LAMBETH: SITE ALLOCATIONS DEVELOPMENT PLAN DOCUMENT (DPD) - DAYLIGHT AMENITY

London Borough of Lambeth

14 February 2024

GIA No: **15790**

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1 INTRODUCTION AND INSTRUCTION

The London Borough of Lambeth ("LBL") has identified a number of new potential development sites in the borough to be included within a Site Allocations Development Plan Document ("SA DPD").

To demonstrate good design and optimisation of residential capacity, daylight and overshadowing testing on both internal amenity for future occupants and external amenity to existing neighbours was required in relation to 13 sites to feed into evidence-base documents in support of the SA DPD. These are referenced as:

- **Site 1**: Royal Street, SE1
- **Site 2**: St Thomas' Hospital, SE1
- **Site 3**: 35-37 and Car Park Leigham Court Road, SW16'
- **Site 7**: 6-12 Kennington Lane and Wooden Spoon House, 5 Dugard Way, SE11
- **Site 8**: 110 Stamford Street, SE1
- **Site 9**: Gabriel's Wharf and Princess Wharf, Upper Ground, SE1
- **Site 17**: 330-336 Brixton Road, SW9'
- **Site 18**: 300-346 Norwood Road, SE27
- **Site 20**: Tesco, 13 Acre Lane, SW2
- **Site 21**: 51-57 Effra Road, SW2
- **Site 22**: 1 & 3–11 Wellfit Street, 7–9 Hinton Road & Units 1–4 Hardess Street, SE24
- **Site 23**: Land at corner of Coldharbour Lane and Herne Hill Road, SE2
- **Site 24**: King's College Hospital, Denmark Hill, SE5

As such, LBL instructed GIA to assist in this process. The staged approach set out below was followed:

1. Identify potential constraints to development from a daylight and overshadowing perspective.
2. By reviewing initial proposals, GIA were able to identify how site layout and design could help optimize development potential, whilst respecting daylight and overshadowing for both the existing neighbouring properties and for the future occupants of the site. The VU.CITY platform was utilised during this process.
3. Subject to feedback from stage 2, LBL revised the proposed massing on each of the sites, which would then be assessed again.

For each site, GIA have provided images with commentary and results, which relate to the final version of the massing that was tested.

2 METHODOLOGY AND APPROACH

The methodology for each stage of work complete is set out below:

Neighbouring uses and indicative positioning of windows was identified by reviewing records on the Valuation Office Agency website and 3D maps.

To understand how site layout and design would affect internal and external daylight and overshadowing, GIA utilised the VU.CITY platform. This provided a qualitative, visual understanding of daylight and direct sunlight (overshadowing) potential. Whilst the VU.CITY model does not pick up on balconies and although window placement is indicative, it is relevant and appropriate for high level, indicative studies on daylight amenity.

The façade study in VU.CITY assumes the uniform placement of windows across the entire neighbouring and indicative façade. It establishes the daylight potential under the Vertical Sky Component (VSC) assessment in both the existing and indicative scenario.

This testing is high level, as appropriate at site allocation/master-planning stage. A more detailed testing would be expected at planning application stage when the development proposals are formulated.

The Vertical Sky Component (VSC) method is described in the BRE Guidelines as the;

> *"Ratio of that part of illuminance, at a point on a given vertical plane, that is received directly from a CIE standard overcast sky, to illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. Usually the 'given vertical plane' is the outside of a window wall. The VSC does not include reflected light, either from the ground or from other buildings"*

Put simply, the VSC provides an assessment of the amount of skylight falling on a vertical plane (generally a window) directly from the sky, in the circumstance of an overcast sky (CIE standard).

In providing feedback, GIA considered the suggested targets within the Building Research Establishment (BRE) handbook, 'Site Layout Planning for Daylight & Sunlight: A Guide to Good Practice (2022) and daylight levels commensurate with those typical of the areas surrounding the sites.

The key below, shows the colour that corresponds with the VSC value where façade studies were completed. The lower the value, the less sky visibility potential a window has. For context, and as a general overview, recent decisions from the GLA and Planning Inspectorate have suggested that lower targets are considered acceptable within urban context. For example the GLA's hearing report for the Monmouth House and Featherstone Street development recognises that "in an inner city urban environment, VSC values in excess of 20% should be considered as reasonably good, and VSC in the mid-teens should be acceptable"[1].

Key of colours and corresponding VSC values

Regarding overshadowing, the BRE Guidelines state

> *"Good site layout planning for daylight and sunlight should not limit itself to providing good natural lighting inside buildings. Sunlight in the spaces between buildings has an important impact on the overall appearance and ambience of a development.."*

GIA used the VU.CITY platform to illustrate any shadow caused by LBL's schemes on existing and proposed amenity areas. The BRE Guidelines suggest the requirement and expectation for sunlight to amenity areas will vary depending on its use. It also suggests the equinox (March 21st) can be chosen as a date of assessment.

In providing feedback, GIA considered the suggested targets within the Building Research Establishment (BRE) handbook, 'Site Layout Planning for Daylight & Sunlight: A Guide to Good Practice (2022) and overshadowing levels commensurate with those typical of the areas surrounding the sites.

Once LBL were provided with feedback from the VSC and Overshadowing assessment in VU.CITY, where necessary, changes were made to the indicative massing and site layout to improve the daylight and overshadowing outcomes..

1 Planning application P2015/3136/FUL, GLA's hearing report, para 120 page 31.

3 PLANNING POLICY AND GUIDANCE

Consideration of daylight and overshadowing amenity forms part of the planning process, as dictated by planning policy. In considering the development potential and the quality of amenity for the surrounding properties, daylight and overshadowing analysis is usually based upon the Building Research Establishment (BRE) guidelines 'Site Layout Planning for Daylight and Sunlight' which provide the criteria and methodology for calculation in connection with daylight and overshadowing. For daylight, typically only habitable rooms / properties are required for assessment. For overshadowing, gardens, communal outdoor spaces, recreation areas etc. will often be relevant for consideration.

Below we have detailed sections from the following documents as they are, in our opinion, the most pertinent in relation to daylight and overshadowing matters.

NATIONAL PLANNING POLICY FRAMEWORK (DECEMBER 2023)

The NPPF (December 2023) 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.

> *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).".*[2]

NATIONAL PLANNING PRACTICE GUIDANCE (UPDATED NOVEMBER 2023)

The PPG outlines that all developments should *"maintain acceptable living standards"* and that assessing appropriate daylight and sunlight amenity *"will depend to some extent on context"*[3]

THE LONDON PLAN (MARCH 2021)

The London Plan was published in March 2021 (CDE.02) and sets out the integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years.

The supporting text for Policy D1 (London's form, character and capacity for growth) states that:

> *"As change is a fundamental characteristic of London, respecting character and accommodating change should not be seen as mutually exclusive. Understanding of the character of a place should not seek to preserve things in a static way but should ensure an appropriate balance is struck between existing fabric and any proposed change. Opportunities for change and transformation, through new building forms and typologies, should be informed by an understanding of a place's distinctive character, recognising that not all elements of a place are special and valued."*[4]

Part A of Policy D2 (Infrastructure requirements for sustainable densities) states that:

> *"The density of development proposals should:*
>
> *1) consider, and be linked to, the provision of future planned levels of infrastructure rather than existing levels*
>
> *2) be proportionate to the site's connectivity and accessibility by walking, cycling, and public transport to jobs and services (including both PTAL and access to local services)"*

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*

2 National Planning Policy Framework (2023), p 38, para 129(c)

3 MHCLG. (2019). National Planning Policy Guidance (2019), para 66-007-20190722

4 Greater London Authority. (2021). The London Plan 2021. London: Greater London Authority, para 3.1.7 pg 1

usability of outside amenity space."

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.

Part C3 of Policy D9 (Tall buildings) states that development proposals should address (among others) environmental impacts in terms of:

> *"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".*

LAMBETH LOCAL PLAN (2021)

Lambeth Local Plan 2021. Policy Q2 (Amenity) states that development will be supported if:

> *'it would not have an unacceptable impact on levels of daylight and sunlight on the host building and adjoining property including their gardens or outdoor spaces'.*
>
> *"adequate outdoor amenity is provided [...] free from excessive [...] overshadowing.*

4 SITE 1: ROYAL STREET, SE1

INTRODUCTION AND SCOPE

Having identified the surrounding uses and site facing windows, Vertical Sky Component (VSC) facade studies were completed to understand daylight potential in the existing and proposed scenarios. In line with the BRE Guidelines, the focus was on residential properties along with any non-domestic buildings where occupants may have a reasonable expectation for daylight; i.e. schools, hospitals, hotels and places of worship.

Regarding the hospital to the west of the site, this forms another Site Allocation.

The identified uses are illustrated in Figure 01 below.

Similarly, a VSC facade study was undertaken on the proposed façades, to understand the potential for the proposed scheme to provide future occupants with good levels of daylight and sunlight.

Finally, an overshadowing study was also completed showing how the shadow cast by the proposed massing would affect the open spaces within and around the site.

Figure 01: Use map

Regarding the properties to the west of the site, these are all currently non-residential use. However as they are occupied by St Thomas's hospital, they were considered for completeness as there may be some sensitive room uses within. Nonetheless, the VSC facade study has shown these buildings will retain good levels of VSC that GIA consider to be appropriate for the location.

To the north of the site (as shown in View 1 and 2) there is a student building. Whilst the building is transiently occupied, such that residents live there for relatively short periods of time, it was tested for completeness. In any event the BRE guidance should be applied flexibly for transiently occupied properties.

As can be seen in Fig. 04, in the existing scenario there is a section of the south site facing facade that has low levels of VSC. With the indicative massing in place, the area of lower VSC values expands. The

VSC ASSESSMENT - VIEW 1 **PROPERTIES TO THE NORTH AND WEST OF THE SITE**

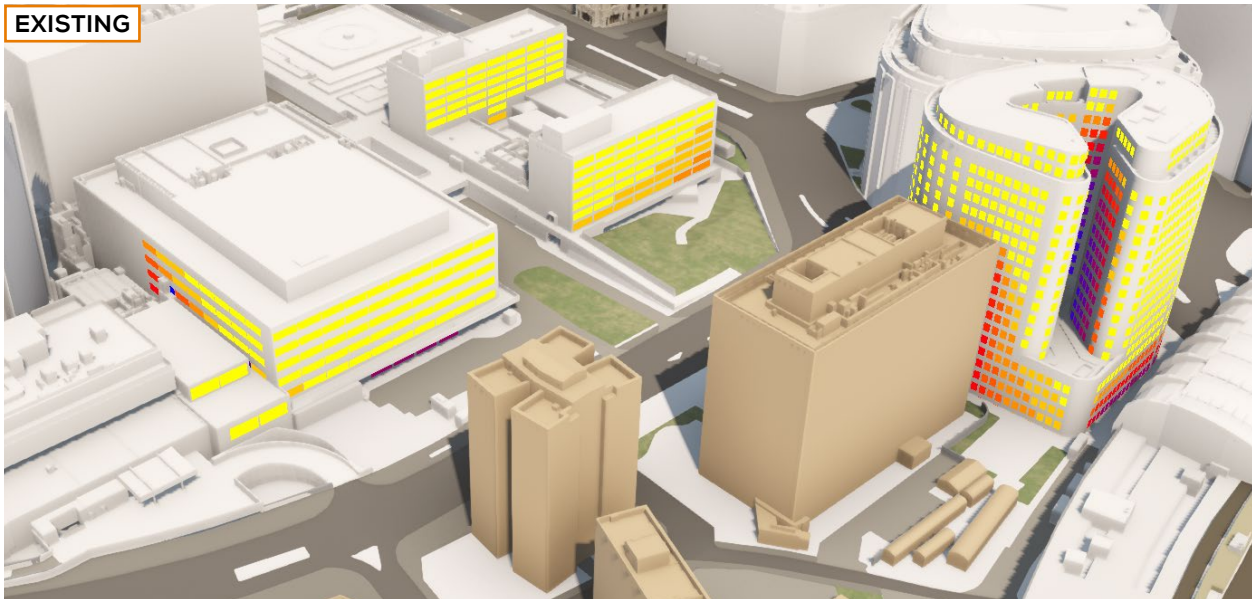


Figure 02: Existing VSC values

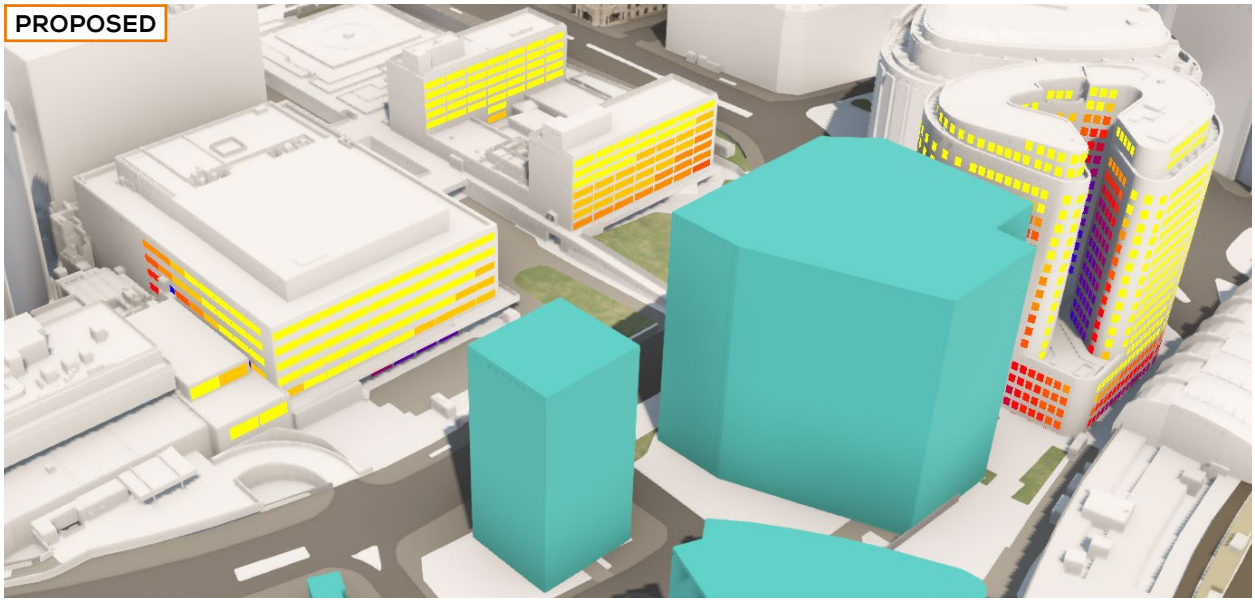
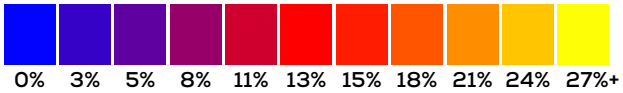


Figure 03: Proposed VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



values however are in line with the existing values within the courtyard of the building, visible in Fig. 04 and 05. In addition, it is considered that the facade that sees lower VSC values with the indicative massing in place is where bedrooms are located; which the BRE Guide acknowledges as having a lower requirement for natural daylight.

An assessment of cumulative impact together with the indicative scheme at the adjacent Site Allocation of St Thomas's Hospital has also been considered, which would not materially change the effects illustrated in View 1 or 2.

Overall, given the use of the property to the north, GIA consider the massing is appropriate for its context with consideration of neighbouring daylight amenity.

VSC ASSESSMENT - VIEW 2 **PROPERTIES TO THE NORTH OF THE SITE (URBAN NEST, 203 WESTMINSTER BRIDGE ROAD)**

EXISTING

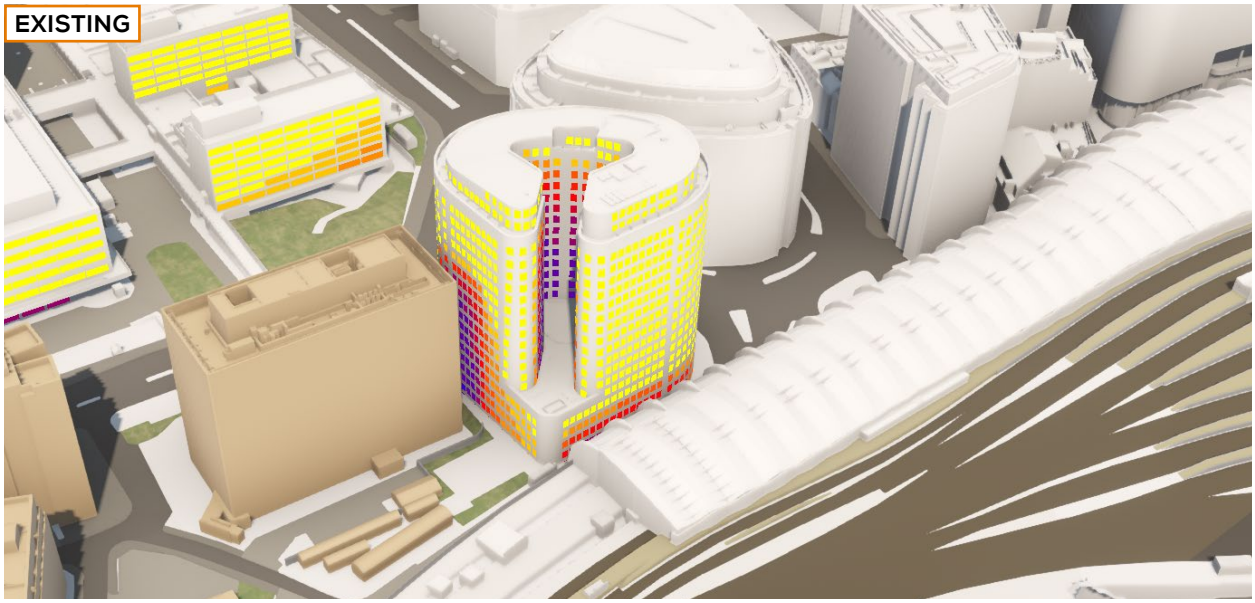


Figure 04: Existing VSC values

PROPOSED

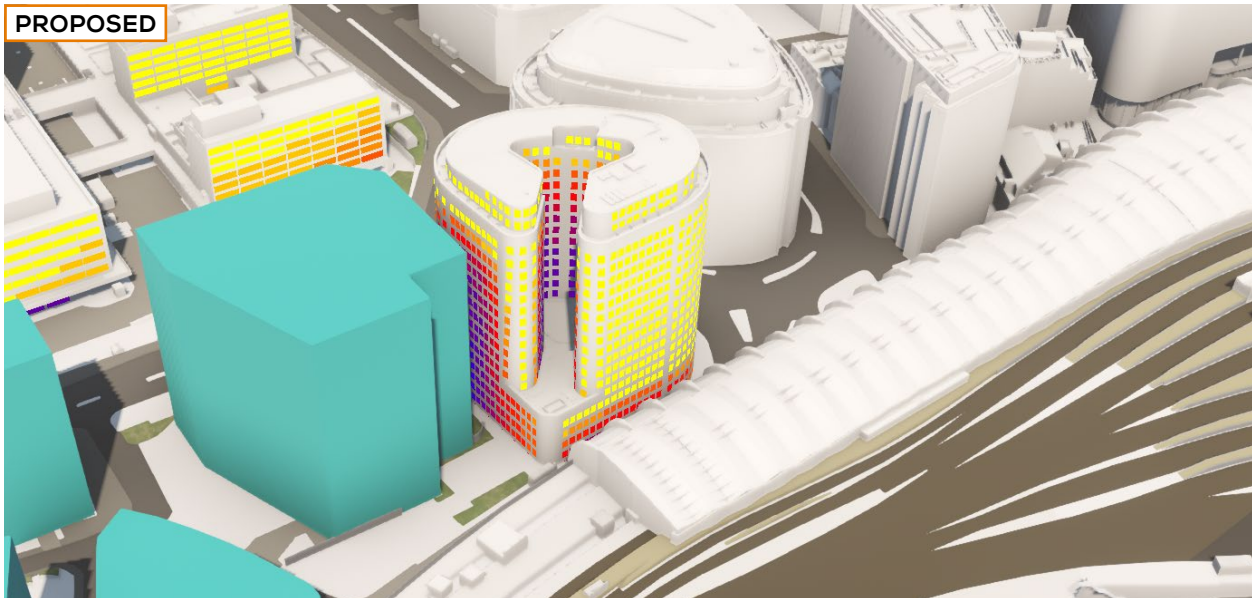


Figure 05: Proposed VSC values

DAYLIGHT AMENITY WITHIN THE SITE

The illustrative massing arrangement includes both residential and non-residential buildings. While the images in this section show the daylight potential levels to all blocks, it should be noted that only residential buildings are typically considered sensitive from a daylight and sunlight perspective.

It is understood that the residential component of the tested scheme comprises the four smaller buildings located along Royal Street. The tower element alongside Lambeth Palace Road has been conceived as commercial, however it enjoys good levels of daylight and so could be a potential good candidate should an increased residential provision be needed. These buildings are highlighted in magenta in View 1 below.

The four blocks along Royal Street receive very good levels of daylight from the south (overlooking Archbishop's Park), east and west and so rooms designed behind these elevations are likely to perform well.

The north elevations of three of these buildings

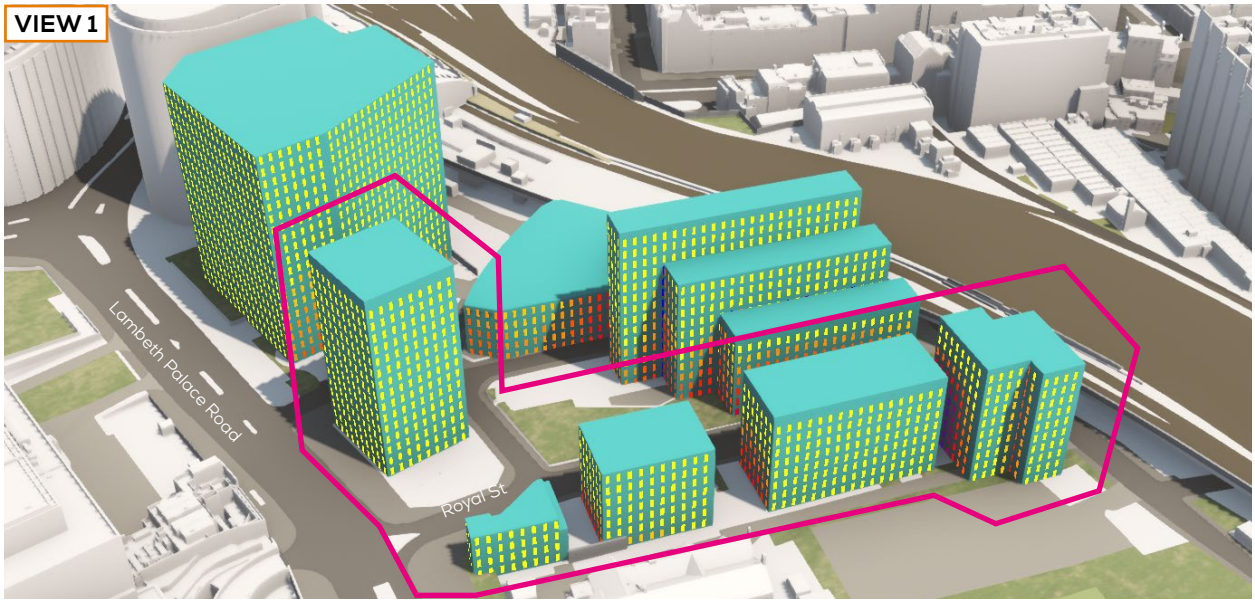


Figure 06: Daylight Potential (VSC)

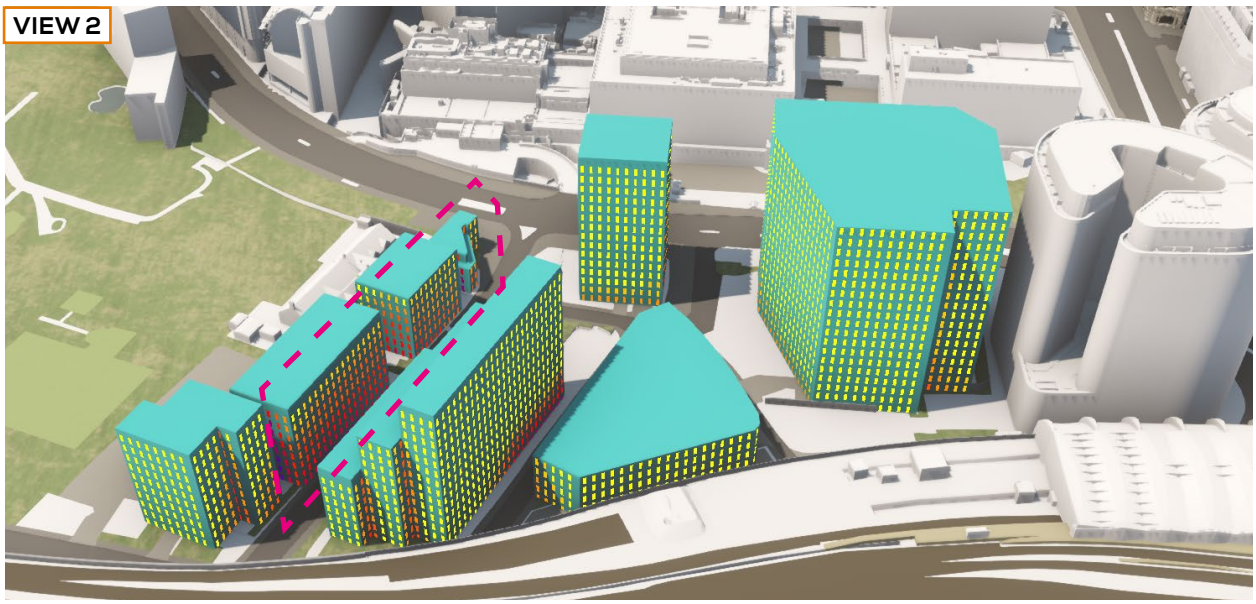
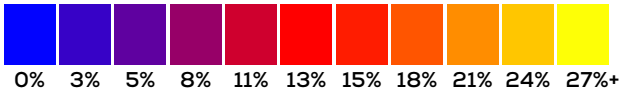


Figure 07: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



(highlighted with a dashed line in View 2) are more obstructed by the indicative scheme and lower than ideal levels of daylight are also seen in the flank elevations, particularly on the lowest floors.

This is unlikely to compromise the overall good performance of the scheme, however it will require careful design considerations. In particular, the flank elevations should be predominantly used to accommodate bedrooms or secondary windows of dual-aspect living rooms.

It should be noted that balconies also restrict the access to daylight and sunlight to the windows set below them (if projecting) or behind them (if recessed). Therefore, their effects should be mitigated, where possible, by providing rooms with additional windows free of obstructions, or by staggering balconies or internal layouts so that the windows serving the living areas are not overhung. This will be particularly important when designing the north facing elevations, as the obstruction caused by balconies will compound with that caused by the indicative scheme itself.

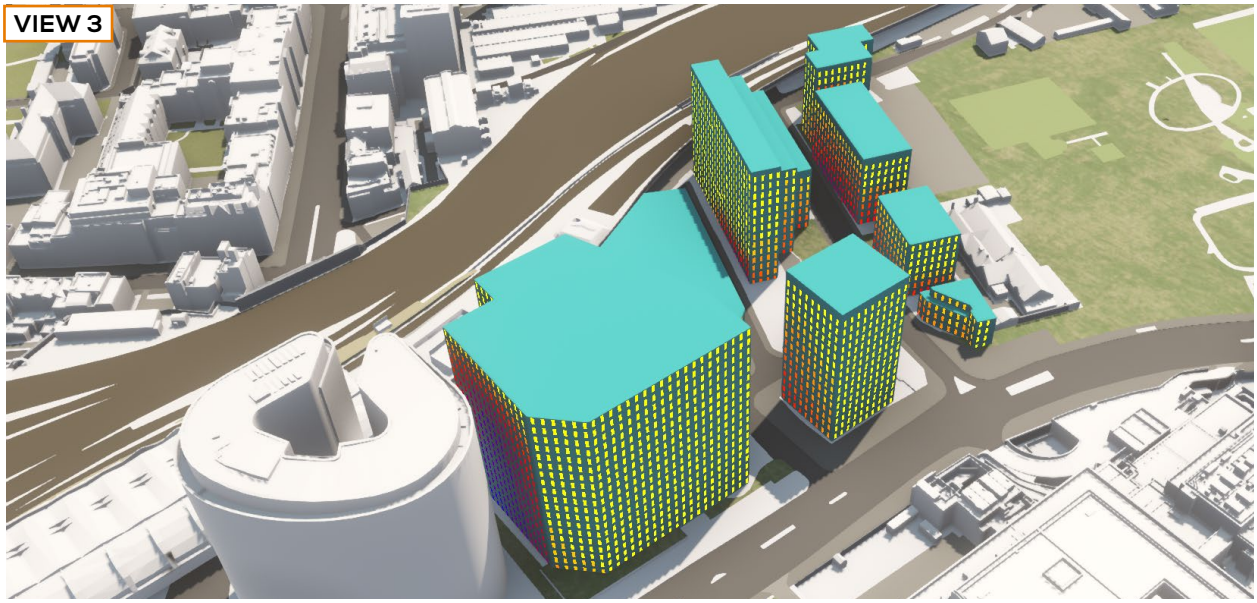


Figure 08: Daylight Potential (VSC)

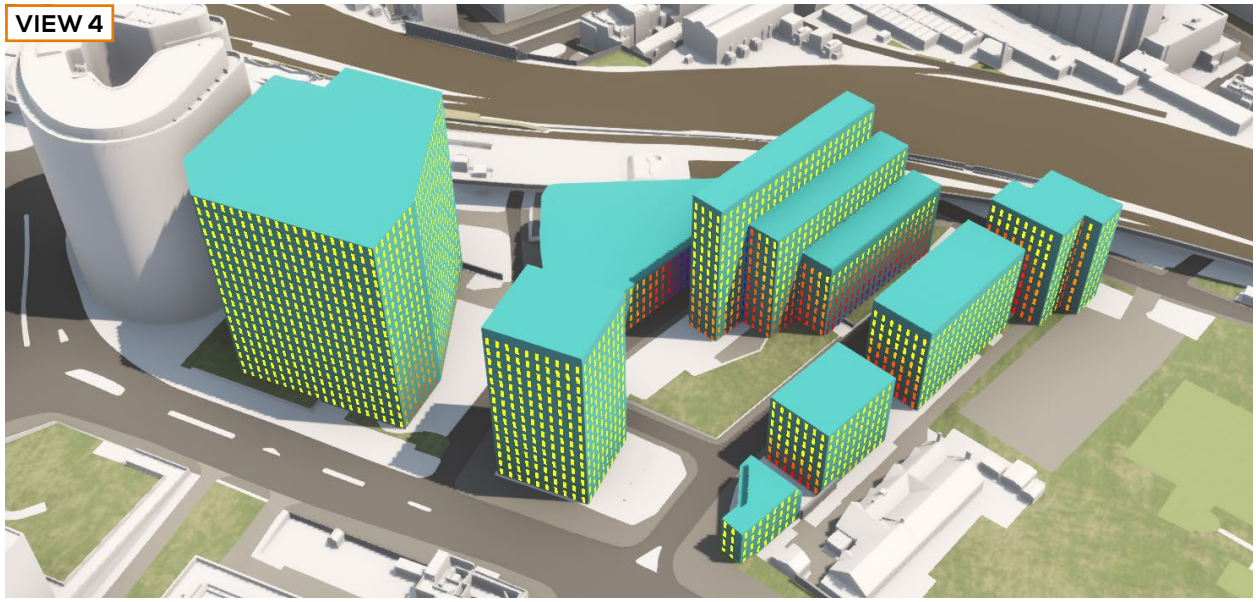


Figure 09: Daylight Potential (VSC)

OVERSHADOWING

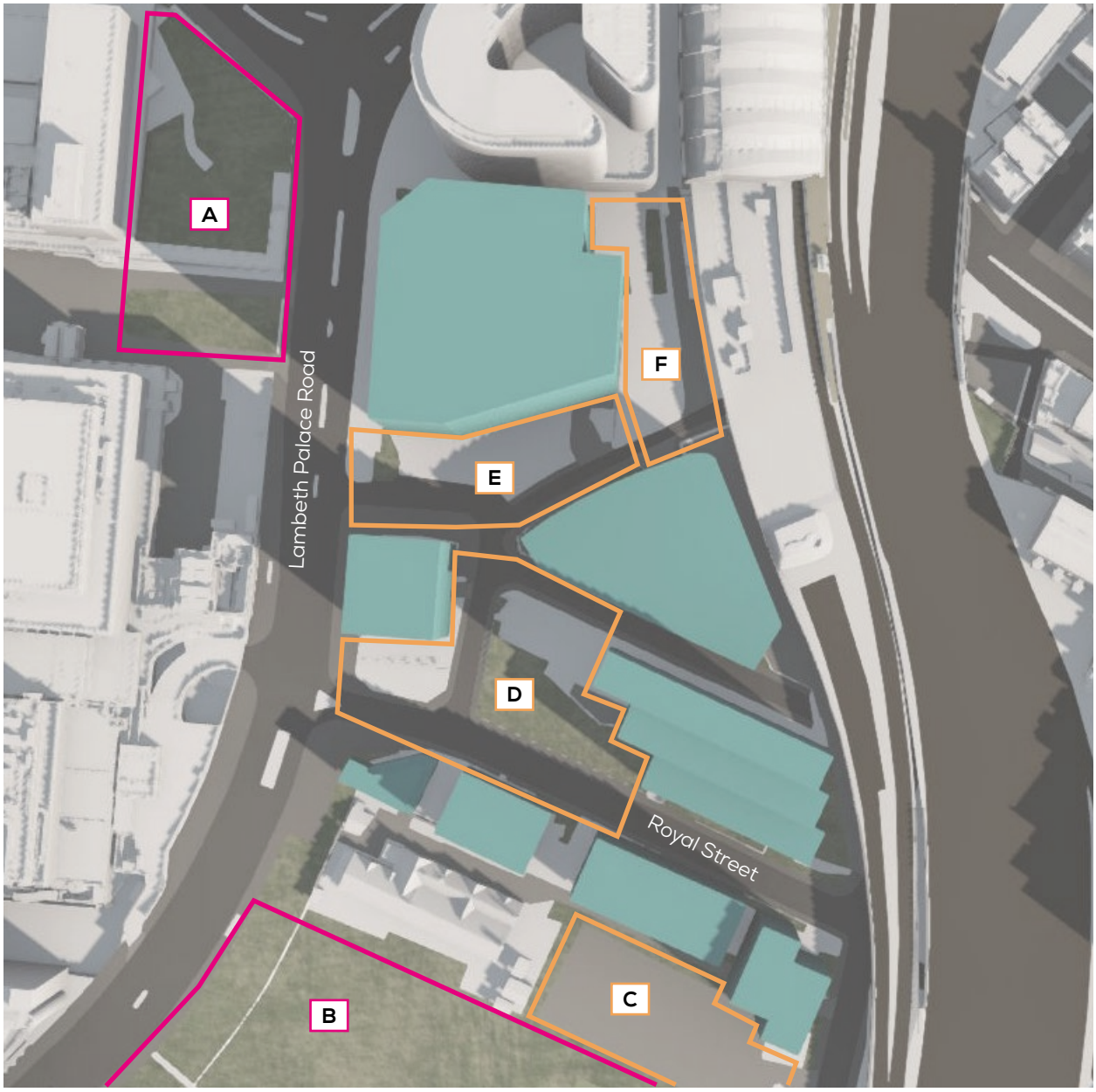
The indicative scheme is unlikely to have any noticeable overshadowing impacts on the neighbouring open spaces (highlighted in magenta in the image below), as they will both retain levels of direct sunlight in excess of the minimum recommendations set out within the BRE Guidelines.

The scheme offers several opportunities for open spaces, each providing different degrees of sunshine and shade.

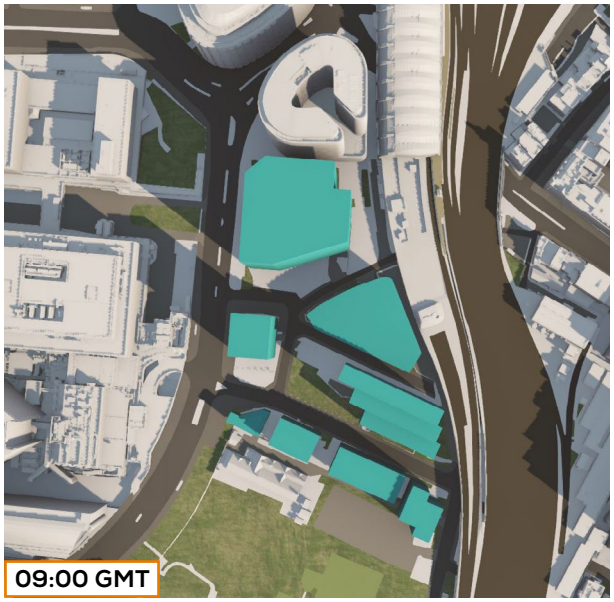
Excellent levels of sunlight are experienced by area C, highlighted in orange in the image below. Relatively good levels are also likely to be seen within areas D and F, while area E is likely to be more shaded.

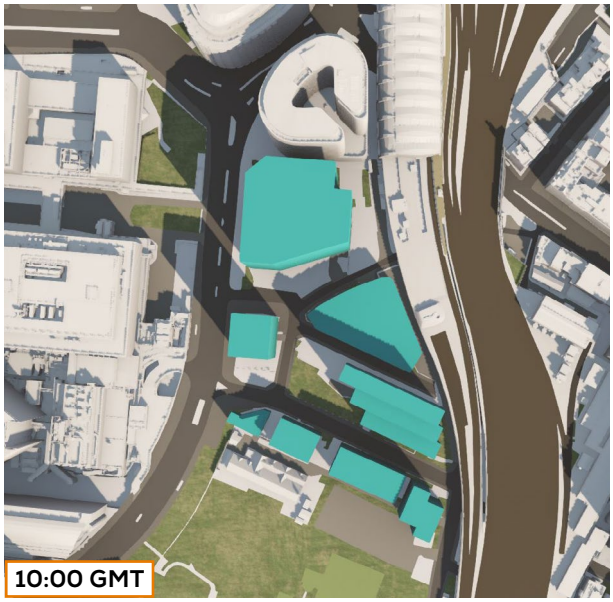
Ideally, these considerations should form part of the landscape design, to make the most effective use of the areas receiving more direct sunlight.

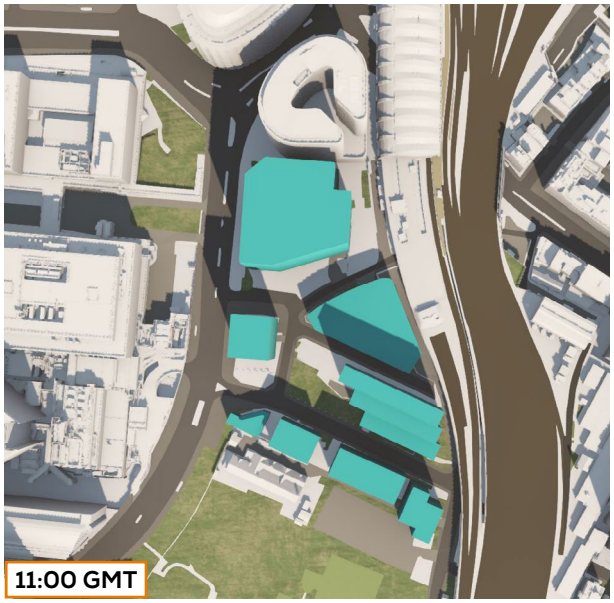
Overall the scheme has the potential to offer adequate levels of direct sunlight outdoors.

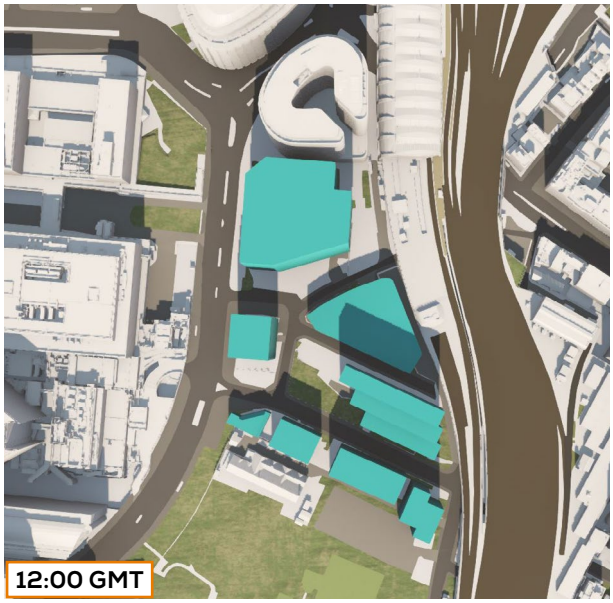


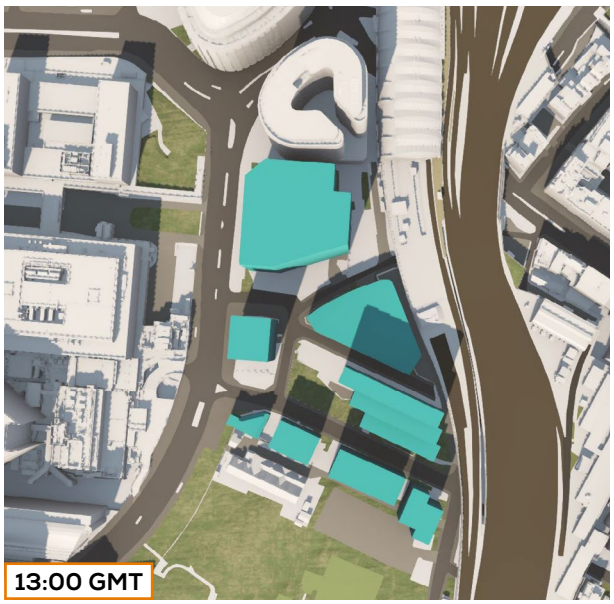
TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH

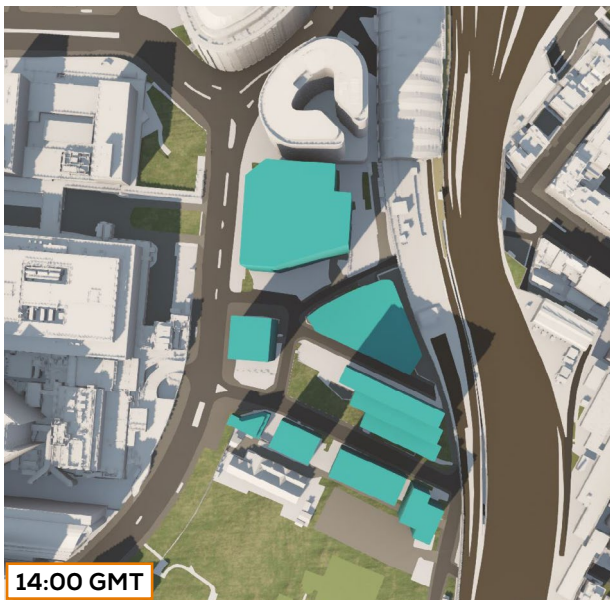




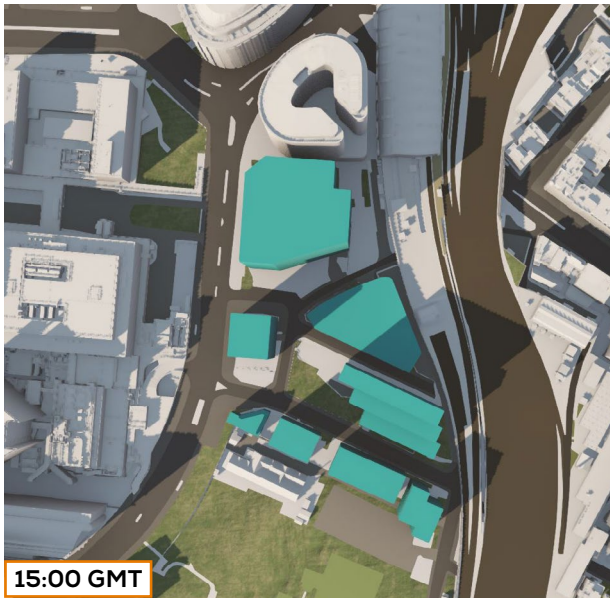








TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH



21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

5 SITE 2: ST THOMAS' HOSPITAL SE1

INTRODUCTION AND SCOPE

Having identified the surrounding uses and site facing windows, Vertical Sky Component (VSC) facade studies were completed to understand daylight potential in the existing and indicative scenarios. In line with the BRE Guidelines, the focus was on residential properties along with any non-domestic buildings where occupants may have a reasonable expectation for daylight; i.e. schools, hospitals, hotels and places of worship.

Regarding the land to the east of the site, this forms another Site Allocation.

The identified uses are illustrated in Figure 10 below.

Similarly, a VSC facade study was undertaken on the proposed façades, to understand the potential for the proposed scheme to provide future occupants with good levels of daylight and sunlight.

Finally, an overshadowing study was also completed showing how the shadow cast by the indicative massing would affect the open spaces within and around the site.

Images illustrating the results of these assessments are shown within Sections 2, 3 and 4.

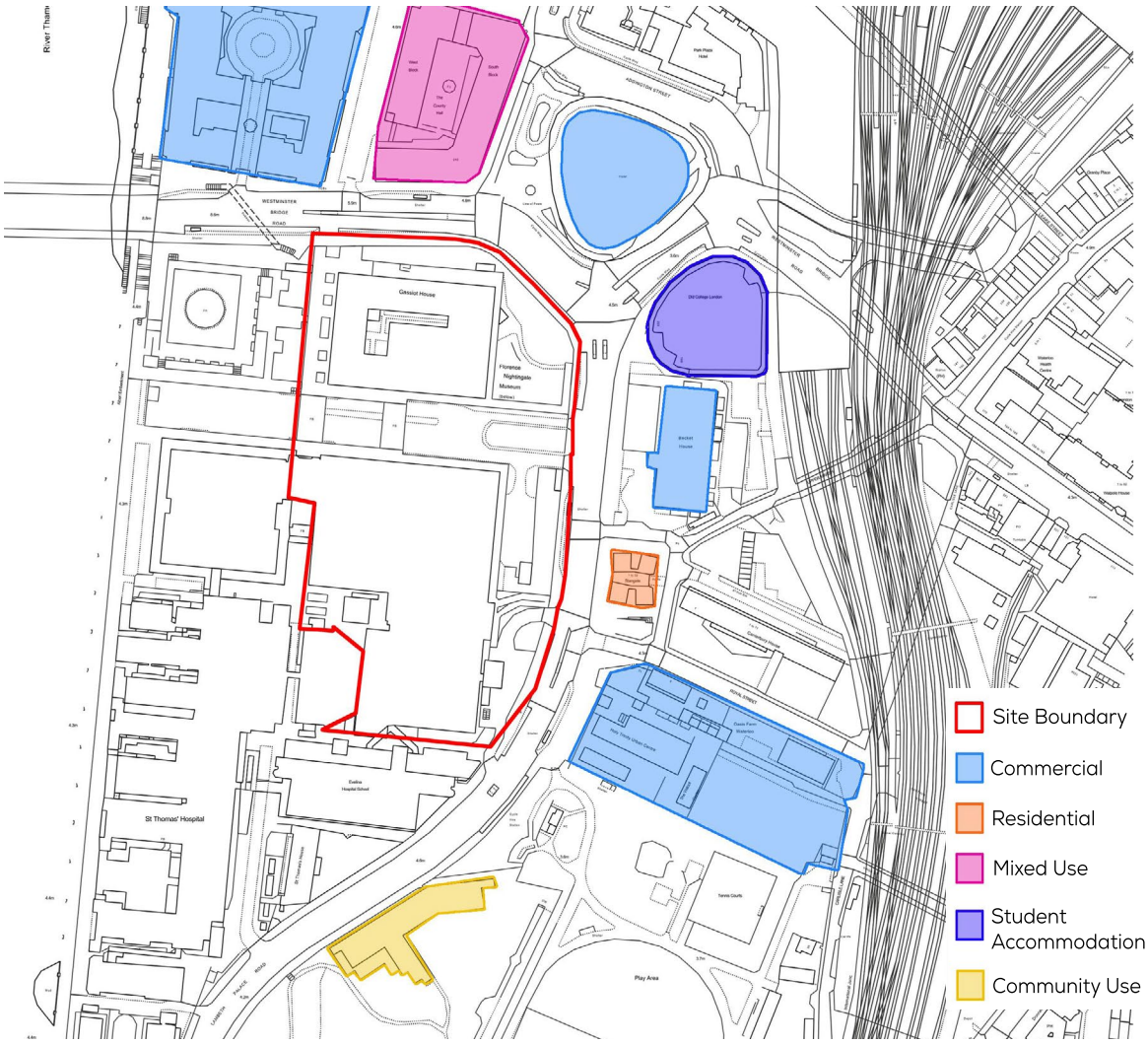


Figure 10: Use map

DAYLIGHT IMPACTS TO NEIGHBOURING PROPERTIES

GIA's façade study identified little or no change in daylight to the neighbouring properties surrounding the site. Where change is evident, retained VSC levels are considered to be good.

As such, GIA consider the indicative massing is appropriate for its context with consideration of neighbouring daylight amenity.

