adversely impact on these properties.

Overall

Overall the massing has minimised the impact on the existing surrounding properties with particular attention to the units which are most likely to be affected. Given the urban context of the site, applying the BRE targets rigidly would not be adequate as the nature of the context suggest that retained values should be adequate for an urban site. The results of the analysis confirm that the great majority of the existing residential spaces achieve values in line with its context.

In summary, below is the further analysis of the rooms/ windows that do not meet daylight (VSC) values

(Based on the final proposal as detailed in the Design Pack by HTA, dated 11th July 2023)
A detailed breakdown of all the windows and rooms has been undertaken and is set out within the following sections/ tables based on the final proposed scheme, using a benchmark of 15% VSC. The detailed results are provided in Appendix A.

When reviewing the impact of the proposals on adjoining properties, only 21 failing windows belong to the residential property (Latitude Apartment Croydon) out of 472 windows assessed (4.4%). Thus, the scheme has a very high pass rate at 94%. The other 2% failing windows belong to non-residential buildings located to the north of the site.

Summary of the 21 failing windows at Latitude Apartment Croydon:

- These impacts occur only to 11 units, all of which lie within the Latitude Apartment Block;

- Only 4 windows within living/kitchen/dining rooms are affected: These corner windows (797, 802, 808 and 826) are located at the ground, first, and second floors - these windows maintain VSC values close to 15%, at 13.88%, 12.67%, 13.38% and 14.57% respectively. These windows also serve dual aspect rooms with unobstructed secondary windows which meet the VSC requirements, therefore they considered to be acceptable and maintain a good level of light overall. Please see Appendix A.

- Of the 17 windows that are bedrooms, these comprise losses ranging from 0.42 times to 0.79 times, against a BRE benchmark of 0.8, which is considered commensurate to the urban context of the site, and noting that bedrooms do not need to be as well-lit as living/kitchen/dining rooms. In addition:

1. A total of 2 windows (82, 925) lose around 4% in absolute terms, which is generally considered to be a small impact and therefore acceptable;
2. A total of 5 (No. 799, 747, 746, 822, 1234) windows maintain a VSC that is close to 14% and above, thereby only marginally below the minimum target;
3. The remaining 10 windows (79, 1232, 71, 820, 819, 800, 821, 1233, 823, 867) at ground, levels 1, 2, 3 and 4 are to some extent impeded by the projections of the building itself, thereby resulting in a worse material impact resulting from the poor design of the existing blocks. Furthermore, a conscious effort has been made to maximise light to living/ kitchen/ dining rooms through the design of this building, hence why there is a higher degree of impact to bedrooms

In conclusion, the impact of the proposed development is considered acceptable and commensurate to the context of the site in daylight terms within an urban location.

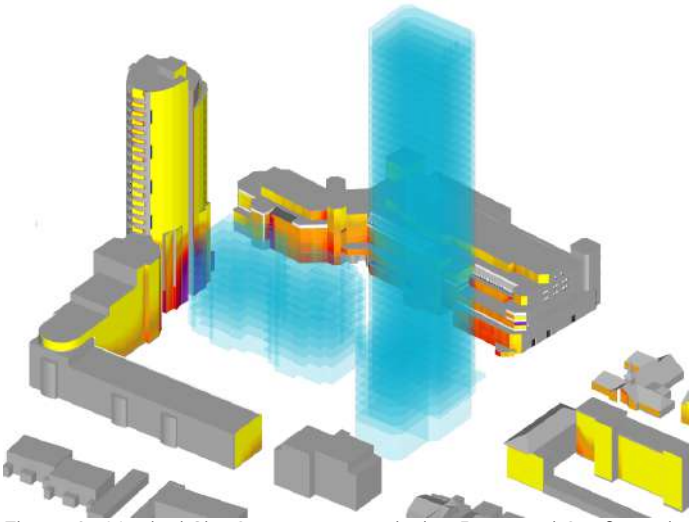


Figure 6 - Vertical Sky Component analysis - Proposed Configuration

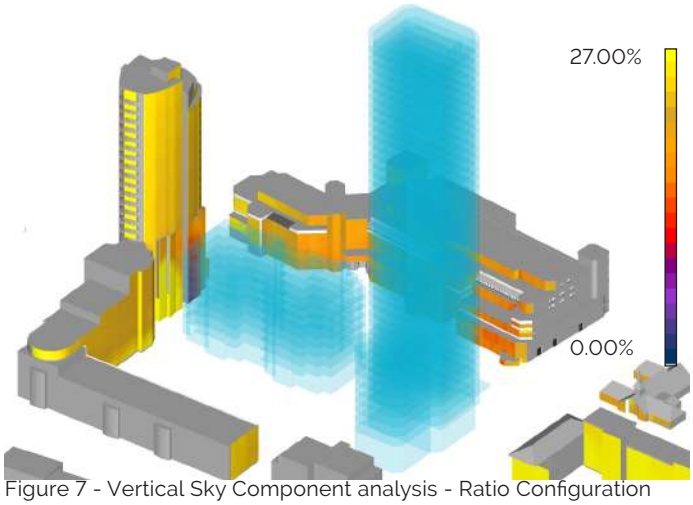


Figure 7 - Vertical Sky Component analysis - Ratio Configuration

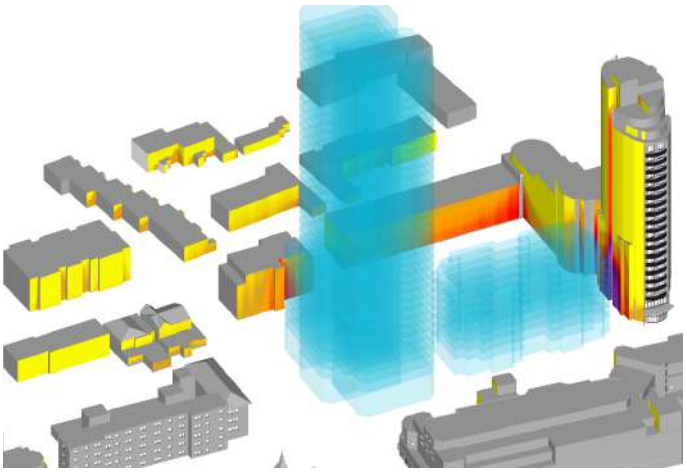


Figure 8 - Vertical Sky Component analysis - Proposed Configuration

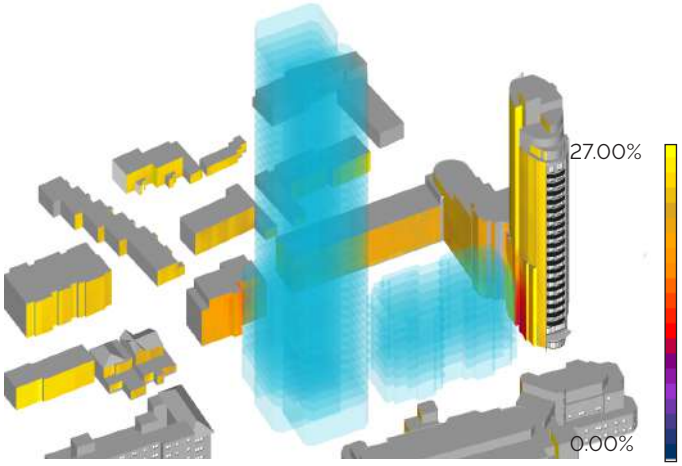


Figure 9 - Vertical Sky Component analysis - Ratio Configuration

Table 04: Daylight Assessment: Impact on the surrounding buildings - VSC

			Windows that meet BRE Guidelines		No. of Windows Experiencing Adverse Impacts -BRE Guidelines			Windows that meet 15% Target			Rooms that meet BRE Guidelines	
	Property	No. of Windows Tested	No.	%	20-29.99% loss (minor losses)	30-39.99% loss (moderate losses)	>40% loss (substantial losses)	No.	%	No. of Rooms Tested	No.	%
Residential	Harrington Court	72	39	54%	0	4	29	72	100%	46	28	61%
	Latitude Apartment Croydon	293	242	83%	27	6	19	275	94%	263	212	81%
	93 Granville Cl	1	1	100%	0	0	0	1	100%	1	1	100%
	86-90 Granville Cl	12	12	100%	0	0	0	12	100%	12	12	100%
	104 - 106 Granville Cl	5	5	100%	0	0	0	5	100%	5	5	100%
	138 Granville Cl	2	2	100%	0	0	0	2	100%	2	2	100%
Non - Residential	13 Addiscombe Road	10	2	20%	6	2	0	8	80%	6	**1**	**17%**
	Croydon Crown Court	77	22	29%	19	30	6	70	91%	75	**22**	**29%**
	Total	**472**	**325**	**69%**	**52**	**42**	**54**	**445**	**94%**	**410**	**283**	**69%**

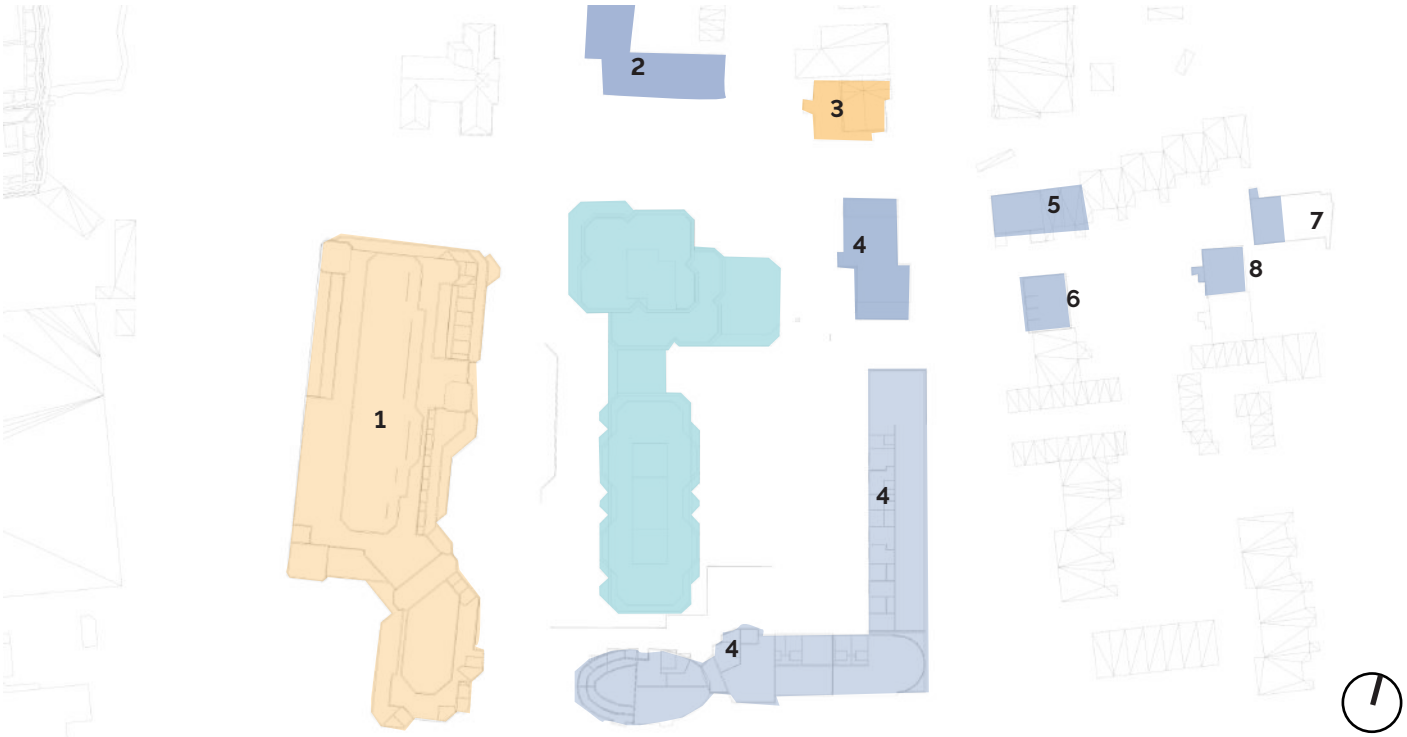
7.0 Sunlight Assessment

7.1 Impact on existing properties

Sunlight is an important issue to consider for the quality of an internal space. The orientation of windows and the position of a building on a site will have an impact on the amount of sunlight it receives but will also have an effect on the sunlight which neighbouring buildings receive. Unlike daylight, which is non-directional and assumes that light from the sky is uniform, the availability of sunlight is dependent on the orientation of the window or area of ground being assessed relative to the position of the sun.

According to the BRE guide, only windows facing within 90 degrees of due south need to be assessed when evaluating the impact of a proposed development on neighbouring properties. This guideline focuses on the windows that are most likely to experience significant changes in sunlight, overshadowing, or privacy due to the development.

However, in the study, it was decided to assess all the windows of the surrounding buildings. This broader approach was taken to achieve a more detailed analysis of the impact of the proposed development on neighbouring properties. By considering all the windows, regardless of their orientation,



KEY

Residential buildings included in the sunlight assessment,
Non-residential buildings included in the sunlight assessment
Proposed buildings

Perpendicular projection of the window

1: Croydon Crown Court
2: Harrington Court
3: 13 Addiscombe Grove
4: Latitude Apartment Croydon
5: 93 Granville Cl
6: 86-90 Granville Cl
7: 138 Granville Cl
8: 104 - 108 Granville Cl

Figure 10 - Site plan indicating the existing buildings tested for the sunlight assessment

a comprehensive understanding of the overall impact on the neighbouring buildings can be obtained. This expanded analysis can provide a more comprehensive picture of the potential impact of the proposed development on the surrounding area, helping to inform decision-making and potential mitigation measures. The results for the tested windows can be found in Table 05 below.

A total of 410 rooms were assessed. In this study all the south-facing windows were tested. Both the annual and the winter APSH (Annual Probable Sunlight Hours) values were assessed against the BRE criteria.

In Harrington Court, the results show that 87% of the rooms achieve adequate sunlight throughout the year. 100% positive results are also encountered for the winter period. There are 6 rooms achieving APSH (Annual Probable Sunlight Hours) values below the recommendations, from which 2 are LKDs and 2 are bedrooms. The failing windows are located on the upper floor of the property. The reductions are caused by the existing roof overhang to Harrington Court which is an inherent design limitation. All the other living rooms continue to achieve adequate levels of sunlight throughout the year. Overall the results deemed to be good with the majority of rooms meeting the criteria. All other rooms continue to achieve adequate levels of sunlight throughout the year.

In Latitude Apartment Croydon, the results show that 92% of the rooms achieve adequate sunlight throughout the year. 94% positive results are also encountered for the winter period. Out of 263 rooms tested , 20 rooms fall below the recommended BRE criteria for sunlight during the year. Out of the 263 rooms tested, 20 rooms fall below the recommended BRE criteria for sunlight. Among these 20 failing rooms, 3 are situated on the ground floor, 4 are on the first floor, 5 are on the second floor, and 3 are on the third floor. It is important to note that all other rooms in the apartment complex continue to achieve satisfactory levels of sunlight throughout the year.

According to the BRE criteria, living rooms with at least one south-facing window are the main requirement for adequate sunlight throughout the year. Interestingly, among the failing rooms, only 5 of them are living/dining/kitchen areas (LKDs), while the remaining 15 are bedrooms. This suggests that the bedrooms are the primary spaces affected by insufficient sunlight. Additionally, it is worth noting that the failing rooms are located on the eastern side of the lower floors of Latitude Apartment Croydon. This positioning limits the amount of sunlight these rooms receive during the day.

Furthermore, the proposed development in close proximity to these rooms casts shadows that further reduce the available sunlight. While bedrooms are not the main focus for sunlight requirements according to BRE, a thorough analysis was conducted on all residential rooms to assess the potential impacts of the proposed development on neighbouring buildings.

In summary, the analysis indicates that Latitude Apartment Croydon generally enjoys good sunlight availability, with the majority of rooms meeting the criteria. However, specific factors such as room location, orientation, and proximity to the proposed development can influence the sunlight levels in certain areas, particularly affecting the bedrooms.

In 13 Addiscombe Grove, the results show that 33% of the rooms achieve adequate sunlight throughout the year. 67% positive results are encountered for the winter period. There are 4 rooms achieving APSH (Annual Probable Sunlight Hours) values below the recommendations. Among the rooms tested, 4 rooms fall below the recommended Annual Probable Sunlight Hours (APSH) values. Out of these failing rooms, 3 are situated on the ground floor, while the remaining one is on the first floor. It is important to note that the sunlight assessment guidance provided by the BRE (Building Research Establishment) primarily focuses on analyzing sunlight in residential rooms rather than school buildings. Therefore, the specific criteria and requirements for sunlight in educational facilities may differ. However, it is worth mentioning that all other rooms within the school continue to achieve adequate levels of sunlight throughout the year. In summary, the analysis reveals that 13 Addiscombe Grove, as a school building, has a relatively lower percentage of rooms receiving adequate sunlight throughout the year. Further assessment, taking into account the specific sunlight requirements for educational facilities, is necessary to better understand and address the impact on the learning environment.

In Croydon Crown Court, the results show that 88% of the rooms achieve adequate sunlight throughout the year. 91% positive results are encountered for the winter period. There are 9 rooms achieving APSH (Annual Probable Sunlight Hours) values below the recommendations. Out of the 9 rooms assessed, it is noted that 2 of them are associated with windows facing north. North-facing windows generally receive less sunlight throughout the year. Therefore, it is expected that these 2 rooms would have lower sunlight levels compared to rooms with other orientations.The remaining 7 rooms are located on the eastern part of the second, third, and fifth floors of Croydon Crown Court. These rooms have windows primarily facing east, which means they may receive less sunlight during the day. Additionally, it is mentioned that these rooms are in close proximity to the proposed development, which can cast shadows and further limit the available sunlight.

It is important to note that Croydon Crown Court is a non-residential building, and therefore, it is not subject to the sunlight criteria outlined by the BRE. As a non-residential building, the lighting requirements can be addressed through technical means rather than relying solely on natural sunlight.

Considering the non-residential nature of Croydon Crown Court, the impact of sunlight levels on occupants may be less critical compared to residential buildings, therefore the results are deemed acceptable for this scheme and its environment.

Overall, the results show that 90% and 94% of the assessed rooms meet the APSH (Annual Probable Sunlight Hours) and WPSH (Winter Probable Sunlight Hours) targets respectively. The results are deemed good. Appendix B shows the location of each window assessed alongside the detailed results of the analysis.

Table 05: Detailed results of the Sunlight Assessment - Impact on the surrounding

Property	Number of Rooms Tested	Annual			Winter			Both		
		Rooms that meet BRE Guidelines		No. of Rooms Experiencing Adverse Impacts	Rooms that meet BRE Guidelines		No. of Rooms Experiencing Adverse Impacts	Rooms that meet BRE Guidelines		No. of Rooms Experiencing Adverse Impacts
		No	%		No	%		No	%	
Harrington Court	46	40	87%	6	46	100%	0	40	87%	6
13 Addiscombe Grove	6	2	33%	4	4	67%	2	2	33%	4
Croydon Crown Court	75	66	88%	9	68	91%	7	64	85%	11
Latitude Apartment Croydon	263	243	92%	20	247	94%	16	243	92%	20
93 Granville Cl	1	1	100%	0	1	100%	0	1	100%	0
86-90 Granville Cl	12	12	100%	0	12	100%	0	12	100%	0
104 - 106 Granville Cl	5	5	100%	0	5	100%	0	5	100%	0
138 Granville Cl	2	2	100%	0	2	100%	0	2	100%	0
Total	**410**	**371**	**90%**	**39**	**385**	**94%**	**25**	**369**	**90%**	**41**

8.0 Sun-on-the ground Analysis

8.1 Impact on existing properties

The recommendations set out in the BRE guide explain how to ensure that outdoor spaces are not permanently in shade for a large part of the year. At least 50% of the open spaces should receive 2 hours of sunlight on the equinox (21st March).

According to the BRE guidance, the availability of sunlight should be checked for all open spaces where it will be required. This would normally include:

- Gardens,
- Parks and playing fields,
- Children's playgrounds,
- Sitting out areas such as those between non-domestic buildings and in public squares, and
- Focal points of view such as a group of monuments or fountains.

An analysis was carried out to assess the sunlight availability on 21 March, including a comparison with the existing configuration.

Appendix C presents the shadow range analysis indicating the time of the day when buildings and external spaces will be in shade.

The sun-on-the ground analysis has been undertaken for 19 spaces on 21 March as recommended in the BRE guideline.

The analysis was carried out for both existing and proposed configurations. The results show that out of 19 spaces, 18 amenity areas achieve sunlight availability in line with the BRE criteria. Meaning that at least 50% of the spaces achieve 2 hours of direct sunlight on 21 March or there is no more than 20% reduction compared to the former values.

Space 19 is the only amenity area that does not meet the BRE target. This space is located to the north of the Crown Court immediately and it is adjacent to a car parking area. It is not a garden, park/playing field, or playground. It is also not considered to be a sitting out area or focal point of views, but given it lies adjacent to a publicly accessible building (the Court) it has been assessed for completeness. Taking this into account, the reduction is deemed acceptable when considered in the round with the performance achieved on the other assessed areas.

An additional test was also conducted on 21 June to assess the sunlight conditions in the summer period when people usually spend longer hours outdoor and are most likely to use these spaces. All the spaces would achieve adequate sunlight condition during this period.

The following images present a comparison between the existing and the proposed configurations. The areas in yellow indicate where at least two hours of sunlight are achieved on the 21 March and on 21 June.

Taking into account the results across all assessed external spaces, the results are considered to be acceptable on balance.

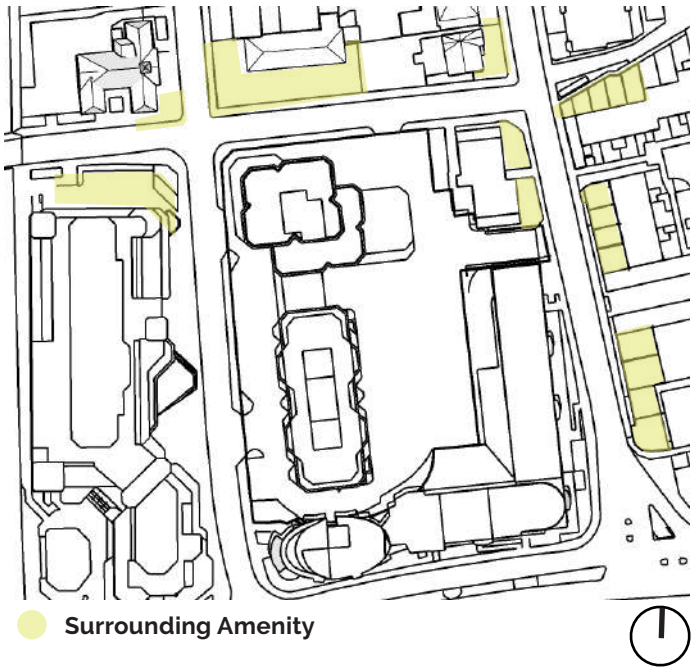


Figure 11 - Site plan identifying the location of the proposed external spaces

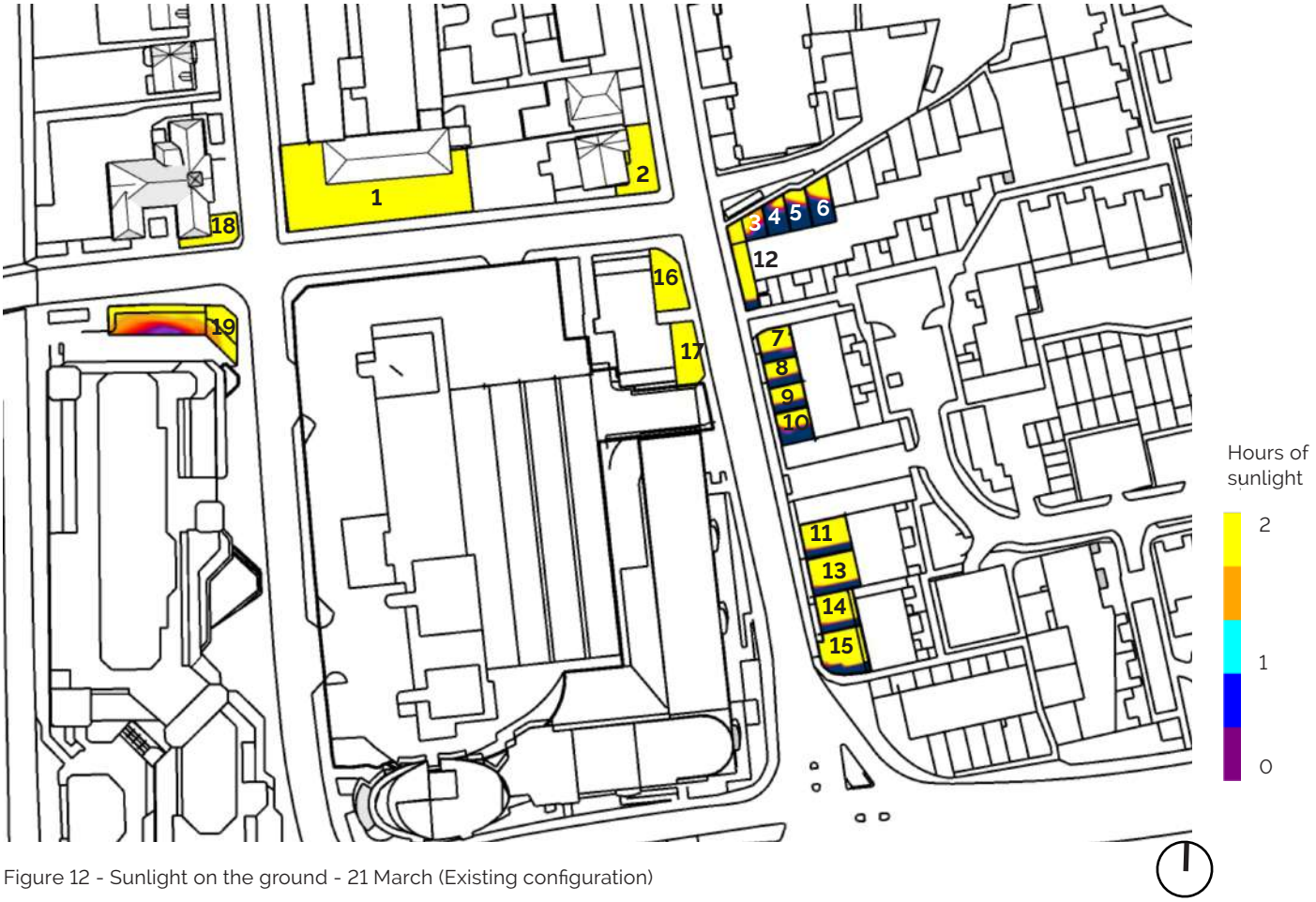


Figure 12 - Sunlight on the ground - 21 March (Existing configuration)

Figure 13 - Sunlight on the ground - 21 March (Proposed configuration)

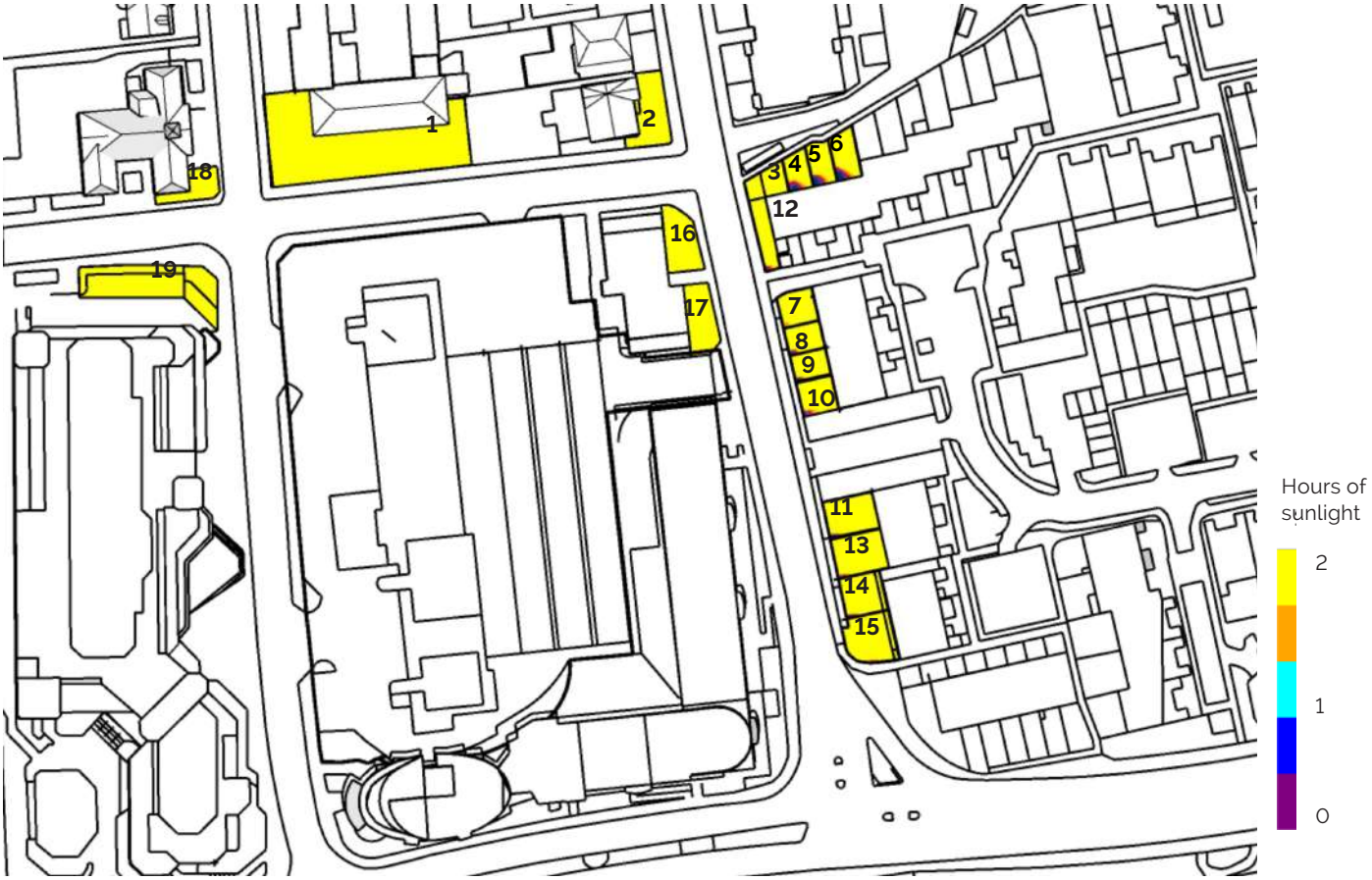


Figure 14 - Sunlight on the ground - 21 June (Existing configuration)

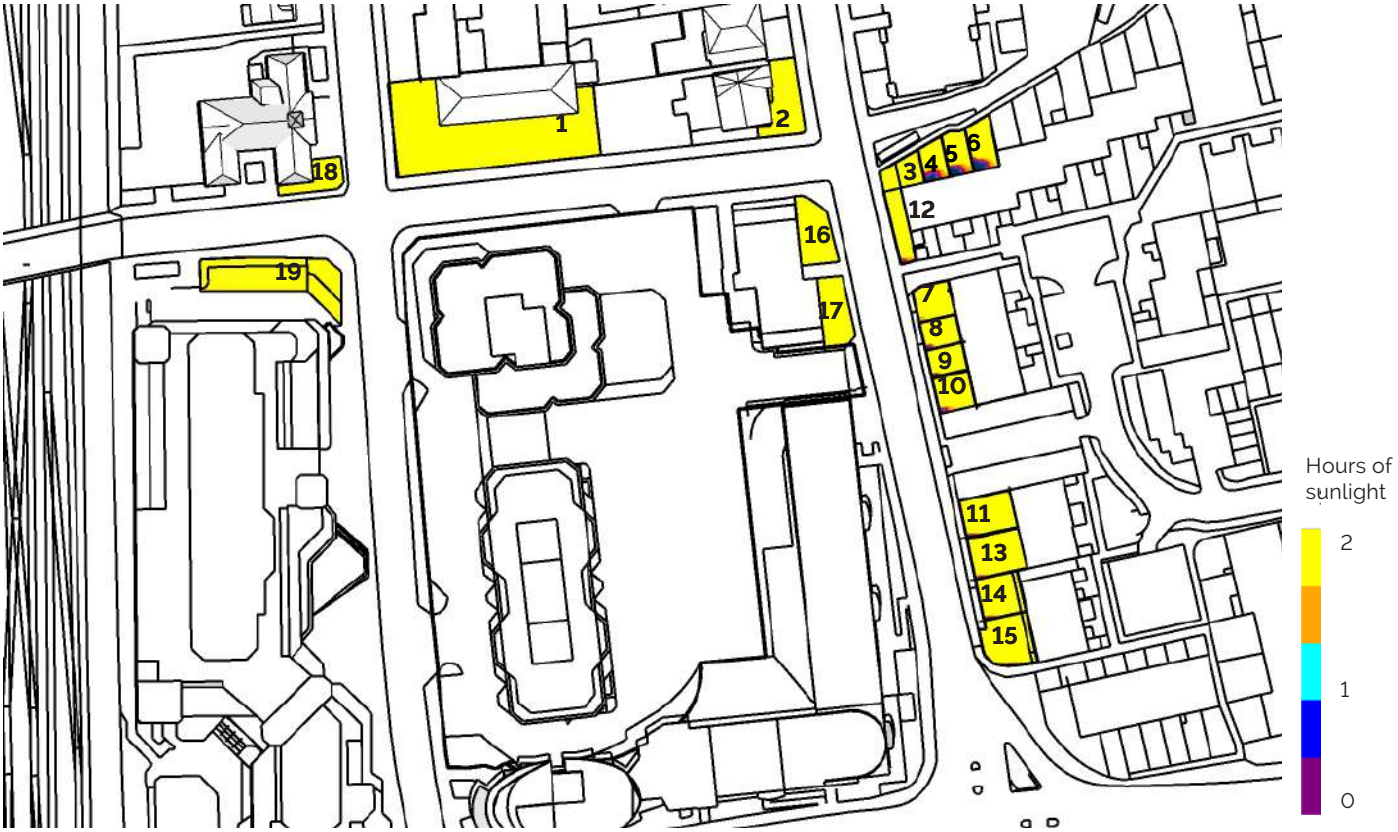


Figure 15 - Sunlight on the ground - 21 June (Proposed configuration)

Table 06: Sunlight on the ground - Existing properties (21 March)

	Area with at least 2 hours of sun (%)			
Space	21 March (Existing)	21 March (Proposed)	Lit Area Ratio	Condition
1	100.00%	100.00%	1	Pass
2	100.00%	100.00%	1	Pass
3	17.39%	17.39%	1	Pass
4	7.32%	7.32%	1	Pass
5	21.21%	21.21%	1	Pass
6	28.57%	28.57%	1	Pass
7	66.67%	66.67%	1	Pass
8	60.00%	60.00%	1	Pass
9	60.00%	60.00%	1	Pass
10	53.06%	53.06%	1	Pass
11	71.43%	71.43%	1	Pass
12	75.44%	75.44%	1	Pass
13	75.00%	75.00%	1	Pass
14	73.44%	73.44%	1	Pass
15	77.00%	77.00%	1	Pass
16	100.00%	100.00%	1	Pass
17	100.00%	100.00%	1	Pass
18	100.00%	93%	0.93	Pass
19	38.95%	27.37%	0.7	Fail

Table 07: Sunlight on the ground - Existing properties (21 June)

	Area with at least 2 hours of sun (%)		
Space ID	21 June (Existing)	21 June (Proposed)	Lit Area Ratio (%)
1	100.00%	100.00%	1
2	100.00%	100.00%	1
3	95.65%	95.65%	1
4	68.29%	60.98%	0.89
5	81.82%	75.76%	0.92
6	77.55%	73.47%	0.94
7	97.62%	97.62%	1
8	94.29%	94.29%	1
9	94.29%	94.29%	1
10	91.84%	91.84%	1
11	97.14%	97.14%	1
12	96.49%	94.72%	0.98
13	97.50%	97.50%	1
14	95.31%	95.31%	1
15	95.40%	95.40%	1
16	100.00%	100.00%	1
17	100.00%	100.00%	1
18	100.00%	100.00%	1
19	100.00%	100.00%	1

9.0 Conclusion

A daylight, sunlight and overshadowing analysis has been carried out by HTA Sustainable futures to assess the impact of the new development on the existing surrounding properties. This assessment has been revised following the Council's review undertaken by Delva Patman Redler on the Council's behalf as well as the the resubmitted development.

To ensure that this development can be appropriately evaluated against the current planning policies, the analysis has been carried out in accordance with BRE's guide 'Site Layout Planning for Sunlight and Daylight: A Guide to Good Practice', P J Littlefair (2022). According to the BRE guide:

> '...the advice given here is not mandatory and this document should not be seen as an instrument of planning policy. Although it gives numerical guidelines, these should be interpreted flexibly since 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'.

Daylight

Daylight in the surrounding buildings

The impact on the surrounding buildings has been minimised to the largest degree. An alternative target (15% VSC) has been set for the purpose of this assessment due to the density of the site.

The results of 13 Addiscombe Road, Croydon Crown Court and Latitude Apartment show that 80%, 91% and 93% of the tested windows meet or exceed the alternative target respectively. It should be noted that 13 Addiscombe Road and Croydon Crown Court are non-residential buildings. Hence, the VSC values could be considered less important. The results show that all the tested windows at Harrington Court, 86-90, 93, 104-108 and 138 Granville Cl achieve the 15% VSC target. Overall, 94% of the analysed windows achieve the alternative target (VSC of 15%). This means that either they achieve a VSC value of at least 15% or that the reduction is no more than 20% of their former value. The results are deemed 'acceptable'.

13 Addiscombe Road is a two storey school of Philosophy located on the north-east of the proposed development site, which is a non-residential building.

There are two windows in the building that are positioned slightly below the desired target level. The building has two windows situated at the internal corner of its structure. These windows fall slightly below the desired target level and a consequence of their positioning, they cast shadows on each other. It's important to note that the spaces associated with these windows are non-residential areas. Considering this, it is recommended to provide additional technical lighting in these areas.
The impact of the proposed development on this building is considered acceptable for this scheme and its environment.

Croydon Crown Court is a non-residential building located on the west side of proposed development. Since the building is expected to have office rooms, the daylight calculations have been conducted. The reductions are mainly on the lower floor and near the corners where usually less daylight values are expected. It should be noted that the functions of the rooms are not clear from available public records, albeit it is expected that they are either office or ancillary to office. Given the use is non-residential in nature, the daylight results are considered acceptable for a use of this type within a town centre (urban) location. The impact from the proposed development on this building is considered acceptable for this scheme and its environment.

Overall, the VSC results are deemed 'acceptable'.

The No-Sky Line (NSL) assessment has been carried out as an additional test. The overall NSL results indicate that 85% of the rooms comply with the BRE recommendations. The results are deemed 'good'.

Sunlight

Sunlight in the surrounding buildings

The impact on the provision of sunlight in the south facing rooms of the surrounding buildings will not be significantly affected, as 90% of the rooms next to the new development regardless of their orientation, achieve the recommended values for the Annual Probable Sunlight Hours (APSH) and 94% of them pass the Winter Probable Sunlight Hours (WPSH) test. The reductions to the sunlight values are deemed acceptable for a scheme in this town centre context and in making effective use of land.

Overshadowing

Sunlight on the ground in the existing spaces

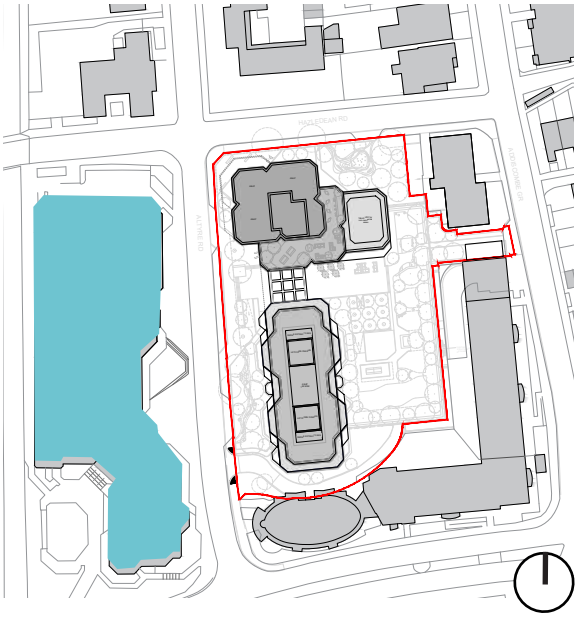
The results of the overshadowing assessment show that out of 19 tested external spaces and private gardens, 18 amenity spaces achieve sunlight availability in line with the BRE criteria on 21 March. Meaning that at least 50% of each tested space achieve 2 hours of direct sunlight on 21 March or there is no more than 20% reduction compared to the former values.

Space 19 is the only amenity area that does not meet the BRE target. This space is located to the north of the Crown Court immediately and it is adjacent to a car parking area. It is not a garden, park/playing field, or playground. It is also not considered to be a sitting out area or focal point of views, but given it lies adjacent to a publicly accessible building (the Court) it has been assessed for completeness. Taking this into account, the reduction is deemed acceptable when considered in the round with the performance achieved on the other assessed areas.

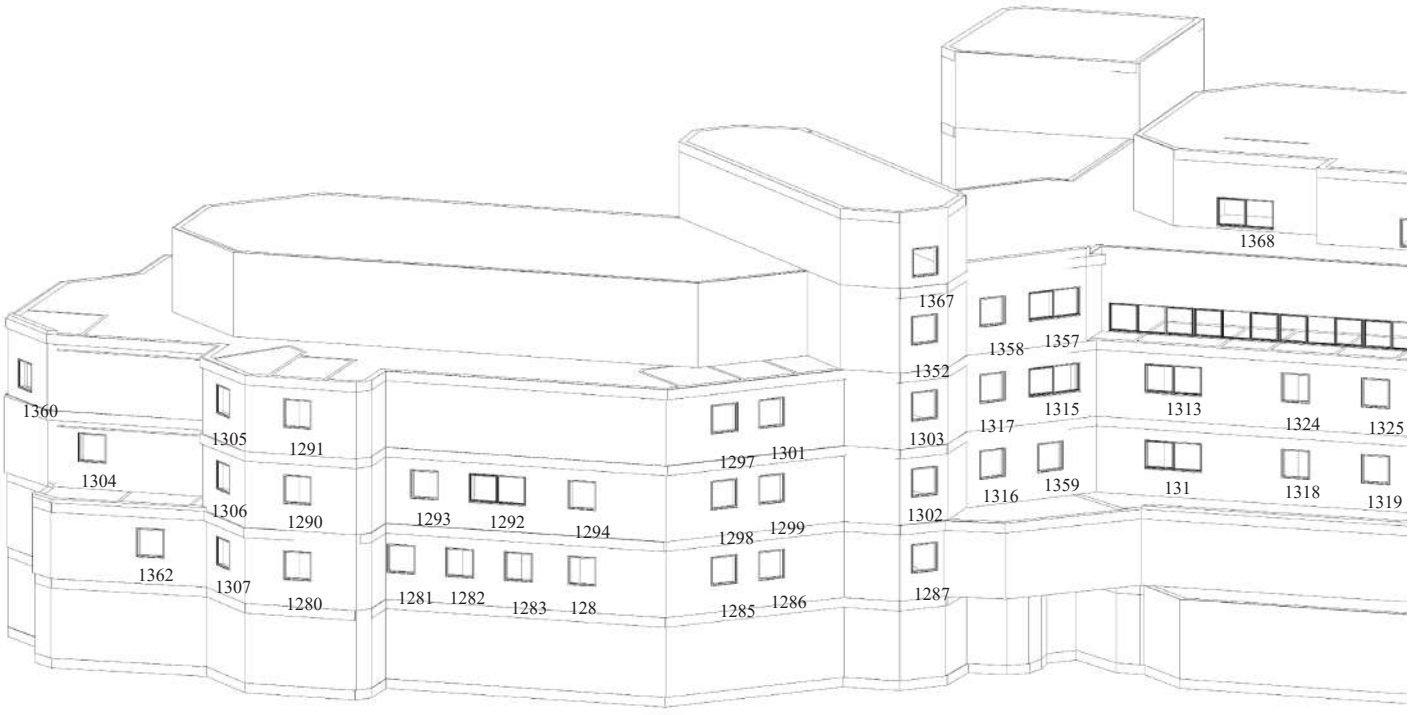
All the spaces would achieve adequate sunlight condition during on 21 June.

Taking into account the results across all assessed external spaces, the results are considered to be acceptable.

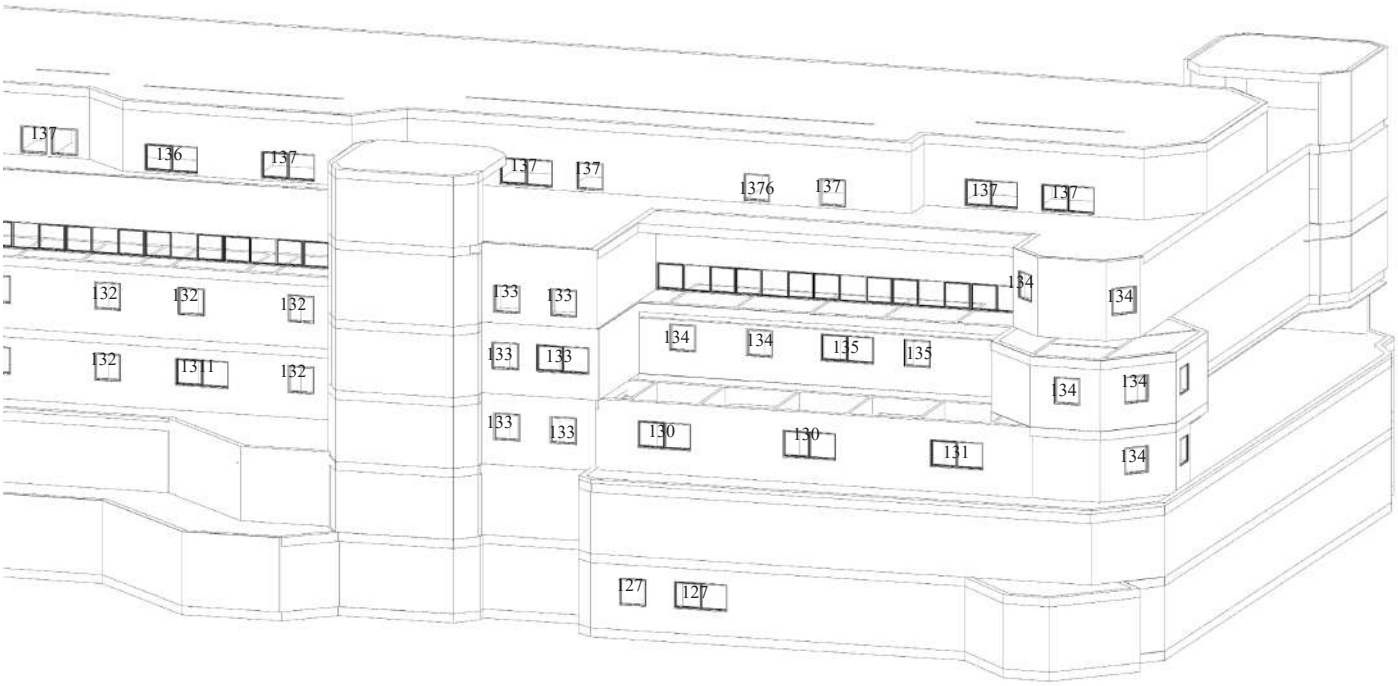
Appendix A -Daylight Assessment: Impact on the surrounding buildings



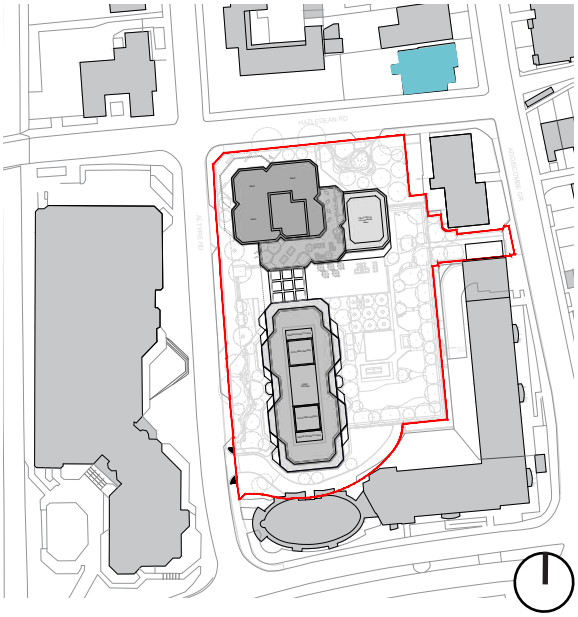
Top view of the site



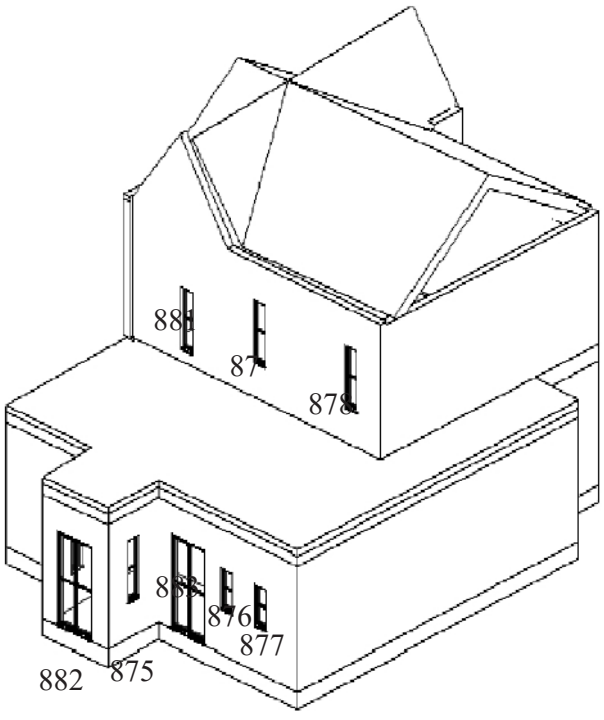
3D view of the model - Croydon Crown Court



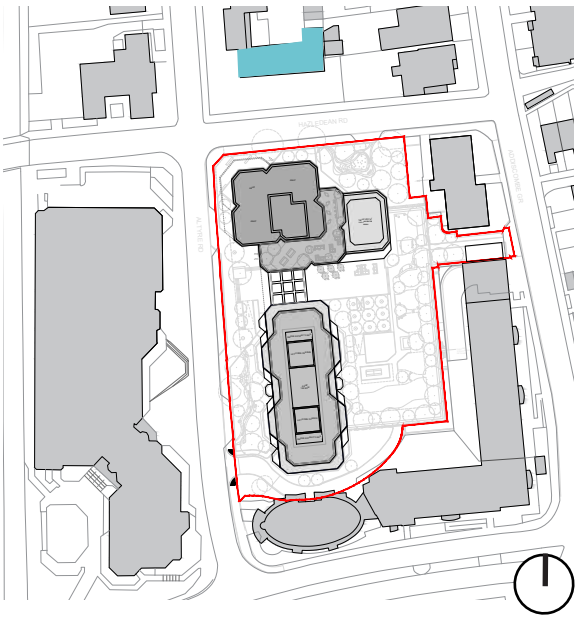
3D view of the model - Croydon Crown Court



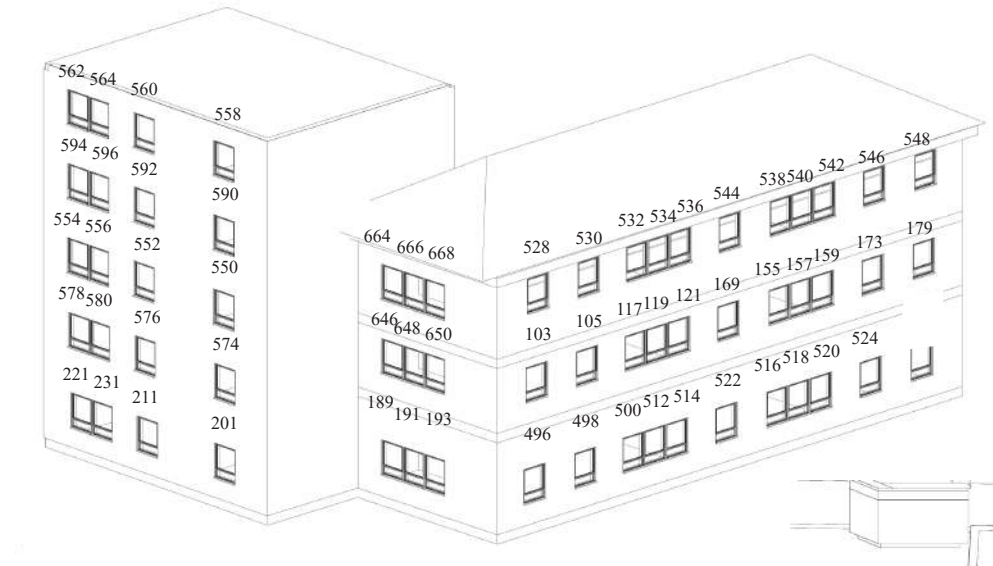
Top view of the site



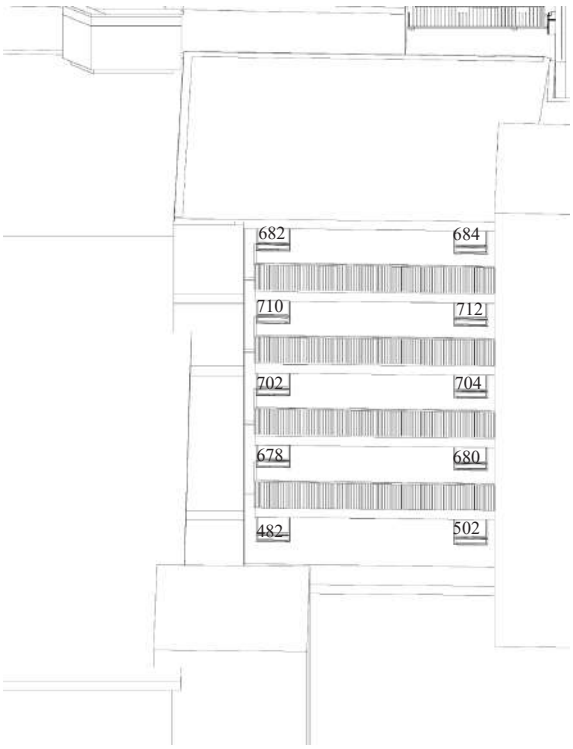
3D view of the model - 13 Addiscombe Grove