VSC ASSESSMENT - VIEW 1 PROPERTIES TO THE NORTH OF THE SITE (246-252 WESTMINSTER BRIDGE ROAD)

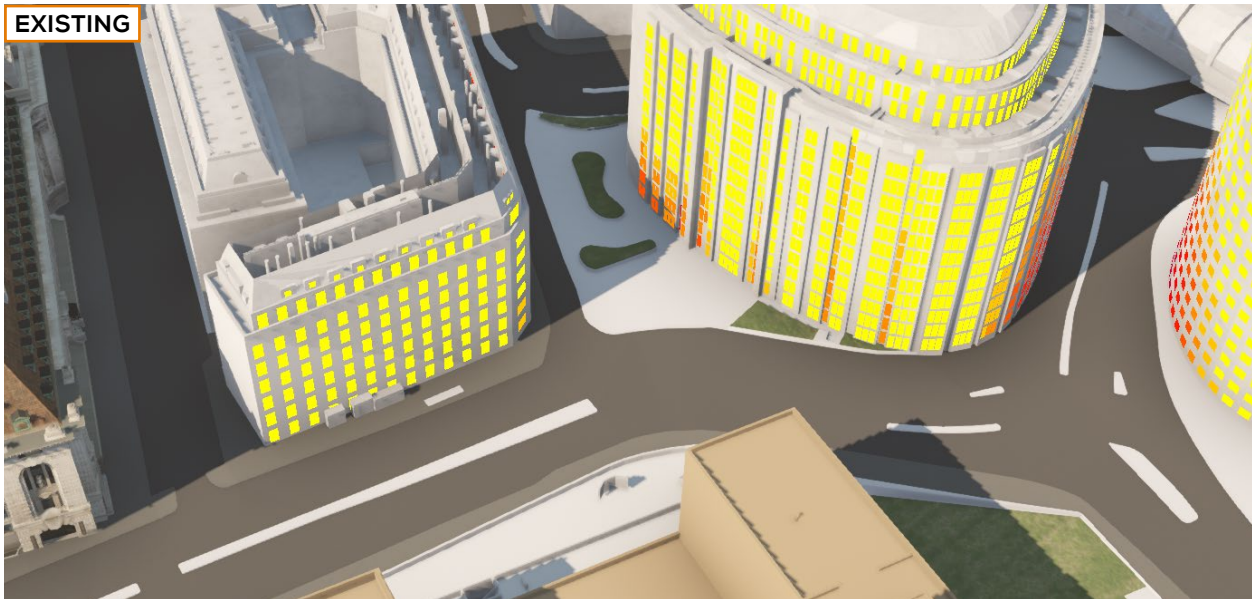


Figure 11: Existing VSC values

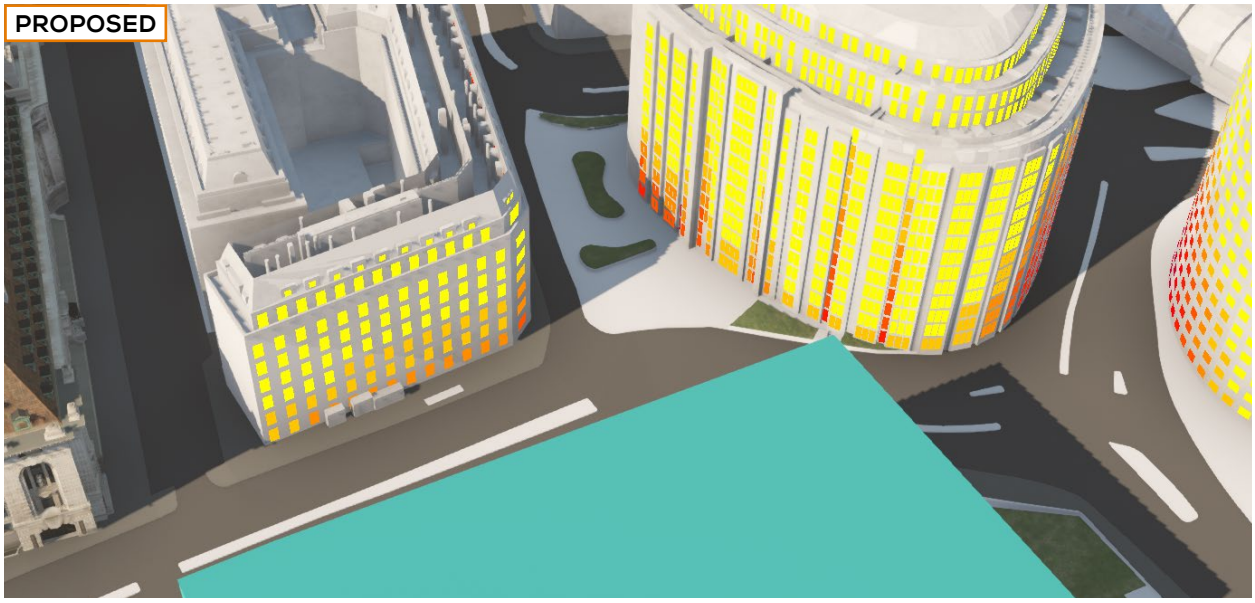
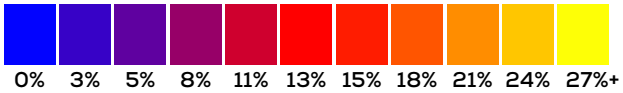


Figure 12: Proposed VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



VSC ASSESSMENT - VIEW 2 **PROPERTIES TO THE EAST OF THE SITE (URBAN NEST AND BECKET HOUSE)**

Figure 13: Existing VSC values

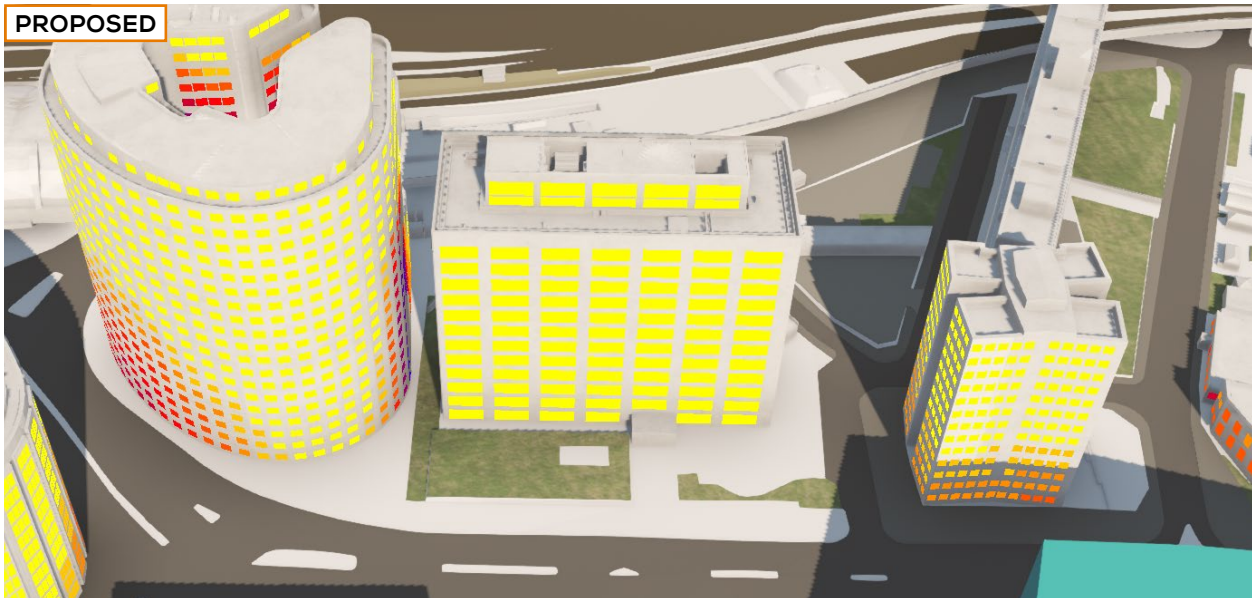
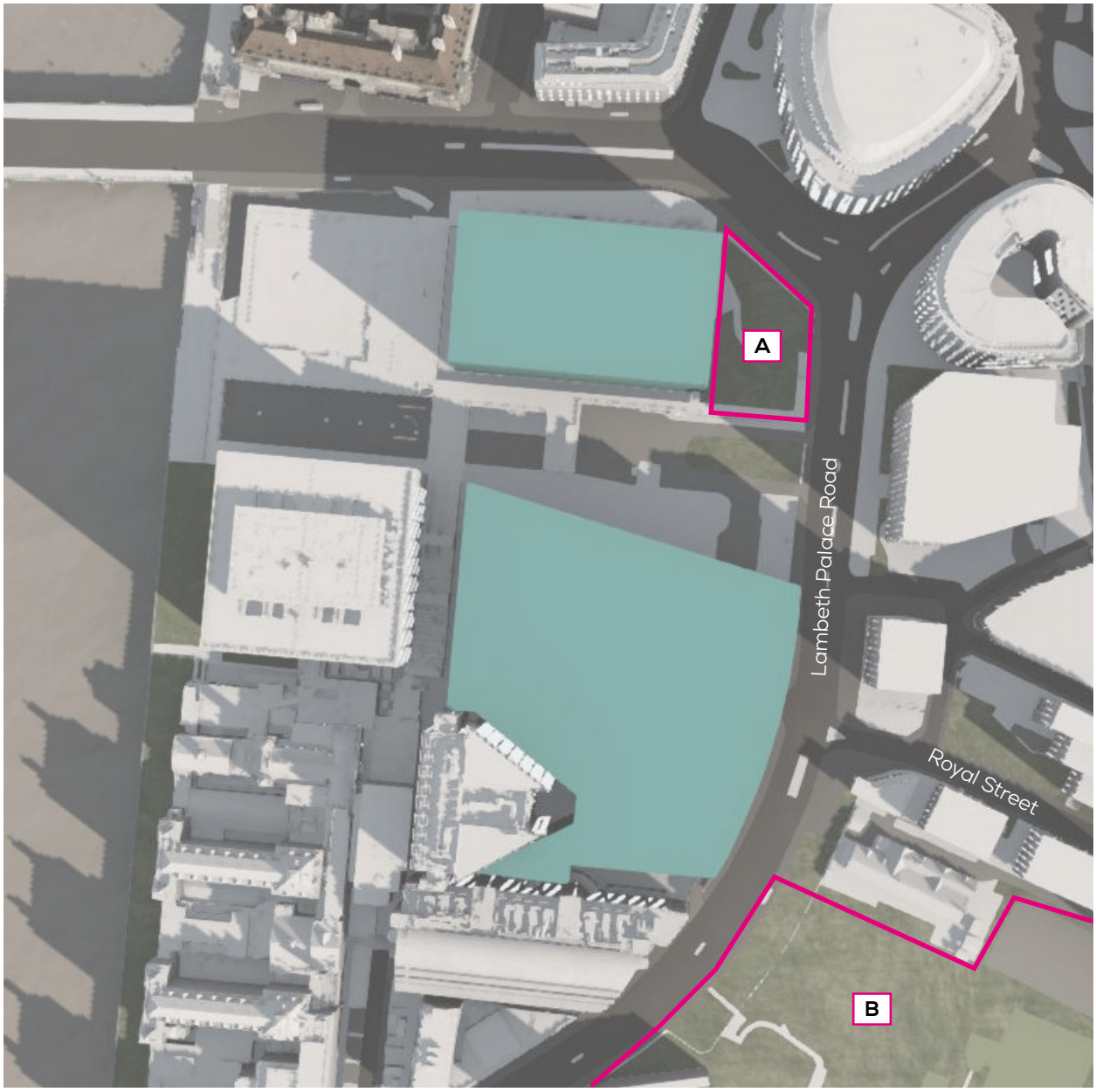


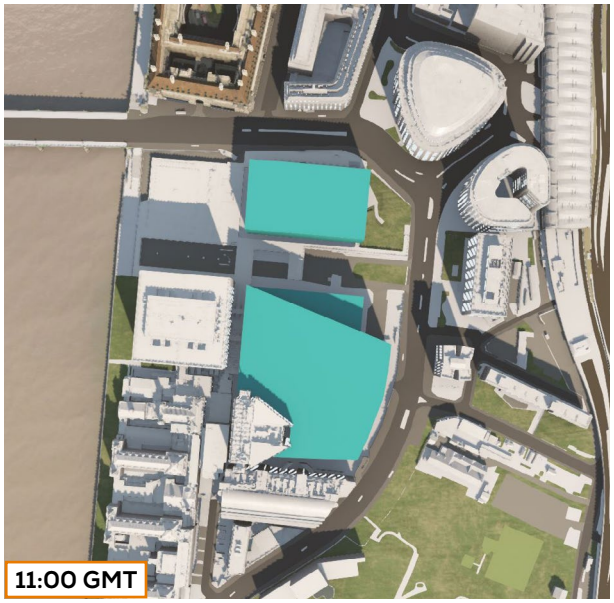
Figure 14: Proposed VSC values

OVERSHADOWING

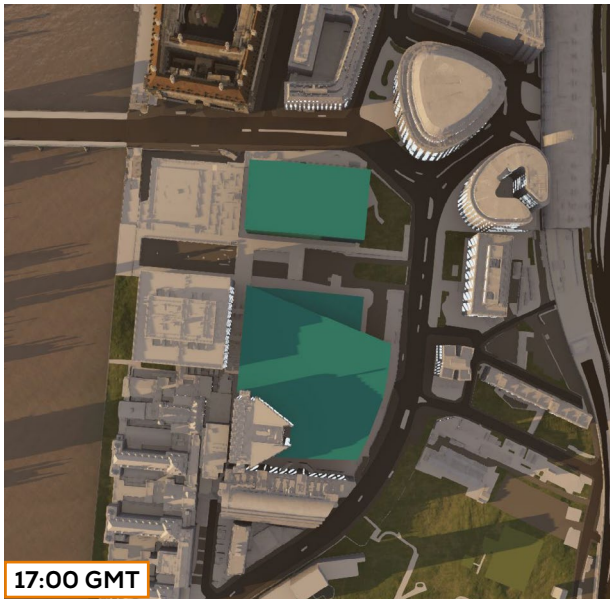
The indicative scheme is unlikely to have any noticeable overshadowing impacts on the neighbouring open spaces (highlighted in magenta in the image below), as they will both retain levels of direct sunlight in excess of the minimum recommendations set out within the BRE Guidelines.



TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH



TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH



21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

6 SITE 3: 35-37 AND CAR PARK LEIGHAM COURT ROAD SW16

INTRODUCTION AND SCOPE

Having identified the surrounding uses and site facing windows, Vertical Sky Component (VSC) facade studies were completed to understand daylight potential in the existing and indicative scenarios. In line with the BRE Guidelines, the focus was on residential properties along with any non-domestic buildings where occupants may have a reasonable expectation for daylight; i.e. schools, hospitals, hotels and places of worship.

The identified uses are illustrated in Figure 15 below.

Similarly, a VSC facade study was undertaken on the indicative façades, to understand the potential for the indicative scheme to provide future occupants with good levels of daylight and sunlight.

Finally, an overshadowing study was also completed showing how the shadow cast by the indicative massing would affect the open spaces within and around the site.

Images illustrating the results of these assessments are shown within Sections 2, 3 and 4.

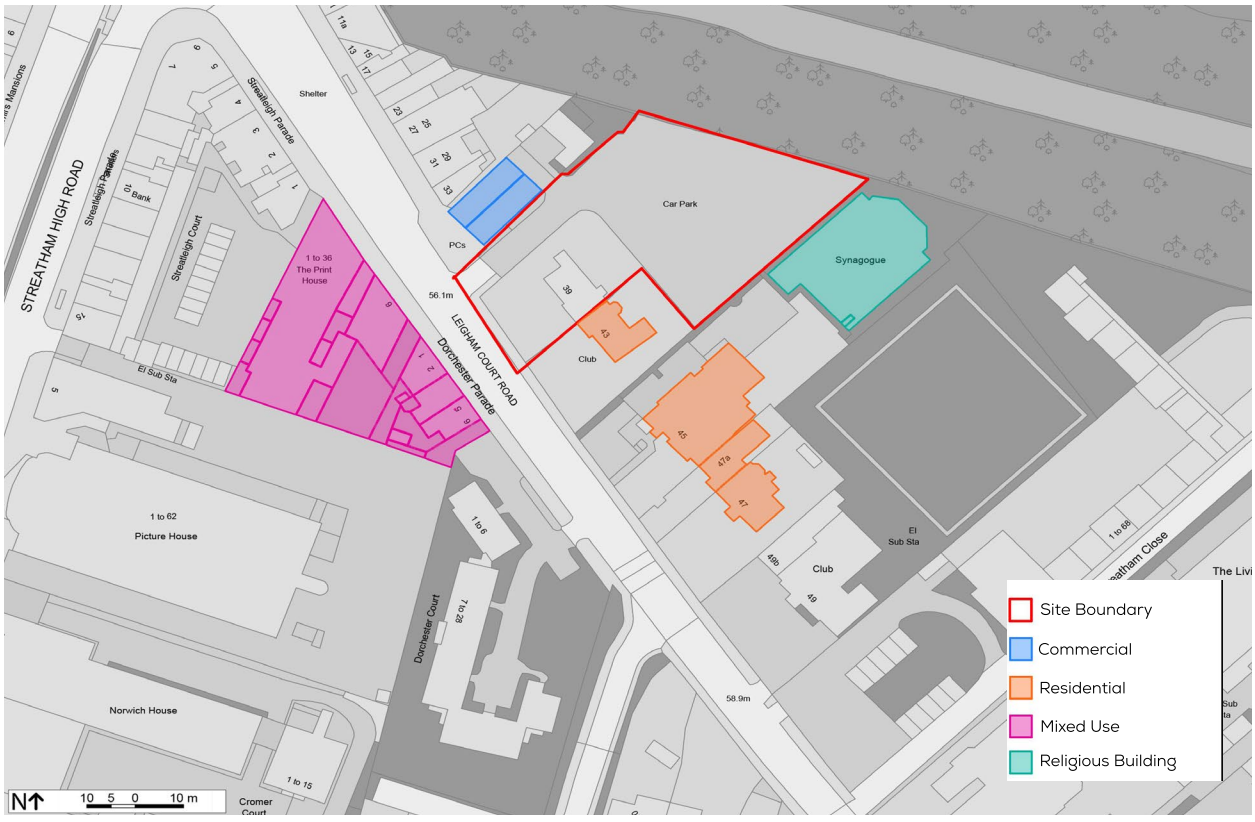


Figure 15: Use map

Regarding the vacant South London Synagogue, it is not known whether or not there are in fact windows on its site facing north west facade. They have however been assumed for completeness. Whilst any windows along this elevation may see a change in VSC value from the existing value, they are still of a "mid teen" value or above. It also appears the building is served by roof lights. Overall, it is expected this property would not experience unacceptable harm upon its natural daylight amenity.

Elsewhere, whilst there are isolated instances where VSC reductions would occur, the vast majority would retain values far in excess of the 20% value considered "good" by the GLA, with remaining windows achieving a VSC of circa 15% which has been considered "acceptable".

As such, GIA consider the massing is appropriate for its context with consideration of neighbouring daylight amenity.

VSC ASSESSMENT - VIEW 1 PROPERTIES TO THE SOUTH AND WEST OF THE SITE (7-79 ST MATTHEW'S ROAD AND SOUTH LONDON SYNAGOGUE)

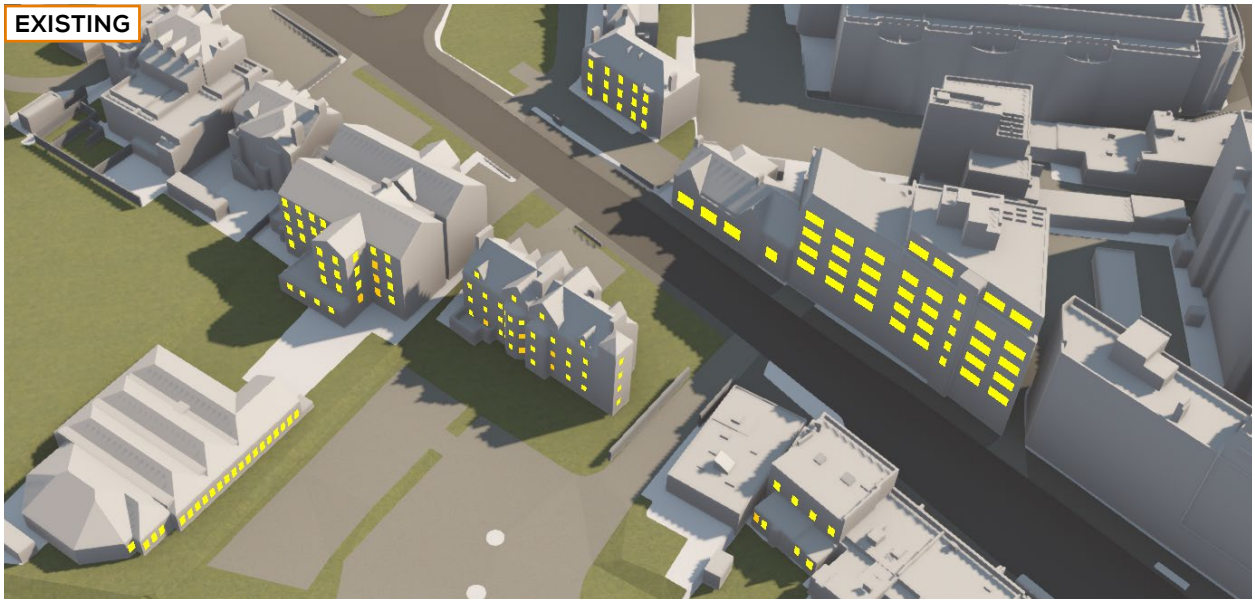


Figure 16: Existing VSC values

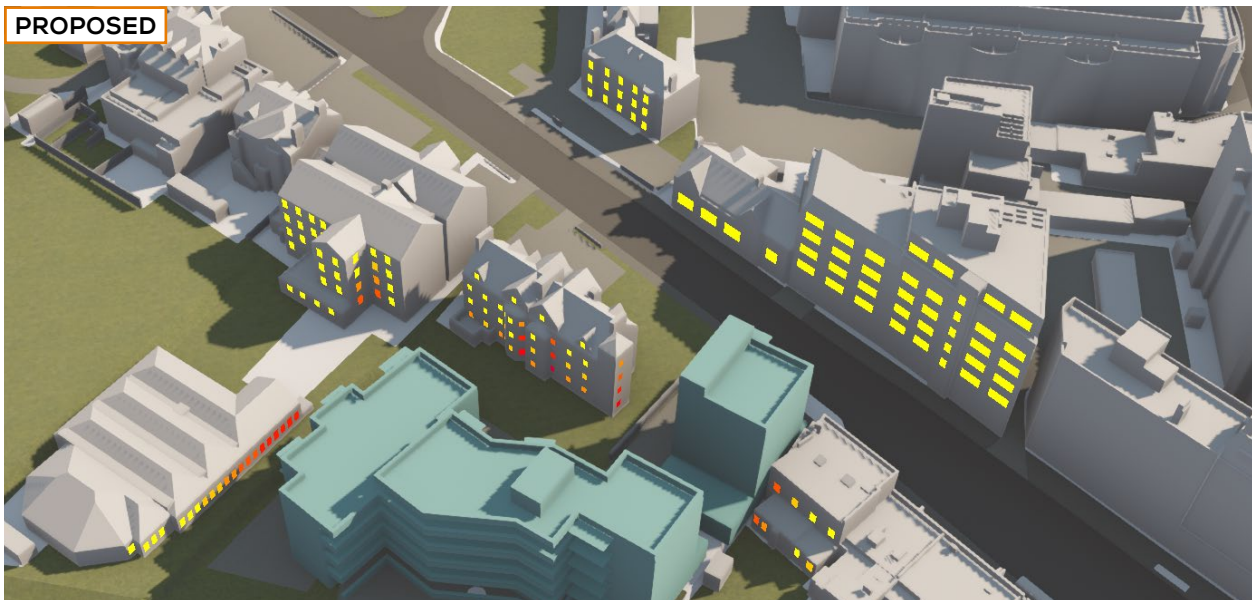
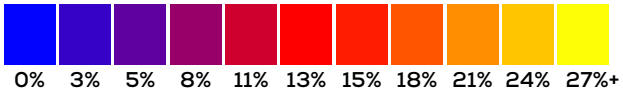


Figure 17: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



VSC ASSESSMENT - VIEW 1 PROPERTIES TO THE SOUTH AND WEST OF THE SITE (7-79 ST MATTHEW'S ROAD AND SOUTH LONDON SYNAGOGUE)

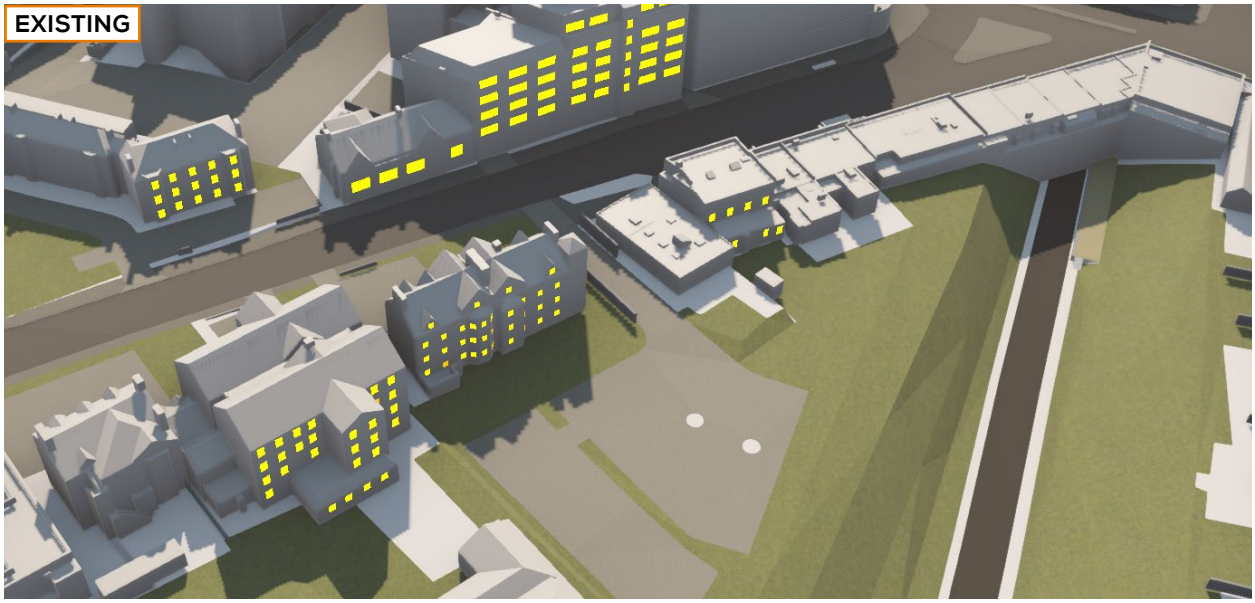


Figure 18: Existing VSC values

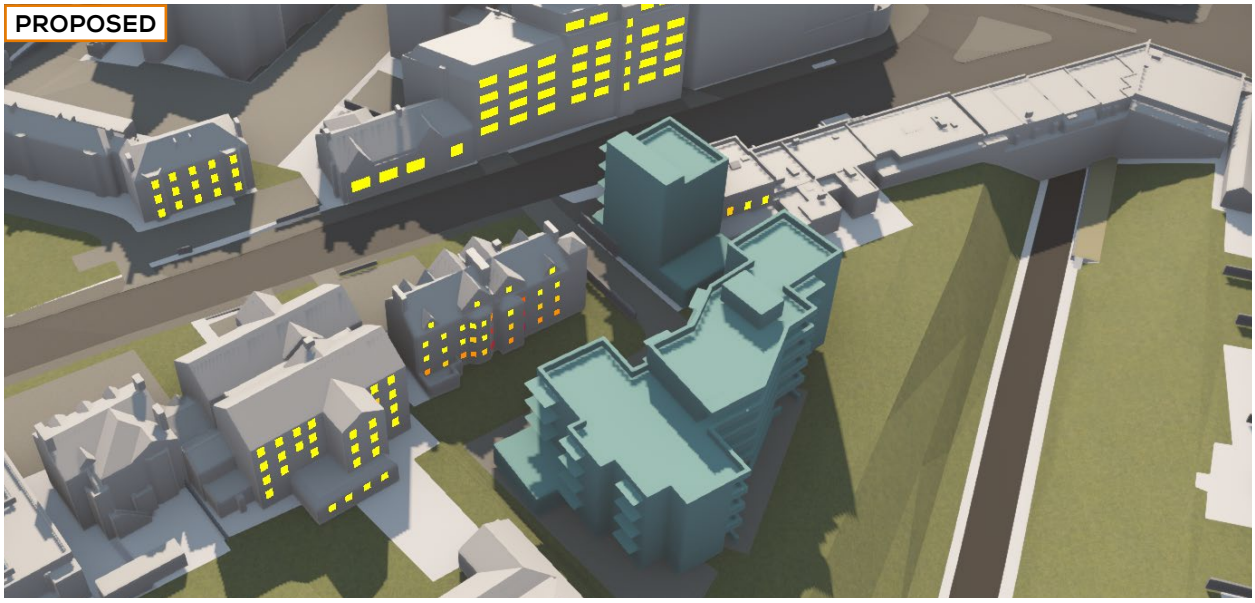


Figure 19: Indicative VSC values

DAYLIGHT AMENITY WITHIN THE SITE

The daylight potential for the scheme is generally very good, with all the rooms located behind the areas coloured in yellow in the diagrams expected to perform well in daylight terms.

Where slightly lower VSC levels (orange and light red) are seen, more generous windows are likely to be required.

The tested massing arrangement has been conceived to be served by external access decks, which will facilitate the provision of through aspect flats. The three blocks located to the rear of the site would be connected by these decks and so part of their façades are inevitably located in close proximity to each other, resulting in low levels of light reaching them. These are indicated in View 1 with orange arrows.

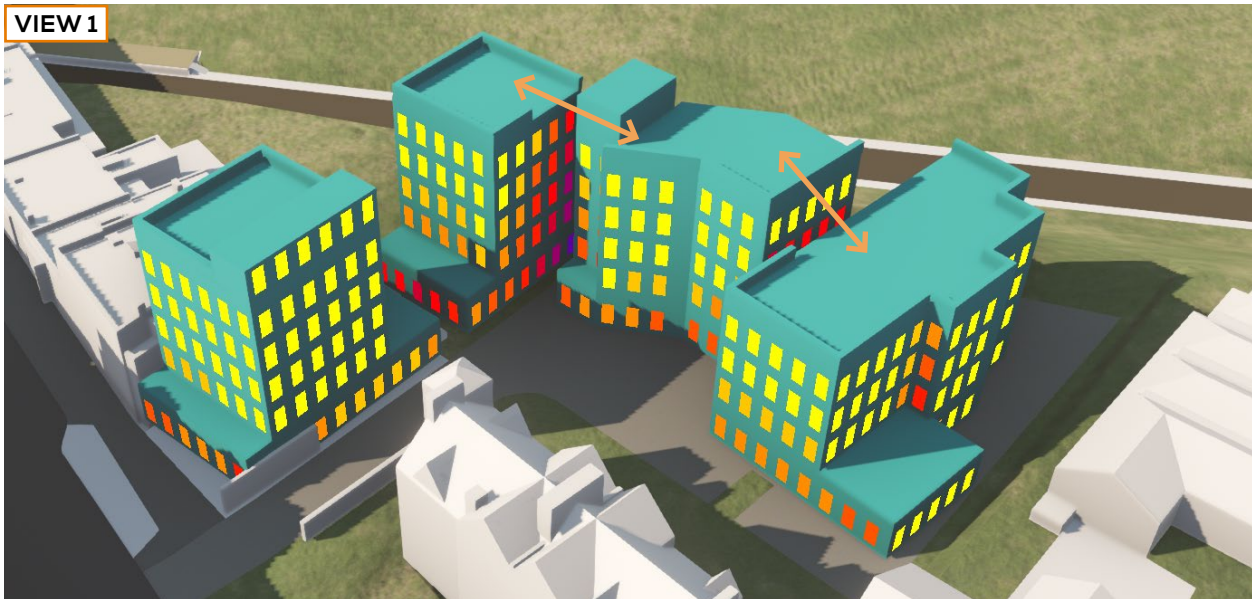


Figure 20: Daylight Potential (VSC)

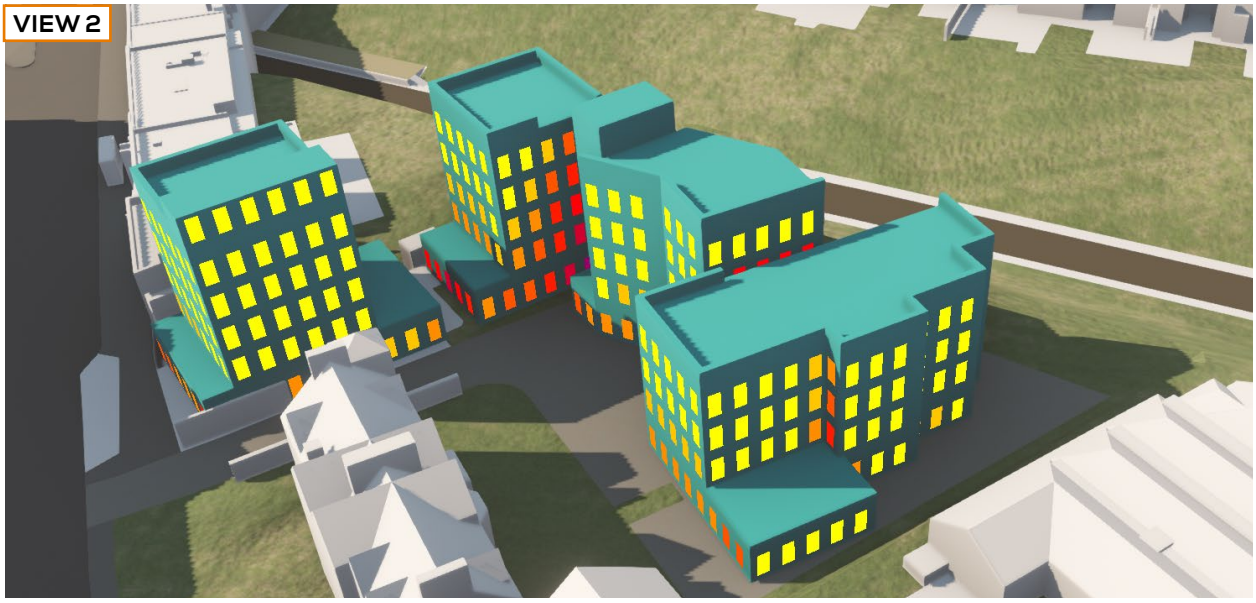
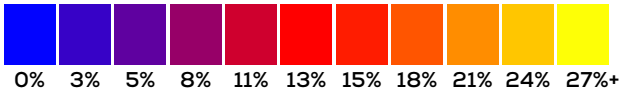


Figure 21: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



These areas, however, are likely to contain the secondary / rear elevations of dual or through-aspect flats which will receive very good levels of light on the other elevation. Windows set below access decks should ideally not serve the main living spaces, but circulation spaces, bathrooms and, if unavoidable, kitchens and secondary bedrooms.

It should be noted that balconies also restrict the access to daylight and sunlight to the windows set below them (if projecting) or behind them (if recessed).

Therefore, their effects should be mitigated, where possible, by providing rooms with additional windows free of obstructions, or by staggering balconies or internal layouts so that the windows serving the living areas are not overhung.

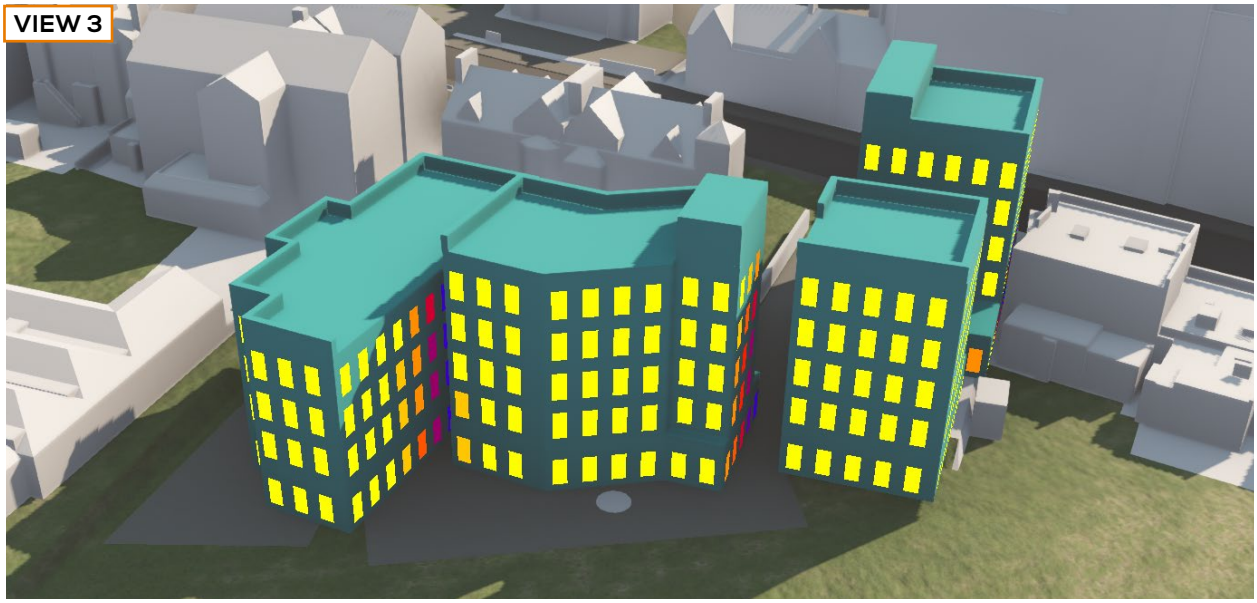


Figure 22: Daylight Potential (VSC)

Figure 23: Daylight Potential (VSC)

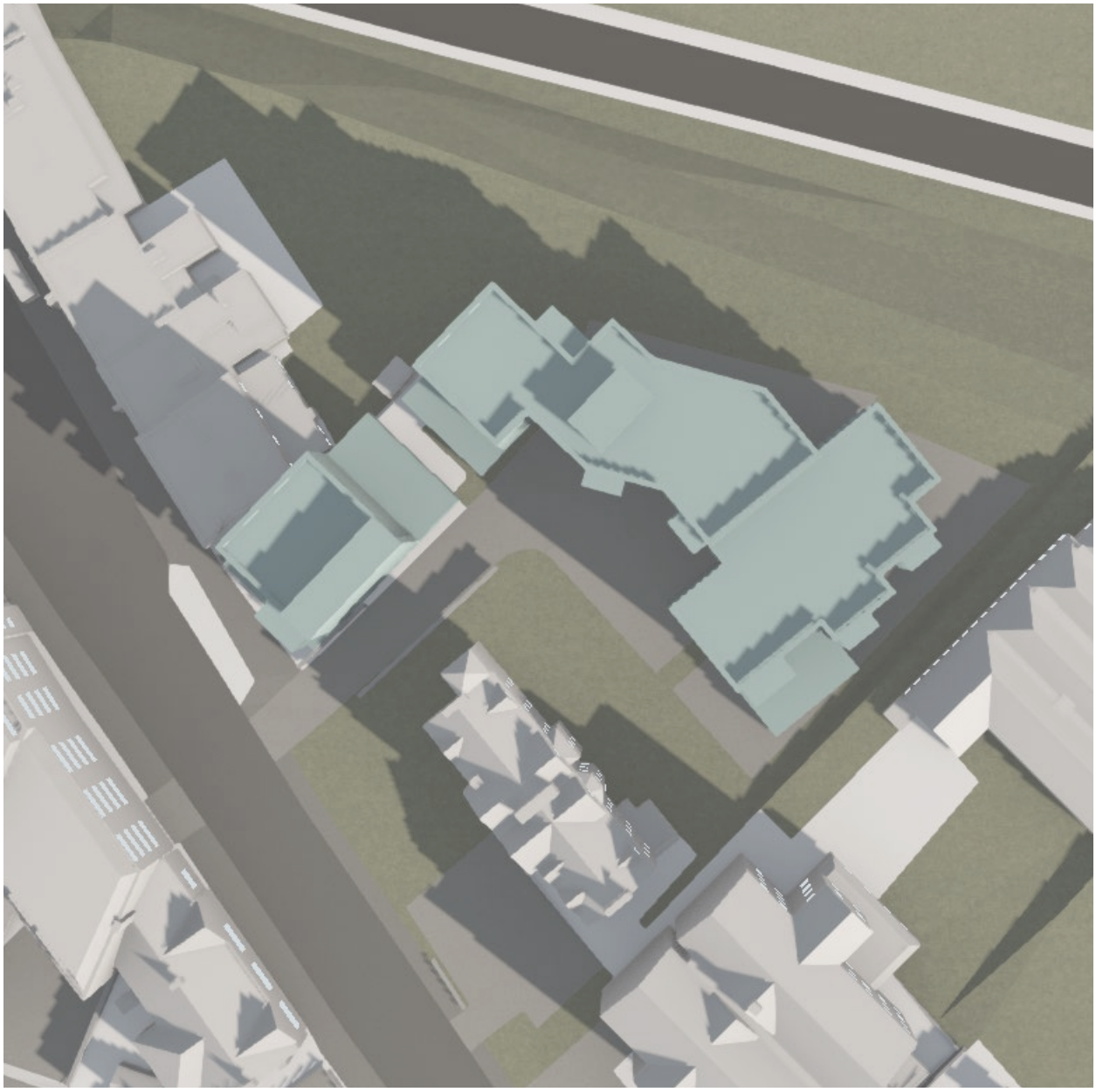
OVERSHADOWING

There will be some additional overshadowing in the morning onto the neighbouring gardens located to the north-west of the scheme, however these are still shown to receive sunlight levels in excess of the minimum recommended by the BRE.

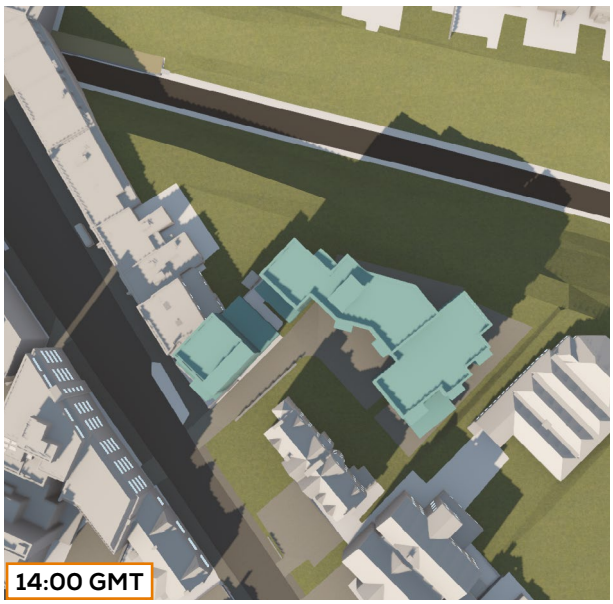
The semi-courtyard located to the south of the scheme will receive plenty of sunlight.

The area to the north will be inevitably more shaded. However, a generous proportion of this open space will receive morning sunlight.

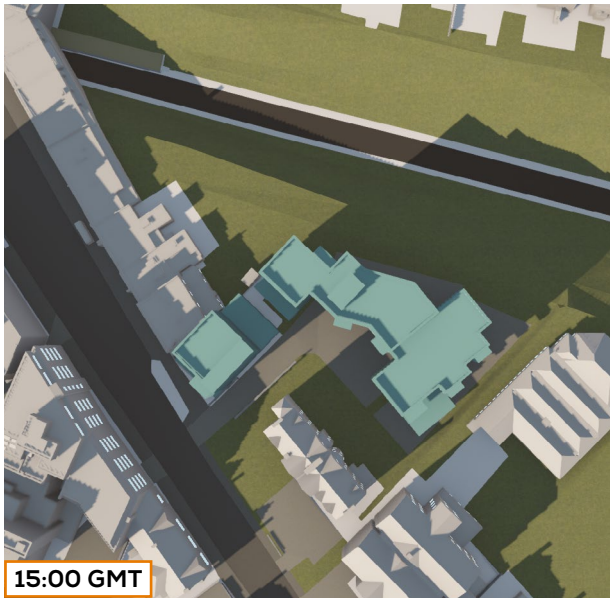
Overall the scheme has the potential to offer adequate levels of direct sunlight outdoors.



TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH



TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH



21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

N

gia

7 SITE 7: 6-12 KENNINGTON LANE AND WOODEN SPOON HOUSE, 5 DUGARD WAY SE11

INTRODUCTION AND SCOPE

Having identified the surrounding uses and site facing windows, Vertical Sky Component (VSC) facade studies were completed to understand daylight potential in the existing and indicative scenarios. In line with the BRE Guidelines, the focus was on residential properties along with any non-domestic buildings where occupants may have a reasonable expectation for daylight; i.e. schools, hospitals, hotels and places of worship.

The identified uses are illustrated in Figure 24 below.

Similarly, a VSC facade study was undertaken on the indicative façades, to understand the potential for the indicative scheme to provide future occupants with good levels of daylight and sunlight.

Finally, an overshadowing study was also completed showing how the shadow cast by the indicative massing would affect the open spaces within and around the site.

Images illustrating the results of these assessments are shown within Sections 2, 3 and 4.

Site Boundary

Mixed Use

Residential

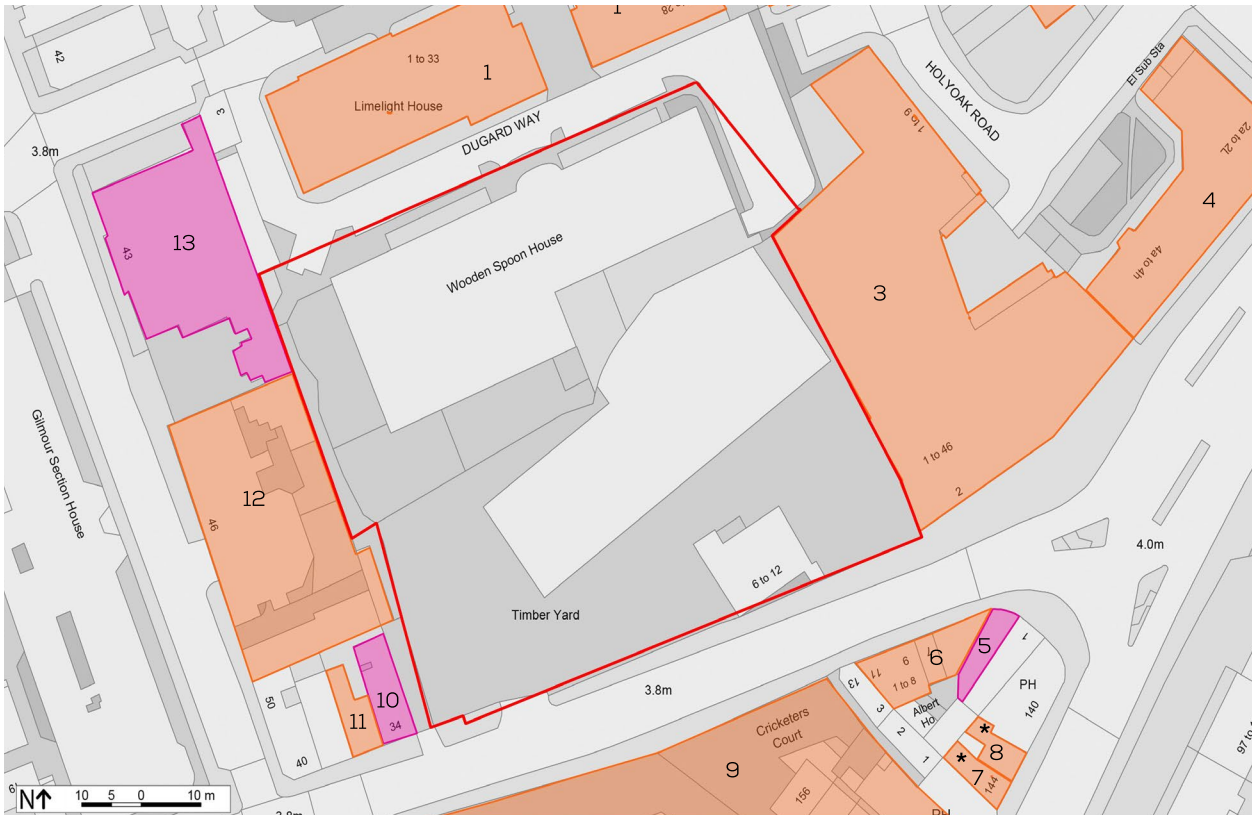


Figure 24: Use map

GIA's façade study identified little or no change in daylight to the residential uses to the east of the site (illustrated in Fig. 25 and 26). To the south of the site, there is some change to VSC levels, however this is generally at lower levels only, with the worst performing ground floor achieving VSC values of circa 15%.

Similarly, the residential use to the north of the site is shown in Figure 28 and 29 to experience some change, however retained VSC values improve as one moves up the building, with the lowest VSC value circa 15%.

To the west of the site windows will generally retain a VSC of 15% and above. There are instances where assumed windows are inherently sensitive due to their location (i.e. adjacent to a projecting wing) which retain lower VSC values as low as circa 8%. These are however isolated occurrences.

VSC ASSESSMENT - VIEW 1

PROPERTIES TO THE EAST AND SOUTH OF THE SITE (130 NEWINGTON BUTTS, 1-10 KENNINGTON ALNE AND 9 KENNINGTON LANE

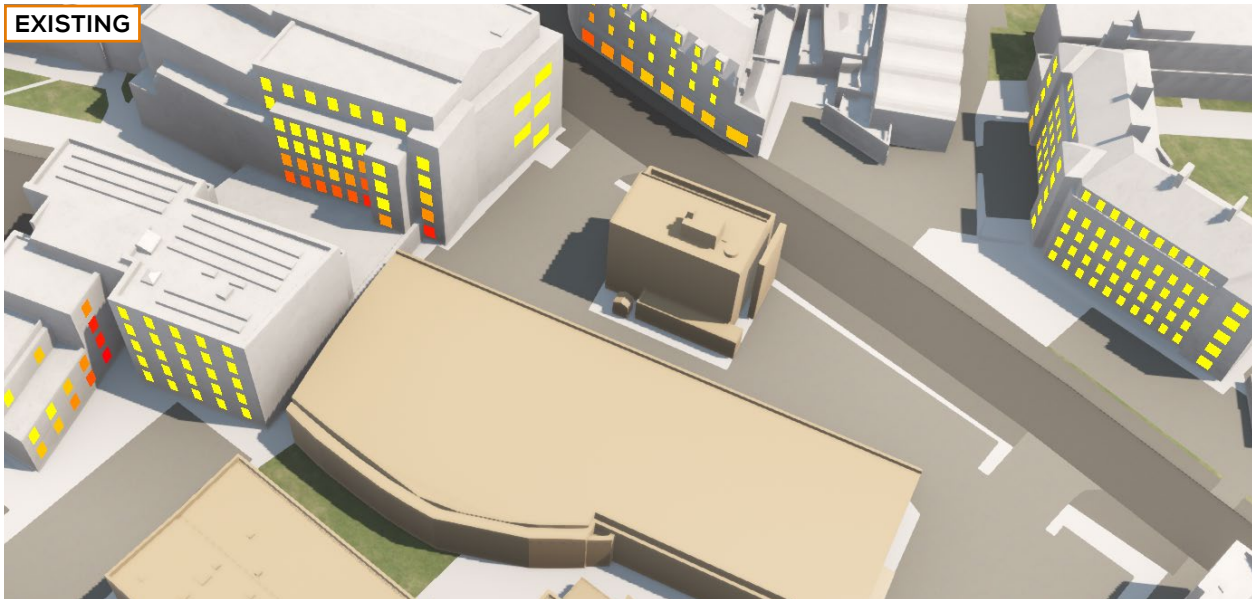
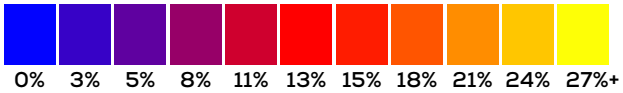


Figure 25: Existing VSC values

Figure 26: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



With consideration of the site location, GIA consider the indicative massing is appropriate for its context with view of potential impact on neighbouring daylight and sunlight amenity.

VSC ASSESSMENT - VIEW 2
PROPERTIES TO THE NORTH OF THE SITE (LIMELIGHT HOUSE)

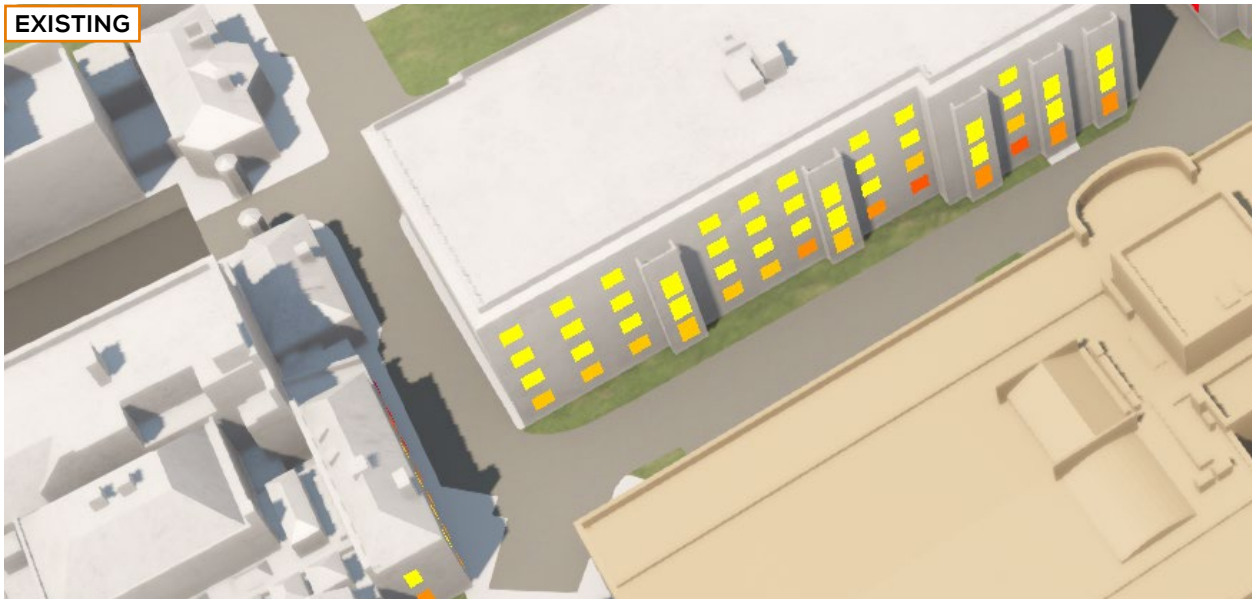


Figure 27: Existing VSC values

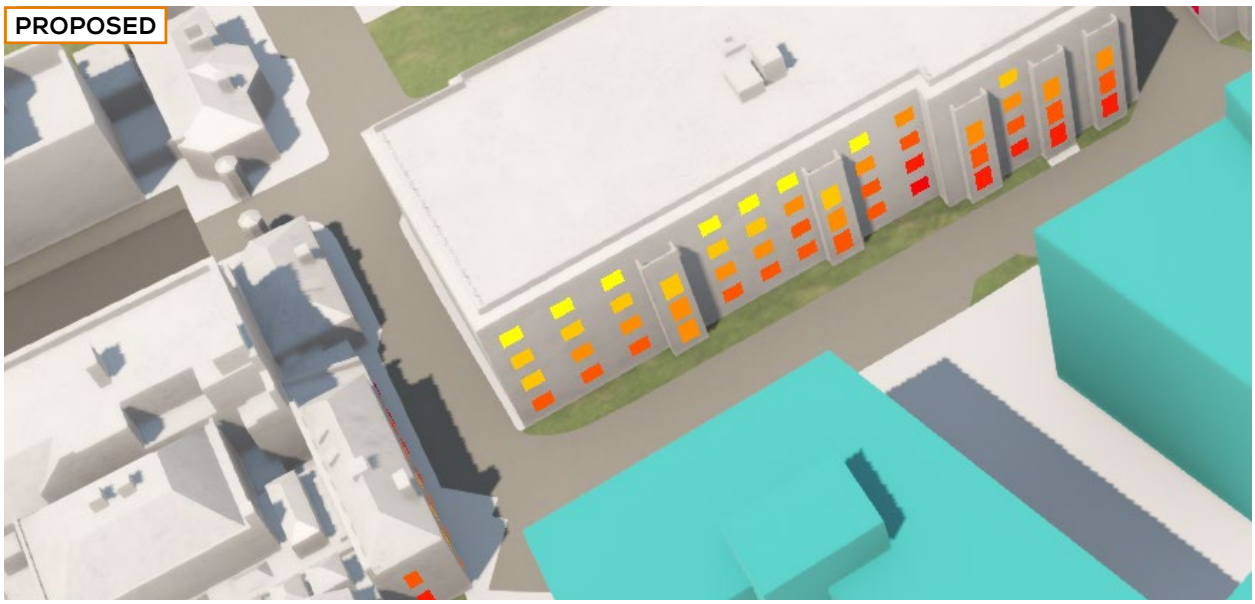
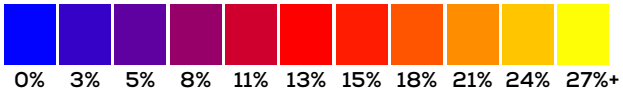


Figure 28: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



VSC ASSESSMENT - VIEW 1
PROPERTIES TO THE WEST OF THE SITE THAT FRONT RENFREW ROAD

EXISTING

Figure 29: Existing VSC values

PROPOSED

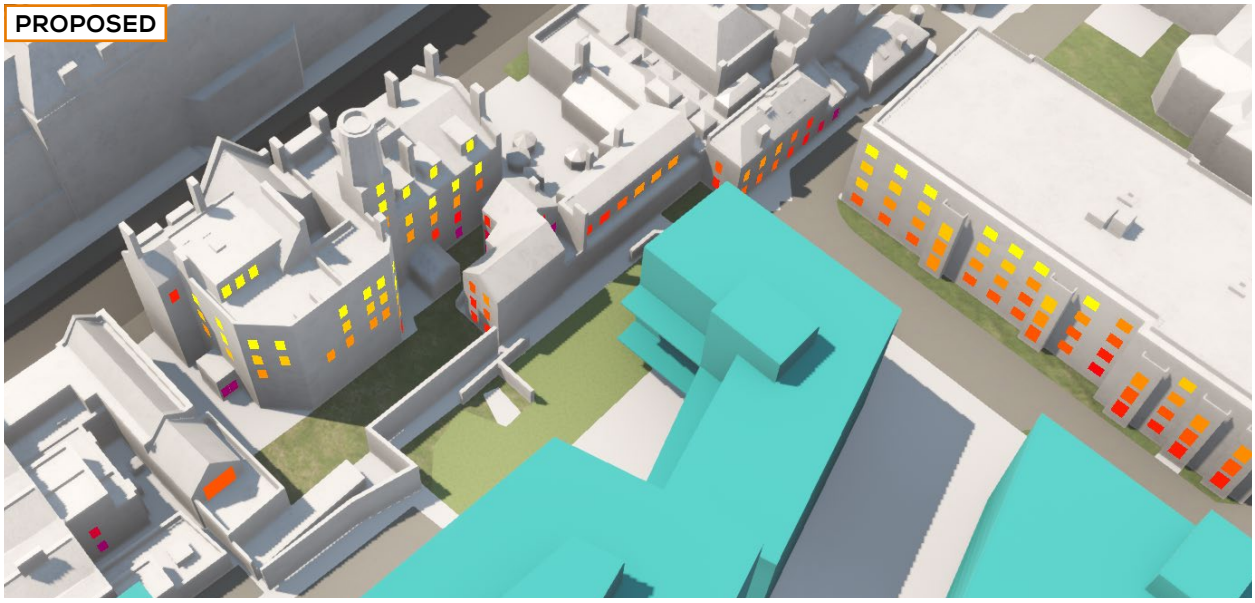


Figure 30: Indicative VSC values

DAYLIGHT AMENITY WITHIN THE SITE

The illustrative massing arrangement sees very good levels of daylight potential to its outer frontages and tower element.

Some areas of lower potential can be seen at the base, particularly where blocks face each other in close proximity. The vast majority are still expected to provide adequate daylight levels to the rooms set behind them, provided that the windows are suitably sized and the depth of the rooms is limited in the most obstructed locations.

Some flank elevations are particularly obstructed by the existing urban grain or proximity to other illustrative blocks and should be used primarily for secondary windows. The main living room windows should be located on the side elevations which benefit from greater daylight levels. These areas are highlighted in magenta in Views 3 and 4.

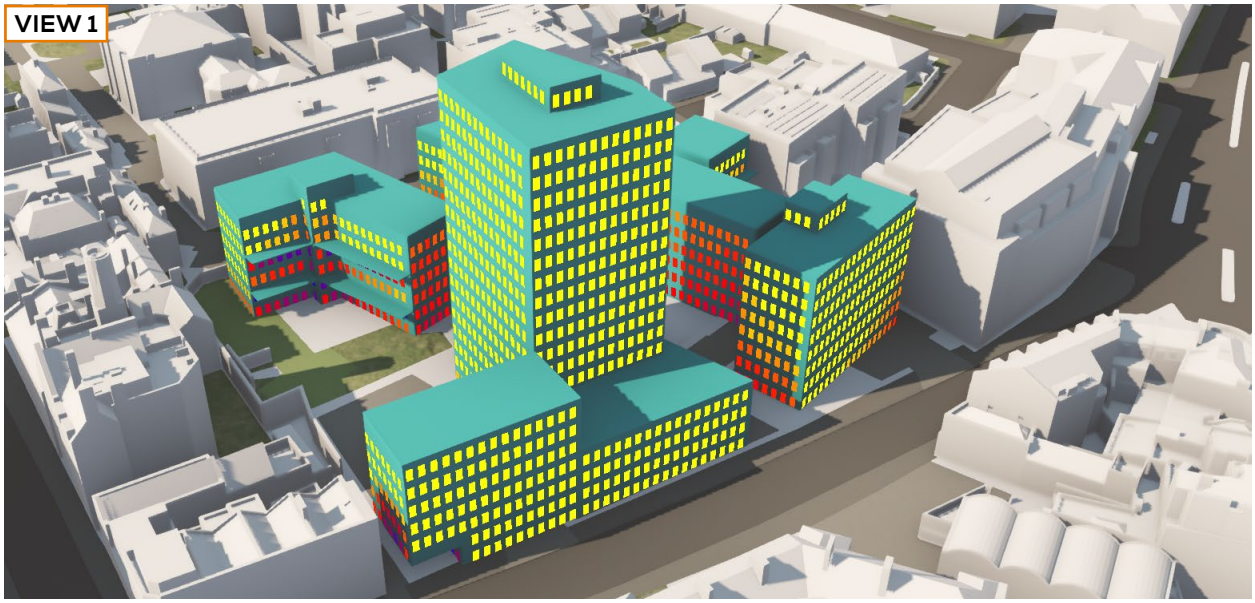


Figure 31: Daylight Potential (VSC)

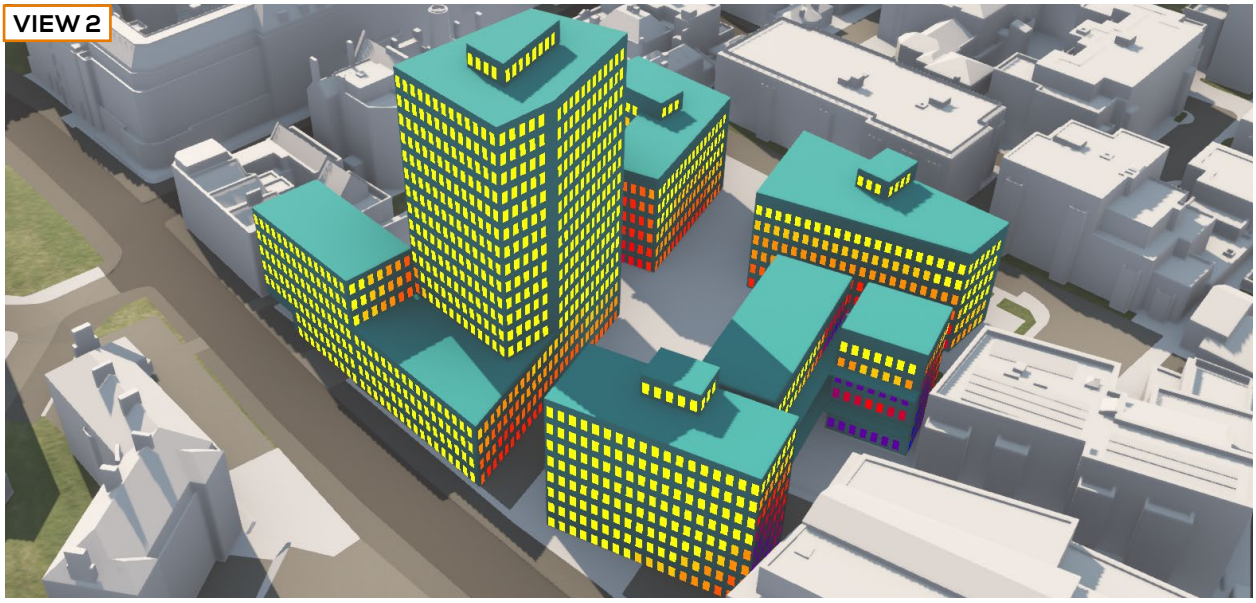
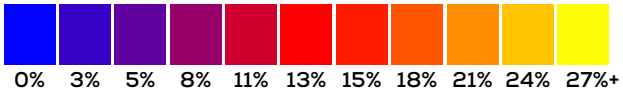


Figure 32: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



The remaining areas of reduced daylight potential are generally in line with expectations for dense urban contexts and an adequate daylight performance can still be achieved provided that sufficiently large windows are specified.

It should be noted that balconies inherently restrict the access to daylight and sunlight to the windows set below them (if projecting) or behind them (if recessed). Therefore, their effects should be mitigated, where possible, providing rooms with additional windows free of obstructions, or by staggering balconies or internal layouts so that the windows serving the living areas are not overhung.

Overall, the indicative scheme has a good daylight potential and the isolated areas of lower availability are in line with expectations for schemes of this density in this context.

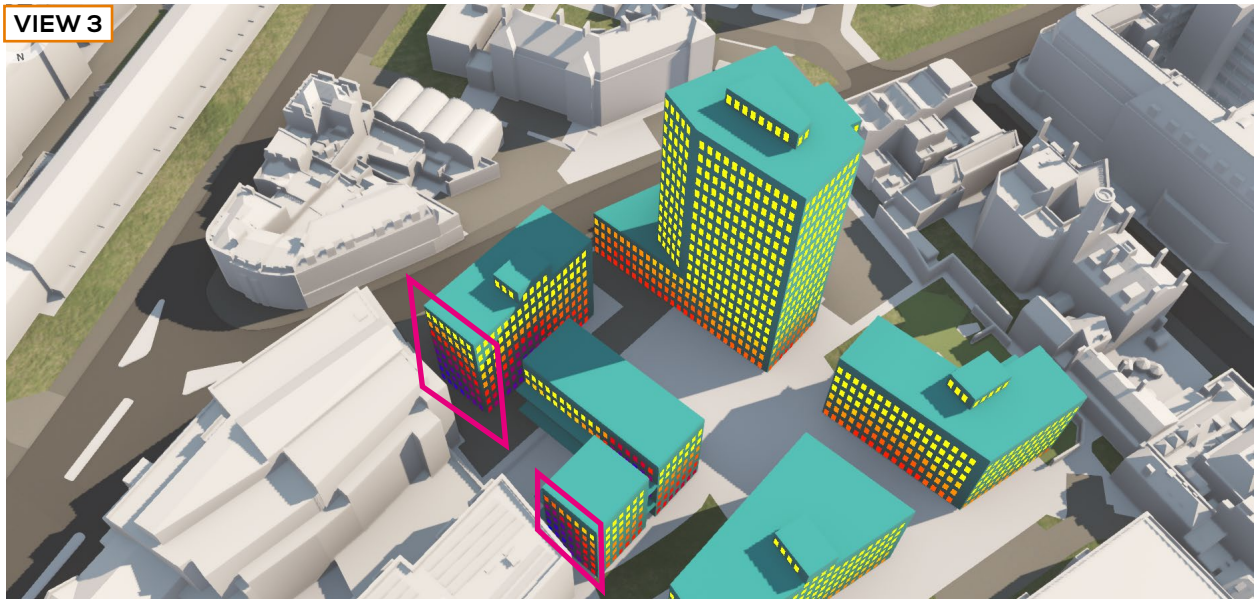


Figure 33: Daylight Potential (VSC)

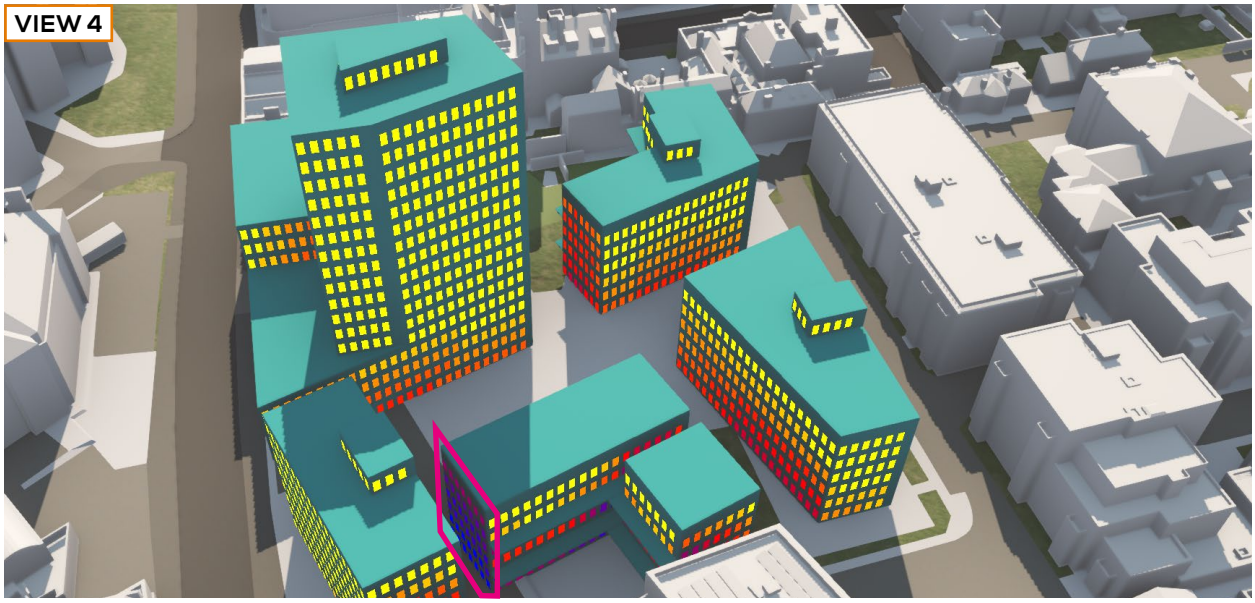


Figure 34: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)

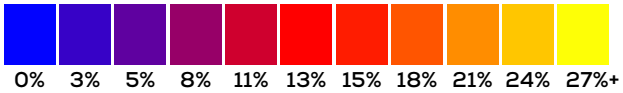


Figure 35: VSC

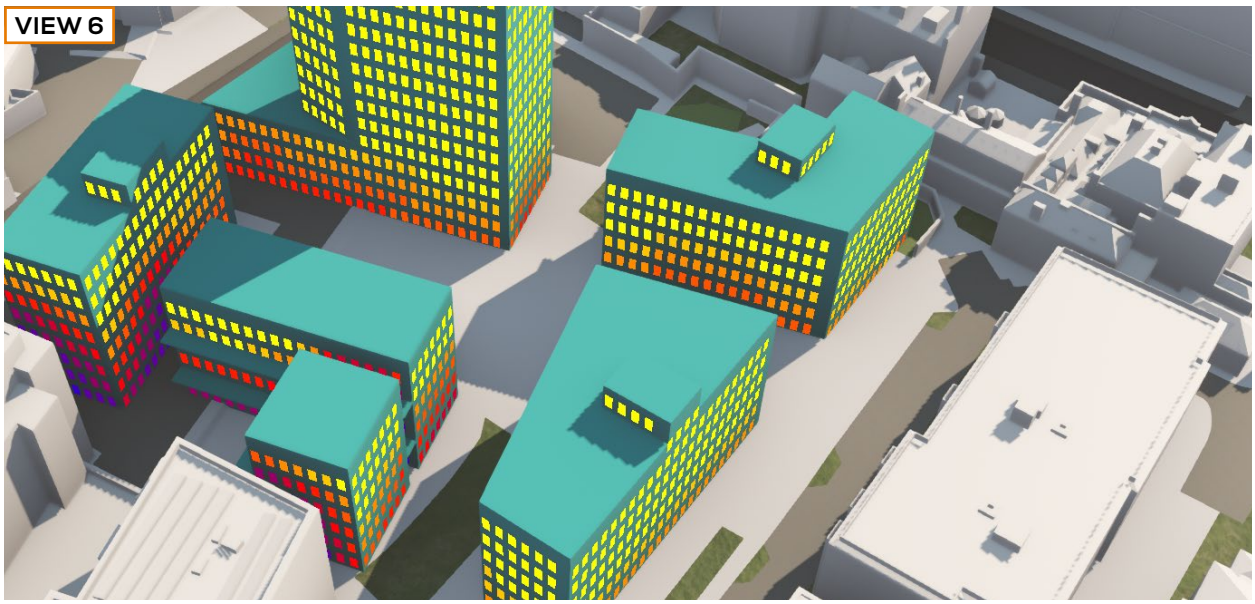
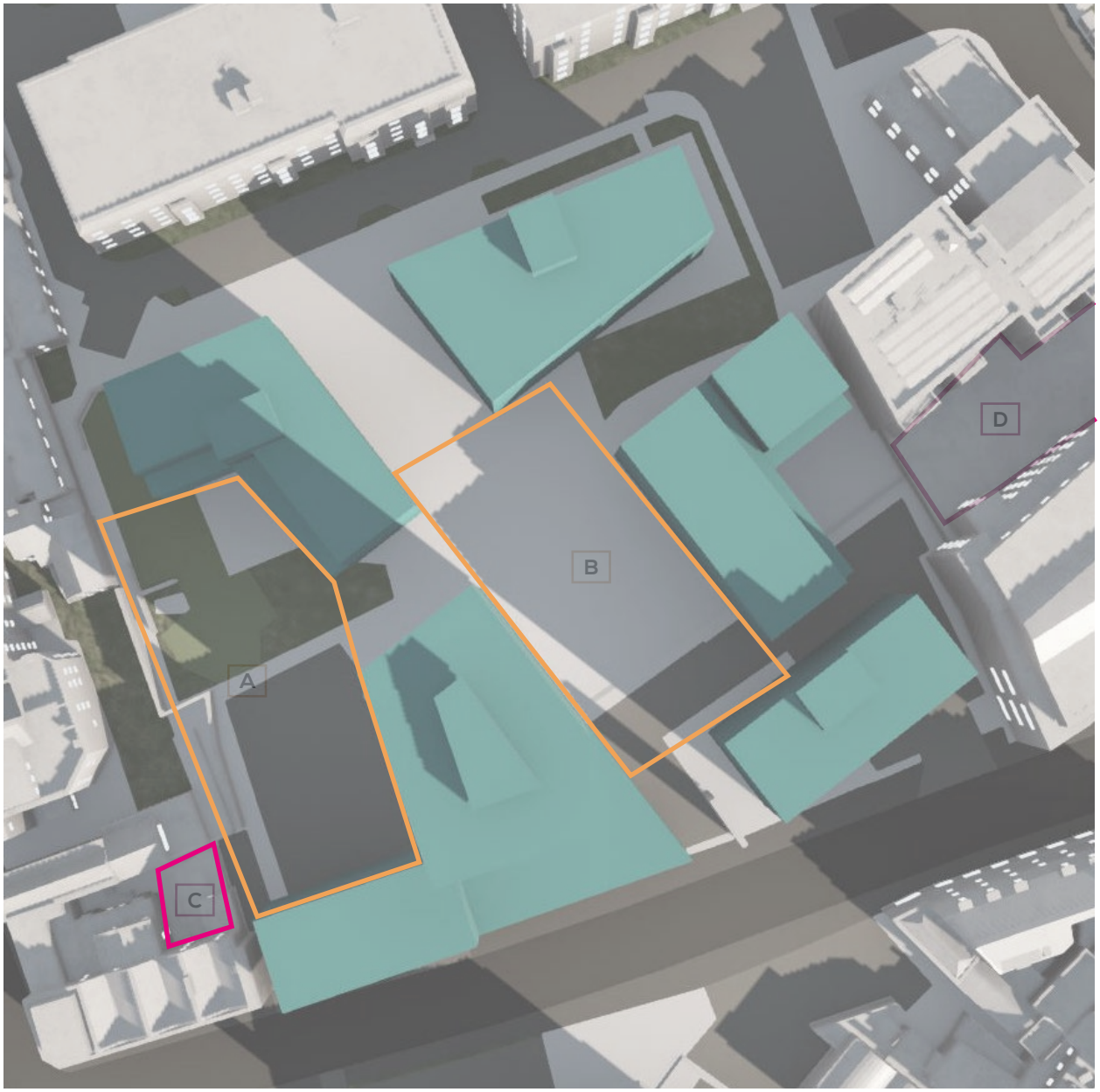


Figure 36: Proposed VSC values

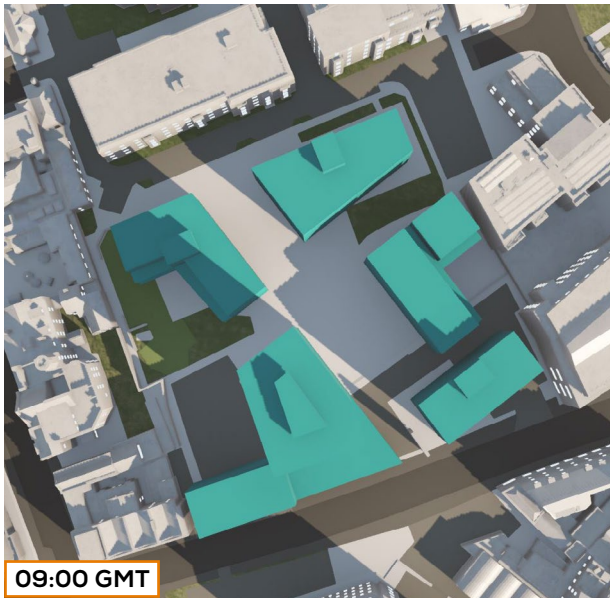
OVERSHADOWING

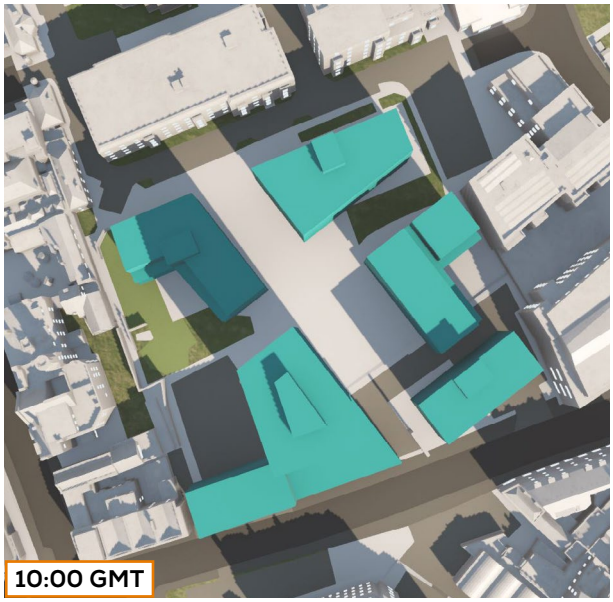
The figure below illustrates in orange the two main areas likely to accommodate open amenity spaces within the illustrative scheme. Area A is expected to meet the recommended BRE Guidelines, while area B will see the combined effect of shadows cast by different buildings and so may fall short of the recommended target, depending on its extent. Given the complexity of the shadow plots a more detailed sun hours on ground study would be necessary to quantify in detail how much direct sunlight is available to the different areas and this should ideally inform the landscape design to make the most of the sunlight available.

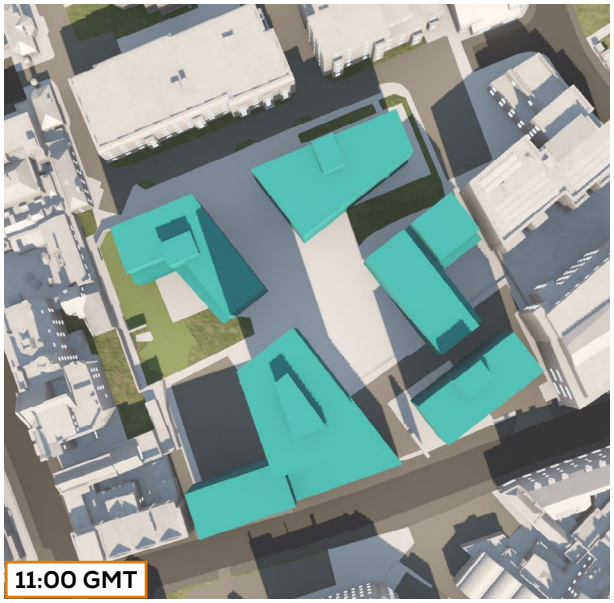
No gardens or parks are located in close proximity to the site that could be affected and the only open spaces considered sensitive to overshadowing are the terraces highlighted in magenta below (C and D). These are located to the west and east of the site and so could experience additional overshadowing either in the morning (until 11 am) or in the afternoon (from 3 pm), respectively.

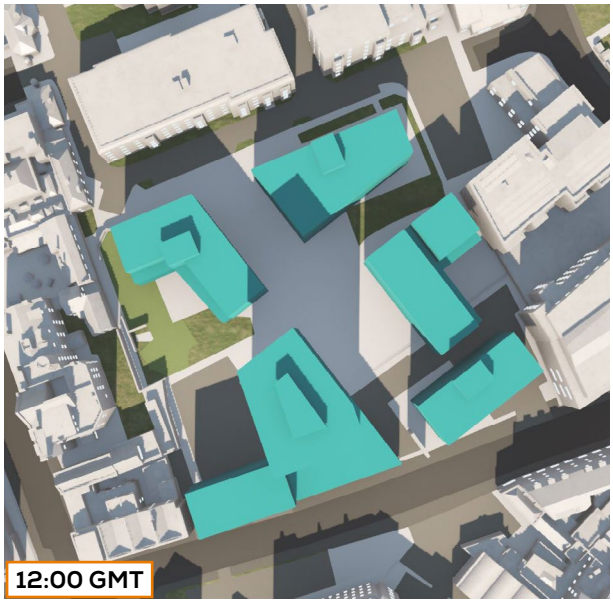


TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH

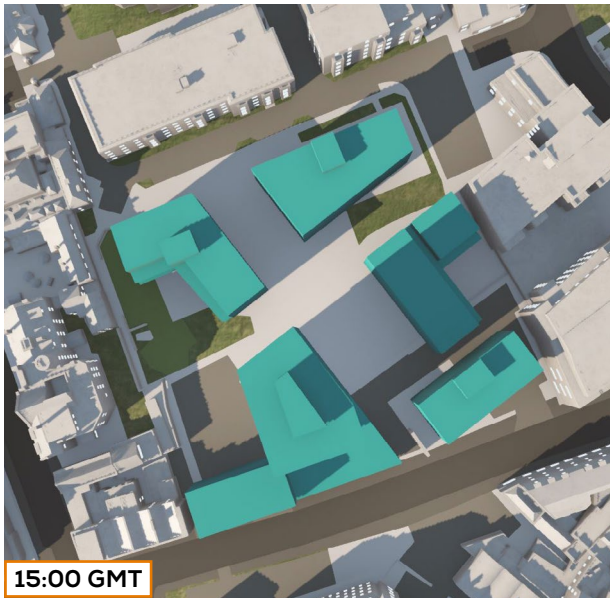


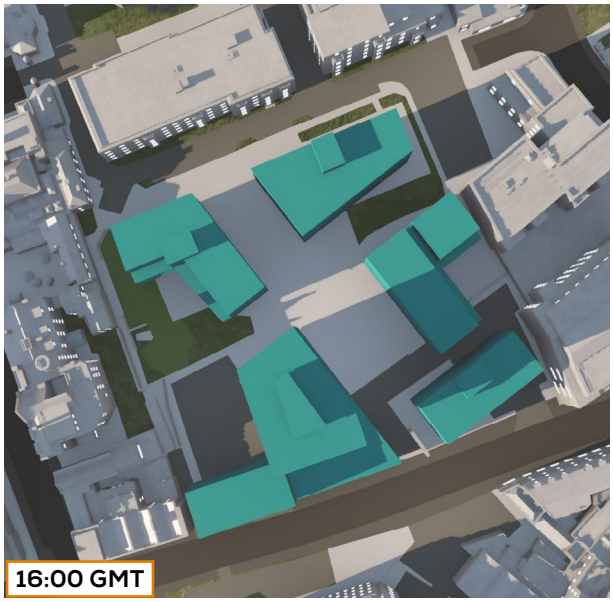


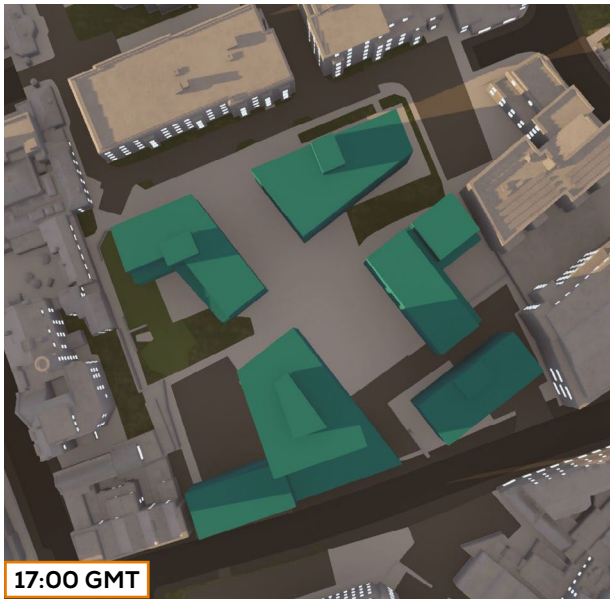




TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH







21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

N

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8 SITE 8: 110 STAMFORD STREET SE1

INTRODUCTION AND SCOPE

Having identified the surrounding uses and site facing windows, Vertical Sky Component (VSC) facade studies were completed to understand daylight potential in the existing and indicative scenarios. In line with the BRE Guidelines, the focus was on residential properties along with any non-domestic buildings where occupants may have a reasonable expectation for daylight; i.e. schools, hospitals, hotels and places of worship.

The identified uses are illustrated in Figure 37 below.

Similarly, a VSC facade study was undertaken on the indicative façades, to understand the potential for the indicative scheme to provide future occupants with good levels of daylight and sunlight.

Finally, an overshadowing study was also completed showing how the shadow cast by the indicative massing would affect the open spaces within and around the site.

Images illustrating the results of these assessments are shown within Sections 2, 3 and 4.

Site Boundary

Commercial

Residential

Student Accomodation

Figure 37: Use map

GIA's façade study identified little or no change in daylight to the vast majority of neighbouring properties surrounding the site. Where change in VSC was noted to residential properties to the south of the site, retained VSC values were in line with those found elsewhere (for example, existing VSC values in Fig. 40 opposite Coin Street Neighbourhood Centre are similar to those opposite the indicative massing in Fig. 41).

As such, GIA consider the massing is appropriate for its context with view of potential impact on neighbouring daylight and sunlight amenity.

VSC ASSESSMENT - VIEW 1
PROPERTIES TO THE WEST AND NORTH OF THE SITE (FRANKLIN-WILKINS BUILDING AND CORNWALL ROAD)

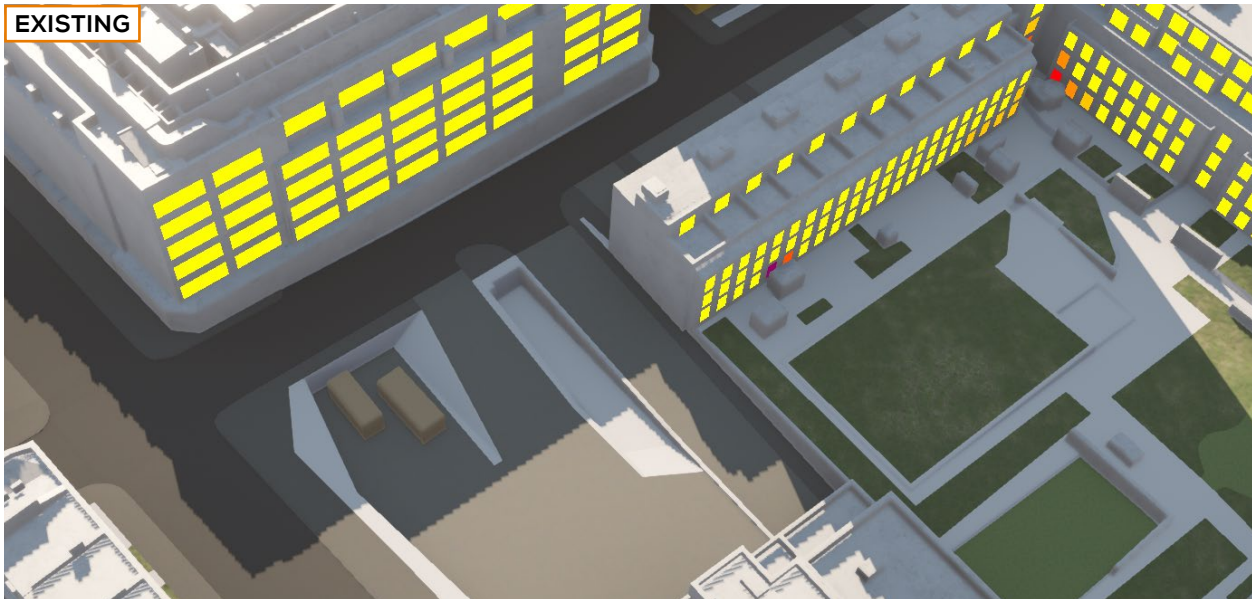


Figure 38: Existing VSC values

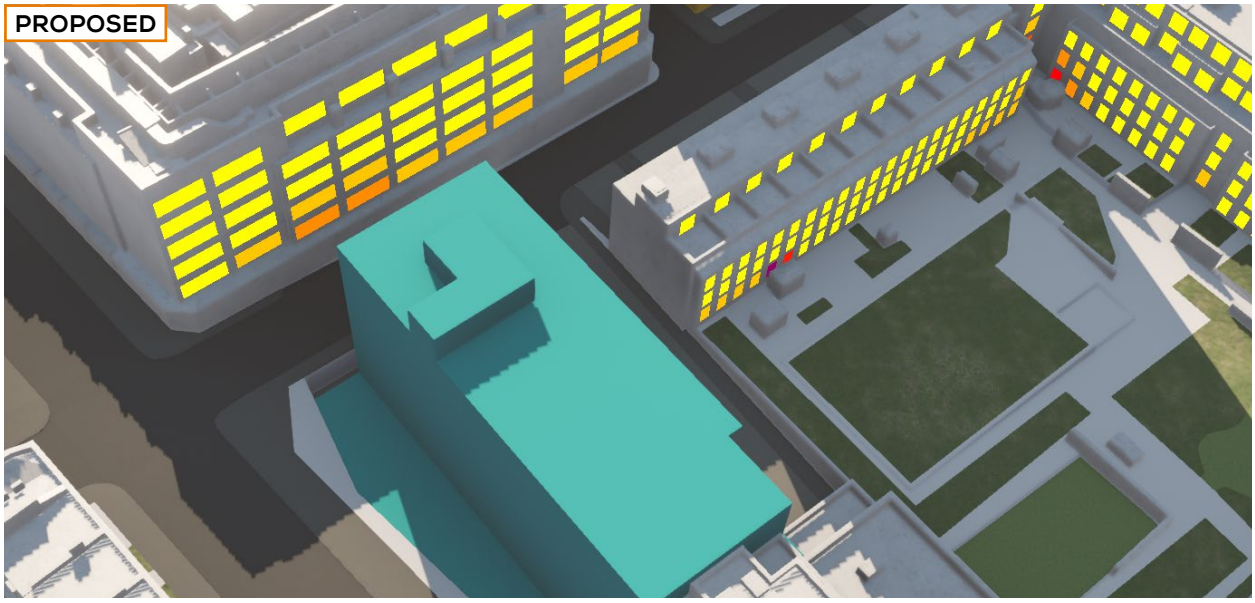
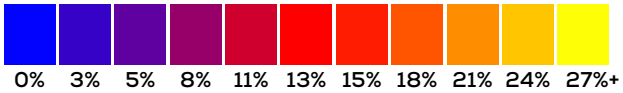


Figure 39: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



VSC ASSESSMENT - VIEW 2
PROPERTIES TO THE EAST AND SOUTH OF THE SITE (COIN STREET NEIGHBOURHOOD CENTRE AND 93-121 STAMFORD STREET)

Figure 40: Existing VSC values

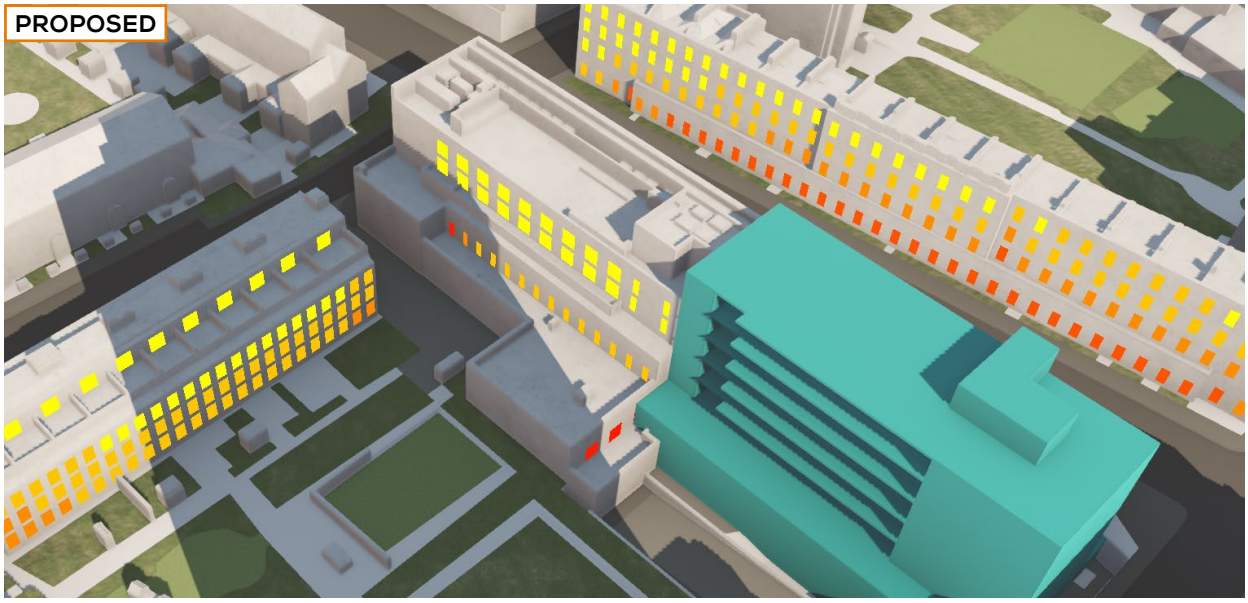


Figure 41: Indicative VSC values

DAYLIGHT AMENITY WITHIN THE SITE

Excellent levels of daylight will be available to the Stamford Street elevation.

The flank wall will be more obstructed by the existing context and so dual-aspect units should ideally be provided in this location as a mitigation measure. The flank elevation should mainly be used for bedrooms and secondary living room windows.

The rear elevation shows continuous access decks which, while facilitating the provision of through-aspect flats, would inevitably reduce the daylight potential seen to the windows set below them. In this configuration, the rear elevation would be best used to accommodate circulation spaces, bathrooms, kitchens and, if unavoidable, bedrooms. Living areas should rely on the front elevation.

The positioning of balconies should also be carefully balanced as, like access decks, they would reduce

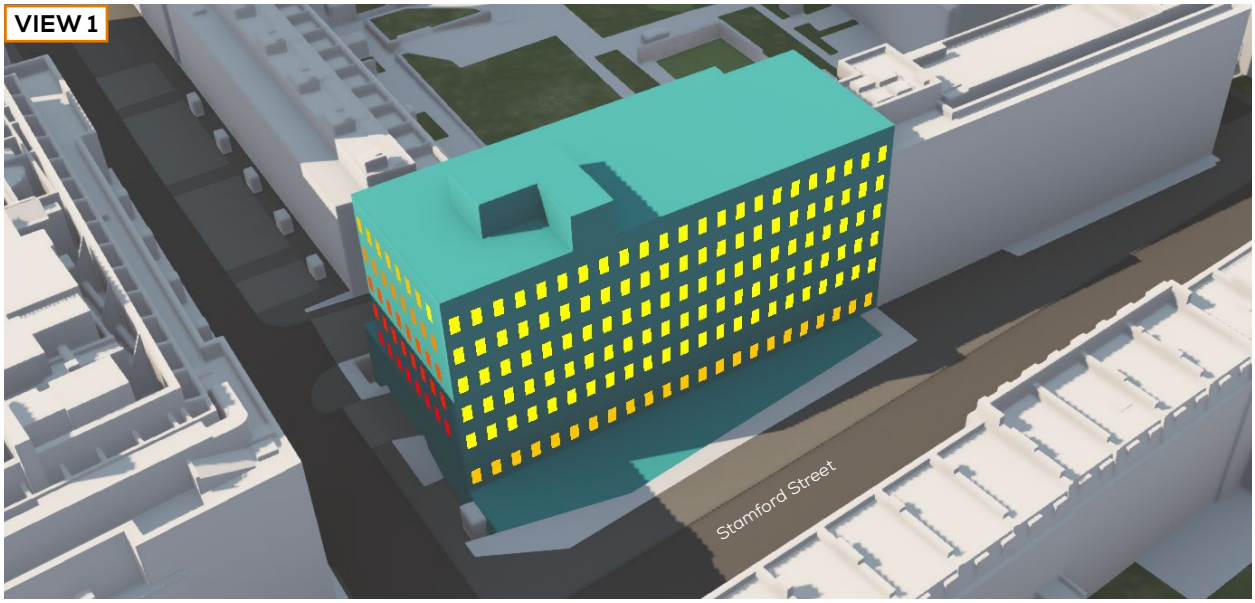


Figure 42: Daylight Potential (VSC)

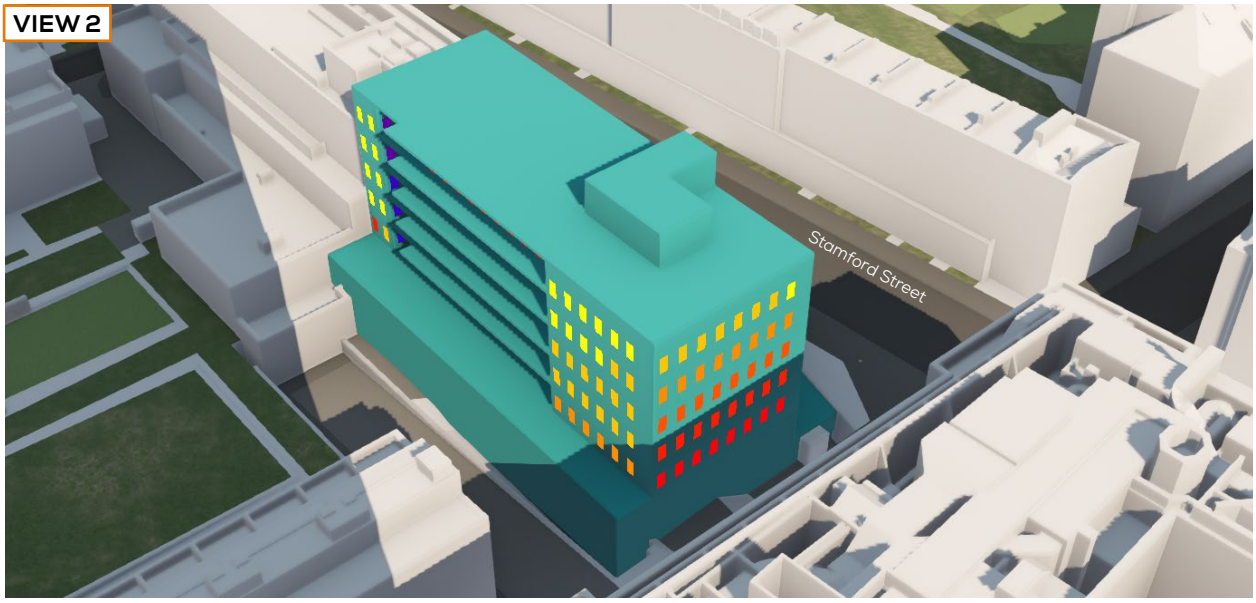
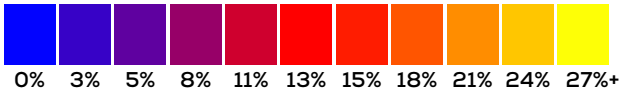


Figure 43: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



the access to daylight and sunlight of the windows set below them (if projecting) or behind them (if recessed).