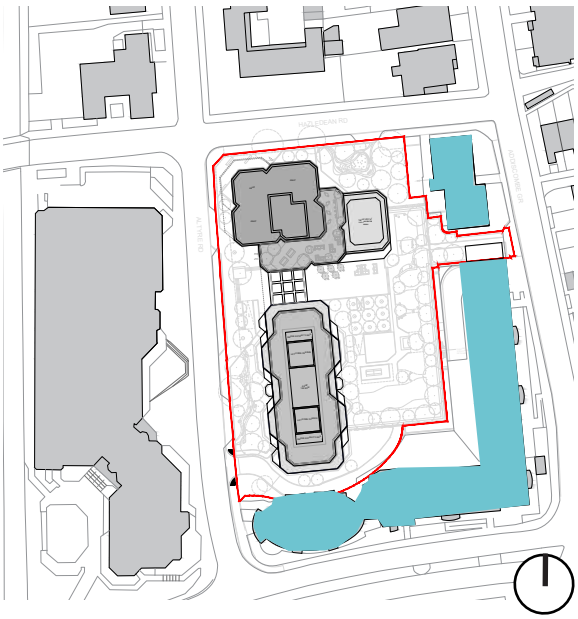
Top view of the site



3D view of the model - Harrington Court



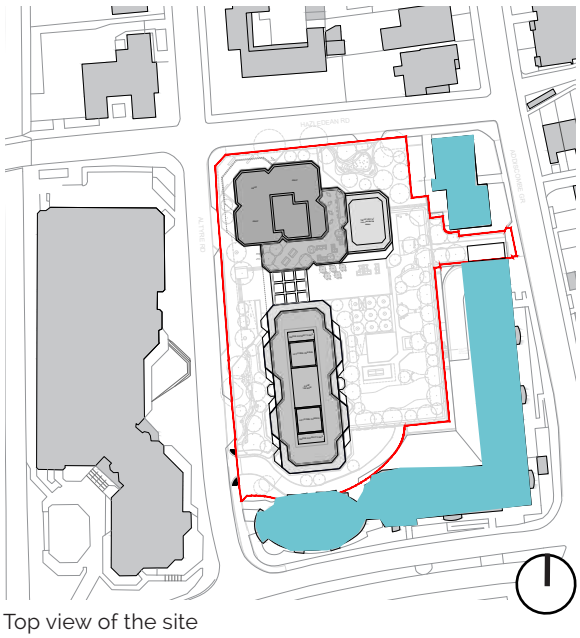
3D view of the model - Harrington Court



Top view of the site

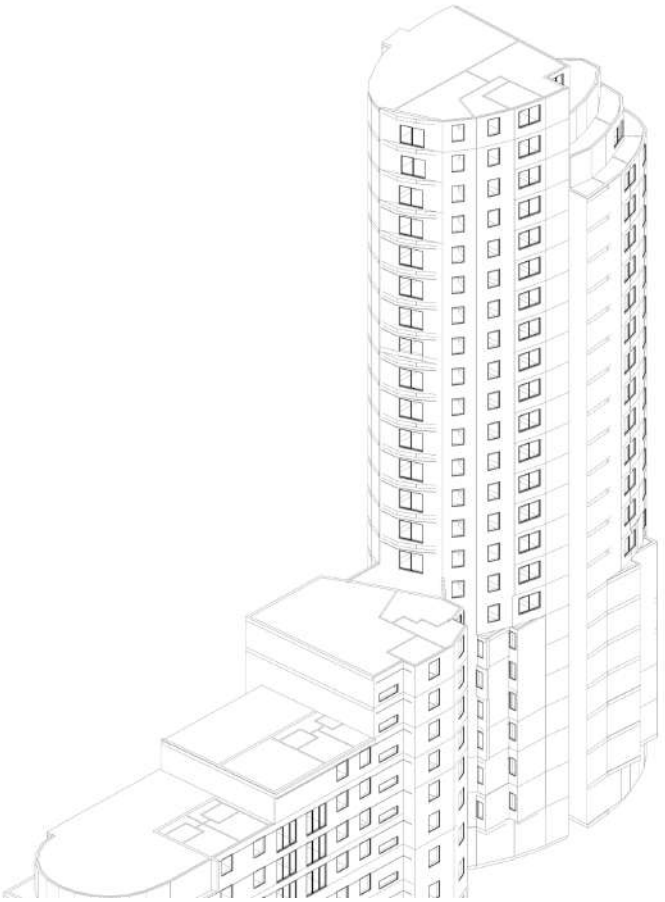
3D view of the model - Latitude Apartment Croydon

3D view of the model - Latitude Apartment Croydon



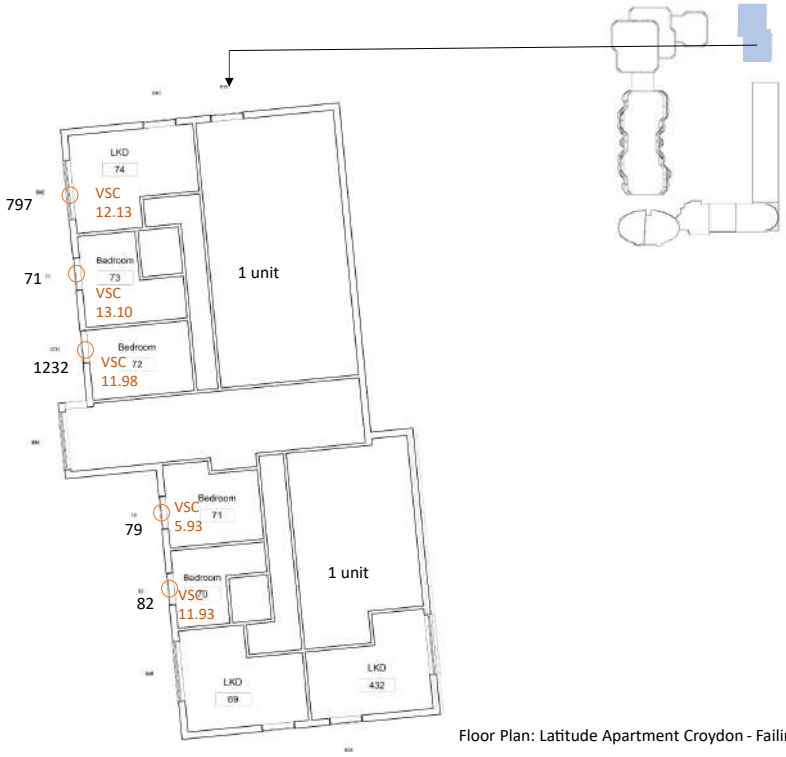
Top view of the site

3D view of the model - Latitude Apartment Croydon



model - Latitude Apartment Croydon

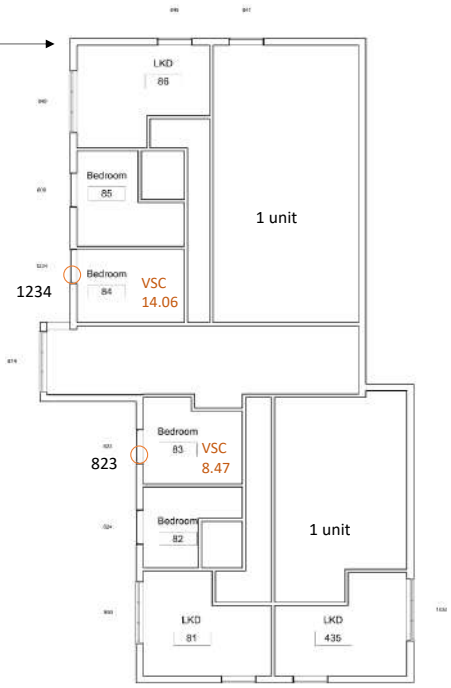
3D view of the model - Latitude Apartment Croydon



Floor Plan: Latitude Apartment Croydon - Failing Windows - Level 0

Floor Plan: Latitude Apartment Croydon - Failing Windows - Level 1

Floor Plan: Latitude Apartment Croydon - Failing Windows - Level 2



Floor Plan: Latitude Apartment Croydon - Failing Windows - Level 3

Floor Plan: Latitude Apartment Croydon - Failing Windows - Level 4

Summary of the 18 failing windows at Latitude Apartment Croydon:

Room function/ Windows ID	Existing VSC values	Retained VSC values
Bedroom/ Window 82	15.81	11.93
Bedroom/ Window 79	11.92	5.93
Bedroom/ Window 1232	20.32	11.98
Bedroom/ Window 71	21.95	13.10
LKD/ Window 797	22.63	13.88
Bedroom/ Window 820	19.94	12.86
Bedroom/ Window 819	15.05	6.55
Bedroom/ Window 800	22.28	12.67
Bedroom/ Window 799	23.84	13.87
Bedroom/ Window 925	16.58	12.61
Bedroom/ Window 747	19.70	14.93
Bedroom/ Window 746	19.24	14.79
LKD/ Window 778	18.55	14.71
Bedroom/ Window 822	23.41	13.90
Bedroom/ Window 821	17.23	7.26
Bedroom/ Window 1233	24.05	13.31
Bedroom/ Window 823	19.38	8.47
Bedroom/ Window 1234	25.93	14.06
Bedroom/ Window 867	23.62	11.91

VSC Values

Project Name: ARE-CPH_HTA-S_Impact_Revised_230712
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Date of Analysis: 12/07/2023

Floor Ref.	Room Ref.	Property Type	Room Use	Window Ref.		VSC		Pr/Ex	Meets BRE Criteria	Window Orientation	Window Area	Use for Room VSC	Room VSC	Pr/Ex	Meets BRE Criteria	Window VSC - Meet 15% Target
								Harrington Court								
Level 0	5	Residential	Bedroom	502	Existing	10.38	0	1.00	YES	86°N	1.40	YES				YES
					Proposed	10.38	0						10.38	1.00	YES	
													10.38			
	6	Residential	LKD	221	Existing	23.04	1	1.00	YES	266°	1.40	YES				YES
					Proposed	23.04	1									
				231	Existing	23.14	2	1.00	YES	266°	1.40	YES				YES
					Proposed	23.14	2									
													23.09	1.00	YES	
													23.09			
	7	Residential	Bedroom	211	Existing	23.31	3	1.00	YES	266°	1.40	YES				YES
					Proposed	23.31	3									
													23.31	1.00	YES	
													23.31			
	8	Residential	LKD	201	Existing	23.63	4	1.00	YES	266°	1.40	YES				YES
					Proposed	23.63	4									
													23.63	1.00	YES	
													23.63			
	9	Residential	Bedroom	482	Existing	7.96	5	1.00	YES	86°N	1.40	YES				YES
					Proposed	7.96	5									
													7.96	1.00	YES	
													7.96			
	10	Residential	LKD	189	Existing	16.59	6	0.99	YES	265°	1.40	YES				YES
					Proposed	16.40	6									
				191	Existing	18.83	7	0.99	YES	265°	1.40	YES				YES
					Proposed	18.58	7									
				193	Existing	20.92	8	0.99	YES	265°	1.40	YES				YES
					Proposed	20.67	8									
				496	Existing	29.17	9	0.64	NO	176°	1.40	YES				YES
					Proposed	18.74	9									
													21.38	0.87	YES	
													18.60			
	11	Residential	Bedroom	498	Existing	29.28	10	0.62	NO	176°	1.40	YES				YES
					Proposed	18.01	10									
													29.28	0.62	NO	
													18.01			
	12	Residential	LKD	500	Existing	29.10	11	0.60	NO	176°	1.40	YES				YES
					Proposed	17.38	11									
				512	Existing	29.04	12	0.59	NO	176°	1.40	YES				YES
					Proposed	17.21	12									
				514	Existing	28.99	13	0.59	NO	176°	1.40	YES				YES
					Proposed	16.99	13									
													29.04	0.59	NO	
													17.19			
	13	Residential	Bedroom	522	Existing	28.92	14	0.58	NO	176°	1.40	YES				YES
					Proposed	16.73	14									
													28.92	0.58	NO	
													16.73			
	14	Residential	LKD	516	Existing	28.93	15	0.57	NO	176°	1.40	YES				YES
					Proposed	16.61	15									
				518	Existing	28.94	16	0.57	NO	176°	1.40	YES				YES
					Proposed	16.62	16									
				520	Existing	28.95	17	0.57	NO	176°	1.40	YES				YES
					Proposed	16.58	17									
													28.94	0.57	NO	
													16.60			
	15	Residential	Bedroom	524	Existing	28.96	18	0.58	NO	176°	1.40	YES				YES
					Proposed	16.73	18									
													28.96	0.58	NO	
													16.73			
	16	Residential	Bedroom	526	Existing	28.71	19	0.59	NO	176°	1.40	YES				YES
					Proposed	17.00	19									
													28.71	0.59	NO	
													17.00			
Level 1B	43	Residential	LKD	578	Existing	24.61	20	1.00	YES	266°	1.40	YES				YES
					Proposed	24.61	20									
				580	Existing	24.72	21	1.00	YES	266°	1.40	YES				YES
					Proposed	24.72	21									
													24.67	1.00	YES	
													24.67			
	44	Residential	LKD	574	Existing	25.23	22	1.00	YES	266°	1.40	YES				YES
					Proposed	25.23	22									
													25.23	1.00	YES	
													25.23			
	45	Residential	Bedroom	576	Existing	24.90	23	1.00	YES	266°	1.40	YES				YES
					Proposed	24.90	23									
													24.90	1.00	YES	
													24.90			
	46	Residential	Bedroom	680	Existing	11.84	24	1.00	YES	86°N	1.40	YES				YES
					Proposed	11.84	24									
													11.84	1.00	YES	
													11.84			
	47	Residential	Bedroom	678	Existing	8.51	25	1.00	YES	86°N	1.40	YES				YES
					Proposed	8.51	25									
													8.51	1.00	YES	
													8.51			
Level 1A	29	Residential	LKD	103	Existing	31.04	26	0.64	NO	176°	1.40	YES				YES

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					Proposed	19.77	26									
				646	Existing	17.24	27	0.99	YES	265°	1.40	YES				YES
					Proposed	17.12	27									
				648	Existing	19.57	28	0.99	YES	265°	1.40	YES				YES
					Proposed	19.39	28									
				650	Existing	21.78	29	0.99	YES	265°	1.40	YES				YES
					Proposed	21.58	29									
													22.41	0.87	YES	
													19.47			
	30	Residential	Bedroom	105	Existing	31.16	30	0.61	NO	176°	1.40	YES				YES
					Proposed	18.94	30									
													31.16	0.61	NO	
													18.94			
	31	Residential	LKD	117	Existing	31.00	31	0.59	NO	176°	1.40	YES				YES
					Proposed	18.35	31									
				119	Existing	30.96	32	0.59	NO	176°	1.40	YES				YES
					Proposed	18.17	32									
				121	Existing	30.96	33	0.58	NO	176°	1.40	YES				YES
					Proposed	17.97	33									
													30.97	0.59	NO	
													18.16			
	32	Residential	Bedroom	169	Existing	30.92	34	0.57	NO	176°	1.40	YES				YES
					Proposed	17.72	34									
													30.92	0.57	NO	
													17.72			
	33	Residential	LKD	155	Existing	30.94	35	0.57	NO	176°	1.40	YES				YES
					Proposed	17.64	35									
				157	Existing	30.94	36	0.57	NO	176°	1.40	YES				YES
					Proposed	17.66	36									
				159	Existing	30.95	37	0.57	NO	176°	1.40	YES				YES
					Proposed	17.70	37									
													30.94	0.57	NO	
													17.67			
	34	Residential	Bedroom	173	Existing	30.96	38	0.58	NO	176°	1.40	YES				YES
					Proposed	17.86	38									
													30.96	0.58	NO	
													17.86			
	35	Residential	Bedroom	179	Existing	30.74	39	0.59	NO	176°	1.40	YES				YES
					Proposed	18.28	39									
													30.74	0.59	NO	
													18.28			
Level 2B	48	Residential	Bedroom	704	Existing	14.66	40	1.00	YES	86°N	1.40	YES				YES
					Proposed	14.65	40									
													14.66	1.00	YES	
													14.65			
	49	Residential	LKD	554	Existing	25.65	41	1.00	YES	266°	1.40	YES				YES
					Proposed	25.65	41									
				556	Existing	25.78	42	1.00	YES	266°	1.40	YES				YES
					Proposed	25.78	42									
													25.72	1.00	YES	
													25.72			
	50	Residential	Bedroom	552	Existing	25.97	43	1.00	YES	266°	1.40	YES				YES
					Proposed	25.97	43									
													25.97	1.00	YES	
													25.97			
	51	Residential	LKD	550	Existing	26.31	44	1.00	YES	266°	1.40	YES				YES
					Proposed	26.31	44									
													26.31	1.00	YES	
													26.31			
	52	Residential	Bedroom	702	Existing	10.52	45	1.00	YES	86°N	1.40	YES				YES
					Proposed	10.52	45									
													10.52	1.00	YES	
													10.52			
Level 2A	36	Residential	LKD	528	Existing	27.72	46	0.59	NO	176°	1.40	YES				YES
					Proposed	16.49	46									
				664	Existing	14.54	47	1.00	YES	265°	1.40	YES				YES
					Proposed	14.48	47									
				666	Existing	16.46	48	1.00	YES	265°	1.40	YES				YES
					Proposed	16.38	48									
				668	Existing	18.25	49	1.00	YES	265°	1.40	YES				YES
					Proposed	18.16	49									
													19.24	0.85	YES	
													16.38			
	37	Residential	Bedroom	530	Existing	27.91	50	0.56	NO	176°	1.40	YES				YES
					Proposed	15.74	50									
													27.91	0.56	NO	
													15.74			
	38	Residential	LKD	532	Existing	27.83	51	0.55	NO	176°	1.40	YES				YES
					Proposed	15.19	51									
				534	Existing	27.79	52	0.54	NO	176°	1.40	YES				YES
					Proposed	15.33	52									
				536	Existing	27.77	53	0.53	NO	176°	1.40	YES				YES
					Proposed	15.22	53									
													27.80	0.55	NO	
													15.25			
	39	Residential	Bedroom	544	Existing	27.73	54	0.53	NO	176°	1.40	YES				YES
					Proposed	15.01	54									
													27.73	0.54	NO	
													15.01			
	40	Residential	LKD	538	Existing	27.75	55	0.52	NO	176°	1.40	YES				YES

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					Proposed	15.05	55									
				540	Existing	27.75	56	0.52	NO	176°	1.40	YES				YES
					Proposed	15.05	56									
				542	Existing	27.78	57	0.53	NO	176°	1.40	YES				YES
					Proposed	15.10	57									
													27.76	0.54	NO	
													15.07			
	41	Residential	Bedroom	546	Existing	27.75	58	0.54	NO	176°	1.40	YES				YES
					Proposed	15.39	58									
													27.75	0.55	NO	
													15.39			
	42	Residential	Bedroom	548	Existing	27.51	59	0.56	NO	176°	1.40	YES				YES
					Proposed	15.33	59									
													27.51	0.56	NO	
													15.33			
Level 3B	53	Residential	Bedroom	712	Existing	17.50	60	0.98	YES	86°N	1.40	YES				YES
					Proposed	17.21	60									
													17.50	0.98	YES	
													17.21			
	54	Residential	LKD	594	Existing	26.55	61	1.00	YES	266°	1.40	YES				YES
					Proposed	26.55	61									
				596	Existing	26.67	62	1.00	YES	266°	1.40	YES				YES
					Proposed	26.67	62									
													26.61	1.00	YES	
													26.61			
	55	Residential	Bedroom	592	Existing	26.87	63	1.00	YES	266°	1.40	YES				YES
					Proposed	26.87	63									
													26.87	1.00	YES	
													26.87			
	56	Residential	LKD	590	Existing	27.22	64	1.00	YES	266°	1.40	YES				YES
					Proposed	27.22	64									
													27.22	1.00	YES	
													27.22			
	57	Residential	Bedroom	710	Existing	14.52	65	1.00	YES	86°N	1.40	YES				YES
					Proposed	14.52	65									
													14.52	1.00	YES	
													14.52			
Level 4B	58	Residential	Bedroom	684	Existing	18.66	66	0.97	YES	86°N	1.40	YES				YES
					Proposed	18.18	66									
													18.66	0.97	YES	
													18.18			
	59	Residential	LKD	562	Existing	27.41	67	1.00	YES	266°	1.40	YES				YES
					Proposed	27.41	67									
				564	Existing	27.52	68	1.00	YES	266°	1.40	YES				YES
					Proposed	27.52	68									
													27.47	1.00	YES	
													27.47			
	60	Residential	Bedroom	560	Existing	27.71	69	1.00	YES	266°	1.40	YES				YES
					Proposed	27.71	69									
													27.71	1.00	YES	
													27.71			
	61	Residential	LKD	558	Existing	28.03	70	1.00	YES	266°	1.40	YES				YES
					Proposed	28.03	70									
													28.03	1.00	YES	
													28.03			
	62	Residential	Bedroom	682	Existing	15.54	71	1.00	YES	86°N	1.40	YES				YES
					Proposed	15.54	71									
													15.54	1.00	YES	
													15.54			
13 Addiscombe Grove																
Level 0	201	Residential	Room	884	Existing	16.45	72	0.94	YES	263°	2.94	YES				YES
					Proposed	15.53	72									
													16.45	0.94	YES	
													15.53			
	202	Residential	LKD	875	Existing	21.48	73	0.68	NO	175°	0.61	YES				NO
					Proposed	14.50	73									
				882	Existing	24.84	74	0.74	NO	261°	2.94	YES				YES
					Proposed	18.37	74									
				883	Existing	20.52	75	0.68	NO	263°	2.94	YES				NO
					Proposed	13.88	75									
				885	Existing	12.31	76	1.00	YES	351°N	0.61	YES				YES
					Proposed	12.31	76									
													21.68	0.72	NO	
													15.66			
	203	Residential	Room	876	Existing	24.11	77	0.71	NO	263°	0.38	YES				YES
					Proposed	17.23	77									
				877	Existing	24.31	78	0.71	NO	263°	0.38	YES				YES
					Proposed	17.22	78									
													24.21	0.71	NO	
													17.23			
Level 1B	409	Residential	Room	881	Existing	23.50	79	0.72	NO	263°	0.61	YES				YES
					Proposed	17.01	79									
													23.50	0.72	NO	
													17.01			
	410	Residential	Room	879	Existing	25.68	80	0.73	NO	263°	0.61	YES				YES
					Proposed	18.80	80									
													25.68	0.73	NO	
													18.80			

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	411	Residential	Room	878	Existing	26.12	81	0.71	NO	263°	0.61	YES				YES
					Proposed	18.64	81						26.12	0.71	NO	
													18.64			
					Croydon Crown Court											
Level 0	334	Residential	Room	1279	Existing	20.06	85	0.64	NO	90°N	2.38	YES				NO
					Proposed	12.81	85						20.06	0.64	NO	
													12.81			
	335	Residential	Room	1278	Existing	19.81	86	0.67	NO	90°N	1.15	YES				NO
					Proposed	13.29	86						19.81	0.67	NO	
													13.29			
Level 1B	336	Residential	Room	1286	Existing	23.07	87	0.65	NO	45°N	1.15	YES				YES
					Proposed	15.09	87						23.07	0.65	NO	
													15.09			
	337	Residential	Room	1285	Existing	23.07	88	0.66	NO	45°N	1.15	YES				YES
					Proposed	15.27	88						23.07	0.66	NO	
													15.27			
	338	Residential	Room	1284	Existing	19.84	89	0.83	YES	91°	1.15	YES				YES
					Proposed	16.38	89						19.84	0.83	YES	
													16.38			
	339	Residential	Room	1283	Existing	19.63	90	0.84	YES	91°	1.15	YES				YES
					Proposed	16.53	90						19.63	0.84	YES	
													16.53			
	340	Residential	Room	1282	Existing	18.14	91	0.84	YES	91°	1.15	YES				YES
					Proposed	15.29	91						18.14	0.84	YES	
													15.29			
	341	Residential	Room	1281	Existing	10.97	92	0.76	NO	91°	1.15	YES				NO
					Proposed	8.34	92						10.97	0.76	NO	
													8.34			
	342	Residential	Room	1280	Existing	22.03	93	0.90	YES	91°	1.15	YES				YES
					Proposed	19.82	93						22.03	0.90	YES	
													19.82			
	343	Residential	Room	1305	Existing	28.21	94	1.00	YES	137°	1.15	YES				YES
					Proposed	28.26	94						28.21	1.00	YES	
													28.26			
	344	Residential	Room	1362	Existing	22.20	95	0.96	YES	88°N	1.15	YES				YES
					Proposed	21.36	95						22.20	0.96	YES	
													21.36			
	345	Residential	Room	1361	Existing	32.80	96	1.00	YES	130°	1.15	YES				YES
					Proposed	32.80	96						32.80	1.00	YES	
													32.80			
Level 2B	348	Residential	Room	1299	Existing	24.74	97	0.66	NO	45°N	1.15	YES				YES
					Proposed	16.40	97						24.74	0.66	NO	
													16.40			
	349	Residential	Room	1298	Existing	24.76	98	0.67	NO	45°N	1.15	YES				YES
					Proposed	16.60	98						24.76	0.67	NO	
													16.60			
	350	Residential	Room	1294	Existing	21.60	99	0.83	YES	91°	1.15	YES				YES
					Proposed	17.88	99						21.60	0.83	YES	
													17.88			
	351	Residential	Room	1292	Existing	21.18	100	0.85	YES	91°	2.38	YES				YES
					Proposed	17.99	100						21.18	0.85	YES	
													17.99			
	352	Residential	Room	1293	Existing	16.76	101	0.83	YES	91°	1.15	YES				YES
					Proposed	13.88	101						16.76	0.83	YES	
													13.88			
	354	Residential	Room	1290	Existing	23.28	102	0.90	YES	91°	1.15	YES				YES
					Proposed	20.92	102						23.28	0.90	YES	
													20.92			
	355	Residential	Room	1306	Existing	30.24	103	1.00	YES	137°	1.15	YES				YES
					Proposed	30.26	103						30.24	1.00	YES	
													30.26			
	356	Residential	Room	1304	Existing	25.68	104	0.96	YES	91°	1.15	YES				YES
					Proposed	24.75	104						25.68	0.96	YES	
													24.75			
	358	Residential	Room	1359	Existing	25.47	105	0.66	NO	43°N	1.15	YES				YES
					Proposed	16.72	105						25.47	0.66	NO	

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													16.72			
	359	Residential	Room	1316	Existing	25.54	106	0.66	NO	43°N	1.15	YES				YES
					Proposed	16.76	106						25.54	0.66	NO	
													16.76			
	360	Residential	Room	1312	Existing	21.84	107	0.69	NO	91°	2.38	YES				YES
					Proposed	15.16	107						21.84	0.69	NO	
													15.16			
	361	Residential	Room	1318	Existing	24.24	108	0.70	NO	91°	1.15	YES				YES
					Proposed	16.98	108						24.24	0.70	NO	
													16.98			
	362	Residential	Room	1319	Existing	24.70	109	0.69	NO	91°	1.15	YES				YES
					Proposed	17.14	109						24.70	0.69	NO	
													17.14			
	363	Residential	Room	1320	Existing	24.31	110	0.69	NO	91°	1.15	YES				YES
					Proposed	16.82	110						24.31	0.69	NO	
													16.82			
	364	Residential	Room	1311	Existing	22.90	111	0.72	NO	91°	2.38	YES				YES
					Proposed	16.50	111						22.90	0.72	NO	
													16.50			
	365	Residential	Room	1321	Existing	18.77	112	0.86	YES	91°	1.15	YES				YES
					Proposed	16.05	112						18.77	0.86	YES	
													16.05			
	366	Residential	Room	1334	Existing	22.42	113	0.63	NO	90°N	1.15	YES				NO
					Proposed	14.14	113						22.42	0.63	NO	
													14.14			
	367	Residential	Room	1335	Existing	23.95	114	0.65	NO	90°N	1.15	YES				YES
					Proposed	15.60	114						23.95	0.65	NO	
													15.60			
	368	Residential	Room	1308	Existing	24.81	115	0.64	NO	91°	2.38	YES				YES
					Proposed	15.83	115						24.81	0.64	NO	
													15.83			
	369	Residential	Room	1309	Existing	25.33	116	0.58	NO	91°	2.38	YES				NO
					Proposed	14.72	116						25.33	0.58	NO	
													14.72			
	370	Residential	Room	1310	Existing	26.00	117	0.55	NO	91°	2.38	YES				NO
					Proposed	14.19	117						26.00	0.55	NO	
													14.19			
	371	Residential	Room	1343	Existing	29.73	118	0.73	NO	45°N	1.15	YES				YES
					Proposed	21.66	118									
				1363	Existing	29.40	119	0.96	YES	1°N	1.15	YES				YES
					Proposed	28.20	119						29.57	0.84	YES	
													24.93			
Level 3B	372	Residential	Room	1301	Existing	26.59	120	0.68	NO	45°N	1.15	YES				YES
					Proposed	17.98	120						26.59	0.68	NO	
													17.98			
	373	Residential	Room	1297	Existing	26.67	121	0.68	NO	45°N	1.15	YES				YES
					Proposed	18.20	121						26.67	0.68	NO	
													18.20			
	377	Residential	Room	1291	Existing	24.58	122	0.90	YES	91°	1.15	YES				YES
					Proposed	22.10	122						24.58	0.90	YES	
													22.10			
	378	Residential	Room	1307	Existing	31.48	123	1.00	YES	137°	1.15	YES				YES
					Proposed	31.47	123						31.48	1.00	YES	
													31.47			
	379	Residential	Room	1360	Existing	34.53	124	1.00	YES	135°	1.15	YES				YES
					Proposed	34.48	124						34.53	1.00	YES	
													34.48			
	380	Residential	Room	1315	Existing	28.13	125	0.68	NO	43°N	2.38	YES				YES
					Proposed	19.15	125						28.13	0.68	NO	
													19.15			
	381	Residential	Room	1317	Existing	27.69	126	0.67	NO	43°N	1.15	YES				YES
					Proposed	18.68	126						27.69	0.67	NO	
													18.68			
	382	Residential	Room	1313	Existing	24.04	127	0.71	NO	91°	2.38	YES				YES
					Proposed	17.15	127						24.04	0.71	NO	
													17.15			
	383	Residential	Room	1324	Existing	26.42	128	0.72	NO	91°	1.15	YES				YES
					Proposed	18.91	128						26.42	0.72	NO	

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	384	Residential	Room	1325	Existing	26.88	129	0.71	NO	91°	1.15	YES	18.91			YES
					Proposed	19.04	129						26.88	0.71	NO	
													19.04			
	385	Residential	Room	1326	Existing	26.61	130	0.70	NO	91°	1.15	YES				YES
					Proposed	18.64	130						26.61	0.70	NO	
													18.64			
	386	Residential	Room	1328	Existing	25.62	131	0.71	NO	91°	1.15	YES				YES
					Proposed	18.25	131						25.62	0.71	NO	
													18.25			
	387	Residential	Room	1327	Existing	20.87	132	0.84	YES	91°	1.15	YES				YES
					Proposed	17.54	132						20.87	0.84	YES	
													17.54			
	388	Residential	Room	1338	Existing	24.40	133	0.62	NO	90°N	1.15	YES				YES
					Proposed	15.16	133						24.40	0.62	NO	
													15.16			
	389	Residential	Room	1339	Existing	26.08	134	0.64	NO	90°N	2.38	YES				YES
					Proposed	16.71	134						26.08	0.64	NO	
													16.71			
	390	Residential	Room	1348	Existing	20.76	135	0.57	NO	91°	1.15	YES				NO
					Proposed	11.88	135						20.76	0.57	NO	
													11.88			
	391	Residential	Room	1350	Existing	27.94	136	0.60	NO	91°	2.38	YES				YES
					Proposed	16.74	136						27.94	0.60	NO	
													16.74			
	392	Residential	Room	1351	Existing	28.17	137	0.59	NO	91°	1.15	YES				YES
					Proposed	16.52	137						28.17	0.59	NO	
													16.52			
	393	Residential	Room	1349	Existing	26.79	138	0.61	NO	91°	1.15	YES				YES
					Proposed	16.36	138						26.79	0.61	NO	
													16.36			
	394	Residential	Room	1365	Existing	21.88	139	1.00	YES	315°N	1.15	YES				YES
					Proposed	21.88	139						21.88	1.00	YES	
													21.88			
	395	Residential	Room	1341	Existing	30.87	140	0.72	NO	45°N	1.15	YES				YES
					Proposed	22.15	140									
				1364	Existing	29.98	141	0.96	YES	1°N	1.15	YES				YES
					Proposed	28.74	141						30.43	0.84	YES	
													25.45			
	396	Residential	Room	1340	Existing	28.69	142	0.54	NO	91°	1.15	YES				YES
					Proposed	15.41	142						28.69	0.54	NO	
													15.41			
	397	Residential	Room	1345	Existing	18.36	143	0.94	YES	181°	2.38	YES				YES
					Proposed	17.33	143						18.36	0.94	YES	
													17.33			
Level 4B	399	Residential	Room	1347	Existing	32.45	144	0.72	NO	45°N	1.15	YES				YES
					Proposed	23.25	144						32.45	0.72	NO	
													23.25			
	400	Residential	Room	1337	Existing	27.89	145	0.63	NO	90°N	1.15	YES				YES
					Proposed	17.67	145						27.89	0.63	NO	
													17.67			
	401	Residential	Room	1336	Existing	26.18	146	0.62	NO	90°N	1.15	YES				YES
					Proposed	16.18	146						26.18	0.62	NO	
													16.18			
	403	Residential	Room	1357	Existing	30.55	147	0.70	NO	43°N	2.38	YES				YES
					Proposed	21.35	147						30.55	0.70	NO	
													21.35			
	404	Residential	Room	1358	Existing	29.75	148	0.69	NO	43°N	1.15	YES				YES
					Proposed	20.53	148						29.75	0.69	NO	
													20.53			
	405	Residential	Room	1352	Existing	29.96	149	0.69	NO	45°N	1.15	YES				YES
					Proposed	20.57	149						29.96	0.69	NO	
													20.57			
Level 5B	414	Residential	Room	1379	Existing	33.06	150	0.64	NO	91°	2.38	YES				YES
					Proposed	21.25	150						33.06	0.64	NO	
													21.25			
	415	Residential	Room	1378	Existing	31.76	151	0.63	NO	91°	2.38	YES				YES
					Proposed	19.99	151						31.76	0.63	NO	

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													19.99			
	416	Residential	Room	1377	Existing	32.56	152	0.65	NO	91°	1.15	YES				YES
					Proposed	21.14	152						32.56	0.65	NO	
													21.14			
	417	Residential	Room	1376	Existing	32.40	153	0.66	NO	91°	1.15	YES				YES
					Proposed	21.50	153						32.40	0.66	NO	
													21.50			
	418	Residential	Room	1373	Existing	30.88	154	0.71	NO	91°	1.15	YES				YES
					Proposed	22.04	154						30.88	0.71	NO	
													22.04			
	419	Residential	Room	1371	Existing	29.54	155	0.72	NO	91°	2.38	YES				YES
					Proposed	21.23	155						29.54	0.72	NO	
													21.23			
	420	Residential	Room	1372	Existing	28.57	156	0.72	NO	91°	1.15	YES				YES
					Proposed	20.47	156						28.57	0.72	NO	
													20.47			
	421	Residential	Room	1370	Existing	30.45	157	0.73	NO	91°	2.38	YES				YES
					Proposed	22.26	157						30.45	0.73	NO	
													22.26			
	422	Residential	Room	1369	Existing	30.99	158	0.72	NO	91°	2.38	YES				YES
					Proposed	22.44	158						30.99	0.72	NO	
													22.44			
	423	Residential	Room	1375	Existing	29.63	159	0.74	NO	91°	1.15	YES				YES
					Proposed	21.88	159						29.63	0.74	NO	
													21.88			
	424	Residential	Room	1374	Existing	30.69	160	0.75	NO	91°	1.15	YES				YES
					Proposed	22.95	160						30.69	0.75	NO	
													22.95			
	425	Residential	Room	1368	Existing	30.06	161	0.78	NO	91°	2.38	YES				YES
					Proposed	23.36	161						30.06	0.78	NO	
													23.36			
Latitude Apartment Croydon																
Level 0	69	Residential	LKD	817	Existing	14.49	162	0.99	YES	265°	5.75	YES				YES
					Proposed	14.31	162									
				827	Existing	18.47	163	1.05	YES	175°	1.89	YES				YES
					Proposed	19.41	163									
													15.47	1.01	YES	
													15.57			
	70	Residential	Bedroom	82	Existing	15.81	164	0.75	NO	265°	1.89	YES				NO
					Proposed	11.93	164						15.81	0.75	NO	
													11.93			
	71	Residential	Bedroom	79	Existing	11.92	165	0.50	NO	265°	1.89	YES				NO
					Proposed	5.93	165						11.92	0.50	NO	
													5.93			
	72	Residential	Bedroom	1232	Existing	20.32	166	0.59	NO	265°	1.89	YES				NO
					Proposed	11.98	166						20.32	0.59	NO	
													11.98			
	73	Residential	Bedroom	71	Existing	21.95	167	0.60	NO	265°	1.89	YES				NO
					Proposed	13.10	167						21.95	0.60	NO	
													13.10			
	74	Residential	LKD	797	Existing	22.63	168	0.61	NO	265°	6.73	YES				NO
					Proposed	13.88	168									
				840	Existing	25.66	169	1.00	YES	355°N	1.89	YES				YES
					Proposed	25.66	169									
													23.29	0.71	NO	
													16.46			
	91	Residential	Bedroom	909	Existing	17.94	170	1.03	YES	355°N	2.30	YES				YES
					Proposed	18.52	170									
													17.94	1.03	YES	
													18.52			
	92	Residential	Bedroom	908	Existing	18.59	171	1.00	YES	355°N	2.30	YES				YES
					Proposed	18.59	171									
													18.59	1.00	YES	
													18.59			
	93	Residential	LKD	991	Existing	18.20	172	0.98	YES	355°N	5.75	YES				YES
					Proposed	17.86	172									
													18.20	0.98	YES	
													17.86			
	94	Residential	LKD	989	Existing	18.10	173	0.92	YES	355°N	5.75	YES				YES
					Proposed	16.58	173									
													18.10	0.92	YES	
													16.58			
	95	Residential	Bedroom	910	Existing	17.32	174	0.86	YES	355°N	2.30	YES				YES
					Proposed	14.89	174									

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													17.32	0.86	YES	
													14.89			
	96	Residential	Bedroom	911	Existing	13.84	175	0.80	YES	355°N	2.30	YES				YES
					Proposed	11.04	175									
													13.84	0.80	YES	
													11.04			
	97	Residential	Bedroom	291	Existing	15.69	176	1.13	YES	355°N	2.30	YES				YES
					Proposed	17.77	176									
													15.69	1.13	YES	
													17.77			
	98	Residential	Bedroom	1469	Existing	11.21	177	1.17	YES	331°N	2.30	YES				YES
					Proposed	13.11	177									
													11.21	1.17	YES	
													13.11			
	99	Residential	LKD	1471	Existing	8.23	178	1.10	YES	335°N	2.30	YES				YES
					Proposed	9.09	178									
													8.23	1.10	YES	
													9.09			
	100	Residential	Bedroom	25	Existing	13.18	179	1.05	YES	265°	2.30	YES				YES
					Proposed	13.79	179									
													13.18	1.05	YES	
													13.79			
	101	Residential	LKD	769	Existing	12.89	180	1.04	YES	265°	5.75	YES				YES
					Proposed	13.46	180									
													12.89	1.04	YES	
													13.46			
	102	Residential	LKD	770	Existing	12.76	181	1.05	YES	265°	5.75	YES				YES
					Proposed	13.35	181									
													12.76	1.05	YES	
													13.35			
	103	Residential	Bedroom	21	Existing	12.70	182	1.04	YES	265°	2.30	YES				YES
					Proposed	13.24	182									
													12.70	1.04	YES	
													13.24			
	104	Residential	Bedroom	17	Existing	12.41	183	1.05	YES	265°	2.30	YES				YES
					Proposed	13.07	183									
													12.41	1.05	YES	
													13.07			
	105	Residential	LKD	771	Existing	11.85	184	1.09	YES	265°	5.75	YES				YES
					Proposed	12.94	184									
													11.85	1.09	YES	
													12.94			
	106	Residential	LKD	772	Existing	11.42	185	1.12	YES	265°	5.75	YES				YES
					Proposed	12.84	185									
													11.42	1.12	YES	
													12.84			
	107	Residential	Bedroom	46	Existing	12.45	186	1.01	YES	265°	2.30	YES				YES
					Proposed	12.58	186									
													12.45	1.01	YES	
													12.58			
	108	Residential	Bedroom	58	Existing	12.81	187	0.90	YES	265°	2.30	YES				YES
					Proposed	11.55	187									
													12.81	0.90	YES	
													11.55			
	109	Residential	LKD	66	Existing	11.38	188	0.86	YES	265°	2.30	YES				YES
					Proposed	9.82	188									
													11.38	0.86	YES	
													9.82			
	110	Residential	LKD	1061	Existing	7.58	189	1.37	YES	30°N	1.80	YES				YES
					Proposed	10.39	189									
													7.58	1.37	YES	
													10.39			
	432	Residential	LKD	828	Existing	18.38	190	1.02	YES	175°	1.89	YES				YES
					Proposed	18.70	190									
				1431	Existing	32.36	191	1.00	YES	85°N	5.75	YES				YES
					Proposed	32.49	191									
													28.91	1.01	YES	
													29.08			
Level 1C	63	Residential	LKD	825	Existing	19.15	192	0.81	YES	265°	5.75	YES				YES
					Proposed	15.52	192									
				829	Existing	22.63	193	0.99	YES	175°	1.89	YES				YES
					Proposed	22.30	193									
													20.01	0.86	YES	
													17.19			
	64	Residential	Bedroom	820	Existing	19.94	194	0.64	NO	265°	1.89	YES				NO
					Proposed	12.86	194									
													19.94	0.64	NO	
													12.86			
	65	Residential	Bedroom	819	Existing	15.05	195	0.44	NO	265°	1.89	YES				NO
					Proposed	6.55	195									
													15.05	0.44	NO	
													6.55			
	66	Residential	Bedroom	800	Existing	22.28	196	0.57	NO	265°	1.89	YES				NO
					Proposed	12.67	196									
													22.28	0.57	NO	
													12.67			
	67	Residential	Bedroom	799	Existing	23.84	197	0.58	NO	265°	1.89	YES				NO
					Proposed	13.87	197									
													23.84	0.58	NO	
													13.87			

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	68	Residential	LKD	802	Existing	24.40	198	0.60	NO	265°	5.75	YES				YES
					Proposed	15.00	198									
				842	Existing	27.78	199	1.00	YES	355°N	1.89	YES				YES
					Proposed	27.78	199									
													25.23	0.72	NO	
													18.16			
	111	Residential	Bedroom	923	Existing	23.91	200	0.88	YES	355°N	2.30	YES				YES
					Proposed	20.95	200									
													23.91	0.88	YES	
													20.95			
	112	Residential	Bedroom	922	Existing	24.49	201	0.87	YES	355°N	2.30	YES				YES
					Proposed	21.20	201									
													24.49	0.87	YES	
													21.20			
	113	Residential	LKD	992	Existing	24.06	202	0.86	YES	355°N	5.75	YES				YES
					Proposed	20.68	202									
													24.06	0.86	YES	
													20.68			
	114	Residential	LKD	990	Existing	23.37	203	0.84	YES	355°N	5.75	YES				YES
					Proposed	19.58	203									
													23.37	0.84	YES	
													19.58			
	115	Residential	Bedroom	924	Existing	21.73	204	0.82	YES	355°N	2.30	YES				YES
					Proposed	17.80	204									
													21.73	0.82	YES	
													17.80			
	116	Residential	Bedroom	925	Existing	16.58	205	0.76	NO	355°N	2.30	YES				NO
					Proposed	12.61	205									
													16.58	0.76	NO	
													12.61			
	117	Residential	Bedroom	919	Existing	21.37	206	0.92	YES	355°N	2.30	YES				YES
					Proposed	19.66	206									
													21.37	0.92	YES	
													19.66			
	118	Residential	Bedroom	920	Existing	14.39	207	1.00	YES	331°N	2.30	YES				YES
					Proposed	14.34	207									
													14.39	1.00	YES	
													14.34			
	119	Residential	LKD	921	Existing	9.87	208	1.01	YES	335°N	2.30	YES				YES
					Proposed	10.00	208									
													9.87	1.01	YES	
													10.00			
	120	Residential	Bedroom	748	Existing	20.63	209	0.75	NO	265°	2.30	YES				YES
					Proposed	15.38	209									
													20.63	0.75	NO	
													15.38			
	121	Residential	LKD	776	Existing	20.24	210	0.75	NO	265°	5.75	YES				YES
					Proposed	15.17	210									
													20.24	0.75	NO	
													15.17			
	122	Residential	LKD	777	Existing	19.98	211	0.76	NO	265°	5.75	YES				YES
					Proposed	15.09	211									
													19.98	0.76	NO	
													15.09			
	123	Residential	Bedroom	747	Existing	19.70	212	0.76	NO	265°	2.30	YES				NO
					Proposed	14.93	212									
													19.70	0.76	NO	
													14.93			
	124	Residential	Bedroom	746	Existing	19.24	213	0.77	NO	265°	2.30	YES				NO
					Proposed	14.79	213									
													19.24	0.77	NO	
													14.79			
	125	Residential	LKD	778	Existing	18.55	214	0.79	NO	265°	5.75	YES				NO
					Proposed	14.71	214									
													18.55	0.79	NO	
													14.71			
	126	Residential	LKD	779	Existing	17.88	215	0.82	YES	265°	5.75	YES				YES
					Proposed	14.62	215									
													17.88	0.82	YES	
													14.62			
	127	Residential	Bedroom	751	Existing	17.38	216	0.82	YES	265°	2.30	YES				YES
					Proposed	14.27	216									
													17.38	0.82	YES	
													14.27			
	128	Residential	Bedroom	754	Existing	15.53	217	0.83	YES	265°	2.30	YES				YES
					Proposed	12.88	217									
													15.53	0.83	YES	
													12.88			
	129	Residential	LKD	756	Existing	13.36	218	0.82	YES	265°	2.30	YES				YES
					Proposed	10.89	218									
													13.36	0.82	YES	
													10.89			
	204	Residential	Bedroom	1257	Existing	27.22	219	1.00	YES	265°	1.13	YES				YES
					Proposed	27.19	219									
													27.22	1.00	YES	
													27.19			
	205	Residential	Bedroom	1254	Existing	16.28	220	0.99	YES	265°	1.13	YES				YES
					Proposed	16.15	220									
													16.28	0.99	YES	
													16.15			

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	206	Residential	Bedroom	1255	Existing	7.24	221	1.43	YES	85°N	1.13	YES				YES
					Proposed	10.37	221						7.24	1.43	YES	
													10.37			
	207	Residential	Bedroom	1256	Existing	5.99	222	1.20	YES	85°N	1.13	YES				YES
					Proposed	7.16	222						5.99	1.20	YES	
													7.16			
	208	Residential	LKD	1210	Existing	30.13	223	0.98	YES	283°N	1.80	YES				YES
					Proposed	29.60	223						30.13	0.98	YES	
													29.60			
	209	Residential	LKD	1062	Existing	9.01	224	1.23	YES	28°N	1.80	YES				YES
					Proposed	11.10	224						9.01	1.23	YES	
													11.10			
	433	Residential	LKD	830	Existing	22.03	225	0.99	YES	175°	1.89	YES				YES
					Proposed	21.73	225									
				1432	Existing	35.67	226	1.00	YES	85°N	5.75	YES				YES
					Proposed	35.67	226									
													32.30	1.00	YES	
													32.23			
Level 2C	75	Residential	LKD	826	Existing	25.05	227	0.67	NO	265°	5.75	YES				YES
					Proposed	16.71	227									
				831	Existing	27.57	228	0.98	YES	175°	1.89	YES				YES
					Proposed	27.15	228									
													25.67	0.75	NO	
													19.29			
	76	Residential	Bedroom	822	Existing	23.41	229	0.59	NO	265°	1.89	YES				NO
					Proposed	13.90	229						23.41	0.59	NO	
													13.90			
	77	Residential	Bedroom	821	Existing	17.23	230	0.42	NO	265°	1.89	YES				NO
					Proposed	7.26	230						17.23	0.42	NO	
													7.26			
	78	Residential	Bedroom	1233	Existing	24.05	231	0.55	NO	265°	1.89	YES				NO
					Proposed	13.31	231						24.05	0.55	NO	
													13.31			
	79	Residential	Bedroom	806	Existing	25.56	232	0.57	NO	265°	1.89	YES				YES
					Proposed	15.00	232						25.56	0.59	NO	
													15.00			
	80	Residential	LKD	808	Existing	26.04	233	0.59	NO	265°	5.75	YES				YES
					Proposed	15.42	233									
				844	Existing	29.24	234	1.00	YES	355°N	1.89	YES				YES
					Proposed	29.24	234									
													26.83	0.70	NO	
													18.83			
	130	Residential	Bedroom	937	Existing	27.63	235	0.84	YES	355°N	2.30	YES				YES
					Proposed	23.25	235						27.63	0.84	YES	
													23.25			
	131	Residential	Bedroom	936	Existing	28.34	236	0.84	YES	355°N	2.30	YES				YES
					Proposed	23.79	236						28.34	0.84	YES	
													23.79			
	132	Residential	LKD	994	Existing	28.15	237	0.84	YES	355°N	5.75	YES				YES
					Proposed	23.64	237						28.15	0.84	YES	
													23.64			
	133	Residential	LKD	993	Existing	27.54	238	0.84	YES	355°N	5.75	YES				YES
					Proposed	23.03	238						27.54	0.84	YES	
													23.03			
	134	Residential	Bedroom	938	Existing	26.21	239	0.83	YES	355°N	2.30	YES				YES
					Proposed	21.70	239						26.21	0.83	YES	
													21.70			
	135	Residential	Bedroom	939	Existing	19.65	240	0.78	NO	355°N	2.30	YES				YES
					Proposed	15.25	240						19.65	0.78	NO	
													15.25			
	136	Residential	Bedroom	933	Existing	25.04	241	0.86	YES	355°N	2.30	YES				YES
					Proposed	21.54	241						25.04	0.86	YES	
													21.54			
	137	Residential	Bedroom	934	Existing	16.80	242	0.93	YES	331°N	2.30	YES				YES
					Proposed	15.69	242						16.80	0.93	YES	
													15.69			
	138	Residential	LKD	935	Existing	11.31	243	0.97	YES	335°N	2.30	YES				YES
					Proposed	11.02	243						11.31	0.97	YES	
													11.02			
	139	Residential	Bedroom	715	Existing	23.96	244	0.72	NO	265°	2.30	YES				YES
					Proposed	17.23	244						23.96	0.72	NO	
													17.23			

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	140	Residential	LKD	781	Existing	23.50	245	0.72	NO	265°	5.75	YES				YES
					Proposed	17.02	245						23.50	0.72	NO	
													17.02			
	141	Residential	LKD	782	Existing	23.07	246	0.73	NO	265°	5.75	YES				YES
					Proposed	16.94	246						23.07	0.73	NO	
													16.94			
	142	Residential	Bedroom	714	Existing	22.58	247	0.75	NO	265°	2.30	YES				YES
					Proposed	16.91	247						22.58	0.75	NO	
													16.91			
	143	Residential	Bedroom	713	Existing	22.04	248	0.76	NO	265°	2.30	YES				YES
					Proposed	16.82	248						22.04	0.76	NO	
													16.82			
	144	Residential	LKD	783	Existing	21.42	249	0.78	NO	265°	5.75	YES				YES
					Proposed	16.69	249						21.42	0.78	NO	
													16.69			
	145	Residential	LKD	784	Existing	20.75	250	0.80	YES	265°	5.75	YES				YES
					Proposed	16.60	250						20.75	0.80	YES	
													16.60			
	146	Residential	Bedroom	718	Existing	20.12	251	0.81	YES	265°	2.30	YES				YES
					Proposed	16.33	251						20.12	0.81	YES	
													16.33			
	147	Residential	Bedroom	721	Existing	17.72	252	0.83	YES	265°	2.30	YES				YES
					Proposed	14.66	252						17.72	0.83	YES	
													14.66			
	148	Residential	LKD	723	Existing	15.06	253	0.81	YES	265°	2.30	YES				YES
					Proposed	12.27	253						15.06	0.81	YES	
													12.27			
	210	Residential	Bedroom	1261	Existing	29.40	254	1.00	YES	265°	1.13	YES				YES
					Proposed	29.37	254						29.40	1.00	YES	
													29.37			
	211	Residential	Bedroom	1258	Existing	17.73	255	0.99	YES	265°	1.13	YES				YES
					Proposed	17.60	255						17.73	0.99	YES	
													17.60			
	212	Residential	Bedroom	1259	Existing	8.08	256	1.37	YES	85°N	1.13	YES				YES
					Proposed	11.10	256						8.08	1.37	YES	
													11.10			
	213	Residential	Bedroom	1260	Existing	6.66	257	1.14	YES	85°N	1.13	YES				YES
					Proposed	7.60	257						6.66	1.14	YES	
													7.60			
	214	Residential	LKD	1211	Existing	32.45	258	0.98	YES	283°N	1.80	YES				YES
					Proposed	31.90	258						32.45	0.98	YES	
													31.90			
	215	Residential	LKD	1063	Existing	10.24	259	1.15	YES	30°N	1.80	YES				YES
					Proposed	11.75	259						10.24	1.15	YES	
													11.75			
	434	Residential	LKD	832	Existing	27.49	260	0.99	YES	175°	1.89	YES				YES
					Proposed	27.10	260									
				1433	Existing	37.86	261	1.00	YES	85°N	5.75	YES				YES
					Proposed	37.86	261						35.30	1.00	YES	
													35.20			
Level 3C	81	Residential	LKD	850	Existing	27.27	262	0.66	NO	265°	5.75	YES				YES
					Proposed	18.04	262									
				858	Existing	32.99	263	0.98	YES	175°	1.89	YES				YES
					Proposed	32.46	263						28.68	0.75	NO	
													21.60			
	82	Residential	Bedroom	824	Existing	25.86	264	0.60	NO	265°	1.89	YES				YES
					Proposed	15.43	264						25.86	0.60	NO	
													15.43			
	83	Residential	Bedroom	823	Existing	19.38	265	0.44	NO	265°	1.89	YES				NO
					Proposed	8.47	265						19.38	0.44	NO	
													8.47			
	84	Residential	Bedroom	1234	Existing	25.93	266	0.54	NO	265°	1.89	YES				NO
					Proposed	14.06	266						25.93	0.54	NO	
													14.06			
	85	Residential	Bedroom	809	Existing	27.37	267	0.56	NO	265°	1.89	YES				YES
					Proposed	15.38	267						27.37	0.56	NO	
													15.38			
	86	Residential	LKD	848	Existing	30.25	268	1.00	YES	355°N	1.89	YES				YES
					Proposed	30.25	268									