Therefore, their effects should be mitigated, where possible, by providing rooms with additional windows free of obstructions, or by staggering balconies or internal layouts so that the windows serving the living areas are not overhung.

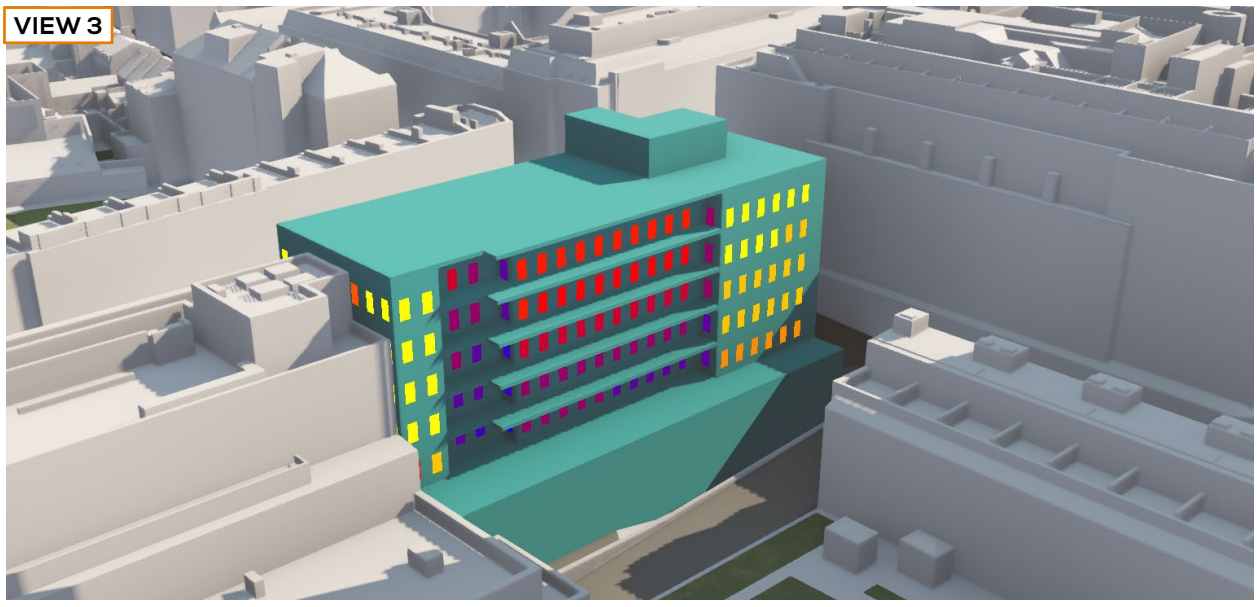


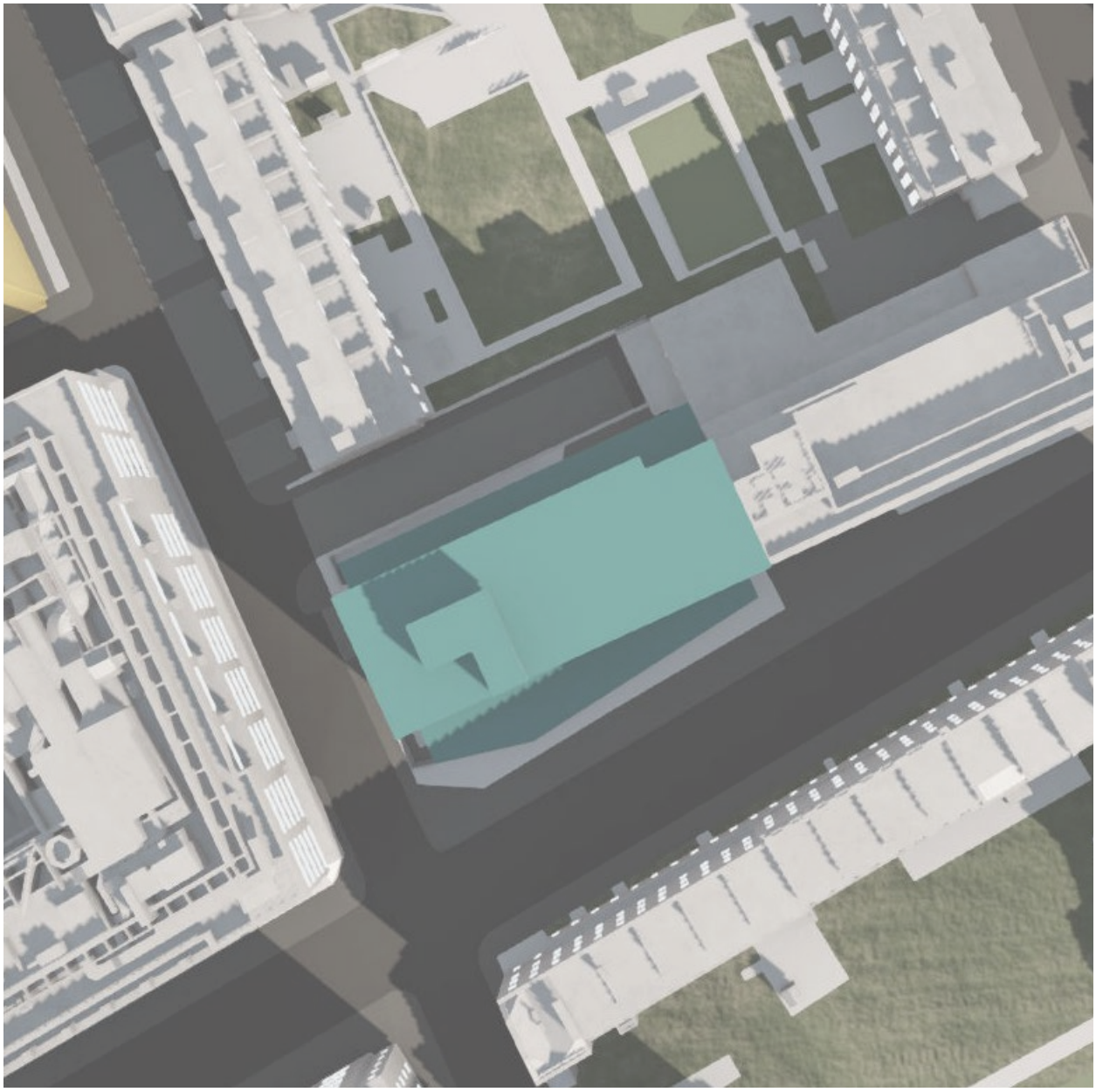
Figure 44: Daylight Potential (VSC)

OVERSHADOWING

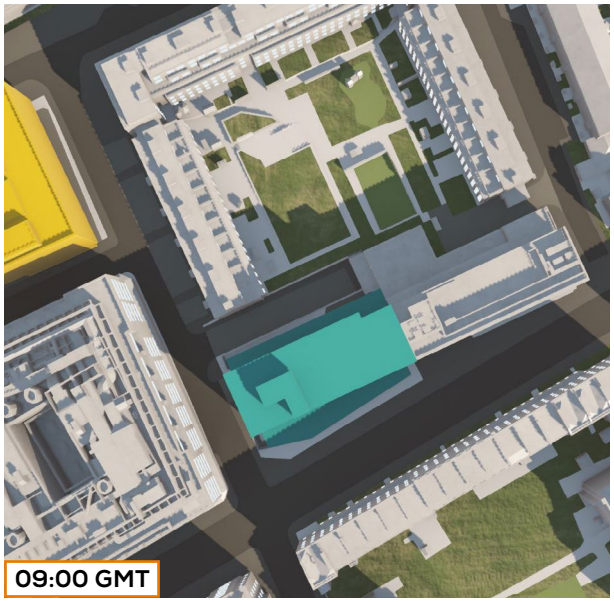
The courtyard to the north of the indicative scheme will only receive little additional overshadowing and will remain BRE compliant.

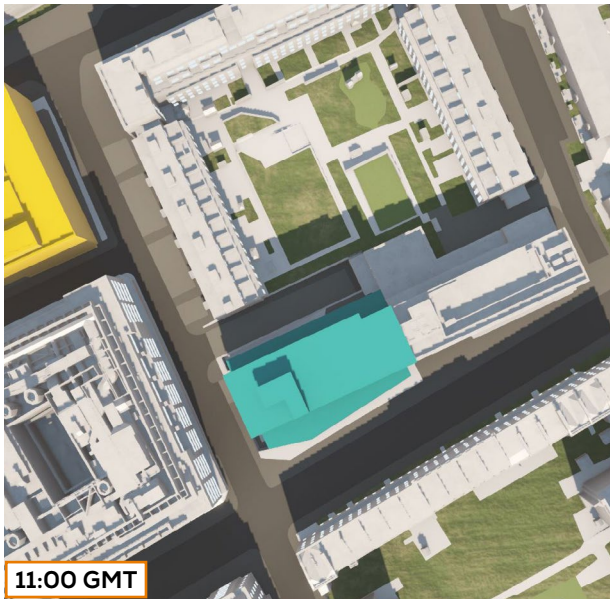
However, a few gardens located in closer proximity to the indicative scheme would experience the combined effect of this additional overshadowing with the self-shading from the existing massing and so may experience greater alterations than the BRE recommends, this is however not uncommon in urban environments, particularly within courtyard arrangements such as this one.

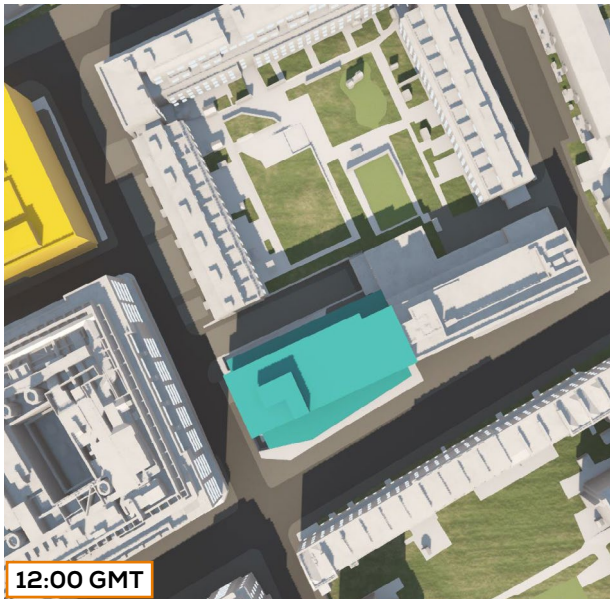
Finally, the illustrative scheme offers opportunities for well sunlit terraces, should these be provided.

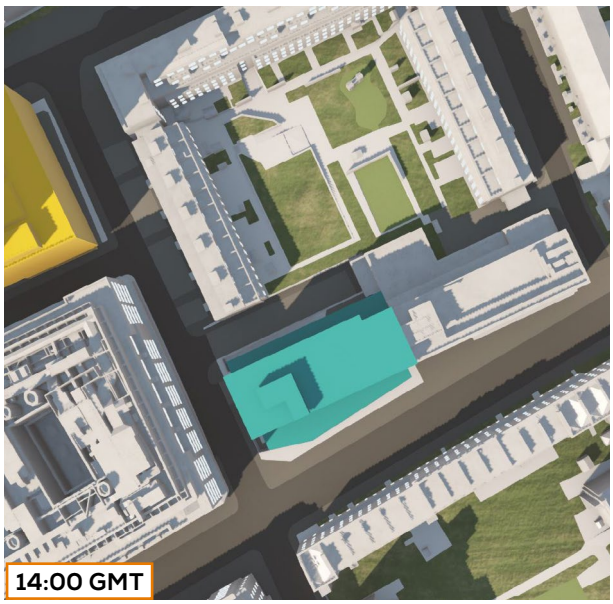


TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH

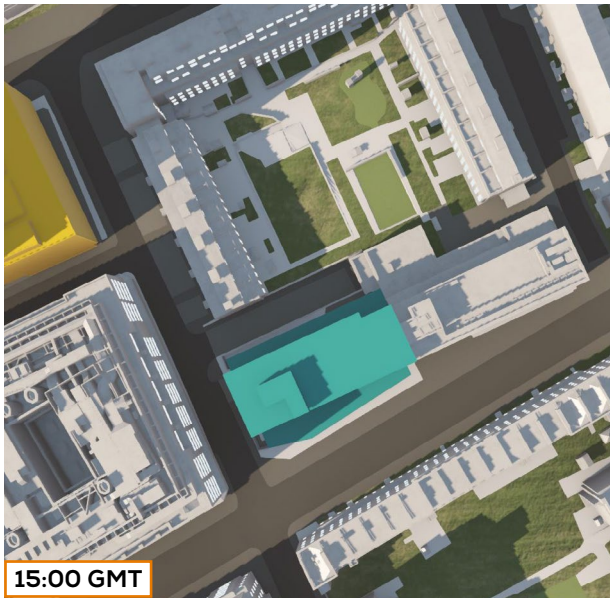


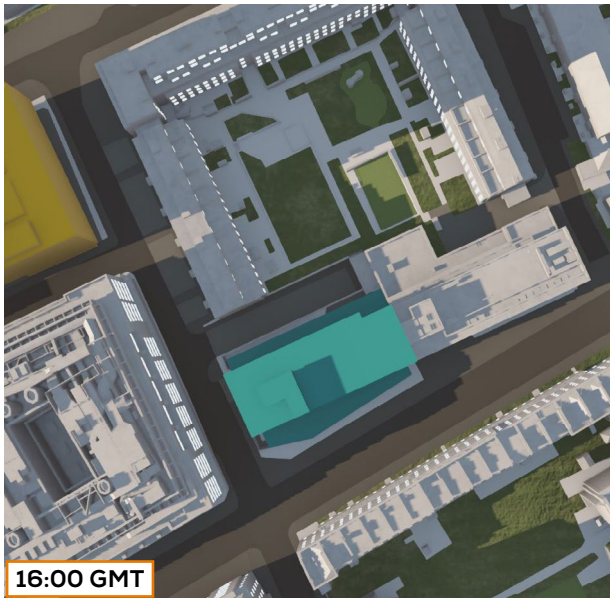


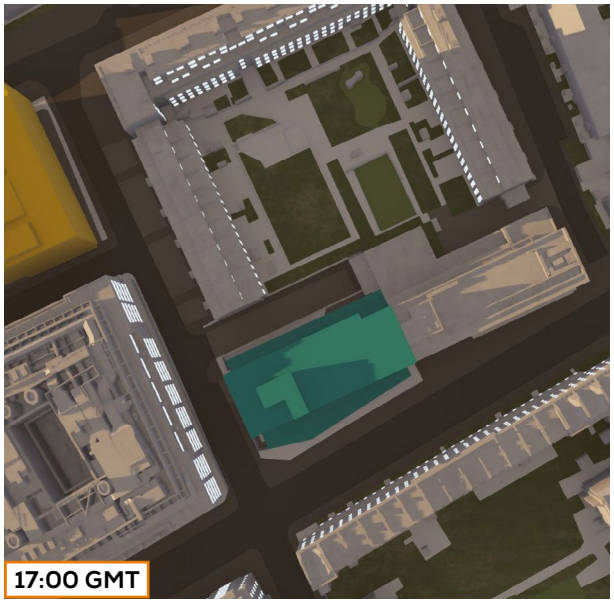




TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH







21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

N

gia

9 SITE 9: GABRIEL'S WHARF AND PRINCESS WHARF, UPPER GROUND SE1

INTRODUCTION AND SCOPE

Having identified the surrounding uses and site facing windows, Vertical Sky Component (VSC) facade studies were completed to understand daylight potential in the existing and indicative scenarios. In line with the BRE Guidelines, the focus was on residential properties along with any non-domestic buildings where occupants may have a reasonable expectation for daylight; i.e. schools, hospitals, hotels and places of worship.

The identified uses are illustrated in Figure 45 below.

Similarly, a VSC facade study was undertaken on the proposed façades, to understand the potential for the indicative scheme to provide future occupants with good levels of daylight and sunlight.

An overshadowing study was also completed showing how the shadow cast by the indicative massing would affect the open spaces within and around the site.

Finally, all assessments have been completed with the ITV Studios development in place to understand what the daylight and overshadowing will look with this scheme built.

Images illustrating the results of these assessments are shown within Sections 2, 3 and 4.

Site Boundary

Commercial

Residential

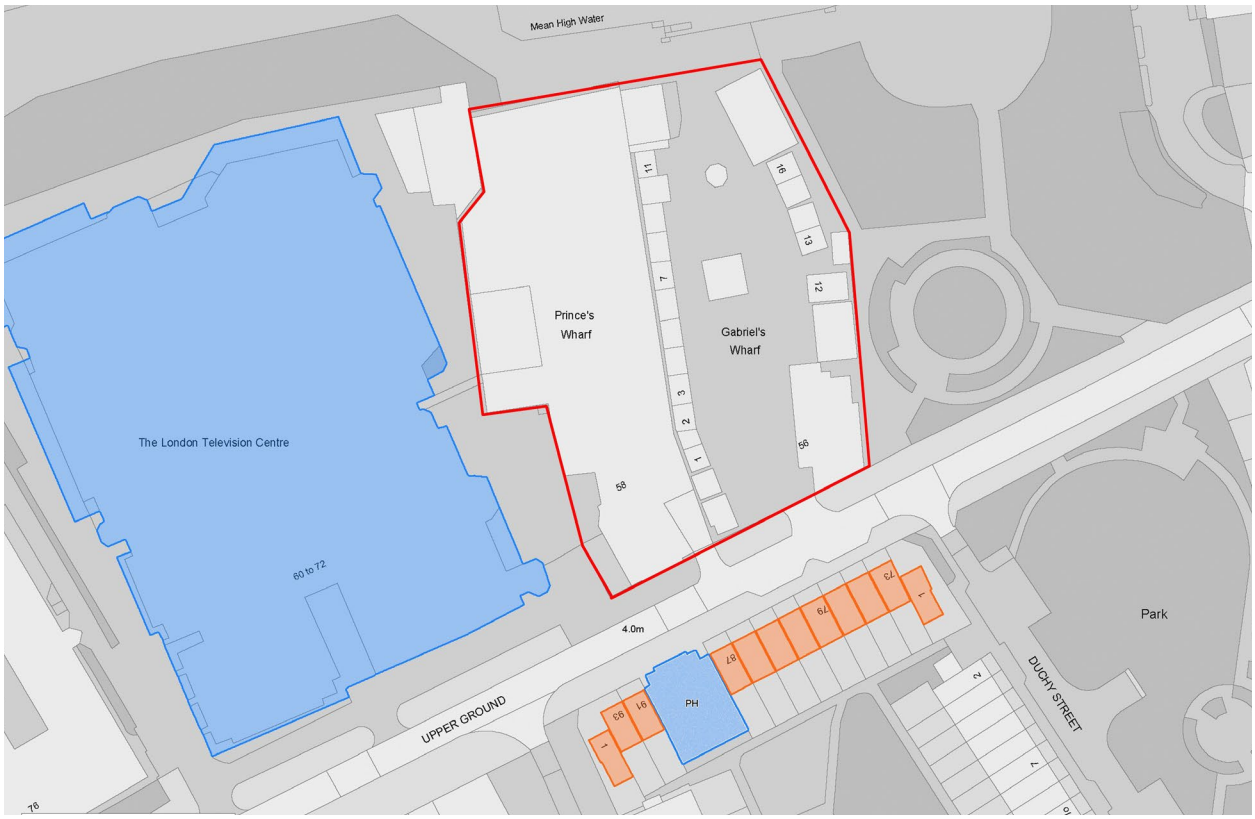


Figure 45: Use map

GIA's façade study identified little or no change in daylight to the residential uses to the east of the site (illustrated in Fig. 46 - 48).

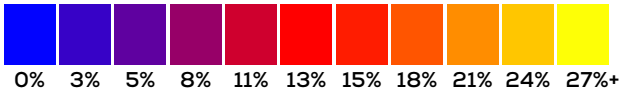
The residential use to the south will see a change in VSC with the indicative massing in place. This is to be expected given the uncharacteristically high existing VSC values for residential properties in a central urban location. Therefore, in delivering any meaningful massing on the site, changes to VSC are to be expected. Nonetheless, the vast majority of the facade where windows have been assumed will retain a VSC of at least 18%. Where colours suggest a slightly lower VSC value of circa 15%, this is primarily at ground level, or occurring at Mulberry Bush, which as a Public House is not considered relevant for the daylight assessment but has been included for completeness.

VSC ASSESSMENT - VIEW 1
PROPERTIES TO THE EAST OF THE SITE

Figure 46: Existing VSC values

Figure 47: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



Overall, GIA consider the indicative massing is appropriate for its context with view of potential impact on neighbouring daylight and sunlight amenity.

VSC ASSESSMENT - VIEW 1
PROPERTIES TO THE EAST OF THE SITE

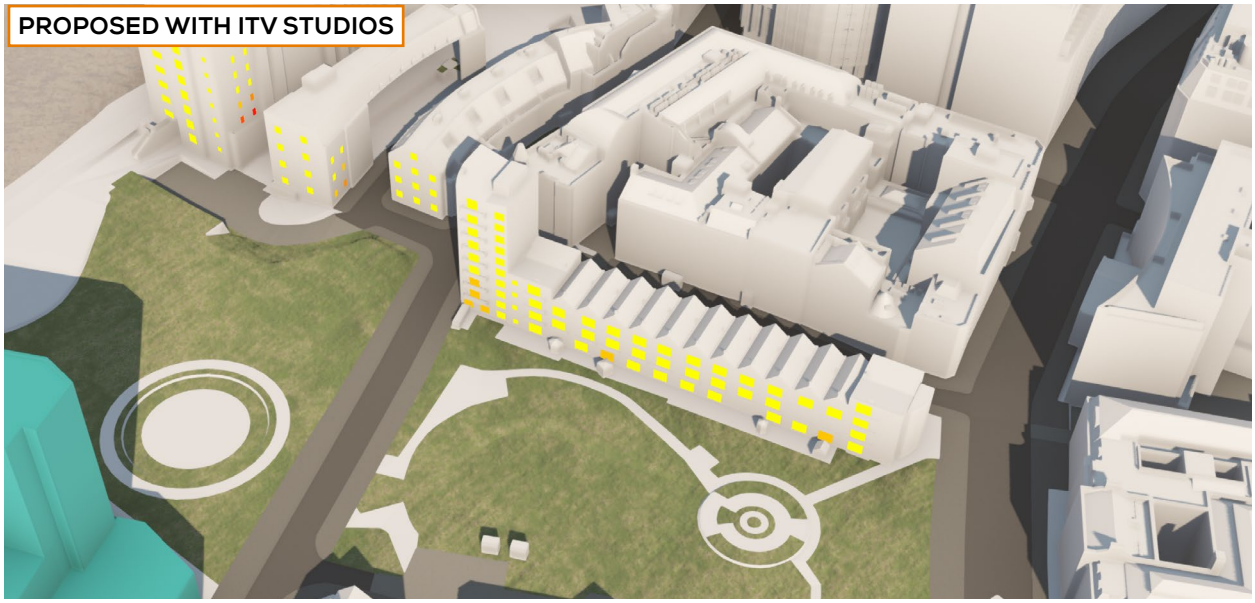


Figure 48: Indicative VSC values with ITV Studios scheme built

VSC ASSESSMENT - VIEW 2
PROPERTIES TO THE SOUTH OF THE SITE (71-93 UPPER GROUND)

Figure 49: Existing VSC values

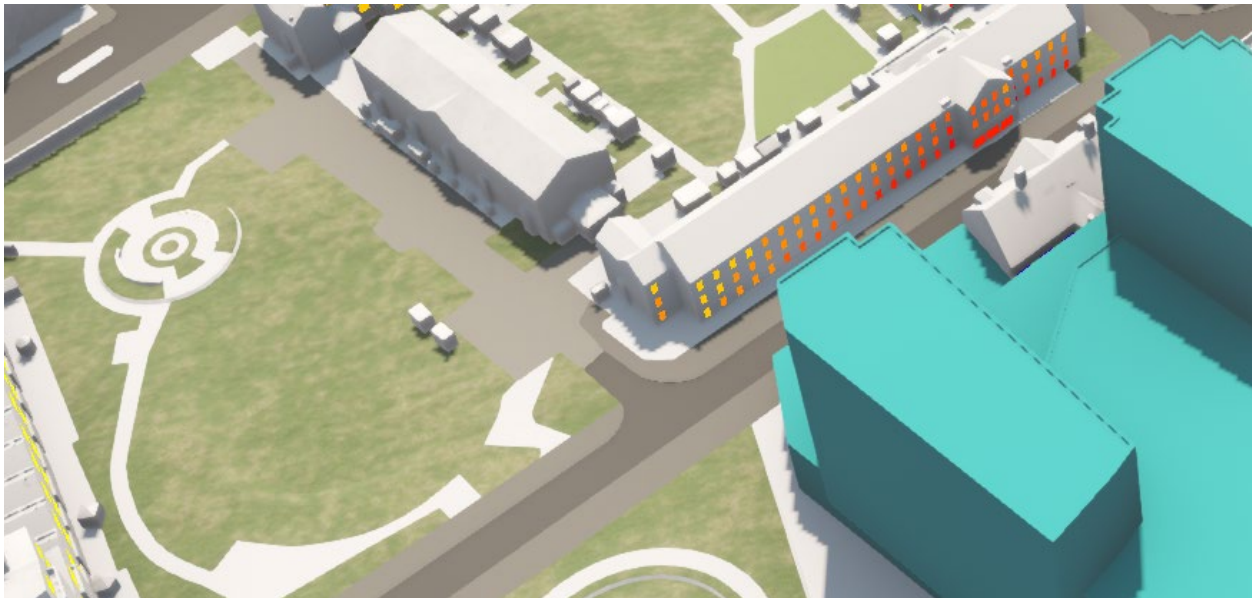
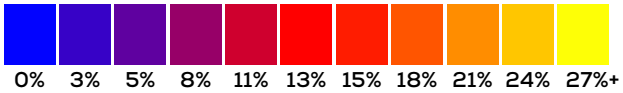


Figure 50: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



VSC ASSESSMENT - VIEW 2
PROPERTIES TO THE SOUTH OF THE SITE (71-93 UPPER GROUND)

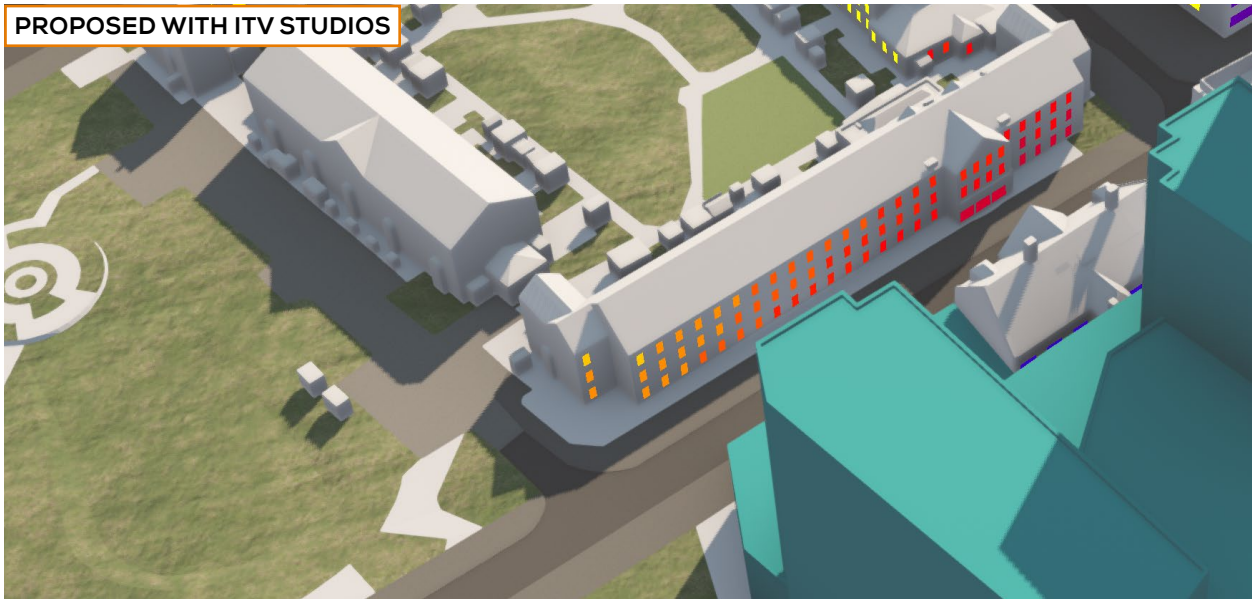


Figure 51: Indicative VSC values with ITV Studios scheme built

DAYLIGHT AMENITY WITHIN THE SITE

The indicative massing arrangement sees very good levels of daylight potential to all its outer frontages, with some areas of lower potential at the base of podium (highlighted in magenta in Views 4 and 5), which is however unlikely to accommodate any residential dwellings.

The potential redevelopment of the neighbouring former ITV Studios building has also been considered (View 4b) and this would further reduce the daylight potential reaching the west elevation of the illustrative scheme, particularly the base of the podium which would therefore be best used for non residential purposes.

Residential accommodation facing west (around the top of the podium and above) may need to incorporate some mitigation measures.

These could include, for example, providing larger

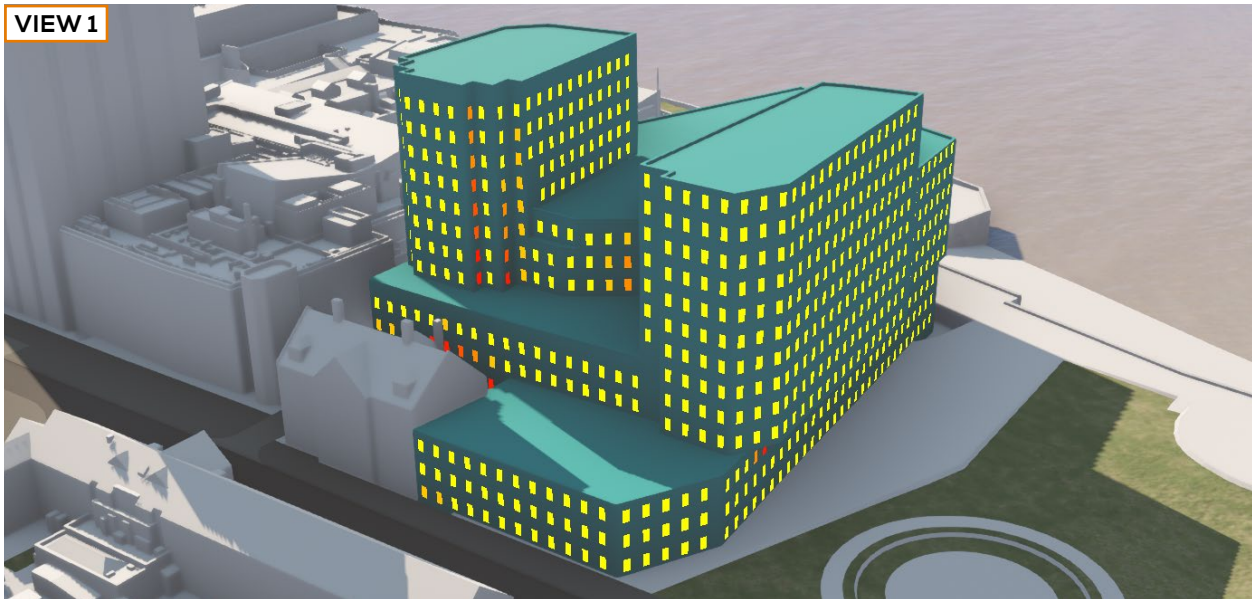


Figure 52: Daylight Potential (VSC)

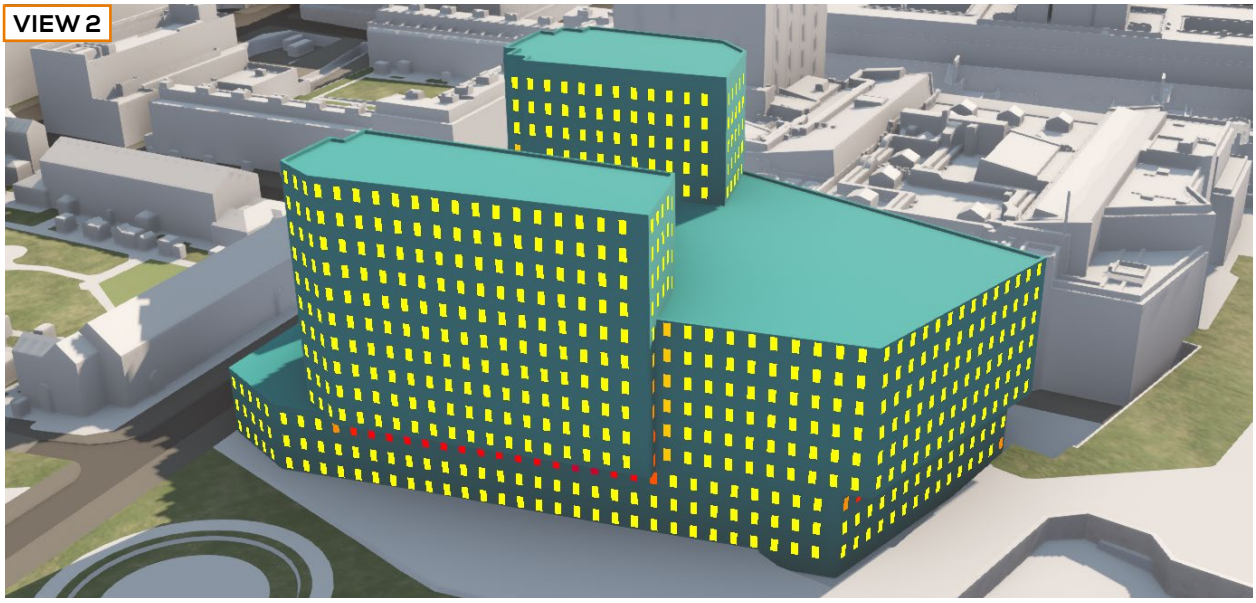
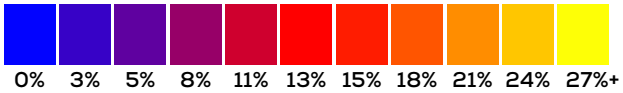


Figure 53: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



windows or utilising dual-aspect layouts to make the most of the daylight coming from north and south.

Even in the areas of good or very good daylight potential, it should be noted that balconies inherently restrict the access to daylight and sunlight to the windows set below them (if projecting) or behind them (if recessed). Therefore, their effects should be mitigated, where possible, providing rooms with additional windows free of obstructions, or by staggering balconies or internal layouts so that the windows serving the living areas are not overhung.

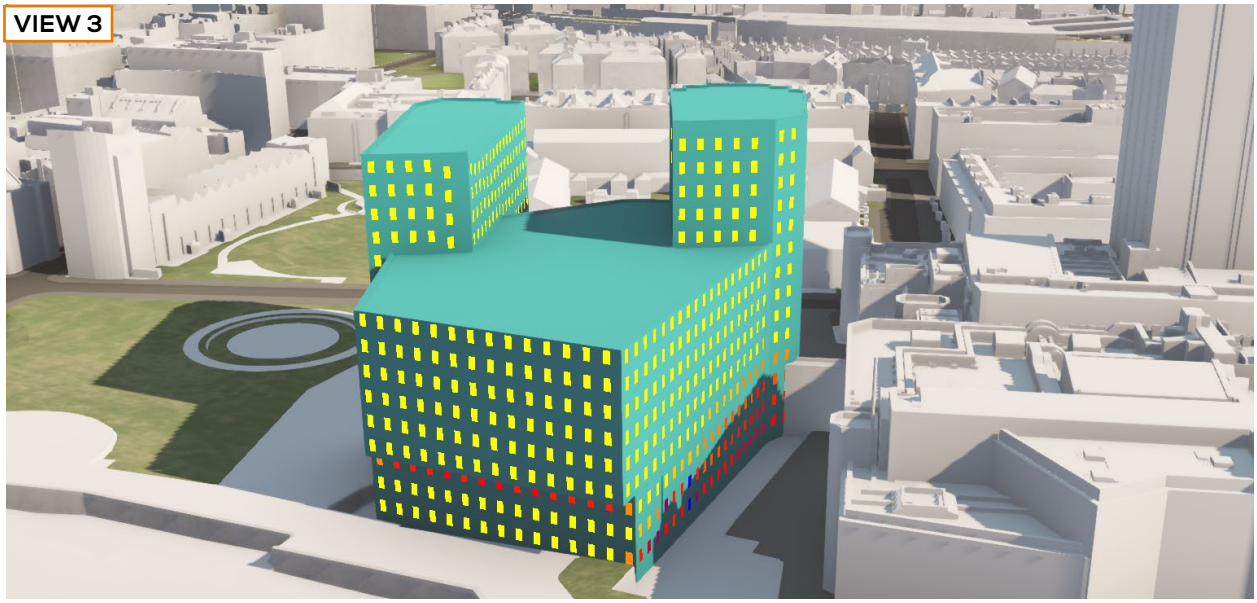


Figure 54: Daylight Potential (VSC)

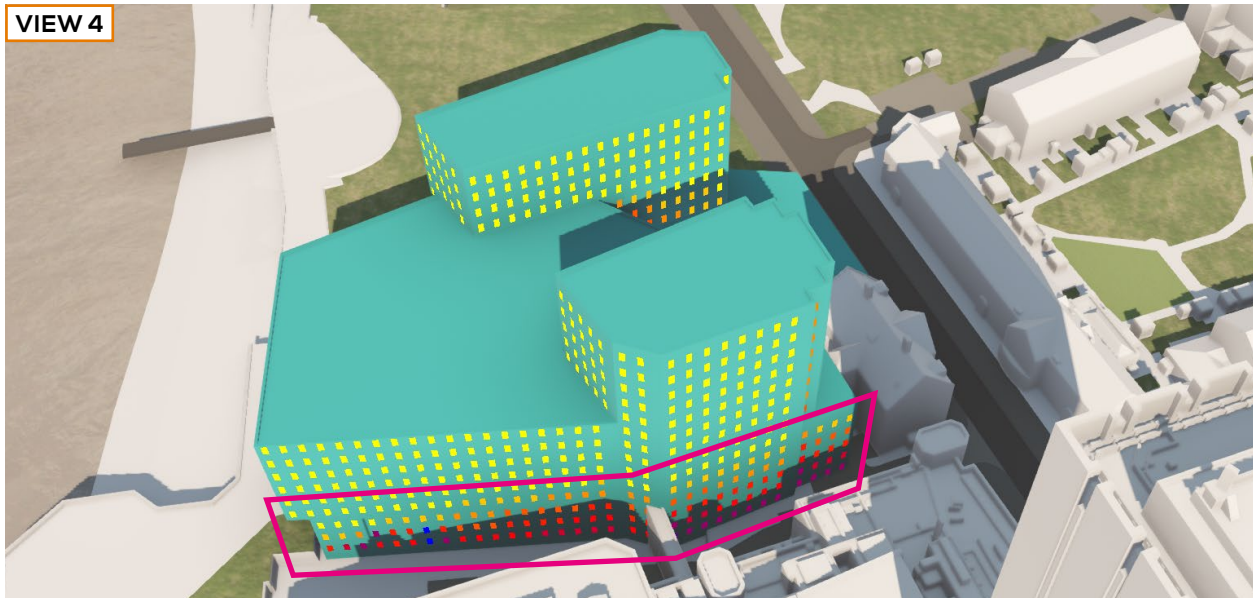
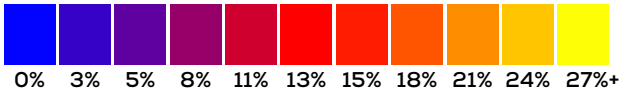


Figure 55: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



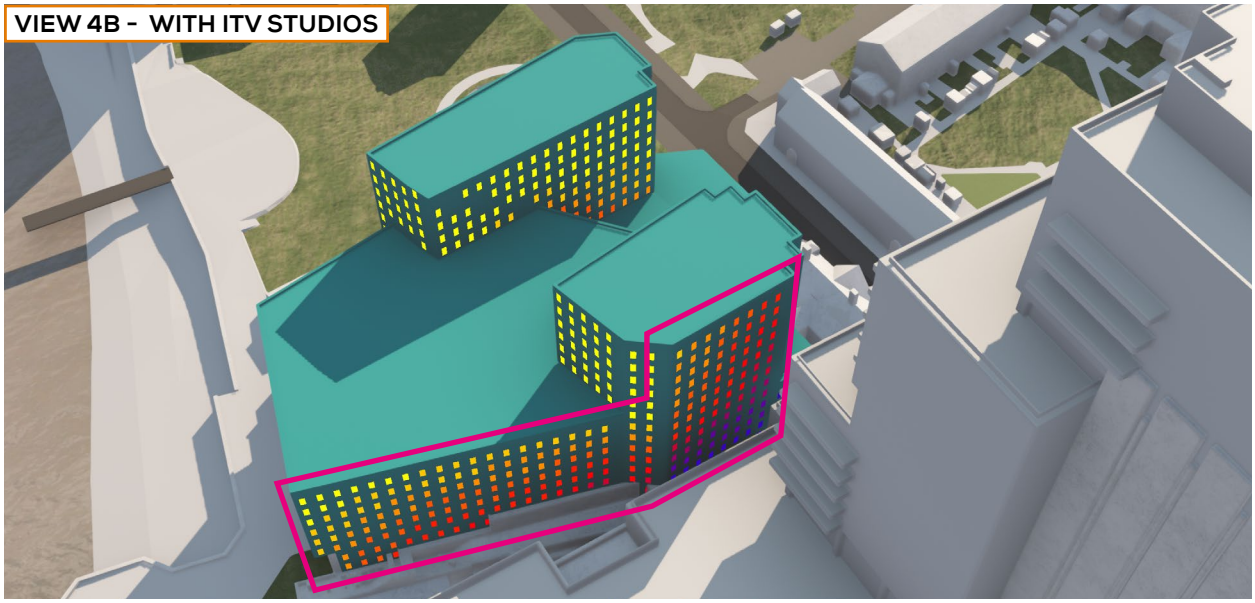


Figure 56: Daylight Potential (VSC)

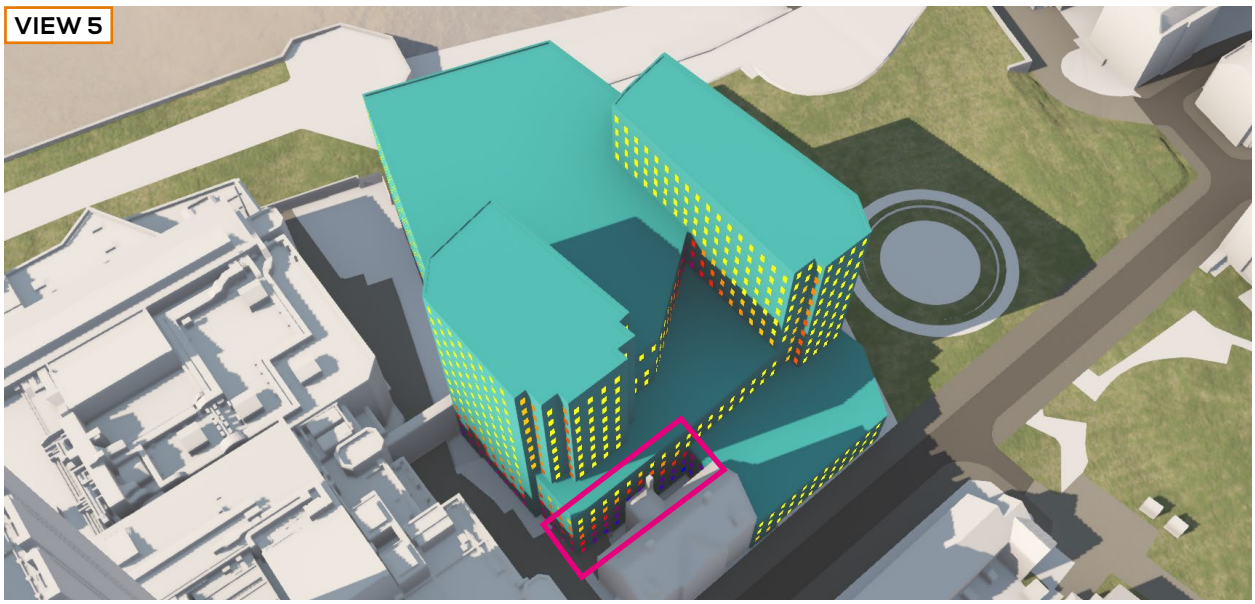


Figure 57: Daylight Potential (VSC)

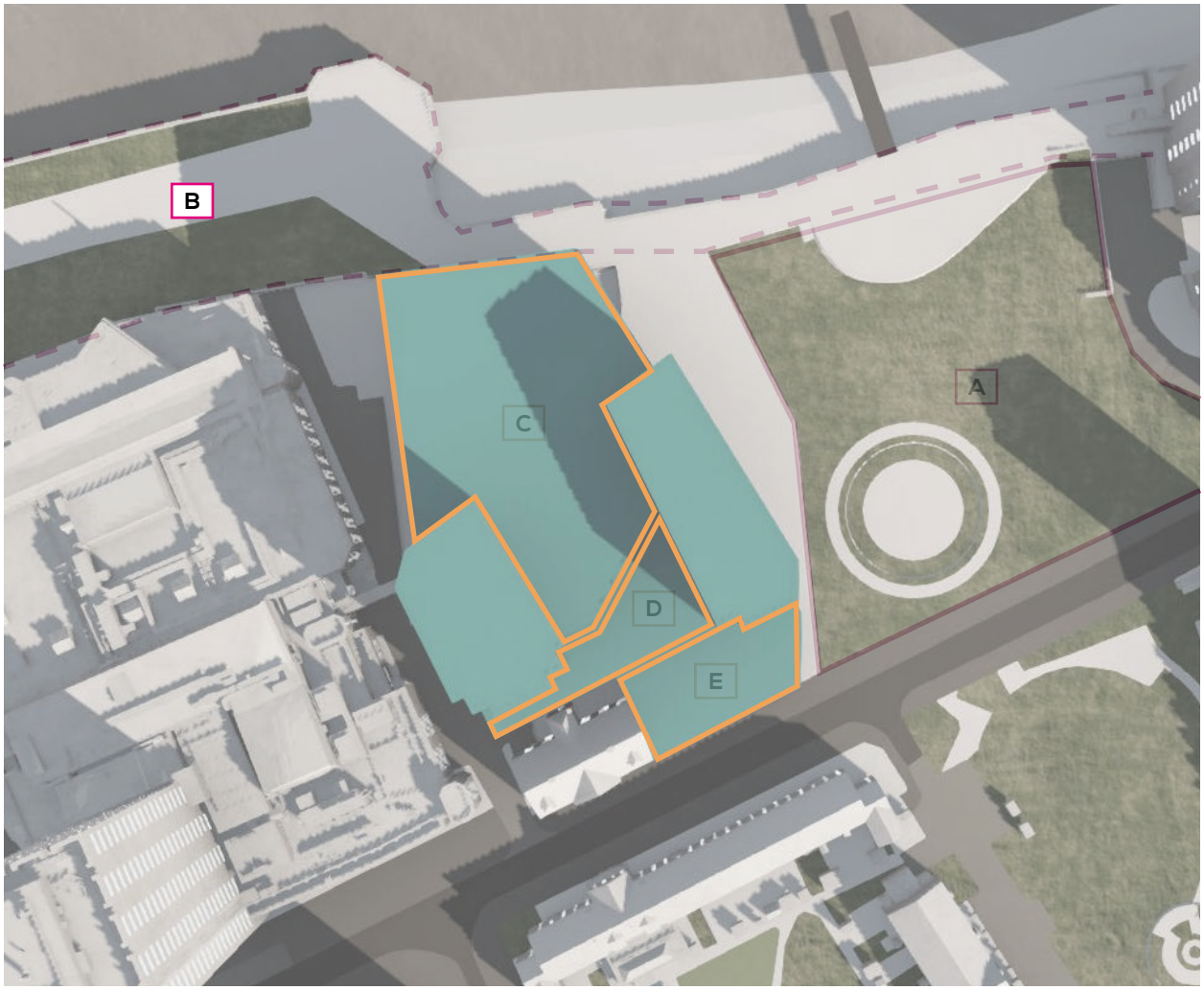
OVERSHADOWING

While some additional overshadowing would affect Bernie Spain Gardens (located to the east of the site and labelled as A in the image below) in the afternoon, the sunlight levels retained would be in line with BRE's recommendations.

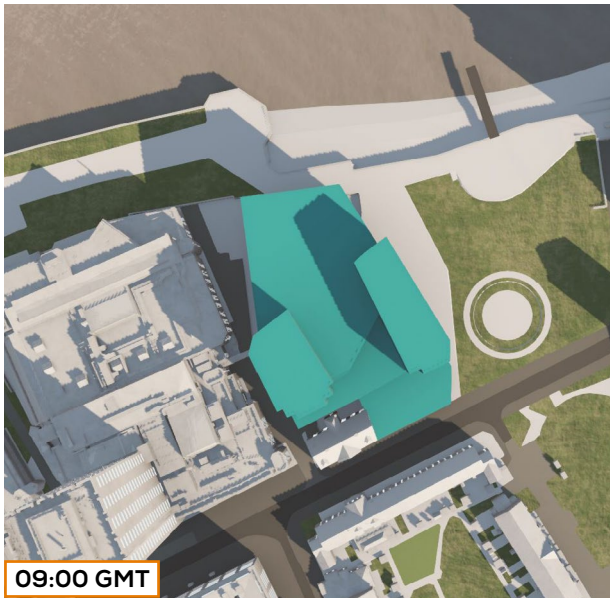
The riverside walking route (B) would inevitably receive some additional shadows, as it is located to the immediate north of the indicative scheme. As the route has no defined contour, the BRE two hours criterion cannot be applied, however the shadow plots provided in the following pages illustrate how the shadows will move throughout the day on the spring equinox. In summer, shadows would obviously be shorter and so sunlight access will improve. The taller elements of the indicative scheme have been located to the south of the site, so as to minimise the overshadowing to the riverside.