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				849	Existing	27.72	269	0.58	NO	265°	5.75	YES				YES
					Proposed	16.20	269						28.34	0.69	NO	
													19.67			
	149	Residential	Bedroom	948	Existing	30.40	270	0.84	YES	355°N	2.30	YES				YES
					Proposed	25.51	270						30.40	0.84	YES	
													25.51			
	150	Residential	Bedroom	947	Existing	31.14	271	0.84	YES	355°N	2.30	YES				YES
					Proposed	26.30	271						31.14	0.84	YES	
													26.30			
	151	Residential	LKD	996	Existing	31.37	272	0.85	YES	355°N	5.75	YES				YES
					Proposed	26.56	272						31.37	0.85	YES	
													26.56			
	152	Residential	LKD	995	Existing	31.54	273	0.85	YES	355°N	5.75	YES				YES
					Proposed	26.76	273						31.54	0.85	YES	
													26.76			
	153	Residential	Bedroom	949	Existing	31.68	274	0.85	YES	355°N	2.30	YES				YES
					Proposed	26.99	274						31.68	0.85	YES	
													26.99			
	154	Residential	Bedroom	950	Existing	27.05	275	0.83	YES	355°N	2.30	YES				YES
					Proposed	22.46	275						27.05	0.83	YES	
													22.46			
	155	Residential	Bedroom	980	Existing	27.72	276	0.85	YES	355°N	2.30	YES				YES
					Proposed	23.54	276						27.72	0.85	YES	
													23.54			
	156	Residential	Bedroom	981	Existing	19.01	277	0.91	YES	331°N	2.30	YES				YES
					Proposed	17.35	277						19.01	0.91	YES	
													17.35			
	157	Residential	LKD	986	Existing	13.17	278	0.94	YES	335°N	2.30	YES				YES
					Proposed	12.35	278						13.17	0.94	YES	
													12.35			
	158	Residential	Bedroom	759	Existing	26.03	279	0.73	NO	265°	2.30	YES				YES
					Proposed	18.99	279						26.03	0.73	NO	
													18.99			
	159	Residential	LKD	786	Existing	25.60	280	0.73	NO	265°	5.75	YES				YES
					Proposed	18.80	280						25.60	0.73	NO	
													18.80			
	160	Residential	LKD	787	Existing	25.20	281	0.74	NO	265°	5.75	YES				YES
					Proposed	18.76	281						25.20	0.74	NO	
													18.76			
	161	Residential	Bedroom	758	Existing	24.76	282	0.76	NO	265°	2.30	YES				YES
					Proposed	18.77	282						24.76	0.76	NO	
													18.77			
	162	Residential	Bedroom	757	Existing	24.26	283	0.77	NO	265°	2.30	YES				YES
					Proposed	18.74	283						24.26	0.77	NO	
													18.74			
	163	Residential	LKD	788	Existing	23.71	284	0.79	NO	265°	5.75	YES				YES
					Proposed	18.67	284						23.71	0.79	NO	
													18.67			
	164	Residential	LKD	789	Existing	23.14	285	0.81	YES	265°	5.75	YES				YES
					Proposed	18.65	285						23.14	0.81	YES	
													18.65			
	165	Residential	Bedroom	762	Existing	22.60	286	0.82	YES	265°	2.30	YES				YES
					Proposed	18.49	286						22.60	0.82	YES	
													18.49			
	166	Residential	Bedroom	765	Existing	20.11	287	0.83	YES	265°	2.30	YES				YES
					Proposed	16.78	287						20.11	0.83	YES	
													16.78			
	167	Residential	LKD	767	Existing	16.71	288	0.82	YES	265°	2.30	YES				YES
					Proposed	13.69	288						16.71	0.82	YES	
													13.69			
	216	Residential	Bedroom	1265	Existing	31.33	289	1.00	YES	265°	1.13	YES				YES
					Proposed	31.30	289						31.33	1.00	YES	
													31.30			
	217	Residential	Bedroom	1262	Existing	19.09	290	0.99	YES	265°	1.13	YES				YES
					Proposed	18.97	290						19.09	0.99	YES	
													18.97			
	218	Residential	Bedroom	1263	Existing	9.07	291	1.31	YES	85°N	1.13	YES				YES
					Proposed	11.92	291									

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													9.07	1.31	YES	
													11.92			
	219	Residential	Bedroom	1264	Existing	7.22	292	1.12	YES	85°N	1.13	YES				YES
					Proposed	8.09	292									
													7.22	1.12	YES	
													8.09			
	220	Residential	LKD	1212	Existing	34.51	293	0.98	YES	283°N	1.80	YES				YES
					Proposed	33.95	293									
													34.51	0.98	YES	
													33.95			
	221	Residential	LKD	1064	Existing	11.44	294	1.09	YES	30°N	1.80	YES				YES
					Proposed	12.52	294									
													11.44	1.09	YES	
													12.52			
	435	Residential	LKD	859	Existing	33.42	295	0.99	YES	175°	1.89	YES				YES
					Proposed	32.93	295									
				1434	Existing	36.10	296	1.00	YES	85°N	5.75	YES				YES
					Proposed	36.10	296									
													35.44	1.00	YES	
													35.32			
Level 4C	87	Residential	LKD	864	Existing	29.04	297	0.56	NO	265°	1.89	YES				YES
					Proposed	16.22	297									
				870	Existing	31.23	298	1.00	YES	355°N	1.89	YES				YES
					Proposed	31.18	298									
													30.14	0.79	NO	
													23.70			
	88	Residential	Bedroom	1235	Existing	28.00	299	0.54	NO	265°	1.89	YES				YES
					Proposed	15.19	299									
													28.00	0.54	NO	
													15.19			
	89	Residential	Bedroom	867	Existing	23.62	300	0.50	NO	265°	1.89	YES				NO
					Proposed	11.91	300									
													23.62	0.50	NO	
													11.91			
	90	Residential	LKD	868	Existing	28.68	301	0.61	NO	265°	1.89	YES				YES
					Proposed	17.49	301									
				873	Existing	35.12	302	0.97	YES	175°	1.89	YES				YES
					Proposed	34.10	302									
													31.90	0.81	YES	
													25.80			
	168	Residential	Bedroom	959	Existing	31.94	303	0.84	YES	355°N	2.30	YES				YES
					Proposed	26.86	303									
													31.94	0.84	YES	
													26.86			
	169	Residential	Bedroom	958	Existing	32.69	304	0.84	YES	355°N	2.30	YES				YES
					Proposed	27.62	304									
													32.69	0.84	YES	
													27.62			
	170	Residential	LKD	998	Existing	33.14	305	0.85	YES	355°N	5.75	YES				YES
					Proposed	28.15	305									
													33.14	0.85	YES	
													28.15			
	171	Residential	LKD	997	Existing	33.63	306	0.85	YES	355°N	5.75	YES				YES
					Proposed	28.67	306									
													33.63	0.85	YES	
													28.67			
	172	Residential	Bedroom	960	Existing	34.09	307	0.86	YES	355°N	2.30	YES				YES
					Proposed	29.21	307									
													34.09	0.86	YES	
													29.21			
	173	Residential	Bedroom	961	Existing	32.98	308	0.86	YES	355°N	2.30	YES				YES
					Proposed	28.26	308									
													32.98	0.86	YES	
													28.26			
	174	Residential	Bedroom	982	Existing	29.96	309	0.83	YES	355°N	2.30	YES				YES
					Proposed	24.94	309									
													29.96	0.83	YES	
													24.94			
	175	Residential	Bedroom	983	Existing	21.63	310	0.88	YES	331°N	2.30	YES				YES
					Proposed	19.02	310									
													21.63	0.88	YES	
													19.02			
	176	Residential	LKD	987	Existing	15.67	311	0.89	YES	335°N	2.30	YES				YES
					Proposed	13.87	311									
													15.67	0.89	YES	
													13.87			
	222	Residential	Bedroom	1269	Existing	32.51	312	1.00	YES	265°	1.13	YES				YES
					Proposed	32.48	312									
													32.51	1.00	YES	
													32.48			
	223	Residential	Bedroom	1266	Existing	20.13	313	1.00	YES	265°	1.13	YES				YES
					Proposed	20.03	313									
													20.13	1.00	YES	
													20.03			
	224	Residential	Bedroom	1267	Existing	10.05	314	1.25	YES	85°N	1.13	YES				YES
					Proposed	12.53	314									
													10.05	1.25	YES	
													12.53			
	225	Residential	Bedroom	1268	Existing	7.74	315	1.09	YES	85°N	1.13	YES				YES
					Proposed	8.47	315									

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													7.74	1.09	YES	
													8.47			
	226	Residential	LKD	1213	Existing	35.77	316	0.98	YES	283°N	1.80	YES				YES
					Proposed	35.19	316									
													35.77	0.98	YES	
													35.19			
	227	Residential	LKD	1065	Existing	12.87	317	1.02	YES	30°N	1.80	YES				YES
					Proposed	13.08	317									
													12.87	1.02	YES	
													13.08			
	436	Residential	LKD	874	Existing	35.38	318	0.97	YES	175°	1.89	YES				YES
					Proposed	34.47	318									
				1435	Existing	39.22	319	1.00	YES	85°N	1.89	YES				YES
					Proposed	39.22	319									
													37.30	0.99	YES	
													36.85			
Level 5C	192	Residential	LKD	988	Existing	19.34	320	0.83	YES	335°N	2.30	YES				YES
					Proposed	15.96	320									
													19.34	0.83	YES	
													15.96			
	193	Residential	Bedroom	985	Existing	25.63	321	0.82	YES	331°N	2.30	YES				YES
					Proposed	21.12	321									
													25.63	0.82	YES	
													21.12			
	194	Residential	Bedroom	984	Existing	32.14	322	0.82	YES	355°N	2.30	YES				YES
					Proposed	26.29	322									
													32.14	0.82	YES	
													26.29			
	195	Residential	Bedroom	970	Existing	32.92	323	0.84	YES	355°N	2.30	YES				YES
					Proposed	27.62	323									
													32.92	0.84	YES	
													27.62			
	196	Residential	Bedroom	969	Existing	33.59	324	0.84	YES	355°N	2.30	YES				YES
					Proposed	28.28	324									
													33.59	0.84	YES	
													28.28			
	197	Residential	Bedroom	971	Existing	34.85	325	0.86	YES	355°N	2.30	YES				YES
					Proposed	29.83	325									
													34.85	0.86	YES	
													29.83			
	198	Residential	Bedroom	972	Existing	34.33	326	0.86	YES	355°N	2.30	YES				YES
					Proposed	29.52	326									
													34.33	0.86	YES	
													29.52			
	199	Residential	LKD	1000	Existing	33.99	327	0.85	YES	355°N	5.75	YES				YES
					Proposed	28.75	327									
													33.99	0.85	YES	
													28.75			
	200	Residential	LKD	999	Existing	34.41	328	0.85	YES	355°N	5.75	YES				YES
					Proposed	29.24	328									
													34.41	0.85	YES	
													29.24			
	228	Residential	Bedroom	1273	Existing	32.95	329	1.00	YES	265°	1.13	YES				YES
					Proposed	32.92	329									
													32.95	1.00	YES	
													32.92			
	229	Residential	Bedroom	1270	Existing	20.86	330	1.00	YES	265°	1.13	YES				YES
					Proposed	20.77	330									
													20.86	1.00	YES	
													20.77			
	230	Residential	Bedroom	1271	Existing	11.92	331	1.15	YES	85°N	1.13	YES				YES
					Proposed	13.69	331									
													11.92	1.15	YES	
													13.69			
	231	Residential	Bedroom	1272	Existing	8.61	332	1.05	YES	85°N	1.13	YES				YES
					Proposed	9.07	332									
													8.61	1.05	YES	
													9.07			
	232	Residential	LKD	1214	Existing	36.26	333	0.98	YES	283°N	1.80	YES				YES
					Proposed	35.67	333									
													36.26	0.98	YES	
													35.67			
	233	Residential	LKD	1066	Existing	15.12	334	0.92	YES	30°N	1.80	YES				YES
					Proposed	13.86	334									
													15.12	0.92	YES	
													13.86			
Level 6C	187	Residential	LKD	1014	Existing	24.00	335	0.77	NO	335°N	2.30	YES				YES
					Proposed	18.48	335									
													24.00	0.77	NO	
													18.48			
	188	Residential	Bedroom	1013	Existing	30.46	336	0.78	NO	331°N	2.30	YES				YES
					Proposed	23.71	336									
													30.46	0.78	NO	
													23.71			
	189	Residential	Bedroom	1007	Existing	33.85	337	0.82	YES	355°N	2.30	YES				YES
					Proposed	27.65	337									
													33.85	0.82	YES	
													27.65			
	190	Residential	Bedroom	1023	Existing	33.15	338	0.83	YES	355°N	2.30	YES				YES
					Proposed	27.52	338									

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													33.15	0.83	YES	
													27.52			
	191	Residential	Bedroom	1022	Existing	33.67	339	0.83	YES	355°N	2.30	YES				YES
					Proposed	28.07	339									
													33.67	0.83	YES	
													28.07			
	234	Residential	Bedroom	1277	Existing	33.04	340	1.00	YES	265°	1.13	YES				YES
					Proposed	33.01	340									
													33.04	1.00	YES	
													33.01			
	235	Residential	Bedroom	1274	Existing	23.31	341	1.00	YES	265°	1.13	YES				YES
					Proposed	23.23	341									
													23.31	1.00	YES	
													23.23			
	236	Residential	Bedroom	1275	Existing	15.59	342	1.05	YES	85°N	1.13	YES				YES
					Proposed	16.32	342									
													15.59	1.05	YES	
													16.32			
	237	Residential	Bedroom	1276	Existing	10.45	343	1.01	YES	85°N	1.13	YES				YES
					Proposed	10.53	343									
													10.45	1.01	YES	
													10.53			
	238	Residential	LKD	1215	Existing	36.40	344	0.98	YES	283°N	1.80	YES				YES
					Proposed	35.80	344									
													36.40	0.98	YES	
													35.80			
	239	Residential	LKD	1067	Existing	18.69	345	0.83	YES	30°N	1.80	YES				YES
					Proposed	15.53	345									
													18.69	0.83	YES	
													15.53			
Level 7C	246	Residential	Bedroom	1237	Existing	34.64	346	0.86	YES	326°N	1.80	YES				YES
					Proposed	29.80	346									
													34.64	0.86	YES	
													29.80			
	247	Residential	Bedroom	1236	Existing	34.53	347	0.81	YES	338°N	3.72	YES				YES
					Proposed	27.89	347									
													34.53	0.81	YES	
													27.89			
	248	Residential	Bedroom	1116	Existing	33.56	348	0.79	NO	8°N	3.72	YES				YES
					Proposed	26.38	348									
													33.56	0.79	NO	
													26.38			
	249	Residential	Bedroom	1164	Existing	31.94	349	0.83	YES	17°N	1.80	YES				YES
					Proposed	26.51	349									
													31.94	0.83	YES	
													26.51			
	250	Residential	LKD	1216	Existing	36.52	350	0.98	YES	283°N	1.80	YES				YES
					Proposed	35.92	350									
													36.52	0.98	YES	
													35.92			
	251	Residential	LKD	1068	Existing	22.36	351	0.81	YES	30°N	1.80	YES				YES
					Proposed	18.15	351									
													22.36	0.81	YES	
													18.15			
	426	Residential	LKD	1017	Existing	27.74	352	0.76	NO	335°N	2.30	YES				YES
					Proposed	20.98	352									
													27.74	0.76	NO	
													20.98			
	427	Residential	Bedroom	1016	Existing	33.49	353	0.78	NO	331°N	2.30	YES				YES
					Proposed	26.13	353									
													33.49	0.78	NO	
													26.13			
	428	Residential	Bedroom	1008	Existing	35.33	354	0.81	YES	355°N	2.30	YES				YES
					Proposed	28.74	354									
													35.33	0.81	YES	
													28.74			
Level 8C	252	Residential	Room	1197	Existing	35.37	355	0.87	YES	326°N	1.80	YES				YES
					Proposed	30.86	355									
													35.37	0.87	YES	
													30.86			
	253	Residential	Bedroom	1183	Existing	35.41	356	0.84	YES	338°N	3.72	YES				YES
					Proposed	29.57	356									
													35.41	0.84	YES	
													29.57			
	254	Residential	Bedroom	1117	Existing	36.33	357	0.82	YES	8°N	3.72	YES				YES
					Proposed	29.73	357									
													36.33	0.82	YES	
													29.73			
	255	Residential	Bedroom	1165	Existing	36.04	358	0.85	YES	17°N	1.80	YES				YES
					Proposed	30.50	358									
													36.04	0.85	YES	
													30.50			
	256	Residential	LKD	1217	Existing	36.63	359	0.98	YES	283°N	1.80	YES				YES
					Proposed	36.03	359									
													36.63	0.98	YES	
													36.03			
	257	Residential	LKD	1069	Existing	30.65	360	0.86	YES	30°N	1.80	YES				YES
					Proposed	26.36	360									
				1242	Existing	0.00	361	1.00	YES	65°N	3.72	YES				YES
					Proposed	0.00	361									

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													9.99	0.86	YES	
	429	Residential	LKD	1020	Existing	30.91	362	0.78	NO	335°N	2.30	YES	8.59			YES
					Proposed	24.12	362									
													30.91	0.78	NO	
	430	Residential	Room	1019	Existing	34.88	363	0.80	YES	331°N	2.30	YES	24.12			YES
					Proposed	27.77	363									
													34.88	0.80	YES	
	431	Residential	Room	1009	Existing	36.15	364	0.82	YES	355°N	2.30	YES	27.77			YES
					Proposed	29.67	364									
													36.15	0.82	YES	
Level 9C	258	Residential	Bedroom	1198	Existing	35.55	365	0.88	YES	326°N	1.80	YES	29.67			YES
					Proposed	31.44	365									
													35.55	0.88	YES	
	259	Residential	Bedroom	1184	Existing	35.60	366	0.86	YES	338°N	3.72	YES	31.44			YES
					Proposed	30.54	366									
													35.60	0.86	YES	
	260	Residential	Bedroom	1118	Existing	36.75	367	0.85	YES	8°N	3.72	YES	30.54			YES
					Proposed	31.38	367									
													36.75	0.85	YES	
	261	Residential	Room	1166	Existing	37.28	368	0.87	YES	17°N	1.80	YES	31.38			YES
					Proposed	32.42	368									
													37.28	0.87	YES	
	262	Residential	LKD	1218	Existing	36.73	369	0.98	YES	283°N	1.80	YES	32.42			YES
					Proposed	36.13	369									
													36.73	0.98	YES	
	263	Residential	LKD	1070	Existing	38.07	370	0.90	YES	30°N	1.80	YES	36.13			YES
					Proposed	34.18	370									
				1243	Existing	36.09	371	0.98	YES	65°N	4.17	YES				YES
					Proposed	35.23	371									
													36.69	0.95	YES	
Level 10C	264	Residential	Bedroom	1199	Existing	35.73	372	0.89	YES	326°N	1.80	YES	34.91			YES
					Proposed	31.74	372									
													35.73	0.89	YES	
	265	Residential	Bedroom	1185	Existing	35.79	373	0.86	YES	338°N	3.72	YES	31.74			YES
					Proposed	30.89	373									
													35.79	0.86	YES	
	266	Residential	Bedroom	1119	Existing	36.92	374	0.86	YES	8°N	3.72	YES	30.89			YES
					Proposed	31.78	374									
													36.92	0.86	YES	
	267	Residential	Bedroom	1167	Existing	37.42	375	0.88	YES	17°N	1.80	YES	31.78			YES
					Proposed	32.83	375									
													37.42	0.88	YES	
	268	Residential	LKD	1219	Existing	36.82	376	0.98	YES	283°N	1.80	YES	32.83			YES
					Proposed	36.23	376									
													36.82	0.98	YES	
	269	Residential	LKD	1071	Existing	38.18	377	0.90	YES	30°N	1.80	YES	36.23			YES
					Proposed	34.50	377									
				1244	Existing	36.14	378	0.98	YES	65°N	4.17	YES				YES
					Proposed	35.29	378									
													36.76	0.95	YES	
Level 11 C	270	Residential	Bedroom	1200	Existing	35.90	379	0.89	YES	326°N	1.80	YES	35.05			YES
					Proposed	31.96	379									
													35.90	0.89	YES	
	271	Residential	Bedroom	1186	Existing	35.97	380	0.87	YES	338°N	3.72	YES	31.96			YES
					Proposed	31.12	380									
													35.97	0.87	YES	
	272	Residential	Bedroom	1120	Existing	37.07	381	0.86	YES	8°N	3.72	YES	31.12			YES
					Proposed	32.00	381									
													37.07	0.86	YES	
	273	Residential	Bedroom	1168	Existing	37.56	382	0.88	YES	17°N	1.80	YES	32.00			YES
					Proposed	33.03	382									
													37.56	0.88	YES	
	274	Residential	LKD	1220	Existing	36.92	383	0.98	YES	283°N	1.80	YES	33.03			YES
					Proposed	36.33	383									
													36.92	0.98	YES	
	275	Residential	LKD	1072	Existing	38.29	384	0.91	YES	30°N	1.80	YES	36.33			YES
					Proposed	34.66	384									
				1245	Existing	36.18	385	0.98	YES	65°N	4.17	YES				YES
					Proposed	35.34	385									

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													36.82	0.95	YES	
													35.13			
Level 12C	276	Residential	Bedroom	1201	Existing	36.06	386	0.89	YES	326°N	1.80	YES				YES
					Proposed	32.19	386									
													36.06	0.89	YES	
													32.19			
	277	Residential	Bedroom	1187	Existing	36.14	387	0.87	YES	338°N	3.72	YES				YES
					Proposed	31.37	387									
													36.14	0.87	YES	
													31.37			
	278	Residential	Bedroom	1121	Existing	37.22	388	0.87	YES	8°N	3.72	YES				YES
					Proposed	32.22	388									
													37.22	0.87	YES	
													32.22			
	279	Residential	Bedroom	1169	Existing	37.69	389	0.88	YES	17°N	1.80	YES				YES
					Proposed	33.24	389									
													37.69	0.88	YES	
													33.24			
	280	Residential	LKD	1221	Existing	37.01	390	0.98	YES	283°N	1.80	YES				YES
					Proposed	36.43	390									
													37.01	0.98	YES	
													36.43			
	281	Residential	LKD	1073	Existing	38.39	391	0.91	YES	30°N	1.80	YES				YES
					Proposed	34.83	391									
				1246	Existing	36.23	392	0.98	YES	65°N	4.17	YES				YES
					Proposed	35.39	392									
													36.88	0.95	YES	
													35.22			
Level 13C	282	Residential	Bedroom	1202	Existing	36.23	393	0.89	YES	326°N	1.80	YES				YES
					Proposed	32.42	393									
													36.23	0.89	YES	
													32.42			
	283	Residential	Bedroom	1188	Existing	36.32	394	0.87	YES	338°N	3.72	YES				YES
					Proposed	31.62	394									
													36.32	0.87	YES	
													31.62			
	284	Residential	Bedroom	1122	Existing	37.37	395	0.87	YES	8°N	3.72	YES				YES
					Proposed	32.45	395									
													37.37	0.87	YES	
													32.45			
	285	Residential	Bedroom	1170	Existing	37.82	396	0.88	YES	17°N	1.80	YES				YES
					Proposed	33.44	396									
													37.82	0.88	YES	
													33.44			
	286	Residential	LKD	1222	Existing	37.11	397	0.98	YES	283°N	1.80	YES				YES
					Proposed	36.54	397									
													37.11	0.98	YES	
													36.54			
	287	Residential	LKD	1074	Existing	38.49	398	0.91	YES	30°N	1.80	YES				YES
					Proposed	34.99	398									
				1247	Existing	36.27	399	0.98	YES	65°N	4.17	YES				YES
					Proposed	35.45	399									
													36.94	0.96	YES	
													35.31			
Level 14C	288	Residential	Bedroom	1203	Existing	36.40	400	0.90	YES	326°N	1.80	YES				YES
					Proposed	32.67	400									
													36.40	0.90	YES	
													32.67			
	289	Residential	Bedroom	1189	Existing	36.49	401	0.87	YES	338°N	3.72	YES				YES
					Proposed	31.89	401									
													36.49	0.87	YES	
													31.89			
	290	Residential	Bedroom	1123	Existing	37.51	402	0.87	YES	8°N	3.72	YES				YES
					Proposed	32.69	402									
													37.51	0.87	YES	
													32.69			
	291	Residential	Bedroom	1171	Existing	37.94	403	0.89	YES	17°N	1.80	YES				YES
					Proposed	33.66	403									
													37.94	0.89	YES	
													33.66			
	292	Residential	LKD	1223	Existing	37.21	404	0.98	YES	283°N	1.80	YES				YES
					Proposed	36.65	404									
													37.21	0.98	YES	
													36.65			
	293	Residential	LKD	1075	Existing	38.58	405	0.91	YES	30°N	1.80	YES				YES
					Proposed	35.17	405									
				1248	Existing	36.31	406	0.98	YES	65°N	4.17	YES				YES
					Proposed	35.50	406									
													36.99	0.96	YES	
													35.40			
Level 15C	294	Residential	Bedroom	1204	Existing	36.57	407	0.90	YES	326°N	1.80	YES				YES
					Proposed	32.92	407									
													36.57	0.90	YES	
													32.92			
	295	Residential	Bedroom	1190	Existing	36.66	408	0.88	YES	338°N	3.72	YES				YES
					Proposed	32.17	408									
													36.66	0.88	YES	
													32.17			
	296	Residential	Bedroom	1124	Existing	37.66	409	0.87	YES	8°N	3.72	YES				YES
					Proposed	32.95	409									

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													37.66	0.87	YES	
													32.95			
	297	Residential	Bedroom	1172	Existing	38.07	410	0.89	YES	17°N	1.80	YES				YES
					Proposed	33.89	410									
													38.07	0.89	YES	
													33.89			
	298	Residential	LKD	1224	Existing	37.31	411	0.99	YES	283°N	1.80	YES				YES
					Proposed	36.76	411									
													37.31	0.99	YES	
													36.76			
	299	Residential	LKD	1076	Existing	38.68	412	0.91	YES	30°N	1.80	YES				YES
					Proposed	35.35	412									
				1249	Existing	36.35	413	0.98	YES	65°N	4.17	YES				YES
					Proposed	35.56	413									
													37.05	0.96	YES	
													35.50			
Level 16C	300	Residential	Bedroom	1205	Existing	36.73	414	0.90	YES	326°N	1.80	YES				YES
					Proposed	33.18	414									
													36.73	0.90	YES	
													33.18			
	301	Residential	Bedroom	1191	Existing	36.83	415	0.88	YES	338°N	3.72	YES				YES
					Proposed	32.46	415									
													36.83	0.88	YES	
													32.46			
	302	Residential	Bedroom	1125	Existing	37.80	416	0.88	YES	8°N	3.72	YES				YES
					Proposed	33.21	416									
													37.80	0.88	YES	
													33.21			
	303	Residential	Bedroom	1173	Existing	38.19	417	0.89	YES	17°N	1.80	YES				YES
					Proposed	34.12	417									
													38.19	0.89	YES	
													34.12			
	304	Residential	LKD	1225	Existing	37.41	418	0.99	YES	283°N	1.80	YES				YES
					Proposed	36.87	418									
													37.41	0.99	YES	
													36.87			
	305	Residential	LKD	1077	Existing	38.77	419	0.92	YES	30°N	1.80	YES				YES
					Proposed	35.53	419									
				1250	Existing	36.39	420	0.98	YES	65°N	4.17	YES				YES
					Proposed	35.62	420									
													37.11	0.96	YES	
													35.59			
Level 17C	306	Residential	Bedroom	1206	Existing	36.89	421	0.91	YES	326°N	1.80	YES				YES
					Proposed	33.45	421									
													36.89	0.91	YES	
													33.45			
	307	Residential	Bedroom	1192	Existing	37.00	422	0.89	YES	338°N	3.72	YES				YES
					Proposed	32.76	422									
													37.00	0.89	YES	
													32.76			
	308	Residential	Bedroom	1126	Existing	37.94	423	0.88	YES	8°N	3.72	YES				YES
					Proposed	33.48	423									
													37.94	0.88	YES	
													33.48			
	309	Residential	Bedroom	1174	Existing	38.31	424	0.90	YES	17°N	1.80	YES				YES
					Proposed	34.37	424									
													38.31	0.90	YES	
													34.37			
	310	Residential	LKD	1226	Existing	37.51	425	0.99	YES	283°N	1.80	YES				YES
					Proposed	36.98	425									
													37.51	0.99	YES	
													36.98			
	311	Residential	LKD	1078	Existing	38.86	426	0.92	YES	30°N	1.80	YES				YES
					Proposed	35.73	426									
				1251	Existing	36.43	427	0.98	YES	65°N	4.17	YES				YES
					Proposed	35.68	427									
													37.16	0.96	YES	
													35.70			
Level 18C	312	Residential	Bedroom	1207	Existing	37.06	428	0.91	YES	326°N	1.80	YES				YES
					Proposed	33.74	428									
													37.06	0.91	YES	
													33.74			
	313	Residential	Bedroom	1193	Existing	37.17	429	0.89	YES	338°N	3.72	YES				YES
					Proposed	33.07	429									
													37.17	0.89	YES	
													33.07			
	314	Residential	Bedroom	1127	Existing	38.08	430	0.89	YES	8°N	3.72	YES				YES
					Proposed	33.77	430									
													38.08	0.89	YES	
													33.77			
	315	Residential	Bedroom	1175	Existing	38.43	431	0.90	YES	17°N	1.80	YES				YES
					Proposed	34.63	431									
													38.43	0.90	YES	
													34.63			
	316	Residential	LKD	1227	Existing	37.61	432	0.99	YES	283°N	1.80	YES				YES
					Proposed	37.10	432									
													37.61	0.99	YES	
													37.10			
	317	Residential	LKD	1079	Existing	38.96	433	0.92	YES	30°N	1.80	YES				YES
					Proposed	35.94	433									

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Floor Ref.	Room Ref.	Property Type	Room Use	Window Ref.		VSC		Pr/Ex	Meets BRE Criteria	Window Orientation	Window Area	Use for Room VSC	Room VSC	Pr/Ex	Meets BRE Criteria	Window VSC - Meet 15% Target
				1252	Existing	36.47	434	0.98	YES	65°N	4.17	YES				YES
					Proposed	35.75	434						37.22	0.96	YES	
													35.81			
Level 19C	318	Residential	Bedroom	1208	Existing	37.22	435	0.91	YES	326°N	1.80	YES				YES
					Proposed	34.02	435						37.22	0.91	YES	
													34.02			
	319	Residential	Bedroom	1194	Existing	37.34	436	0.89	YES	338°N	3.72	YES				YES
					Proposed	33.39	436						37.34	0.89	YES	
													33.39			
	320	Residential	Bedroom	1128	Existing	38.21	437	0.89	YES	8°N	3.72	YES				YES
					Proposed	34.07	437						38.21	0.89	YES	
													34.07			
	321	Residential	Bedroom	1176	Existing	38.55	438	0.91	YES	17°N	1.80	YES				YES
					Proposed	34.89	438						38.55	0.91	YES	
													34.89			
	322	Residential	LKD	1228	Existing	37.71	439	0.99	YES	283°N	1.80	YES				YES
					Proposed	37.21	439						37.71	0.99	YES	
													37.21			
	323	Residential	LKD	1080	Existing	39.04	440	0.93	YES	30°N	1.80	YES				YES
					Proposed	36.14	440									
				1253	Existing	36.50	441	0.98	YES	65°N	4.17	YES				YES
					Proposed	35.81	441									
													37.27	0.96	YES	
													35.91			
Level 20C	324	Residential	LKD	1230	Existing	37.44	442	0.91	YES	332°N	3.72	YES				YES
					Proposed	34.15	442						37.44	0.91	YES	
													34.15			
Level 21C	325	Residential	Bedroom	1130	Existing	38.48	443	0.90	YES	8°N	3.72	YES				YES
					Proposed	34.69	443						38.48	0.90	YES	
													34.69			
	326	Residential	Bedroom	1178	Existing	38.78	444	0.91	YES	17°N	1.80	YES				YES
					Proposed	35.44	444						38.78	0.91	YES	
													35.44			
	327	Residential	LKD	1082	Existing	39.21	445	0.93	YES	30°N	1.80	YES				YES
					Proposed	36.57	445									
				1241	Existing	37.65	446	0.98	YES	65°N	4.17	YES				YES
					Proposed	37.02	446									
													38.12	0.97	YES	
													36.88			
Level 22C	328	Residential	Bedroom	1131	Existing	38.58	447	0.91	YES	8°N	3.72	YES				YES
					Proposed	34.99	447						38.58	0.91	YES	
													34.99			
	329	Residential	Bedroom	1179	Existing	38.86	448	0.92	YES	17°N	1.80	YES				YES
					Proposed	35.71	448						38.86	0.92	YES	
													35.71			
	330	Residential	LKD	1083	Existing	39.27	449	0.94	YES	30°N	1.80	YES				YES
					Proposed	36.78	449									
				1240	Existing	37.76	450	0.98	YES	65°N	4.17	YES				YES
					Proposed	37.15	450									
													38.22	0.97	YES	
													37.04			
Level 23C	331	Residential	Bedroom	1132	Existing	38.68	451	0.91	YES	8°N	3.72	YES				YES
					Proposed	35.31	451						38.68	0.91	YES	
													35.31			
	332	Residential	Bedroom	1180	Existing	38.95	452	0.92	YES	17°N	1.80	YES				YES
					Proposed	35.99	452						38.95	0.92	YES	
													35.99			
	333	Residential	LKD	1084	Existing	39.33	453	0.94	YES	30°N	1.80	YES				YES
					Proposed	36.99	453									
				1238	Existing	37.74	454	0.98	YES	65°N	4.17	YES				YES
					Proposed	37.17	454									
													38.22	0.97	YES	
													37.12			
93 Granville Cl																
Level 1B	448	Residential	Bedroom	1453	Existing	23.85	455	0.86	YES	259°	0.53	YES				YES
					Proposed	20.53	455						23.85	0.86	YES	
													20.53			
86-90 Granville Cl																
Level 0	437	Residential	Bedroom	1451	Existing	25.21	456	0.88	YES	259°	2.26	YES				YES
					Proposed	22.22	456						25.21	0.88	YES	
													22.22			

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Floor Ref.	Room Ref.	Property Type	Room Use	Window Ref.		VSC		Pr/Ex	Meets BRE Criteria	Window Orientation	Window Area	Use for Room VSC	Room VSC	Pr/Ex	Meets BRE Criteria	Window VSC - Meet 15% Target
	438	Residential	Bedroom	1452	Existing	25.29	457	0.88	YES	259°	2.26	YES				YES
					Proposed	22.14	457						25.29	0.88	YES	
													22.14			
	439	Residential	Bedroom	1450	Existing	25.43	458	0.87	YES	259°	1.05	YES				YES
					Proposed	22.15	458						25.43	0.87	YES	
													22.15			
	456	Residential	LKD	1463	Existing	25.11	459	0.88	YES	259°	1.03	YES				YES
					Proposed	22.01	459						25.11	0.88	YES	
													22.01			
Level 1B	440	Residential	Bedroom	1441	Existing	27.33	460	0.87	YES	259°	2.19	YES				YES
					Proposed	23.65	460						27.33	0.87	YES	
													23.65			
	441	Residential	Bedroom	1443	Existing	27.50	461	0.87	YES	259°	2.19	YES				YES
					Proposed	23.81	461						27.50	0.87	YES	
													23.81			
	442	Residential	Bedroom	1464	Existing	27.66	462	0.87	YES	259°	1.05	YES				YES
					Proposed	23.96	462						27.66	0.87	YES	
													23.96			
	446	Residential	LKD	1436	Existing	27.17	463	0.86	YES	259°	1.03	YES				YES
					Proposed	23.38	463						27.17	0.86	YES	
													23.38			
Level 2B	443	Residential	Bedroom	1440	Existing	29.07	464	0.85	YES	259°	2.19	YES				YES
					Proposed	24.71	464						29.07	0.85	YES	
													24.71			
	444	Residential	Bedroom	1444	Existing	29.25	465	0.85	YES	259°	2.19	YES				YES
					Proposed	24.97	465						29.25	0.85	YES	
													24.97			
	445	Residential	Bedroom	1439	Existing	29.37	466	0.86	YES	259°	1.10	YES				YES
					Proposed	25.14	466						29.37	0.86	YES	
													25.14			
	447	Residential	LKD	1437	Existing	28.90	467	0.84	YES	259°	1.10	YES				YES
					Proposed	24.42	467						28.90	0.84	YES	
													24.42			
104 - 106 Granville Cl																
Level 0	449	Residential	LKD	1460	Existing	25.95	468	0.89	YES	259°	1.04	YES				YES
					Proposed	23.22	468						25.95	0.89	YES	
													23.22			
	450	Residential	LKD	1461	Existing	28.47	469	0.91	YES	259°	1.04	YES				YES
					Proposed	25.82	469						28.47	0.91	YES	
													25.82			
Level 1B	451	Residential	LKD	1457	Existing	30.75	470	0.90	YES	259°	1.57	YES				YES
					Proposed	27.75	470						30.75	0.90	YES	
													27.75			
	452	Residential	LKD	1458	Existing	30.89	471	0.91	YES	259°	1.57	YES				YES
					Proposed	28.05	471						30.89	0.91	YES	
													28.05			
	453	Residential	Bedroom	1459	Existing	30.83	472	0.90	YES	259°	1.26	YES				YES
					Proposed	27.89	472						30.83	0.90	YES	
													27.89			
138 Granville Cl																
Level 0	454	Residential	Bedroom	1454	Existing	24.65	473	0.90	YES	259°	0.53	YES				YES
					Proposed	22.08	473						24.65	0.90	YES	
													22.08			
Level 1B	455	Residential	Bedroom	1456	Existing	30.08	474	0.91	YES	259°	0.61	YES				YES
					Proposed	27.38	474						30.08	0.91	YES	
													27.38			

No-Sky Line (NSL)

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Floor Ref.	Room Ref	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
Harrington Court								
Level 0	5	Bedroom	Area m2	8.95	7.92	7.92		
			% of room		88.55%	88.55%	1.00	YES
	6	LKD	Area m2	18.54	17.42	17.42		
			% of room		93.95%	93.95%	1.00	YES
	7	Bedroom	Area m2	11.64	8.68	8.68		
			% of room		74.52%	74.52%	1.00	YES
	8	LKD	Area m2	21.89	17.29	17.29		
			% of room		78.97%	78.97%	1.00	YES
	9	Bedroom	Area m2	14.27	10.64	10.64		
			% of room		74.54%	74.54%	1.00	YES
	10	LKD	Area m2	22.41	22.08	21.56		
			% of room		98.51%	96.22%	0.98	YES
	11	Bedroom	Area m2	10.46	9.07	5.92		
			% of room		86.72%	56.62%	0.65	NO
	12	LKD	Area m2	21.59	21.51	19.90		
			% of room		99.64%	92.17%	0.93	YES
	13	Bedroom	Area m2	10.46	9.25	4.63		
			% of room		88.43%	44.28%	0.50	NO
	14	LKD	Area m2	23.82	23.70	20.99		
			% of room		99.49%	88.11%	0.89	YES
	15	Bedroom	Area m2	11.80	10.69	5.63		
			% of room		90.58%	47.70%	0.53	NO
	16	Bedroom	Area m2	10.72	9.24	4.64		
			% of room		86.21%	43.31%	0.50	NO
Level 1B	43	LKD	Area m2	18.54	17.48	17.48		
			% of room		94.27%	94.27%	1.00	YES
	44	LKD	Area m2	21.89	17.67	17.67		
			% of room		80.72%	80.72%	1.00	YES
	45	Bedroom	Area m2	11.64	9.35	9.35		
			% of room		80.30%	80.30%	1.00	YES
	46	Bedroom	Area m2	8.95	8.34	8.34		
			% of room		93.22%	93.22%	1.00	YES
	47	Bedroom	Area m2	14.27	10.73	10.73		
			% of room		75.15%	75.15%	1.00	YES
Level 1A	29	LKD	Area m2	22.41	22.05	21.87		
			% of room		98.38%	97.58%	0.99	YES
	30	Bedroom	Area m2	10.46	9.19	5.91		
			% of room		87.82%	56.48%	0.64	NO
	31	LKD	Area m2	21.59	21.51	19.89		
			% of room		99.64%	92.12%	0.92	YES
	32	Bedroom	Area m2	10.46	9.36	4.84		
			% of room		89.53%	46.29%	0.52	NO
	33	LKD	Area m2	23.82	23.71	20.91		

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Floor Ref.	Room Ref	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
			% of room		99.53%	87.79%	0.88	YES
	34	Bedroom	Area m2	11.80	10.74	5.82		
			% of room		91.02%	49.33%	0.54	NO
	35	Bedroom	Area m2	10.72	9.30	4.84		
			% of room		86.78%	45.11%	0.52	NO
Level 2B	48	Bedroom	Area m2	8.95	8.57	8.56		
			% of room		95.73%	95.73%	1.00	YES
	49	LKD	Area m2	18.54	17.57	17.57		
			% of room		94.80%	94.80%	1.00	YES
	50	Bedroom	Area m2	11.64	9.62	9.62		
			% of room		82.61%	82.61%	1.00	YES
	51	LKD	Area m2	21.89	17.86	17.86		
			% of room		81.55%	81.55%	1.00	YES
	52	Bedroom	Area m2	14.27	10.87	10.87		
			% of room		76.20%	76.20%	1.00	YES
Level 2A	36	LKD	Area m2	22.41	21.30	21.22		
			% of room		95.04%	94.70%	1.00	YES
	37	Bedroom	Area m2	10.46	9.12	5.59		
			% of room		87.19%	53.42%	0.61	NO
	38	LKD	Area m2	21.59	20.09	18.51		
			% of room		93.04%	85.72%	0.92	YES
	39	Bedroom	Area m2	10.46	9.08	4.82		
			% of room		86.84%	46.11%	0.53	NO
	40	LKD	Area m2	23.82	22.26	19.56		
			% of room		93.44%	82.09%	0.88	YES
	41	Bedroom	Area m2	11.80	10.38	5.90		
			% of room		87.92%	49.95%	0.57	NO
	42	Bedroom	Area m2	10.72	9.19	5.01		
			% of room		85.75%	46.75%	0.55	NO
Level 3B	53	Bedroom	Area m2	8.95	8.65	8.59		
			% of room		96.70%	95.98%	0.99	YES
	54	LKD	Area m2	18.54	17.63	17.63		
			% of room		95.11%	95.11%	1.00	YES
	55	Bedroom	Area m2	11.64	9.69	9.69		
			% of room		83.22%	83.22%	1.00	YES
	56	LKD	Area m2	21.89	17.83	17.83		
			% of room		81.45%	81.45%	1.00	YES
	57	Bedroom	Area m2	14.27	11.06	11.06		
			% of room		77.48%	77.48%	1.00	YES
Level 4B	58	Bedroom	Area m2	8.95	8.67	8.59		
			% of room		96.91%	96.05%	0.99	YES
	59	LKD	Area m2	18.54	17.61	17.61		
			% of room		94.99%	94.99%	1.00	YES
	60	Bedroom	Area m2	11.64	9.80	9.80		
			% of room		84.14%	84.14%	1.00	YES
	61	LKD	Area m2	21.89	17.88	17.88		

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Floor Ref.	Room Ref	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
			% of room		81.67%	81.67%	1.00	YES
	62	Bedroom	Area m2	14.27	11.40	11.40		
			% of room		79.91%	79.91%	1.00	YES
13 Addiscombe Grove								
Level 0	201	Room	Area m2	8.94	6.83	5.67		
			% of room		76.34%	63.41%	0.83	YES
	202	LKD	Area m2	19.43	18.97	18.69		
			% of room		97.61%	96.16%	0.99	YES
	203	Room	Area m2	8.52	7.70	7.20		
			% of room		90.36%	84.51%	0.94	YES
Level 1B	409	Room	Area m2	7.80	6.42	5.44		
			% of room		82.35%	69.77%	0.85	YES
	410	Room	Area m2	7.74	6.23	6.00		
			% of room		80.43%	77.48%	0.96	YES
	411	Room	Area m2	5.99	5.09	4.21		
			% of room		84.98%	70.23%	0.83	YES
Christian Science Church								
Level 0	406	Room	Area m2	6.17	5.98	5.92		
			% of room		96.98%	95.94%	0.99	YES
	407	Room	Area m2	6.30	6.22	6.14		
			% of room		98.72%	97.56%	0.99	YES
	408	Room	Area m2	6.60	4.31	3.95		
			% of room		65.30%	59.88%	0.92	YES
Croydon Crown Court								
Level 0	334	Room	Area m2	10.84	7.45	9.43		
			% of room		68.69%	86.94%	1.27	YES
	335	Room	Area m2	9.91	6.06	6.23		
			% of room		61.13%	62.86%	1.03	YES
Level 1B	336	Room	Area m2	8.08	6.84	4.08		
			% of room		84.69%	50.46%	0.60	NO
	337	Room	Area m2	10.20	9.04	5.44		
			% of room		88.59%	53.35%	0.60	NO
	338	Room	Area m2	7.42	4.65	5.68		
			% of room		62.68%	76.55%	1.22	YES
	339	Room	Area m2	8.89	5.67	6.99		
			% of room		63.82%	78.65%	1.23	YES
	340	Room	Area m2	8.94	6.91	7.27		
			% of room		77.30%	81.31%	1.05	YES
	341	Room	Area m2	7.33	4.03	4.04		
			% of room		55.04%	55.07%	1.00	YES

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Floor Ref.	Room Ref	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
	342	Room	Area m2	8.56	7.09	7.05		
			% of room		82.83%	82.34%	0.99	YES
	343	Room	Area m2	10.21	9.30	9.30		
			% of room		91.09%	91.08%	1.00	YES
	344	Room	Area m2	10.83	8.86	9.40		
			% of room		81.86%	86.81%	1.06	YES
	345	Room	Area m2	10.45	10.17	10.17		
			% of room		97.38%	97.38%	1.00	YES
Level 2B	348	Room	Area m2	8.43	7.82	4.86		
			% of room		92.80%	57.64%	0.62	NO
	349	Room	Area m2	9.85	9.37	5.84		
			% of room		95.08%	59.27%	0.62	NO
	350	Room	Area m2	8.56	6.07	6.19		
			% of room		70.96%	72.30%	1.02	YES
	351	Room	Area m2	15.32	12.73	13.49		
			% of room		83.08%	88.07%	1.06	YES
	352	Room	Area m2	9.22	7.45	6.94		
			% of room		80.83%	75.27%	0.93	YES
	354	Room	Area m2	8.56	7.11	7.06		
			% of room		83.03%	82.56%	0.99	YES
	355	Room	Area m2	10.21	9.44	9.44		
			% of room		92.43%	92.42%	1.00	YES
	356	Room	Area m2	10.47	9.21	9.45		
			% of room		87.98%	90.27%	1.03	YES
	358	Room	Area m2	9.31	9.12	6.48		
			% of room		97.88%	69.53%	0.71	NO
	359	Room	Area m2	9.69	9.40	6.39		
			% of room		96.96%	65.89%	0.68	NO
	360	Room	Area m2	12.81	11.88	9.65		
			% of room		92.71%	75.33%	0.81	YES
	361	Room	Area m2	9.85	8.85	6.05		
			% of room		89.79%	61.44%	0.68	NO
	362	Room	Area m2	9.11	7.88	5.20		
			% of room		86.51%	57.02%	0.66	NO
	363	Room	Area m2	9.11	8.00	5.57		
			% of room		87.78%	61.13%	0.70	NO
	364	Room	Area m2	12.03	10.69	9.25		
			% of room		88.86%	76.89%	0.87	YES
	365	Room	Area m2	8.74	7.15	6.01		
			% of room		81.80%	68.73%	0.84	YES
	366	Room	Area m2	8.59	5.60	7.11		
			% of room		65.25%	82.81%	1.27	YES
	367	Room	Area m2	10.76	7.02	7.93		
			% of room		65.23%	73.73%	1.13	YES
	368	Room	Area m2	10.96	7.88	10.54		
			% of room		71.87%	96.19%	1.34	YES

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Floor Ref.	Room Ref	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
	369	Room	Area m2	11.48	8.80	10.10		
			% of room		76.64%	87.95%	1.15	YES
	370	Room	Area m2	11.33	9.48	9.70		
			% of room		83.68%	85.58%	1.02	YES
	371	Room	Area m2	12.91	12.58	12.49		
			% of room		97.41%	96.69%	0.99	YES
Level 3B	372	Room	Area m2	8.43	8.19	5.61		
			% of room		97.17%	66.53%	0.68	NO
	373	Room	Area m2	9.66	9.41	6.57		
			% of room		97.46%	68.00%	0.70	NO
	377	Room	Area m2	8.56	7.14	7.10		
			% of room		83.45%	82.99%	0.99	YES
	378	Room	Area m2	10.21	9.55	9.55		
			% of room		93.56%	93.56%	1.00	YES
	379	Room	Area m2	9.96	8.89	8.89		
			% of room		89.28%	89.28%	1.00	YES
	380	Room	Area m2	9.31	9.13	8.15		
			% of room		97.98%	87.56%	0.89	YES
	381	Room	Area m2	9.69	9.50	7.02		
			% of room		98.01%	72.48%	0.74	NO
	382	Room	Area m2	12.81	12.53	10.73		
			% of room		97.81%	83.74%	0.86	YES
	383	Room	Area m2	9.85	9.66	6.98		
			% of room		98.03%	70.81%	0.72	NO
	384	Room	Area m2	9.11	8.92	5.90		
			% of room		97.89%	64.79%	0.66	NO
	385	Room	Area m2	9.11	9.00	6.31		
			% of room		98.73%	69.21%	0.70	NO
	386	Room	Area m2	12.03	11.20	7.83		
			% of room		93.12%	65.06%	0.70	NO
	387	Room	Area m2	8.74	8.37	6.47		
			% of room		95.78%	74.00%	0.77	NO
	388	Room	Area m2	8.76	6.95	7.36		
			% of room		79.30%	84.00%	1.06	YES
	389	Room	Area m2	11.47	9.20	11.13		
			% of room		80.16%	97.06%	1.21	YES
	390	Room	Area m2	11.54	7.72	6.65		
			% of room		66.91%	57.60%	0.86	YES
	391	Room	Area m2	12.34	11.88	11.14		
			% of room		96.33%	90.28%	0.94	YES
	392	Room	Area m2	12.31	11.36	8.68		
			% of room		92.30%	70.49%	0.76	NO
	393	Room	Area m2	12.84	11.38	8.90		
			% of room		88.63%	69.34%	0.78	NO
	394	Room	Area m2	8.39	6.34	6.34		
			% of room		75.48%	75.48%	1.00	YES

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Floor Ref.	Room Ref	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
	395	Room	Area m2	10.30	9.15	8.72		
			% of room		88.79%	84.66%	0.95	YES
	396	Room	Area m2	7.22	6.98	5.68		
			% of room		96.69%	78.70%	0.81	YES
	397	Room	Area m2	8.94	7.29	7.29		
			% of room		81.59%	81.58%	1.00	YES
Level 4B	399	Room	Area m2	5.11	5.09	4.03		
			% of room		99.56%	78.88%	0.79	NO
	400	Room	Area m2	6.94	5.06	5.09		
			% of room		72.94%	73.35%	1.01	YES
	401	Room	Area m2	6.41	4.61	4.89		
			% of room		71.98%	76.24%	1.06	YES
	403	Room	Area m2	10.98	10.74	10.74		
			% of room		97.82%	97.82%	1.00	YES
	404	Room	Area m2	8.77	8.65	7.00		
			% of room		98.60%	79.77%	0.81	YES
	405	Room	Area m2	12.89	12.78	11.07		
			% of room		99.17%	85.89%	0.87	YES
Level 5B	414	Room	Area m2	8.75	7.70	8.68		
			% of room		88.03%	99.25%	1.13	YES
	415	Room	Area m2	8.87	7.56	8.68		
			% of room		85.25%	97.88%	1.15	YES
	416	Room	Area m2	6.85	4.81	5.17		
			% of room		70.19%	75.49%	1.08	YES
	417	Room	Area m2	6.57	4.01	4.50		
			% of room		60.97%	68.45%	1.12	YES
	418	Room	Area m2	5.74	3.49	4.32		
			% of room		60.90%	75.32%	1.24	YES
	419	Room	Area m2	9.09	5.87	7.56		
			% of room		64.58%	83.13%	1.29	YES
	420	Room	Area m2	5.46	2.76	1.77		
			% of room		50.51%	32.49%	0.64	NO
	421	Room	Area m2	8.52	5.38	7.10		
			% of room		63.12%	83.38%	1.32	YES
	422	Room	Area m2	9.04	5.56	5.95		
			% of room		61.51%	65.80%	1.07	YES
	423	Room	Area m2	4.19	2.82	1.78		
			% of room		67.23%	42.57%	0.63	NO
	424	Room	Area m2	3.92	2.66	1.63		
			% of room		67.89%	41.60%	0.61	NO
	425	Room	Area m2	8.49	6.76	4.57		
			% of room		79.61%	53.88%	0.68	NO
Latitude Apartment Croydon								
Level 0	69	LKD	Area m2	21.52	20.52	21.15		

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			% of room		95.39%	98.27%	1.03	YES
	70	Bedroom	Area m2	11.05	6.83	7.08		
			% of room		61.80%	64.12%	1.04	YES
	71	Bedroom	Area m2	14.79	6.85	5.87		
			% of room		46.32%	39.71%	0.86	YES
	72	Bedroom	Area m2	14.80	10.92	8.66		
			% of room		73.83%	58.50%	0.79	NO
	73	Bedroom	Area m2	14.92	12.68	10.22		
			% of room		85.01%	68.46%	0.81	YES
	74	LKD	Area m2	21.77	21.62	21.22		
			% of room		99.33%	97.48%	0.98	YES
	91	Bedroom	Area m2	8.10	6.57	7.89		
			% of room		81.18%	97.47%	1.20	YES
	92	Bedroom	Area m2	13.31	11.53	11.10		
			% of room		86.64%	83.36%	0.96	YES
	93	LKD	Area m2	24.81	13.28	19.89		
			% of room		53.53%	80.18%	1.50	YES
	94	LKD	Area m2	23.54	19.09	20.24		
			% of room		81.11%	86.00%	1.06	YES
	95	Bedroom	Area m2	13.31	11.65	11.17		
			% of room		87.50%	83.91%	0.96	YES
	96	Bedroom	Area m2	13.79	10.00	9.63		
			% of room		72.51%	69.79%	0.96	YES
	97	Bedroom	Area m2	12.89	9.31	8.50		
			% of room		72.20%	65.94%	0.91	YES
	98	Bedroom	Area m2	10.20	5.92	5.98		
			% of room		58.09%	58.61%	1.01	YES
	99	LKD	Area m2	26.85	8.06	7.43		
			% of room		30.01%	27.66%	0.92	YES
	100	Bedroom	Area m2	9.42	3.33	6.19		
			% of room		35.32%	65.74%	1.86	YES
	101	LKD	Area m2	26.21	7.32	10.38		
			% of room		27.95%	39.61%	1.42	YES
	102	LKD	Area m2	26.56	7.07	9.29		
			% of room		26.63%	34.98%	1.31	YES
	103	Bedroom	Area m2	10.95	3.70	4.13		
			% of room		33.80%	37.71%	1.12	YES
	104	Bedroom	Area m2	11.90	4.29	5.29		
			% of room		36.02%	44.48%	1.23	YES
	105	LKD	Area m2	24.74	5.93	13.41		
			% of room		23.96%	54.20%	2.26	YES
	106	LKD	Area m2	22.19	7.67	14.18		
			% of room		34.55%	63.91%	1.85	YES
	107	Bedroom	Area m2	13.97	7.59	8.15		
			% of room		54.33%	58.31%	1.07	YES
	108	Bedroom	Area m2	13.12	8.14	8.17		

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Floor Ref.	Room Ref	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
			% of room		62.05%	62.30%	1.00	YES
	109	LKD	Area m2	22.52	9.47	11.34		
			% of room		42.03%	50.36%	1.20	YES
	110	LKD	Area m2	59.45	13.09	18.10		
			% of room		22.02%	30.45%	1.38	YES
	432	LKD	Area m2	20.55	20.28	20.30		
			% of room		98.66%	98.79%	1.00	YES
Level 1C	63	LKD	Area m2	21.52	19.58	21.10		
			% of room		90.98%	98.04%	1.08	YES
	64	Bedroom	Area m2	11.05	8.39	7.56		
			% of room		75.92%	68.41%	0.90	YES
	65	Bedroom	Area m2	14.79	8.68	6.25		
			% of room		58.68%	42.24%	0.72	NO
	66	Bedroom	Area m2	14.80	11.15	8.73		
			% of room		75.35%	58.99%	0.78	NO
	67	Bedroom	Area m2	14.92	13.22	10.39		
			% of room		88.60%	69.66%	0.79	NO
	68	LKD	Area m2	21.77	21.59	21.09		
			% of room		99.16%	96.87%	0.98	YES
	111	Bedroom	Area m2	8.10	8.07	8.04		
			% of room		99.70%	99.33%	1.00	YES
	112	Bedroom	Area m2	13.31	12.87	11.62		
			% of room		96.73%	87.27%	0.90	YES
	113	LKD	Area m2	24.81	19.73	20.44		
			% of room		79.52%	82.39%	1.04	YES
	114	LKD	Area m2	23.54	21.86	20.79		
			% of room		92.85%	88.33%	0.95	YES
	115	Bedroom	Area m2	13.31	12.87	12.03		
			% of room		96.68%	90.42%	0.94	YES
	116	Bedroom	Area m2	13.79	10.46	10.27		
			% of room		75.86%	74.48%	0.98	YES
	117	Bedroom	Area m2	12.16	9.53	8.32		
			% of room		78.37%	68.42%	0.87	YES
	118	Bedroom	Area m2	9.80	6.03	5.88		
			% of room		61.59%	60.04%	0.97	YES
	119	LKD	Area m2	25.38	8.29	7.71		
			% of room		32.65%	30.36%	0.93	YES
	120	Bedroom	Area m2	9.42	7.03	6.46		
			% of room		74.67%	68.61%	0.92	YES
	121	LKD	Area m2	26.21	14.43	11.67		
			% of room		55.08%	44.54%	0.81	YES
	122	LKD	Area m2	24.05	14.89	10.54		
			% of room		61.94%	43.83%	0.71	NO
	123	Bedroom	Area m2	10.95	7.96	4.96		
			% of room		72.69%	45.30%	0.62	NO
	124	Bedroom	Area m2	11.90	8.84	6.50		

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			% of room		74.29%	54.59%	0.73	NO
	125	LKD	Area m2	24.74	11.11	14.37		
			% of room		44.91%	58.10%	1.29	YES
	126	LKD	Area m2	22.19	12.26	14.67		
			% of room		55.26%	66.14%	1.20	YES
	127	Bedroom	Area m2	13.97	9.62	8.92		
			% of room		68.88%	63.83%	0.93	YES
	128	Bedroom	Area m2	13.12	9.28	8.71		
			% of room		70.72%	66.38%	0.94	YES
	129	LKD	Area m2	22.52	10.78	11.75		
			% of room		47.88%	52.19%	1.09	YES
	204	Bedroom	Area m2	14.15	10.35	10.35		
			% of room		73.16%	73.16%	1.00	YES
	205	Bedroom	Area m2	16.49	13.22	13.22		
			% of room		80.17%	80.17%	1.00	YES
	206	Bedroom	Area m2	14.14	6.54	8.84		
			% of room		46.26%	62.53%	1.35	YES
	207	Bedroom	Area m2	11.01	6.18	6.22		
			% of room		56.11%	56.47%	1.01	YES
	208	LKD	Area m2	23.12	17.47	17.33		
			% of room		75.53%	74.94%	0.99	YES
	209	LKD	Area m2	35.95	16.12	17.17		
			% of room		44.83%	47.75%	1.07	YES
	433	LKD	Area m2	21.23	21.00	21.03		
			% of room		98.94%	99.08%	1.00	YES
Level 2C	75	LKD	Area m2	21.52	N/R	N/R		
			% of room		N/A	N/A	1.00	N/A
	76	Bedroom	Area m2	11.05	9.38	8.06		
			% of room		84.87%	72.91%	0.86	YES
	77	Bedroom	Area m2	14.79	10.27	6.51		
			% of room		69.46%	44.00%	0.63	NO
	78	Bedroom	Area m2	14.84	11.59	8.82		
			% of room		78.14%	59.42%	0.76	NO
	79	Bedroom	Area m2	14.88	13.33	10.50		
			% of room		89.60%	70.54%	0.79	NO
	80	LKD	Area m2	21.77	21.65	21.14		
			% of room		99.47%	97.12%	0.98	YES
	130	Bedroom	Area m2	8.10	8.07	8.07		
			% of room		99.72%	99.68%	1.00	YES
	131	Bedroom	Area m2	13.31	12.99	12.11		
			% of room		97.60%	90.95%	0.93	YES
	132	LKD	Area m2	24.81	24.73	20.91		
			% of room		99.68%	84.28%	0.85	YES
	133	LKD	Area m2	23.54	23.51	21.13		
			% of room		99.89%	89.75%	0.90	YES
	134	Bedroom	Area m2	13.31	13.00	12.45		

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			% of room		97.66%	93.57%	0.96	YES
	135	Bedroom	Area m2	13.82	11.51	11.45		
			% of room		83.34%	82.90%	0.99	YES
	136	Bedroom	Area m2	12.16	10.04	8.74		
			% of room		82.56%	71.85%	0.87	YES
	137	Bedroom	Area m2	9.80	6.35	6.14		
			% of room		64.79%	62.69%	0.97	YES
	138	LKD	Area m2	25.38	8.70	8.09		
			% of room		34.26%	31.88%	0.93	YES
	139	Bedroom	Area m2	9.84	8.79	7.10		
			% of room		89.36%	72.11%	0.81	YES
	140	LKD	Area m2	26.92	17.93	13.23		
			% of room		66.63%	49.15%	0.74	NO
	141	LKD	Area m2	24.82	17.48	12.01		
			% of room		70.43%	48.37%	0.69	NO
	142	Bedroom	Area m2	11.45	9.91	6.09		
			% of room		86.54%	53.19%	0.61	NO
	143	Bedroom	Area m2	12.46	10.58	7.86		
			% of room		84.94%	63.09%	0.74	NO
	144	LKD	Area m2	25.31	13.80	15.31		
			% of room		54.52%	60.49%	1.11	YES
	145	LKD	Area m2	22.82	15.21	15.76		
			% of room		66.65%	69.08%	1.04	YES
	146	Bedroom	Area m2	14.53	11.27	10.02		
			% of room		77.58%	68.96%	0.89	YES
	147	Bedroom	Area m2	13.64	10.65	9.65		
			% of room		78.06%	70.72%	0.91	YES
	148	LKD	Area m2	23.09	11.94	12.51		
			% of room		51.73%	54.17%	1.05	YES
	210	Bedroom	Area m2	13.94	10.52	10.52		
			% of room		75.45%	75.45%	1.00	YES
	211	Bedroom	Area m2	16.49	13.28	13.28		
			% of room		80.53%	80.53%	1.00	YES
	212	Bedroom	Area m2	14.19	6.60	8.89		
			% of room		46.52%	62.61%	1.35	YES
	213	Bedroom	Area m2	10.78	6.12	6.19		
			% of room		56.82%	57.42%	1.01	YES
	214	LKD	Area m2	23.03	21.64	21.57		
			% of room		93.99%	93.64%	1.00	YES
	215	LKD	Area m2	34.24	16.45	17.78		
			% of room		48.03%	51.93%	1.08	YES
	434	LKD	Area m2	21.23	21.04	21.07		
			% of room		99.13%	99.25%	1.00	YES
Level 3C	81	LKD	Area m2	21.52	21.32	21.32		
			% of room		99.06%	99.06%	1.00	YES
	82	Bedroom	Area m2	11.05	10.69	8.68		

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Floor Ref.	Room Ref	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
			% of room		96.74%	78.51%	0.81	YES
	83	Bedroom	Area m2	14.79	12.57	6.81		
			% of room		84.97%	46.04%	0.54	NO
	84	Bedroom	Area m2	14.80	12.67	8.99		
			% of room		85.65%	60.74%	0.71	NO
	85	Bedroom	Area m2	14.92	13.43	10.80		
			% of room		90.01%	72.37%	0.80	YES
	86	LKD	Area m2	21.77	21.65	21.16		
			% of room		99.44%	97.22%	0.98	YES
	149	Bedroom	Area m2	8.10	8.07	8.07		
			% of room		99.73%	99.72%	1.00	YES
	150	Bedroom	Area m2	13.31	13.06	12.53		
			% of room		98.10%	94.14%	0.96	YES
	151	LKD	Area m2	24.81	24.77	21.49		
			% of room		99.84%	86.64%	0.87	YES
	152	LKD	Area m2	23.54	23.52	21.43		
			% of room		99.92%	91.04%	0.91	YES
	153	Bedroom	Area m2	13.31	13.02	12.67		
			% of room		97.84%	95.22%	0.97	YES
	154	Bedroom	Area m2	13.79	13.35	13.29		
			% of room		96.81%	96.36%	1.00	YES
	155	Bedroom	Area m2	12.16	11.00	9.56		
			% of room		90.43%	78.62%	0.87	YES
	156	Bedroom	Area m2	9.80	6.96	6.66		
			% of room		71.05%	67.98%	0.96	YES
	157	LKD	Area m2	25.38	9.53	8.57		
			% of room		37.56%	33.76%	0.90	YES
	158	Bedroom	Area m2	9.84	9.37	7.83		
			% of room		95.24%	79.57%	0.84	YES
	159	LKD	Area m2	26.92	22.89	15.79		
			% of room		85.05%	58.66%	0.69	NO
	160	LKD	Area m2	24.82	20.04	14.11		
			% of room		80.75%	56.85%	0.70	NO
	161	Bedroom	Area m2	11.45	10.71	7.43		
			% of room		93.52%	64.83%	0.69	NO
	162	Bedroom	Area m2	12.46	11.83	9.43		
			% of room		94.93%	75.71%	0.80	YES
	163	LKD	Area m2	25.31	18.07	16.56		
			% of room		71.38%	65.44%	0.92	YES
	164	LKD	Area m2	22.82	19.07	16.94		
			% of room		83.57%	74.24%	0.89	YES
	165	Bedroom	Area m2	14.53	13.27	11.22		
			% of room		91.35%	77.23%	0.85	YES
	166	Bedroom	Area m2	13.64	12.32	10.72		
			% of room		90.26%	78.59%	0.87	YES
	167	LKD	Area m2	23.09	13.53	13.18		

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Floor Ref.	Room Ref	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
			% of room		58.57%	57.07%	0.97	YES
	216	Bedroom	Area m2	13.94	10.58	10.58		
			% of room		75.86%	75.86%	1.00	YES
	217	Bedroom	Area m2	16.49	13.36	13.36		
			% of room		81.02%	81.02%	1.00	YES
	218	Bedroom	Area m2	14.23	6.78	8.98		
			% of room		47.68%	63.11%	1.32	YES
	219	Bedroom	Area m2	10.78	6.18	6.24		
			% of room		57.30%	57.90%	1.01	YES
	220	LKD	Area m2	23.03	21.70	21.62		
			% of room		94.24%	93.89%	1.00	YES
	221	LKD	Area m2	34.24	16.79	17.92		
			% of room		49.04%	52.33%	1.07	YES
	435	LKD	Area m2	21.23	20.95	20.96		
			% of room		98.67%	98.72%	1.00	YES
Level 4C	87	LKD	Area m2	22.17	21.95	21.40		
			% of room		98.99%	96.50%	0.97	YES
	88	Bedroom	Area m2	12.66	11.02	8.59		
			% of room		87.07%	67.82%	0.78	NO
	89	Bedroom	Area m2	11.30	11.19	4.96		
			% of room		99.08%	43.86%	0.44	NO
	90	LKD	Area m2	21.94	21.65	21.56		
			% of room		98.66%	98.25%	1.00	YES
	168	Bedroom	Area m2	8.10	8.07	8.07		
			% of room		99.73%	99.73%	1.00	YES
	169	Bedroom	Area m2	13.31	13.07	12.78		
			% of room		98.22%	96.02%	0.98	YES
	170	LKD	Area m2	24.81	24.77	21.93		
			% of room		99.85%	88.38%	0.89	YES
	171	LKD	Area m2	23.54	23.52	21.72		
			% of room		99.93%	92.26%	0.92	YES
	172	Bedroom	Area m2	13.31	13.03	12.73		
			% of room		97.87%	95.67%	0.98	YES
	173	Bedroom	Area m2	13.29	12.91	12.88		
			% of room		97.18%	96.95%	1.00	YES
	174	Bedroom	Area m2	12.16	11.76	10.82		
			% of room		96.73%	89.02%	0.92	YES
	175	Bedroom	Area m2	9.80	7.88	7.44		
			% of room		80.40%	75.89%	0.94	YES
	176	LKD	Area m2	25.38	10.97	9.18		
			% of room		43.22%	36.18%	0.84	YES
	222	Bedroom	Area m2	13.94	10.63	10.63		
			% of room		76.24%	76.24%	1.00	YES
	223	Bedroom	Area m2	16.49	13.42	13.42		
			% of room		81.40%	81.40%	1.00	YES
	224	Bedroom	Area m2	14.19	7.07	9.10		

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Floor Ref.	Room Ref	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
			% of room		49.83%	64.12%	1.29	YES
	225	Bedroom	Area m2	10.78	6.30	6.35		
			% of room		58.47%	58.96%	1.01	YES
	226	LKD	Area m2	23.03	21.74	21.66		
			% of room		94.38%	94.04%	1.00	YES
	227	LKD	Area m2	34.24	17.37	18.07		
			% of room		50.73%	52.78%	1.04	YES
	436	LKD	Area m2	22.01	21.79	21.61		
			% of room		98.98%	98.17%	0.99	YES
Level 5C	192	LKD	Area m2	25.71	13.28	10.41		
			% of room		51.64%	40.49%	0.78	NO
	193	Bedroom	Area m2	15.33	12.62	8.79		
			% of room		82.31%	57.32%	0.70	NO
	194	Bedroom	Area m2	12.16	11.88	11.86		
			% of room		97.73%	97.49%	1.00	YES
	195	Bedroom	Area m2	8.89	8.87	8.86		
			% of room		99.76%	99.64%	1.00	YES
	196	Bedroom	Area m2	14.11	13.84	13.64		
			% of room		98.11%	96.64%	0.98	YES
	197	Bedroom	Area m2	14.11	13.72	13.12		
			% of room		97.21%	93.02%	0.96	YES
	198	Bedroom	Area m2	14.09	13.76	13.73		
			% of room		97.65%	97.44%	1.00	YES
	199	LKD	Area m2	24.81	24.77	22.47		
			% of room		99.86%	90.56%	0.91	YES
	200	LKD	Area m2	23.54	23.52	22.05		
			% of room		99.93%	93.66%	0.94	YES
	228	Bedroom	Area m2	13.94	10.69	10.69		
			% of room		76.70%	76.70%	1.00	YES
	229	Bedroom	Area m2	16.49	13.56	13.56		
			% of room		82.24%	82.24%	1.00	YES
	230	Bedroom	Area m2	14.19	8.12	9.36		
			% of room		57.20%	65.98%	1.15	YES
	231	Bedroom	Area m2	10.79	6.64	6.65		
			% of room		61.58%	61.63%	1.00	YES
	232	LKD	Area m2	23.03	21.75	21.67		
			% of room		94.46%	94.11%	1.00	YES
	233	LKD	Area m2	34.24	18.94	18.49		
			% of room		55.32%	54.00%	0.98	YES
Level 6C	187	LKD	Area m2	26.85	20.05	12.91		
			% of room		74.68%	48.08%	0.64	NO
	188	Bedroom	Area m2	16.48	15.77	11.51		
			% of room		95.70%	69.86%	0.73	NO
	189	Bedroom	Area m2	12.89	12.61	12.58		
			% of room		97.82%	97.57%	1.00	YES
	190	Bedroom	Area m2	8.89	8.87	8.87		

Appendix B -Sunlight Assessment: Impact on the surrounding buildings

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Floor Ref.	Room Ref.	Room Use	Window Ref.	Window Orientation	Annual	Pr/Ex	Meets BRE Criteria	Winter	Pr/Ex	Meets BRE Criteria	Total Suns per Room Annual	Pr/Ex	Meets BRE Criteria	Total Suns per Room Winter	Pr/Ex	Meets BRE Criteria
Harrington Court																
Level 0	5	Bedroom	502	86°N	14.00 14.00	1.00	YES	0.00 0.00	1.00	YES						
											14.00 14.00	1.00	YES	0.00 0.00	1.00	YES
	6	LKD	221	266°	19.00 19.00	1.00	YES	5.00 5.00	1.00	YES						
			231	266°	20.00 20.00	1.00	YES	5.00 5.00	1.00	YES						
											20.00 20.00	1.00	YES	5.00 5.00	1.00	YES
	7	Bedroom	211	266°	20.00 20.00	1.00	YES	5.00 5.00	1.00	YES						
											20.00 20.00	1.00	YES	5.00 5.00	1.00	YES
	8	LKD	201	266°	20.00 20.00	1.00	YES	5.00 5.00	1.00	YES						
											20.00 20.00	1.00	YES	5.00 5.00	1.00	YES
	9	Bedroom	482	86°N	5.00 5.00	1.00	YES	0.00 0.00	1.00	YES						
											5.00 5.00	1.00	YES	0.00 0.00	1.00	YES
	10	LKD	189	265°	23.00 23.00	1.00	YES	6.00 6.00	1.00	YES						
			191	265°	23.00 23.00	1.00	YES	6.00 6.00	1.00	YES						
			193	265°	23.00 23.00	1.00	YES	6.00 6.00	1.00	YES						
			496	176°	53.00 33.00	0.62	YES	15.00 9.00	0.60	YES						
											60.00 40.00	0.67	YES	16.00 10.00	0.63	YES
	11	Bedroom	498	176°	52.00 32.00	0.62	YES	14.00 8.00	0.57	YES						
											52.00 32.00	0.62	YES	14.00 8.00	0.57	YES
	12	LKD	500	176°	53.00 32.00	0.60	YES	15.00 7.00	0.47	YES						
			512	176°	54.00 32.00	0.59	YES	16.00 7.00	0.44	YES						
			514	176°	55.00 32.00	0.58	YES	17.00 8.00	0.47	YES						
											55.00 34.00	0.62	YES	17.00 8.00	0.47	YES
	13	Bedroom	522	176°	53.00 31.00	0.58	YES	15.00 7.00	0.47	YES						
											53.00 31.00	0.58	YES	15.00 7.00	0.47	YES
	14	LKD	516	176°	53.00 29.00	0.55	YES	15.00 6.00	0.40	YES						
			518	176°	52.00 30.00	0.58	YES	14.00 6.00	0.43	YES						
			520	176°	53.00 30.00	0.57	YES	15.00 6.00	0.40	YES						
											55.00 30.00	0.55	YES	17.00 6.00	0.35	YES
	15	Bedroom	524	176°	55.00 31.00	0.56	YES	17.00 6.00	0.35	YES						
											55.00 31.00	0.56	YES	17.00 6.00	0.35	YES
	16	Bedroom	526	176°	54.00 32.00	0.59	YES	16.00 7.00	0.44	YES						
											54.00 32.00	0.59	YES	16.00 7.00	0.44	YES
Level 1B	43	LKD	578	266°	19.00 19.00	1.00	YES	5.00 5.00	1.00	YES						
			580	266°	20.00 20.00	1.00	YES	5.00 5.00	1.00	YES						
											20.00 20.00	1.00	YES	5.00 5.00	1.00	YES
	44	LKD	574	266°	22.00 22.00	1.00	YES	7.00 7.00	1.00	YES						
											22.00 22.00	1.00	YES	7.00 7.00	1.00	YES
	45	Bedroom	576	266°	21.00 21.00	1.00	YES	6.00 6.00	1.00	YES						
											21.00 21.00	1.00	YES	6.00 6.00	1.00	YES
	46	Bedroom	680	86°N	14.00 14.00	1.00	YES	0.00 0.00	1.00	YES						
											14.00 14.00	1.00	YES	0.00 0.00	1.00	YES
	47	Bedroom	678	86°N	5.00 5.00	1.00	YES	0.00 0.00	1.00	YES						
											5.00 5.00	1.00	YES	0.00 0.00	1.00	YES
Level 1A	29	LKD	103	176°	55.00 33.00	0.60	YES	17.00 9.00	0.53	YES						
			646	265°	24.00 24.00	1.00	YES	7.00 7.00	1.00	YES						
			648	265°	25.00	1.00	YES	7.00	1.00	YES						

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					25.00			7.00								
			650	265°	25.00	1.00	YES	7.00	1.00	YES						
					25.00			7.00								
											64.00			19.00		
	30	Bedroom	105	176°	54.00	0.59	YES	16.00	0.50	YES	42.00	0.66	YES	11.00	0.58	YES
					32.00			8.00								
											54.00			16.00		
	31	LKD	117	176°	54.00	0.59	YES	16.00	0.44	YES	32.00	0.59	YES	8.00	0.50	YES
					32.00			7.00								
			119	176°	56.00	0.59	YES	18.00	0.44	YES						
					33.00			8.00								
			121	176°	57.00	0.58	YES	19.00	0.47	YES						
					33.00			9.00								
											57.00			19.00		
	32	Bedroom	169	176°	56.00	0.57	YES	18.00	0.44	YES	35.00	0.61	YES	9.00	0.47	YES
					32.00			8.00								
											56.00			18.00		
	33	LKD	155	176°	55.00	0.55	YES	17.00	0.41	YES	32.00	0.57	YES	8.00	0.44	YES
					30.00			7.00								
			157	176°	55.00	0.56	YES	17.00	0.41	YES						
					31.00			7.00								
			159	176°	56.00	0.55	YES	18.00	0.39	YES						
					31.00			7.00								
											57.00			19.00		
	34	Bedroom	173	176°	57.00	0.56	YES	19.00	0.32	YES	31.00	0.54	YES	7.00	0.37	YES
					32.00			6.00								
											57.00			19.00		
	35	Bedroom	179	176°	56.00	0.59	YES	18.00	0.39	YES	32.00	0.56	YES	6.00	0.32	YES
					33.00			7.00								
											56.00			18.00		
											33.00	0.59	YES	7.00	0.39	YES
Level 2B	48	Bedroom	704	86°N	17.00	1.00	YES	3.00	1.00	YES						
					17.00			3.00								
											17.00			3.00		
	49	LKD	554	266°	22.00	1.00	YES	7.00	1.00	YES	17.00	1.00	YES	3.00	1.00	YES
					22.00			7.00								
			556	266°	23.00	1.00	YES	7.00	1.00	YES						
					23.00			7.00								
											23.00			7.00		
	50	Bedroom	552	266°	23.00	1.00	YES	7.00	1.00	YES	23.00	1.00	YES	7.00	1.00	YES
					23.00			7.00								
											23.00			7.00		
	51	LKD	550	266°	23.00	1.00	YES	7.00	1.00	YES	23.00	1.00	YES	7.00	1.00	YES
					23.00			7.00								
											23.00			7.00		
	52	Bedroom	702	86°N	8.00	1.00	YES	0.00	1.00	YES	23.00	1.00	YES	7.00	1.00	YES
					8.00			0.00								
											8.00			0.00		
											8.00	1.00	YES	0.00	1.00	YES
Level 2A	36	LKD	528	176°	40.00	0.58	NO	20.00	0.55	YES						
					23.00			11.00								
			664	265°	22.00	1.00	YES	8.00	1.00	YES						
					22.00			8.00								
			666	265°	22.00	1.00	YES	8.00	1.00	YES						
					22.00			8.00								
			668	265°	22.00	1.00	YES	8.00	1.00	YES						
					22.00			8.00								
											53.00			22.00		
	37	Bedroom	530	176°	39.00	0.54	NO	19.00	0.47	YES	36.00	0.68	YES	13.00	0.59	YES
					21.00			9.00								
											39.00			19.00		
	38	LKD	532	176°	39.00	0.54	NO	19.00	0.42	YES	21.00	0.54	NO	9.00	0.47	YES
					21.00			8.00								
			534	176°	40.00	0.53	NO	20.00	0.40	YES						
					21.00			8.00								
			536	176°	39.00	0.54	NO	19.00	0.42	YES						
					21.00			8.00								
											40.00			20.00		
	39	Bedroom	544	176°	39.00	0.56	NO	19.00	0.47	YES	22.00	0.55	NO	9.00	0.45	YES
					22.00			9.00								
											39.00			19.00		
	40	LKD	538	176°	39.00	0.51	NO	19.00	0.42	YES	22.00	0.56	NO	9.00	0.47	YES
					20.00			8.00								
			540	176°	40.00	0.50	NO	20.00	0.40	YES						
					20.00			8.00								
			542	176°	41.00	0.51	NO	21.00	0.43	YES						
					21.00			9.00								
											42.00			22.00		
	41	Bedroom	546	176°	41.00	0.51	NO	21.00	0.38	YES	21.00	0.50	NO	9.00	0.41	YES

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					21.00			8.00								
											41.00			21.00		
	42	Bedroom	548	176°	40.00	0.55	NO	20.00	0.40	YES	21.00	0.51	NO	8.00	0.38	YES
					22.00			8.00								
											40.00			20.00		
											22.00	0.55	NO	8.00	0.40	YES
Level 3B	53	Bedroom	712	86°N	19.00	1.00	YES	5.00	1.00	YES						
					19.00			5.00								
											19.00			5.00		
											19.00	1.00	YES	5.00	1.00	YES
	54	LKD	594	266°	24.00	1.00	YES	7.00	1.00	YES						
					24.00			7.00								
			596	266°	24.00	1.00	YES	7.00	1.00	YES						
					24.00			7.00								
											24.00			7.00		
											24.00	1.00	YES	7.00	1.00	YES
	55	Bedroom	592	266°	23.00	1.00	YES	7.00	1.00	YES						
					23.00			7.00								
											23.00			7.00		
											23.00	1.00	YES	7.00	1.00	YES
	56	LKD	590	266°	24.00	1.00	YES	8.00	1.00	YES						
					24.00			8.00								
											24.00			8.00		
											24.00	1.00	YES	8.00	1.00	YES
	57	Bedroom	710	86°N	13.00	1.00	YES	1.00	1.00	YES						
					13.00			1.00								
											13.00			1.00		
											13.00	1.00	YES	1.00	1.00	YES
Level 4B	58	Bedroom	684	86°N	20.00	1.00	YES	6.00	1.00	YES						
					20.00			6.00								
											20.00			6.00		
											20.00	1.00	YES	6.00	1.00	YES
	59	LKD	562	266°	24.00	1.00	YES	7.00	1.00	YES						
					24.00			7.00								
			564	266°	25.00	1.00	YES	7.00	1.00	YES						
					25.00			7.00								
											25.00			7.00		
											25.00	1.00	YES	7.00	1.00	YES
	60	Bedroom	560	266°	24.00	1.00	YES	7.00	1.00	YES						
					24.00			7.00								
											24.00			7.00		
											24.00	1.00	YES	7.00	1.00	YES
	61	LKD	558	266°	25.00	1.00	YES	8.00	1.00	YES						
					25.00			8.00								
											25.00			8.00		
											25.00	1.00	YES	8.00	1.00	YES
	62	Bedroom	682	86°N	14.00	1.00	YES	2.00	1.00	YES						
					14.00			2.00								
											14.00			2.00		
											14.00	1.00	YES	2.00	1.00	YES
13 Addiscombe Grove																
Level 0	201	Room	884	263°	8.00	0.88	YES	2.00	1.00	YES						
					7.00			2.00								
											8.00			2.00		
											7.00	0.88	YES	2.00	1.00	YES
	202	LKD	875	175°	30.00	0.67	NO	8.00	0.63	YES						
					20.00			5.00								
			882	261°	26.00	0.35	NO	5.00	0.40	NO						
					9.00			2.00								
			883	263°	24.00	0.29	NO	3.00	0.33	NO						
					7.00			1.00								
			885	351°N	0.00	1.00	YES	0.00	1.00	YES						
					0.00			0.00								
											48.00			11.00		
											29.00	0.60	YES	7.00	0.64	YES
	203	Room	876	263°	15.00	0.47	NO	1.00	1.00	YES						
					7.00			1.00								
			877	263°	15.00	0.47	NO	1.00	1.00	YES						
					7.00			1.00								
											15.00			1.00		
											7.00	0.47	NO	1.00	1.00	YES
Level 1B	409	Room	881	263°	17.00	0.47	NO	3.00	0.67	NO						
					8.00			2.00								
											17.00			3.00		
											8.00	0.47	NO	2.00	0.67	NO
	410	Room	879	263°	19.00	0.53	NO	3.00	0.67	NO						
					10.00			2.00								
											19.00			3.00		
											10.00	0.53	NO	2.00	0.67	NO
	411	Room	878	263°	16.00	0.44	NO	1.00	1.00	YES						
					7.00			1.00								
											16.00			1.00		
											7.00	0.44	NO	1.00	1.00	YES
Christian Science Church																
Level 0	406	Room	1430	87°N	23.00	0.52	NO	2.00	0.00	NO						
					12.00			0.00								
											23.00			2.00		
											12.00	0.52	NO	0.00	0.00	NO
	407	Room	1429	87°N	22.00	0.50	NO	0.00	1.00	YES						

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					11.00			0.00								
											22.00			0.00		
	408	Room	240	177°	34.00	0.85	YES	10.00	1.00	YES	11.00	0.50	NO	0.00	1.00	YES
					29.00			10.00								
											34.00			10.00		
											29.00	0.85	YES	10.00	1.00	YES
				Croydon Crown Court												
Level 0	334	Room	1279	90°N	15.00	1.07	YES	1.00	1.00	YES						
					16.00			1.00								
											15.00			1.00		
	335	Room	1278	90°N	14.00	0.86	YES	0.00	1.00	YES	16.00	1.07	YES	1.00	1.00	YES
					12.00			0.00								
											14.00			0.00		
											12.00	0.86	YES	0.00	1.00	YES
Level 1B	336	Room	1286	45°N	4.00	0.75	YES	0.00	1.00	YES						
					3.00			0.00								
											4.00			0.00		
	337	Room	1285	45°N	4.00	1.00	YES	0.00	1.00	YES	3.00	0.75	YES	0.00	1.00	YES
					4.00			0.00								
											4.00			0.00		
	338	Room	1284	91°	13.00	1.00	YES	4.00	1.00	YES	4.00	1.00	YES	0.00	1.00	YES
					13.00			4.00								
											13.00			4.00		
	339	Room	1283	91°	15.00	1.07	YES	4.00	1.00	YES	13.00	1.00	YES	4.00	1.00	YES
					16.00			4.00								
											15.00			4.00		
	340	Room	1282	91°	13.00	1.15	YES	3.00	1.00	YES	16.00	1.07	YES	4.00	1.00	YES
					15.00			3.00								
											13.00			3.00		
	341	Room	1281	91°	0.00	∞	YES	0.00	1.00	YES	15.00	1.15	YES	3.00	1.00	YES
					2.00			0.00								
											0.00			0.00		
	342	Room	1280	91°	22.00	1.00	YES	6.00	1.00	YES	2.00	∞	YES	0.00	1.00	YES
					22.00			6.00								
											22.00			6.00		
	343	Room	1305	137°	44.00	1.00	YES	17.00	1.00	YES	22.00	1.00	YES	6.00	1.00	YES
					44.00			17.00								
											44.00			17.00		
	344	Room	1362	88°N	25.00	1.00	YES	5.00	1.00	YES	44.00	1.00	YES	17.00	1.00	YES
					25.00			5.00								
											25.00			5.00		
	345	Room	1361	130°	49.00	1.00	YES	18.00	1.00	YES	25.00	1.00	YES	5.00	1.00	YES
					49.00			18.00								
											49.00			18.00		
Level 2B	348	Room	1299	45°N	5.00	0.60	YES	0.00	1.00	YES	49.00	1.00	YES	18.00	1.00	YES
					3.00			0.00								
											5.00			0.00		
	349	Room	1298	45°N	5.00	0.80	YES	0.00	1.00	YES	3.00	0.60	YES	0.00	1.00	YES
					4.00			0.00								
											5.00			0.00		
	350	Room	1294	91°	14.00	1.00	YES	5.00	1.00	YES	4.00	0.80	YES	0.00	1.00	YES
					14.00			5.00								
											14.00			5.00		
	351	Room	1292	91°	16.00	1.13	YES	5.00	1.00	YES	14.00	1.00	YES	5.00	1.00	YES
					18.00			5.00								
											16.00			5.00		
	352	Room	1293	91°	6.00	1.17	YES	1.00	1.00	YES	18.00	1.13	YES	5.00	1.00	YES
					7.00			1.00								
											6.00			1.00		
	354	Room	1290	91°	22.00	1.00	YES	6.00	1.00	YES	7.00	1.17	YES	1.00	1.00	YES
					22.00			6.00								
											22.00			6.00		
	355	Room	1306	137°	46.00	1.00	YES	19.00	1.00	YES	22.00	1.00	YES	6.00	1.00	YES
					46.00			19.00								
											46.00			19.00		
	356	Room	1304	91°	28.00	1.00	YES	6.00	1.00	YES	46.00	1.00	YES	19.00	1.00	YES
					28.00			6.00								
											28.00			6.00		
	358	Room	1359	43°N	5.00	0.80	YES	0.00	1.00	YES	28.00	1.00	YES	6.00	1.00	YES
					4.00			0.00								
											5.00			0.00		
											4.00	0.80	YES	0.00	1.00	YES

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	359	Room	1316	43°N	5.00 2.00	0.40	YES	0.00 0.00	1.00	YES	5.00 2.00	0.40	YES	0.00 0.00	1.00	YES
	360	Room	1312	91°	8.00 6.00	0.75	YES	0.00 0.00	1.00	YES	8.00 6.00	0.75	YES	0.00 0.00	1.00	YES
	361	Room	1318	91°	14.00 12.00	0.86	YES	1.00 1.00	1.00	YES	14.00 12.00	0.86	YES	1.00 1.00	1.00	YES
	362	Room	1319	91°	16.00 14.00	0.88	YES	2.00 2.00	1.00	YES	16.00 14.00	0.88	YES	2.00 2.00	1.00	YES
	363	Room	1320	91°	17.00 15.00	0.88	YES	1.00 1.00	1.00	YES	17.00 15.00	0.88	YES	1.00 1.00	1.00	YES
	364	Room	1311	91°	21.00 19.00	0.90	YES	4.00 4.00	1.00	YES	21.00 19.00	0.90	YES	4.00 4.00	1.00	YES
	365	Room	1321	91°	18.00 15.00	0.83	YES	1.00 1.00	1.00	YES	18.00 15.00	0.83	YES	1.00 1.00	1.00	YES
	366	Room	1334	90°N	17.00 13.00	0.76	YES	1.00 0.00	0.00	YES	17.00 13.00	0.76	YES	1.00 0.00	0.00	YES
	367	Room	1335	90°N	18.00 14.00	0.78	YES	1.00 0.00	0.00	YES	18.00 14.00	0.78	YES	1.00 0.00	0.00	YES
	368	Room	1308	91°	22.00 18.00	0.82	YES	3.00 1.00	0.33	YES	22.00 18.00	0.82	YES	3.00 1.00	0.33	YES
	369	Room	1309	91°	22.00 18.00	0.82	YES	3.00 1.00	0.33	YES	22.00 18.00	0.82	YES	3.00 1.00	0.33	YES
	370	Room	1310	91°	24.00 15.00	0.63	NO	4.00 1.00	0.25	NO	24.00 15.00	0.63	NO	4.00 1.00	0.25	NO
	371	Room	1343	45°N	4.00 1.00	0.25	YES	0.00 0.00	1.00	YES						
			1363	1°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	4.00 1.00	0.25	YES	0.00 0.00	1.00	YES
Level 3B	372	Room	1301	45°N	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES
	373	Room	1297	45°N	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES
	377	Room	1291	91°	24.00 24.00	1.00	YES	7.00 7.00	1.00	YES	24.00 24.00	1.00	YES	7.00 7.00	1.00	YES
	378	Room	1307	137°	47.00 47.00	1.00	YES	20.00 20.00	1.00	YES	47.00 47.00	1.00	YES	20.00 20.00	1.00	YES
	379	Room	1360	135°	53.00 53.00	1.00	YES	20.00 20.00	1.00	YES	53.00 53.00	1.00	YES	20.00 20.00	1.00	YES
	380	Room	1315	43°N	9.00 6.00	0.67	YES	0.00 0.00	1.00	YES	9.00 6.00	0.67	YES	0.00 0.00	1.00	YES
	381	Room	1317	43°N	6.00 4.00	0.67	YES	0.00 0.00	1.00	YES	6.00 4.00	0.67	YES	0.00 0.00	1.00	YES
	382	Room	1313	91°	11.00 9.00	0.82	YES	0.00 0.00	1.00	YES	11.00 9.00	0.82	YES	0.00 0.00	1.00	YES
	383	Room	1324	91°	18.00 15.00	0.83	YES	2.00 2.00	1.00	YES	18.00 15.00	0.83	YES	2.00 2.00	1.00	YES
	384	Room	1325	91°	18.00 15.00	0.83	YES	2.00 2.00	1.00	YES	18.00 15.00	0.83	YES	2.00 2.00	1.00	YES

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	385	Room	1326	91°	20.00 16.00	0.80	YES	1.00 1.00	1.00	YES	20.00 16.00	0.80	YES	1.00 1.00	1.00	YES
	386	Room	1328	91°	19.00 17.00	0.89	YES	1.00 1.00	1.00	YES	19.00 17.00	0.89	YES	1.00 1.00	1.00	YES
	387	Room	1327	91°	21.00 18.00	0.86	YES	1.00 1.00	1.00	YES	21.00 18.00	0.86	YES	1.00 1.00	1.00	YES
	388	Room	1338	90°N	18.00 19.00	1.06	YES	1.00 1.00	1.00	YES	18.00 19.00	1.06	YES	1.00 1.00	1.00	YES
	389	Room	1339	90°N	20.00 21.00	1.05	YES	2.00 2.00	1.00	YES	20.00 21.00	1.05	YES	2.00 2.00	1.00	YES
	390	Room	1348	91°	8.00 6.00	0.75	YES	0.00 0.00	1.00	YES	8.00 6.00	0.75	YES	0.00 0.00	1.00	YES
	391	Room	1350	91°	26.00 24.00	0.92	YES	3.00 3.00	1.00	YES	26.00 24.00	0.92	YES	3.00 3.00	1.00	YES
	392	Room	1351	91°	25.00 19.00	0.76	NO	2.00 2.00	1.00	YES	25.00 19.00	0.76	NO	2.00 2.00	1.00	YES
	393	Room	1349	91°	22.00 20.00	0.91	YES	1.00 1.00	1.00	YES	22.00 20.00	0.91	YES	1.00 1.00	1.00	YES
	394	Room	1365	315°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES
	395	Room	1341	45°N	6.00 1.00	0.17	NO	0.00 0.00	1.00	YES						
			1364	1°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	6.00 1.00	0.17	NO	0.00 0.00	1.00	YES
	396	Room	1340	91°	25.00 15.00	0.60	NO	3.00 2.00	0.67	NO	25.00 15.00	0.60	NO	3.00 2.00	0.67	NO
	397	Room	1345	181°	36.00 36.00	1.00	YES	9.00 9.00	1.00	YES	36.00 36.00	1.00	YES	9.00 9.00	1.00	YES
Level 4B	399	Room	1347	45°N	11.00 1.00	0.09	NO	0.00 0.00	1.00	YES	11.00 1.00	0.09	NO	0.00 0.00	1.00	YES
	400	Room	1337	90°N	21.00 20.00	0.95	YES	1.00 1.00	1.00	YES	21.00 20.00	0.95	YES	1.00 1.00	1.00	YES
	401	Room	1336	90°N	20.00 20.00	1.00	YES	1.00 1.00	1.00	YES	20.00 20.00	1.00	YES	1.00 1.00	1.00	YES
	403	Room	1357	43°N	11.00 7.00	0.64	YES	0.00 0.00	1.00	YES	11.00 7.00	0.64	YES	0.00 0.00	1.00	YES
	404	Room	1358	43°N	8.00 5.00	0.63	YES	0.00 0.00	1.00	YES	8.00 5.00	0.63	YES	0.00 0.00	1.00	YES
	405	Room	1352	45°N	9.00 6.00	0.67	YES	0.00 0.00	1.00	YES	9.00 6.00	0.67	YES	0.00 0.00	1.00	YES
Level 5B	414	Room	1379	91°	34.00 25.00	0.74	YES	7.00 7.00	1.00	YES	34.00 25.00	0.74	YES	7.00 7.00	1.00	YES
	415	Room	1378	91°	29.00 20.00	0.69	NO	2.00 1.00	0.50	NO	29.00 20.00	0.69	NO	2.00 1.00	0.50	NO
	416	Room	1377	91°	30.00 22.00	0.73	NO	3.00 2.00	0.67	NO	30.00 22.00	0.73	NO	3.00 2.00	0.67	NO
	417	Room	1376	91°	29.00 23.00	0.79	NO	3.00 2.00	0.67	NO	29.00 23.00	0.79	NO	3.00 2.00	0.67	NO

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	418	Room	1373	91°	26.00 24.00	0.92	YES	1.00 1.00	1.00	YES						
											26.00 24.00	0.92	YES	1.00 1.00	1.00	YES
	419	Room	1371	91°	26.00 25.00	0.96	YES	4.00 4.00	1.00	YES						
											26.00 25.00	0.96	YES	4.00 4.00	1.00	YES
	420	Room	1372	91°	22.00 21.00	0.95	YES	2.00 1.00	0.50	YES						
											22.00 21.00	0.95	YES	2.00 1.00	0.50	YES
	421	Room	1370	91°	29.00 24.00	0.83	YES	5.00 4.00	0.80	YES						
											29.00 24.00	0.83	YES	5.00 4.00	0.80	YES
	422	Room	1369	91°	29.00 23.00	0.79	NO	6.00 5.00	0.83	YES						
											29.00 23.00	0.79	NO	6.00 5.00	0.83	YES
	423	Room	1375	91°	28.00 23.00	0.82	YES	4.00 3.00	0.75	NO						
											28.00 23.00	0.82	YES	4.00 3.00	0.75	NO
	424	Room	1374	91°	27.00 22.00	0.81	YES	4.00 3.00	0.75	NO						
											27.00 22.00	0.81	YES	4.00 3.00	0.75	NO
	425	Room	1368	91°	28.00 25.00	0.89	YES	7.00 7.00	1.00	YES						
											28.00 25.00	0.89	YES	7.00 7.00	1.00	YES
Latitude Apartment Croydon																
Level 0	69	LKD	817	265°	9.00 20.00	2.22	YES	2.00 3.00	1.50	YES						
			827	175°	39.00 41.00	1.05	YES	5.00 5.00	1.00	YES						
											39.00 44.00	1.13	YES	5.00 5.00	1.00	YES
	70	Bedroom	82	265°	8.00 12.00	1.50	YES	0.00 0.00	1.00	YES						
											8.00 12.00	1.50	YES	0.00 0.00	1.00	YES
	71	Bedroom	79	265°	12.00 9.00	0.75	YES	0.00 0.00	1.00	YES						
											12.00 9.00	0.75	YES	0.00 0.00	1.00	YES
	72	Bedroom	1232	265°	15.00 2.00	0.13	NO	0.00 0.00	1.00	YES						
											15.00 2.00	0.13	NO	0.00 0.00	1.00	YES
	73	Bedroom	71	265°	18.00 5.00	0.28	NO	2.00 2.00	1.00	YES						
											18.00 5.00	0.28	NO	2.00 2.00	1.00	YES
	74	LKD	797	265°	25.00 8.00	0.32	NO	4.00 2.00	0.50	NO						
			840	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											25.00 8.00	0.32	NO	4.00 2.00	0.50	NO
	91	Bedroom	909	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	92	Bedroom	908	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	93	LKD	991	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	94	LKD	989	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	95	Bedroom	910	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	96	Bedroom	911	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	97	Bedroom	291	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	98	Bedroom	1469	331°N	0.00 2.00	∞	YES	0.00 0.00	1.00	YES						
											0.00			0.00		

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Project No.: 1234
Report Title: Daylight & Sunlight Analysis - Neighbour
Date of Analysis: 12/07/2023

Floor Ref.	Room Ref.	Room Use	Window Ref.	Window Orientation	Annual	Pr/Ex	Meets BRE Criteria	Winter	Pr/Ex	Meets BRE Criteria	Total Suns per Room Annual	Pr/Ex	Meets BRE Criteria	Total Suns per Room Winter	Pr/Ex	Meets BRE Criteria
	99	LKD	1471	335°N	2.00 4.00	2.00	YES	0.00 0.00	1.00	YES	2.00	∞	YES	0.00	1.00	YES
	100	Bedroom	25	265°	6.00 11.00	1.83	YES	0.00 0.00	1.00	YES	2.00 4.00	2.00	YES	0.00 0.00	1.00	YES
	101	LKD	769	265°	13.00 18.00	1.38	YES	3.00 3.00	1.00	YES	6.00 11.00	1.83	YES	0.00 0.00	1.00	YES
	102	LKD	770	265°	10.00 14.00	1.40	YES	1.00 1.00	1.00	YES	13.00 18.00	1.38	YES	3.00 3.00	1.00	YES
	103	Bedroom	21	265°	4.00 8.00	2.00	YES	0.00 0.00	1.00	YES	10.00 14.00	1.40	YES	1.00 1.00	1.00	YES
	104	Bedroom	17	265°	4.00 8.00	2.00	YES	0.00 0.00	1.00	YES	4.00 8.00	2.00	YES	0.00 0.00	1.00	YES
	105	LKD	771	265°	5.00 8.00	1.60	YES	0.00 0.00	1.00	YES	4.00 8.00	2.00	YES	0.00 0.00	1.00	YES
	106	LKD	772	265°	4.00 7.00	1.75	YES	0.00 0.00	1.00	YES	5.00 8.00	1.60	YES	0.00 0.00	1.00	YES
	107	Bedroom	46	265°	4.00 5.00	1.25	YES	1.00 1.00	1.00	YES	4.00 7.00	1.75	YES	0.00 0.00	1.00	YES
	108	Bedroom	58	265°	2.00 2.00	1.00	YES	0.00 0.00	1.00	YES	4.00 5.00	1.25	YES	1.00 1.00	1.00	YES
	109	LKD	66	265°	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	2.00 2.00	1.00	YES	0.00 0.00	1.00	YES
	110	LKD	1061	30°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	432	LKD	828	175°	39.00 39.00	1.00	YES	4.00 4.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
			1431	85°N	35.00 35.00	1.00	YES	8.00 8.00	1.00	YES						
											55.00 55.00	1.00	YES	8.00 8.00	1.00	YES
Level 1C	63	LKD	825	265°	18.00 20.00	1.11	YES	3.00 3.00	1.00	YES						
			829	175°	49.00 48.00	0.98	YES	7.00 6.00	0.86	YES						
											52.00 51.00	0.98	YES	7.00 6.00	0.86	YES
	64	Bedroom	820	265°	17.00 13.00	0.76	YES	0.00 0.00	1.00	YES	17.00 13.00	0.76	YES	0.00 0.00	1.00	YES
	65	Bedroom	819	265°	20.00 10.00	0.50	NO	2.00 1.00	0.50	NO	20.00 10.00	0.50	NO	2.00 1.00	0.50	NO
	66	Bedroom	800	265°	16.00 2.00	0.13	NO	0.00 0.00	1.00	YES	16.00 2.00	0.13	NO	0.00 0.00	1.00	YES
	67	Bedroom	799	265°	20.00 6.00	0.30	NO	2.00 2.00	1.00	YES	20.00 6.00	0.30	NO	2.00 2.00	1.00	YES
	68	LKD	802	265°	27.00 8.00	0.30	NO	4.00 2.00	0.50	NO						
			842	355°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES						
											27.00 8.00	0.30	NO	4.00 2.00	0.50	NO
	111	Bedroom	923	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	112	Bedroom	922	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	113	LKD	992	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00			0.00		

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Floor Ref.	Room Ref.	Room Use	Window Ref.	Window Orientation	Annual	Pr/Ex	Meets BRE Criteria	Winter	Pr/Ex	Meets BRE Criteria	Total Suns per Room Annual	Pr/Ex	Meets BRE Criteria	Total Suns per Room Winter	Pr/Ex	Meets BRE Criteria
	114	LKD	990	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00	1.00	YES	0.00	1.00	YES
	115	Bedroom	924	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	116	Bedroom	925	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	117	Bedroom	919	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	118	Bedroom	920	331°N	0.00 2.00	∞	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	119	LKD	921	335°N	2.00 5.00	2.50	YES	0.00 0.00	1.00	YES	0.00 2.00	∞	YES	0.00 0.00	1.00	YES
	120	Bedroom	748	265°	17.00 14.00	0.82	YES	2.00 1.00	0.50	YES	2.00 5.00	2.50	YES	0.00 0.00	1.00	YES
	121	LKD	776	265°	20.00 18.00	0.90	YES	3.00 3.00	1.00	YES	17.00 14.00	0.82	YES	2.00 1.00	0.50	YES
	122	LKD	777	265°	18.00 17.00	0.94	YES	3.00 3.00	1.00	YES	20.00 18.00	0.90	YES	3.00 3.00	1.00	YES
	123	Bedroom	747	265°	10.00 9.00	0.90	YES	0.00 0.00	1.00	YES	18.00 17.00	0.94	YES	3.00 3.00	1.00	YES
	124	Bedroom	746	265°	9.00 8.00	0.89	YES	0.00 0.00	1.00	YES	10.00 9.00	0.90	YES	0.00 0.00	1.00	YES
	125	LKD	778	265°	12.00 10.00	0.83	YES	0.00 0.00	1.00	YES	9.00 8.00	0.89	YES	0.00 0.00	1.00	YES
	126	LKD	779	265°	11.00 10.00	0.91	YES	0.00 0.00	1.00	YES	12.00 10.00	0.83	YES	0.00 0.00	1.00	YES
	127	Bedroom	751	265°	10.00 9.00	0.90	YES	1.00 1.00	1.00	YES	11.00 10.00	0.91	YES	0.00 0.00	1.00	YES
	128	Bedroom	754	265°	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES	10.00 9.00	0.90	YES	1.00 1.00	1.00	YES
	129	LKD	756	265°	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES
	204	Bedroom	1257	265°	25.00 25.00	1.00	YES	5.00 5.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES
	205	Bedroom	1254	265°	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	25.00 25.00	1.00	YES	5.00 5.00	1.00	YES
	206	Bedroom	1255	85°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES
	207	Bedroom	1256	85°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	208	LKD	1210	283°N	24.00 24.00	1.00	YES	5.00 5.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	209	LKD	1062	28°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	24.00 24.00	1.00	YES	5.00 5.00	1.00	YES
	433	LKD	830	175°	47.00 47.00	1.00	YES	5.00 5.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
			1432	85°N	38.00 38.00	1.00	YES	8.00 8.00	1.00	YES						
											63.00			9.00		

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											63.00	1.00	YES	9.00	1.00	YES
Level 2C	75	LKD	826	265°	29.00 21.00	0.72	NO	5.00 3.00	0.60	NO						
			831	175°	59.00 58.00	0.98	YES	16.00 15.00	0.94	YES						
											67.00 60.00	0.90	YES	16.00 15.00	0.94	YES
	76	Bedroom	822	265°	25.00 15.00	0.60	NO	3.00 2.00	0.67	NO						
											25.00 15.00	0.60	NO	3.00 2.00	0.67	NO
	77	Bedroom	821	265°	23.00 12.00	0.52	NO	3.00 2.00	0.67	NO						
											23.00 12.00	0.52	NO	3.00 2.00	0.67	NO
	78	Bedroom	1233	265°	20.00 4.00	0.20	NO	1.00 0.00	0.00	NO						
											20.00 4.00	0.20	NO	1.00 0.00	0.00	NO
	79	Bedroom	806	265°	24.00 8.00	0.33	NO	3.00 2.00	0.67	NO						
											24.00 8.00	0.33	NO	3.00 2.00	0.67	NO
	80	LKD	808	265°	28.00 10.00	0.36	NO	5.00 2.00	0.40	NO						
			844	355°N	2.00 2.00	1.00	YES	0.00 0.00	1.00	YES						
											29.00 11.00	0.38	NO	5.00 2.00	0.40	NO
	130	Bedroom	937	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	131	Bedroom	936	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	132	LKD	994	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	133	LKD	993	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	134	Bedroom	938	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	135	Bedroom	939	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	136	Bedroom	933	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	137	Bedroom	934	331°N	0.00 3.00	∞	YES	0.00 0.00	1.00	YES						
											0.00 3.00	∞	YES	0.00 0.00	1.00	YES
	138	LKD	935	335°N	3.00 6.00	2.00	YES	0.00 0.00	1.00	YES						
											3.00 6.00	2.00	YES	0.00 0.00	1.00	YES
	139	Bedroom	715	265°	20.00 17.00	0.85	YES	2.00 2.00	1.00	YES						
											20.00 17.00	0.85	YES	2.00 2.00	1.00	YES
	140	LKD	781	265°	27.00 24.00	0.89	YES	5.00 5.00	1.00	YES						
											27.00 24.00	0.89	YES	5.00 5.00	1.00	YES
	141	LKD	782	265°	24.00 21.00	0.88	YES	5.00 5.00	1.00	YES						
											24.00 21.00	0.88	YES	5.00 5.00	1.00	YES
	142	Bedroom	714	265°	17.00 14.00	0.82	YES	2.00 2.00	1.00	YES						
											17.00 14.00	0.82	YES	2.00 2.00	1.00	YES
	143	Bedroom	713	265°	15.00 12.00	0.80	YES	2.00 2.00	1.00	YES						
											15.00 12.00	0.80	YES	2.00 2.00	1.00	YES
	144	LKD	783	265°	18.00 15.00	0.83	YES	3.00 3.00	1.00	YES						
											18.00 15.00	0.83	YES	3.00 3.00	1.00	YES
	145	LKD	784	265°	15.00 13.00	0.87	YES	1.00 1.00	1.00	YES						
											15.00 13.00	0.87	YES	1.00 1.00	1.00	YES
	146	Bedroom	718	265°	13.00	1.00	YES	1.00	2.00	YES						