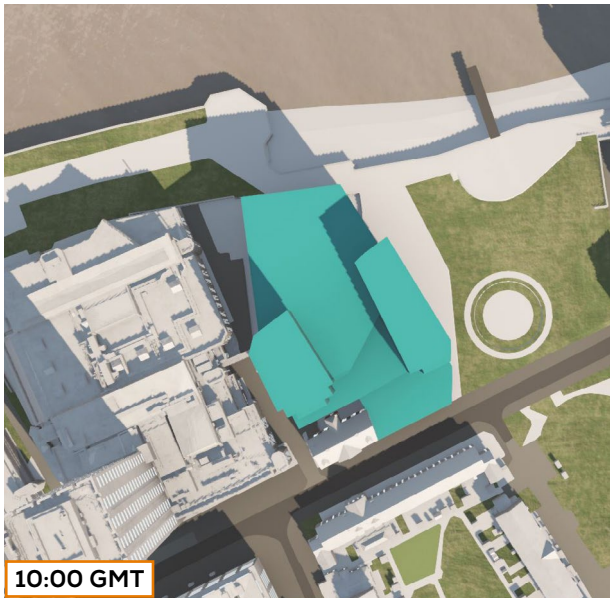
The indicative scheme itself, owing to being open to the south will receive plenty of sunlight to its terraces (labelled as C, D, E in the image below), which all have the potential to serve as excellently sunlit amenity spaces.

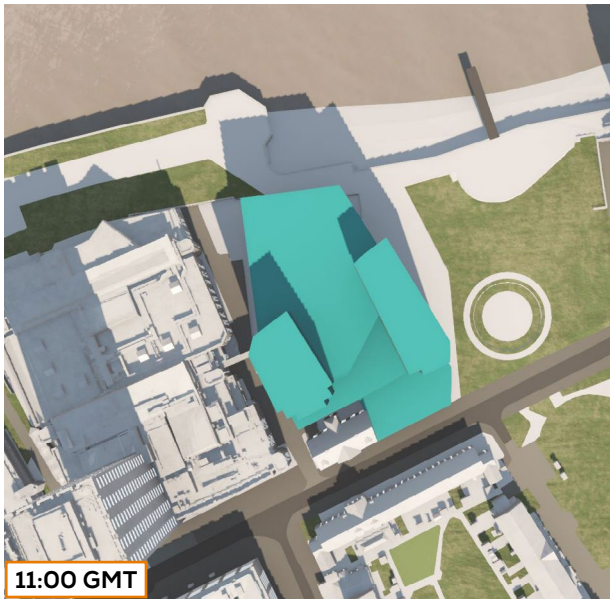
While the levels of direct sunlight experienced within the terraces (particularly C) would somewhat be reduced by the ITV scheme coming forward, the overall sunlight levels are still expected to remain in line with BRE's recommendations.

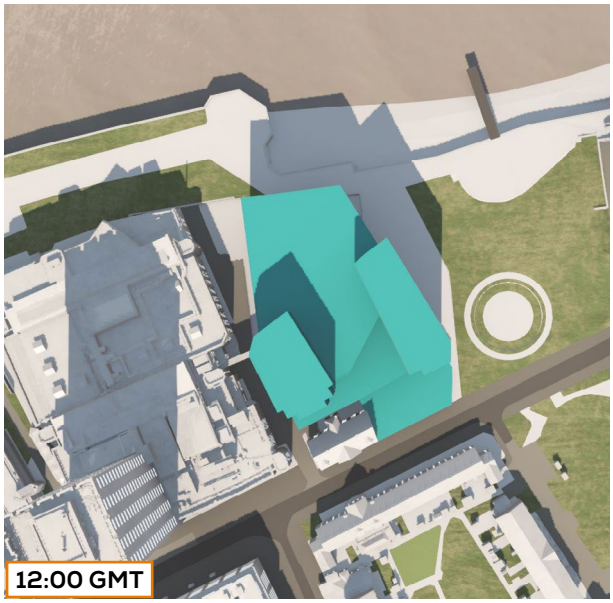


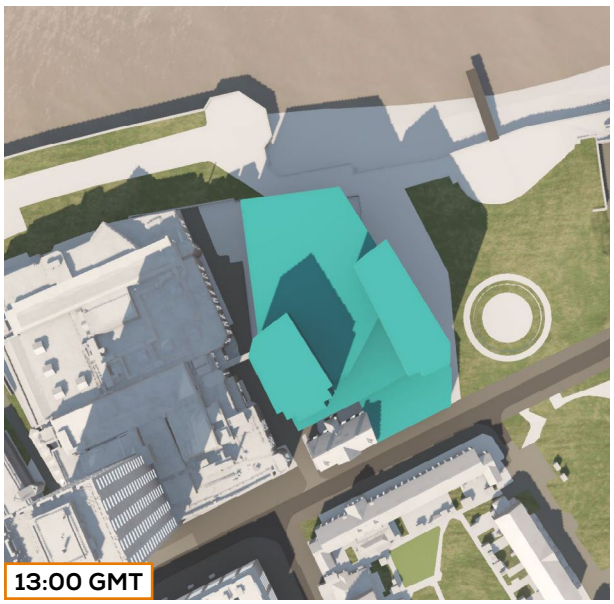
TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH

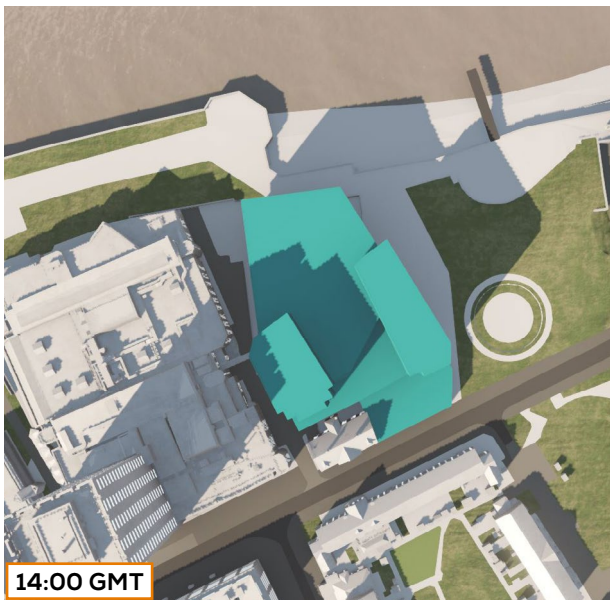




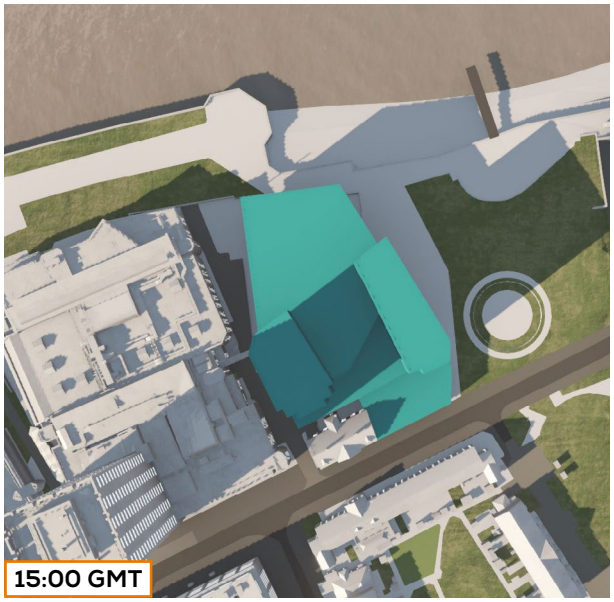


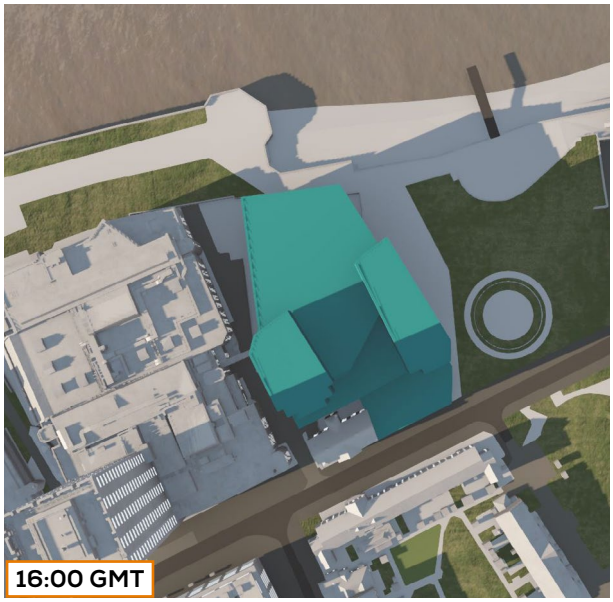


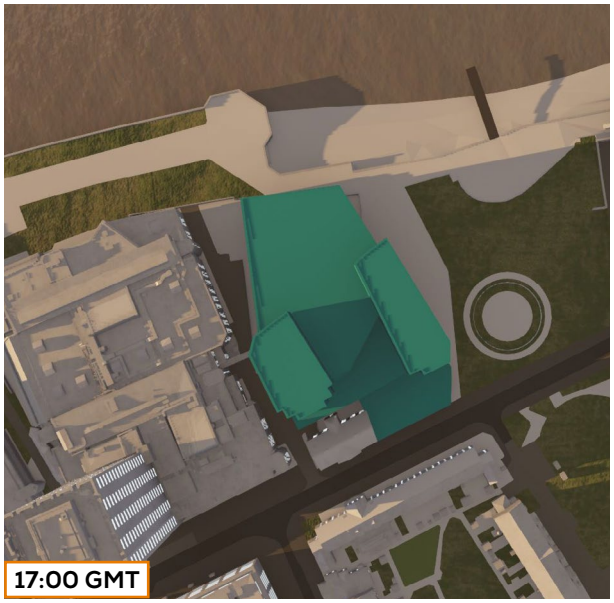




TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH







21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

N

TRANSIENT OVERSHADOWING ASSESSMENT - WITH ITV STUDIOS
21ST MARCH

gia

TRANSIENT OVERSHADOWING ASSESSMENT - WITH ITV STUDIOS
21ST MARCH

21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

N

10 SITE 17: 330-336 BRIXTON ROAD SW9

INTRODUCTION AND SCOPE

Having identified the surrounding uses and site facing windows, Vertical Sky Component (VSC) facade studies were completed to understand daylight potential in the existing and indicative scenarios. In line with the BRE Guidelines, the focus was on residential properties along with any non-domestic buildings where occupants may have a reasonable expectation for daylight; i.e. schools, hospitals, hotels and places of worship.

The identified uses are illustrated in Figure 58 below.

Similarly, a VSC facade study was undertaken on the indicative façades, to understand the potential for the indicative scheme to provide future occupants with good levels of daylight and sunlight.

Finally, an overshadowing study was also completed showing how the shadow cast by the indicative massing would affect the open spaces within and around the site.

Images illustrating the results of these assessments are shown within Sections 2, 3 and 4.

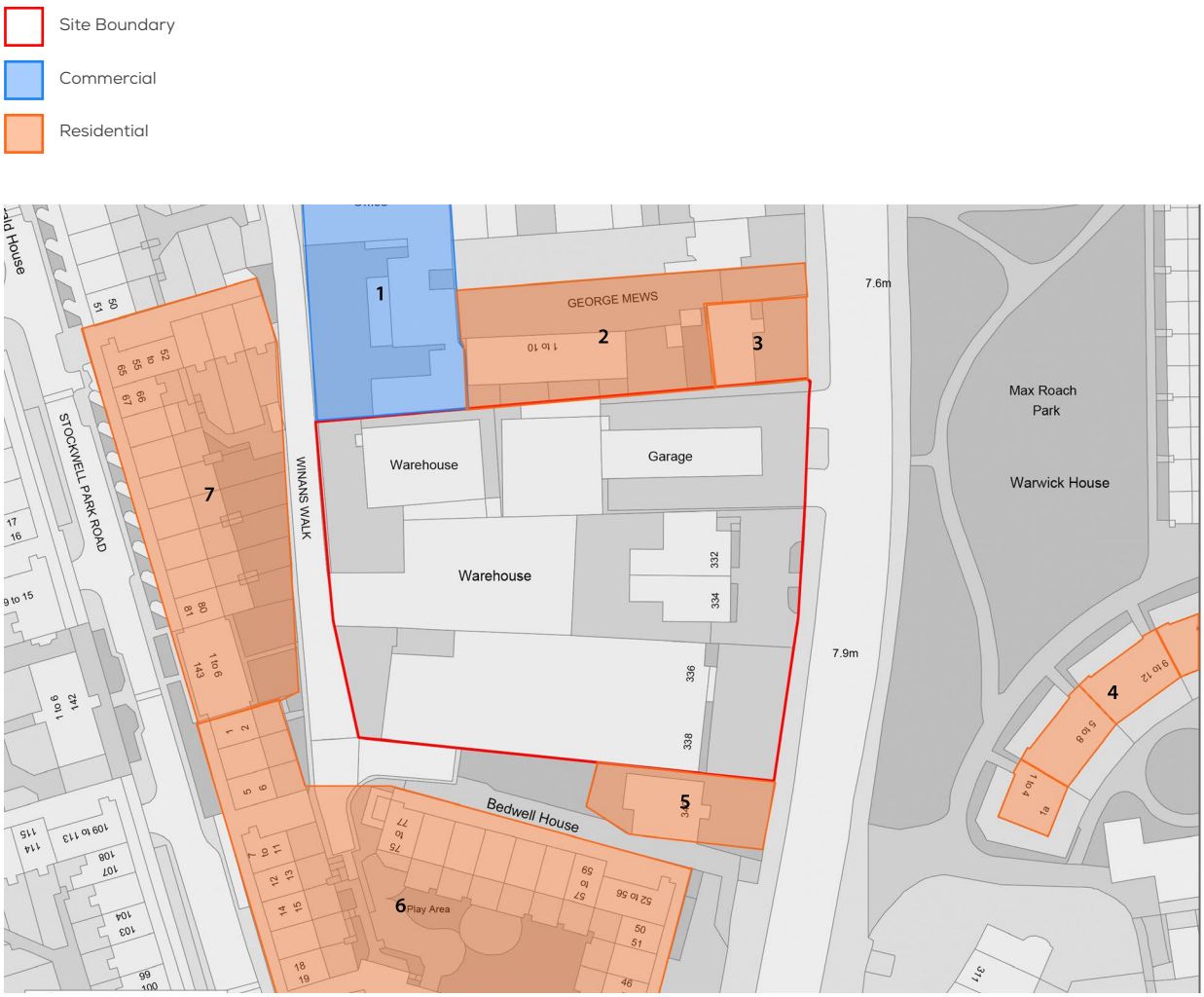


Figure 58: Use map

DAYLIGHT IMPACTS TO NEIGHBOURING PROPERTIES

GIA's façade study identified little or no change in daylight to the vast majority of neighbouring properties surrounding the site; particularly those to the east and west of the site.

Lower retained VSC values were anticipated for the most proximate neighbouring properties to the north (5 George Mews) and south (Bedwell House) of the site due to these buildings being located close to the site boundary.

The BRE states:

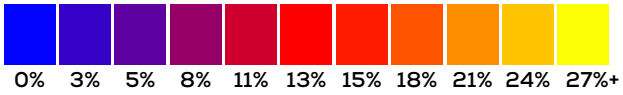
"From a daylighting standpoint it is possible to reduce the quality of adjoining development land by building too close to the boundary. A well-designed building will stand a reasonable distance back from the boundaries so as to enable future nearby developments to enjoy a similar access to daylight. By doing so it will also keep its own natural light when the adjoining land is developed."

VSC ASSESSMENT - VIEW 1
PROPERTIES TO THE EAST OF THE SITE (BOATEMAH WALK)

Figure 59: Existing VSC values

Figure 60: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



It is therefore to be expected that the neighbouring properties to the north and south will retain lower VSC values with any reasonable development on the site. Nonetheless, retained VSC values are of at least a "mid-teen" value.

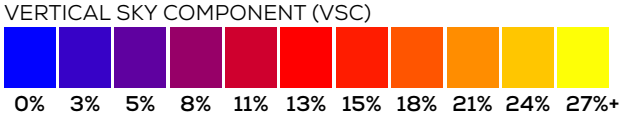
Overall, GIA consider the massing is appropriate for its context with view of potential impact on neighbouring daylight and sunlight amenity.

VSC ASSESSMENT - VIEW 2
PROPERTIES TO THE NORTH OF THE SITE (5 GEORGE MEWS AND SIBLEY HOUSE)

Figure 61: Existing VSC values

Figure 62: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



VSC ASSESSMENT - VIEW 3
PROPERTIES TO THE SOUTH AND WEST OF THE SITE (BEDWELL HOUSE)

EXISTING

Figure 63: Existing VSC values

PROPOSED

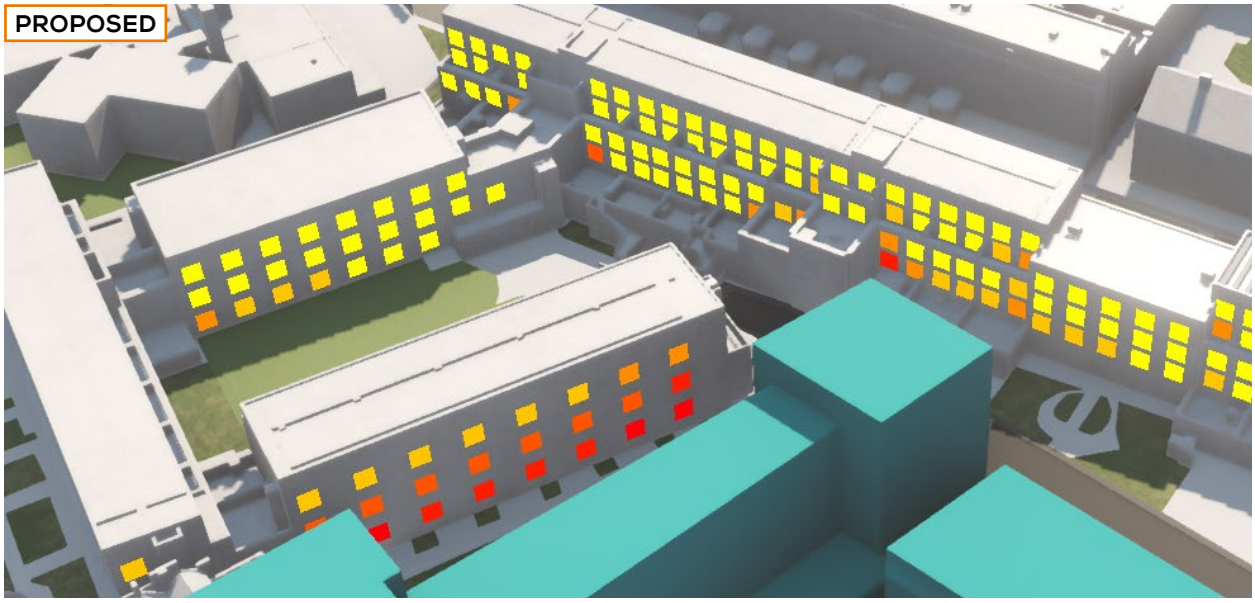


Figure 64: Indicative VSC values

DAYLIGHT AMENITY WITHIN THE SITE

The illustrative massing arrangement sees very good levels of daylight potential to all its outer frontages, with some areas of lower potential at the base, which is however unlikely to accommodate any residential dwellings.

Some areas of reduced potential can be seen primarily where the two blocks face each other in close proximity (highlighted in magenta in Views 2 and 4) . These façades should be used primarily for bedrooms and secondary living room windows. The main living room windows should be located on the side elevations which benefit from greater daylight levels.

Overall, the scheme has a good daylight potential and the isolated areas of lower availability are in line with expectations for schemes of this density in this context.

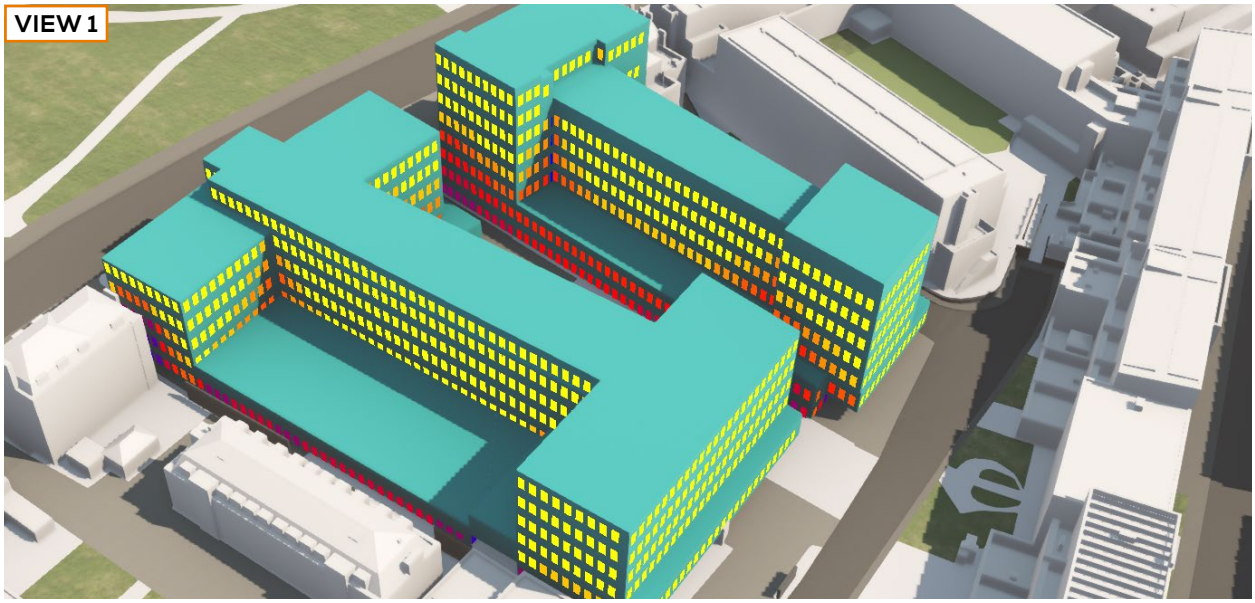


Figure 65: Daylight Potential (VSC)

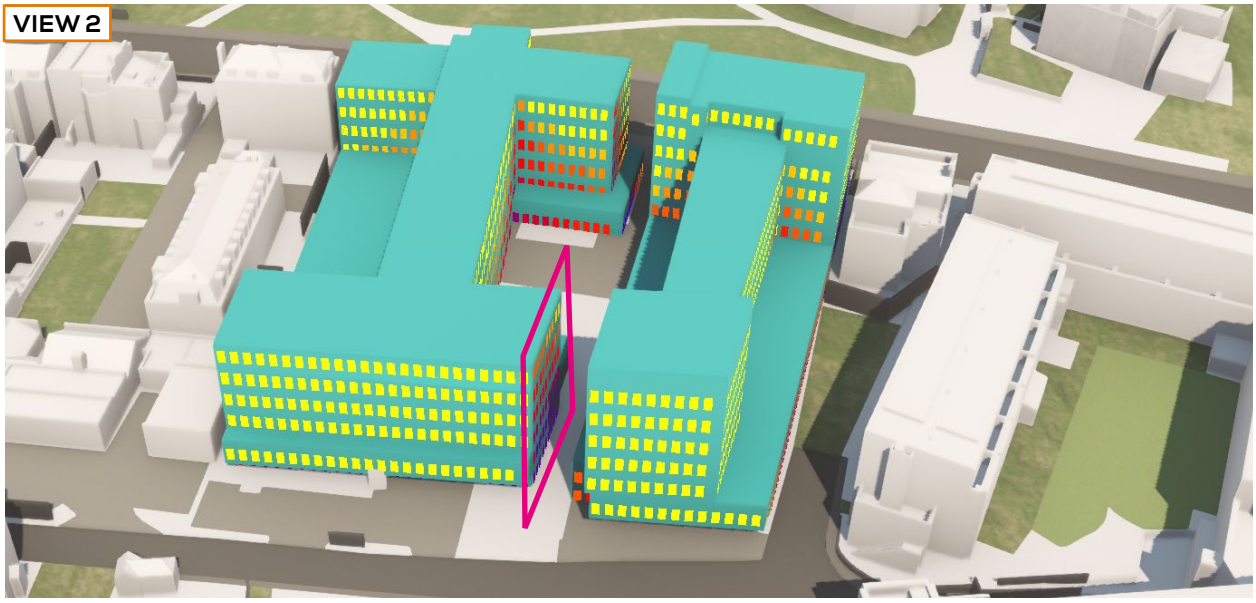
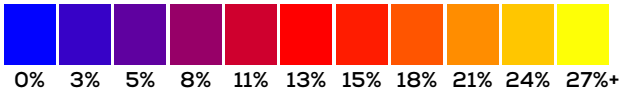


Figure 66: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



It should be noted that balconies inherently restrict the access to daylight and sunlight to the windows set below them (if projecting) or behind them (if recessed). Therefore, their effects should be mitigated, where possible, providing rooms with additional windows free of obstructions, or by staggering balconies or internal layouts so that the windows serving the living areas are not overhung.

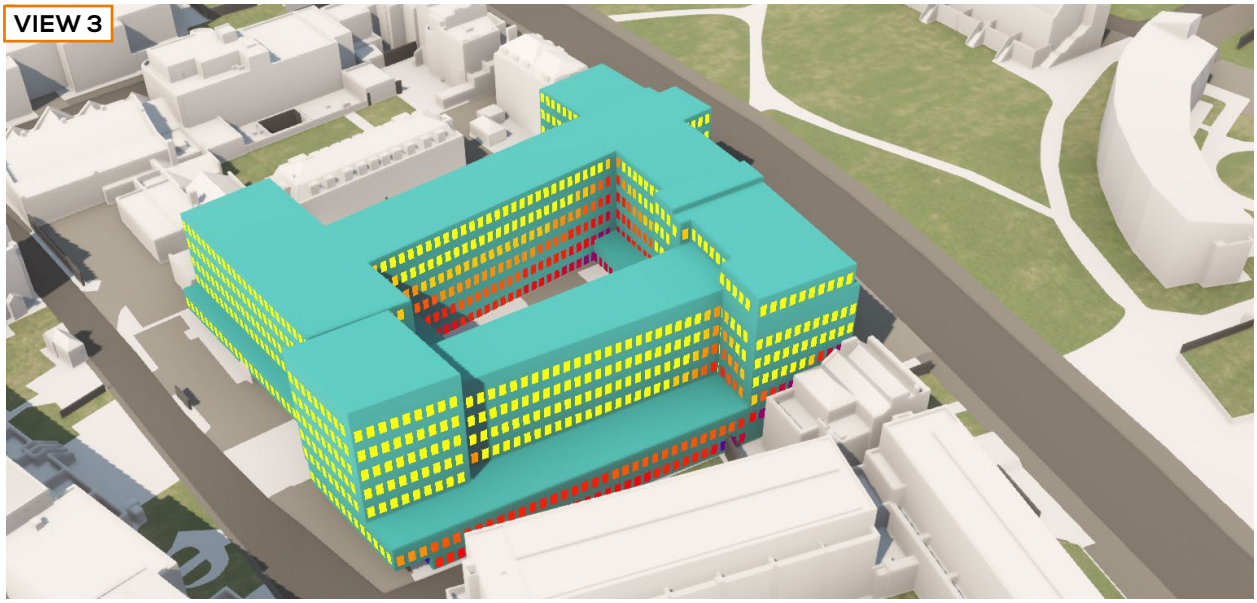


Figure 67: Daylight Potential (VSC)

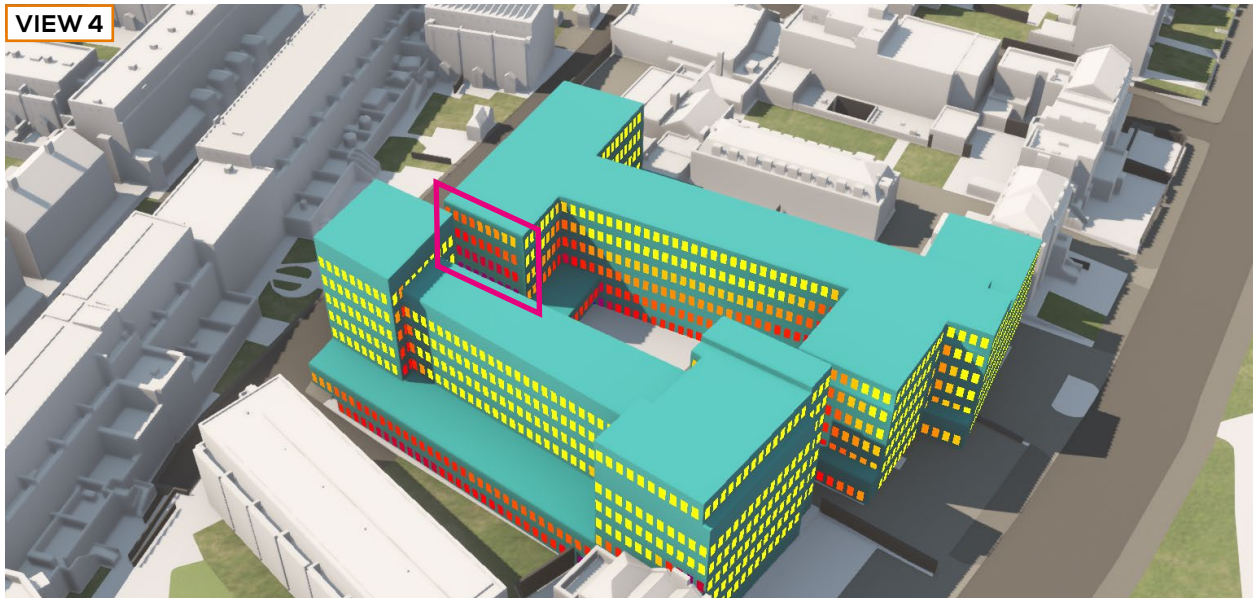
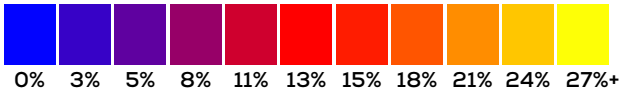


Figure 68: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



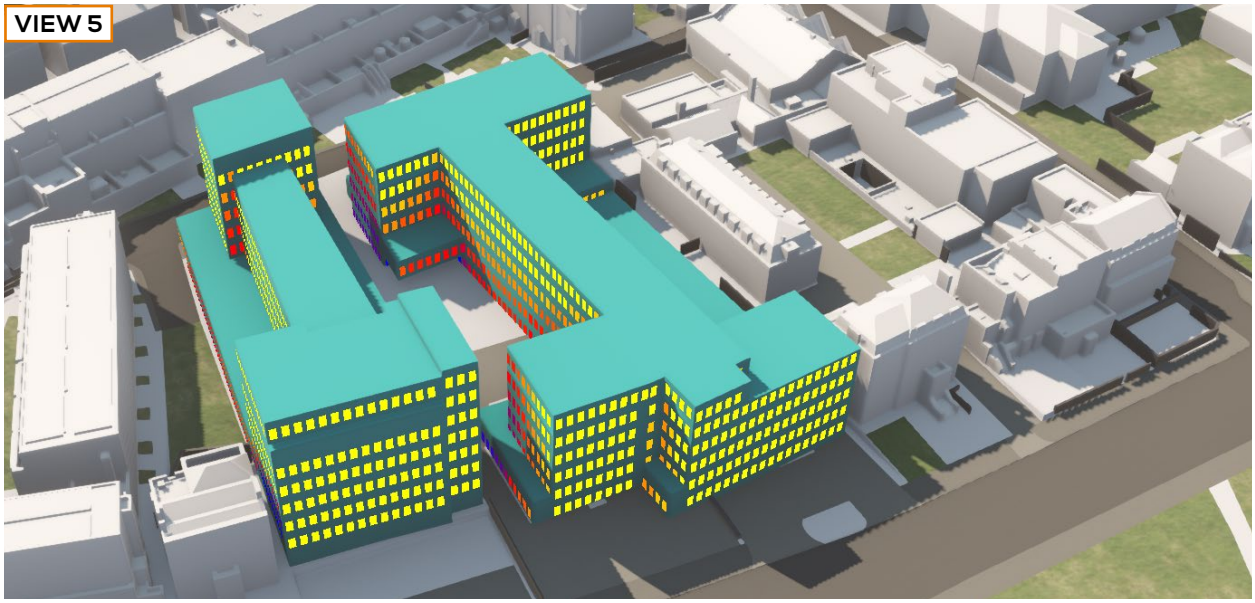


Figure 69: VSC

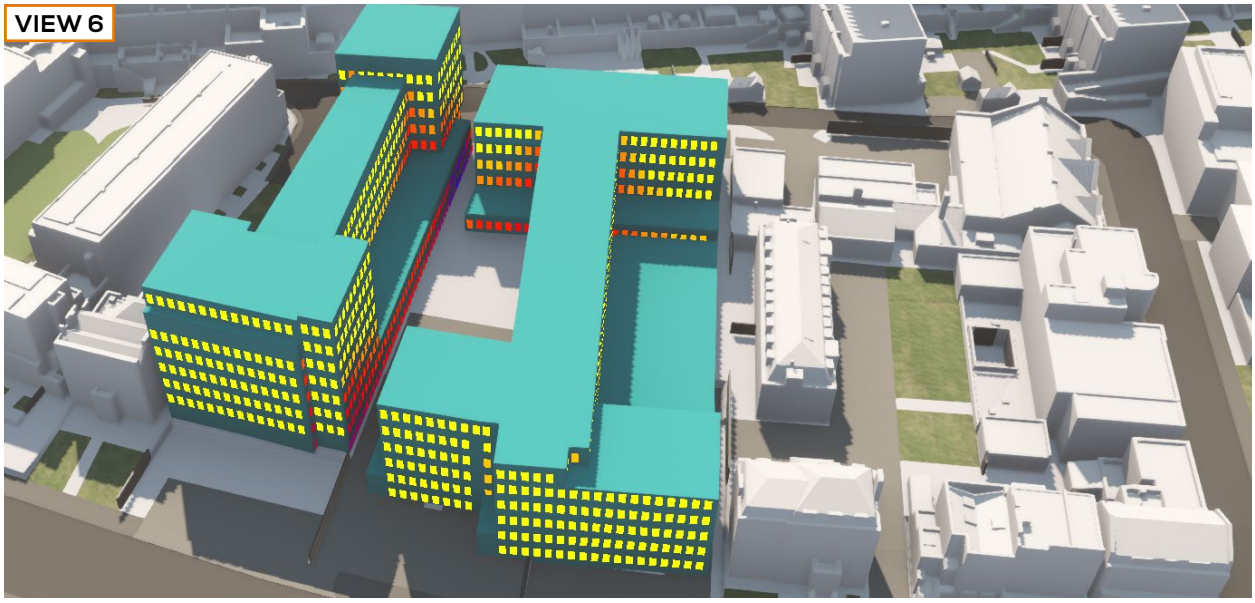


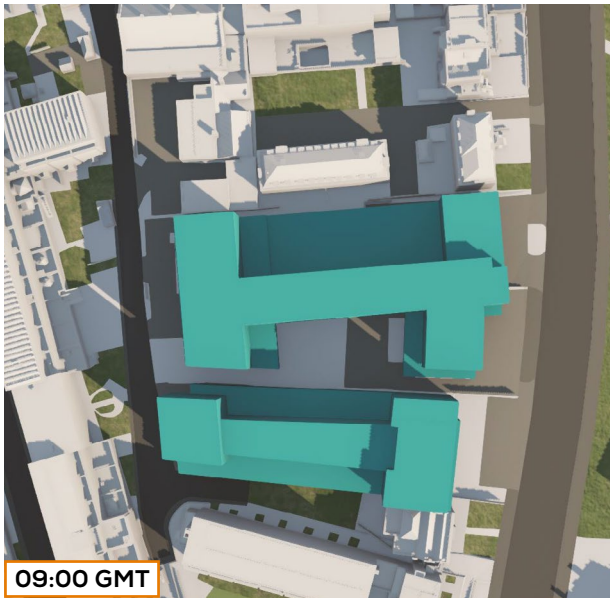
Figure 70: Proposed VSC values

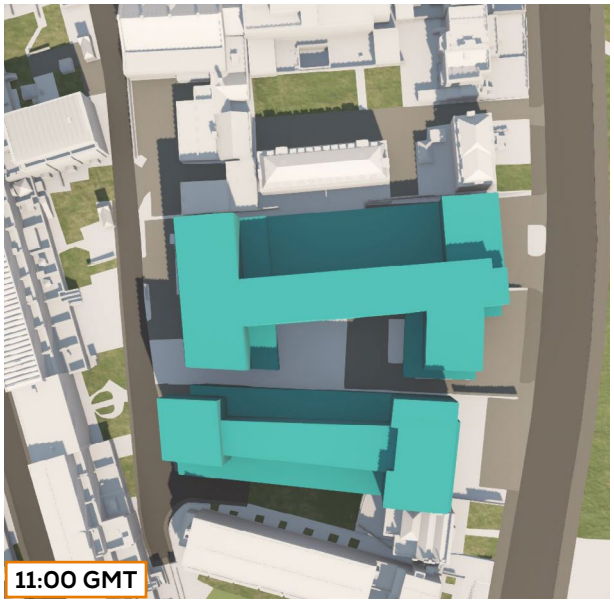
OVERSHADOWING

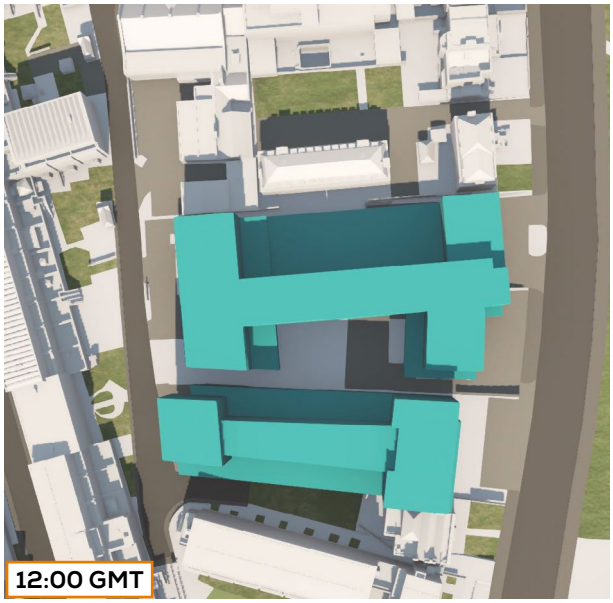
There will be little overshadowing of the neighbouring amenity areas. The rear gardens to the west would only be shadowed in the early morning. Those located to the immediate north may experience some additional overshadowing, however their sunlight levels are likely to be driven predominantly by the relationship with the existing party wall, which casts some shade throughout the day. The rear gardens to the north-east will receive some shadows until approximately midday and retain direct sunlight in the central part of the day.

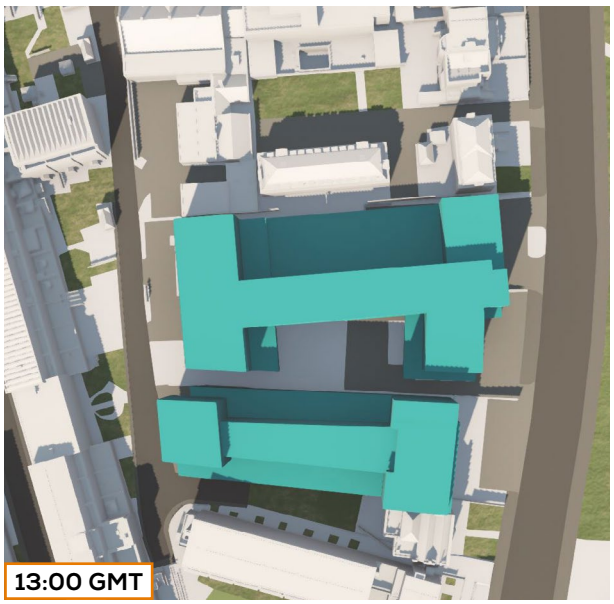
The scheme itself, owing to its east-west orientation, will have predominantly shaded courtyards, with the exception of the south facing one (labelled as C in the image below). The central portion of the public realm (D) at ground level is also likely to be mainly in shade on the spring equinox, however good levels of sunlight will be seen to the west and east portions. Ideally, the amenity provision should be complemented with some roof terrace space, which will benefit from excellent sunlight levels throughout the year. It should also be noted that the Max Roach Park is just on the other side of the road and will be excellently sunlit.

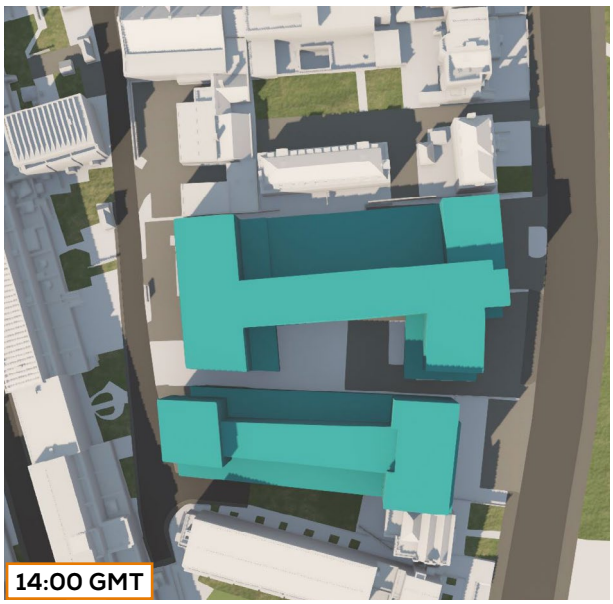
TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH



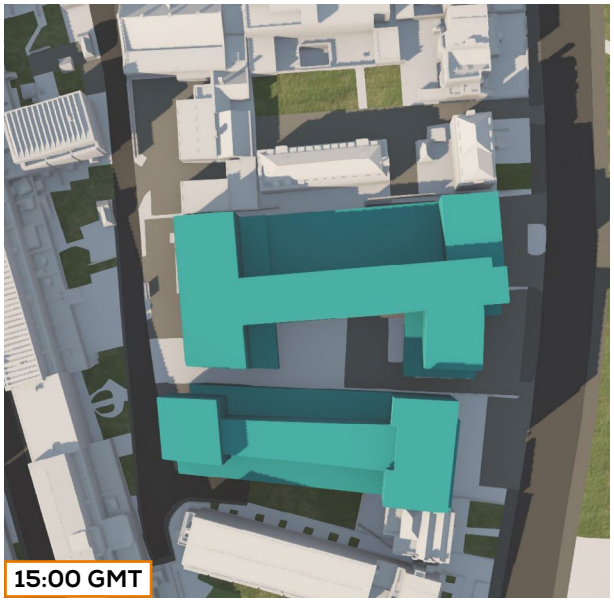


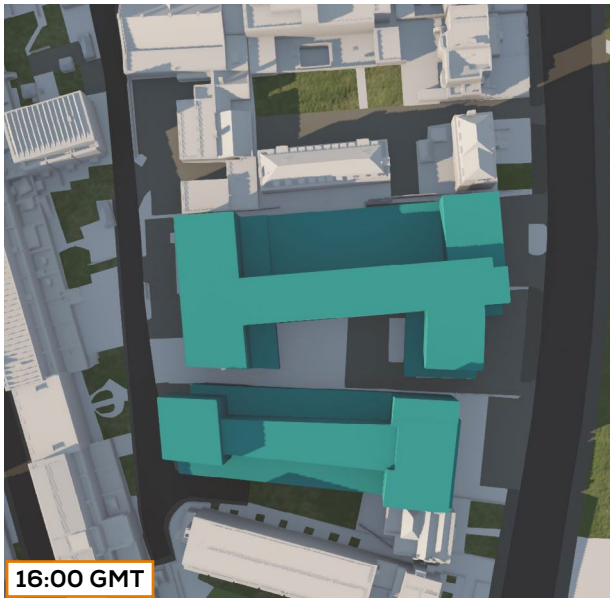






TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH





21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

N

11 SITE 18: 300 -346 NORWOOD ROAD, SE27

INTRODUCTION AND SCOPE

Having identified the surrounding uses and site facing windows, Vertical Sky Component (VSC) facade studies were completed to understand daylight potential in the existing and indicative scenarios. In line with the BRE Guidelines, the focus was on residential properties along with any non-domestic buildings where occupants may have a reasonable expectation for daylight; i.e. schools, hospitals, hotels and places of worship.

The identified uses are illustrated in Figure 71 below.

Similarly, a VSC facade study was undertaken on the indicative façades, to understand the potential for the indicative scheme to provide future occupants with good levels of daylight and sunlight.

Finally, an overshadowing study was also completed showing how the shadow cast by the indicative massing would affect the open spaces within and around the site.

Images illustrating the results of these assessments are shown within Sections 2, 3 and 4.

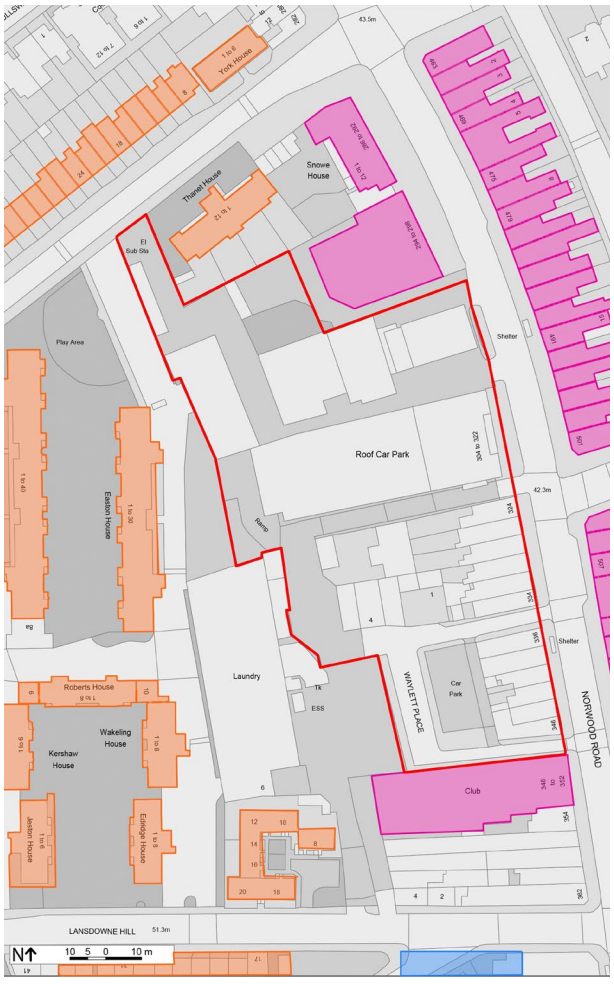


Figure 71: Use map

DAYLIGHT IMPACTS TO NEIGHBOURING PROPERTIES

GIA's façade study identified little or no change in daylight to the vast majority of neighbouring properties surrounding the site. Where change in VSC was noted, this was minor and/or retained VSC levels were considered good and in keeping with the surrounding area.

It should also be noted that, while picked up by this indicative study, some of the areas shown to experience a reduction in light levels do not have residential / sensitive windows and so will not need to be assessed for daylight and sunlight. This is the case, for example, with the ground floor of the Iceland store to the south of the site (see Fig. 74 and Fig. 75)

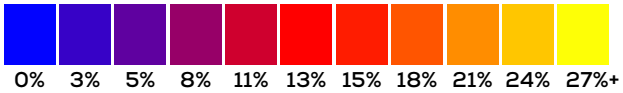
As such, GIA consider the massing is appropriate for its context with view of potential impact on neighbouring daylight and sunlight amenity.

VSC ASSESSMENT - VIEW 1
PROPERTIES TO THE WEST AND NORTH OF THE SITE (EASTON HOUSE AND THANET HOUSE)

Figure 72: Existing VSC values

Figure 73: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



VSC ASSESSMENT - VIEW 2
PROPERTIES TO THE EAST AND SOUTH OF THE SITE (503-533 NORWOOD ROAD AND 348 - 352 NORWOOD ROAD)

Figure 74: Existing VSC values

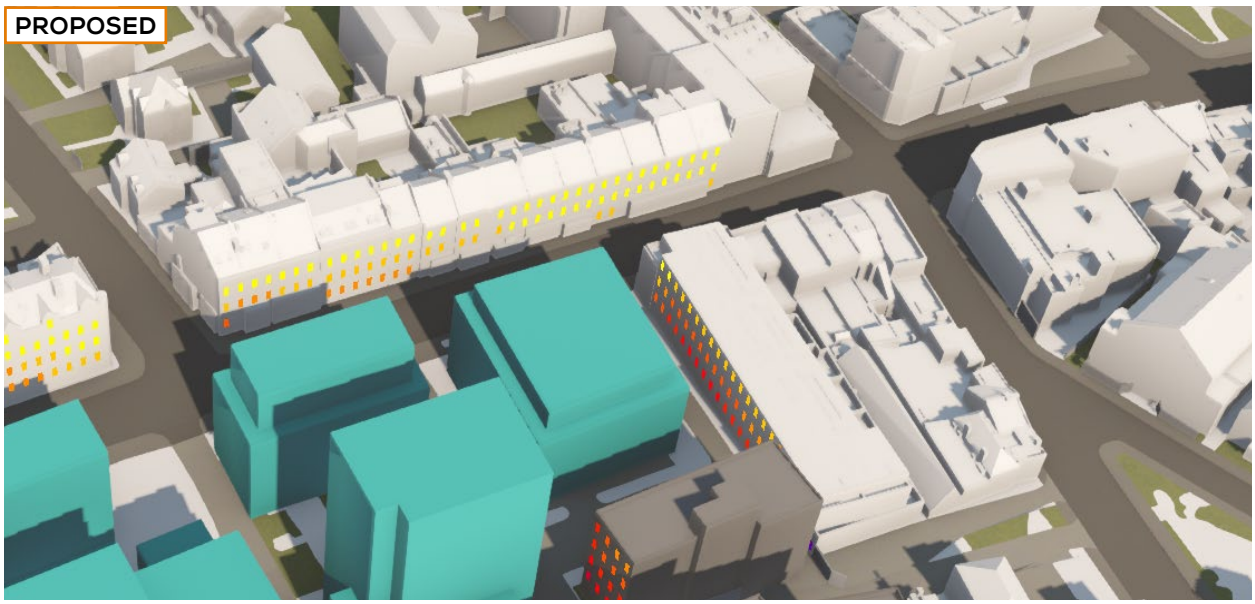


Figure 75: Indicative VSC values

DAYLIGHT AMENITY WITHIN THE SITE

The daylight potential for the scheme is overall very good, with only isolated areas seeing lower levels of VSC than ideal.