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					13.00			2.00								
											13.00			1.00		
											13.00	1.00	YES	2.00	2.00	YES
	147	Bedroom	721	265°	4.00	0.75	YES	0.00	1.00	YES						
					3.00			0.00								
											4.00			0.00		
											3.00	0.75	YES	0.00	1.00	YES
	148	LKD	723	265°	2.00	0.50	YES	0.00	1.00	YES						
					1.00			0.00								
											2.00			0.00		
											1.00	0.50	YES	0.00	1.00	YES
	210	Bedroom	1261	265°	28.00	1.00	YES	6.00	1.00	YES						
					28.00			6.00								
											28.00			6.00		
											28.00	1.00	YES	6.00	1.00	YES
	211	Bedroom	1258	265°	8.00	1.00	YES	0.00	1.00	YES						
					8.00			0.00								
											8.00			0.00		
											8.00	1.00	YES	0.00	1.00	YES
	212	Bedroom	1259	85°N	1.00	1.00	YES	0.00	1.00	YES						
					1.00			0.00								
											1.00			0.00		
											1.00	1.00	YES	0.00	1.00	YES
	213	Bedroom	1260	85°N	0.00	1.00	YES	0.00	1.00	YES						
					0.00			0.00								
											0.00			0.00		
											0.00	1.00	YES	0.00	1.00	YES
	214	LKD	1211	283°N	28.00	1.00	YES	6.00	1.00	YES						
					28.00			6.00								
											28.00			6.00		
											28.00	1.00	YES	6.00	1.00	YES
	215	LKD	1063	30°N	0.00	1.00	YES	0.00	1.00	YES						
					0.00			0.00								
											0.00			0.00		
											0.00	1.00	YES	0.00	1.00	YES
	434	LKD	832	175°	58.00	0.98	YES	15.00	0.93	YES						
					57.00			14.00								
			1433	85°N	39.00	1.00	YES	9.00	1.00	YES						
					39.00			9.00								
											72.00			17.00		
											71.00	0.99	YES	16.00	0.94	YES
Level 3C	81	LKD	850	265°	32.00	0.75	NO	7.00	0.86	YES						
					24.00			6.00								
			858	175°	66.00	0.98	YES	23.00	0.96	YES						
					65.00			22.00								
											76.00			24.00		
											68.00	0.89	YES	23.00	0.96	YES
	82	Bedroom	824	265°	27.00	0.56	NO	4.00	0.50	NO						
					15.00			2.00								
											27.00			4.00		
											15.00	0.56	NO	2.00	0.50	NO
	83	Bedroom	823	265°	25.00	0.52	NO	4.00	0.75	NO						
					13.00			3.00								
											25.00			4.00		
											13.00	0.52	NO	3.00	0.75	NO
	84	Bedroom	1234	265°	22.00	0.23	NO	3.00	0.00	NO						
					5.00			0.00								
											22.00			3.00		
											5.00	0.23	NO	0.00	0.00	NO
	85	Bedroom	809	265°	26.00	0.31	NO	5.00	0.40	NO						
					8.00			2.00								
											26.00			5.00		
											8.00	0.31	NO	2.00	0.40	NO
	86	LKD	848	355°N	2.00	1.00	YES	0.00	1.00	YES						
					2.00			0.00								
			849	265°	31.00	0.35	NO	7.00	0.29	NO						
					11.00			2.00								
											32.00			7.00		
											12.00	0.38	NO	2.00	0.29	NO
	149	Bedroom	948	355°N	1.00	1.00	YES	0.00	1.00	YES						
					1.00			0.00								
											1.00			0.00		
											1.00	1.00	YES	0.00	1.00	YES
	150	Bedroom	947	355°N	1.00	1.00	YES	0.00	1.00	YES						
					1.00			0.00								
											1.00			0.00		
											1.00	1.00	YES	0.00	1.00	YES
	151	LKD	996	355°N	0.00	1.00	YES	0.00	1.00	YES						
					0.00			0.00								
											0.00			0.00		
											0.00	1.00	YES	0.00	1.00	YES
	152	LKD	995	355°N	0.00	1.00	YES	0.00	1.00	YES						
					0.00			0.00								
											0.00			0.00		
											0.00	1.00	YES	0.00	1.00	YES
	153	Bedroom	949	355°N	0.00	1.00	YES	0.00	1.00	YES						
					0.00			0.00								
											0.00			0.00		
											0.00	1.00	YES	0.00	1.00	YES
	154	Bedroom	950	355°N	0.00	1.00	YES	0.00	1.00	YES						
					0.00			0.00								
											0.00			0.00		
											0.00	1.00	YES	0.00	1.00	YES
	155	Bedroom	980	355°N	1.00	1.00	YES	0.00	1.00	YES						

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					1.00			0.00								
											1.00			0.00		
											1.00	1.00	YES	0.00	1.00	YES
	156	Bedroom	981	331°N	0.00	∞	YES	0.00	1.00	YES						
					3.00			0.00								
											0.00			0.00		
											3.00	∞	YES	0.00	1.00	YES
	157	LKD	986	335°N	3.00	2.00	YES	0.00	1.00	YES						
					6.00			0.00								
											3.00			0.00		
											6.00	2.00	YES	0.00	1.00	YES
	158	Bedroom	759	265°	21.00	0.95	YES	2.00	1.00	YES						
					20.00			2.00								
											21.00			2.00		
											20.00	0.95	YES	2.00	1.00	YES
	159	LKD	786	265°	28.00	0.96	YES	5.00	1.00	YES						
					27.00			5.00								
											28.00			5.00		
											27.00	0.96	YES	5.00	1.00	YES
	160	LKD	787	265°	27.00	0.93	YES	5.00	1.00	YES						
					25.00			5.00								
											27.00			5.00		
											25.00	0.93	YES	5.00	1.00	YES
	161	Bedroom	758	265°	19.00	0.89	YES	2.00	1.00	YES						
					17.00			2.00								
											19.00			2.00		
											17.00	0.89	YES	2.00	1.00	YES
	162	Bedroom	757	265°	17.00	0.94	YES	2.00	1.00	YES						
					16.00			2.00								
											17.00			2.00		
											16.00	0.94	YES	2.00	1.00	YES
	163	LKD	788	265°	20.00	0.95	YES	4.00	1.00	YES						
					19.00			4.00								
											20.00			4.00		
											19.00	0.95	YES	4.00	1.00	YES
	164	LKD	789	265°	20.00	0.95	YES	3.00	1.00	YES						
					19.00			3.00								
											20.00			3.00		
											19.00	0.95	YES	3.00	1.00	YES
	165	Bedroom	762	265°	17.00	1.00	YES	1.00	2.00	YES						
					17.00			2.00								
											17.00			1.00		
											17.00	1.00	YES	2.00	2.00	YES
	166	Bedroom	765	265°	8.00	0.88	YES	0.00	1.00	YES						
					7.00			0.00								
											8.00			0.00		
											7.00	0.88	YES	0.00	1.00	YES
	167	LKD	767	265°	3.00	0.67	YES	0.00	1.00	YES						
					2.00			0.00								
											3.00			0.00		
											2.00	0.67	YES	0.00	1.00	YES
	216	Bedroom	1265	265°	30.00	1.00	YES	6.00	1.00	YES						
					30.00			6.00								
											30.00			6.00		
											30.00	1.00	YES	6.00	1.00	YES
	217	Bedroom	1262	265°	10.00	1.00	YES	0.00	1.00	YES						
					10.00			0.00								
											10.00			0.00		
											10.00	1.00	YES	0.00	1.00	YES
	218	Bedroom	1263	85°N	1.00	1.00	YES	0.00	1.00	YES						
					1.00			0.00								
											1.00			0.00		
											1.00	1.00	YES	0.00	1.00	YES
	219	Bedroom	1264	85°N	0.00	1.00	YES	0.00	1.00	YES						
					0.00			0.00								
											0.00			0.00		
											0.00	1.00	YES	0.00	1.00	YES
	220	LKD	1212	283°N	30.00	1.00	YES	6.00	1.00	YES						
					30.00			6.00								
											30.00			6.00		
											30.00	1.00	YES	6.00	1.00	YES
	221	LKD	1064	30°N	0.00	1.00	YES	0.00	1.00	YES						
					0.00			0.00								
											0.00			0.00		
											0.00	1.00	YES	0.00	1.00	YES
	435	LKD	859	175°	66.00	0.98	YES	23.00	0.96	YES						
					65.00			22.00								
			1434	85°N	37.00	1.00	YES	10.00	1.00	YES						
					37.00			10.00								
											78.00			23.00		
											77.00	0.99	YES	22.00	0.96	YES
Level 4C	87	LKD	864	265°	28.00	0.32	NO	5.00	0.40	NO						
					9.00			2.00								
			870	355°N	2.00	1.00	YES	0.00	1.00	YES						
					2.00			0.00								
											29.00			5.00		
											10.00	0.34	NO	2.00	0.40	NO
	88	Bedroom	1235	265°	25.00	0.28	NO	3.00	0.00	NO						
					7.00			0.00								
											25.00			3.00		
											7.00	0.28	NO	0.00	0.00	NO
	89	Bedroom	867	265°	26.00	0.54	NO	4.00	0.75	NO						
					14.00			3.00								
											26.00			4.00		

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Floor Ref.	Room Ref.	Room Use	Window Ref.	Window Orientation	Annual	Pr/Ex	Meets BRE Criteria	Winter	Pr/Ex	Meets BRE Criteria	Total Suns per Room Annual	Pr/Ex	Meets BRE Criteria	Total Suns per Room Winter	Pr/Ex	Meets BRE Criteria
	90	LKD	868	265°	27.00 18.00	0.67	NO	4.00 3.00	0.75	NO	14.00	0.54	NO	3.00	0.75	NO
			873	175°	66.00 66.00	1.00	YES	23.00 23.00	1.00	YES						
	168	Bedroom	959	355°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	77.00 69.00	0.90	YES	24.00 24.00	1.00	YES
	169	Bedroom	958	355°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES
	170	LKD	998	355°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES
	171	LKD	997	355°N	2.00 1.00	0.50	YES	0.00 0.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES
	172	Bedroom	960	355°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	2.00 1.00	0.50	YES	0.00 0.00	1.00	YES
	173	Bedroom	961	355°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES
	174	Bedroom	982	355°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	175	Bedroom	983	331°N	0.00 3.00	∞	YES	0.00 0.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES
	176	LKD	987	335°N	3.00 6.00	2.00	YES	0.00 0.00	1.00	YES	0.00 3.00	∞	YES	0.00 0.00	1.00	YES
	222	Bedroom	1269	265°	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES	3.00 6.00	2.00	YES	0.00 0.00	1.00	YES
	223	Bedroom	1266	265°	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES
	224	Bedroom	1267	85°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES
	225	Bedroom	1268	85°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES
	226	LKD	1213	283°N	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	227	LKD	1065	30°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES
	436	LKD	874	175°	66.00 66.00	1.00	YES	23.00 23.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
			1435	85°N	35.00 35.00	1.00	YES	7.00 7.00	1.00	YES						
											78.00 78.00	1.00	YES	23.00 23.00	1.00	YES
Level 5C	192	LKD	988	335°N	3.00 6.00	2.00	YES	0.00 0.00	1.00	YES						
	193	Bedroom	985	331°N	2.00 3.00	1.50	YES	0.00 0.00	1.00	YES	3.00 6.00	2.00	YES	0.00 0.00	1.00	YES
	194	Bedroom	984	355°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	2.00 3.00	1.50	YES	0.00 0.00	1.00	YES
	195	Bedroom	970	355°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES
	196	Bedroom	969	355°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES
	197	Bedroom	971	355°N	2.00	0.50	YES	0.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES

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Floor Ref.	Room Ref.	Room Use	Window Ref.	Window Orientation	Annual	Pr/Ex	Meets BRE Criteria	Winter	Pr/Ex	Meets BRE Criteria	Total Suns per Room Annual	Pr/Ex	Meets BRE Criteria	Total Suns per Room Winter	Pr/Ex	Meets BRE Criteria
					1.00			0.00								
	198	Bedroom	972	355°N	1.00 0.00	0.00	YES	0.00 0.00	1.00	YES	2.00 1.00	0.50	YES	0.00 0.00	1.00	YES
	199	LKD	1000	355°N	3.00 1.00	0.33	YES	0.00 0.00	1.00	YES	1.00 0.00	0.00	YES	0.00 0.00	1.00	YES
	200	LKD	999	355°N	3.00 2.00	0.67	YES	0.00 0.00	1.00	YES	3.00 1.00	0.33	YES	0.00 0.00	1.00	YES
	228	Bedroom	1273	265°	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES	3.00 2.00	0.67	YES	0.00 0.00	1.00	YES
	229	Bedroom	1270	265°	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES
	230	Bedroom	1271	85°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES
	231	Bedroom	1272	85°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES
	232	LKD	1214	283°N	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	233	LKD	1066	30°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
Level 6C	187	LKD	1014	335°N	7.00 6.00	0.86	YES	0.00 0.00	1.00	YES						
	188	Bedroom	1013	331°N	5.00 4.00	0.80	YES	0.00 0.00	1.00	YES	7.00 6.00	0.86	YES	0.00 0.00	1.00	YES
	189	Bedroom	1007	355°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	5.00 4.00	0.80	YES	0.00 0.00	1.00	YES
	190	Bedroom	1023	355°N	2.00 1.00	0.50	YES	0.00 0.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES
	191	Bedroom	1022	355°N	2.00 1.00	0.50	YES	0.00 0.00	1.00	YES	2.00 1.00	0.50	YES	0.00 0.00	1.00	YES
	234	Bedroom	1277	265°	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES	2.00 1.00	0.50	YES	0.00 0.00	1.00	YES
	235	Bedroom	1274	265°	13.00 13.00	1.00	YES	0.00 0.00	1.00	YES	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES
	236	Bedroom	1275	85°N	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES	13.00 13.00	1.00	YES	0.00 0.00	1.00	YES
	237	Bedroom	1276	85°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	1.00 1.00	1.00	YES	0.00 0.00	1.00	YES
	238	LKD	1215	283°N	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	239	LKD	1067	30°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES
											0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
Level 7C	246	Bedroom	1237	326°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
	247	Bedroom	1236	338°N	9.00 9.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	248	Bedroom	1116	8°N	2.00 2.00	1.00	YES	0.00 0.00	1.00	YES	9.00 9.00	1.00	YES	0.00 0.00	1.00	YES
											2.00			0.00		

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	249	Bedroom	1164	17°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	2.00	1.00	YES	0.00	1.00	YES
	250	LKD	1216	283°N	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	251	LKD	1068	30°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES
	426	LKD	1017	335°N	7.00 7.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	427	Bedroom	1016	331°N	7.00 6.00	0.86	YES	0.00 0.00	1.00	YES	7.00 7.00	1.00	YES	0.00 0.00	1.00	YES
	428	Bedroom	1008	355°N	2.00 1.00	0.50	YES	0.00 0.00	1.00	YES	7.00 6.00	0.86	YES	0.00 0.00	1.00	YES
Level 8C	252	Room	1197	326°N	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES	2.00 1.00	0.50	YES	0.00 0.00	1.00	YES
	253	Bedroom	1183	338°N	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES
	254	Bedroom	1117	8°N	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES
	255	Bedroom	1165	17°N	2.00 2.00	1.00	YES	0.00 0.00	1.00	YES	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES
	256	LKD	1217	283°N	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES	2.00 2.00	1.00	YES	0.00 0.00	1.00	YES
	257	LKD	1069	30°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES
			1242	65°N	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES						
	429	LKD	1020	335°N	7.00 7.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES	0.00 0.00	1.00	YES
	430	Room	1019	331°N	7.00 7.00	1.00	YES	0.00 0.00	1.00	YES	7.00 7.00	1.00	YES	0.00 0.00	1.00	YES
	431	Room	1009	355°N	2.00 2.00	1.00	YES	0.00 0.00	1.00	YES	7.00 7.00	1.00	YES	0.00 0.00	1.00	YES
Level 9C	258	Bedroom	1198	326°N	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES	2.00 2.00	1.00	YES	0.00 0.00	1.00	YES
	259	Bedroom	1184	338°N	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES
	260	Bedroom	1118	8°N	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES
	261	Room	1166	17°N	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES
	262	LKD	1218	283°N	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES
	263	LKD	1070	30°N	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES
			1243	65°N	26.00 26.00	1.00	YES	5.00 5.00	1.00	YES						
Level 10C	264	Bedroom	1199	326°N	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES	26.00 26.00	1.00	YES	5.00 5.00	1.00	YES
	265	Bedroom	1185	338°N	10.00	1.00	YES	0.00	1.00	YES	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES

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					10.00			0.00								
											10.00			0.00		
	266	Bedroom	1119	8°N	6.00	1.00	YES	0.00	1.00	YES	10.00	1.00	YES	0.00	1.00	YES
					6.00			0.00								
											6.00			0.00		
	267	Bedroom	1167	17°N	3.00	1.00	YES	0.00	1.00	YES	6.00	1.00	YES	0.00	1.00	YES
					3.00			0.00								
											3.00			0.00		
	268	LKD	1219	283°N	30.00	1.00	YES	6.00	1.00	YES	3.00	1.00	YES	0.00	1.00	YES
					30.00			6.00								
											30.00			6.00		
	269	LKD	1071	30°N	6.00	1.00	YES	0.00	1.00	YES	30.00	1.00	YES	6.00	1.00	YES
					6.00			0.00								
			1244	65°N	26.00	1.00	YES	5.00	1.00	YES						
					26.00			5.00								
											26.00			5.00		
											26.00	1.00	YES	5.00	1.00	YES
Level 11 C	270	Bedroom	1200	326°N	10.00	1.00	YES	0.00	1.00	YES						
					10.00			0.00								
											10.00			0.00		
	271	Bedroom	1186	338°N	10.00	1.00	YES	0.00	1.00	YES	10.00	1.00	YES	0.00	1.00	YES
					10.00			0.00								
											10.00			0.00		
	272	Bedroom	1120	8°N	6.00	1.00	YES	0.00	1.00	YES	10.00	1.00	YES	0.00	1.00	YES
					6.00			0.00								
											6.00			0.00		
	273	Bedroom	1168	17°N	3.00	1.00	YES	0.00	1.00	YES	6.00	1.00	YES	0.00	1.00	YES
					3.00			0.00								
											3.00			0.00		
	274	LKD	1220	283°N	30.00	1.00	YES	6.00	1.00	YES	3.00	1.00	YES	0.00	1.00	YES
					30.00			6.00								
											30.00			6.00		
	275	LKD	1072	30°N	6.00	1.00	YES	0.00	1.00	YES	30.00	1.00	YES	6.00	1.00	YES
					6.00			0.00								
			1245	65°N	26.00	1.00	YES	5.00	1.00	YES						
					26.00			5.00								
											26.00			5.00		
											26.00	1.00	YES	5.00	1.00	YES
Level 12C	276	Bedroom	1201	326°N	10.00	1.00	YES	0.00	1.00	YES						
					10.00			0.00								
											10.00			0.00		
	277	Bedroom	1187	338°N	10.00	1.00	YES	0.00	1.00	YES	10.00	1.00	YES	0.00	1.00	YES
					10.00			0.00								
											10.00			0.00		
	278	Bedroom	1121	8°N	6.00	1.00	YES	0.00	1.00	YES	10.00	1.00	YES	0.00	1.00	YES
					6.00			0.00								
											6.00			0.00		
	279	Bedroom	1169	17°N	3.00	1.00	YES	0.00	1.00	YES	6.00	1.00	YES	0.00	1.00	YES
					3.00			0.00								
											3.00			0.00		
	280	LKD	1221	283°N	30.00	1.00	YES	6.00	1.00	YES	3.00	1.00	YES	0.00	1.00	YES
					30.00			6.00								
											30.00			6.00		
	281	LKD	1073	30°N	6.00	1.00	YES	0.00	1.00	YES	30.00	1.00	YES	6.00	1.00	YES
					6.00			0.00								
			1246	65°N	26.00	1.00	YES	5.00	1.00	YES						
					26.00			5.00								
											26.00			5.00		
											26.00	1.00	YES	5.00	1.00	YES
Level 13C	282	Bedroom	1202	326°N	10.00	1.00	YES	0.00	1.00	YES						
					10.00			0.00								
											10.00			0.00		
	283	Bedroom	1188	338°N	10.00	1.00	YES	0.00	1.00	YES	10.00	1.00	YES	0.00	1.00	YES
					10.00			0.00								
											10.00			0.00		
	284	Bedroom	1122	8°N	6.00	1.00	YES	0.00	1.00	YES	10.00	1.00	YES	0.00	1.00	YES
					6.00			0.00								
											6.00			0.00		
	285	Bedroom	1170	17°N	3.00	1.00	YES	0.00	1.00	YES	6.00	1.00	YES	0.00	1.00	YES
					3.00			0.00								
											3.00			0.00		
	286	LKD	1222	283°N	30.00	1.00	YES	6.00	1.00	YES	3.00	1.00	YES	0.00	1.00	YES
					30.00			6.00								
											30.00			6.00		
	287	LKD	1074	30°N	6.00	1.00	YES	0.00	1.00	YES	30.00	1.00	YES	6.00	1.00	YES

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Floor Ref.	Room Ref.	Room Use	Window Ref.	Window Orientation	Annual	Pr/Ex	Meets BRE Criteria	Winter	Pr/Ex	Meets BRE Criteria	Total Suns per Room Annual	Pr/Ex	Meets BRE Criteria	Total Suns per Room Winter	Pr/Ex	Meets BRE Criteria
					6.00			0.00								
			1247	65°N	26.00	1.00	YES	5.00	1.00	YES						
					26.00			5.00								
											26.00			5.00		
											26.00	1.00	YES	5.00	1.00	YES
Level 14C	288	Bedroom	1203	326°N	10.00	1.00	YES	0.00	1.00	YES						
					10.00			0.00								
											10.00			0.00		
											10.00	1.00	YES	0.00	1.00	YES
	289	Bedroom	1189	338°N	10.00	1.00	YES	0.00	1.00	YES						
					10.00			0.00								
											10.00			0.00		
											10.00	1.00	YES	0.00	1.00	YES
	290	Bedroom	1123	8°N	6.00	1.00	YES	0.00	1.00	YES						
					6.00			0.00								
											6.00			0.00		
											6.00	1.00	YES	0.00	1.00	YES
	291	Bedroom	1171	17°N	3.00	1.00	YES	0.00	1.00	YES						
					3.00			0.00								
											3.00			0.00		
											3.00	1.00	YES	0.00	1.00	YES
	292	LKD	1223	283°N	30.00	1.00	YES	6.00	1.00	YES						
					30.00			6.00								
											30.00			6.00		
											30.00	1.00	YES	6.00	1.00	YES
	293	LKD	1075	30°N	6.00	1.00	YES	0.00	1.00	YES						
					6.00			0.00								
			1248	65°N	26.00	1.00	YES	5.00	1.00	YES						
					26.00			5.00								
											26.00			5.00		
											26.00	1.00	YES	5.00	1.00	YES
Level 15C	294	Bedroom	1204	326°N	10.00	1.00	YES	0.00	1.00	YES						
					10.00			0.00								
											10.00			0.00		
											10.00	1.00	YES	0.00	1.00	YES
	295	Bedroom	1190	338°N	10.00	1.00	YES	0.00	1.00	YES						
					10.00			0.00								
											10.00			0.00		
											10.00	1.00	YES	0.00	1.00	YES
	296	Bedroom	1124	8°N	6.00	1.00	YES	0.00	1.00	YES						
					6.00			0.00								
											6.00			0.00		
											6.00	1.00	YES	0.00	1.00	YES
	297	Bedroom	1172	17°N	3.00	1.00	YES	0.00	1.00	YES						
					3.00			0.00								
											3.00			0.00		
											3.00	1.00	YES	0.00	1.00	YES
	298	LKD	1224	283°N	30.00	1.00	YES	6.00	1.00	YES						
					30.00			6.00								
											30.00			6.00		
											30.00	1.00	YES	6.00	1.00	YES
	299	LKD	1076	30°N	6.00	1.00	YES	0.00	1.00	YES						
					6.00			0.00								
			1249	65°N	26.00	1.00	YES	5.00	1.00	YES						
					26.00			5.00								
											26.00			5.00		
											26.00	1.00	YES	5.00	1.00	YES
Level 16C	300	Bedroom	1205	326°N	10.00	1.00	YES	0.00	1.00	YES						
					10.00			0.00								
											10.00			0.00		
											10.00	1.00	YES	0.00	1.00	YES
	301	Bedroom	1191	338°N	10.00	1.00	YES	0.00	1.00	YES						
					10.00			0.00								
											10.00			0.00		
											10.00	1.00	YES	0.00	1.00	YES
	302	Bedroom	1125	8°N	6.00	1.00	YES	0.00	1.00	YES						
					6.00			0.00								
											6.00			0.00		
											6.00	1.00	YES	0.00	1.00	YES
	303	Bedroom	1173	17°N	3.00	1.00	YES	0.00	1.00	YES						
					3.00			0.00								
											3.00			0.00		
											3.00	1.00	YES	0.00	1.00	YES
	304	LKD	1225	283°N	30.00	1.00	YES	6.00	1.00	YES						
					30.00			6.00								
											30.00			6.00		
											30.00	1.00	YES	6.00	1.00	YES
	305	LKD	1077	30°N	6.00	1.00	YES	0.00	1.00	YES						
					6.00			0.00								
			1250	65°N	26.00	1.00	YES	5.00	1.00	YES						
					26.00			5.00								
											26.00			5.00		
											26.00	1.00	YES	5.00	1.00	YES
Level 17C	306	Bedroom	1206	326°N	10.00	1.00	YES	0.00	1.00	YES						
					10.00			0.00								
											10.00			0.00		
											10.00	1.00	YES	0.00	1.00	YES
	307	Bedroom	1192	338°N	10.00	1.00	YES	0.00	1.00	YES						
					10.00			0.00								
											10.00			0.00		
											10.00	1.00	YES	0.00	1.00	YES
	308	Bedroom	1126	8°N	6.00	1.00	YES	0.00	1.00	YES						
					6.00			0.00								
											6.00			0.00		

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	309	Bedroom	1174	17°N	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES	6.00	1.00	YES	0.00	1.00	YES
	310	LKD	1226	283°N	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES
	311	LKD	1078	30°N	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES
			1251	65°N	26.00 26.00	1.00	YES	5.00 5.00	1.00	YES						
Level 18C	312	Bedroom	1207	326°N	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES	26.00 26.00	1.00	YES	5.00 5.00	1.00	YES
	313	Bedroom	1193	338°N	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES
	314	Bedroom	1127	8°N	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES
	315	Bedroom	1175	17°N	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES
	316	LKD	1227	283°N	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES
	317	LKD	1079	30°N	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES
			1252	65°N	26.00 26.00	1.00	YES	5.00 5.00	1.00	YES						
Level 19C	318	Bedroom	1208	326°N	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES	26.00 26.00	1.00	YES	5.00 5.00	1.00	YES
	319	Bedroom	1194	338°N	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES
	320	Bedroom	1128	8°N	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES
	321	Bedroom	1176	17°N	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES
	322	LKD	1228	283°N	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES
	323	LKD	1080	30°N	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	30.00 30.00	1.00	YES	6.00 6.00	1.00	YES
			1253	65°N	26.00 26.00	1.00	YES	5.00 5.00	1.00	YES						
Level 20C	324	LKD	1230	332°N	10.00 10.00	1.00	YES	0.00 0.00	1.00	YES	26.00 26.00	1.00	YES	5.00 5.00	1.00	YES
											10.00 10.00	1.00	YES	0.00 0.00	1.00	YES
Level 21C	325	Bedroom	1130	8°N	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES
	326	Bedroom	1178	17°N	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES
	327	LKD	1082	30°N	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	29.00 29.00	1.00	YES	5.00 5.00	1.00	YES
			1241	65°N	29.00 29.00	1.00	YES	5.00 5.00	1.00	YES						
Level 22C	328	Bedroom	1131	8°N	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES	6.00 6.00	1.00	YES	0.00 0.00	1.00	YES
	329	Bedroom	1179	17°N	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES	3.00 3.00	1.00	YES	0.00 0.00	1.00	YES
	330	LKD	1083	30°N	6.00	1.00	YES	0.00	1.00	YES						

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					6.00			0.00								
			1240	65°N	28.00	1.00	YES	5.00	1.00	YES						
					28.00			5.00								
											28.00			5.00		
											28.00	1.00	YES	5.00	1.00	YES
Level 23C	331	Bedroom	1132	8°N	6.00	1.00	YES	0.00	1.00	YES						
					6.00			0.00								
											6.00			0.00		
											6.00	1.00	YES	0.00	1.00	YES
	332	Bedroom	1180	17°N	3.00	1.00	YES	0.00	1.00	YES						
					3.00			0.00								
											3.00			0.00		
											3.00	1.00	YES	0.00	1.00	YES
	333	LKD	1084	30°N	6.00	1.00	YES	0.00	1.00	YES						
					6.00			0.00								
			1238	65°N	29.00	1.00	YES	5.00	1.00	YES						
					29.00			5.00								
											29.00			5.00		
											29.00	1.00	YES	5.00	1.00	YES
93 Granville Cl																
Level 1B	448	Bedroom	1453	259°	22.00	0.86	YES	4.00	1.00	YES						
					19.00			4.00								
											22.00			4.00		
											19.00	0.86	YES	4.00	1.00	YES
86-90 Granville Cl																
Level 0	437	Bedroom	1451	259°	37.00	0.95	YES	10.00	1.00	YES						
					35.00			10.00								
											37.00			10.00		
											35.00	0.95	YES	10.00	1.00	YES
	438	Bedroom	1452	259°	37.00	0.92	YES	10.00	1.00	YES						
					34.00			10.00								
											37.00			10.00		
											34.00	0.92	YES	10.00	1.00	YES
	439	Bedroom	1450	259°	35.00	0.91	YES	9.00	1.00	YES						
					32.00			9.00								
											35.00			9.00		
											32.00	0.91	YES	9.00	1.00	YES
	456	LKD	1463	259°	31.00	1.00	YES	9.00	1.00	YES						
					31.00			9.00								
											31.00			9.00		
											31.00	1.00	YES	9.00	1.00	YES
Level 1B	440	Bedroom	1441	259°	39.00	0.92	YES	11.00	1.00	YES						
					36.00			11.00								
											39.00			11.00		
											36.00	0.92	YES	11.00	1.00	YES
	441	Bedroom	1443	259°	38.00	0.95	YES	10.00	1.00	YES						
					36.00			10.00								
											38.00			10.00		
											36.00	0.95	YES	10.00	1.00	YES
	442	Bedroom	1464	259°	36.00	0.94	YES	9.00	1.00	YES						
					34.00			9.00								
											36.00			9.00		
											34.00	0.94	YES	9.00	1.00	YES
	446	LKD	1436	259°	34.00	0.94	YES	10.00	1.00	YES						
					32.00			10.00								
											34.00			10.00		
											32.00	0.94	YES	10.00	1.00	YES
Level 2B	443	Bedroom	1440	259°	41.00	0.88	YES	12.00	0.92	YES						
					36.00			11.00								
											41.00			12.00		
											36.00	0.88	YES	11.00	0.92	YES
	444	Bedroom	1444	259°	40.00	0.90	YES	11.00	0.91	YES						
					36.00			10.00								
											40.00			11.00		
											36.00	0.90	YES	10.00	0.91	YES
	445	Bedroom	1439	259°	37.00	0.92	YES	10.00	0.90	YES						
					34.00			9.00								
											37.00			10.00		
											34.00	0.92	YES	9.00	0.90	YES
	447	LKD	1437	259°	37.00	0.89	YES	10.00	1.00	YES						
					33.00			10.00								
											37.00			10.00		
											33.00	0.89	YES	10.00	1.00	YES
104 - 106 Granville Cl																
Level 0	449	LKD	1460	259°	27.00	0.93	YES	0.00	1.00	YES						
					25.00			0.00								
											27.00			0.00		
											25.00	0.93	YES	0.00	1.00	YES
	450	LKD	1461	259°	34.00	0.91	YES	7.00	1.00	YES						
					31.00			7.00								
											34.00			7.00		
											31.00	0.91	YES	7.00	1.00	YES
Level 1B	451	LKD	1457	259°	41.00	0.95	YES	12.00	1.00	YES						
					39.00			12.00								
											41.00			12.00		
											39.00	0.95	YES	12.00	1.00	YES
	452	LKD	1458	259°	40.00	0.90	YES	12.00	0.92	YES						
					36.00			11.00								

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											40.00			12.00		
											36.00	0.90	YES	11.00	0.92	YES
	453	Bedroom	1459	259°	39.00	0.90	YES	11.00	1.00	YES						
					35.00			11.00								
											39.00			11.00		
											35.00	0.90	YES	11.00	1.00	YES
138 Granville Cl																
Level 0	454	Bedroom	1454	259°	22.00	0.91	YES	1.00	1.00	YES						
					20.00			1.00								
											22.00			1.00		
											20.00	0.91	YES	1.00	1.00	YES
Level 1B	455	Bedroom	1456	259°	23.00	0.91	YES	3.00	1.00	YES						
					21.00			3.00								
											23.00			3.00		
											21.00	0.91	YES	3.00	1.00	YES

Appendix C - Shadow Plots

In accordance with the BRE guide we have undertaken an overshadowing assessment of the amenity spaces. The results of the overshadowing analysis are shown in the following pages. The model was tested on 21st March (the Spring Equinox), on 21st June (mid-summer's day) and on 21st December (Winter solstice).

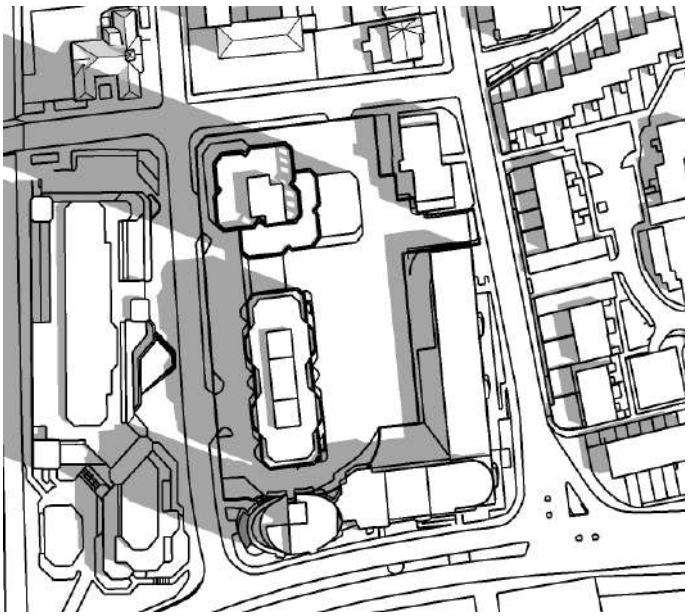
21 March- 9:00

21 March - 11:00

21 March - 13:00

21 March - 15:00

21 March - 17:00



21 June- 9:00

21 June - 11:00

21 June - 13:00

21 June - 15:00

21 June - 17:00

Appendix D - Spot heights drawings for information

Please see below the scaled elevations including the AOD levels as well as the scaled sections and the survey plan provided by the Architect's team, which received the model georeferenced and scaled. Additionally, please see the 3D view of the Revit model including the AOD levels, latitude, and longitude measures.

Revit models were provided for the purpose of the DSO analysis. They include further details for the impact analysis on the neighbouring buildings.

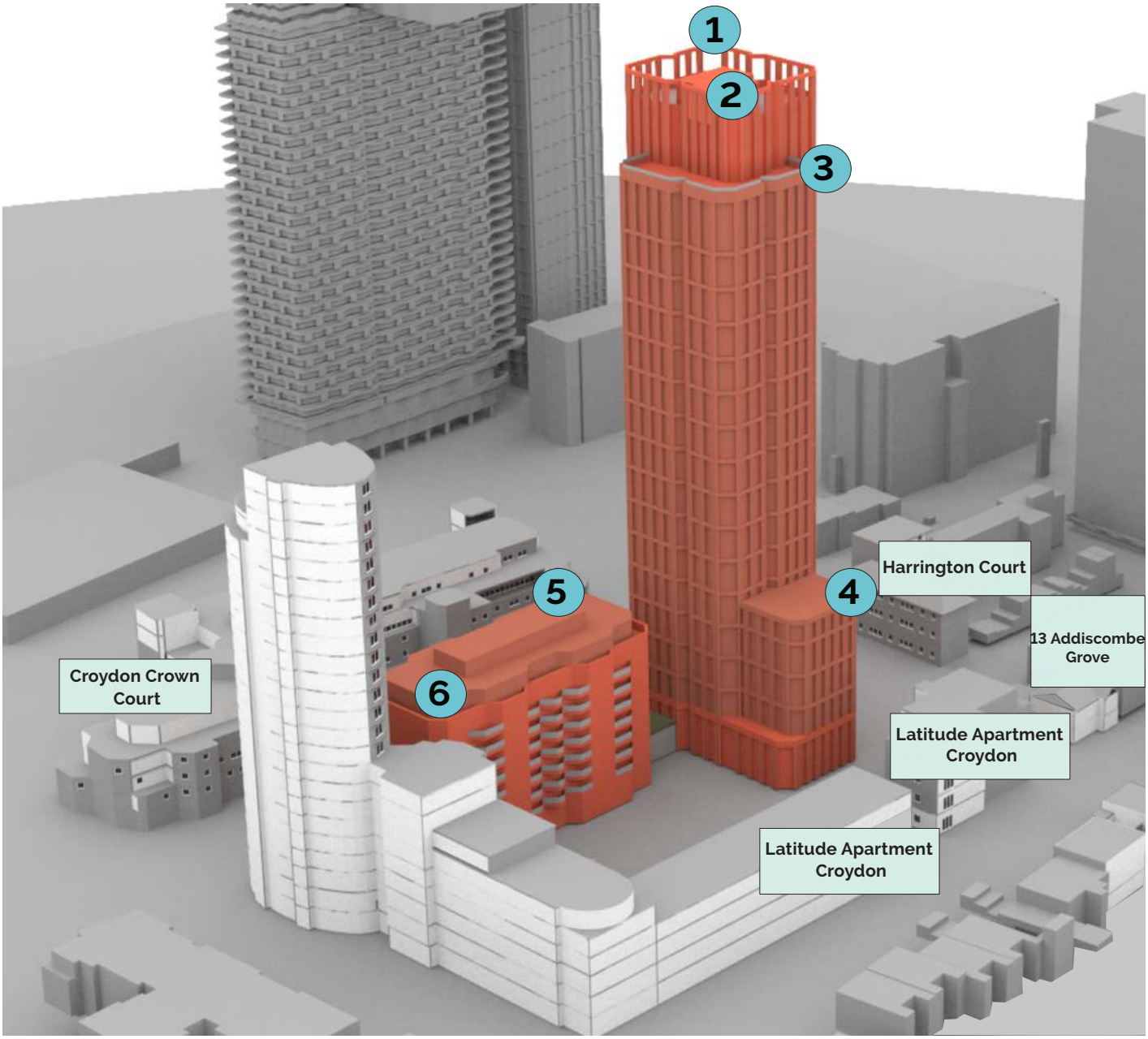
The models are geolocated and scaled based on dwg or SketchUp models from the architects. Also, we use isometric projections from Revit to illustrate our reports that are not to scale due to the layout.

The MBS Plug-in uses the climate file to determine the location and the coordinates of the project which are as follows:

- Location: London, Gatwick
- Latitude 51.1500 and Longitude -0.1800

A measured survey was carried out to produce the context model (including the existing buildings) which uses a high definition terrestrial laser scanner' to create a point cloud. This is then utilised to create a fully refined 3D model of the built environment with the pertinent receptors correctly sized and positioned to millimetre accuracy.

This is then utilised to create a fully refined 3D model of the built environment with the pertinent receptors. Whilst we have not obtained access to all the neighbouring properties assessed, full or partial floor plans have been obtained from Croydon Planning Portal and Property Sales websites for the following properties, and these layouts have been incorporated into the 3D model.



1
E=532928.9189
N=165549.4716
AOD=187.9

2
E=532955.9884
N=165531.5567
AOD=187.9

3
E=532960.4623
N=165546.5468
AOD=173.725

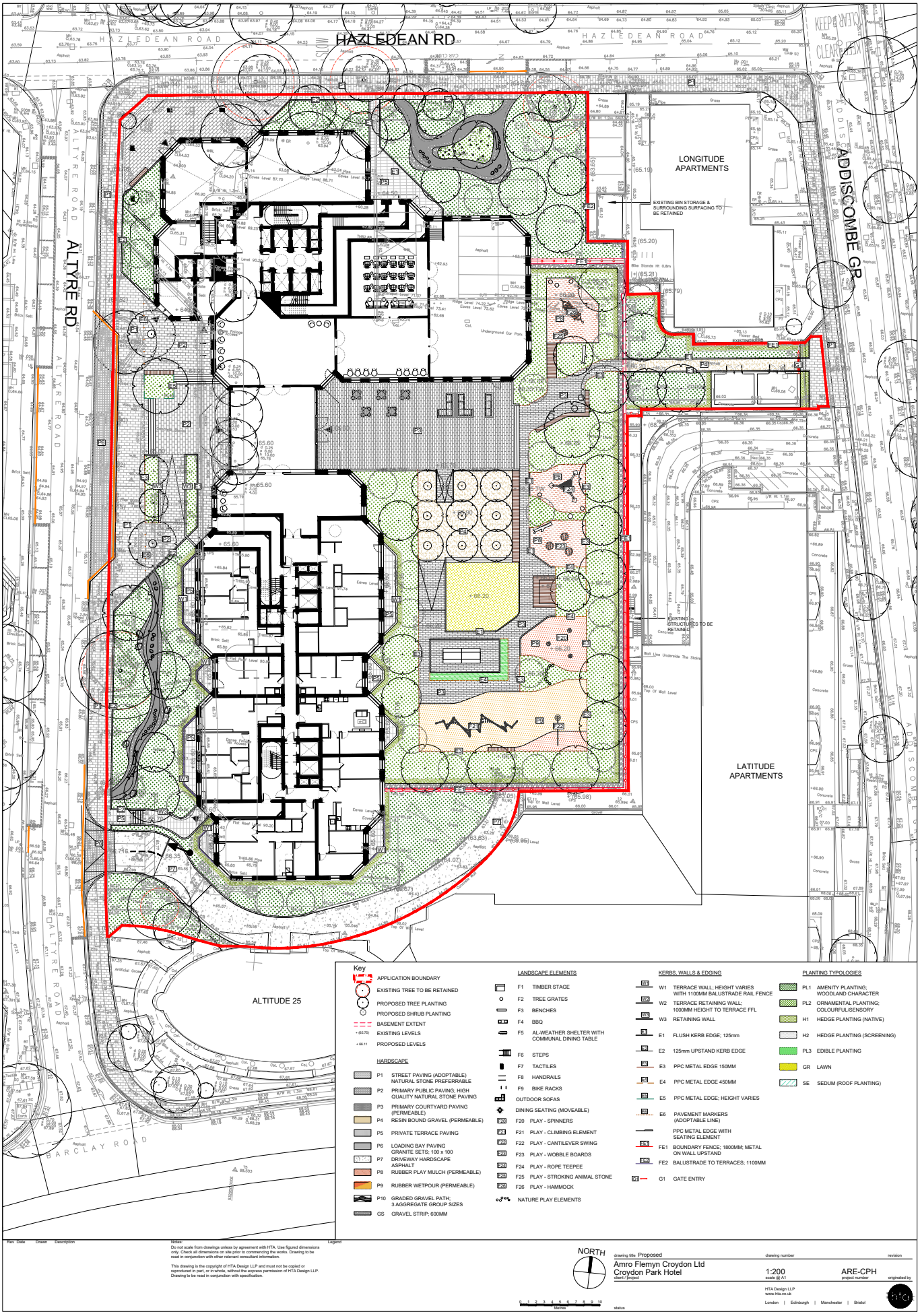
4
E=532973.3983
N=165546.3328
AOD=96.25

5
E=532944.7439
N=165501.1768
AOD=99.4

6
E=532961.0315
N=165461.4981
AOD=93.83

The coordinates shown on the image above are the detailed site latitude and longitude measures. However, it should be noted that MBS plug-in uses the climate file to determine the location and the coordinates of the project which are as follows:

- Location: London, Gatwick
- Latitude 51.1500 and Longitude -0.1800


HAZLEDEAN RD
ALTYRE RD
ADDISCOMBE GR
LONGITUDE APARTMENTS
LATITUDE APARTMENTS
ALTITUDE 25
EXISTING BIN STORAGE & SURROUNDING SURFACING TO BE RETAINED
EXISTING STRUCTURES TO BE RETAINED
Key
APPLICATION BOUNDARY
EXISTING TREE TO BE RETAINED
PROPOSED TREE PLANTING
PROPOSED SHRUB PLANTING
BASEMENT EXTENT
EXISTING LEVELS
PROPOSED LEVELS
HARDSCAPE
P1 STREET PAVING (ADOPTABLE) NATURAL STONE PREFERRABLE
P2 PRIMARY PUBLIC PAVING; HIGH QUALITY NATURAL STONE PAVING
P3 PRIMARY COURTYARD PAVING (PERMEABLE)
P4 RESIN BOUND GRAVEL (PERMEABLE)
P5 PRIVATE TERRACE PAVING
P6 LOADING BAY PAVING GRANITE SETS; 100 x 100
P7 DRIVEWAY HARDSCAPE ASPHALT
P8 RUBBER PLAY MULCH (PERMEABLE)
P9 RUBBER WETPOUR (PERMEABLE)
P10 GRADED GRAVEL PATH; 3 AGGREGATE GROUP SIZES
GS GRAVEL STRIP; 600MM
LANDSCAPE ELEMENTS
F1 TIMBER STAGE
F2 TREE GRATES
F3 BENCHES
F4 BBQ
F5 AL-WEATHER SHELTER WITH COMMUNAL DINING TABLE
F6 STEPS
F7 TACTILES
F8 HANDRAILS
F9 BIKE RACKS
OUTDOOR SOFAS
DINING SEATING (MOVEABLE)
F20 PLAY - SPINNERS
F21 PLAY - CLIMBING ELEMENT
F22 PLAY - CANTILEVER SWING
F23 PLAY - WOBBLE BOARDS
F24 PLAY - ROPE TEEPEE
F25 PLAY - STROKING ANIMAL STONE
F26 PLAY - HAMMOCK
NATURE PLAY ELEMENTS
KERBS, WALLS & EDGING
W1 TERRACE WALL; HEIGHT VARIES WITH 1100MM BALUSTRADE RAIL FENCE
W2 TERRACE RETAINING WALL; 1000MM HEIGHT TO TERRACE FFL
W3 RETAINING WALL
E1 FLUSH KERB EDGE; 125mm
E2 125mm UPSTAND KERB EDGE
E3 PPC METAL EDGE 150MM
E4 PPC METAL EDGE 450MM
E5 PPC METAL EDGE; HEIGHT VARIES
E6 PAVEMENT MARKERS (ADOPTABLE LINE)
PPC METAL EDGE WITH SEATING ELEMENT
FE1 BOUNDARY FENCE; 1800MM; METAL ON WALL UPSTAND
FE2 BALUSTRADE TO TERRACES; 1100MM
G1 GATE ENTRY
PLANTING TYPOLOGIES
PL1 AMENITY PLANTING; WOODLAND CHARACTER
PL2 ORNAMENTAL PLANTING; COLOURFUL/SENSORY
H1 HEDGE PLANTING (NATIVE)
H2 HEDGE PLANTING (SCREENING)
PL3 EDIBLE PLANTING
GR LAWN
SE SEDUM (ROOF PLANTING)
Rev Date Drawn Description
Legend
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NORTH
drawing title Proposed
Amro Flemyn Croydon Ltd
Croydon Park Hotel
client / project
drawing number
1:200
scale @ A1
revision
ARE-CPH
project number
originated by
status
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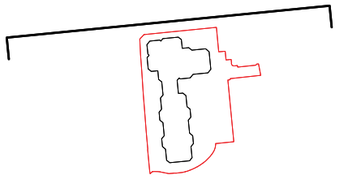
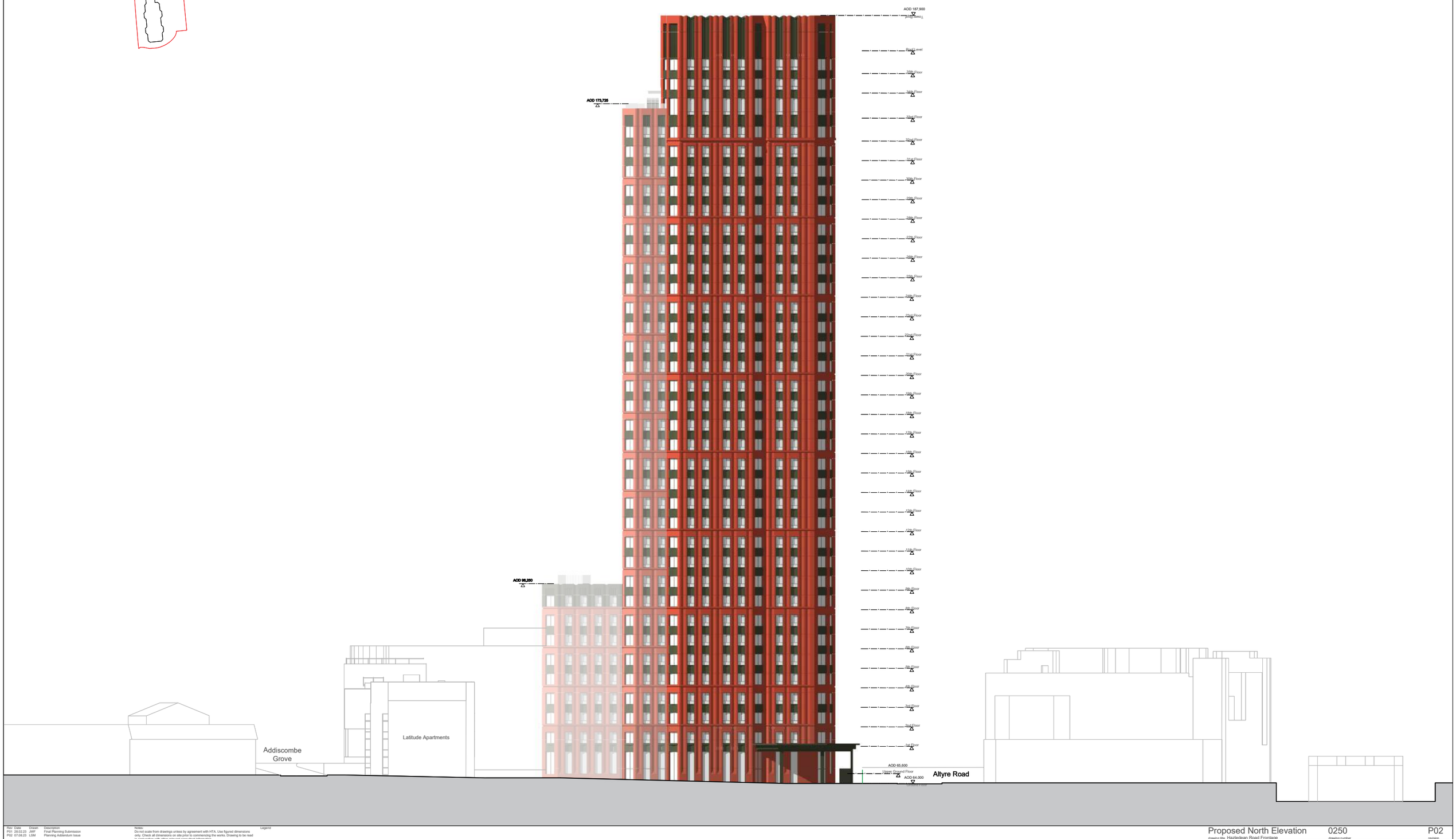
MAP KEY





Rev	Date	Drawn	Description
P01	28.02.23	JWF	Final Planning Submission
P02	07.08.23	LSM	Planning Addendum Issue

Notes:
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Legend

0 5 10 15 20 25
Metres

Proposed North Elevation — drawing title: Haztledean Road Frontage
0250 — drawing number
P02 — revision
Amro Flemyn Croydon Ltd — client name
Croydon Park Hotel — project name
Scale 1:200 @ A2
ARE-CPH — project number
JWF — originated by
FOR PLANNING — status

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P02	07.06.23	LSM	Planning Addendum Issue

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Legend

0 5 10 15 20 25
Metres

Proposed East Elevation — drawing title
Courtyard Frontage
0251 — drawing number
P02 — revision
Amro Flemyn Croydon Ltd — client
Croydon Park Hotel
Scale 1:200 @ A0
ARE-CPH — project number
JWF — originated by
FOR PLANNING — status

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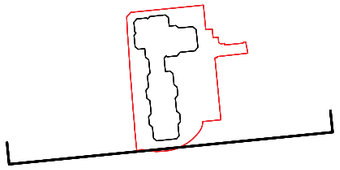

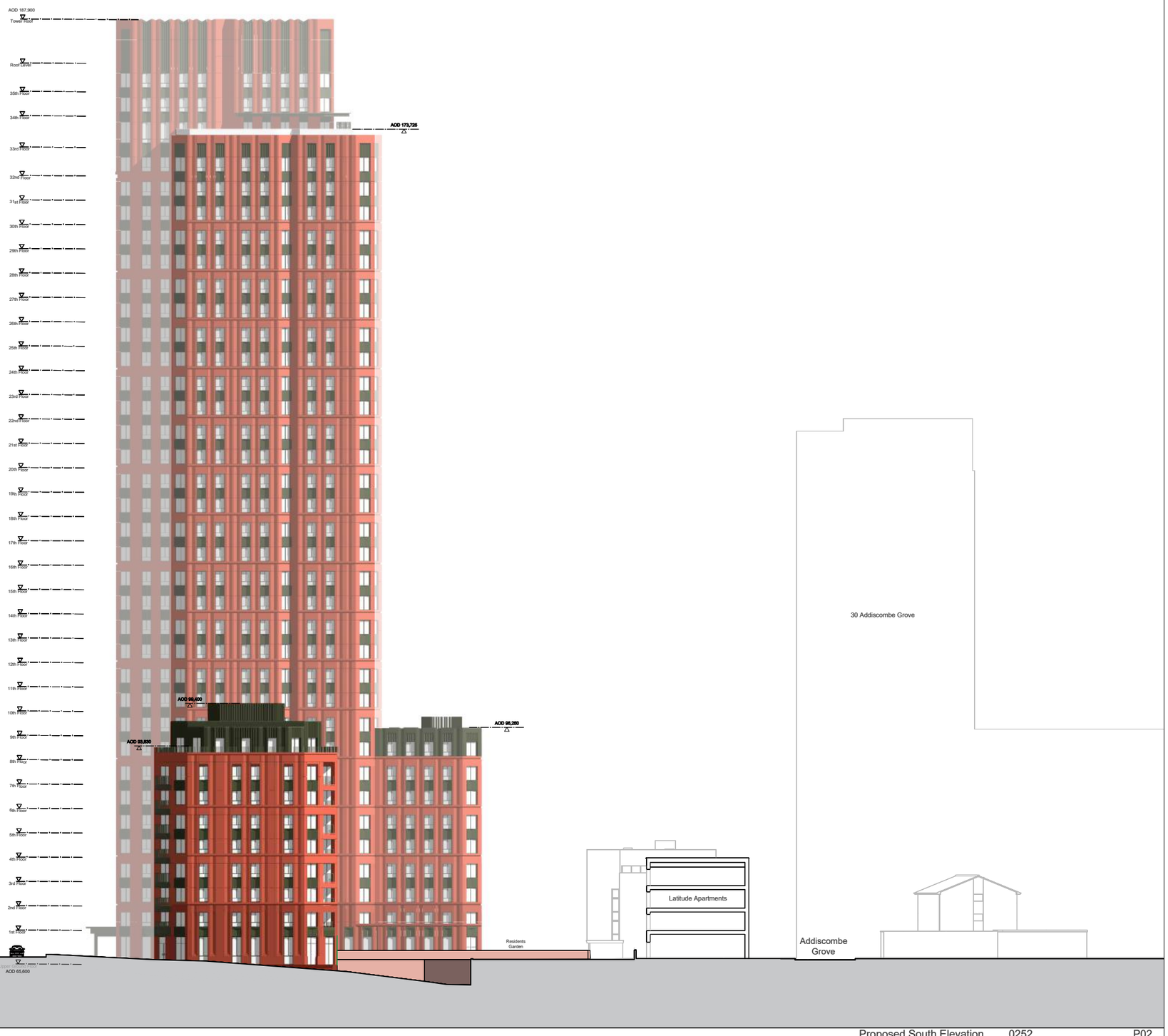

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P01	28.02.23	JWF	Final Planning Submission
P02	07.08.23	LSM	Planning Addendum Issue

Notes:
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Legend

0 5 10 15 20 25
Metres

Proposed South Elevation — drawing title
0252 — drawing number
P02 — revision
Amro Flemyn Croydon Ltd
Croydon Park Hotel — client project
Scale 1:200 @ A0
ARE-CPH — project number
JWF — originated by
FOR PLANNING — status

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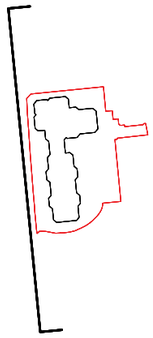

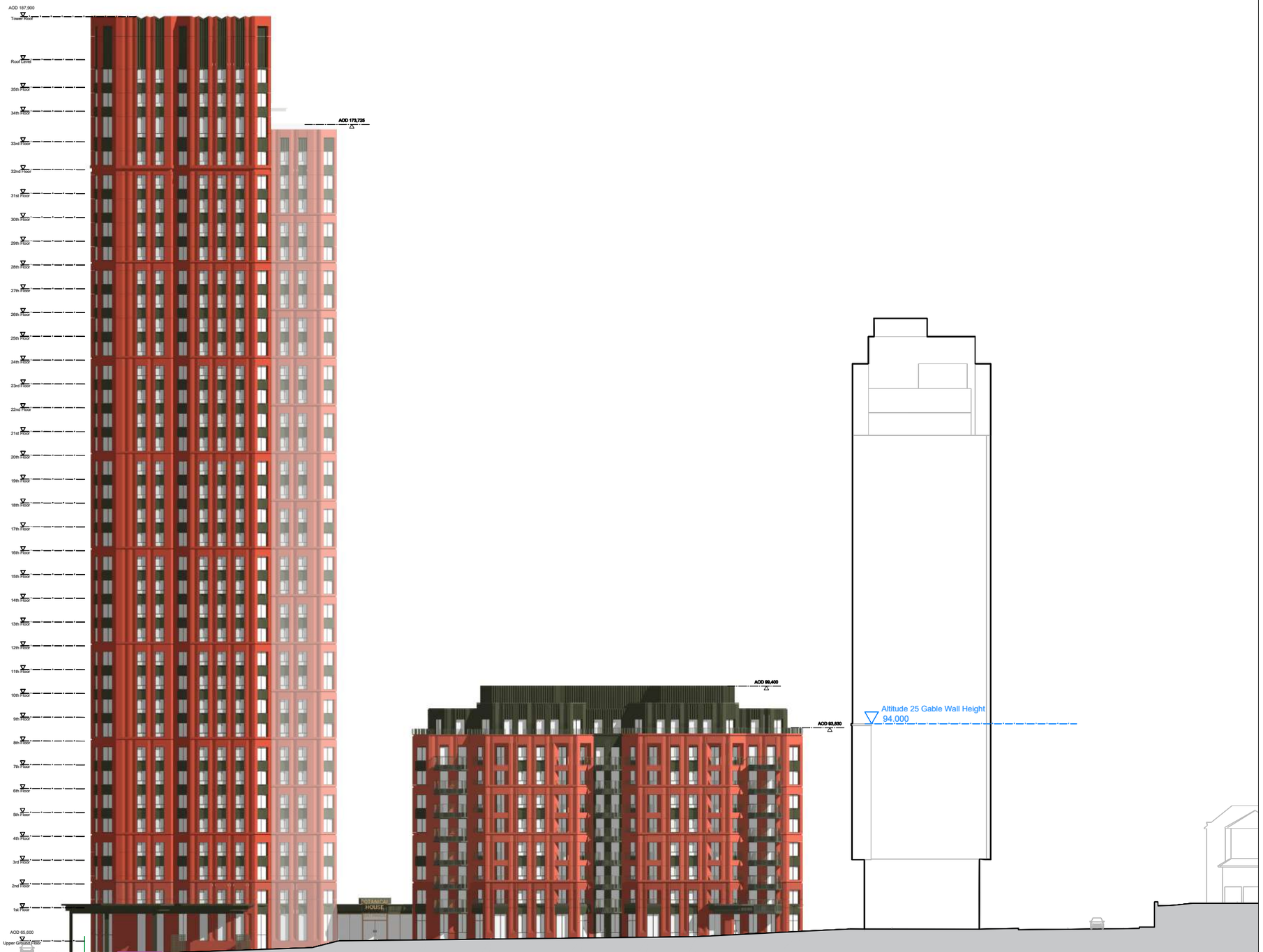

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P02	07.08.23	LSM	Planning Addendum Issue

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Drawing to be read in conjunction with specification.

Legend

0 5 10 15 20 25
Metres

Proposed West Elevation
drawing title: Alhyre Road Frontage

0253
drawing number

P02
revision

Amro Flemyn Croydon Ltd
Croydon Park Hotel
client / project

Scale
1:200 @ A0

ARE-CPH
project number

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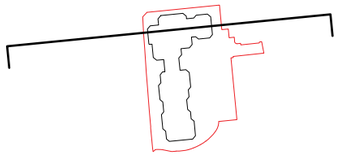

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P02	07.08.23	ZAB	Planning Addendum Issue

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Legend

0 5 10 15 20 25
Metres

Proposed Section
drawing title (East - West through Tower)

0260
drawing number

P02
revision

Amro Flemyn Croydon Ltd
Croydon Park Hotel
client & site

Scale
1:200 @ A0

ARE-CPH
project number

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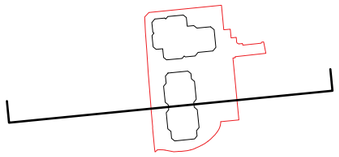

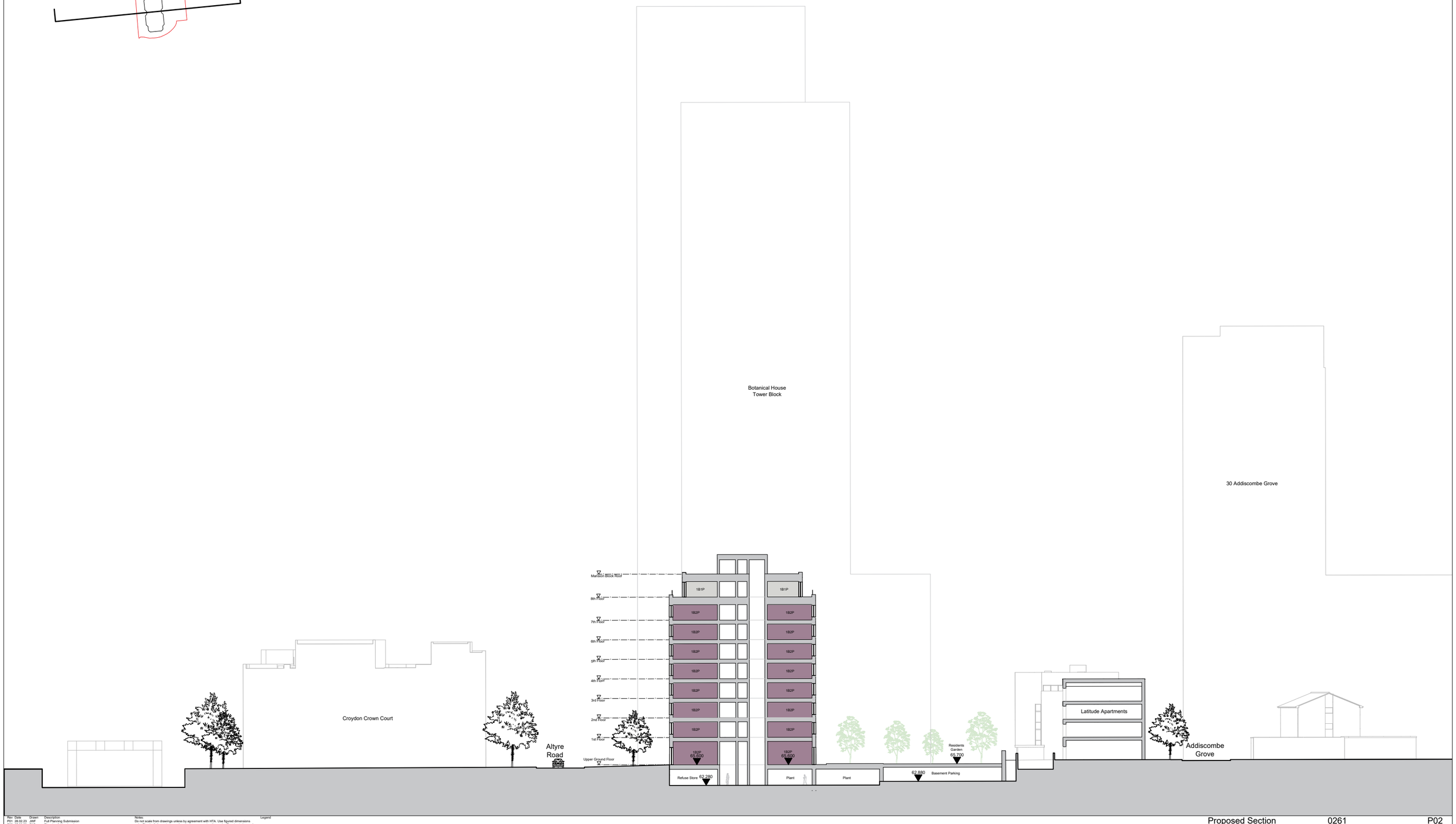

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P02	07.08.23	ZAB	Planning Addendum Issue

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Drawing to be read in conjunction with specification.

Legend

0 5 10 15 20 25
Metres

Proposed Section
drawing title (East - West through Mansion Block)

0261
drawing number

P02
revision

Amro Flemyn Croydon Ltd
Croydon Park Hotel
client and project

Scale
1:200 @ A0

ARE-CPH
project number

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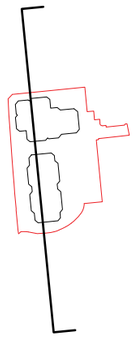

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Drawing to be read in conjunction with specification.

Legend

0 5 10 15 20 25
Metres

Proposed Section
drawing title (North - South Through Tower & Mansion Block)

0262
drawing number

P02
revision

Amro Flemyn Croydon Ltd
Croydon Park Hotel
client, project

Scale
1:200 @ A0

ARE-CPH
project number

JWF
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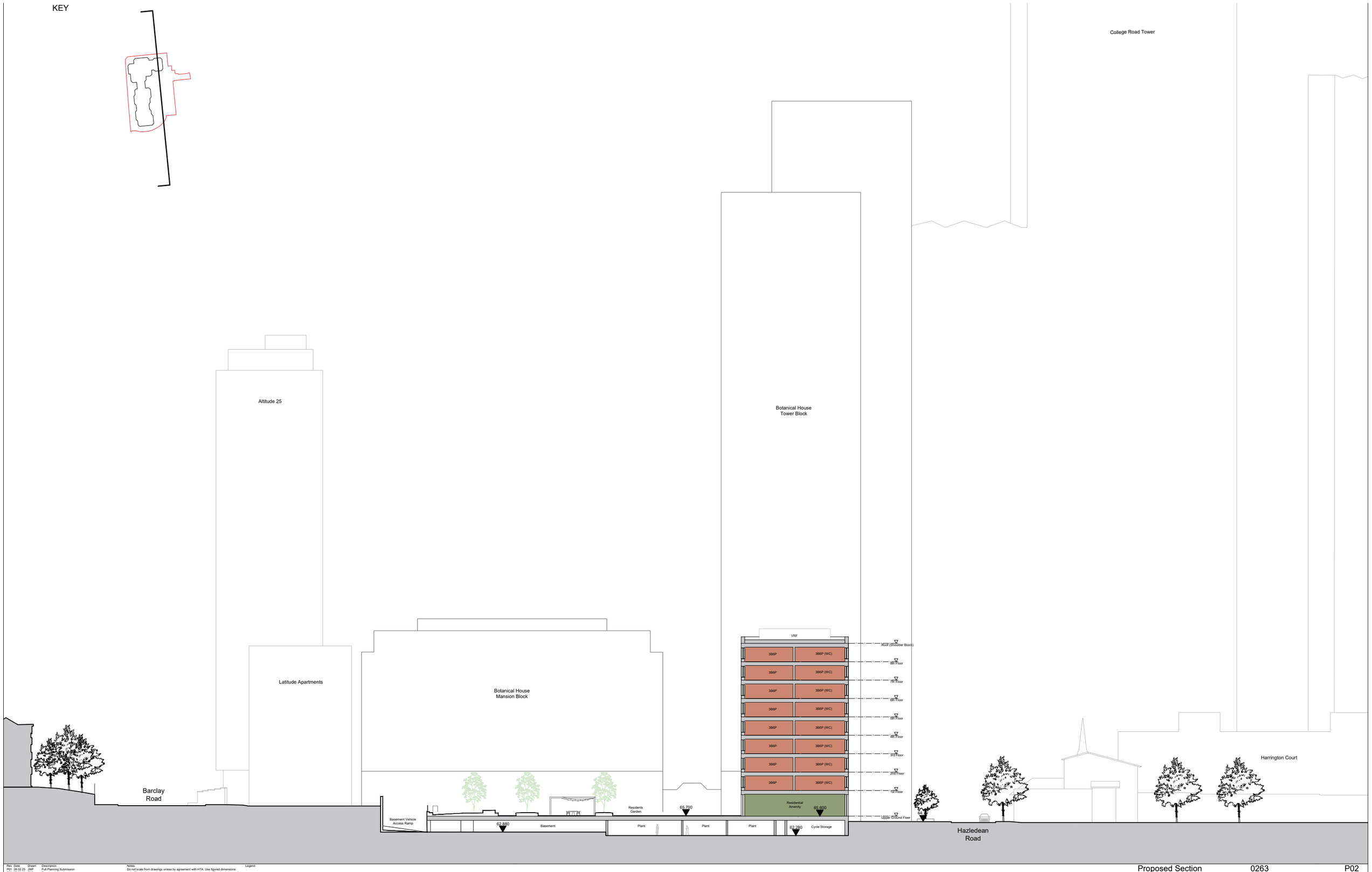

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Drawing to be read in conjunction with specification.

Legend

0 5 10 15 20 25
Metres

Proposed Section
drawing title (North - South Through Tower Shoulder)

0263
drawing number

P02
revision

Amro Flemyn Croydon Ltd
Croydon Park Hotel
client

Scale
1:200 @ A0

ARE-CPH
project number

JWF
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BSc (Hons) Dip Arch

APPENDIX A.32 CROYDON PARK HOTEL COMMITTEE REPORT

1 APPLICATION DETAILS

Ref: 23/00872/FUL
Location: Croydon Park Hotel, 7 Altyre Road, Croydon, CR9 5AA
Ward: Addiscombe West
Description: Demolition of the existing buildings and retention of the existing basement, site preparation and enabling works to allow for the erection of a residential building (Use Class C3) comprising a maximum 447 homes with a maximum height of 36 storeys and community floorspace (Use Class F.1/F.2) on the ground floor, highways and access works, landscaping, car and cycle parking, and other associated works
Drawing Nos: See Appendix 1
Applicant: Amro Fleymn Croydon Limited
Agent: Mark Knibbs of Avison Young
Case Officer: Georgina Betts

	Housing Mix				
	Studio (1 person)	**1 bed** (2 person)	**2 bed** (3 and 4 person)	**3 bed** (5 and 6 person)	**TOTAL**
Proposed (Market Rent)	84	106	75	96	**361**
Proposed (Discount Market Rent)	0	46	22	0	**68**
Proposed (London Living Rent)	0	0	4	14	**18**
TOTAL	**84 (18%)**	**152 (34%**	**101 (23%)**	**110 (25%)**	**447 (100%)**

Type of floor space	**Amount proposed**
Residential (Use Class C3)	44,193sqm (NIA)
Community (Use Class F.1/F.2)	208sqm (NIA)
Total	44,401sqm

Vehicle and Cycle Parking (London Plan Standards)	
PTAL: 6b	
Car Parking maximum standard	**Proposed**
Car free with 3% disabled provision	13x disabled bays only
Long Stay Cycle Storage minimum	**Proposed**
775	788
Short Stay Cycle Storage minimum	**Proposed**
13	13

1.1 This application is being reported to committee because:

- The ward councillors (Cllr Fitzsimons and Cllr Hay-Justice) made representations in accordance with the Committee Consideration Criteria and requested committee consideration.

- Objections above the threshold in the Committee Consideration Criteria have been received.
- It is a residential development containing 200 or more new dwellings.

2 RECOMMENDATION

2.1 That the Committee resolve to GRANT planning permission

2.2 That the Director of Planning and Sustainable Regeneration is delegated authority to issue the planning permission subject to:

A. Any direction by the London Mayor pursuant to the Mayor of London Order
B. The prior completion of a legal agreement to secure the following planning obligations:

Housing
a) Build to Rent criteria, including covenant, clawback mechanism and management
b) Secure 20% affordable housing (by habitable room) as 30% London Living Rent (LLR) level and 70% as Discount Market Rent (DMR) level
c) Affordable housing review mechanisms (early and late-stage reviews)

Transport
d) Sustainable Transport financial contribution of £491,700 (to include improvements to Barclay Road pedestrian crossing)
e) Transport for London (TfL) financial contribution of £550,000
f) Provision of a car club bay (with EVCP) to Hazledean Road
g) Car club membership for every home for 3 years
h) Restriction on residential parking permits in Controlled Parking Zone (CPZ) and in town centre car parks
i) Travel plan and monitoring

Public Realm
j) Enter into a S. 38 and 278 highways agreement to secure the following:
    - Resurfacing of public footpath on all pavements around the site
    - New layby to Altyre Road (with pedestrian footpath inset into application site and then adopted)
    - Removal of redundant dropped kerbs
k) Tree planting to Altyre Road (a minimum of 7 trees) secured through financial obligation of £7,840.

Design
l) Architect retention clause
m) Financial contribution of £10,892 for off-site play space for over 12-year-olds
n) Public art clauses – location defined and a) brief and section agreed with LPA b) final strategy agreed with LPA and c) implementation

Environmental
o) Carbon offsetting financial contribution of £315,164 (subject to review if the energy performance improves during the detailed design stages)
p) 'Be Seen' monitoring clause
q) Air quality financial contribution of £44,700
r) TV signal mitigation measures

Employment and Training
s) Local Employment and Training strategy (LETS)

t) LETS construction phase financial contribution of £100,000 and operational contribution of £6,770.00

Other

u) Community space management plan (how the space will be marketed, what will be provided in the space and reporting on an annual basis which groups use it, as well as a commitment to making the space is available to rent at a subsidized rate of 50% below market value for 15 hours per week for charities or community groups in Croydon)
v) Community use agreement
w) Relevant monitoring fees (per £1,500 per obligation above)

2.3 That the Director of Planning and Sustainable Regeneration is delegated authority to negotiate the legal agreement indicated above.

2.4 That the Director of Planning and Sustainable Regeneration is delegated authority to issue the planning permission and impose conditions and informatives to secure the following matters:

Conditions

1) Commencement time limit of 3 years
2) Carried out in accordance with the approved drawings
3) Development to have 447 homes (Use Class C3) across all buildings at heights of 9, 33 and 36 storeys

Pre-commencement (pre-demolition)

4) Demolition and Construction Logistics Plan (discharged in consultation with TfL and London Trams)
5) Demolition and Construction Environment Management Plan
6) Submission of a Piling Method Statement

Pre-commencement (post-demolition)

7) Public Art strategy, designs and implementation (brief and commissioned pieces for elevations including physical samples)
8) Wind mitigation in relation to ground entrance and the 33rd floor roof top amenity area
9) Sustainable urban drainage strategy
10) Intrusive site investigation

Prior to above ground floor slab level

11) Typical façade materials and detailing 1:1 mock-up's, with 1:5/1:10 details to confirm following approval
12) 1:1 mock-up's of the crown, showing interface, and of the amenity levels and window/sill details
13) External facing materials, including physical samples and detailed drawings of design elements 1:5/1:10
14) Building lighting scheme, to include night-time illumination and wildlife sensitive lighting design
15) Achieve Secured by Design accreditation
16) Vehicle Dynamics Assessment with hostile vehicle mitigation and anti-terrorist measures
17) Sufficient ducting space for full fibre connectivity infrastructure
18) Air Quality and Dust Management Plan
19) Final details of cycle parking

20) Details of aviation lights to the top of the two interlocking towers

Pre-occupation

21) Hard and soft landscaping (including planting / boundary treatment, furniture and structures / play space / equipment and rooftop amenity)
22) Urban Greening Factor to result in a minimum of 0.4 (scheme achieves 0.42)
23) Communal area management plan stipulating access to all communal areas (rooms and outside space) for all residents within both blocks
24) Detailed Delivery and Servicing Plan
25) Refuse Collection Management Plan
26) Building maintenance strategy including window cleaning
27) Parking Design and Management Plan (including details of the maintenance of the electronic gates and traffic light system utilised)
28) Community use cycle parking review for use of facilities and spaces within the basement
29) Development in accordance with WLC assessment and post-construction assessment to review emissions against submitted report
30) Development in accordance with Circular Economy assessment and post-construction assessment to review against submitted report
31) Travel Plan
32) Building fully accessible to all with step free access and evacuation lifts provided
33) Confirmation that either all water network upgrades required to accommodate the additional demand to serve the development have been completed or a development and infrastructure phasing plan agreed (from Thames Water)
34) Wind mitigation provided as specified

Compliance

35) 10% of units build to Part M4(3) and 90% to Part M4(2) of the Building Regulations
36) Access for all residents (across all tenures) throughout all buildings (being the Tower, Villa and Mansion Blocks) provided and maintained in perpetuity
37) Compliance with measures in Noise and Vibration Assessment August 2023
38) Noise from air and plant units should not increase background noise
39) Securing biodiversity mitigation and enhancement measures within Biodiversity Net Gain Statement August 2023
40) Minimum 35% CO2 reduction secured on site
41) Compliance with Air Quality Assessment March 2023 and the letter of conformity dated August 2023
42) Compliance with Energy and Overheating Assessment August 2023
43) 110 litre/person/day water consumption target
44) All car parking spaces equipped with electric vehicle charging infrastructure
45) Compliance with fire statement and detailed design of fire strategy
46) All features and materials must comply with Part B of the Building Regulations in relation to fire safety
47) Obscure glazing to the south facing windows of Tower and north facing windows of Mansion Block
48) Compliance with the Television and Radio Signal Survey and Reception Impact Assessment
49) Community use as Use Class F.1/F.2 in perpetuity
50) Any other planning condition(s) considered necessary by the Director of Planning and Sustainable Regeneration

Informatives

1) Granted subject to a Section 106 Agreement
2) Community Infrastructure Levy

3) Material/detailing conditions information
4) Code of practise for Construction Sites
5) Site notice removal
6) Thames Water guidance related to working near or diverting assets
7) Thames Water Groundwater Risk Management permit info
8) Thames Water Minimum pressure and flow rates
9) Obstacle lighting (Aviation)
10) CAA Crane Notification (Aviation)
11) Any other informative(s) considered necessary by the Director of Planning and Sustainable Regeneration

2.5 That the Committee confirms that it has paid special attention to the desirability of preserving or enhancing the character and appearance of the Chatsworth Road and Central Croydon Conservation Areas as required by Section 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990.

2.6 That the Committee confirms that adequate provision has been made, by the imposition of conditions, for the preservation or planting of trees as required by Section 197 of the Town and Country Planning Act 1990.

2.7 That, if within 3 months the legal agreement has not been completed, the Director of Planning and Sustainable Regeneration is delegated authority to refuse planning permission.

3 PROPOSAL AND LOCATION DETAILS

Proposal

3.1 The proposal is for full planning permission for:

- Demolition of existing hotel structures with the basement retained
- Site preparation and enabling works
- Construction of two buildings (the Towers/Villa and the Mansion Block) with a shared basement and ground floor level
- Building heights ranging between 9 storeys (Mansion Block) to 36 storeys (highest part of The Towers)
- Delivery of 447 residential homes (Use Class C3) as Build to Rent
- 208sqm of community floorspace (Use Class F.1/F.2)
- Highways/access works, landscaping, car (disabled parking only), cycle parking, and other associated works.

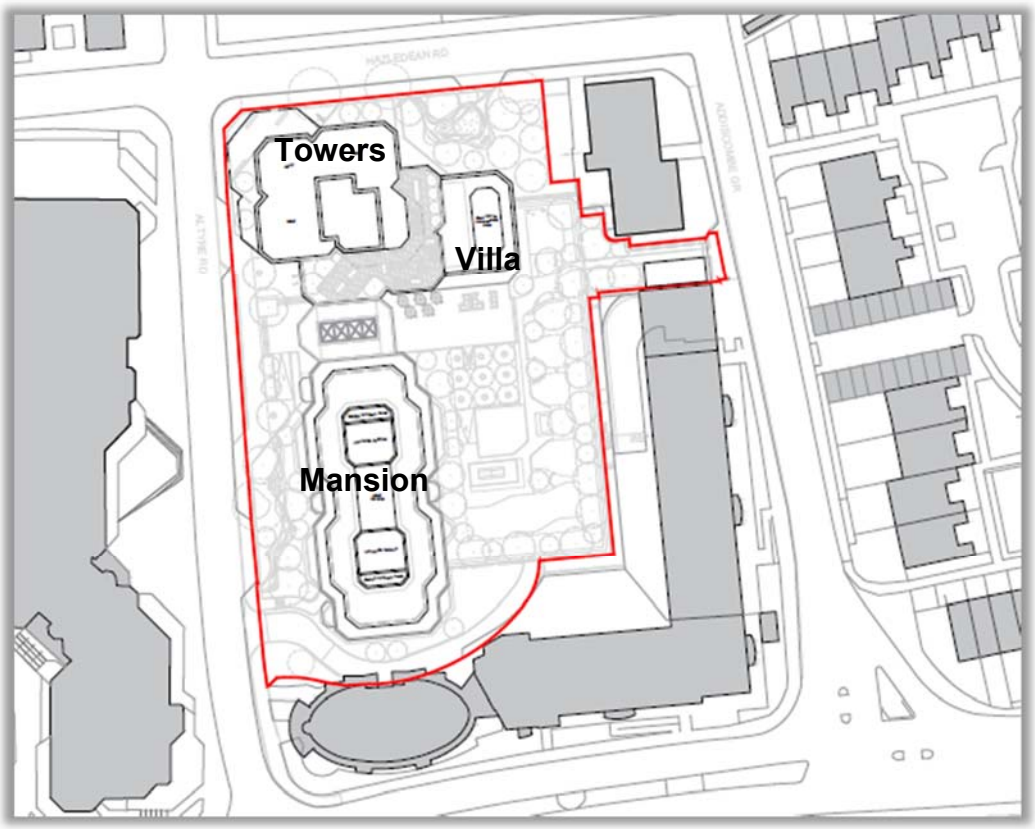


Figure 1: proposed site layout plan

Towers

- Located on the north-western corner of the application site
- The interlocking tower forms are at a height of 33 and 36 storeys
- A 208sqm community floor space on the ground floor to the north-eastern section of the floor plate
- Residential communal amenity spaces on the ground floor and 33rd floor of the tower including a gym, bar area and roof terrace. All units across the development have access to these spaces within the Towers.

Villa Block

- Located to the north-eastern corner of the site and is attached to the two interlocking towers to the west
- The Villa has a total height of 9 storeys, set back by approximately 17 metres from Hazledean Road to the north
- Multi-functional residential amenity is provided on the ground floor area

Mansion Block

- Located to the south end of the application site and is visually detached from the interlocking towers with a single storey glazed greenhouse link at ground floor level only
- The Mansion Block has a total height of 9 storeys and sits adjacent to the 9 storey blank façade of Altitude 25
- Balconies are provided on both the eastern and western elevations
- Vehicular access would be maintained to the south of The Mansion Block as per the current basement access arrangements to the hotel use

Outdoor/Amenity space

- The development provides a series of external spaces, comprising a communal courtyard garden of 1,802sqm, a pocket garden of 454sqm, a communal roof

terrace of 273sqm, and improved public realm areas of 1,022sqm totalling 3,351sqm
- An urban greening factor of 0.42 is achieved on site
- On site play space is provided for 0-5 and 6-12 year-olds with an offsite contribution secured for children over 12

Amendments

3.2 During the course of the application assessment significant amendments to the scheme were secured as a result of officer feedback. A re-consultation exercise took place on 23rd August 2023.

3.3 The improvements broadly comprise:

Design

- Reduction in height of the Towers from 39/38 storeys to 36/33 storeys.
- Reduction in the number of proposed units from 455 to 447 Build to Rent homes.
- Reduction in height of the Villa Block from 12 to 9 storeys.
- Reduction in height of Mansion Block by 600mm.
- Increase in dual aspect homes (7% increase from submission).
- Separation distances between the Towers and Mansion Block increased to 10m (originally 9m at submission).
- The Towers form has developed and been accentuated through the use of shadow gaps, contrasting colours, material and texture refinement.
- The Towers form refined/articulated to improve slenderness.
- The Mansion Block plan has been refined to reduce its length and width.
- The Mansion Block corridors have been straightened, reduced in length and made more generous in width.
- Residential entrance space relocated to the greenhouse.
- Increase of community room size by 120sqm and relocation to prominent position on Hazledean Road frontage.

Public Realm

- Resurfacing of public footpath on all pavements around the site
- Contribution towards junction crossings to Park Hill Park
- Tree planting along Hazledean and Altyre Road.
- Creation of a pocket garden to north of the Villa.
- Public realm increased by 376sqm along Altyre Road and Hazledean Road (totalling approximately 1,570sqm) through:
    - Villa Block separation from Hazledean Road increased by 1.2m (so 7m to edge of site)
    - Towers separation from Altyre Road increased by 1.5m (so 7.2m to edge of site)
    - Mansion Block separation from Altyre Road increased by 2.4m (so 13.3m to edge of site)

Neighbouring and Future Residents' Impact

- Higher Vertical Sky Component pass rate on surrounding residential properties (8% increase from planning submission) and similar uplift in the daylight performance of the proposed homes (7% increase from planning submission).
- Villa Block shifted south to provide 18m separation from Longitude Apartments.
- Separation distances between the proposed development the flats at Altitude 25 and Longitude apartments increased.

Transport/Servicing

- Basement car parking area reduced in size by circa 450sqm with 3% wheelchair parking provision.
- Cycle access improved via dedicated cycle access lift from Altyre Road to basement level.

Figure 2: CGI of the proposed scheme

Site and Surroundings

3.4 The existing site currently houses a large purpose-built hotel which is currently vacant. Croydon Park Hotel opened in 1984 and was previously operated under an international hotel brand. In recent years the hotel has closed and become disused and dilapidated. The building comprises two sections; the primary accommodation block is constructed over ground and five upper floors, with the second block built over two floors comprising both front and back of house facilities.

3.5 A public car park is provided partially at ground level and within the basement of the existing hotel, providing 87 parking bays.

3.6 The site is located approximately 200m south of East Croydon Station, on the south-eastern corner of Altyre Road and Hazledean Road. The site forms part of an existing perimeter block with the site directly to the south occupied by Altitude 25, a 25 storey residential tower, with lower elements to the east known as Latitude Apartments. Latitude Apartments turn the corner of Barclay Road and extend up Addiscombe Grove, falling in height to 4 storey. The final building in the block is Longitude Apartments, a 5 storey building on the corner between Addiscombe Grove and Hazledean Road.

3.7 The surrounding streets to the east are predominantly residential buildings of 2-4 storeys, with Croydon Crown Court located directly opposite on Altyre Road and the large Park Hill Park to the south off Barclay Road.

Figure 3: aerial photograph of site in context

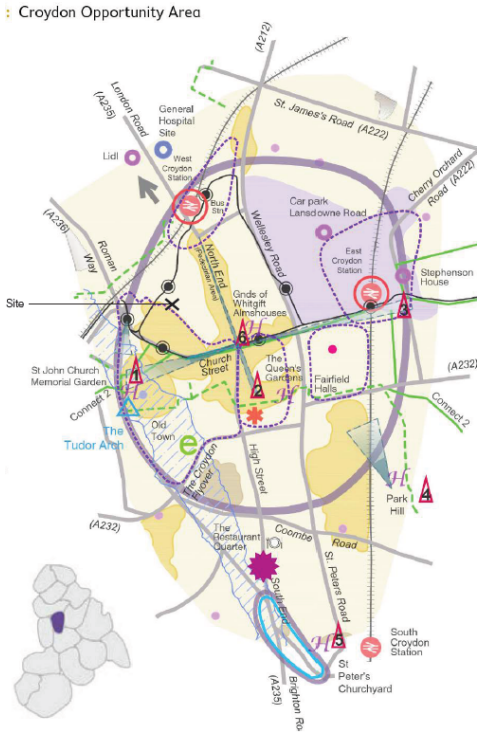
Figures 4 and 5: birds eye views of the existing hotel building

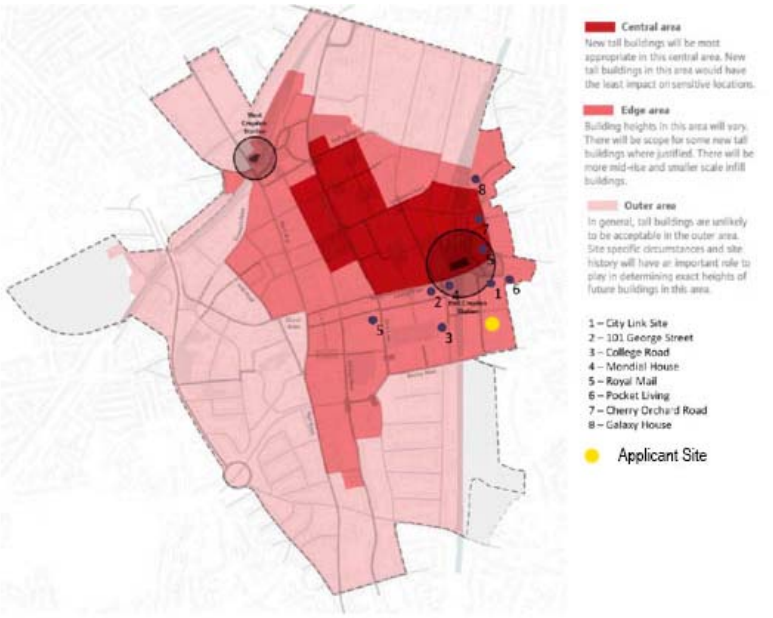
3.13 The surrounding area towards East Croydon Station contains a wide variety of building types and scale, with a number of tall buildings either under construction or benefiting from planning permission. College Tower (19/04987/FUL) is nearing completion on site, which is part 49 and part 34 storey tower and Ten Degrees (17/04201/FUL) part 38 and part 44 storey in height. It is also important to note the Citylink scheme (21/02912/FUL) for a part 14 storey and part 28 storey building with basement, comprising 498 co-living units and 84 residential units. this was refused permission on grounds of impact on the NLA Tower; this decision was allowed on appeal by the Planning Inspectorate. This is located 90m to the north of the application site.

Planning Designations and Constraints

3.14 The site is located within the Croydon Opportunity Area (so policy DM38 applies) and within the 'Edge Area' for tall buildings *(See Images 4 and 5: Extracts from Croydon Local Plan 2018)*. The site has excellent Public Transport Accessibility (PTAL 6B), being

in close proximity to East Croydon Station and numerous bus and tram links. The site in totality is at a 1 in 100 year and a 1 in 1,000-year risk of surface water flooding and is at risk of ground water flooding.





Figures 6 and 7: Extracts from Croydon Local Plan 2018

3.15 All of the roads around the site are within the Central Croydon CPZ. The site is not subject to a Tree Preservation Order although there are a number of established trees towards to the northern boundary. The site lies near to the Chatsworth Road Conservation Area (approximately 74m to the south of the site), the Central Croydon Conservation Area (approximately 400m to the west of the site) and the NLA Tower which is a locally listed building (approximately 127m to the north of the site).

Planning History

3.16 The following planning decisions are relevant to the application:

92/00968/P	Erection of five/six/seven storey hotel extension comprising 115 bedrooms, syndicate and function rooms and additional underground parking for 37 cars; erection of 2/3 storey and 4 storey buildings comprising 1 two bedroom, 13 one bedroom and 24 studio flats with underground parking for 45 cars. **Permission Granted and Implemented.**
97/01367/P	Alterations; erection of two single storey ground floor extensions to include installation of rotary and automatic doors. **Permission Granted and Implemented.**
21/06269/PRE	To demolish the existing buildings. To erect buildings to provide approximately 550 residential units, internal and external amenity space, together with associated wheelchair accessible vehicle parking, cycle parking, landscaping, play areas and associated works. **Pre-application scheme that was presented to Place Review Panel and came to Planning Committee as a developer**

presentation (see below). Officers had concerns with a number of aspects of the scheme.

22/04535/ENVS Environmental Impact Assessment (EIA) Screening Opinion Request for the demolish all structures on site and construct two new buildings (linked by basement and ground floor) with the tallest building up to a maximum 43 storeys. The Proposed Development will provide: Up to approximately 500 residential Build to Rent dwellings within three building blocks, Accessible parking spaces incorporating active or passive EV charging, Bicycle parking facilities and new landscaping and publicly accessible formal and informal play space, new tree planting and quality hard landscape areas at ground floor level. **EIA Not Required.**

Pre-Application background (21/06269/PRE)

Place Review Panel 1 (PRP)

3.17 An early iteration of the scheme was presented to the Council's PRP in October 2022. This version of the scheme was for the erection of a part 31/36/39 storey tower, a 10 storey linear block and 6 storey villa block comprising approximately 430 Built to Rent units and associated parking, servicing, amenity spaces, landscaping and public realm works.

Figures 8, 9, 10 and 11: proposal presented to PRP in October 2022

3.18 The Panel were very concerned with the tower's height and width and the lack of private amenity, as well as the mansion block's height and distance from Altitude 25. They felt there was potential to link the scheme better into the cluster of tall buildings to the west of the railway line, but that there should also be a distinction from them. The Panel felt that the public realm was of critical importance to make the scheme attractive for over 1,000 people. The Panel encouraged the applicant to think more about the users of the building and the sense of community and shared amenity spaces. A summary of comments and key recommendations are provided below:

- Need to revisit the principles that guide the design and massing with sufficient assessment of the environmental and townscape impacts.
- Specific commitments to energy need to be detailed with specification.
- More external private balcony space for fresh air and sitting out for residents.
- Strongly recommended lowering the height of the tower due to its “Edge” location by 10 storeys and of the mansion block to a maximum of 9 storeys considering the 9 storey flank of Altitude 25.
- Strongly advocated for significantly increasing the proportion of dual aspect units and the redistribution of some family units into the mansion block.
- Recommend revisiting the form and function of the corner entrance area to be more public and sociable.
- Natural daylight to the tower core and all cores is vital and essential.
- Emphasised the need to have some bike storage on the ground floor.
- Advised that improvements to the public realm would enhance the pedestrian experience.

<u>Developer Presentation to Committee</u>

3.19 The scheme was revised and presented to Committee Members on the 16th December 2022. This proposal was to demolish the existing buildings and erect a development to provide approximately 450 residential units (Use Class C3, as Build to Rent), internal and external amenity space, together with associated wheelchair accessible vehicle parking, cycle parking, landscaping, play areas and works.

Figures 12, 13 and 14: views from the north of Altyre Road (left) and from South Park Hill Park to the south (top right), then proposed site plan (bottom right)

3.20 The main issues raised at this meeting by Members of the Committee were as follows:

Principle

- Sorry for loss of much-loved Hotel

- Prime location 200m from East Croydon station
- Do not want site derelict and abandoned
- Loss of employment from loss of hotel
- Need for housing
- Questioned whether student accommodation had been considered
  Officer response: There is no protection for the existing hotel use, so the principle of its loss and a residential redevelopment is supported. There is currently no identified need for purpose built student accommodation, so this matter was not pursued by Officers.

Height

- Site can take some height, but a concern at this height could set a precedent
- Concerned not part of the cluster of tall buildings, distinction between sides of the railway line
- Height more akin to NLA Tower, Altitude 25 and Pocket could be more appropriate
- *Officer response: Officers agree that the site could accommodate a tall building. The scheme has been reduced in overall height terms, but officers acknowledge it remains taller than NLA Tower, Altitude 25 and Pocket.*

Design

- Should not compete with NLA Tower
- Materiality competes, should consider a softer palette
- Contrast between surroundings is too much of a change
- Needs to relate better to Pocket and Altitude 25
- Questions around terracotta and materials
- Balcony materials important - linked to privacy
- Relationship between blocks successful and design works
  Officer response: The proposed development does not compete with the NLA tower given the separation distance and the contrasting material palette. The scheme takes cues from surrounding buildings in terms of detailing which respect the architectural style of the NLA tower and nearby new buildings known as Ten Degrees and College Tower. The contrasting materials are supported by officers, explained later in the design section of the report.

Affordable housing

- Questions around location, type, service charges, use of facilities and maintenance and whether secured in perpetuity
- Questioned where 20% has come from and need for viability to have been worked through
  Officer response: The affordable housing units would be pepper potted throughout the scheme, with access to all facilities and maintenance controlled through unified ownership and management of the private and affordable elements of the scheme. The 20% affordable housing has been tested under the viability tested route; officers have reviewed the final FVA alongside independent advise and concur with the applicants' findings that the 20% offer is the maximum reasonable affordable housing provision.

Mix and standard

- Questioned mix beyond family provision - seems high proportion of one-bed
- Dual aspect units important
- Questions around Build to Rent experience of the developer
- Pollution from the road and impact for future occupiers
- Spaces needed for different uses, including prayer and disabled/elderly

Officer response: The applicant has now increased the number of family units and now stands at 25% which is in excess of the 20% policy requirement. The number of dual aspect units have increased.

Residential impact

- Residents concerned about what is coming forward
- Questioned how the scheme has amended through consultation
- Questions around microclimate and noise
- Daylight and sunlight impacts need to be considered, bearing in mind lower rise in Altyre Road
- Relationship to Altitude 25 important

  Officer response: Details in 3.3 and 3.23 show how the scheme has been amended prior to submission and during the course of the application process. Microclimate including wind and daylight/sunlight impacts have been independently verified by the Councils expert consultants and covered in detail in the main body of this report.

Public realm

- Generosity of pavement and public realm needed
- Welcome public realm approach of green link and tree retention
- Links to Park Hill should be improved - suggestion of working with Park Hill community groups
- Blue infrastructure important

  Officer response: Officers have worked with the applicant's team to set the buildings deeper into the site to provide more generous public realm and green link, as well as a contribution towards improvement to the Barclay Road pedestrian crossing into park Hill. Full details are addressed in more detail below.

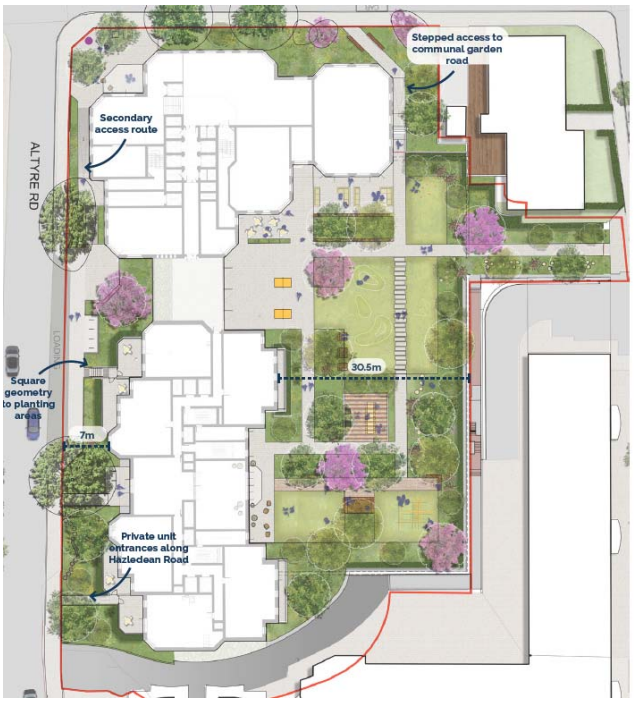
Other

- Car parking numbers and impact on congestion
- Refuse and bulky items need to be factored in
- Support the sustainability approach
- Questioned the name of the development

  Officer response: The proposal is car free with the exception of 3% disabled parking provision that will be provided within the basement area. Refuse arrangements have been worked through and covered in detail below, as well as sustainability credentials. The question of the scheme is not a planning matter.

PRP2

3.21 The proposal was further amended and presented to a second PRP in January 2023, this time for the erection of a part 39/38 storey tower with a 12 storey shoulder, plus a 9 storey linear block comprising approximately 453 Built to Rent units and associated parking, servicing, amenity spaces, landscaping and public realm works.



Figures 15, 16, 17 and 18: site layout at part of PRP 2 (top left and right) January 2023 visual from Barclay Road (left) January 2023 visual, north of Altyre Road (below)

3.22 The Panel were very concerned with the height of the tower and the appendage block, the eastern boundary treatment and landscaping, articulation of the mansion block, and the impact of wind to pedestrians and sunlight losses to the flats to the north. A summary of comments and key recommendations are given below:

- The definition of dual aspect needs to be clarified and adhered to.
- Need to account for microclimate analysis to inform the design particularly at street level to create a welcoming space that is comfortable to socialise in and sit out in and be pleasant all year round.
- Emphasised the need to be convinced of the robustness of the public realm.

- Recommend lowering the height of the tower due to its “Edge” location and of the appendage block, due to its increased negative impact on the flats across the street.
- Recommend revisiting the massing and architectural expression of the mansion block to appear less bulky and of the corner of the tower to be more generous within the public realm.
- Advised that clarity is needed on the eastern landscape and boundary treatment, as well as the access route from Hazledean Road.
- Good design is what Croydon Council is looking for.

3.23 A number of key changes have been made to the scheme following PRP and Planning Committee feedback, as well as ongoing dialogue with officers both before and during the assessment of the application, are summarised below:

- Reduction in the height of the towers from 36/39 storey to 33 and 36 storey.
- Reduction in the height of the Villa from 12 storey to 9 storey.
- Reduction in the height of the Mansion Block from 12 storey to 9 storey.
- Increase in the depth of the public realm to Altyre Road by approx. 1.8m.
- Creation of a pocket park to the northeast.
- Car free except for 3% disabled parking
- Reduction in the number of units from 455 to 447
- Greater separation between the Towers and the Mansion Block with further details provided in terms of the materiality of the balconies.
- Number of dual aspect units has been increased which single north facing units have been provided with ‘enhanced’ outlooks as a result in the elbows of the façade.
- Air quality has been addressed and Officers of the Council are satisfied with the results of the surveys.
- Multi-functional communal amenity space in now provided on the ground and 33rd floor of the towers.
- A commitment from the applicant to contribute to improvements to the footway and pedestrian crossing to Barclay Road including the planting of street trees.
- Refuse matters have been resolved with a servicing layby provide on Altyre Road and refuse chutes provided throughout the development which will be managed by the operations team.
- Whilst not a planning matter, the name of the development has changed from the ‘Lilibet’ to ‘Botanical House’.

3.24 The key changes secured during the course of the planning application determination period are summarised in paragraph 3.3.

4 SUMMARY OF KEY REASONS FOR RECOMMENDATION

- The principle of two intersecting Towers (33/36 storeys), Villa Block (9 storeys) and Mansion Block (9 storeys) comprising residential accommodation is supported and aligns with the desire for growth in the Croydon Opportunity Area and Metropolitan Centre.
- The principle of a 208sqm unit secured for community use (Use Class F.1/F.2) is supported in this location.
- The proposed development would provide 20% affordable housing by habitable room, which amounts to 86 homes, at a 68 to 18 split between Discounted Market Rent and London Living Rent. This offer has been independently scrutinised and is the maximum reasonable affordable housing policy compliant provision.

- The mix of units is appropriate and includes 25% family accommodation in compliance with the 20% target set out within the Croydon Opportunity Area Framework.
- The application site is situated within an appropriate location for a tall building; the height and mass of the Towers, Villa and Mansion Blocks have been assessed in relation to their impact from a wide range of viewpoints and found acceptable.
- The design, appearance and detailed façade treatment of the development is of high quality as required for tall buildings and would significantly improve the quality of public realm, particularly given the redundant status of the hotel with the introduction of a new pocket garden to the north.
- Officers have sought to limit any heritage harm, with less than substantial harm on heritages assets identified, however, the impact is outweighed by public benefits.
- Whilst there would be harm to the amenities of surrounding occupiers, particularly in relation to daylight and sunlight impacts to the flats within Harrington Court, Latitude and Longitude apartments, these would not be so unduly harmful as to refuse planning permission on this ground.
- The standard of residential accommodation would be acceptable, as all homes would meet the Nationally Described Space Standards. Where private external amenity space is not provided all affected units are suitably oversized while all units would have access to 962sqm of internal and 2,529sqm of external communal amenity areas. All homes would have acceptable outlook, with the majority receiving good lighting levels.
- The proposed development is located in a highly sustainable well-connected location which makes it suitable to be car free, with exception of disabled parking provision. The proposed development would not have an adverse impact on the operation of the highway generally would contribute to highway improvement works secured as part of the legal agreement.
- The environmental impacts, including wind, noise, light, air quality, biodiversity, land contamination and flooding, are acceptable subject to mitigation proposed through a combination of conditions and s.106 agreement.
- Sustainability aspects have been properly assessed and their delivery can be controlled through planning obligations and planning conditions.
- There are no aviation or archaeological impacts. Television mitigation, delivering employment opportunities and crime prevention through design can be secured through conditions and s.106 agreement.

4.1 The following sections of this report summarise the officer assessment and the reason for the recommendation.

5 CONSULTATION RESPONSE

5.1 The views of the Planning Service are expressed in the MATERIAL PLANNING CONSIDERATIONS section below.

5.2 The following were consulted regarding the application:

Greater London Authority (GLA) (Statutory Consultee)

5.3 A summary of the comments on strategic matters are provided below.

Land use principles: Residential-led redevelopment of this vacant hotel site within the Croydon Town Centre / Opportunity Area is supported.
[Officer comment: The recommendation endorses this position].

Housing: 20% affordable housing is proposed as part of a Build to Rent scheme. The affordable housing would be intermediate Discount Market Rent (DMR) housing, of which, 30% would be at London Living Rent levels and the remaining DMR homes at up to 80% of market rent. GLA officers are currently scrutinising the applicant's FVA. The proposed level of affordable housing is considered to be unacceptable at present in the absence of a verified and agreed viability position and noting the significant size and scale of the development. A Build to Rent management plan, covenant and clawback mechanism would need to be secured.
[Officer comment: LBC officers are now satisfied through extensive testing that the maximum level of affordable housing has been achieved. A Build to Rent management plan, covenant and clawback mechanism would need to be secured through the S.106 agreement].

Urban design: Further information is required in relation to the proposed internal layout and residential quality. The architectural and materials quality of the proposed development is supported. Whilst the proposed tower is in a broadly defined location where tall buildings can be supported, there are a number of concerns regarding the potential environmental impact in terms of wind microclimate conditions which must be addressed to ensure compliance with London Plan Policy D9.
[Officer comment: These matters have now been addressed as part of the amended proposal, Officers at the GLA have met with Council Officers and are now satisfied that this matter has been fully addressed].