A few areas, highlighted in the diagrams, would receive lower levels of daylight so particular care should be taken when designing a scheme in detail to make sure the daylight ingress is maximised. Owing to the levels of VSC seen, maximising the fenestration should suffice to deliver accommodation that will likely meet the minimum recommendations in most instances, however single-aspect deep rooms should be avoided.

The few areas where enlarging the windows is not sufficient can be further mitigated by providing dual-aspect units, which will have the opportunity to benefit from generous levels of light coming from other directions.

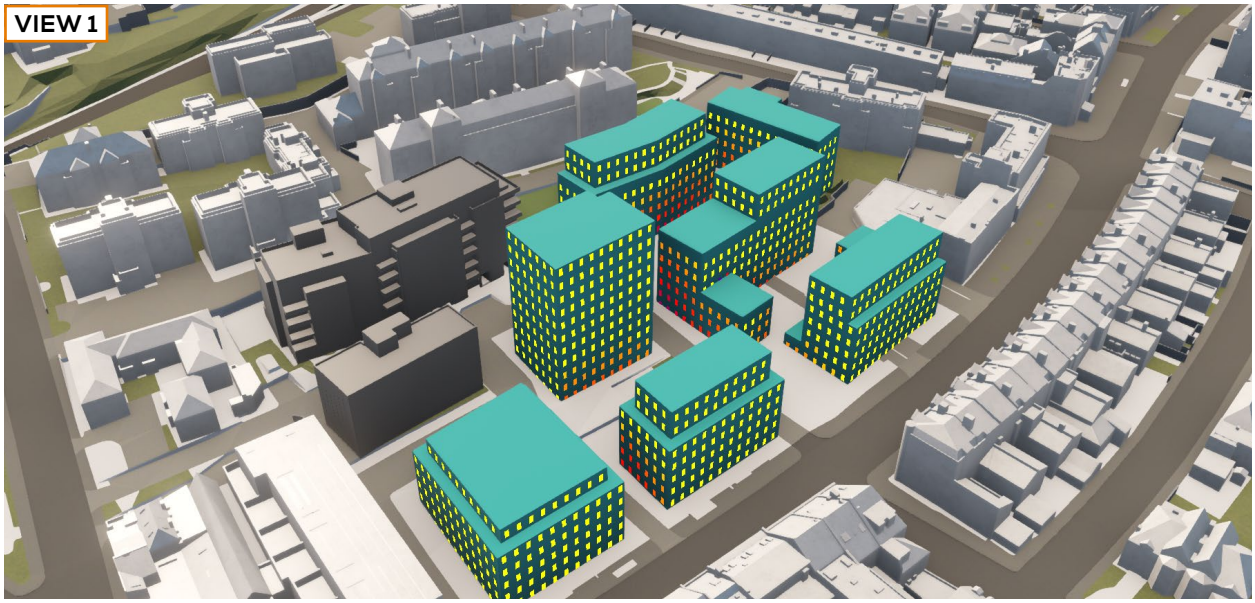
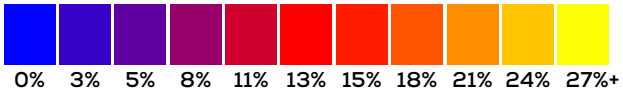


Figure 76: Daylight Potential (VSC)

Figure 77: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



It should be noted that balconies inherently restrict the access to daylight and sunlight to the windows set below them (if projecting) or behind them (if recessed). Therefore, their effects should be mitigated, where possible, providing rooms with additional windows free of obstructions, or by staggering balconies or internal layouts so that the windows serving the living areas are not overhung.

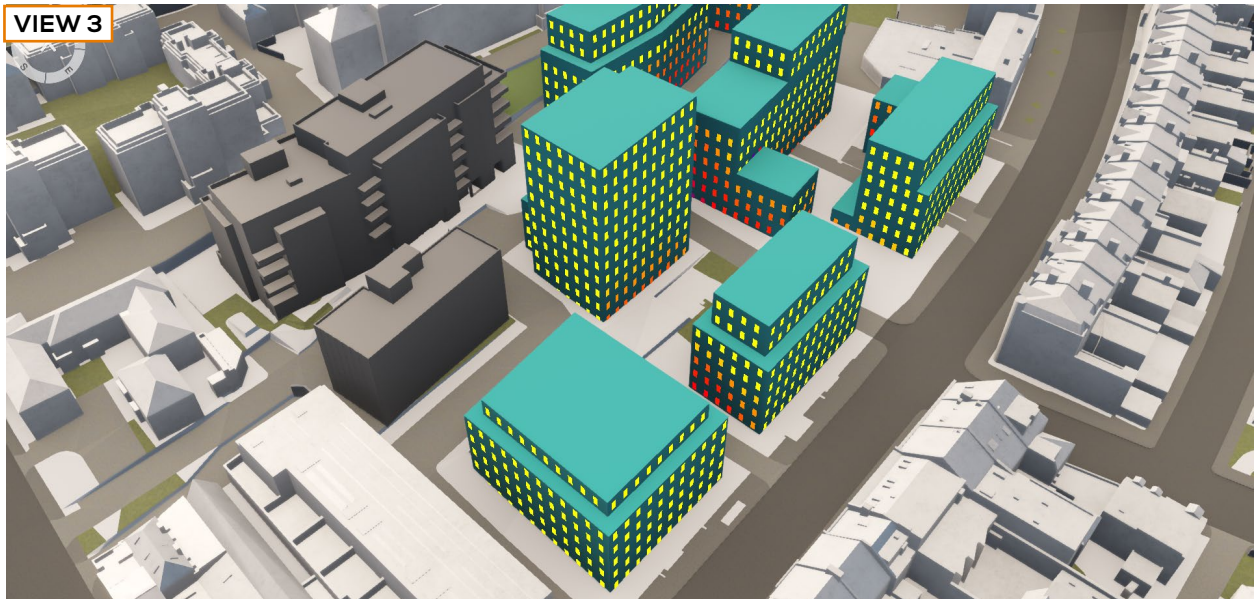


Figure 78: Daylight Potential (VSC)

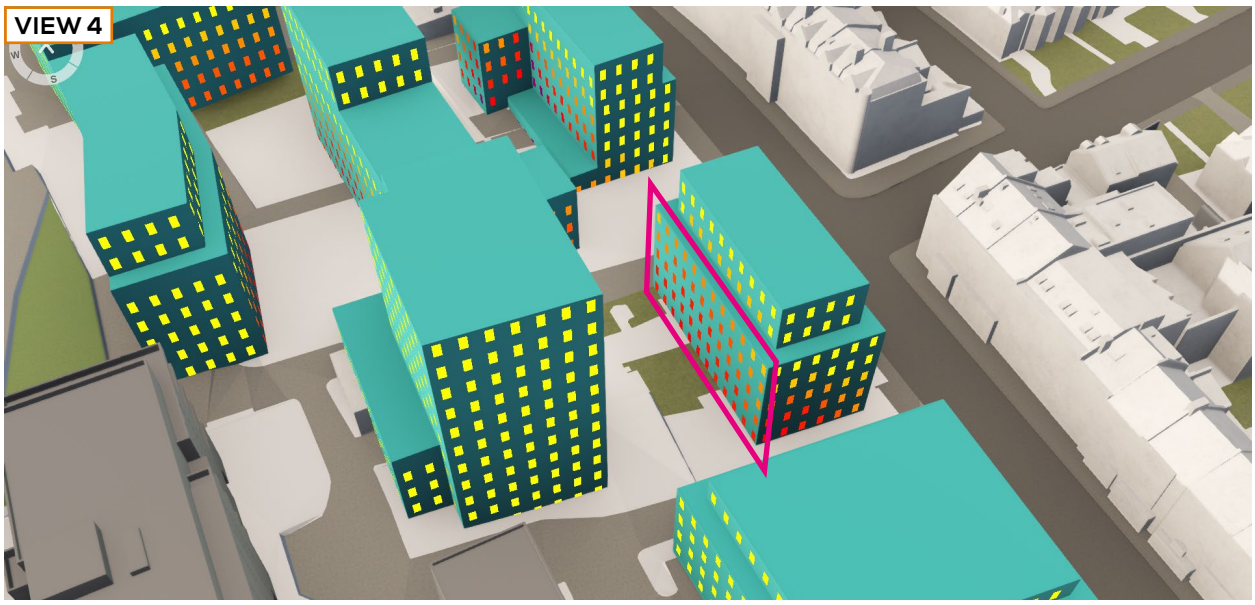
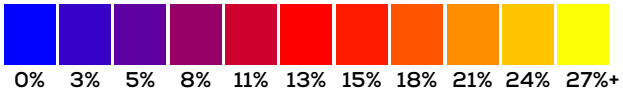


Figure 79: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



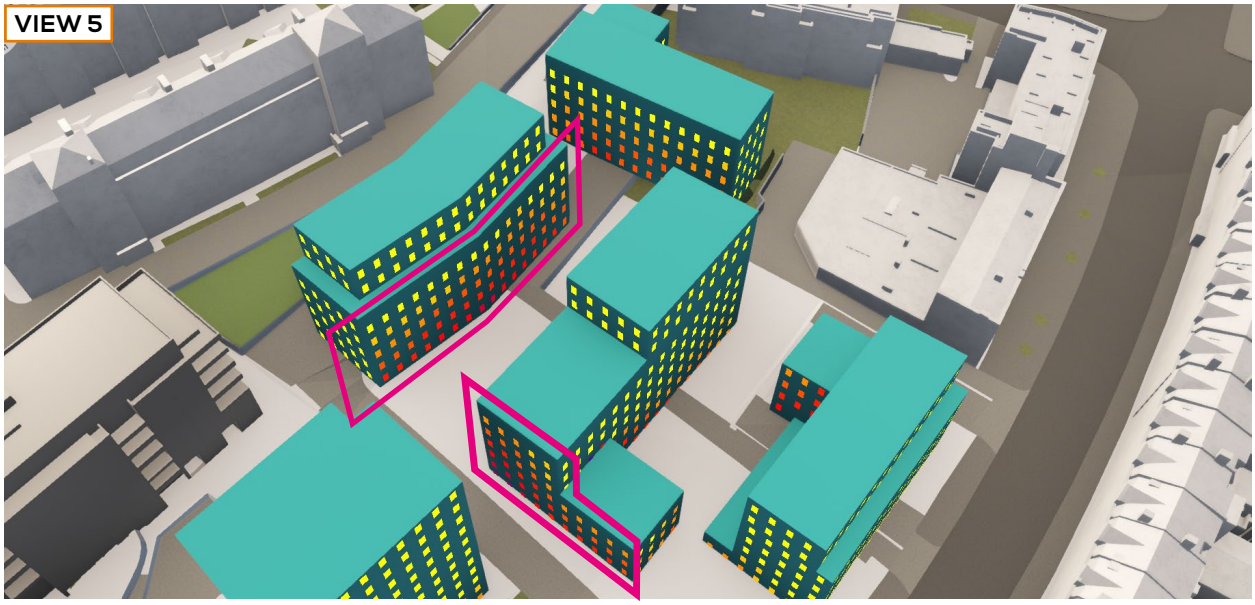


Figure 80: VSC

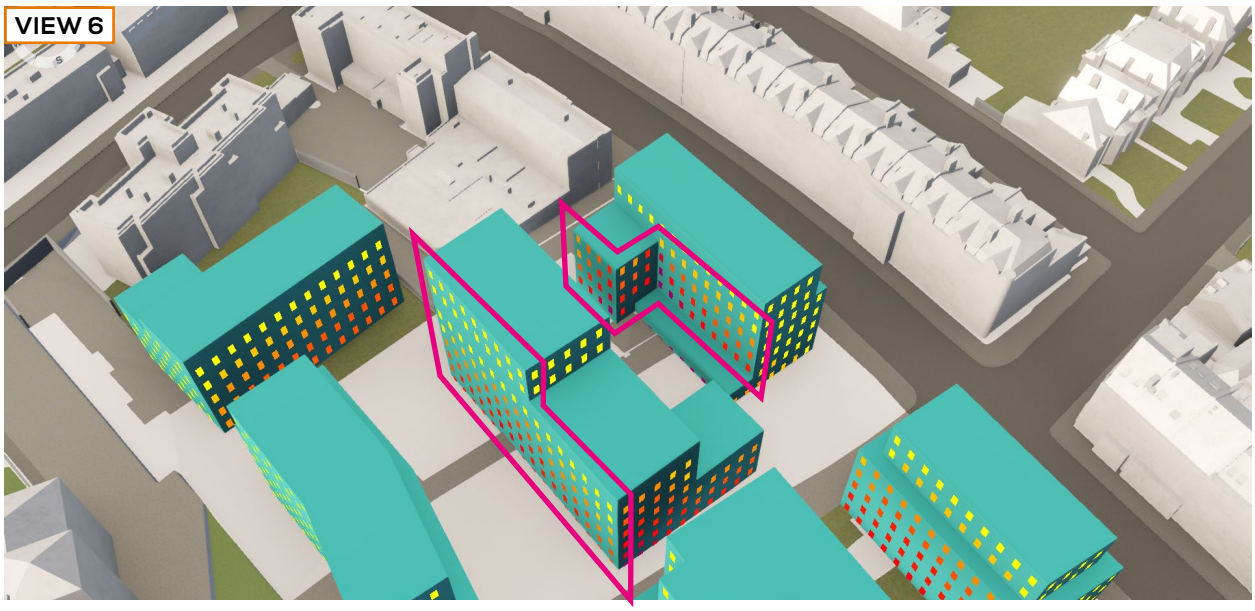


Figure 81: Proposed VSC values

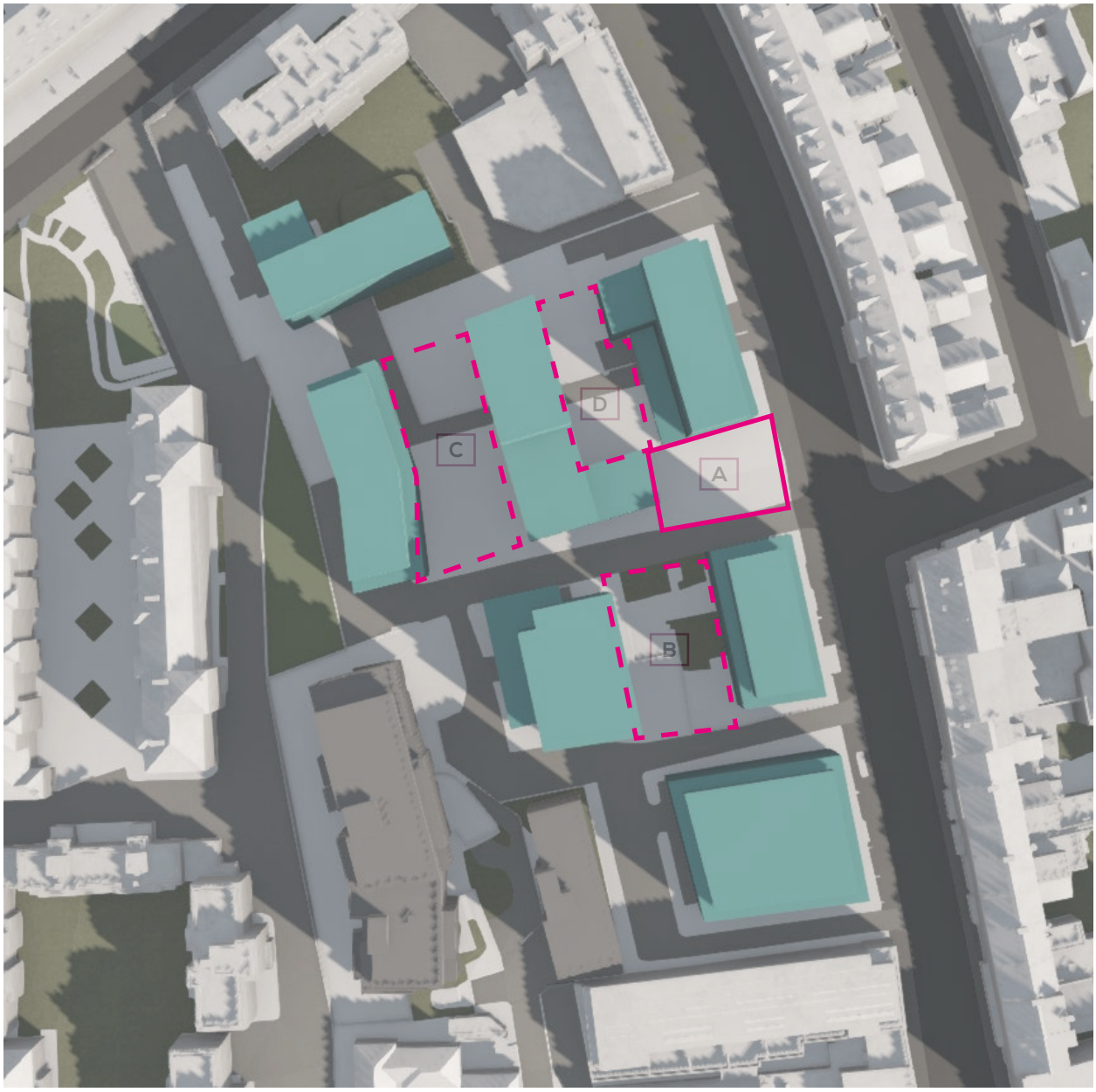
OVERSHADOWING

There will be little overshadowing of neighbouring amenity areas, with the exception of Thanet House's rear gardens, which would see their sunlight availability noticeably reduced.

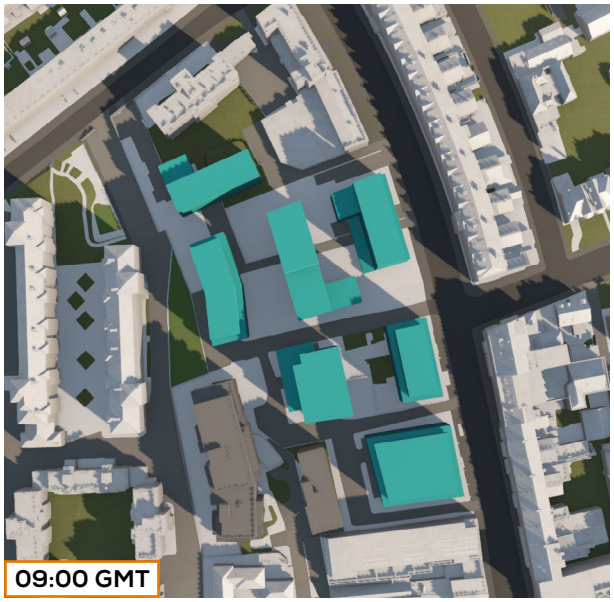
When looking at the sunlight availability within the proposed open spaces, the main square (A) will receive plenty of sunlight.

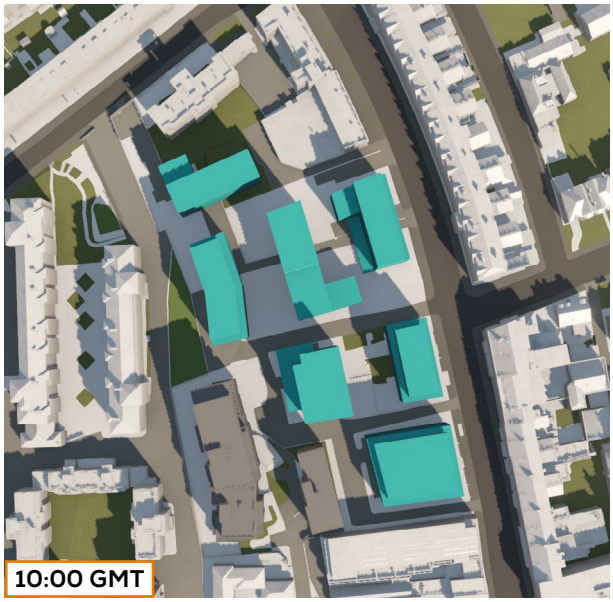
The remaining areas would experience different levels of sunlight exposure, with area B expected to perform well, and area C likely to fall short slightly of the BRE recommendations. Its southern portion would however offer good sunlight levels and is so suitable to provide open amenity areas, if required.

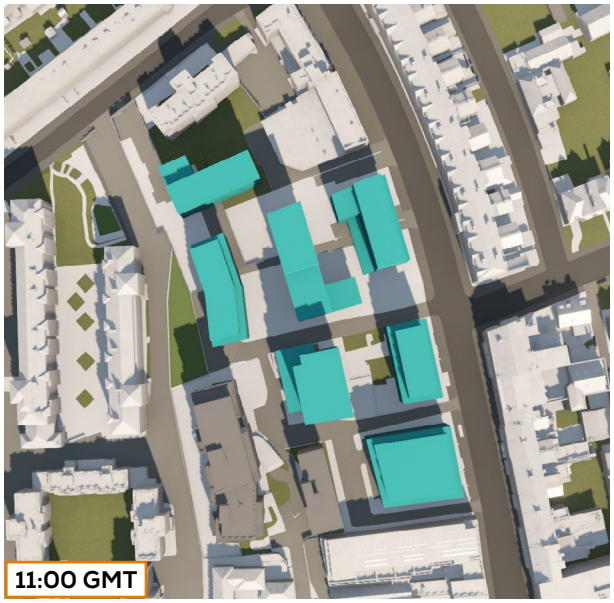
Area D, conversely, would offer better levels of sunlight towards its north end, as the southern portion would be overshadowed by the massing configuration of L of the block to the west. Should more sunlight be sought, opening up the area to the south would help.

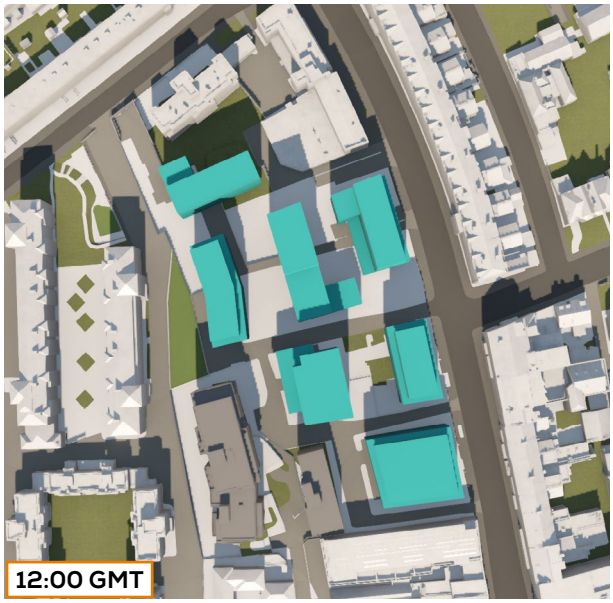


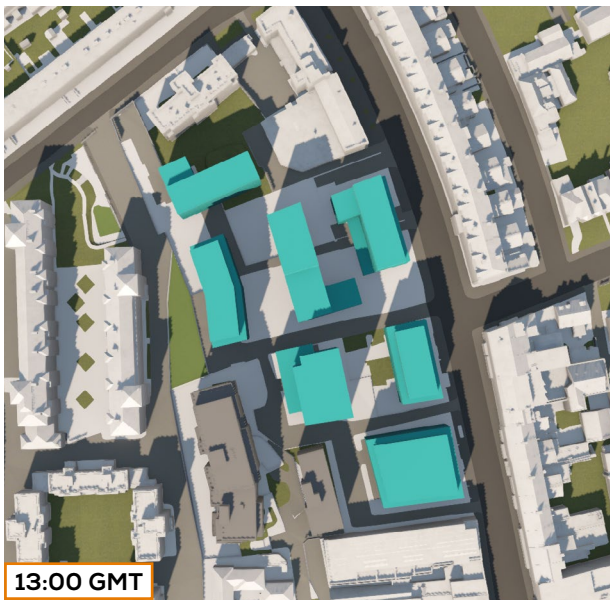
TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH

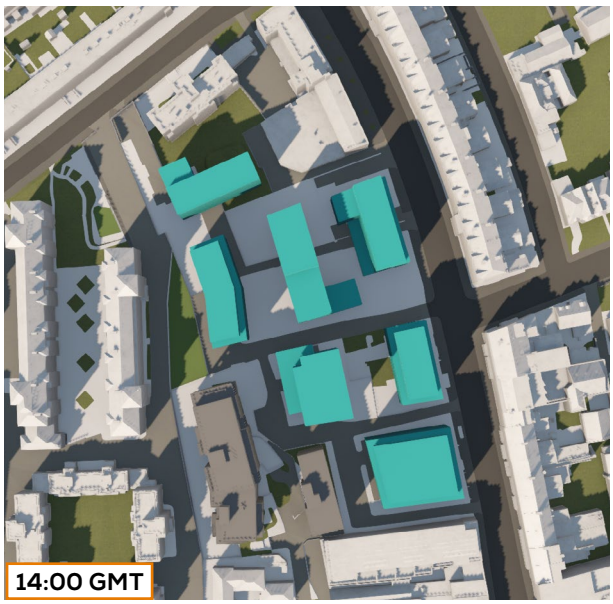




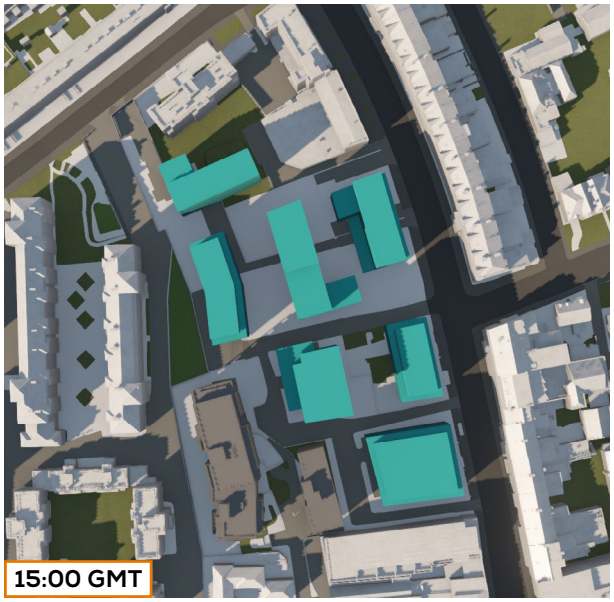


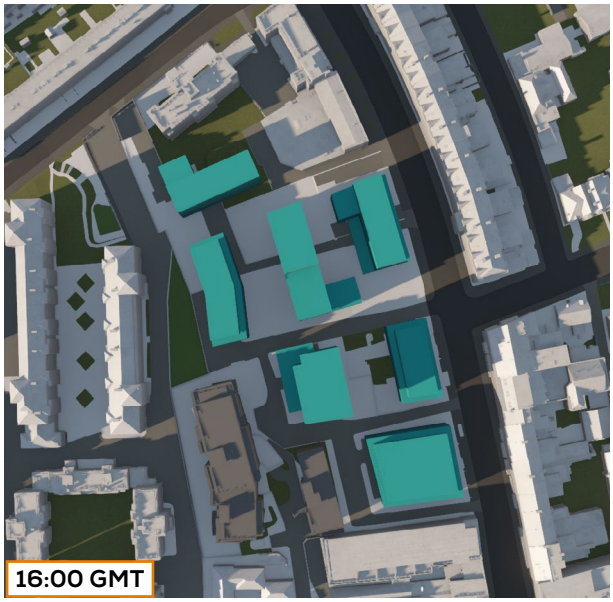


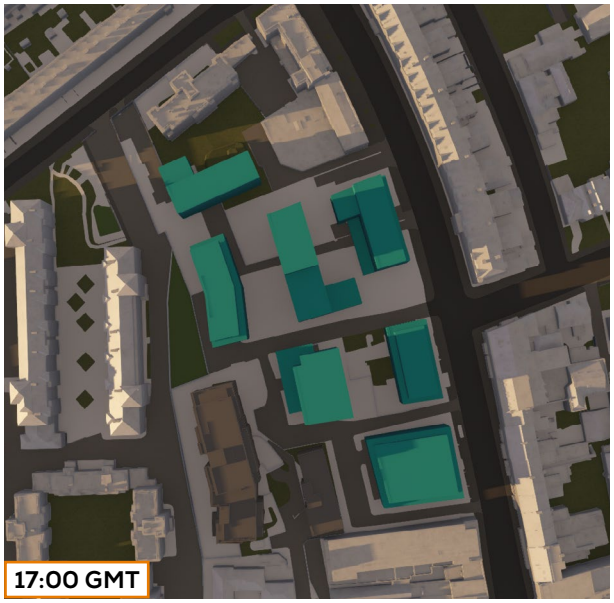




TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH







21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

N

gia

12 SITE 20: TESCO, 13 ACRE LANE, SW2

INTRODUCTION AND SCOPE

Having identified the surrounding uses and site facing windows, Vertical Sky Component (VSC) facade studies were completed to understand daylight potential in the existing and indicative scenarios. In line with the BRE Guidelines, the focus was on residential properties along with any non-domestic buildings where occupants may have a reasonable expectation for daylight; i.e. schools, hospitals, hotels and places of worship.

The identified uses are illustrated in Figure 82 below.

Similarly, a VSC facade study was undertaken on the indicative façades, to understand the potential for the indicative scheme to provide future occupants with good levels of daylight and sunlight.

Finally, an overshadowing study was also completed showing how the shadow cast by the indicative massing would affect the open spaces within and around the site.

Images illustrating the results of these assessments are shown within Sections 2, 3 and 4.

Figure 82: Use map

GIA's façade study identified little or no change in daylight to the vast majority of neighbouring properties surrounding the site. Where change in VSC was noted, this was to areas that were inherently sensitive due to projecting wings or recessed façades.

The BRE Guide acknowledges at paragraph 2.2.14 such design features may result in a "larger relative reduction in VSC". In addition the lower retained VSC values at the recently constructed building at 41 Acre Lane are isolated at ground level, which will be of commercial use and therefore not considered a sensitive receptor for daylight.

As such, GIA consider the massing is appropriate for its context with view of potential impact on neighbouring daylight and sunlight amenity.

VSC ASSESSMENT - VIEW 1
PROPERTIES TO THE NORTH OF THE SITE (40-64 ACRE LANE)

Figure 83: Existing VSC values

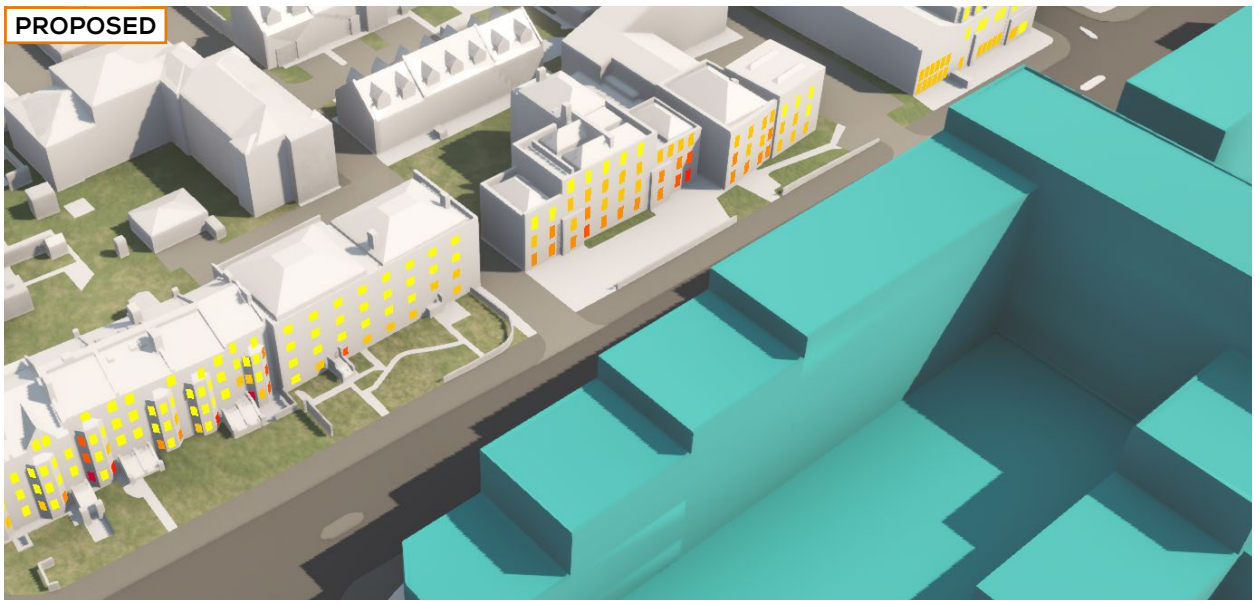
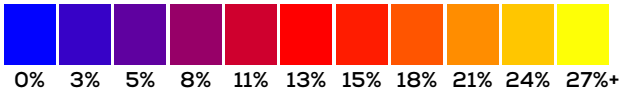


Figure 84: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)

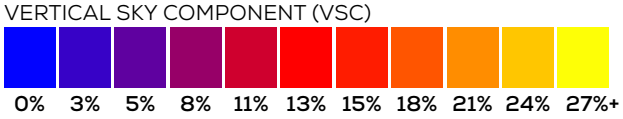


VSC ASSESSMENT - VIEW 2
PROPERTIES TO THE EAST OF THE SITE (1 ACRE LANE 1-22 PORDEN ROAD)

Figure 85: Existing VSC values

Figure 86: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



VSC ASSESSMENT - VIEW 3
PROPERTIES TO THE SOUTH OF THE SITE (ARLINGTON LODGE ESTATE AND 2-28 AND 17-59 BAYTREE ROAD)

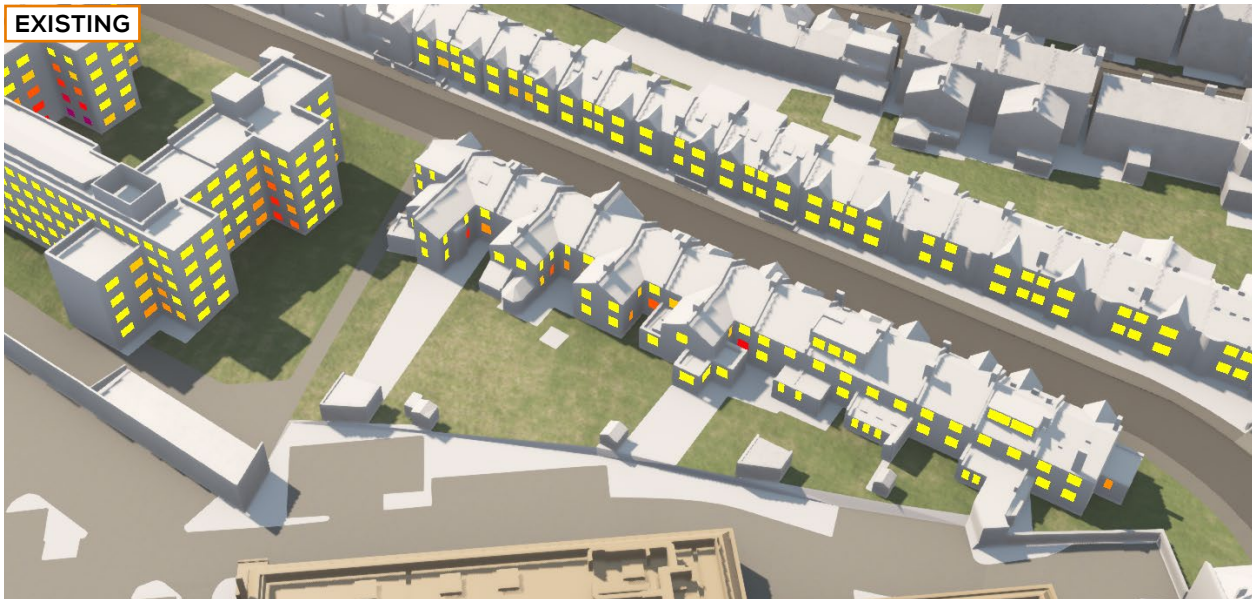
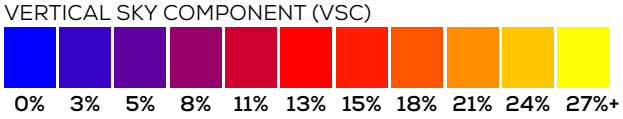


Figure 87: Existing VSC values

Figure 88: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



VSC ASSESSMENT - VIEW 4
PROPERTIES TO THE EAST OF THE SITE (65-73 BATREE ROAD AND 41 ACRE LANE)

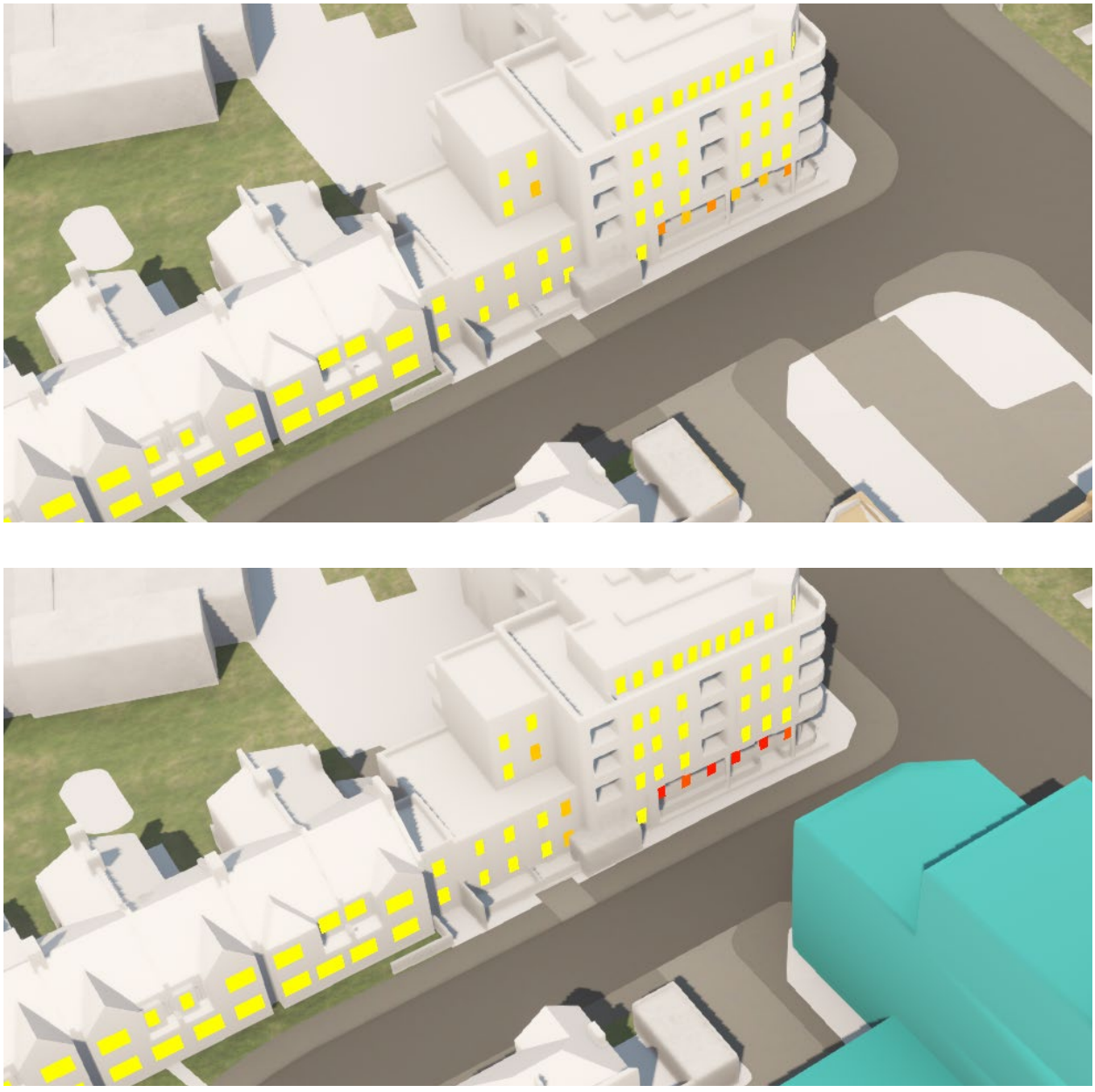


Figure 89: Indicative VSC values

DAYLIGHT AMENITY WITHIN THE SITE

Very good levels of daylight are reaching most of the scheme's elevations.

Windows located close to the inner corners of the open courtyards would have a slightly reduced daylight ingress, however this can be easily compensated by providing larger windows. Similar levels are seen in the flank elevations of the smaller C-shaped block, however these can also be mitigated by relying on the side elevations through dual-aspect rooms. Overall, the scheme is expected to have an excellent performance from an internal daylight perspective.

It should be noted that balconies inherently restrict the access to daylight and sunlight to the windows set below them (if projecting) or behind them (if recessed). Therefore, their effects should be mitigated, where possible, providing rooms with additional windows free of obstructions, or by

Figure 90: Daylight Potential (VSC)

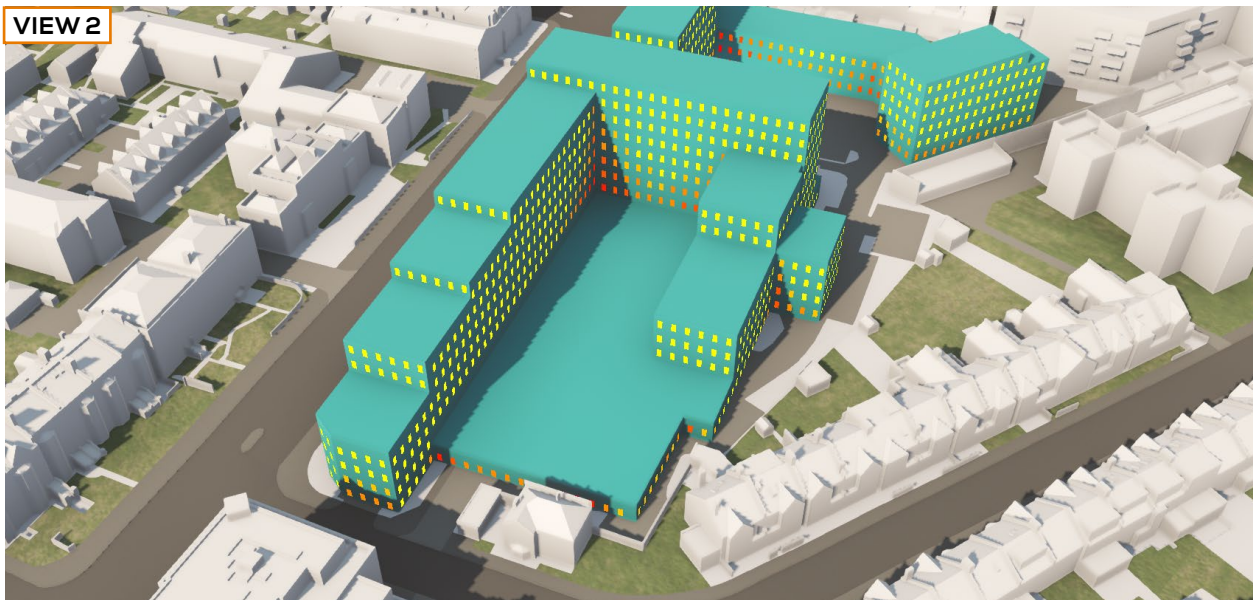
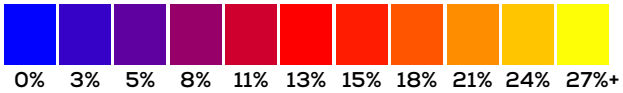


Figure 91: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



staggering balconies or internal layouts so that the windows serving the living areas are not overhung.

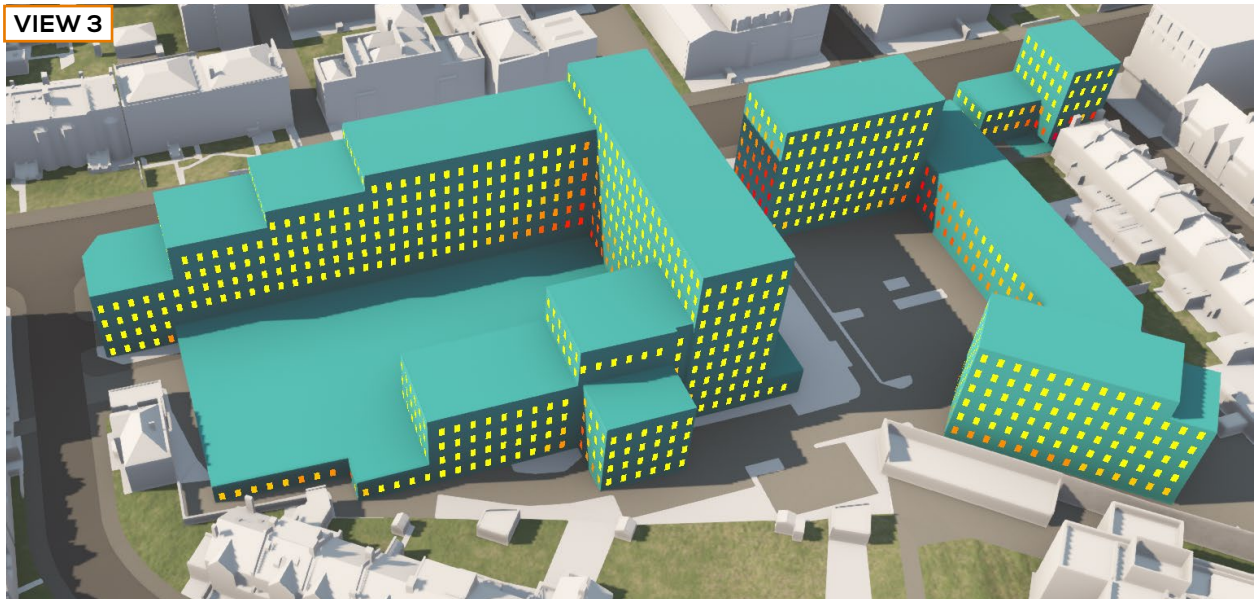


Figure 92: Daylight Potential (VSC)

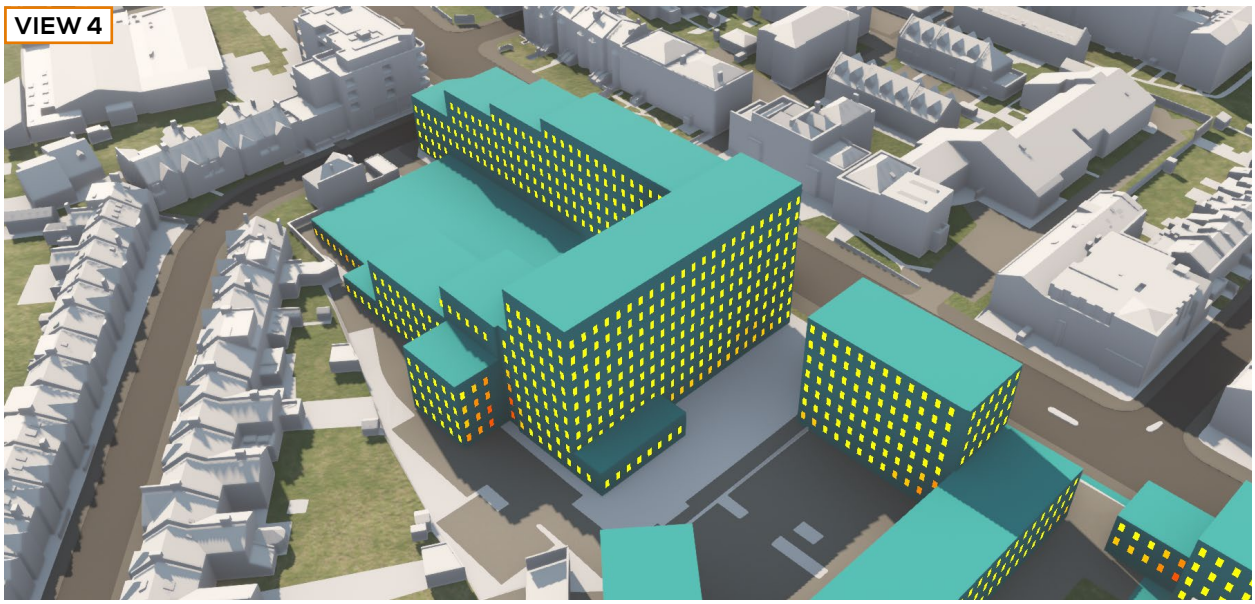
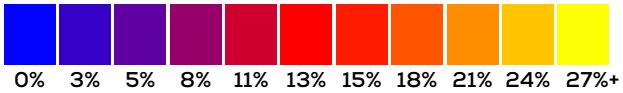


Figure 93: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



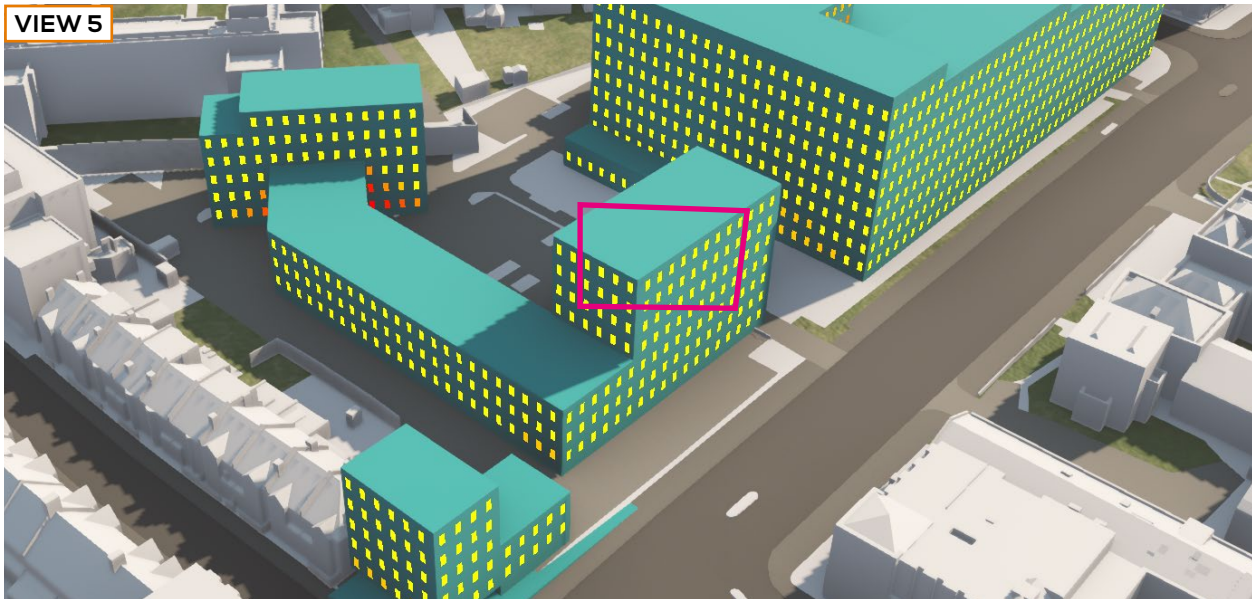


Figure 94: VSC

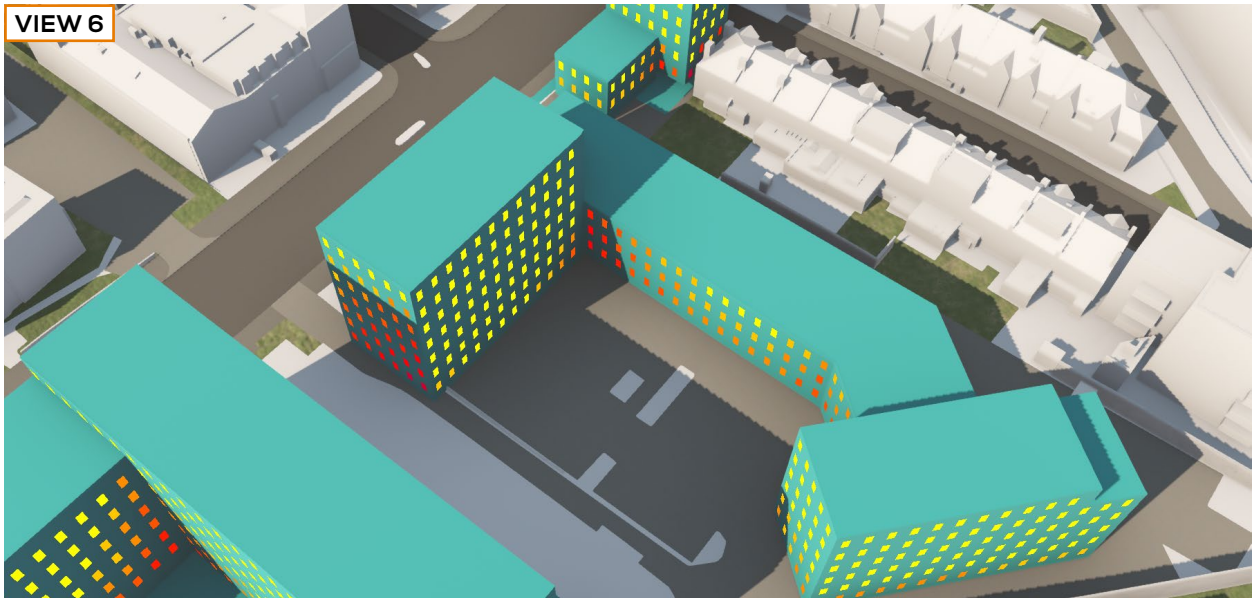


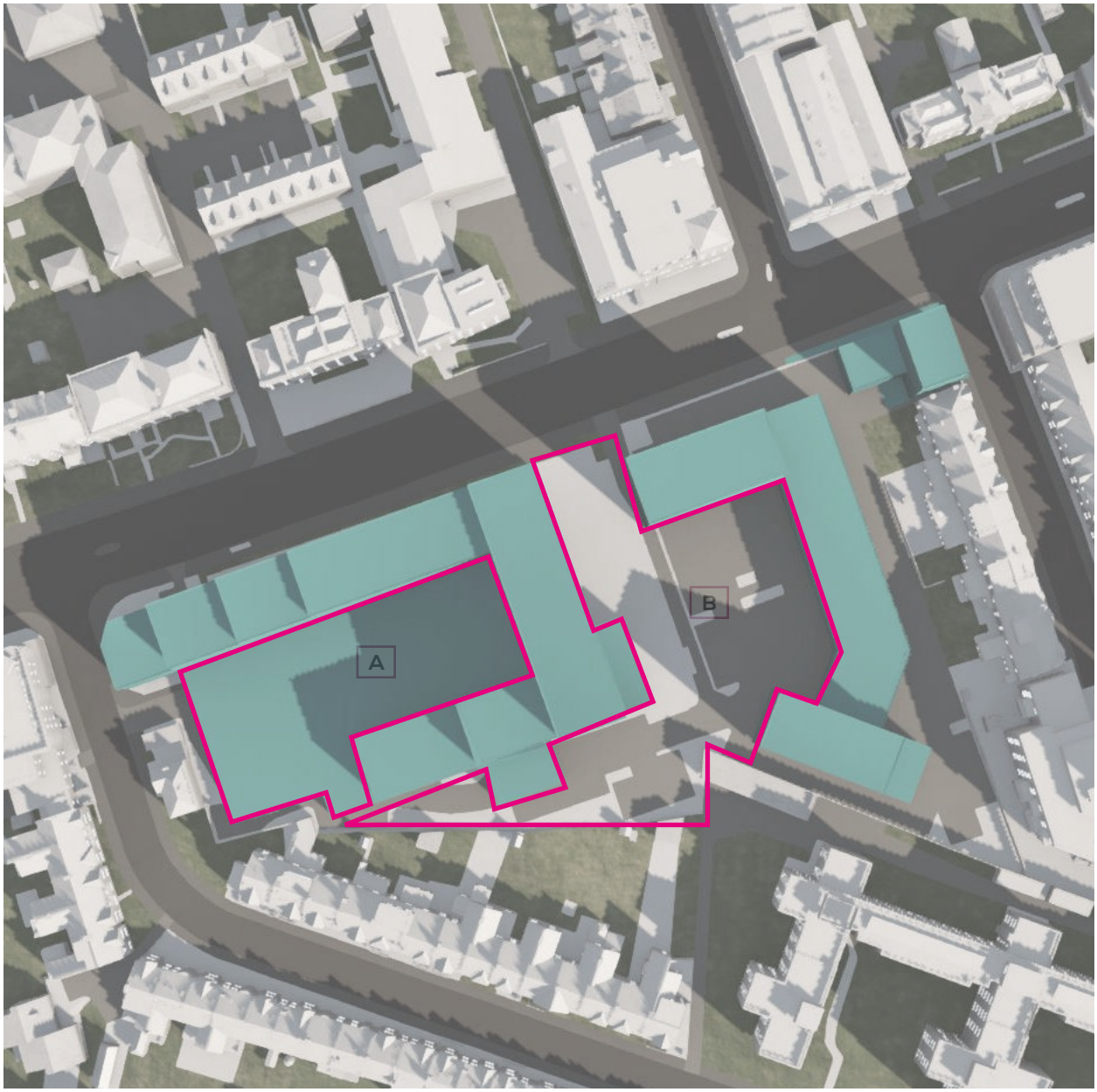
Figure 95: Indicative VSC values

OVERSHADOWING

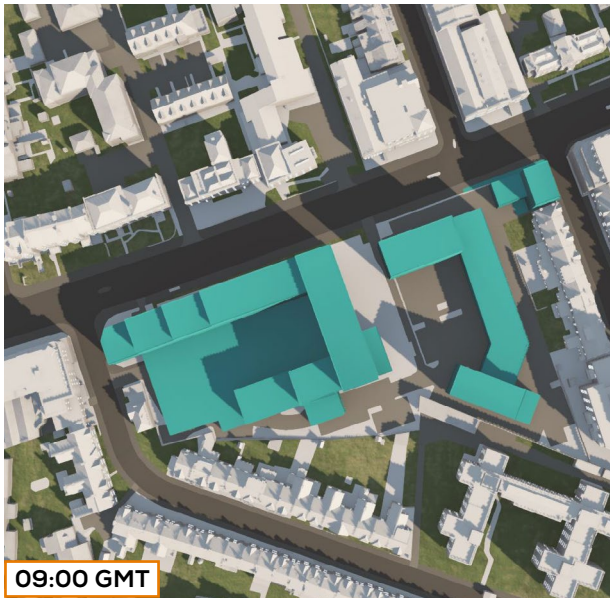
There will be some overshadowing to the neighbouring amenity areas located north and east. Those to the north will receive some additional shade in the morning, but will have plenty of afternoon sunlight. Those located east will receive additional shadow in the afternoon. As the shadow plots demonstrate, over two hours are likely to be retained on 21st March and so they would remain compliant with the BRE Guidelines.

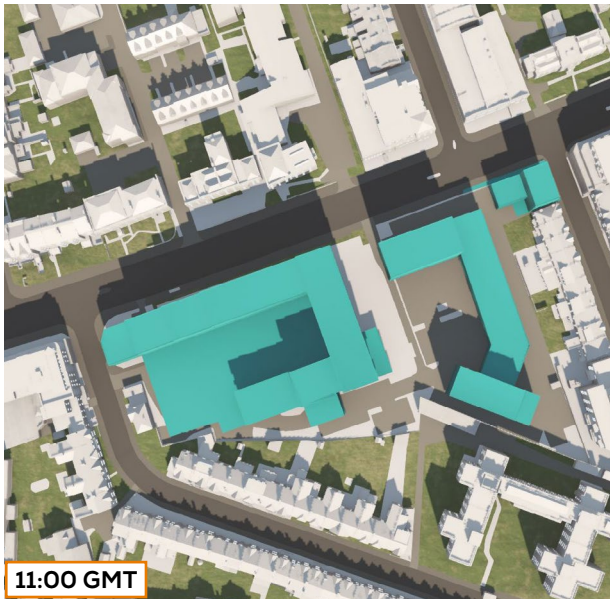
The podium courtyard terrace (labelled as A in the image below) will see good sunlight levels and the public realm (B) is also expected to perform very well. Some areas of the public realm will be more shaded, in particular a portion of the courtyard, while others will receive plenty of sunlight, particularly the area located to the south, so the amenity space should be designed with this in mind.

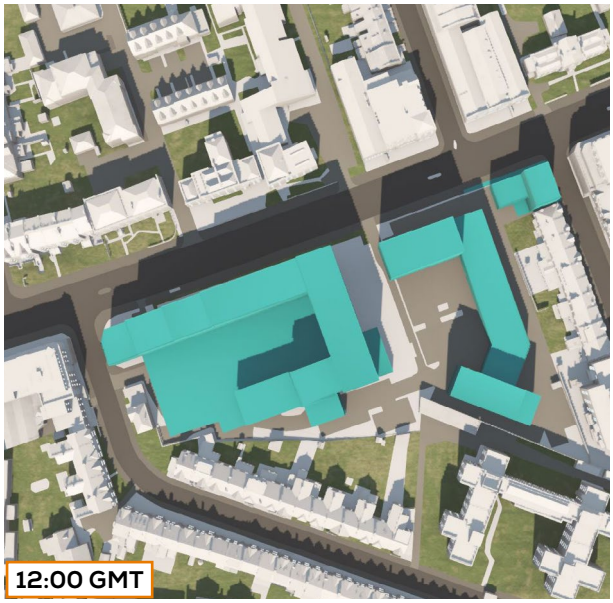
The access to sunlight will obviously improve over the summer months, likely offering future residents with excellent levels of sunlight.

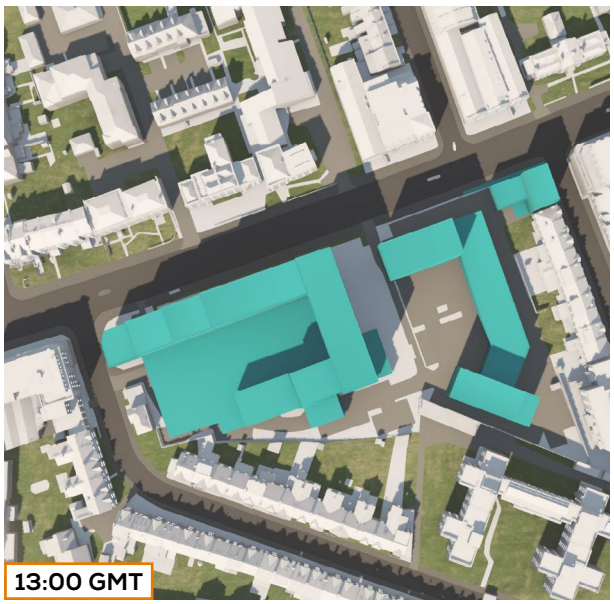


TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH

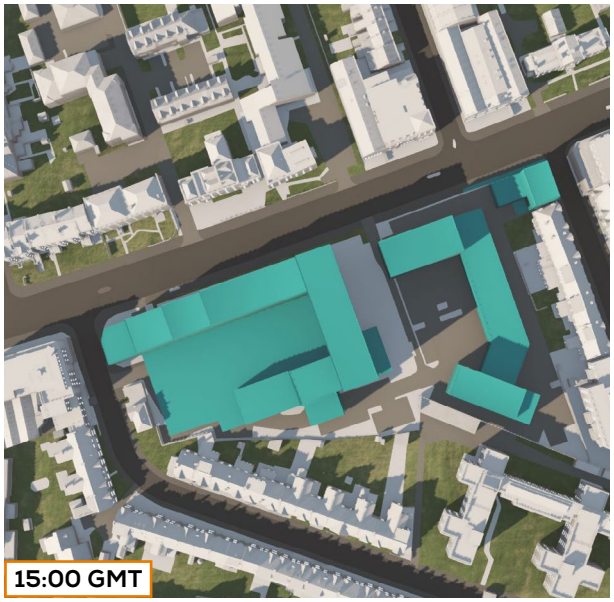


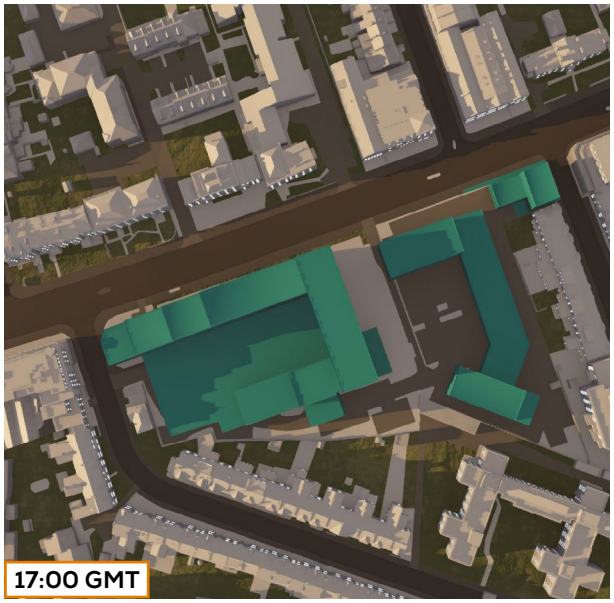






TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH





21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

N

13 SITE 21: 51-57 EFFRA ROAD SW2'

INTRODUCTION AND SCOPE

Having identified the surrounding uses and site facing windows, Vertical Sky Component (VSC) facade studies were completed to understand daylight potential in the existing and indicative scenarios. In line with the BRE Guidelines, the focus was on residential properties along with any non-domestic buildings where occupants may have a reasonable expectation for daylight; i.e. schools, hospitals, hotels and places of worship.

The identified uses are illustrated in Figure 96 below.

Similarly, a VSC facade study was undertaken on the indicative façades, to understand the potential for the indicative scheme to provide future occupants with good levels of daylight and sunlight.

Finally, an overshadowing study was also completed showing how the shadow cast by the indicative massing would affect the open spaces within and around the site.

Images illustrating the results of these assessments are shown within Sections 2, 3 and 4.

Site Boundary

Commercial

Residential

Religious

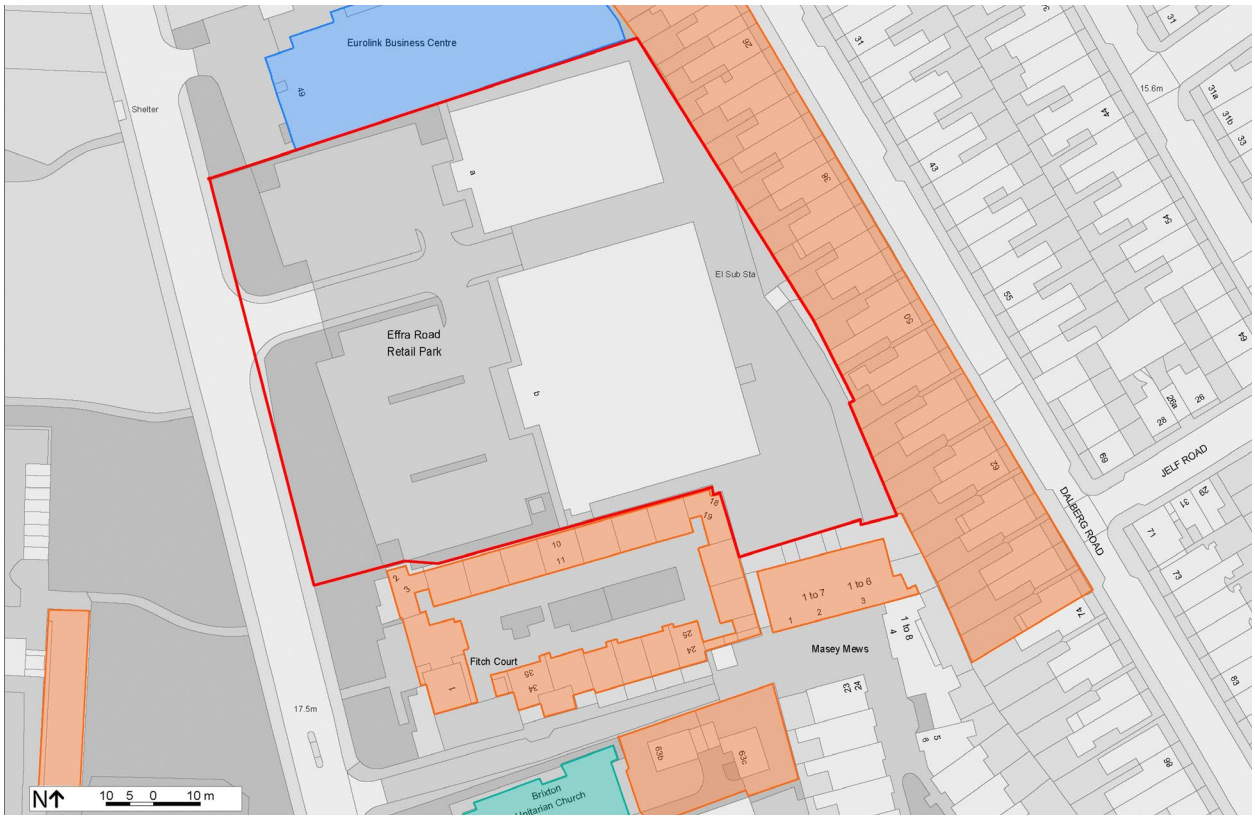


Figure 96: Use map

GIA's façade study identified little or no change in daylight to the vast majority of neighbouring properties surrounding the site. Where change in VSC was noted, this was minor and/or retained VSC levels were considered in keeping with the surrounding area.

When looking at Fitch Court, it should be noted that the building has a number of skylights that could not be captured in this indicative model and so are not illustrated in the images below. These skylights will allow for excellent levels of light to be retained within the rooms they serve.

As such, GIA consider the massing is appropriate for its context with view of potential impact on neighbouring daylight and sunlight amenity.

VSC ASSESSMENT - VIEW 1
PROPERTIES TO THE WEST OF THE SITE (7-79 ST MATTHEW'S ROAD AND 1-107 CROWNSTONE ROAD

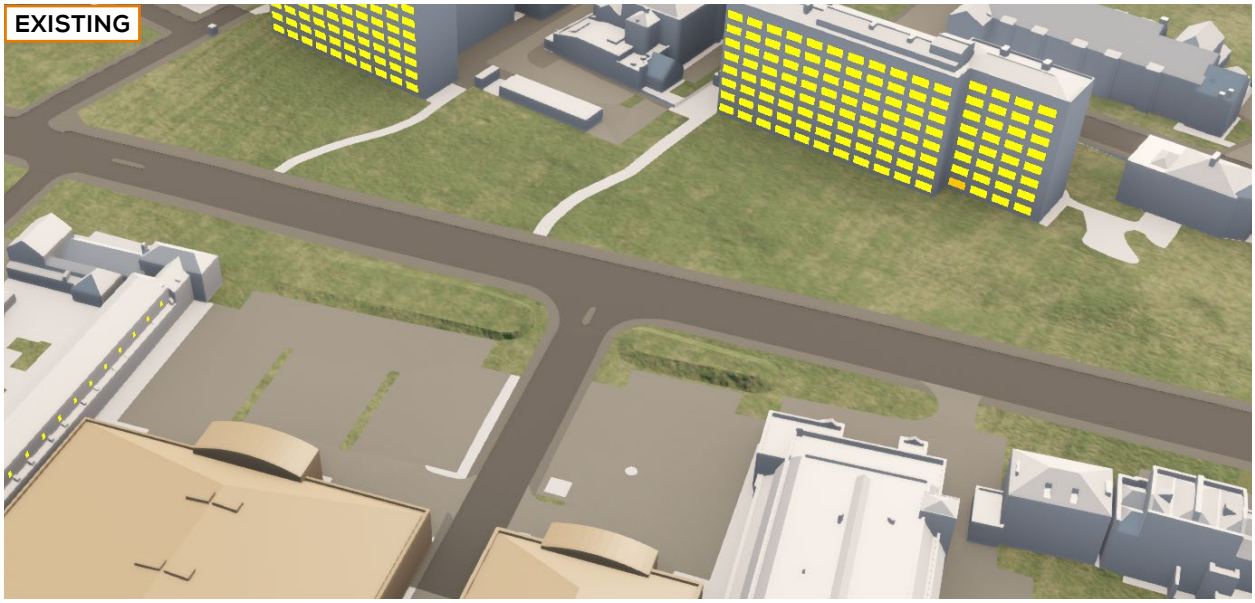


Figure 97: Existing VSC values

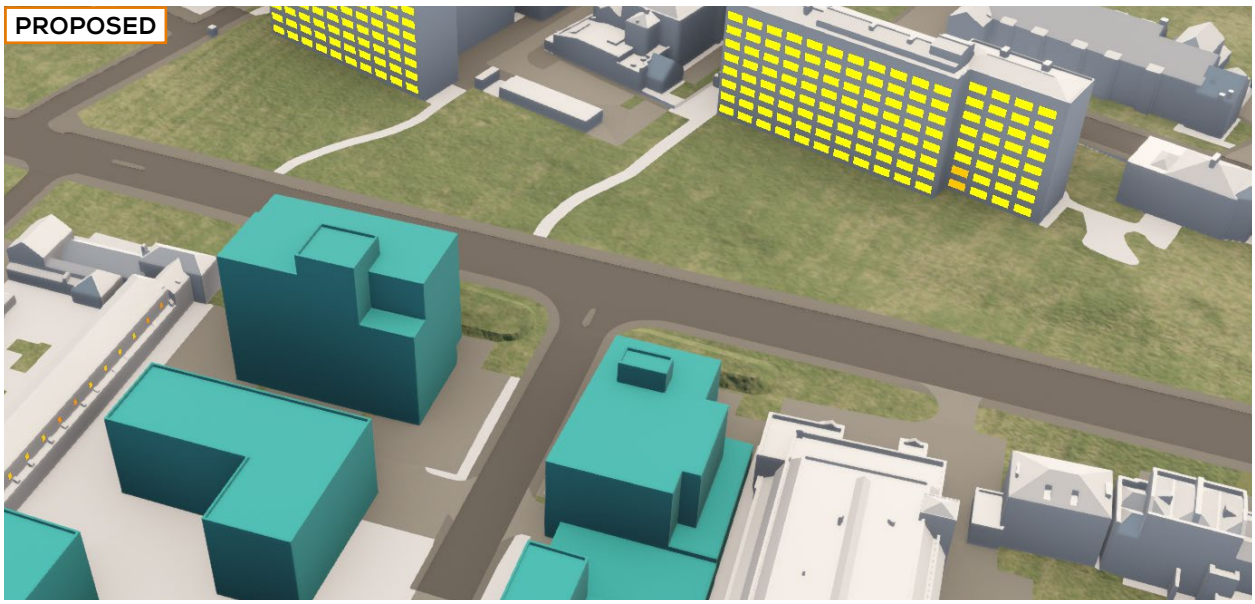
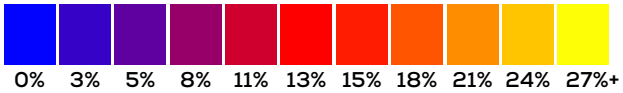


Figure 98: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



VSC ASSESSMENT - VIEW 2
PROPERTIES TO THE EAST AND SOUTH OF THE SITE (14-66 DALBERG ROAD, MASEY MEWS AND FITCH COURT)

Figure 99: Existing VSC values

Figure 100: Indicative VSC values

DAYLIGHT AMENITY WITHIN THE SITE

The daylight potential for the scheme is overall very good, with only isolated areas seeing lower levels of VSC than ideal.

Only one of the façades, highlighted in the diagrams (View 6), would see lower levels of daylight than ideal to a substantial proportion of its area. Therefore, particular care should be taken when designing a scheme in detail to make sure the daylight ingress is maximised.

Owing to the levels of VSC seen, maximising the fenestration should suffice to deliver accommodation that will likely meet the minimum recommendations in most instances, however single-aspect deep rooms should be avoided.

Providing dual-aspect units, which will have the opportunity to benefit from generous levels of light coming from other directions, would offer some additional mitigation.

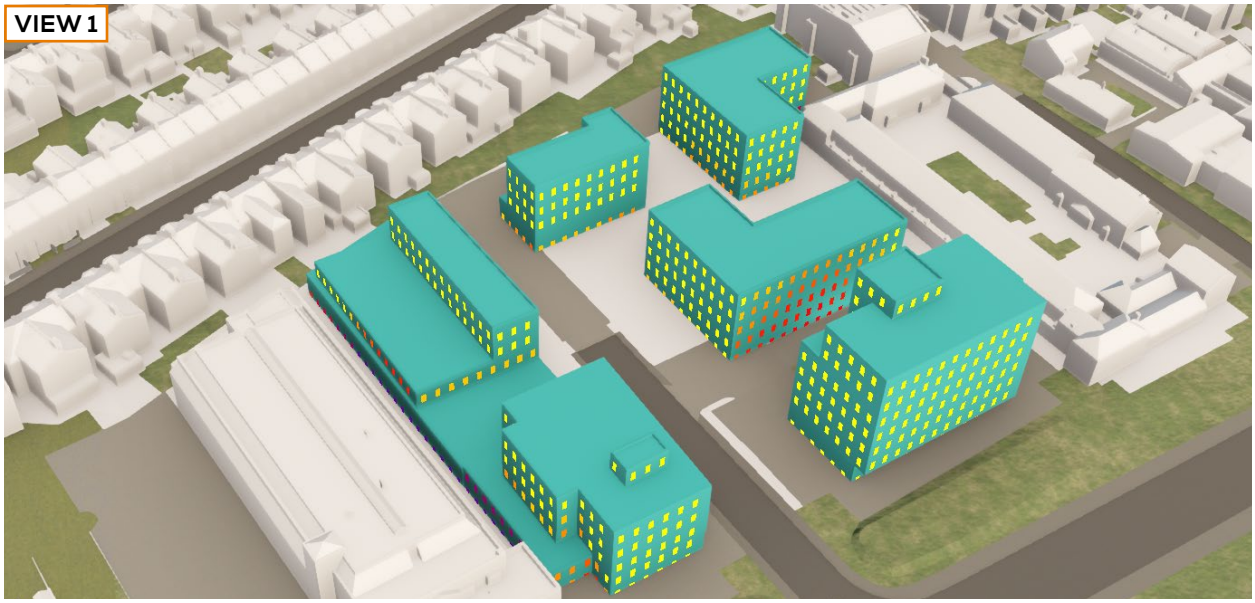


Figure 101: Daylight Potential (VSC)

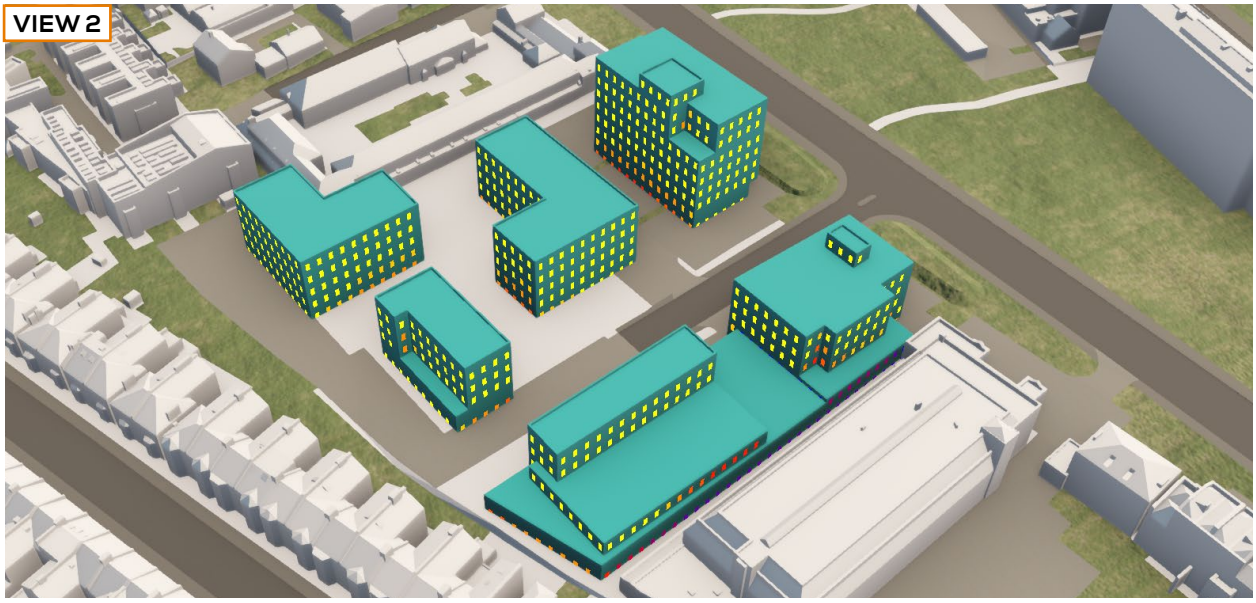
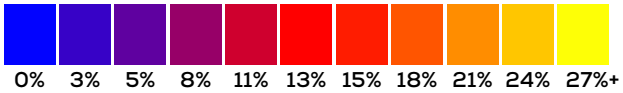


Figure 102: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



It should be noted that balconies inherently restrict the access to daylight and sunlight to the windows set below them (if projecting) or behind them (if recessed). Therefore, their effects should be mitigated, where possible, providing rooms with additional windows free of obstructions, or by staggering balconies or internal layouts so that the windows serving the living areas are not overhung.

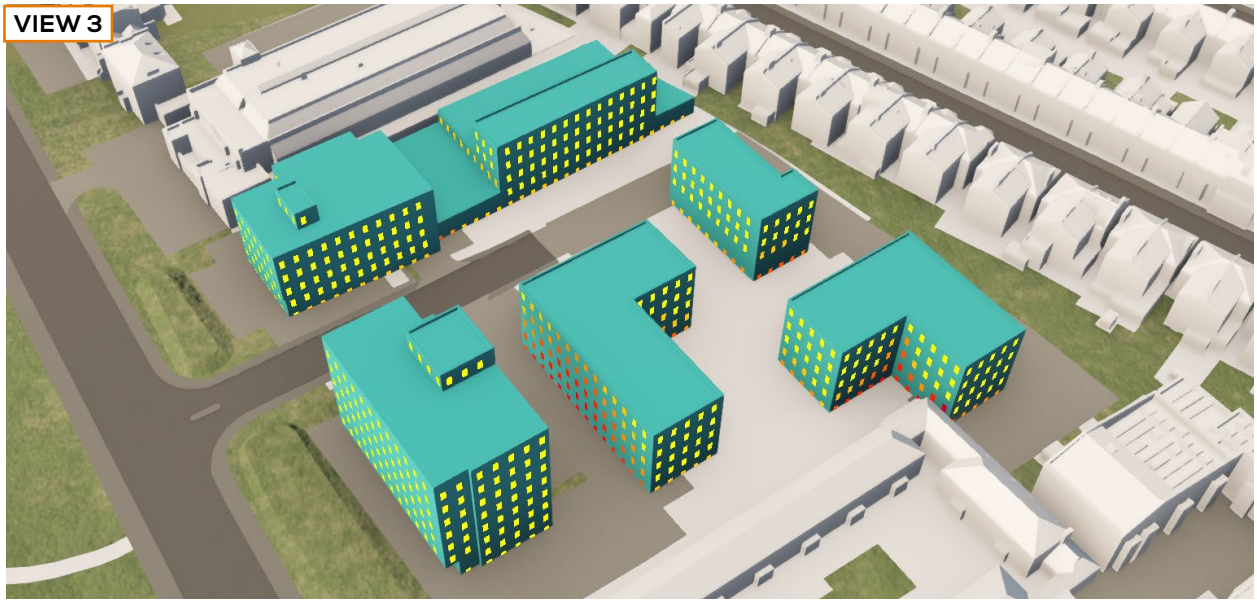


Figure 103: Daylight Potential (VSC)

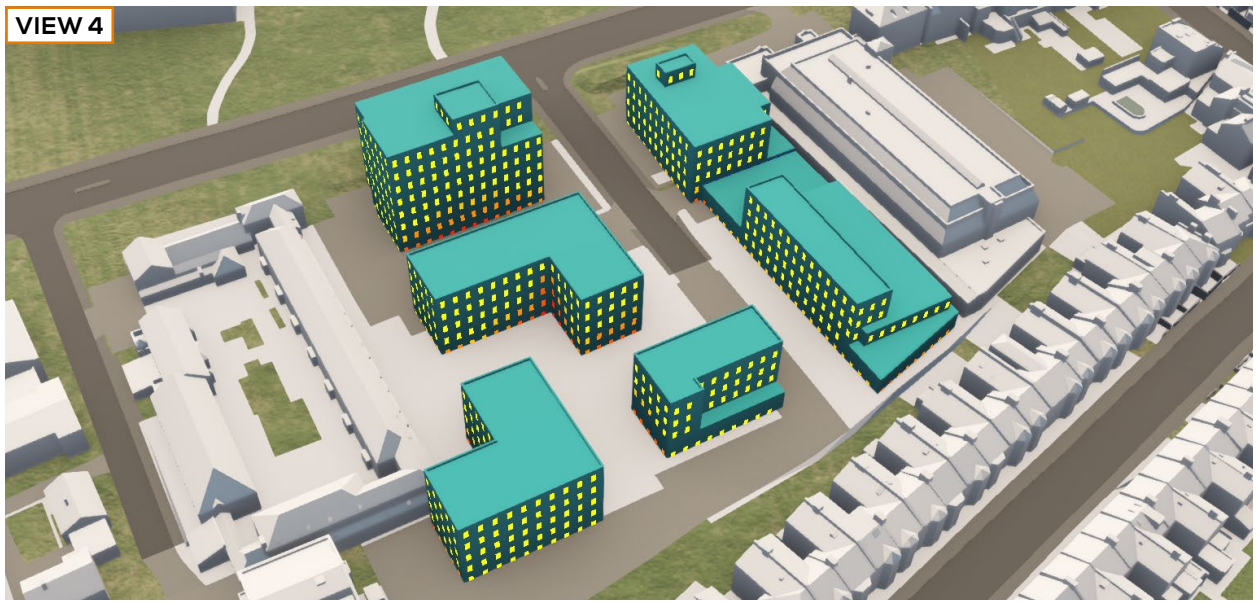
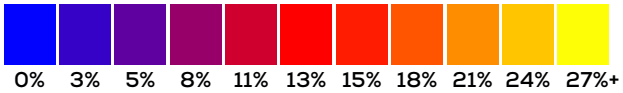


Figure 104: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



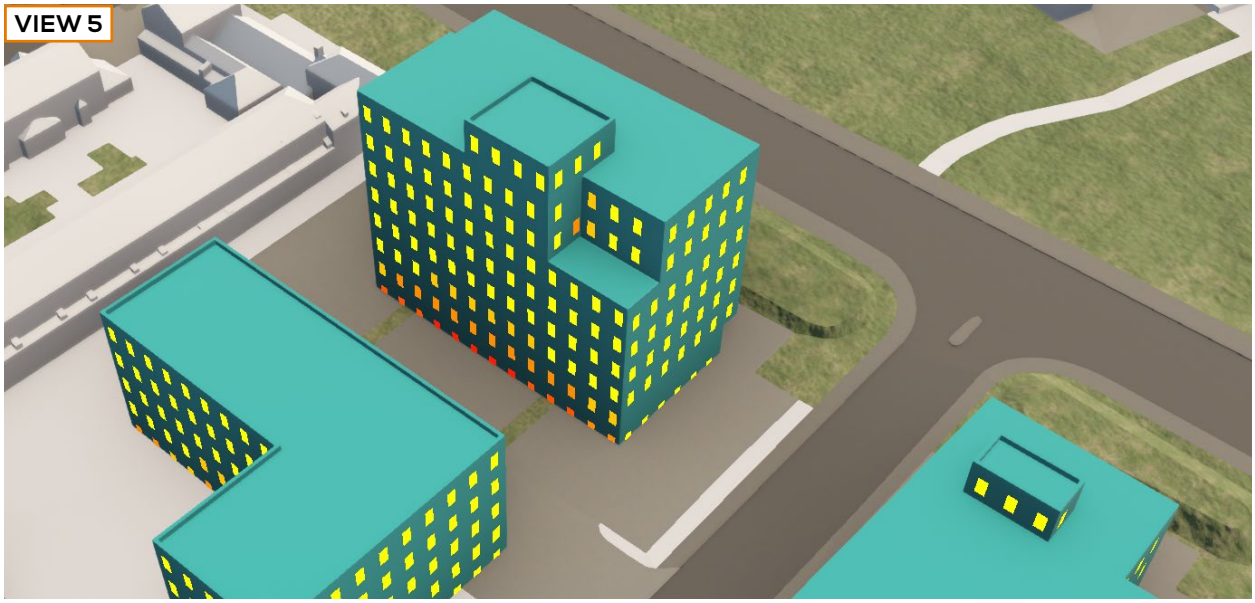


Figure 105: VSC

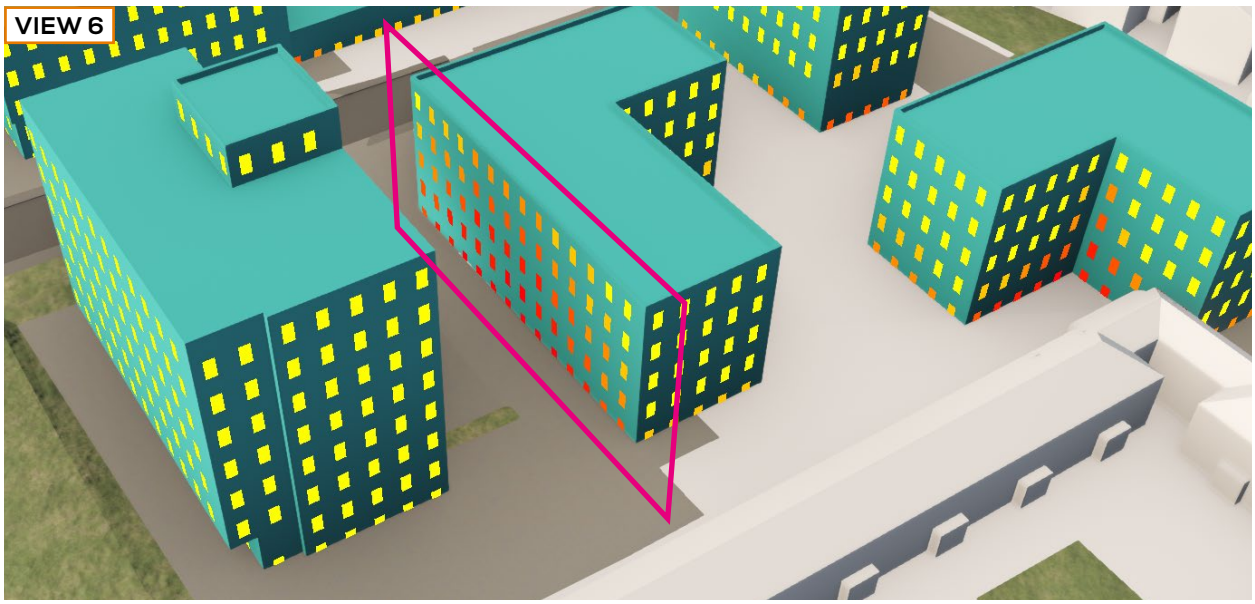


Figure 106: Proposed VSC values

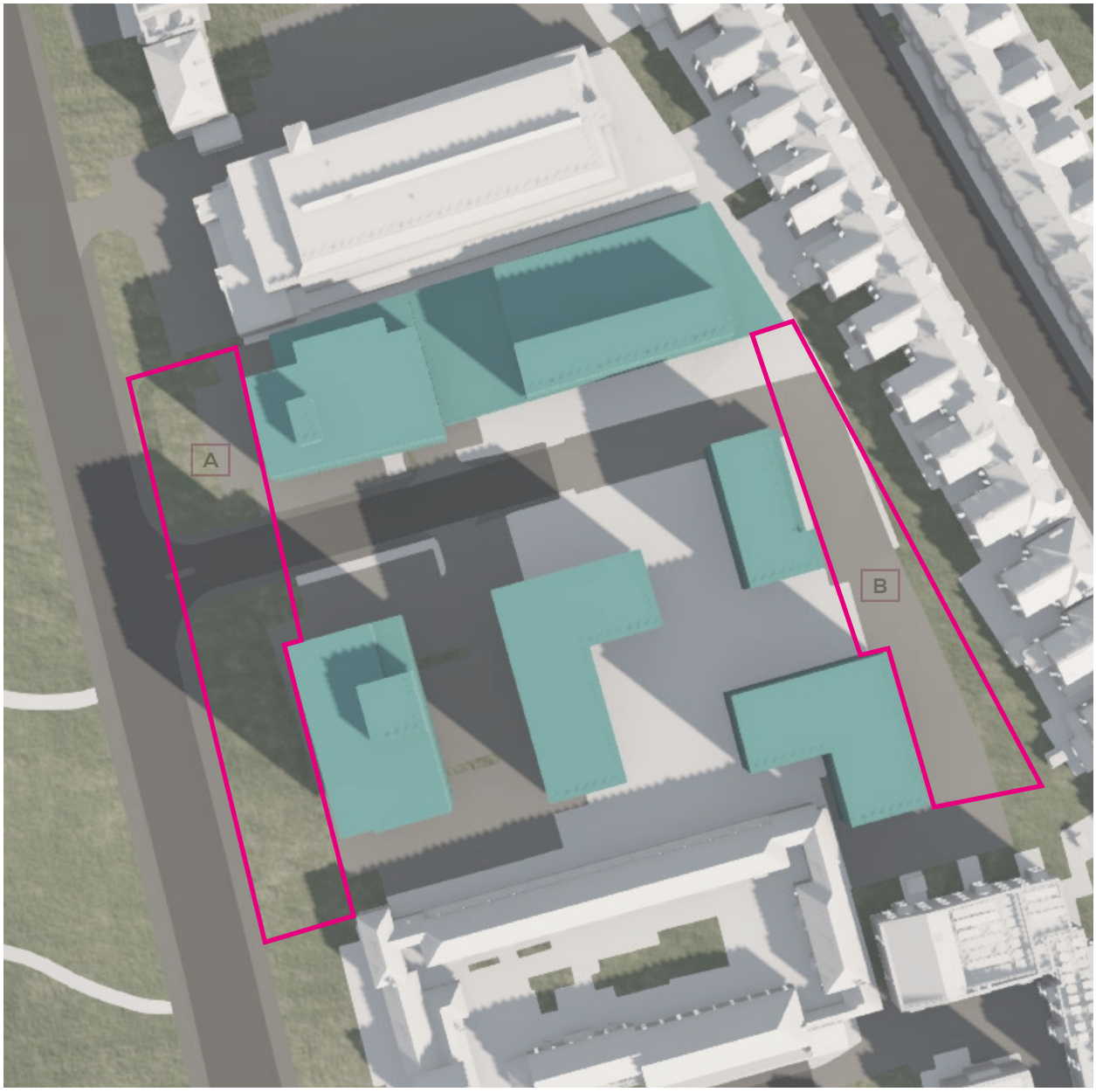
OVERSHADOWING

There will be little overshadowing of neighbouring amenity areas, mainly from mid-afternoon. These are likely to remain compliant with the BRE Guidelines.

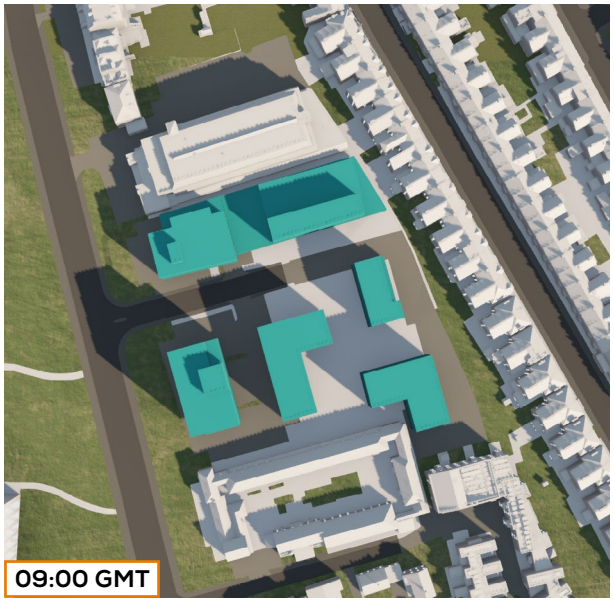
The open spaces located east and west of the indicative scheme will receive plenty of sunlight. The area to the west will receive mainly afternoon sunlight (A in the image below), while that to the east (B) will receive mainly morning sunlight. The public realm in between the buildings is also expected to exceed the minimum levels of sunlight recommended by the BRE.

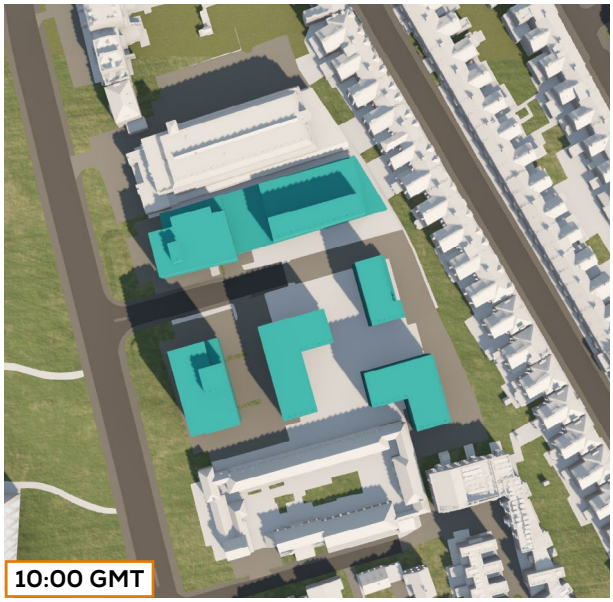
The open space to the immediate north of each of the buildings would of course be more shaded and so this should be considered when designing the public realm.

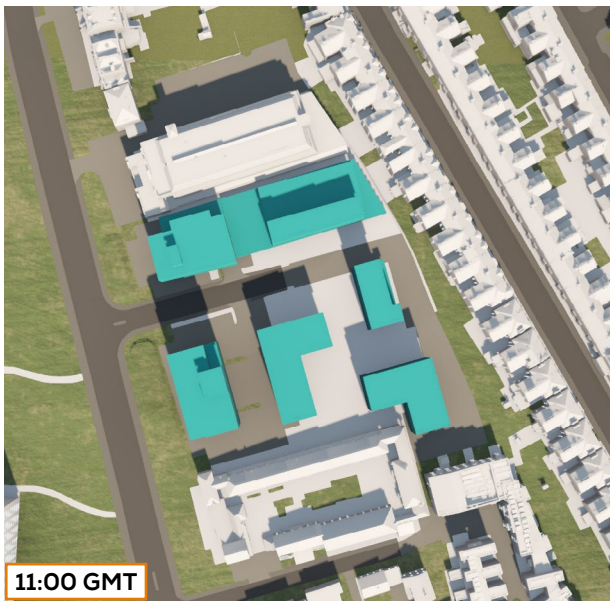
Overall, the indicative scheme will offer future residents with good levels of sunlight.