Heritage: The application would cause a low level of less than substantial harm to heritage assets which must be outweighed by public benefits at the Mayor's decision-making stage.
[Officer comment: LBC officers agree with GLA officers' assessment of harm and are now satisfied that the public benefits outweigh this harm, with further details have been provided below].

Transport: Standard car parking should be removed from the proposals. Further detail should be provided for the cycle parking and additional servicing options should be considered. A contribution of £550,000 is requested to mitigate the cumulative impact on public transport services.
[Officer comment: The proposal is now car free with the exception of 3% disabled parking in line with TfL's requirement. The financial obligation would be secured via the legal agreement.].

Climate change: The energy, drainage and urban greening strategies are generally supported, subject to certain key details being secured.
[Officer comment: All matters are addressed and can be secured via appropriately worded condition].

GLA Viability Team (part of GLA, who are a Statutory Consultee)

5.4 The GLA provided comments in June 2023 based on the initial Financial Viability Assessment (FVA) requesting that a revised FVA should be undertaken assessing the viability on a forward funded approach given the Build to Rent nature of the proposal. The GLA raised concerns with the applicants' inputs in respect of the operational costs, approach to appraisal, yield, costs and fees, fiancé rate, profit, Benchmark Land Value and the overall deficit.

[Officer comment: During the course of the application LBC officers and the applicant met with the GLA to seek to address the concerns raised above regarding the nature of the FVA and the inputs. This resulted in the applicant undertaking a 'Forward Funded' FVA while further evidence was submitted by the applicant to support their assumptions and inputs. No formal response was received from the GLA based on the revised FVA at the time of drafting this report, however, LBC officers have sought independent advice from our viability consultants. This matter is discussed in more detail below, but the conclusion of LBC officers, supported by advice from our viability consultants, is that the 20% affordable housing is the maximum reasonable offer that can be secured. Early and late stage review mechanisms are also recommended].

Transport for London (TfL) (Statutory Consultee)

5.5 Comments were received raising the following concerns:

a) Healthy Streets – TfL raised concerns regarding wind conditions on the junction of Altyre Road and Hazledean Road
[Officer comment: This matter was raised by the LPAs Wind Consultants and has now been addressed].
b) Support for the removal of the vehicular access to Hazledean Road supporting the Major's Healthy Streets initiative.
[Officer comment: The recommendation endorses this position].
c) On-street loading and parking should be reconsidered
[Officer comment: There is no on-street parking and on street loading has been subject to discussions with the Councils highway team of which support can be given].
d) The removal of the existing surface level car park will reduce the number of vehicle trips, which is welcomed.
[Officer comment: The recommendation endorses this position].
e) A financial contribution is requested to be secured in the S106. Based on the trip generation presented in the TA a contribution in the region of £550,000 should be secured
[Officer comment: This is recommended in the heads of terms above].
f) It is proposed to provide 15 disabled persons car parking spaces, which equates to 3% of the total number of dwellings and is accepted. However, a further 39 standard car parking spaces are proposed within the basement.
[Officer comment: Standard parking bays have now been omitted from the proposal and 13 disabled parking spaces has been provided equating to 3%].
g) This amount of cycle parking meets the minimum standards set out in table 10.2 of the London Plan. A further four Sheffield stands are proposed within the public realm to support the community use, which is accepted.
[Officer comment: The recommendation endorses this position].
h) Lift access to the basement level cycle parking will be provided. These should be designated cycle lifts, rather than servicing lifts.
[Officer comment: Separate cycle lifts have now been provided].
i) it appears the proposed inset bay would remove existing on-street car parking. Provided that a minimum 2m clear footway is retained behind the bay, this could be supported. A Delivery and Servicing Plan (DSP) is expected to be secured by condition.
[Officer comment: A condition is recommended].
j) An outline Construction Logistics Plan (CLP) has been submitted with the application. Further detail should be provided in the detailed CLP, secured by condition.
[Officer comment: A condition is recommended].

Active Travel England (Statutory Consultee)

5.6 Active Travel England have stated that the LPA should refer to the comments made by Transport for London, and confirmed they will not provide additional comments within London.

Health and Safety Executive (Statutory Consultee)

5.7 Following a review of the information provided in the planning application, the HSE is content with the fire safety design to the extent that it affects land use planning.

Building Control (Consultee)

5.8 Building Control reviewed the application in relation to the consideration of fire. They have raised no objection, stating that the design allows for some flexibility at the build stage should any issues arise at the detailed design stage. Officers note that following recent regulatory changes the scheme will be legally required to have obtained the approval of the regulator.
[Officer comment: Conditions are recommended].

Metropolitan Police Service (Design out Crime Officers)

5.9 No objection subject to conditions in respect of Secured by Design.
[Officer comment: A condition is recommended].

Network Rail

5.10 No objection.

Environment Agency (Statutory Consultee)

5.11 Responded stating that no consultation was necessary.

Lead Local Flood Authority (Statutory Consultee)

5.12 Have not raised an objection to the proposal subject to the imposition of appropriately worded conditions to address SuDS.
[Officer comment: Conditions are recommended].

Thames Water (Consultee)

5.13 Have not objected to the proposal but have raised concerns over water and sewage capacity and have therefore recommended that conditions be attached to any approval.

Historic England (Statutory Consultee)

5.14 Have raised no objection and do not consider as conditions to be necessary.

National Air Traffic Services (NATS) Safeguarding (Consultee)

5.15 Have not objected subject to details of aviation lights at the top of the towers being secured via condition.
[Officer comment: A condition is recommended].

Civil Aviation Authority (Consultee)

5.16 Have not objected subject to details of aviation lights at the top of the towers being secured via condition.
[Officer comment: A condition is recommended].

London Fire Brigade (Consultee)

5.17 No response was received as part of the initial consultation period or as part of the consultation following the amendments.

Natural England

5.18 Responded stating that no consultation was necessary.

6 LOCAL REPRESENTATION

6.1 A total of 638 neighbouring properties were notified about the application and invited to comment. The application has been publicised by way of one or more site notices displayed in the vicinity of the application site and has also been publicised in the local press. Following the receipt of amendments, a further consultation exercise was carried out in August 2023 and therefore the following comments capture both the initial consultation period and the amended consultation period. The number of representations received from neighbours, local groups etc in response to notification and publicity of the application were as follows:

No of individual responses: 715 Objecting: 495 Supporting: 215

Neutral comments: 5

6.2 The following local groups/societies made representations:

- Croydon Voluntary Action Team Croydon [Supporting]
- Asian Resource Centre [Supporting]
- Legacy Youth Zone [Supporting]
- HM Courts and Tribunals Service [Objecting]
- Park Hill Residents Association (PHRA) [Objecting]

6.3 The following Councillors made representations:

- Councillor Sean Fitzsimons [objecting]
- Councillor Patricia Hay-Justice [objecting]

6.4 The following issues were raised in representations that are material to the determination of the application, and they are addressed in substance in the next section of this report:

Objection	**Officer comment**
Character and design	Concerns in this respect are covered in paragraphs 8.12-8.43
Overdevelopment	
Scale and height of buildings too great	
Inappropriate colour of materials	
Too many towers in the centre	

Ugly with no design merit	
Neighbouring amenity	Concerns in this respect are covered in paragraphs 8.125-8.166
Too close to neighbouring building at Altitude apartments, smell nuisance from nearby smoke vent	
Loss of daylight/sunlight	
Noise and general disturbance especially during construction works	
Overshadowing and/or visual intrusion	
Increase in anti-social behaviour	
Inaccuracies in the daylight and sunlight reports	
Loss of privacy	
Transport and Highways impacts	Concerns in this respect are covered in paragraphs 8.167-8.193
Increase in localised traffic in a heavily congested area	
Not enough parking	
Busier public transport	
Tress and ecology	Concerns in this respect are covered in paragraphs 8.12-8.43 and paragraphs 8.214-8.229
Loss of trees	
Harm to ecological interests	
Other matters	
Lack of investment in local services	Officer comment: such matters will be address through the CIL contribution and Legal Agreement
Block phone, radio and television signals	Officer comment: such matters will be covered through the use of Planning conditions
Lack of affordable housing	Concerns are covered in paragraphs 8.66-8.80
Greater levels of pollution	Such matters are covered in paragraphs 8.214-8.229 and will also be addressed through financial contribution towards air quality
Wind tunnel effects/impacts	Such matters are covered under paragraphs 8.81-8.166
Lack of private amenity/ shortfall in London Plan internal size requirements/ single aspect units	Such matters are covered under paragraphs 8.81-8.124
Viability needs to be independently reviewed	The viability has been independently reviewed and is covered in paragraphs 8.66-8.80
Loss of gym, pool and meeting area	Such matters are covered under paragraphs 8.2-8.11
Harm to heritage assets such as the NLA tower	Such matters are covered under paragraphs 8.44-8.65
Greater strain on water and waste facilities	Such matters are addressed through appropriately worded conditions, this follows the advice received from Thames Water as a result of the consultation process.

Concerns over the impact of the stability of Altitude 25	Officer Comment: there are no known land stability issues in areas which the impacts arising from the construction phase would subject to building control approval
Overheating	Such matters are covered under paragraphs 8.214-8.229
Creates a transient community	Officer comment: the London Plan supports this type of housing and there is no evidence that Build to Rent creates such communities.
Pollution/air quality	Such matters are covered under paragraphs 8.214-8.229 with financial contributions towards air quality secured via the legal agreement
Increase in flood risk and surface water run-off	Such matters are covered under paragraphs 8.214-8.229 with further details secured via condition. No objection to the principle of the development has been received from the LLFA or EA.
Non-material matters	
Loss of views	Officer Comment: there are no rights to view, the impact upon the adjoining occupiers are covered under paragraphs 8.125-8.166
Devaluation of existing properties	Officer Comment: this is not a material planning consideration.
The ownership of the site and the Council profiteering from the development	The site is no longer a Council Asset as it was sold to the applicant. This is not a material consideration.

Support	**Officer comment** The below matters are noted unless indicated otherwise
This will provide homes for young people who desperately need them/more accessible homes	
Provision of affordable housing	
Regeneration of the area	
More green spaces/public space/children's play areas	
Croydon needs to be a better place; this development would contribute to this aspiration	
Will bring back more businesses	
Creation of more jobs	
Good quality accommodation	
Energy efficiency	
A landmark for Croydon, attracting more talent to the borough	
High quality of accommodation	
Good use of derelict land	
Supports the amendments that have been made since the initial submission	Officers note that a large numbers of objections were received prior to the re-consultation process.

Significant numbers of public benefits	This matter is addressed in paragraphs 8.230-8.235

7 RELEVANT PLANNING POLICIES AND GUIDANCE

Development Plan

7.1 The Council's adopted Development Plan consists of the London Plan (2021), the Croydon Local Plan (2018) and the South London Waste Plan (2022). Although not an exhaustive list, the policies which are most relevant to the application are:

London Plan (2021)

- GG2 Making best use of land
- GG4 Delivering homes Londoners need
- SD1 Opportunity Areas
- SD6 Town centres and high streets
- D2 Infrastructure requirements for sustainable densities
- D3 Optimising site capacity through the design-led approach
- D4 Delivering good design
- D5 Inclusive design
- D6 Housing quality and standards
- D7 Accessible housing
- D8 Public realm
- D9 Tall buildings
- D11 Safety, security and resilience to emergency
- D12 Fire safety
- D13 Agent of Change
- D14 Noise
- H1 Increasing housing supply
- H4 Delivering affordable housing
- H5 Threshold approach to applications
- H6 Affordable housing tenure
- H10 Housing size mix
- H11 Build to rent
- S4 Play and informal recreation
- HC1 Heritage conservation and growth
- G5 Urban greening
- G6 Biodiversity and access to nature
- G7 Trees and woodlands
- SI1 Improving air quality
- SI2 Minimising greenhouse gas emissions
- SI3 Energy Infrastructure
- SI4 Managing Heat Risk
- SI5 Water infrastructure
- SI6 Digital connectivity infrastructure
- SI7 Reducing waste and supporting the circular economy
- SI12 Flood risk management
- SI13 Sustainable drainage
- T1 Strategic approach to transport
- T2 Healthy Streets
- T4 Assessing and mitigating transport impacts
- T5 Cycling

- T6 Car parking
- T6.1 Residential parking
- T7 Deliveries, servicing and construction
- T9 Funding transport infrastructure through planning
- DF1 Delivery of the Plan and Planning Obligations

Croydon Local Plan (2018)

- SP2 Homes
- SP4 Urban design and local character
- SP5 Community facilities
- SP6 Environment and climate change
- SP7 Green Grid
- SP8 Transport and communication
- DM1 Housing choice for sustainable communities
- DM10 Design and character
- DM13 Refuse and recycling
- DM14 Public art
- DM15 Tall and large buildings
- DM16 Promoting healthy communities
- DM17 Views and landmarks
- DM18 Heritage assets and conservation
- DM19 Promoting and protecting community facilities
- DM23 Development and construction
- DM24 Land contamination
- DM25 Sustainable drainage systems
- DM27 Protection and enhancing biodiversity
- DM28 Trees
- DM29 Promoting sustainable travel and reducing congestion
- DM30 Car and cycle parking in new development
- DM32 Facilitating rail and tram improvements
- DM33 Telecommunications
- DM38 Croydon Opportunity Area

7.2 The Development Plan should be read as a whole, and where policies conflict with each other, the conflict must be resolved in favour of the policy contained in the last document to be adopted, approved or published as part of the development plan, (in accordance with s38(5) of the Planning and Compulsory Purchase Act 2004).

Planning Guidance

National Planning Policy Framework (NPPF)

7.3 Government Guidance is contained in the NPPF, updated on 5th September 2023, and accompanied by the online Planning Practice Guidance (PPG 2021). The NPPF sets out a presumption in favour of sustainable development, requiring that development which accords with an up-to-date local plan should be approved without delay. The NPPF identifies a number of key issues for the delivery of sustainable development, those most relevant to this case are:

- Achieving sustainable development (Chap 2)
- Delivering a sufficient supply of homes (Chap 5)
- Promoting sustainable transport (Chap 9)

- Making effective use of land (Chap 11)
- Achieving well designed places (Chap 12)
- Meeting the challenge of climate change, flooding and coastal change (Chap14)
- Conserving and enhancing natural environment (Chap 15)

SPDs, SPGs and LPGs

7.4 There are also several Supplementary Planning Documents (SPD) and Supplementary Planning Guidance (SPG) documents (including London Planning Guidance) which are material considerations. Although not an exhaustive list, the most relevant to the application are:

- Croydon Opportunity Area Planning Framework (2013)
- Conservation Area General Guidance SPD (2013)
- Central Croydon Conservation Area Appraisal and Management Plan SPD (2014)
- Chatsworth Road Conservation Area Appraisal and Management Plan SPD (2016)
- Waste and Recycling in Planning Policy Document (October 2018)
- Section 106 Planning Obligations in Croydon and their relationship to the Community Infrastructure Levy (2019)

- London Housing SPG (March 2016)
- London Mayoral Affordable Housing SPG: Homes for Londoners (August 2017)
- Circular Economy Statements LPG (2022)
- Sustainable Transport, Walking and Cycling guidance (2022)
- Whole-life Carbon Assessments LPG (2022)
- Characterisation and Growth Strategy LPG (2023)
- Housing Design Standards LPG (2023)
- Optimising Site Capacity: A Design-led Approach LPG (2023)
- Urban Greening Factor LPG (2023)

- Technical Housing Standards: Nationally Described Space Standard (2015)
- National Design Guide (2021)
- National Model Design Code (2021)

8 MATERIAL PLANNING CONSIDERATIONS

8.1 The main planning issues raised by the application that the committee must consider are:

1. Principle of development
2. Design and impact on character of the area
3. Heritage
4. Housing mix and affordable housing
5. Quality of residential accommodation
6. Impact on neighbouring amenity
7. Access, parking and highway impacts
8. Environmental impact
9. Sustainable design
10. Other planning issues
11. Conclusions

Principle of development

Loss of hotel

8.2 Croydon Local Plan SP3.9 states that Croydon Metropolitan Centre will remain the principal location in the borough for office, retail, cultural (including a diverse evening/night-time economy) and hotel activity, and also be the largest retail and commercial centre in South London. Policy SP8.2 states that the Council and its partners will enhance the borough's sub-regional transport role to support its position as a major business, hotel and conferencing destination serving London's airports and the Coast to Capital economic area. Policy E10 of the London Plan promotes visitor accommodation but does not currently protect such uses.

8.3 Therefore, residential use on this site can be supported in principle as the existing use a hotel is not 'protected' within the Development Plan.

Loss of car park

8.4 Part of the site is currently occupied by a Public Car Park. Policy SP8 of the Croydon Local Plan 2018 states that land used for public transport and land required to facilitate future transport operations will be safeguarded unless alternative facilities are provided to enable existing transport operations to be maintained.

8.5 The applicant has undertaken a parking stress survey (outside of school holidays and formal industrial action) which demonstrates that the loss of the public car park would not result in an unacceptable loss of parking spaces across the Croydon Metropolitan Centre. The surveys have been reviewed by Officers and are acceptable.

Residential

8.6 The Croydon Local Plan sets out a housing target of 32,890 homes over a 20-year period from 2016-2036 (1,645 homes per year). The London Plan requires 20,790 of those homes to be delivered within a shorter 10-year period (2019-2029), resulting in a higher target of 2,079 homes per year.

8.7 The Croydon Local Plan also sets out a target for development on Windfall sites of 10,060 homes (approximately 503 per year). The London Plan requires 6,410 net completions on small sites (below 0.25 hectares in size) over 10 years, with a small sites housing target of 641 per year.

8.8 In addition, the redevelopment of this 'brownfield' site would support the provision of 447 much needed homes, making a significant contribution to the Borough's housing delivery; such delivery is encouraged within the Local Development Plan and the National Planning Policy Framework (NPPF 2023). While the principle of the development can be supported in land use terms a balance must be struck between developing land for more efficient housing use and protecting character/heritage/neighbouring amenity etc. Therefore, the principle of providing residential use (Use Class C3) in this location can be supported subject to satisfying the criteria of other relevant policies; such are addressed below.

Build to Rent

8.9 The scheme is for Build to Rent which is Use Class C3. London Plan Policy H11 sets out criteria that Build to Rent schemes need to comply with. Build to Rent homes should be secured under a covenant for a least 15 years. A clawback mechanism should also be secured which would be triggered in the event that the covenant is broken during the 15-year period. Other provisions set out in Policy H11, including unified ownership and on-site management, length of tenancy and certainty over rent levels should also be secured. London Plan Policy H11 confirms that, where these requirements are met, it is acceptable for a Build to Rent scheme to provide affordable housing as solely Discount Market Rent at a genuinely affordable rent, preferably London Living Rent levels. The

legal agreement recommended would secure the covenant for at least 15 years, the clawback mechanism and the management plan. This secures the requirements of Policy H11. Affordable housing aspects considered in 8.68 and beyond of this report.

Community use

8.10 Policy DM19 of the Croydon Local Plan states that the Council will support applications for community uses where they:

a. Include buildings which are flexible, adaptable, capable of multi-use and, where possible, enable future expansion;
b. Comply with the criteria for D1 class uses in industrial locations set out in Table 5.1;
c. Are accessible to local shopping facilities, healthcare, other community services and public transport or provides a community use in a location and of a type that is designed to meet the needs of a particular client group; and
d. Are for a use that is a town centre use, as defined by the National Planning Policy Framework, are located within Croydon Metropolitan Centre or a District or Local Centre, have no more than 280sqm of floor space (net) and are in the vicinity of a Neighbourhood Centre, or are a change of use of an existing unit in a Shopping Parade.

8.11 The proposal would be located within the CMC and would not exceed 280sqm at 208sqm. The applicant has approached several end users to ensure that the space is flexible to accommodate a multitude of uses. The provision of a community use in this location can therefore be supported.

Design and impact on character of the area

8.12 London Plan Policy D9 requires locations appropriate for tall buildings to be identified through the development plan (see below) and requires assessment of impacts from a visual, functional and environmental impact. All these aspects are considered throughout the various sections of this report. Policy SP4.5 of the Croydon Local Plan relating to tall buildings states that they will be encouraged only in the Croydon Opportunity Area, areas in District Centres and locations where it is in an area around well-connected public transport interchanges and where there are direct physical connections to the Croydon Opportunity Area, Croydon Metropolitan Centre or District Centres. The application site lies within the 'edge area' of Croydon Opportunity Area and within the Croydon Metropolitan Centre and has an excellent PTAL, as such the provision of a tall building in this location can be supported. This position is endorsed by the GLA in their Stage 1 comments.

8.13 CLP Policy SP4.6 (and supported by DM15) states four criteria for tall buildings in order for them to be acceptable in these locations:

a. Respect and enhance local character and heritage assets;
b. Minimise the environmental impacts and respond sensitively to topography;
c. Make a positive contribution to the skyline and image of Croydon; and
d. Include high quality public realm in their proposals to provide a setting appropriate to the scale and significance of the building and the context of the surrounding area.

8.14 CLP Policy DM15 requires their location in PTAL4 and above, to be of exceptional quality, respond positively to nearby heritage assets and include active ground floor and inclusive public realm.

8.15 The Croydon Local Plan 2018 has a place specific policy DM38, Croydon Opportunity Area Framework, which is relevant to this site. The site lies within the defined 'Edge

Area' of the Croydon Opportunity Area. The policies seek to enable development opportunities, including public realm improvements, to be undertaken in a cohesive and coordinated manner complemented by masterplans. Policy DM38.4 (edge area) states a tall building may be acceptable where it can be demonstrated that there will be limited negative impact on sensitive locations and that the form, height, design and treatment of a building are high quality.

8.16 It is considered that the proposed building does comply with the above criteria, discussed in detail in the design and environmental impact sections of this report.

Height and Massing

8.17 The massing of the building has been rigorously tested in terms of its townscape impact. During pre-application discussions the overall massing and height remained a contentious issue as the design grappled with fitting in with the surrounding townscape, the quantum of development proposed and the potential for harm to surrounding residential amenity. In its final iteration before members, a number of positive amendments have been made to address many of these earlier concerns (see paragraph 3.3 above for the full list secured during the course of the application), such as pulling the building lines back from Hazledean Road and Altyre Road, reducing the overall height of the Towers (from 39/38 storey down to 36/33 storey) and reducing the height of the Villa Block from 12 storey down to 9 storeys.

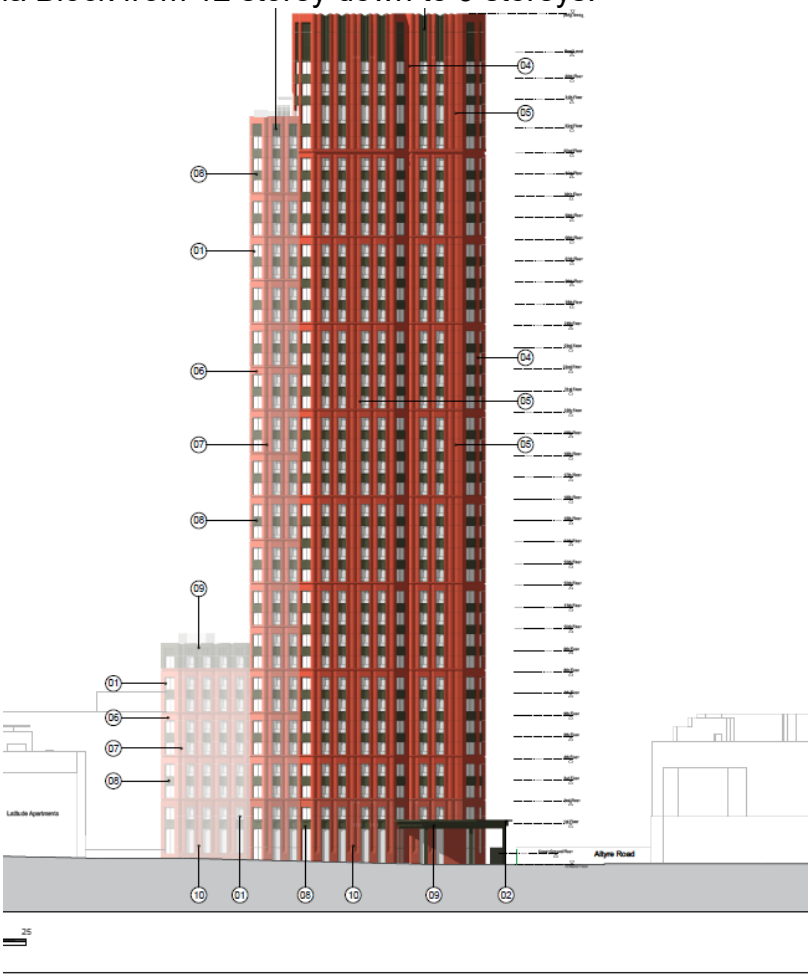


Figure 19: north elevation

8.18 Officers are aware that the Towers to a maximum height of 36 storey are significantly taller than the immediate context, as well as Altitude 25 (25 storey), Pocket Living (21 storey) and the recently allowed on appeal Citylink (28 storey). This was a matter raised at both PRP and the Developer Presentation to Members.

8.19 However, the proposed 36 storey maximum height is comparable with the height of Ten Degrees (part 38 and part 44 storey) and College Tower (part 49 and part 34 storey). Whilst officers acknowledge these lie on the opposite side of the railway to the west, all of these buildings are within the 'Edge Area' of the COA where DM38.4 states tall buildings may be acceptable. Officers have worked with the applicant to reduce the height of the Towers, and as a result the scheme has been reduced by three storeys compared to the originally submitted scheme. This has sought to ensure the overall height would be lower than both College Tower and Ten Degrees to the west, as shown on Figure 20 below.

8.20 Officers accept that a lower overall maximum height to the Towers could potentially result in a more sensitive response to the built character within this Edge Area and would create a clearer distinction between either side of the railway line. That said, the 36 storey maximum height is the scheme for consideration and determination, not a hypothetical alternative.

8.21 The GLA have stated in their Stage 1 response *"The CGIs and townscape views provided suggest that the building has the potential to make a positive contribution to these immediate / local views in terms of townscape character and legibility by providing an attractive, slender and well-articulated tall building".* Important to note is the fact that this was based on the originally submitted scheme, so the proposal has been reduced in height since that consultation was reached.

Figure 20: cross section

8.22 Whilst officers do identify some harm to townscape as a result of the extent of height proposed for the Towers which weighs against the scheme, this needs to be carefully balanced against the public benefits that this proposal would bring forward. This is discussed in more detail in paragraph 8.64 below).

8.23 Officers are supportive of the macro massing narrative to the Towers which is defined by two interlocking tower forms. Its purpose is to break up and enhance verticality within the massing form and thus create the impression of slenderness. Additional vertical recesses have been added into each tower elevation to further break up the massing form and enhance verticality. This form has the added benefit of allowing for a high proportion of dual aspect units.

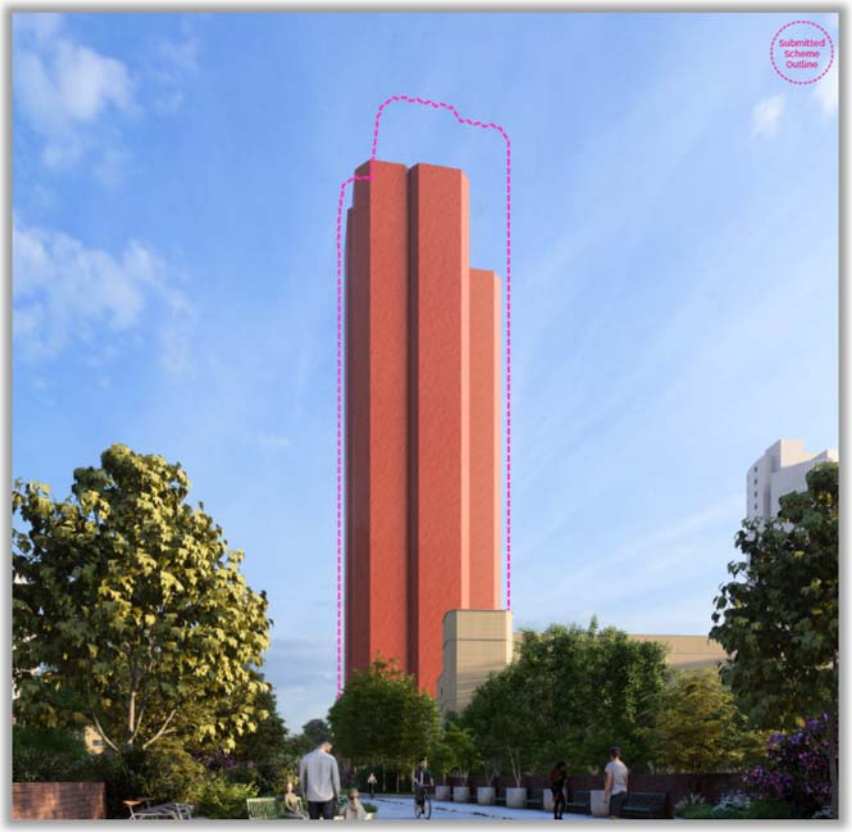


Figure 21: view looking east from Hazledean Bridge (red outline shows the height as originally submitted, with officers securing a reduction in height)

8.24 To the northeast lies the Villa Block which is a 9 storey element to the side of the Tower fronting Hazledean Road. The Villa Block contains a mix of amenity space on the ground floor with self-contained flats above. The height of the Villa Block has been reduced from 12 storey on submission to 9 storey allowing it to better integrate in the street scene and align with the height of the Mansion Block to the south. This provides a consistent height of the lower elements of the scheme which enables the proposal to integrate into the surrounding area with reference to the nine-storey blank façade of Altitude 25. The treatment of the façade of the Villa Block follows that of the Towers to ensure that the development appears well-articulated and knits into the local Croydon vernacular.

8.25 Officers are supportive of the height and mass of the 9 storey Mansion Block on Altyre Road. The Mansion Block infills the gap between the Towers proposed as part of this scheme and Altitude 25, completing the perimeter block. The block responds positively to surrounding constraints with the height aligning with the existing blank flank wall on Altitude 25, separation gaps either end between the two towers and a top floor setback, helping to create a visual and spatial break between the built forms which is supported. The existing hotel is currently stands at 7 storeys, whilst the proposal would see an increase of two storeys, this would align with the with the 9 storey blank façade of Altitude 25.

Layout and Public Realm

8.26 Officers are supportive of the general site principles defined by a perimeter layout with the Towers located on the north-western corner and lower buildings infilling the edges to the existing buildings within the urban block. In respect of street side, an appropriate balance across the sites accesses and servicing has been struck with improvements to the public realm and landscape. The middle of the urban block provides space for a residential communal landscape and amenities for the new occupiers of the scheme, which is supported.

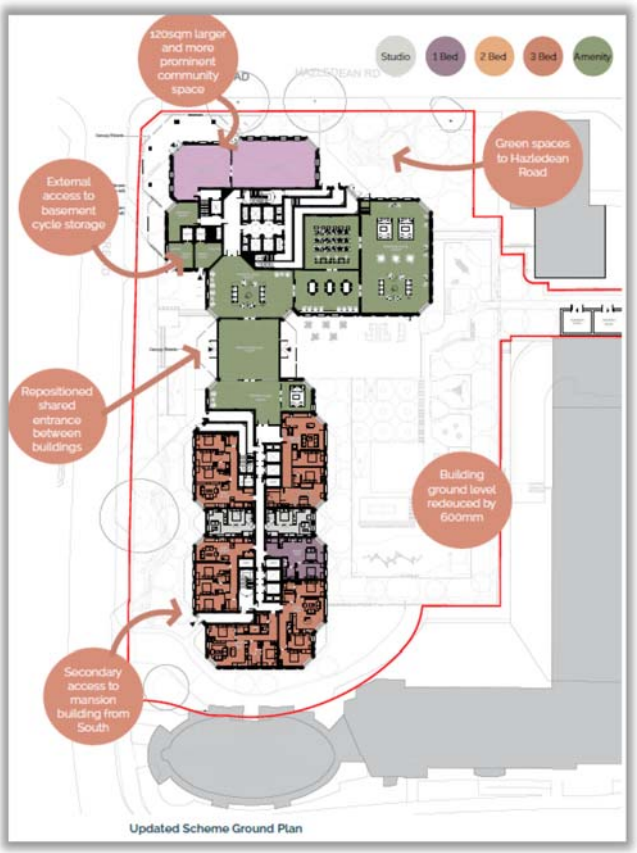


Figure 22: Ground floor plan

8.27 Ground floor uses include a community space, communal residential amenity and ground floor residential dwellings, which are appropriate. The community space is located on and the entrance to on the prominent corner of Altyre Road and Hazledean Road (see Figure 23 below), accessible to both the wider community and the buildings residents. The primary residential entrance is positioned on Altyre Road within the 2-storey link between the Towers and Mansion Block, creating a visual connection through to the rear landscape. A means of escape is available from the northern side of the Villa Block, on the inner elbow of the junction with the Towers. The remainder of the Tower and Villa Block ground floor provides communal amenity space for residents including lounges, shared dining and a cinema room. The Mansion Block ground floor is primarily single storey residential dwellings with a secondary entrance to the southern end. Overall, the layout is fully supported.

Figure 23: View of community space entrance

8.28 A series of public realm and landscaped spaces have been formed within the frontage between the pavement and the building edges. Officers are supportive of the principle of enhancing this strategic green link along Altyre Road which connects East Croydon station to Park Hill Park. Within the site boundary, play along the way, green landscaping, hard surface upgrades and tree planting are welcomed and help accommodate the increase in built scale. Tree planting along this route is recommended as part of the S.106 legal agreement to further mitigate the impacts of the development and deliver this important green link. On the corner of Altyre Road and Hazledean Road, a small plaza is created adjacent to the community space and beneath a canopy, which is required to mitigate wind downdrafts. A pocket garden is proposed on Hazledean Road which integrates play and has been identified as a location for the public art required as part of the scheme. This would be secured by S.106 legal agreement.

Figure 24: View looking north along proposed green frontage on Alytre Road

8.29 The existing basement is proposed for re-use with some increase in area. The existing basement ramp would be remodelled with the vehicle crossover recited further south along Altyre Road to provide access to a servicing bay and 13 disabled parking bays at basement level. The removal and relocation of the existing vehicular crossovers will provide opportunities for greater levels of soft landscaping along Altyre Road with play on the way which would contribute to the green link from East Croydon train station southwards towards South Park Hill Park. Positively, most of the car parking, refuse and cycle storage would be contained at this lower level within the basement (accessed via a lift from the Altyre Road frontage), freeing up the ground level for active uses, public realm and landscaping.

8.30 Overall, the location of the built form back from the pavement edge that facilitates a combination of pocket garden, small plaza and greening of the frontage, as well as the delivery of public realm, are supported.

<u>Appearance</u>

8.31 Officers are supportive of the buildings proposed architectural appearance. Across the development, the different buildings share a common language with variations, allowing different buildings to respond to their individual roles within the setting.

Towers

8.32 The Towers' role is to contribute to and mediate between the emerging tall building cluster and the local neighbourhoods. The architectural expression draws upon

Croydon's modernist heritage, using a façade grid to articulate groupings, floors and bays. The design subtly varies the composition of these elements to distinguish the massing components such as the interlocking tower forms. This approach speaks to a similar underlying language used by College Tower and Ten Degrees, and ensure the buildings have a shared character within wider townscape views. The material red terracotta tone and texture helps to mediate the buildings scale to the immediate context, where brick is predominantly used while providing a visual change and/or backdrop to Croydon post war heritage.

Figure 25: View from Hazledean Bridge where only the Towers are visible

8.33 The base of the buildings is defined by both a material and textural change compared to the body above and links a continuous datum across all buildings in the development. Within this lower zone, canopies are used to mitigate adverse wind impacts and help express the location of entrances. The PRP panel suggested a more formal plinth to the building with the body stepping back, to better mediate to neighbouring scales and protect from wind. Wind matters have been addressed through other forms of mitigation and therefore Officers feel the base would be appropriate given that a more prominent base would result in a significant loss of floor space and ultimately would reduce in the number of units.

Figure 26: Altyre Road view with the Towers (left) and Mansion Block (right)

8.34 The top of the tallest tower is expressed through a crenelated crown and solid green chamfers, whilst the lower tower takes a more subtle capping. This approach provides a degree of richness to the top of the building which is reflective of the character of recent developments in the immediate area.

Figure 27: crown articulation at top of the Towers

8.35 The body of the tower uses a repeating bay detail as a base component to form the overall composition. The bay detail is designed in a way to assist the building in meeting its environmental requirements such as overheating, daylight levels, thermal comfort and ventilation. For example, the window openings have a deep reveal which provides overhang to help control the amount of sunlight in summer months.

Figure 28: model view of typical bay

Villa Block

8.36 The Villa block would be sited adjoining the Towers to the east and would have an overall height of 9 storeys, matching that of the Mansion Block. The amendments received during the course of the application have seen the Villa Block reduced from 12 to 9 storeys to provide consistency in the heights of the lower elements. Furthermore, this has reduced the height of the development closest to Longitude Apartments to the east therefore improving this relationship. The Villa Block shares its architectural style and fenestration with the Towers. The Villa Block would be set back 14.6m from Hazledean Road to allow for the provision of a pocket garden. The pocket garden would not only seek to benefit residents and the wider public, but it would also seek to enhance the setting of the Villa Block at pedestrian level.

Figure 29: the Villa Block

Mansion Block

8.37 The Mansion Block is similar but with subtle differences. The façade principles share features such bay proportions, rhythm, datums and some aspects of materiality, whilst

differs by having balconies (conditions more comfortable at lower levels compared to the tower) and a more textured aggregate within the terracotta.

Materials

8.38 The primary materials combine red tones from terracotta's and precast concrete, with green tones from ceramic panels and fenestration features. In addition, the design uses ribbing to the surface and changes in the aggregate mix to vary the texture of these base materials and create visual interest. The pallet is different to a number of the other buildings in the locale such as the NLA Tower, Pocket and Altitude 25 and officers are aware of the views of members from the Developer Presentation. The applicant explored lighter tones as options, but it was considered that the warmer tones, that pick up on the colour of the current Hotel on site, Latitude and Longitude apartments and red brick buildings beyond, with green elements that pick up on Ten Degrees and reference the name of scheme as 'Botanical House' were the most appropriate and high-quality response. Furthermore, the change in material palette seeks to allow the mid-century buildings of Croydon to prevail in the wider townscape.

Figure 30: material palette

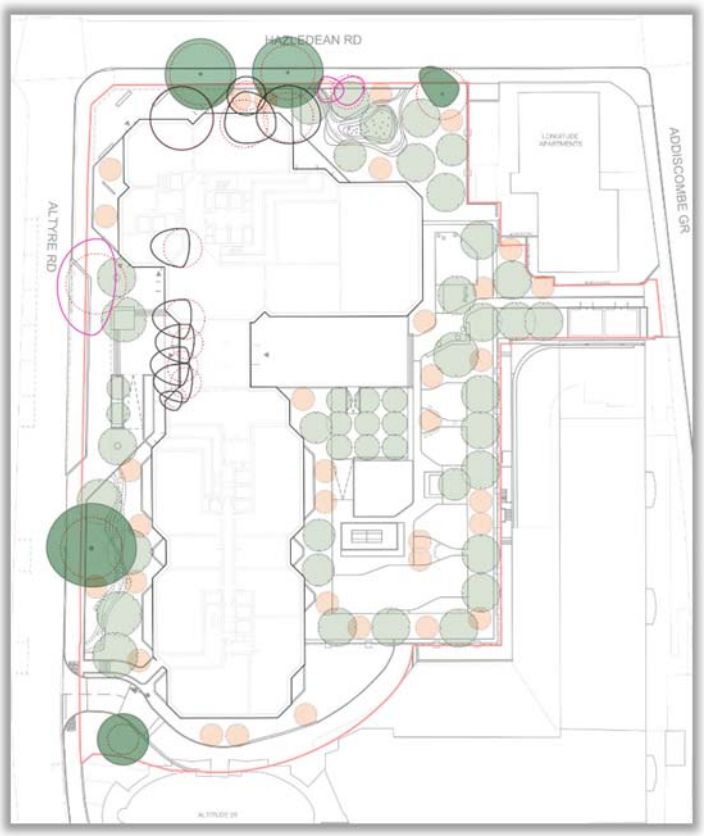
<u>Landscaping</u>

8.39 The development is proposing some tree removal (15), the most significant being a Cat B Honey Locust on Altrye Road. To offset the loss, the development proposes 45 new tree spread across public (street frontages) and private (residential courtyard) areas.

Figure 31: landscape plan

8.40 London Plan policy G5 requires major development to contribute to greening, setting a target score of 0.4. The development provides public realm landscaping improvements and a landscaped courtyard garden for future residents. Extensive landscaping is proposed across the development, which includes the retention of 5 trees, and the introduction of 45 new trees with further soft landscaping designed to deliver visual interest and contribute to a net gain in biodiversity, with an Urban Greening Factor of 0.42 against a policy target of 0.4.

8.41 London Plan policy G6 requires that any development seeks to provide biodiversity net gain. The Biodiversity Net Gain Assessment identifies a net increase in ecological value of 50.99% for habitat units and 100% for hedgerow units which significantly exceeds policy and is fully supported.



Tree Removal

	Retain	Remove	Total
Category B	*1*	*2*	*3*
Category C	*2*	*13*	*15*
Outside Boundary	2 (C)		*2*

Proposed Trees & Shrubs

	Shrubs	Trees
At Planning	17	24
Current Proposal	32	45

Figure 32: tree strategy table and plan

8.42 Overall, the landscape proposal would result in a high-quality development that would have real environmental benefits, not only for the residents but the wider public. To ensure that the landscaping does not result in a generic approach full details would be secured via an appropriately worded condition. Such appropriately worded conditions would help to ensure that the landscaping proposals are ambitious and evolve a narrative more closely linked to this part of Croydon.

8.43 The LPG on Optimising Site Capacity 2023 states that, *"good growth across London requires development to optimise site capacity, rather than maximising density. This means responding to the existing character and distinctiveness of the surrounding context and balancing the capacity for growth, need for increased housing supply, and key factors such as access by walking, cycling and public transport, alongside an improved quality of life for Londoners. Capacity-testing should be the product of the design-led approach, and not the driver."* Throughout the course of the pre-application discussions and application amendments the changes made by the applicant have sought an appropriate balance, optimising site capacity and density. Overall building heights and unit numbers have been reduced to ensure that a high quality and exemplar design is achieved while ensuring that the large number of homes (447 in total) are located in highly accessible locations which actively encourage walking through improvement public realm and pedestrian crossings (as of which would be secured as part of any legal agreement)

Heritage

8.44 The Planning (Listed Buildings and Conservation Areas) Act 1990 requires (at section 66) with respect to listed buildings, that special regard is paid to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. With regard to conservation areas (at section 72), it requires

special attention to be paid to the desirability of preserving or enhancing their character or appearance.

8.45 The NPPF places strong emphasis on the desirability of sustaining and enhancing the significance of heritage assets and affords great weight to the asset's conservation. It states that:

"great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be)… irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm"

8.46 Any harm to a designated heritage asset, including from development within its setting requires *"clear and convincing justification"*, with less than substantial harm weighed against the public benefits delivered by the proposed development.

8.47 With regard to non-designated heritage assets, paragraph 203 of the NPPF states that:

"the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing…applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset."

8.48 Policy DM18 of the Local Plan permits development affecting heritage assets where the significance of the asset is preserved or enhanced. Policy SP4 requires developments to respect and enhance heritage assets, and Policy DM15 permits tall buildings which relate positively to nearby heritage assets. London Plan Policy HC1 states that developments should conserve historic significance by being sympathetic of the assets' significance and setting along with HC3 that protects strategic and local views. This policy goes on to state that new development can make a positive contribution to the views, and this should be encouraged.

8.49 The setting of a building is defined as 'the surroundings in which a heritage asset is experienced' in the glossary to the NPPF *"It's extent is not fixed and may change as the asset and its surrounding evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance of may be neutral."*

8.50 The site is not within a Conservation Area; however, the site lies in close proximity to the Chatsworth Road conservation Area (approximately 74m to the south of the site) and the Central Croydon Conservation Area (approximately 400m to the west of the site). There are no statutorily designated heritage assets on the site, but a number of listed and locally listed buildings are located within the wider area. In terms of non-designated heritage assets, the NLA Tower (local listed building) lies 160m to the north and Fairfield Halls (local listed building) lies 270m to the west. Park Hill Locally Listed Historic Park and Garden lies 80m to the south. The development will be visible in the setting of the Conservation Areas and some other nearby heritage assets due to its height and form.

8.51 A detailed Townscape, Heritage and Visual Impact Assessment (HVIA) was submitted as part of the application and was amended following the scheme amendments. This assesses the impacts of the proposal on a range of nearby heritage assets, accompanied by views. The analysis of the views used the Zone of Theoretical Visibility approach (ZTV) to assess where views may be impacts. From this study it can be seen the key heritage impacts are the setting of the Chatsworth Road Conservation and

longer-range views from within the Central Croydon Conservation Area, particularly views of Fairfield Halls which is a non-designated heritage asset.

8.52 Whilst the existing building has a maximum height of 7 storey, the proposal would significantly increase the height of the built form and would result in a sharper transition from the predominately 3 to 4 storey Victorian and post war residential housing within the Fairfield Ward, as visible in the images below. As such the designated heritage asset where the proposal is most visible from is the Chatsworth Road Conservation Area as the proposed development is in close proximity and prominent in a number of the views. The massing and articulation of volumes (stepping up in height away from the Conservation Area) have been designed to help mediate the relationship between the houses and the height of the interlocking Towers, which has helped to limit any harm being caused to the setting of this Conservation Area. The use of terracotta tones in the external facing materials help to differentiate the central cluster from the application site, providing a clear distinction when viewed from within the Conservation Area. Officers consider that the use of different tones in the built environment would provide interest and variation that would distinguish the proposal. The Towers are clearly visible from a number of locations, so would impact the setting in short and medium length views. Whilst this element of the development is considered to cause some harm, in terms of the setting of the designated heritage asset, officers have concluded that the harm caused would be less than substantial.

Figures 33 and 34: view from Chatsworth Road (within the Chatsworth Road Conservation Area), facing north towards the site without (left) and with (right) proposal

Figures 35 and 36: view from Friends Road looking north-east towards the site without (left) and with (right) proposal

Figures 37 and 38: view from Queens Gardens (within the Central Croydon Conservation Area) looking east towards the site without (left) and with (right) proposal

Figures 39 and 40: View from South Park Hill Park looking north without (left) and with (right)

8.53 The proposed building, given its heights and interlocking towers would be visible behind the silhouette of Fairfield Halls which is a non-designated heritage asset, from within the Central Croydon Conservation Area. The setting of Fairfield Halls, which is not a designated asset, is to some extent interrupted by the presence of Altitude 25. In addition, the setting of Fairfield Halls has been impacted by nearby developments, particularly College Tower and Ten Degrees, shown in Figures 37 and 38 above and Figures 41 and 42 below. Given the non-statutory status of Fairfield Halls and the openness surrounding the building at pedestrian level the level of harm that would result should this proposal be approved is considered to be less than significant. The use of terracotta tones in the proposed material palette would help to differentiate the Towers from that of Fairfield Halls. The use of lighter materials in the construction and renovation of Fairfield Halls are consistent with the post war development and architecture of the Croydon Metropolitan Centre, the use of darker tones in the proposed development would help to define the post war era from more recent developments.

Figures 41 and 42: view directly overly Fairfield Halls looking east towards the site, the reduction in height from 38/39 storeys to 33/36 results in the proposal no longer being visible from close range viewpoints. Without (left) and with (right) proposal.

8.54 The Central Croydon Conservation Area comprises the commercial and civic heart of Croydon and includes the 16th century Grade I listed Whitgift Almshouses, Surrey Street market as well as Queens Gardens the Grade II listed Late Victorian Town Hall and 1930s modernist office buildings including the Grade II listed Segas House. The appraisal identifies key views along George Street towards the NLA tower.

8.55 View 17 of the applicant's HVIA shows that the proposed tower would not harm the Grade I listed Whitgift Almshouses, or impact the key view set out above along George Street.

8.56 View 18 shows that the proposal would appear directly behind the rear facade of the Grade II listed Segas House in views along Katharine Street. The street view is lined on the right-hand side by the Grade II listed Victorian Town Hall, Municipal Buildings and library as well as the Grade II listed former Nat West Bank (now the Spread Eagle pub). Whilst the main impact of the Tower would be on the rear facade of the Segas House, these elevations are attractive and significant features of the building and exhibit the same curved double height ground floor bay windows and large gridded horizontal windows. The visibility of the Tower would be highly prominent in this view, rising above the centre of the silhouette of Segas House building. It would be viewed alongside the College Road development and St George's House (Nestle Tower). Officers consider that the impact of the tower on the setting of the Segas House would result in less than substantial harm to the significance of the Grade II listed heritage asset. This would be at a moderate level on the scale of less than substantial harm.

8.57 The level of harm caused to the Grade II listed Municipal Buildings (including the Town Hall, Library, Corn Exchange, Clock tower and offices and war memorial) would be lower, given that the Tower would not be in the backdrop of these buildings. However, some harm would still be caused to the significance of these heritage assets by the Tower marking this prominent street view. The level of harm caused would be less than substantial and at a low level on the scale of less than substantial harm.

8.58 In terms of the Central Croydon Conservation Area, harm would be caused by the impacts summarised above in terms of the visibility of the Tower in views along Katherine Street (HVIA view 18). In addition, the Tower would be visible in views across Queens Gardens looking east towards the existing cluster of tall buildings including Ten Degrees and College Road towers (HVIA view 19). The proposal would cause additional cumulative harm in this view with the building rising above Fairfield Halls. Officers consider that a low level of less than substantial harm would be caused to the significance of the Central Croydon Conservation Area.

8.59 No direct harm to the fabric of any designated heritage assets would occur as a result of the proposal. However, it is considered the proposed development would have a less than substantial impact on the settings of both the Chatsworth Road Conservation Area and the Central Croydon Conservation Area. In addition to this there would be an impact on both the Grade II listed Segas House and Municipal Buildings, as less than substantial, at the moderate level and low level respectively. There is no harm identified to further surrounding designated and non-designated heritage assets.

Figures 43 and 44: view looking south along Cherry Orchard Road towards the site in relation to the NLA Tower. Without (left) and with (right) proposal.

8.60 It is also important to draw member's attention to the recent Citylink House allowed appeal decision (reference 21/02912/FUL), which forms a material consideration. This scheme would be visible in views south along Cherry Orchard Road and was refused on the effect on the setting of a non-designated heritage asset (NDHA), known as the NLA tower. Citylink House is sited closer to the NLA Tower with a separation distance of approximately 30 metres, whilst the Croydon Park Hotel site sits approximately 154 metres further south. In allowing the appeal, the Inspector stated:

"*The NDHA's setting is within a heavily developed urban area, dominated by transport infrastructure, which existed at the time of the construction of the tower. This setting aids the understanding of the development of the NLA tower as part of the post war growth plan of Croydon… The development would be greater in size and scale than the NLA tower but there is clearly articulated differentiation between the shoulder and tower… In this respect, there would be obscuring and coalescing effects from the development in relation to the NLA tower, in varying degrees, in these views."*

8.61 In allowing the Citylink House appeal, the Inspector concluded that the tower (28 storey) and shoulder (14 storey) would not harm the setting of the NDHA or ability to appreciate it's significance. In the case of this current application, it is noted that the views of the NLA Tower from the north and south would be obscured in part by the Towers, but the development would have limited impact on the eastern and western views, which in the case of the Citylink House appeal was attributed greater weight by the Inspector. Consideration should also be given to the separation distance of approximately 154 metres and the presence (and consents) of other buildings in and around the NLA Tower which are much closer. Given all these factors due consideration the proposed development is not considered to result in harm to the setting of this non-designated heritage asset nor would it detract from its significance.

Balance

8.62 As harm has been identified to heritage assets the provision of paragraph 202 of the NPPF to weigh any harm against the public benefits of the scheme is enacted. When weighing the proposed harm to designated heritage assets against public benefits of the scheme, any harm is given considerable importance and weight. A balanced judgement towards harm caused to non-designated heritage assets is also required. Public benefits can include heritage benefits and great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.

8.63 No direct harm to the fabric of any designated heritage assets would occur as a result of the proposal, however, a degree of harm has been identified to Chatsworth Road Conservation Area and the Central Croydon Conservation Area and therefore the

statutory presumption toward preservation or enhancement has not been met. The level of harm in this case is less than substantial and would be at the lower end of this scale across all assets considered.

8.64 Public benefits *"could be anything that delivers economic, social or environmental progress as described in the 2023 NPPF"* The NPPG continues stating that *"public benefits should flow from the proposed development. They should be of a nature or scale to be of benefit to the public at large and should not just be a private benefit".* The development does deliver a number of public benefits, including housing provision, a quantity of which would be for affordable housing delivered on site including wheelchair accessible homes, family accommodation, an improved public realm and pocket park and greening to the street frontages, including the replacement of the existing building with a high-quality scheme, community space on the ground floor for use by local groups, highway improvement works to include enhancements to the pedestrian crossing on Barclay Road and the planting of street trees, a contribution towards wider transport network improvements (particularly pedestrian and cyclist) and short-term employment derived from the construction of the development.

8.65 It is considered that these public benefits are sufficient to outweigh the less than substantial harm identified to the heritage assets outlined above and therefore as per requirements of the NPPF, making a balanced judgement as to the scale of harm and the significance of the asset, the impact is considered to be acceptable. Notwithstanding this, it is essential that the development provides an exceptionally high design quality in relation to materials and other detailed matters at planning conditions stage. This is to ensure that the building, which is visible in the setting of heritage assets, is one of which is perceived as being of excellent contemporary design which responds appropriately to its historic context.

Housing Mix and Affordable Housing

Housing Mix

8.66 Croydon Local Plan 2018 policy SP2.7 sets a strategic target for 30% of all new homes up to 2036 to have three or more bedrooms. Policy DM1.1 allows for setting preferred mixes on individual sites via table 4.1. Applying table 4.1 to this site (Central setting with a PTAL of 4, 5, 6a or 6b within West Croydon, Fairfield and Mid Croydon area) shows a requirement of 20% 3+ bedrooms units unless there is agreement from an affordable housing provider (that these are not viable or needed).

8.67 The proposed development would achieve a 25% (110) provision of three-bedroom homes, thereby exceeding the policy standard set out with the OAPF which is specific to this development site, the provision of three-bedroom homes is therefore acceptable.

Affordable Housing

8.68 Policy SP2.4 of the Croydon Local Plan 2018 seeks to negotiate to achieve up to 50% affordable housing, subject to viability. Part b) of the policy seeks a 60:40 ratio between affordable rented homes and intermediate (including starter) homes unless there is agreement that a different tenure split is justified (a minimum of three Registered Providers should be approached before the Council will consider applying this policy). The policy also requires a minimum provision of affordable housing as set out in policy SP2.5, which requires a minimum provision of affordable housing to be provided either:

> *a) Preferably as a minimum level of 30% affordable housing on the same site as the proposed development or, if 30% on site provision is not viable;*

b) If the site is in the Croydon Opportunity Area or a District Centre, as a minimum level of 15% affordable housing on the same site as the proposed development plus the simultaneous delivery of the equivalent of 15% affordable housing on a donor site with a prior planning permission in addition to that site's own requirement. If the site is in the Croydon Opportunity Area, the donor site must be located within either the Croydon Opportunity Area or one of the neighbouring Places of Addiscombe, Broad Green & Selhurst, South Croydon or Waddon. If the site is in a District Centre, the donor site must be located within the same Place as the District Centre; or

c) As a minimum level of 15% affordable housing on the same site as the proposed development, plus a Review Mechanism entered into for the remaining affordable housing (up to the equivalent of 50% overall provision through a commuted sum based on a review of actual sales values and build costs of completed units) provided 30% on-site provision is not viable, construction costs are not in the upper quartile and, in the case of developments in the Croydon Opportunity Area or District Centres, there is no suitable donor site.

8.69 The London Plan (2021) Policy H5 sets a strategic target of 50% but allows lower provision to be provided dependent on whether it meets/exceeds certain thresholds, or when it has been viability tested. It should be noted as the London Plan (2021) was adopted after the Croydon Local Plan (2018), where there is a policy difference, then the most recently adopted policy should take precedent.

8.70 The scheme is for Build to Rent homes and the most up-to-date policy is H11 of the London Plan (2021). Subject to meeting certain criteria (covered in paragraph 8.9 above), the policy confirms that the affordable housing offer can be solely Discounted Market Rent (DMR) at a genuinely affordable rent, preferably London Living Rent level. Part C of the policy states that the Mayor expects at least 30% of DMR homes to be provided at an equivalent rent to London Living Rent (LLR) with the remaining 70 per cent at a range of genuinely affordable rents.

8.71 The London Plan stipulates that to follow the Fast Track Route, Build to Rent schemes must deliver at least 35 per cent affordable housing, or 50 per cent where the development is on public sector land.

8.72 The proposed development would provide 20% affordable housing by habitable room, which amounts to 86 homes. Therefore, the scheme is not following the Fast Track route and as such a financial viability appraisal has been submitted with the application. The tenure split would be 70% DMR to 30% LLR with the affordable units being 'pepper potted' throughout the development and across the Towers, Villa and Mansion Blocks.

8.73 The application was subject to a financial viability appraisal (FVA), which has been scrutinised independently by Gerald Eve (GE). Furthermore, the GLA viability team have sent a report, covered in 5.4 above. The key viability inputs where the focus of discussion has taken place are covered in the table below.

	Standing stock asset approach		Forward funded approach	
	Newsteer	Gerald Eve (acting for the LPA)	Newsteer	Gerald Eve (acting for the LPA)
Base NDV	£187,744,252	£187,744,252	£183,904,041	£183,904,041
Base Cost	£125,702,280	£146,401,174	£125,702,280	£146,401,174
Deficit	£33,456,805	£55,948,114	£14,099,889	£28,446,797

Table 1: key viability inputs

8.74 Upon the request by the GLA the applicant has undertaken two Financial Viability Appraisal (FVAs) with the first based on the 'standing stock' approach and the other on a 'forward funded' approach (as shown above in Table 1). Both reviews show a deficit although the forward funded approach indicates there would be less of a deficit. Given the level of deficit the Council's Independent Consultants (Gerald Eve) and the GLA have raised concerns regarding the deliverability of the scheme. In response, the applicant has provided further sensitivity testing to demonstrate when the proposal starts to make a profit. This shows that the development would start to show a return at year 2, based on rental growth with current market trends suggesting that this is a reasonable assumption. The applicant has therefore demonstrated that the scheme would be deliverable based on a medium term of investment (circa 5-6 years given build timescales and rental periods of growth).

8.75 The FVA and sensitivity testing show that the proposed scheme is currently unviable and cannot deliver further affordable housing beyond the 20% offered. The conclusion (for both the applicant and GEs review) is that the scheme is in deficit. The applicant has indicated the scheme will be delivered as a standing stock asset, so a deficit of £33,456,805, whilst the Council's independent review suggests a deficit of £55,948,114. The difference is mainly due to the applicant adopting lower construction costs and higher land values. Officers acknowledge the extent of deficit, but weight needs to be given to the uniqueness of this case, current market trends and the mid to longer investment nature of this proposal.

8.76 Given the current deficit it is clear that the proposal could not offer a greater level of affordable housing. The applicant proposes 20% affordable housing by habitable room (split by 30% London Living Rent (LLR) level and 70% as Discount Market Rent (DMR) level) that has been independently reviewed as the maximum reasonable, which exceeds the minimum policy requirement of 15% in the Croydon Local Plan and meets the mix requirements of H11 of the London Plan. The legal agreement would secure a review mechanism (more detail below) and construction costs are not in the upper quartile (as confirmed by GE).

8.77 LLR is an intermediate affordable housing product with low rents that vary by ward across London, set by the GLA. The DMR homes would also be an intermediate affordable housing product, subject to an annual household income cap of £60,000. These matters would be secured in the S.106 legal agreement.

8.78 The GLA has suggested that the scheme's viability could be improved, even providing a surplus, if their assumptions were adopted. However, the GLA have not provided any evidence to support their applied yields, OPEX, marketing and sales figures and therefore the LPA are unable to apply such to its own sensitivity testing. Therefore, in the absence of evidence to the contrary Officers are satisfied that the maximum levels of affordable housing has been secured as part of the proposal.

8.79 As required by London Plan Policy H5 (f) early and late-stage reviews are recommended within the legal agreement. They would capture any changes (for example increase in rental prices/reduction in construction costs) which may result in increased affordable housing provision and/or contribution. The applicant has indicated that the scheme will be delivered as a standing stock asset, but this will need to be confirmed to ensure the correct deficit is secured through the S.106 legal agreement. On this basis the lower deficit of £33,456,805 will be applied.

8.80 The early-stage review would be engaged if an agreed level of progress on implementation is not made within two years of the permission being granted, in this case construction up to at least first floor level. The late-stage review would be engaged when 75% of the units in the scheme are let.

Quality of residential accommodation

8.81 London Plan 2021 policies D5 inclusive design, D6 housing quality and D7 accessible housing seek the highest standards of accommodation for future occupiers. Policy sets out quantitative and qualitative standards, including minimum floor space and amenity standards for new builds in order to promote high quality living accommodation.

8.82 The Housing Design Standards LPG 2023 seeks to respond to the impact of the COVID-19 pandemic, including the shift to increased homeworking. It also recognises the climate emergency, and the role that residential development has to play, and the contribution it has to make, in reaching net zero. These housing design standards seeks to provide homes that: are safe, inclusive, comfortable, flexible, durable, well-built and well managed. They encompass designing with residents' wellbeing in mind and express what it means to optimise site capacity for a residential development, as opposed to simply maximising the development of a site.

8.83 Croydon Local Plan policy SP2.8 relates to quality and standards, requiring all new homes to meet the standards set out in the Mayor of London's Housing SPG (now covered in D6 identified above) and the National Technical Standards 2015. Croydon Local Plan policy DM10.4 has a number of requirements in relation to providing private amenity space for new residential development. The relevant policy points seek a high quality design; a functional space, a minimum amount (5sq m per one/two person unit and extra 1m2 per person after that), minimum of 10m2 per child of new play space. Croydon Local Plan policy DM10.5 requires the inclusion of high quality communal outdoor amenity space that is designed to be flexible, multifunctional, accessible and inclusive.

8.84 Typical upper floors are residential dwellings and circulation space. The Tower plan performs well in providing dual aspect units with a central core and steps and kinks within the plan form creating meaningful second aspects (orientation, light, outlook and ventilation). The Mansion Block layout is based upon a central linear corridor with units butterflied either side. The downside of this typology is it results in a higher proportion of single aspect units. However, folds within the façade do provide enhancements but they would not meet the GLA's guidance for dual aspect dwellings. The proposal would include 52% dual aspect, 44% enhanced aspect and 4% single aspect units. Officers have worked closely with the applicant during the course of the application to increase the proportion of dual aspect homes. This has resulted in an increased from 34% at submission to 44% in respect of enhanced aspect units and 12% to 4% in respect of single aspect units in this scheme for consideration. This has seen a small reduction in dual aspect units from 54% to 52%. Overall, the quality of internal accommodation has been improved. The Tower form has been developed to seek to maximise dual and enhanced aspect units. The Mansion Block is more challenging given orientation and desire to optimise the site; other typologies could have further improved the proportion of dual aspect dwellings, but this is the scheme for consideration. Balancing the challenges of site optimisation, officers are supportive of the layout of the homes.

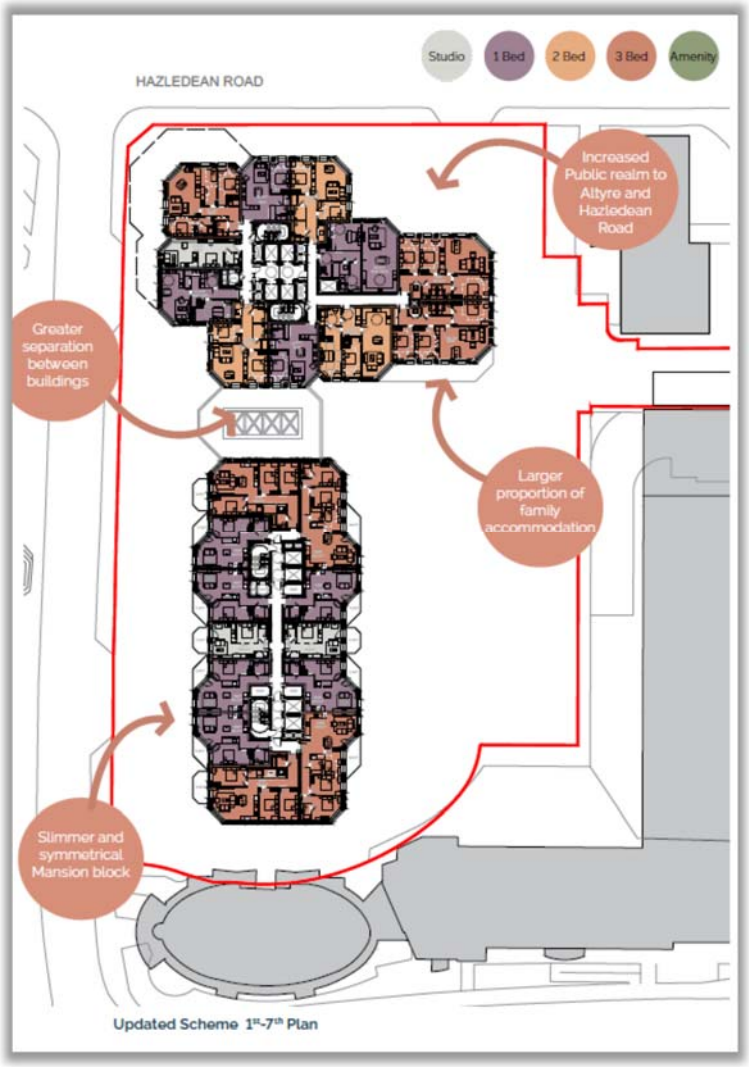


Figure 45: typical floor plan (7th Floor)

8.85 London Plan policy SP4 play and informal recreation seeks, for residential developments, good-quality, accessible play provision for all ages and at least 10sqm of play space should be provided per child. Croydon Local Plan policy DM10.4 and DM10.5 set minimum requirements for the provision of communal amenity space and children's play areas that will be required in new flatted development. This scheme must provide a minimum of 10m2 per child of new play space, calculated using the Mayor of London's population yield calculator.

Size and layout

8.86 All of the proposed residential homes either meet or exceed the minimum floor space standards set out in the London Plan (2021) while units which are not provided with private amenity space are oversized in floorspace terms.

8.87 The communal garden to the rear provides a range of spaces to meet residents needs such as external dining spaces, activity spaces, child play equipment and flexible areas for pop up events, curated by the building's operations team. The garden will be built upon an existing deck with the basement below. Officers have raised concerns over the viability of mature planting upon this base and will require robust conditioning of these details to ensure the qualities indicated within the application are delivered.

8.88 London Plan (2021) states that developments should maximise the provision of dual aspect units, with single aspect units only provided where it considered to be a more appropriate design solution in order to optimise capacity, and where it can be

demonstrated they will have adequate passive ventilation, daylight, privacy and avoid overheating. The Housing Design Standards LPG (2023) sets the definition of dual aspect as *"A dual aspect dwelling is defined as one with openable windows on two external walls, which may be either on opposite sides of a dwelling or on adjacent sides of a dwelling where the external walls of a dwelling wrap around the corner of a building."*

8.89 The layout of the scheme has helped to maximise the amount of dual aspect units, at 52%, (rising to 96% when including enhanced aspect), and there are no single aspect north facing units, which is welcomed. An overheating assessment was submitted which demonstrates the proposal maximises passive and active design measures, reducing the risk of overheating as far as practical.

Daylight and sunlight

8.90 The applicant has submitted a sunlight and daylight report that has been carried out in accordance with 2022 BRE guidance. In terms of daylight, the assessment considers the spatial daylight autonomy (sDA) – see Appendix 2. The results are based on using 200 Lux as the target value for mixed use living/kitchen/dining area. The report also considers sunlight to new buildings and their gardens/outdoor spaces. The internal daylight and sunlight assessment has split the results between the Towers/Villa Block and Mansion Block.

8.91 This report has been reviewed by the Council's daylight and sunlight consultant, who conclude that the methodology and application of the guidelines is appropriate.

8.92 In terms of daylight, of the 1,137 proposed habitable rooms considered, 828 (73%) satisfy the BRE guidelines in sDA terms. For the Towers (and Villa Block), of the 882 rooms considered, 699 (79%) satisfy the BRE guidelines, and in the Mansion Block of the 255 rooms considered, 129 (51%) satisfy the BRE guidelines. The originally submitted scheme only achieved 26% of rooms within the Mansion Block adhering to the BRE recommended levels, so the revised scheme improves the daylight levels to this block. The overall level of adherence with the BRE recommendations increases to 77% if 150 Lux is used for the living/kitchen/dining areas within the Mansion Block (up from 51% against 200 Lux).

8.93 There are 307 rooms achieving SDA values below the recommended target. In particular, 168 bedrooms and 69 living-kitchen-dining rooms (LKD) and 72 studios do not meet the illuminance criteria. Out of the 307 rooms not meeting the criteria in total, 68 bedrooms, 46 LKD rooms and 25 studios marginally fall below the criteria. These rooms fall within 5-10% below the passing target (50%). The worst failures are with the southern end of the Mansion Block facing Altitude 25, with one unit containing two bedrooms achieving 0% illuminance, but this unit has a LKD that meets the guidelines, and its third bedroom achieves 49% (against a target of 50%).

8.94 Generally, the overall compliance rate is considered acceptable for a regeneration scheme in an urban location. There are isolated units on the lower to mid floors with rooms that are expected to receive low levels of daylight. This is not uncommon as rooms on lower floors face higher levels of obstruction and windows beneath balconies necessarily have a more limited view of sky but do provide private amenity space for the dwelling above.

8.95 In terms of sunlight, the report evaluated sunlight provision within the scheme by testing living room windows, regardless of their orientation, which is a broader approach than just those within 90 degrees of due south. Of the 450 living rooms tested, 366 (81%) satisfy the BRE guidelines. For the Towers (and Villa Block), of the 346 living rooms considered, 269 (78%) satisfy the BRE guidelines, and in the Mansion Block of the 104

living rooms considered, 96 (92%) satisfy the BRE guidelines. Of the overall failures, 82 of them are north facing, meaning they are expected to achieve lower sunlight values. The worst performing units within the Mansion Block are to the southern end of the block to the rear, whilst within the Towers it is units in the northern elevation fronting Hazledean Road.

8.96 Generally, this represents a good overall adherence to the BRE guidelines as it is inevitable that some living rooms will face predominantly north.

8.97 In terms of outdoor amenity spaces, the results show that for both of the proposed amenity areas (the terrace at level 38 and the ground floor external spaces shown in Figure 46 below) over half of each space would receive at least 2 hours of sun on 21 March thus meeting the guideline.

Figure 46: sunlight on the ground on 21st March

8.98 Overall, an acceptable level of sun and day light is achieved. Officers are also satisfied that where BRE standards have not been achieved that this is due to a combination of factors including site optimisation, site characteristics and design considerations.

Outlook and privacy

8.99 Paragraph 6.80 of the Croydon Local Plan states *"A minimum separation of 18-21m between directly facing habitable room windows on main rear elevations is a best practice 'yardstick' in common usage and should be applied flexibly, dependent on the context of the development to ensure that development is provided at an acceptable density in the local context"*.

8.100 There are a number of units (16) towards the southern side of the Towers which would look out onto the northern flank elevation of the Mansion Block. The distance between the Towers and the Mansion Block is approximately 10m and would occur up to the 9th storey only, given the height of the Mansion Block. The 16 units affected would be provided with enhanced outlooks to the south-east and south-west which would be acceptable.

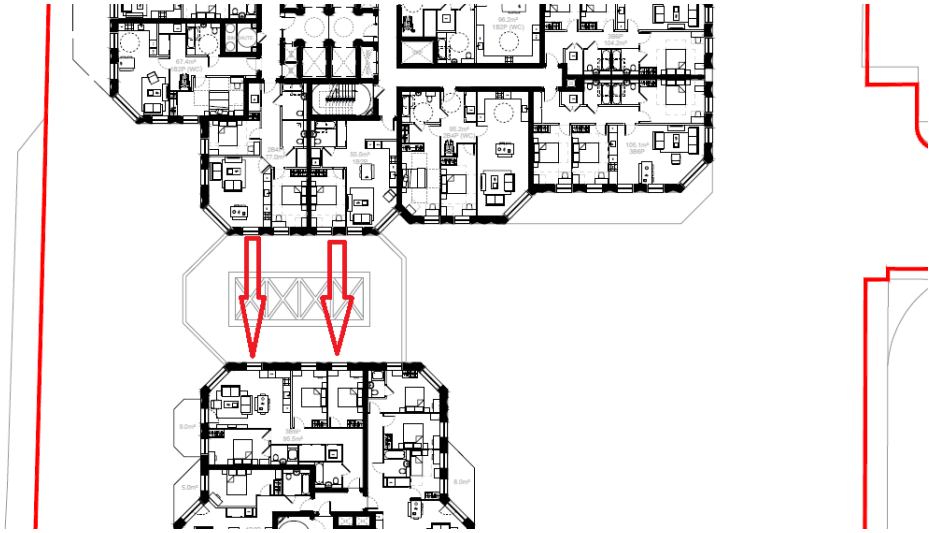


Figure 47: window alignment between the tower and mansion block from 1st to 7th floors

8.101 The Development Plan nor the LPGs provide a 'yardstick' measurement for the depth in respect of outlook and therefore a planning judgement needs to be applied. In this case, a 10m outlook would be provided before an obstruction is encountered while an enhanced outlook would allow greater views out from these windows. It is therefore considered that the 16 affected units on the southern elevation would be provided with an acceptable level of outlook given the need for site optimisation.

8.102 It is noted that the windows within the south elevation of the Towers have bedrooms with sole outlook towards the Mansion Block (and vice-versa) and LKD rooms facing each other but with angled windows also within those rooms. It is important that the bedrooms have an outlook, and given they do not directly face each other, conditioning as obscurely glazed is not considered reasonable. However, as the LKD have windows orientated away as well as the windows facing, it is felt a condition to obscurely glaze these windows is justified.

8.103 The Mansion Block would be sited approximately 6-8 metres from the northern flank elevation of Altitude 25, with its northern elevation containing no north facing windows up to the 9th floors. The 9 storey height of the Mansion Block would therefore not obstruct or restrict outlook. Windows to Altitude 25 are further eastwards and would overlook a communal garden whereas existing views would overlook the existing hotel complex. Given the relationship between the Mansion Block and Altitude 25 no direct overlooking would occur. The Towers would be visible from the windows of Altitude 25 but would be sited in excess of 68 metres away, therefore good levels of outlook would be provided from the flats in Altitude 25.

8.104 There are flats further east known as Latitude Apartments which would overlook the communal garden area of the proposed development with separation distances of approximately 68m between the Villa Block and Latitude Apartments, which would maintain appropriate levels of outlook.

8.105 All other proposed windows would be sited more than 18m from the neighbouring residential development and therefore appropriate levels of privacy for future occupiers would be achieved. There is a generous separation distance with no direct window alignment between the Villa and Mansion Blocks and therefore appropriate levels of privacy would be provided for the future occupiers of this blocks.

8.106 There is sufficient separation (in excess of 21m) between the proposed units and the Law Courts for there to be no detrimental impact on the future occupier's privacy or outlook.

Wind

8.107 The submitted wind study (which utilised wind tunnel testing) indicates that all of the balconies within the Mansion Block, the ground floor shared outdoor spaces and roof top terrace at the 33rd floor would achieve wind conditions that are suitable for their intended use with fixed mitigation at ground and 33rd floor. Fixed mitigation at ground floor would comprise an entrance canopy and fixed wind screens as part of the landscaping proposals while at the 33rd floor, the amenity space has been moved to the eastern side of the towers with wind screens and soft landscaping. Subject to a suitably worded condition these areas would be suitable for their intended uses.

Noise

8.108 The agent of change policy (D13 of the London Plan) puts the responsibility for mitigating impacts from existing noise generating uses (in this case the Law Courts and Church to the west/north-west) on the proposed noise-sensitive development.

8.109 The Environmental Health officer has reviewed the submitted noise and vibration assessment, and raises no objections, stating that the recommendations (namely the provision of enhanced glazing and ventilation of appropriate specification as detailed with the assessment and limits on plant noise) are appropriate and should be secured by condition.

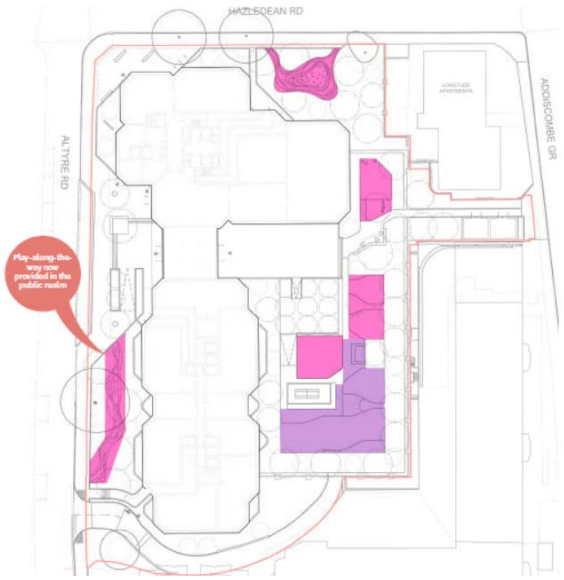
Private/Communal Amenity Space and Child Play Space Provision

8.110 All of the proposed residential homes either meet or exceed the minimum floor space standards set out in the London Plan (2021) while units which are not provided with private amenity space are oversized in floorspace terms. All ground floor homes in the Mansion Block would have private amenity space with the upper floor units provided private balconies. The units in the Towers and Villa Block are not provided with private terraces and/or balconies due to issues in relation to useability of these spaces at higher level and elegance of the building; these units are appropriately oversized as a result. As such, the conflict with London Plan Policy D6 is therefore considered to be justified, on balance, given the specific circumstances and in light of other material considerations.

8.111 The development provides a series of external spaces, comprising a communal courtyard garden of 1,802 sqm, a pocket garden of 454 sqm, a communal roof terrace of 273 sqm, and improved public realm areas of 1,022 sqm. Communal internal space is also provided across the Ground (585sqm) and 33rd floors (134sqm). All spaces are accessible to all future residents of the development and have been designed as flexible, multifunctional, and inclusive.

8.112 All units would access to the communal amenity spaces which have been designed to provide places for resting, socialising and play, whilst also increasing biodiversity. The images of benches, tables and play equipment are welcomed and alongside other features such as play on the way, providing a range of different spatial experiences and cater for multiple users. Detailed plans and specifications for play equipment, along with the soft and hard landscaping, will need to be secured by condition and the requirement to understand the density of planting.

8.113 The development would provide play on site for ages 0-4's and 5-11's with the over 12-year-old provision being provided offsite (with a requirement of 128sqm).



Age	Play Requirement	Play Provision on site	Location
Under 5	418 sqm	440 sqm	100% on site
5 to 11	286 sqm	290 sqm	100% on site
12+	128 sqm	0 sqm	100% off site
Total	832.1 sqm	730 sqm	

Figure 48: location of play space within development

8.114 Although there is space within the overall landscaping areas the proposal does not provide play space for the 12-15 and 16-17 year age ranges, highlighting that due to the sites constraints to provide meaningful play for older children and need to provide outdoor space for adult residents, these older children will be encouraged to visit Park Hill Park, which is within close proximity 60m to the south. Whilst this position is accepted the scheme stills needs to mitigate against the shortfall of older children play space. A financial contribution of £10,892 will be secured in lieu of this shortfall based on the costs of equipping an area of approximately 128sqm with suitable equipment and including an allowance for future maintenance.

8.115 The noise impact assessment additionally found the outdoor spaces within the scheme to be suitable without mitigation, as confirmed by the environmental health officer.

Fire safety

8.116 Although fire safety is predominantly a building regulations issue, policy D12 of the London Plan 2021 requires developments to achieve the highest standards of fire safety for all building users. The policy sets out a number of requirements, with the submission of a Fire Statement (an independent fire strategy produced by a third party suitably qualified assessor) setting out how the development has been designed and will function to minimise fire risk.

8.117 Policy D5 B 5) of the London Plan requires that in all developments where lifts are installed, as a minimum at least one lift per core (or more subject to capacity assessments) should be a suitably sized fire evacuation lift suitable to be used to evacuate people who require level access from the building.

8.118 The fire statement has been drafted by a BB7 who through its authors are registered with the Institute of Fire Engineers as a Member of the Institute. The statement has therefore been prepared by a suitably qualified assessor. The GLA have confirmed they are satisfied with the submission in relation to fire.

8.119 The scheme is a ‘relevant building’ under planning gateway one and hence the Health and Safety Executive (HSE) were consulted. The HSE have reviewed the amended fire statement and are satisfied with the information provided, raising no substantive objections. The interlocking Towers and Villa Block are served by two stair cores and a separate firefighting stair core with the Mansion Block served by two separate stair cores.

8.120 Both the interlocking Tower and Villa Block and Mansion Block will be provided with two evacuation lifts. This will ensure the safe and dignified emergency evacuation for all users in line with London Plan (2021) policy D5 and can be secured by condition.

8.121 The HSE raised some concern regarding the clarification of fire service access and hose laying distances, tenability within the firefighting stair, lobbies and corridors, the enclosed amenity room (33rd floor) and fire-fighting access. However, upon the review of the amended fire safety statement the HSE is content with the fire safety design to the extent that it affects land use planning.

8.122 No objection has been raised from the HSE and separate regulation (Building Control) approval will be required for these elements, so the scheme is considered acceptable in terms of fire at this planning stage. In addition, the Councils Principal Building Control Surveyor has reviewed this statement and is content that the detailed fire design is suitably flexible to allow for any changes should this be needed at the detailed design stage post-planning.

Accessibility

8.123 11% (49 units) would meet Building Regulation requirement M4(3) 'wheelchair user dwellings' and the remaining units would meet Building Regulation requirement M4(2) 'accessible and adaptable dwellings' and therefore satisfy Policy D7 of the London Plan and will be secured by condition. It is important to note that the M4(3) units are pepper potted through the different blocks. This approach is logical as the blue badge parking is all located within the basement which is accessible across all stair and lift cores.

8.124 Overall, the proposed development would provide well-designed homes that would provide a high standard of residential accommodation.

Impact on neighbouring amenity

8.125 Policy DM10.6 states that the Council will not support development proposals which would have adverse effects on the amenities of adjoining or nearby properties or have an unacceptable impact on the surrounding area. This can include a loss of privacy, daylight, sunlight, outlook or an increased sense of enclosure. There are a number of buildings surrounding the site requiring consideration in terms of daylight/sunlight impact. This aligns with the requirements of Policy D9 of the London Plan in relation to tall buildings.

8.126 Paragraph 6.80 of the Croydon Local Plan states *"A minimum separation of 18-21m between directly facing habitable room windows on main rear elevations is a best practice 'yardstick' in common usage and should be applied flexibly, dependent on the context of the development to ensure that development is provided at an acceptable density in the local context"*.

8.127 The Housing Design Standards LPG (2023) states that, the orientation and massing of buildings, and the separation distances between them, should ensure that the public realm is not unduly overshadowed to the detriment of health, wellbeing, biodiversity or amenity. Where demonstration is necessary and/or a building over 30 metres high is proposed, a micro-climate/wind/daylight and sunlight assessment should be submitted.

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amenity. Where demonstration is necessary and/or a building over 30 metres high is proposed, a micro-climate/wind/daylight and sunlight assessment should be submitted.

Outlook and Privacy

8.129 The Towers and Villa Block towards the north would be sited approximately 27m to 38m from Harrington Court which lies to the north on the opposite side of Hazledean Road. The Villa Block would be sited approximately 29m from 13 Addiscombe Grove to the northeast and approximately 18m from Longitude Apartments to the west, with the Towers providing a separation of approximately 27m from Longitude Apartments. The Towers and Villa Block would be sited approximately 65m to 67m from Latitude Apartments to the south and 35m to the southeast where Latitude Apartments returns north up Addiscombe Grove.

8.130 The Mansion Block would be sited approximately 37m from Latitude Apartments to the east and reduces down to 9m to the southeast where Latitude Apartments returns along Barclay Road. The windows at the closest point (9m) are angled away from each other and therefore given the orientation would not result in any overlooking or loss of privacy that would warrant a refusal of planning permission. The Mansion Block would be sited approximately 7m from Altitude 25 to the south but would sit adjacent to its blank facade, which extends up to the 9th floor as Altitude 25 was built when Croydon Park Hotel was in situ.

Figure 49: blank façade of Altitude

8.131 To the west of the site lies the Law Courts which by their nature do not contain any residential properties. A community building lies to the north-west which is known as the Christian Science Church which is not residential in use. An appropriate degree of separation would exist between the proposal and the Christian Science Church to ensure that adequate privacy would be provided for the new development.

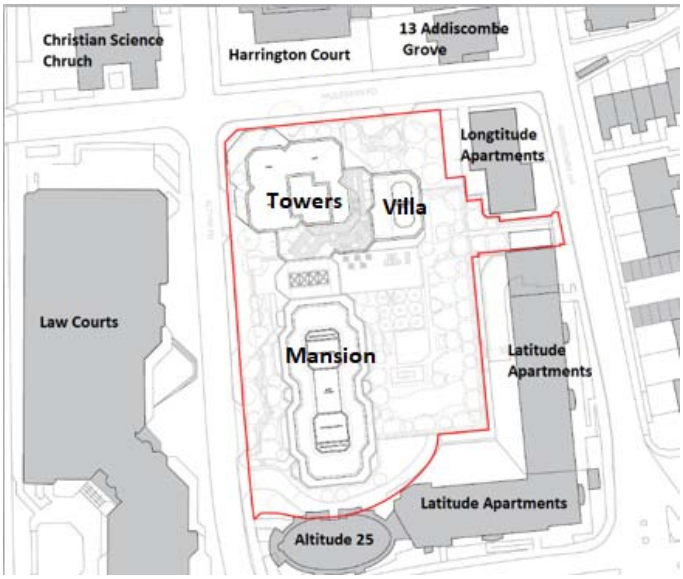


Figure 50: proposed site plan in relation to neighbouring buildings

8.132 Overall, given the density of the surrounding built form and closely related development in a central location it is expected that there will be a degree of mutual overlooking and visual impact for occupiers, orientation of windows and separation distances in excess of 18m acceptable levels of outlook and privacy would be achieved and maintained.

Daylight and Sunlight

8.133 Paragraph 125 of the NPPF states, in part c) that *"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)".*

8.134 The Mayor of London's Housing SPG also endorses a flexible approach to daylight and sunlight, stating:

"An appropriate degree of flexibility needs to be applied when using BRE guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres, large sites and accessible locations, where BRE advice suggests considering the use of alternative targets. This should take into account local circumstances; the need to optimise housing capacity; and scope for the character and form of an area to change over time… The degree of harm on adjacent properties and the daylight targets within a proposed scheme should be assessed drawing on broadly comparable residential typologies within the area and of a similar nature across London. Decision makers should recognise that fully optimising housing potential on large sites may necessitate standards which depart from those presently experienced, but which still achieve satisfactory levels of residential amenity and avoid unacceptable harm."

8.135 Furthermore, the OAPF notes that *"It is recognised that in heavily built up areas such as the Croydon Opportunity Area, new development will inevitably result in some level of overshadowing and overlooking of neighbouring properties and amenity spaces. It should be noted that the existing pattern of development in the central part of the COA is not conducive to the application of normal planning guidelines for sunlight and daylight. As such, as part of new development proposals, there will need to be a flexible approach to the protection of natural light for existing properties."*

8.136 The Housing Design Standards LPG (June 2023) states that the *"most favourable orientation for each new building will be heavily influenced by the site-specific opportunities and constraints. Layouts should optimise the orientation of new buildings to maximise the quality of daylight and thermal comfort for residents, minimise overheating, and optimise thermal efficiency, by utilising and controlling solar gains".*

8.137 It should be noted that the BRE does allow for alternative targets. In this case an alternative target (15% VSC) has been set for the purpose of this assessment due to the density of the site. Through a number of planning applications and appeals it has been established that alternative targets may be set having regard to site context, with 15% VSC being an appropriate benchmark. This is considered appropriate for this site.

8.138 The applicant has submitted a sunlight and daylight report that has been carried out in accordance with 2022 BRE guidance. This report has been reviewed by the Council's daylight and sunlight consultant, who conclude that the methodology and application of the guidelines is appropriate.

8.139 The report applies the BRE standard numerical guidelines for daylight and sunlight to existing surrounding buildings. The following properties satisfy the BRE guidelines:

- 93 Granville Close
- 86-90 Granville Close
- 104-106 Granville Close
- 138 Granville Close
- 13 Addiscombe Road: Experiences a significant reduction but is not believed to contain residential units.
- Croydon Crown Court: Experiences a significant reduction but does not contain residential units.

8.140 The neighbouring properties that have the potential to experience a reduction in daylight and sunlight beyond the BRE guidelines are Harrington Court and Latitude apartments (noting that Altitude 25 and Longitude apartments were considered under Latitude apartments) discussed in more detail below.

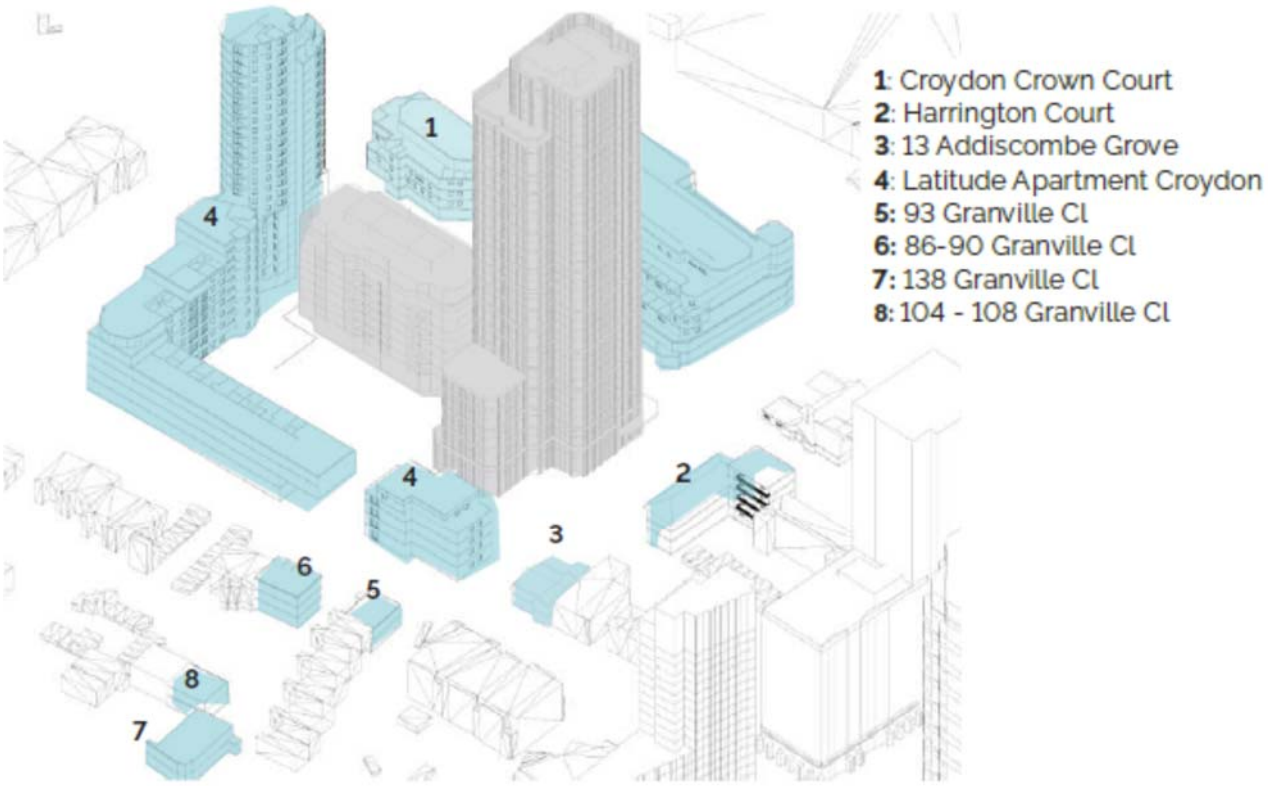


Figure 51: 3D view of the model used to show surrounding buildings

Harrington Court

8.141 This is the three-storey residential building located to the north of the development site which has been based on assumed layouts.

8.142 In terms of daylight, 72 windows were assessed using the Vertical Sky Component (VSC) test – see Appendix 2. Of the 72 windows tested, 39 (54%) remain BRE compliant. Of the 33 windows that fall below the BRE guidelines, 4 will experience a moderate adverse impact, while 29 will experience a major adverse impact seeing a reduction greater than 40% (the most impacted window has a reduction of 48%, with the lowest actual VSC being 15.01%).

8.143 If an alternative target of 15% of VSC is applied, which officers feel is appropriate, the results show that 100% of the windows tested will comply.

8.144 In terms of daylight distribution, 46 rooms were assessed using the No Sky-Line test (NSL) – see Appendix 2. Of the 46 rooms assessed, 34 (74%) would experience no noticeable alteration in daylight distribution. Of the 12 rooms that do not comply, 3 rooms would experience a moderate adverse impact, with 9 rooms experiencing major adverse impacts (reductions greater than 40%).

8.145 In terms of sunlight, 46 rooms have been assessed using the Annual Probable Sunlight Hours test (APSH) – see Appendix 2. Of the 46 rooms assessed, 40 (87%) remain BRE compliant. There are 6 rooms achieving APSH below the recommendations; these are all located in the upper floor of Harrington court where there is an existing roof overhang, which is an inherent design limitation which would contribute to a lower achieved value. Generally, the APSH results show that all rooms considered will meet the alternative target values.

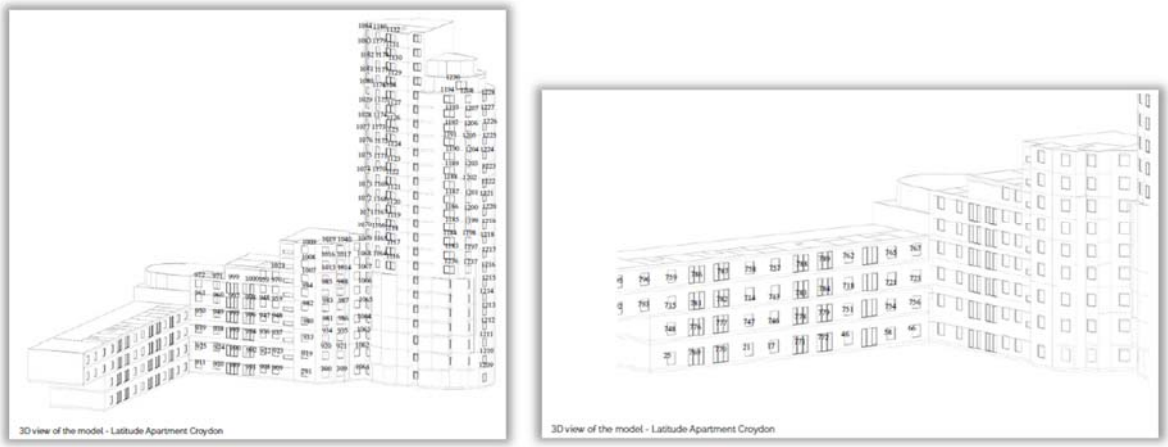
8.146 Overall, the latest scheme massing marginally reduces the daylight and sunlight impact on this property. Several windows have the potential to experience a significant reduction beyond the BRE guidelines, but all windows maintain a mid-teen VSC.

Latitude Apartments (including Altitude 25 and Longitude apartments)

8.147 These are the three residential blocks located directly to the east and south of the development site. They range from 4 to 25 storey in height. The northern block of the three (Longitude apartments) has protruding balconies which obstruct the passage of daylight and sunlight.

8.148 In terms of daylight, 293 windows were assessed using the VSC test. Of the 293 windows tested, 242 (83%) remain BRE compliant. Of the 52 windows that fall below the BRE guidelines, 27 will experience a minor adverse impact beyond the BRE guidelines, 6 a moderate adverse impact and 19 a major adverse impact. Of the 293 windows, 272 (93%) retain a VSC of at least 15%. With the exception of 4 homes with a VSC under 10%, the remaining windows retain a VSC of at least 10% post-development.

8.149 There are four scenarios where a VSC under 10 occurs, with a lowest overall VSC of 5.93 and the greatest overall reduction in VSC of 58%. These are all generally within the rear elevation of Longitude apartments and the western elevation of Latitude apartments where the block turns the corner and fronts Addiscombe Road.



Figures 52 and 53: windows to Latitude Apartments (shown to include Altitude 25)

8.150 In terms of daylight distribution, 263 rooms were assessed using the NSL. Of the 263 rooms assessed, 238 (90%) would experience no noticeable alteration in daylight distribution and satisfy BRE. Of the 25 rooms that do not comply, 16 would experience a minor adverse impact, 7 a moderate adverse impact, with 2 rooms experiencing major adverse impacts (reductions of 46% and 56% - both units are within the rear elevation of Longitude apartments).

8.151 In terms of sunlight, 263 rooms have been assessed using the APSH test. Of the 263 rooms assessed, 243 (92%) remain BRE compliant. There are 20 rooms achieving APSH below the recommendations for sunlight during the year; these are generally located in the rear elevation of Longitude apartments and a number of windows in the northern elevation if Latitude apartments. Of these 20 rooms that fail, 5 are LKD while the remaining 15 are bedrooms, where there is a lower expectation of sunlight.

8.152 Overall, the revised massing appears to reduce the daylight and sunlight effects to this property when compared to the original scheme. The proposed scheme will cause a noticeable alteration in daylight to this building, which is regrettable and must be given weight, but is not unexpected given its proximity to the site.

Sunlight to neighbouring amenity spaces

8.153 19 neighbouring amenity areas are considered within the assessment, making up a combination of residential gardens (both front and rear, private and communal), as well as spaces in front of non-domestic buildings.

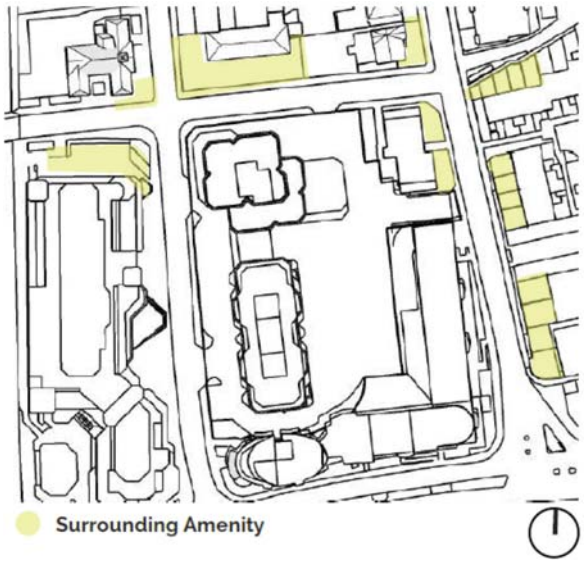


Figure 54: amenity areas assessed

8.154 Of the 19 amenity areas, 18 satisfy the BRE guidelines. The one area that falls below the suggested BRE guidelines is a car park located to the north of the Croydon Crown Court building, which is non-residential. Overall, the report indicates that the proposed scheme will only have a negligible effect on the neighbouring amenity areas.

Daylight and sunlight conclusion

8.155 The properties that would experience noticeable daylight and sunlight effects are Harrington Court and Latitude Apartments, but the revised massing reduces the overall effects to these properties. There are residential dwellings in both properties that directly face the development site and due to the extent of the proposed massing a reduction beyond the BRE guidelines is expected.

8.156 The proposed scheme will cause a noticeable alteration in daylight and sunlight to these buildings, particularly Longitude and Latitude apartments which is regrettable and must be given weight but is not unexpected given its proximity to the site. Taking into account the opportunity area location, the relatively dense urban environment, the fact the brownfield site contains a vacant building and the policy steer to apply application of the BRE guidance flexibly, when balancing the benefits of the scheme against the harm of these impacts, officers raise no objection.

8.157 There will be no significant adverse effect on sunlight to back gardens or amenity spaces.

Microclimate

8.158 Paragraph 6.71 of the Croydon OAPF states that new buildings, in particular tall buildings, will need to demonstrate how they successfully mitigate impacts from microclimate conditions on new and existing amenity spaces. In particular, new tall buildings in the COA will need to show how their designs do not have a negative impact on wind (downdrafts and wind tunnelling). This is endorsed in DM38.4 of the Croydon Local Plan and D9 of the London Plan.

8.159 A wind report has been submitted in support of the application that reviews the impact of the proposal on nearby and surrounding land and has been independently review by the Councils Wind Consultant, GIA. The land to the north-western of the interlocking towers and the ramp down to the basement had previously identified unsafe conditions while concerns existed in respect of the wind conditions of the roof terrace, on the 33rd floor.

8.160 The amendments to the proposal as part of this application have sought to address these concerns through the following mitigation:

a. Siting the mansion block further back from Altyre Road by approximately 1.8m;
b. The introduction of two permanent wind screens at the ground floor as part of the overall landscaping proposals close to the north-western entrance;
c. The introduction of a canopy to the ground floor north-western entrance at the junction of Hazledean Road and Altyre Road;
d. The relocation of the roof top terrace, at the 33rd Floor, to the eastern side of the interlocking towers and the introduction of wind screen around the periphery of the roof top terrace;
e. No pedestrian access via the ramped access to the basement.

8.161 All wind mitigation is provided through permanent and fixed structures and are capable of being secured through an appropriately worded planning condition. There are no soft landscaping features that are proposed as wind mitigation and therefore Officers have no concerns over the provision and retention of such mitigation features.

8.162 The applicant's Wind Assessment, the independent Review and third parties raised concerns regarding the undesirable wind condition at the corner of Barclay Road and Addiscombe Road, to the east immediately outside of Latitude Apartments (nodal point 89). Through wind tunnel modelling this corner position shows existing uncomfortable walking conditions. The application before Members does not make this position any worse and therefore there would be no greater concerns in regard to public safety; this position has been supported by the Council Consultants.

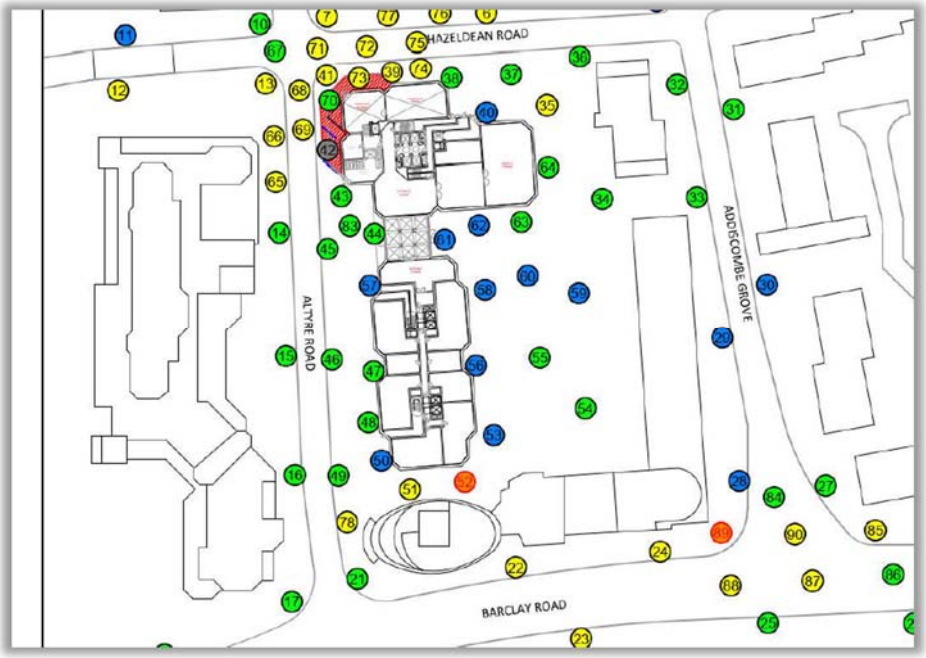


Figure 55: proposed wind conditions in relation to nodal point 89

8.163 Subject to securing the permanent wind mitigation through an appropriately worded conditions Officers are satisfied that the proposal would not result in any additional risk to public safety and would provide an acceptable environment in relation to wind.

Noise and disturbance

8.164 London Plan policy D13 Agent of change is relevant in relation to some neighbouring commercial businesses. Croydon Local Plan policy DM23 seeks to limit noise disturbance through high standards of development and construction.

8.165 Whilst population density would increase, the development is not considered to result in a harmful increase in noise and disturbance. A new outside space would be created at ground floor in a courtyard arrangement but is not considered to harm amenity from a noise perspective given the previous use of the site as hotel and the existing public car park use to the north. Moreover, this is a built-up urban area, and a degree of noise and disturbance is not uncommon.

8.166 During construction there would undoubtedly be an impact on neighbouring occupiers, including the Law Courts and other nearby community and commercial buildings. A construction logistics plan would ensure the build-phase is managed appropriately, minimising disturbance towards neighbouring properties, and can be secured by condition. Furthermore, disruption due to construction is only temporary, limited to the site and is of medium-term duration.

Access, parking and highway impacts

8.167 The site has a Public Transport Accessibility Level (PTAL) of 6b, on a scale of 0-6b, where 6b is the most accessible, so has an excellent level of accessibility to public transport links.

8.168 The site has existing vehicular access points from Hazledean Road to the north (serving the public car park) and Altyre Road to the west (an in and out under the hotel canopy for drop off, some parking and access to the existing basement), with a separate pedestrian access provided to the east onto Addiscombe Road. The access to the north currently provides access to a public car park which is still in operation while the accesses onto Altyre Road and Addiscombe Road have not been in operation since the closure of the hotel. The site lies within a controlled parking zone with pay and display bays (limited to a maximum of 2 hours) within Hazledean Road and Altyre Road.

Access: Vehicular

8.169 The existing former hotel contains 211 bedrooms while the site also incorporates the Hazledean Road car park which is currently in use and, according to the operators of the car park, currently provides up to circa 110 spaces for use by the public as a ‘pay by mobile’ car park at any time Mondays to Sundays.

8.170 When the site was operational vehicles accessing the hotel as well as the public car park would access the car park within the basement and via a dedicated ramp to the south along Altyre Road, with the public car park operating at both basement and ground floor levels. The hotel would be serviced onsite with dedicated areas within its forecourt along Altyre Road with additional coach parking and/or set down and pick up areas. The proposal seeks to retain some basement parking (for disabled users only) while the car park to Hazledean Road would be removed to accommodate the Villa Block and pocket garden.

8.171 The basement would accommodate 13 parking spaces for disabled users only with the remainder of the basement footprint given over to plant, refuse and cycle storage. A

dedicated cycle lift would be provided to the north-western corner of the basement with a dedicated cycle wash area. A small vehicle servicing bay is provided at basement level.

8.172 The basement would be retained with access from Altyre Road around the south of the building. This vehicular access onto Altyre Road would be realigned to the southern end of the site to take account of the Mansion Block and this would result in the need to redesign the ramp to the basement area. This would result in a 1:20 gradient for the first 5m and is considered suitable to provide access from the highway which sits at a higher level than the application site. Further details were requested by Council Officers during the course of the application to demonstrate that such an area would be suitably accessible. In addition, the width of the access has been reduced to a maximum of 5m and the applicant has confirmed that appropriate sight lines and pedestrian visibility splays will be provided (and secured via condition). To ensure that vehicles can pass one another freely on the access ramp a traffic light system would be installed and secured via an appropriately worded condition. Such measures would ensure that there would be no holding up or obstructions on the highway, achieving the highest safety standards.

8.173 The development would be served by a new on street loading bay with the public footpath (at a minimum width of 2m) re-routed around and into the application site. S.38 and S.278 highways agreements will be required to facilitate and deliver these works, with the Council adopting the realigned footpath as part of the highway. The realignment of the footway has been reviewed by strategic transport and highways colleagues and is considered acceptable and adheres to the comments received from TfL.

8.174 The existing crossover to Hazledean Road would be reinstated, so dropped kerb removed, secured under S.278 agreement. It is proposed to install the car club bay in this location, so there would be no loss of car parking facilities within Hazledean Road. The provision of the car club bay and 3-year membership for future residents would be secured through the S.106 legal agreement.

Access: Pedestrian

8.175 Pedestrian access is proposed on Hazledean Road to the community space on the north-western corner of the site. The main residential entrance to the building would be from Altyre Road, between the Towers and Mansion Block, with a secondary access to the Mansion Block at the southern end. Gated and secure access would also be provided to the east along Addiscombe Grove adjacent to the onsite sub stations.

8.176 All pedestrian entrances have been designed to be step free. There would be no pedestrian access provided via the basement ramp to the south end of the site due to issues of wind speed on the ramp. However, the cores within the Towers and Mansion Blocks would contain lifts that would provide access to the basement level.