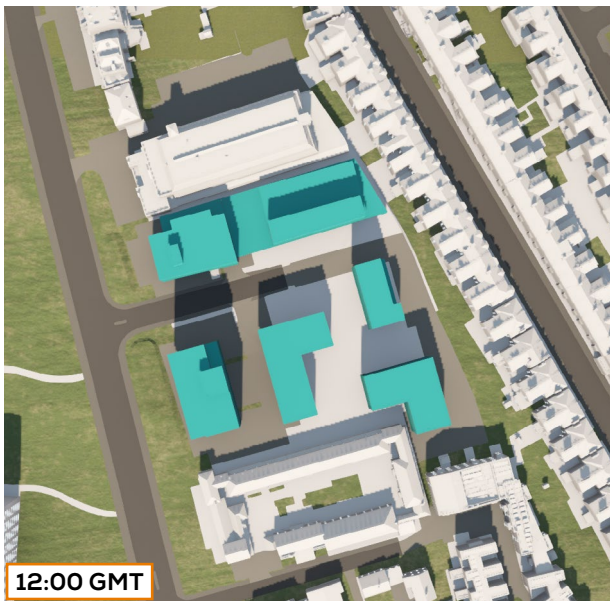


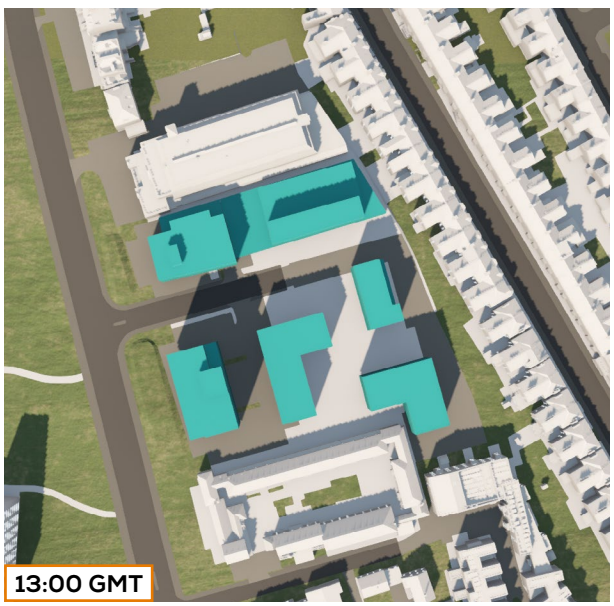
TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH

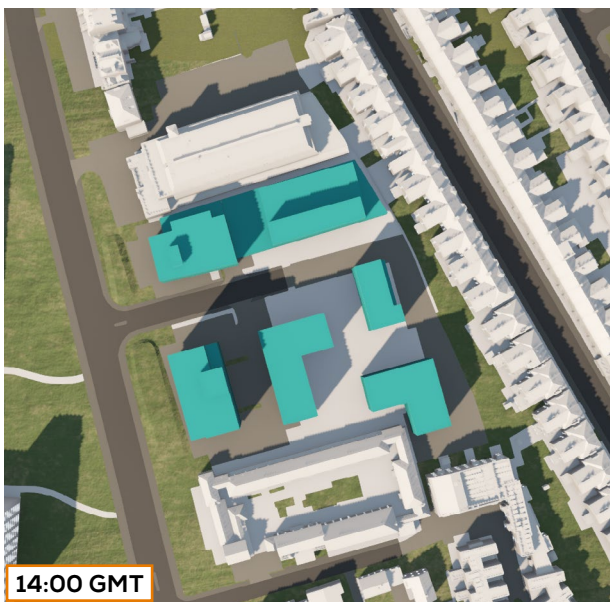




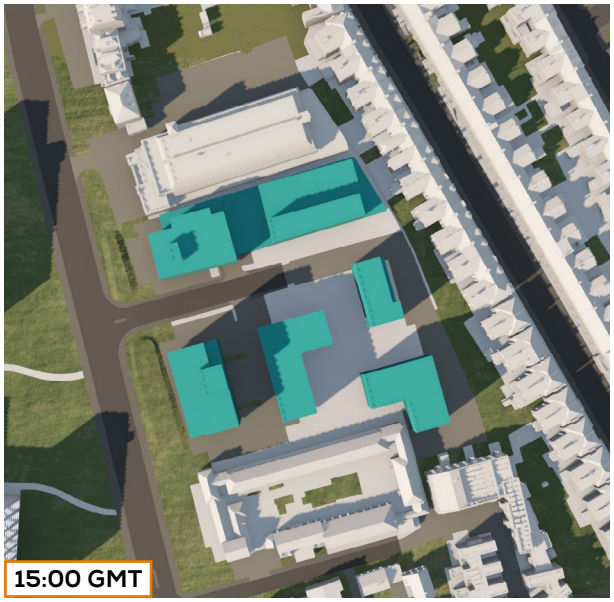


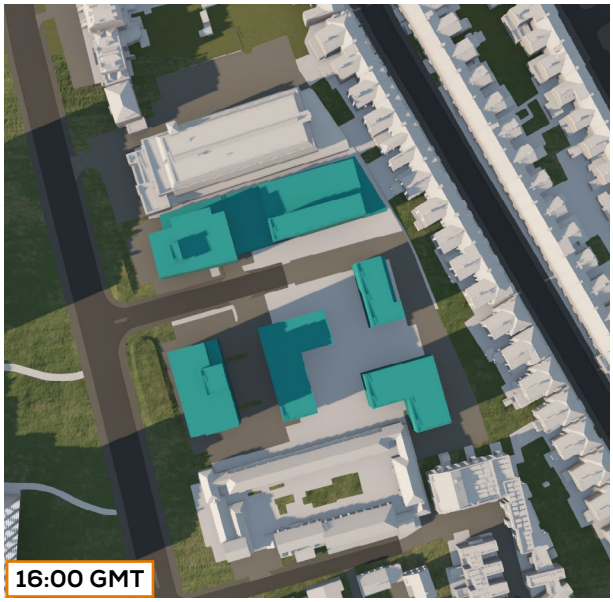


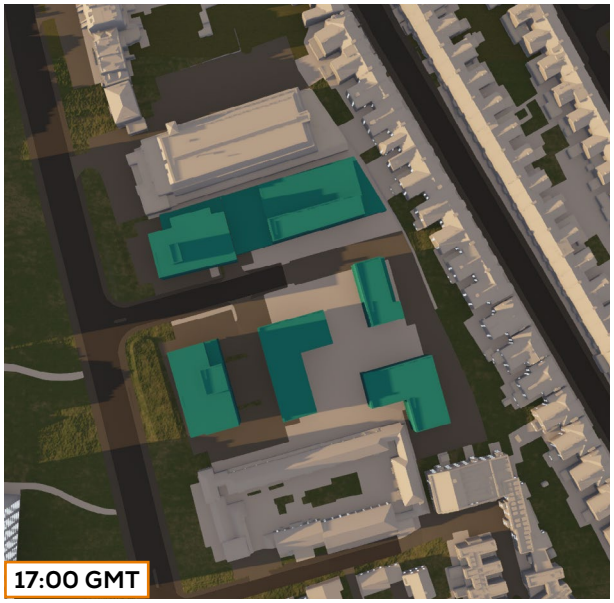




TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH







21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

N

gia

14 SITE 22: 1 & 3–11 WELLFIT STREET, 7–9 HINTON ROAD & UNITS 1–4 HARDESS STREET, SE24'

INTRODUCTION AND SCOPE

Having identified the surrounding uses and site facing windows, Vertical Sky Component (VSC) facade studies were completed to understand daylight potential in the existing and indicative scenarios. In line with the BRE Guidelines, the focus was on residential properties along with any non-domestic buildings where occupants may have a reasonable expectation for daylight; i.e. schools, hospitals, hotels and places of worship. GIA also considered the Higgs Yard development.

The identified uses are illustrated in Figure 107 below.

Similarly, a VSC facade study was undertaken on the indicative façades, to understand the potential for the indicative scheme to provide future occupants with good levels of daylight and sunlight.

Finally, an overshadowing study was also completed showing how the shadow cast by the indicative massing would affect the open spaces within and around the site.

Images illustrating the results of these assessments are shown within Sections 2, 3 and 4.

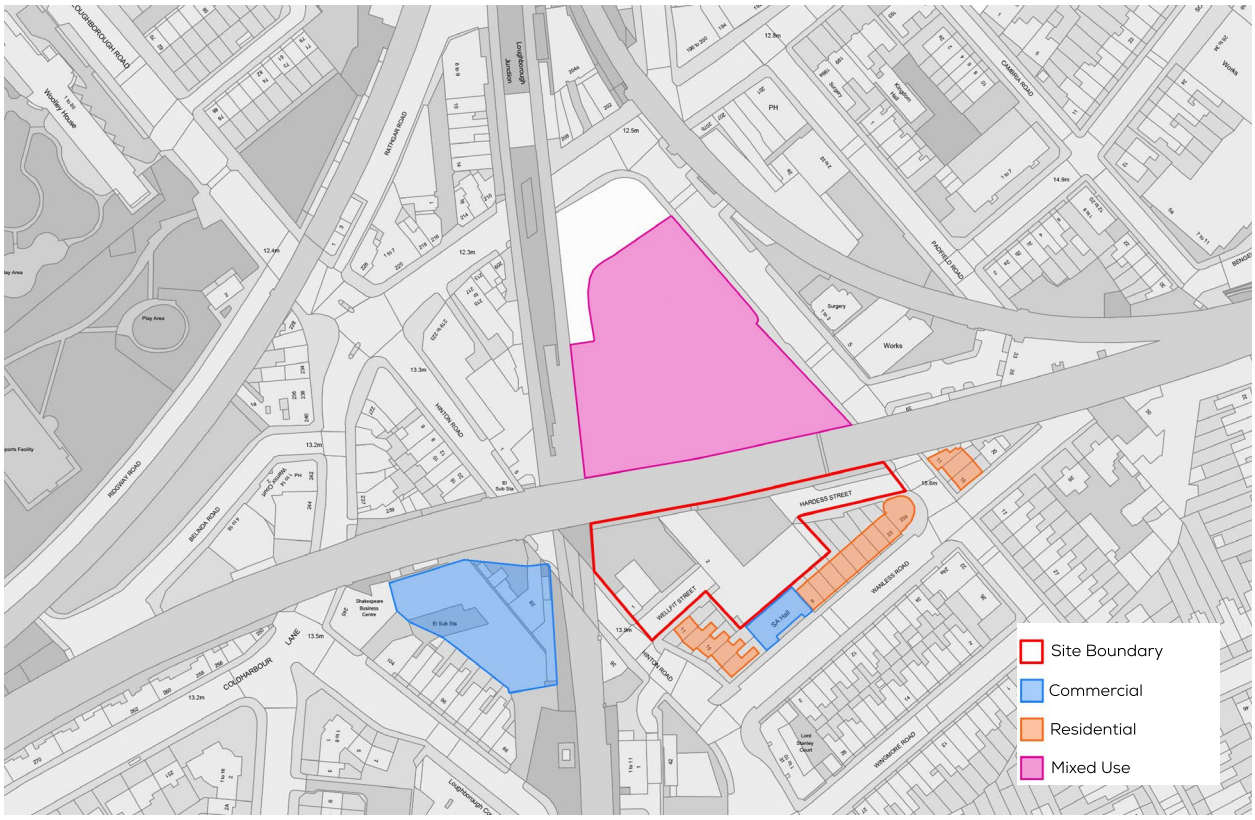


Figure 107: Use map

GIA's façade study identified in view 1 and 2 that due to the low density nature of the existing site, there would inevitably be some change in VSC values to the most proximate residential properties at 11-21 Wanless Road and 11-19 Hinton Road. However, the retained VSC values with the indicative massing in place were considered to be in keeping with what may be considered appropriate for the local area.

Regarding the recently developed Higgs Yard scheme to the north of the site, all windows on the main building facade would retain good levels of VSC above 20%. Windows that are situated beneath balconies would retain lower levels of VSC, although the BRE Guidelines recognise that this is inevitable due to balconies limiting sky visibility from above.

VSC ASSESSMENT - VIEW 1
PROPERTIES TO THE SOUTH OF THE SITE (11-21 WANLESS ROAD)

Figure 108: Existing VSC values

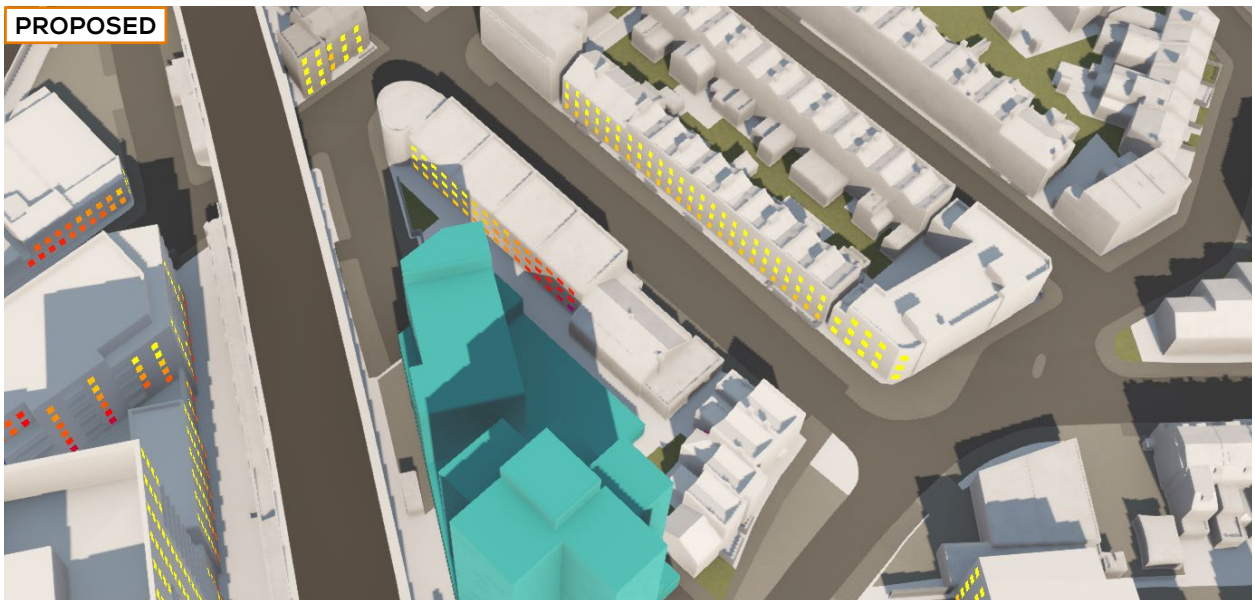
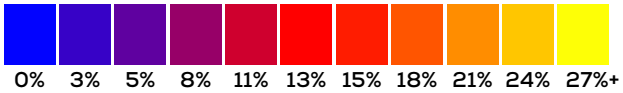


Figure 109: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



As such, GIA consider the massing is appropriate for its context with view of potential impact on neighbouring daylight amenity.

VSC ASSESSMENT - VIEW 2
PROPERTIES TO THE WEST OF THE SITE (11-19 HINTON ROAD)

Figure 110: Existing VSC values

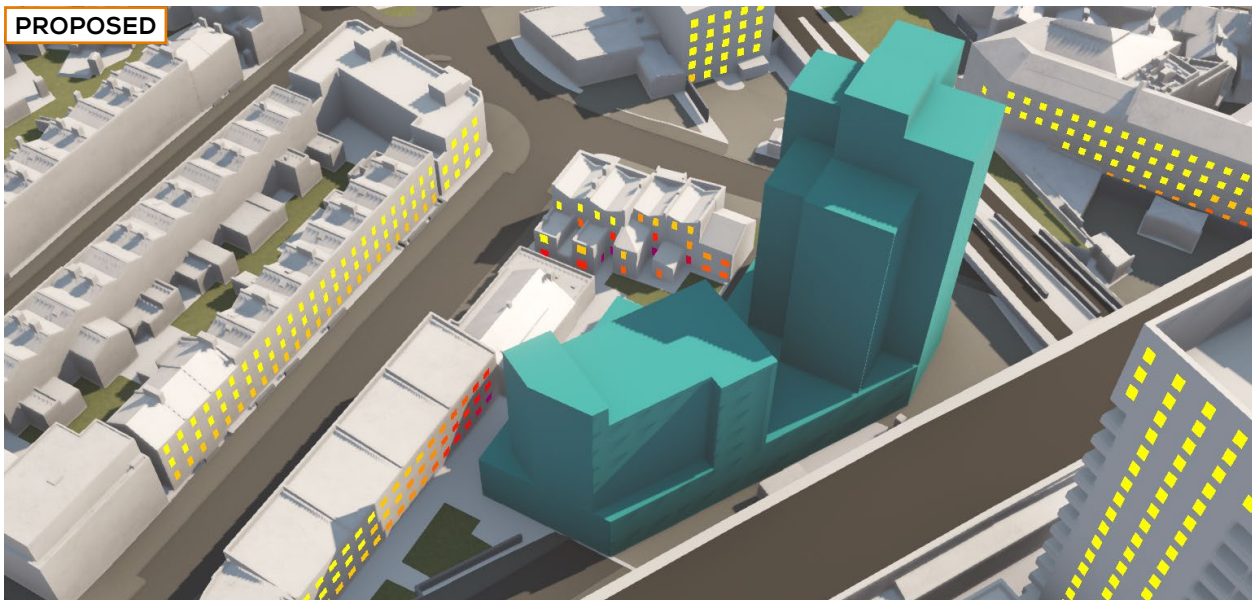
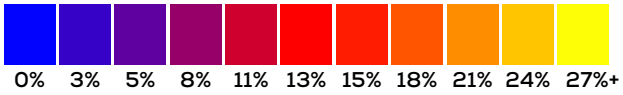


Figure 111: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



VSC ASSESSMENT - VIEW 3
HIGGS YARD DEVELOPMENT TO THE NORTH OF THE SITE)

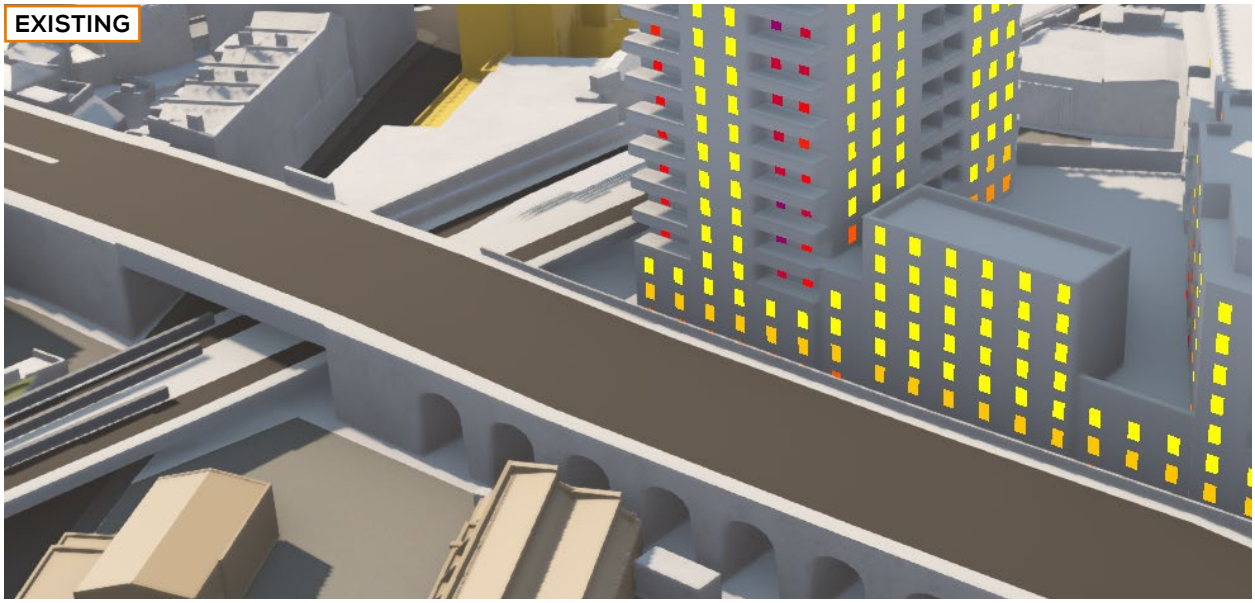


Figure 112: Existing VSC values

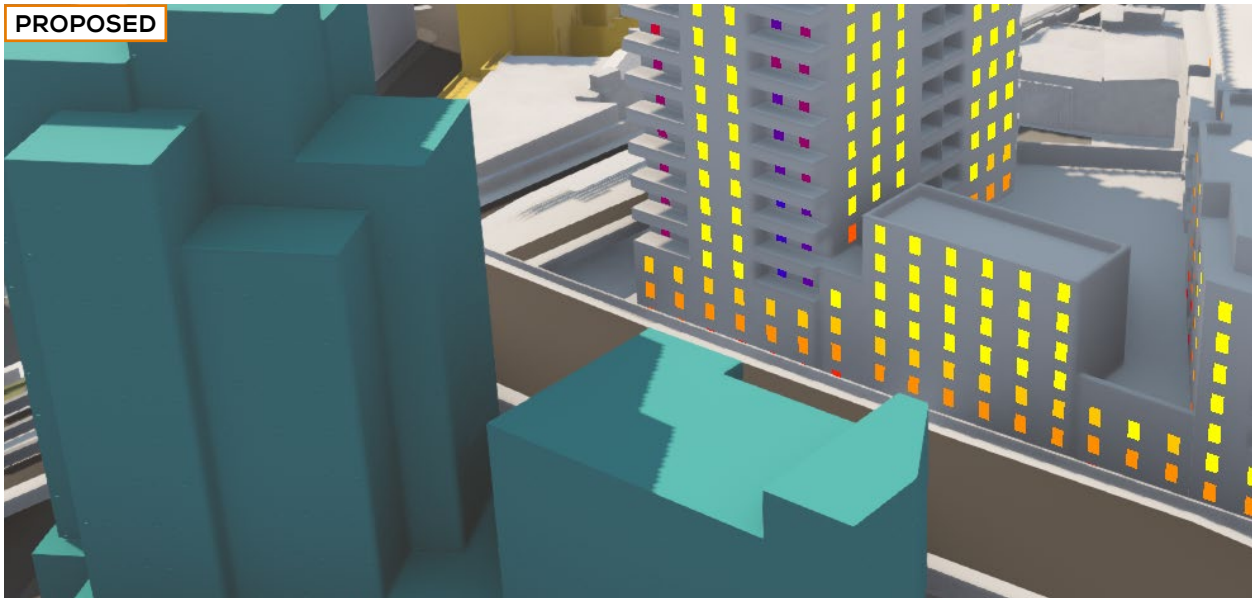


Figure 113: Indicative VSC values

DAYLIGHT AMENITY WITHIN THE SITE

The daylight potential for the scheme is overall very good, with all the main elevations seeing very good levels of daylight potential. This means that conventional layouts and window sizes will generally result in a good daylight performance.

Lower levels of light than those ideally recommended are seen in parts of the podium and in the flank elevation of the linear block, directly facing the tower element. For the podium, this is only relevant should residential accommodation be provided in these specific locations. Should this be the case, large windows may be necessary.

Figure 114: Daylight Potential (VSC)

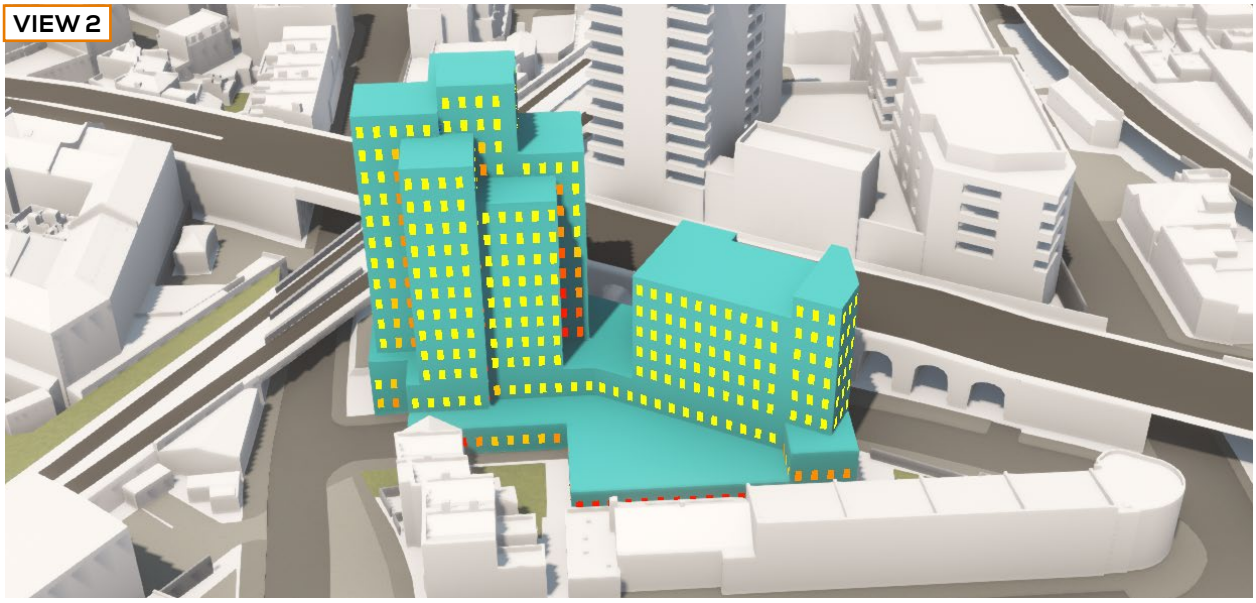
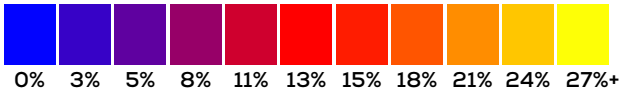


Figure 115: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



For the flank elevation of the linear block, good levels of light indoors can still be achieved provided that appropriate mitigation measures are incorporated within the design. Ideally, this elevation should preferentially be used to accommodate bedrooms and secondary windows of dual-aspect living rooms, which will receive abundant levels of light from the north and south elevations.

It should be noted that balconies inherently restrict the access to daylight and sunlight to the windows set below them (if projecting) or behind them (if recessed). Therefore, their effects should be mitigated, where possible, by providing rooms with additional windows free of obstructions, or by staggering balconies or internal layouts so that the windows serving the living areas are not overhung.

Figure 116: Daylight Potential (VSC)

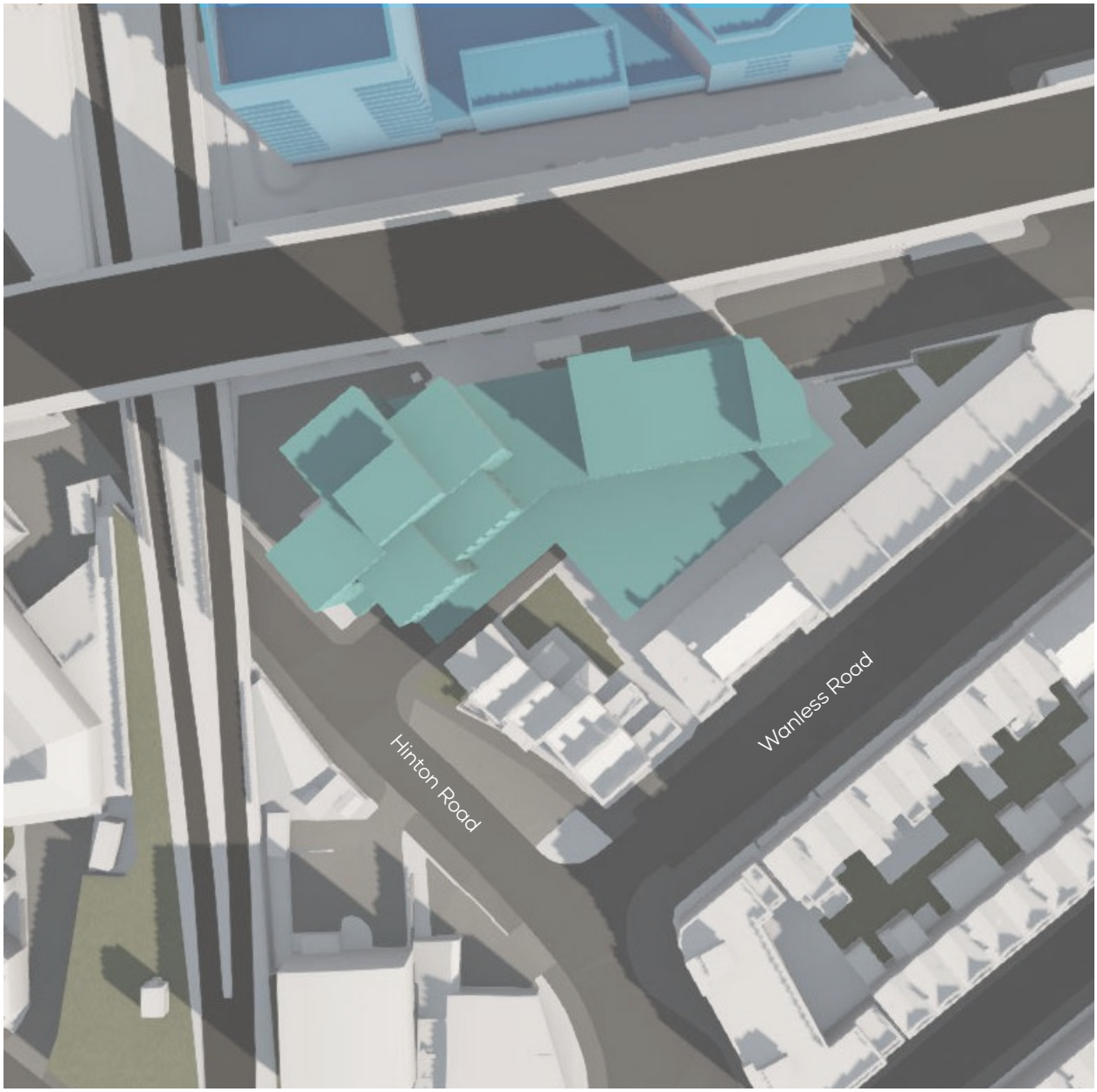
Figure 117: Daylight Potential (VSC)

OVERSHADOWING

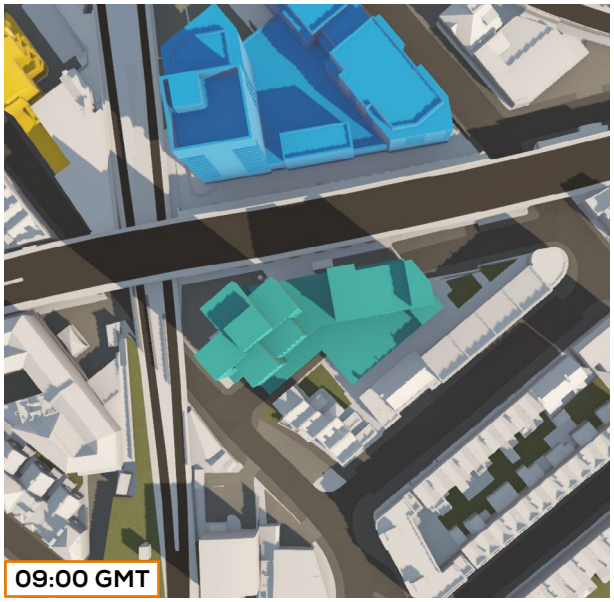
There will be little overshadowing of neighbouring amenity areas, mainly from mid-afternoon.

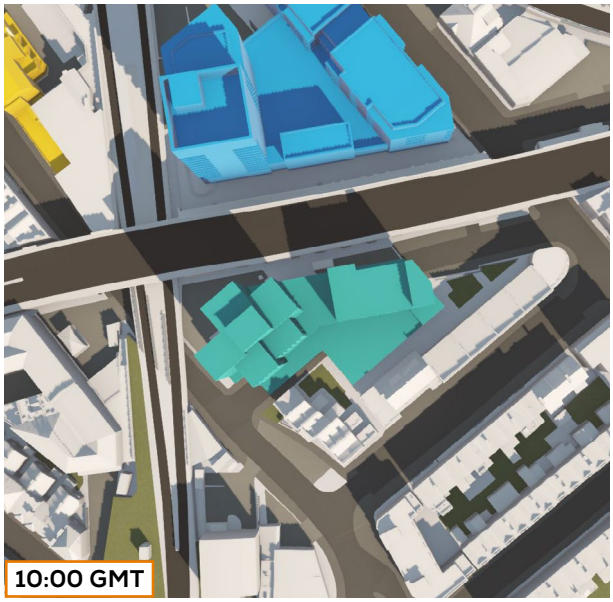
The rear gardens of the properties along Hinton Road are unlikely to be noticeably affected. Along Wanless Road are a few properties whose rear gardens are located to their north and so are mainly overshadowed in the existing conditions. These may experience some additional overshadowing in the late afternoon / evening.

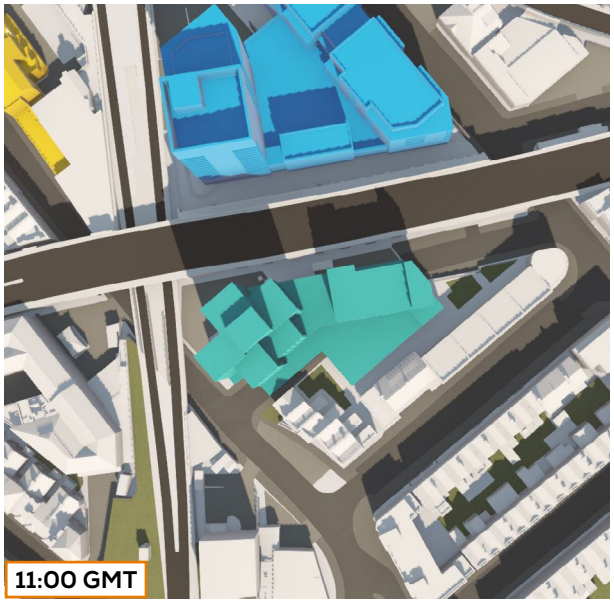
All roof and podium terraces within the indicative scheme will enjoy levels of sunlight which are comfortably above the minimum recommendation set out within the BRE Guidelines for 21st March. The indicative scheme has therefore the potential to provide future residents with excellent levels of sunlight.

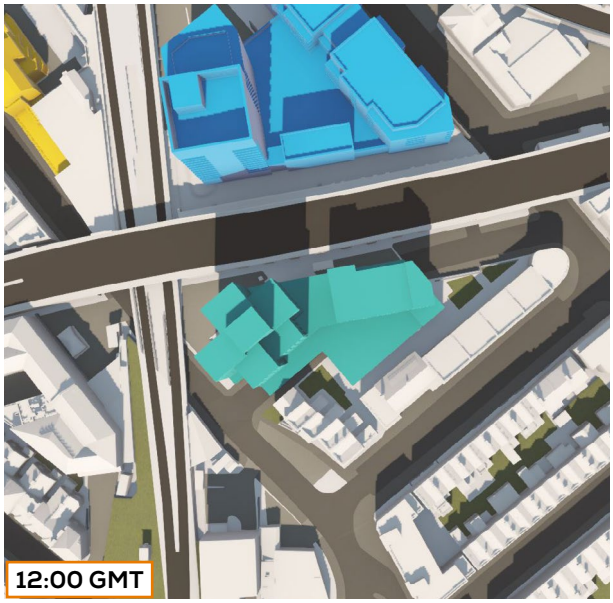


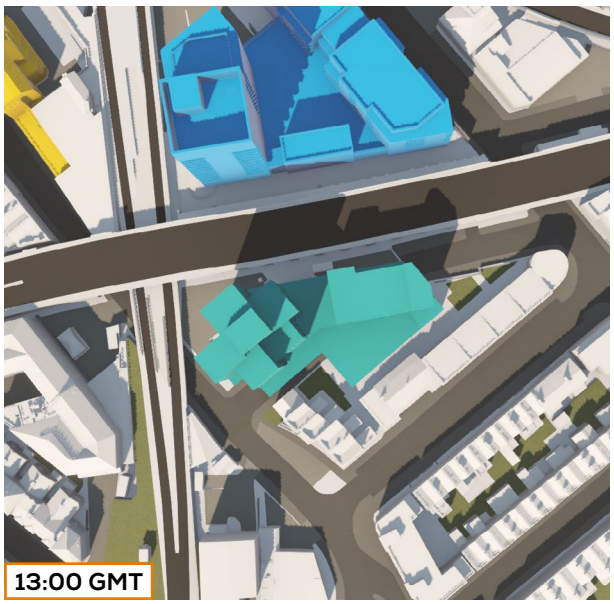
TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH

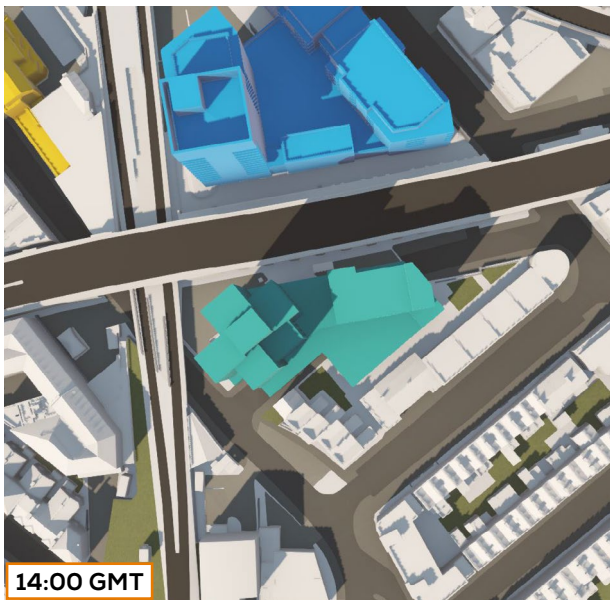




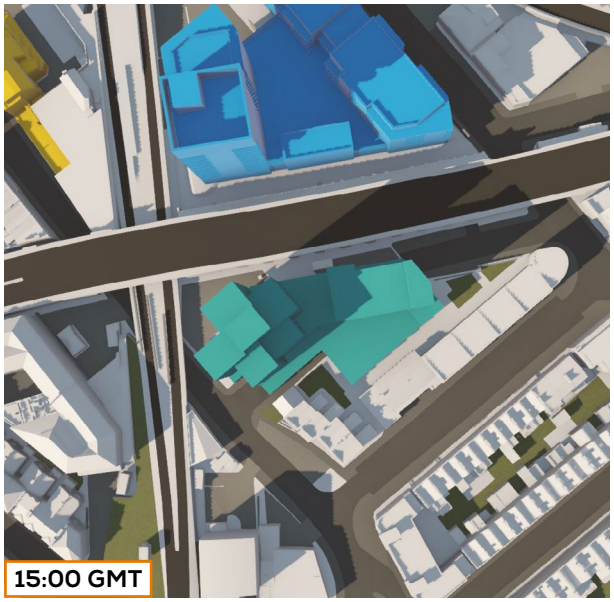


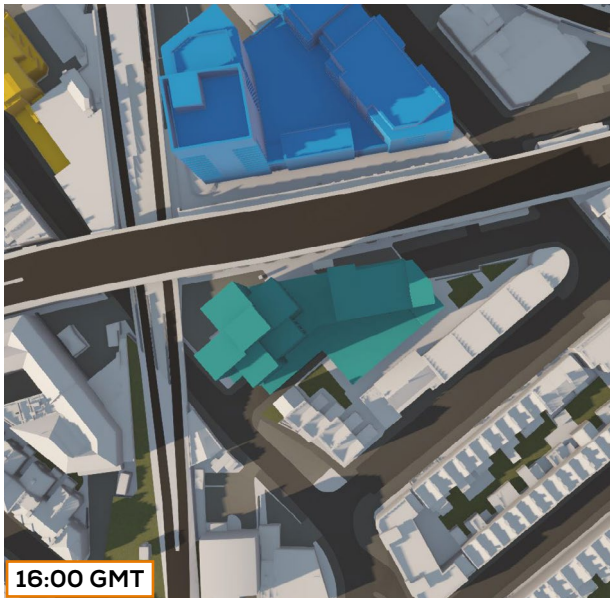


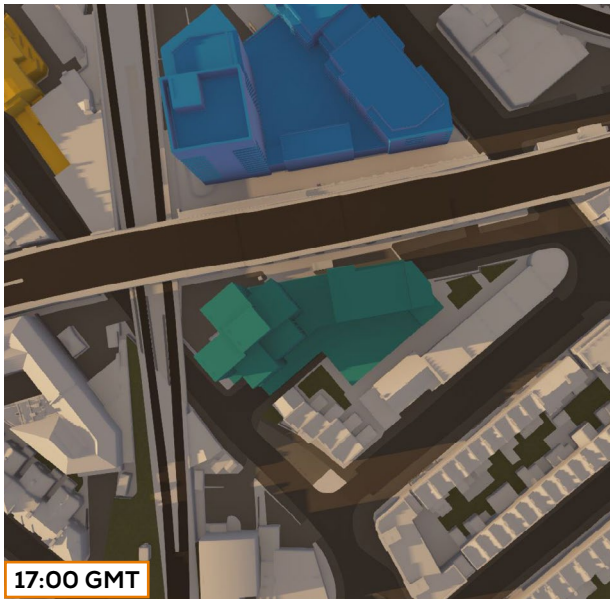




TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH







21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

N

15 SITE 23: LAND AT CORNER OF COLDHARBOUR LANE AND HERNE HILL ROAD, SE2

INTRODUCTION AND SCOPE

Having identified the surrounding uses and site facing windows, Vertical Sky Component (VSC) facade studies were completed to understand daylight potential in the existing and indicative scenarios. In line with the BRE Guidelines, the focus was on residential properties along with any non-domestic buildings where occupants may have a reasonable expectation for daylight; i.e. schools, hospitals, hotels and places of worship.

The identified uses are illustrated in Figure 118 below.

Similarly, a VSC facade study was undertaken on the indicative façades, to understand the potential for the indicative scheme to provide future occupants with good levels of daylight and sunlight.

Finally, an overshadowing study was also completed showing how the shadow cast by the indicative massing would affect the open spaces within and around the site.

Images illustrating the results of these assessments are shown within Sections 2, 3 and 4.

Site Boundary

Mixed Use

Residential

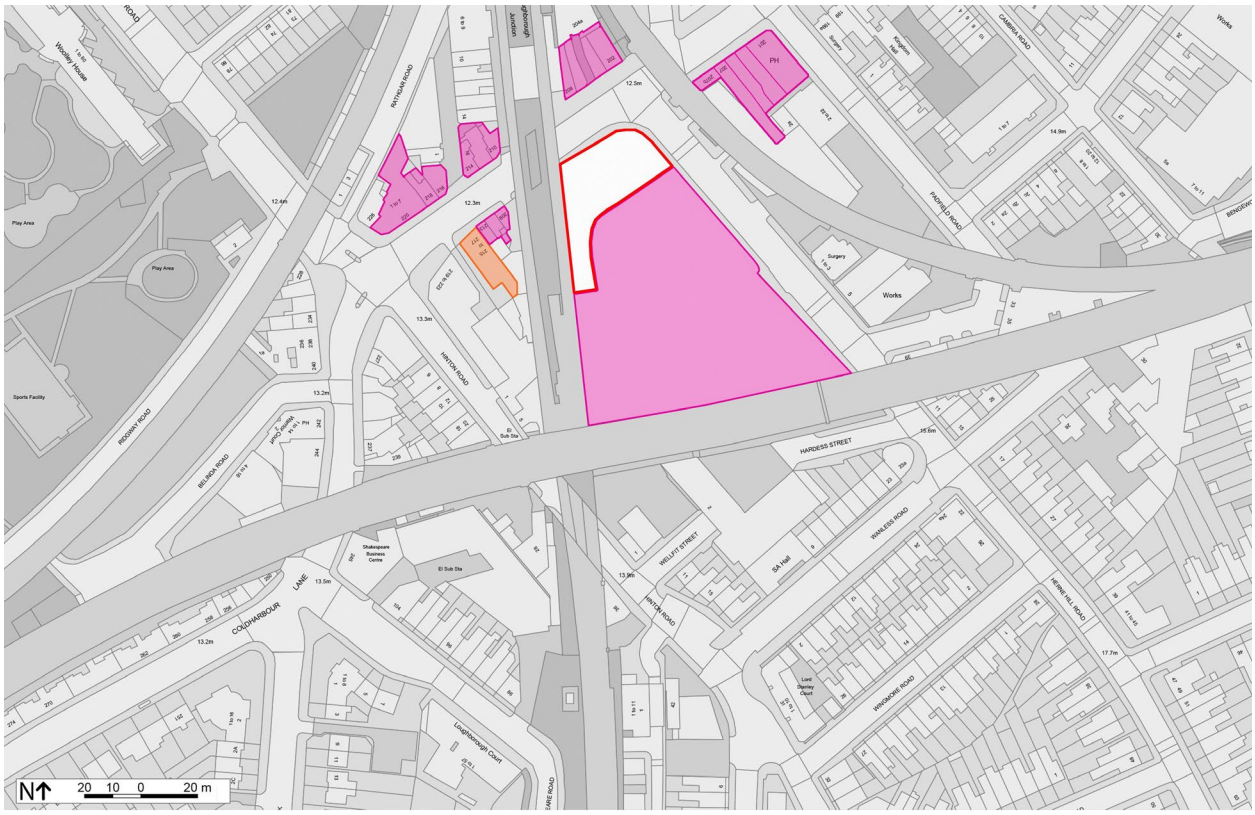


Figure 118: Use map

DAYLIGHT IMPACTS TO NEIGHBOURING PROPERTIES

GIA's façade study identified in view 1 and 2 that due to the low density nature of the existing site, there would inevitably be some change in VSC values to the most proximate residential properties at 202-204 Coldharbour Lane. However, as shown in Figure 03, retained VSC values with the indicative development in place were considered to be good and in keeping with what may be considered appropriate for the local area.

Regarding the recently developed Higgs Yard scheme to the south of the site, all windows on the main building facade would retain "mid-teen" VSC values. It's important to highlight ground and first floor will be of commercial use and therefore not considered relevant for the daylight assessment. Where assumed windows at second floor and above are shown to retain lower VSC values below a "mid-teen" value, these are windows situated beneath overhanging balconies; which the BRE Guide recognise, stating

VSC ASSESSMENT - VIEW 1
PROPERTIES TO THE NORTH OF THE SITE (202 - 210 COLDHARBOUR LANE)

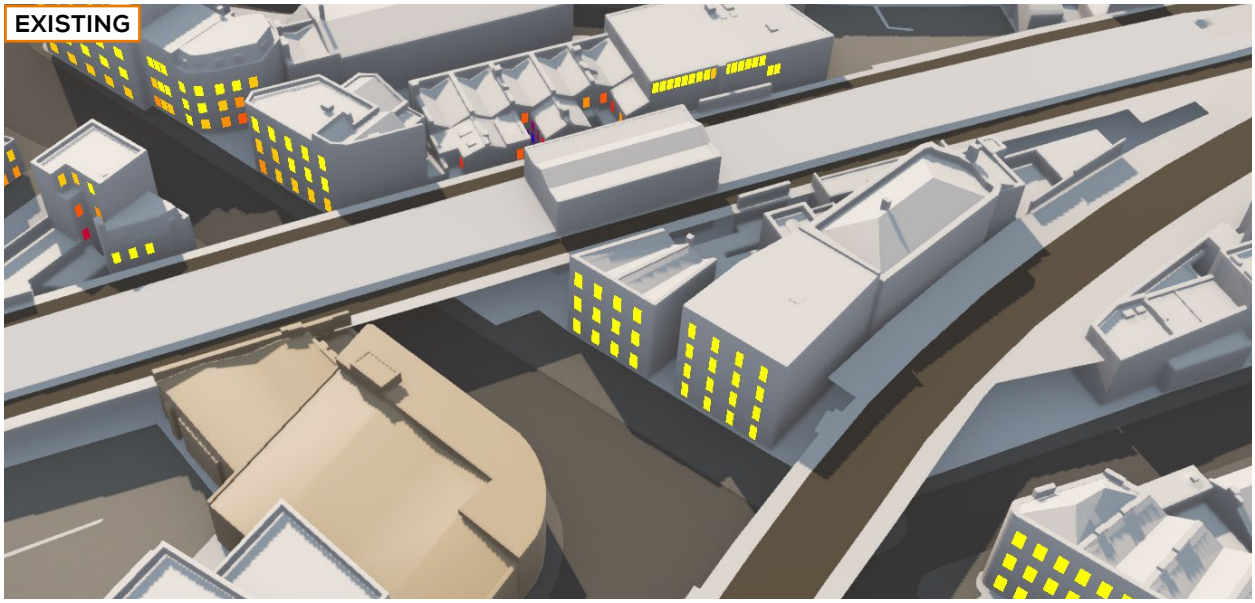
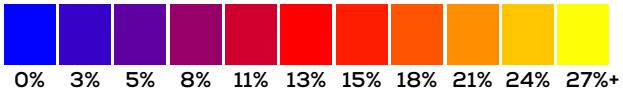


Figure 119: Existing VSC values

Figure 120: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



"Balconies and overhangs significantly reduce the light entering windows below them..." and go on to suggest additional technical assessments can be run where the balconies are hypothetically removed to better understand the impact on a neighbouring property if such features did not exist.

With consideration of the site location and light limiting features at the Higgs Yard Development, GIA consider the indicative massing is appropriate for its context with view of potential impact on neighbouring daylight and sunlight amenity.

VSC ASSESSMENT - VIEW 2
PROPERTIES TO THE SOUTH OF THE SITE (HIGGS YARD DEVELOPMENT)

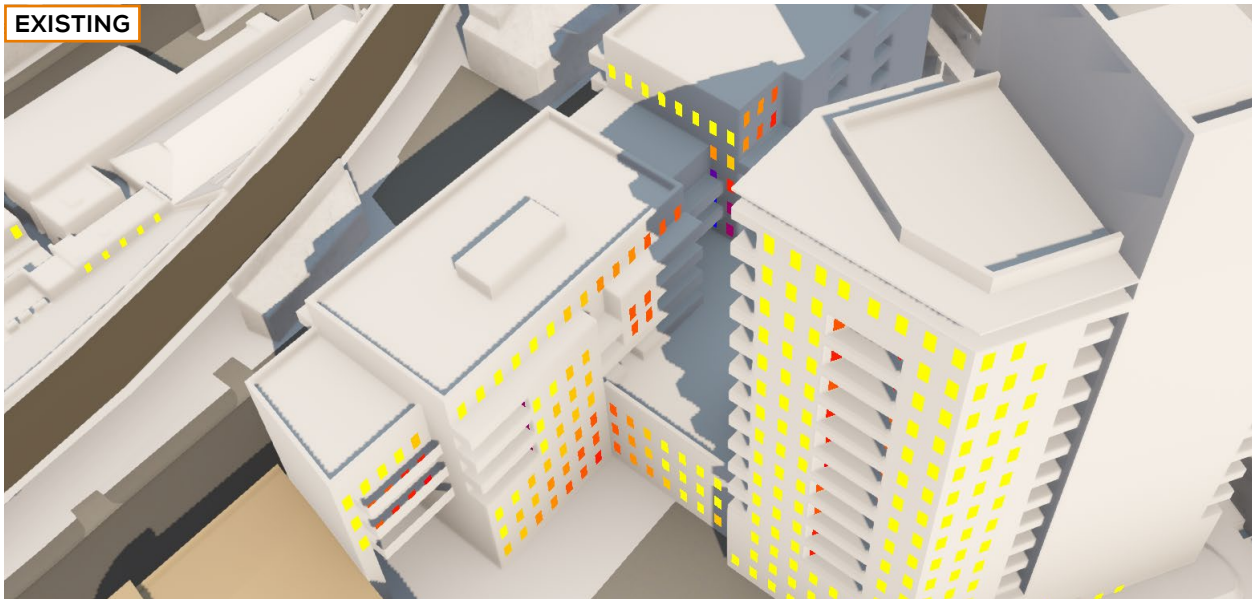


Figure 121: Existing VSC values

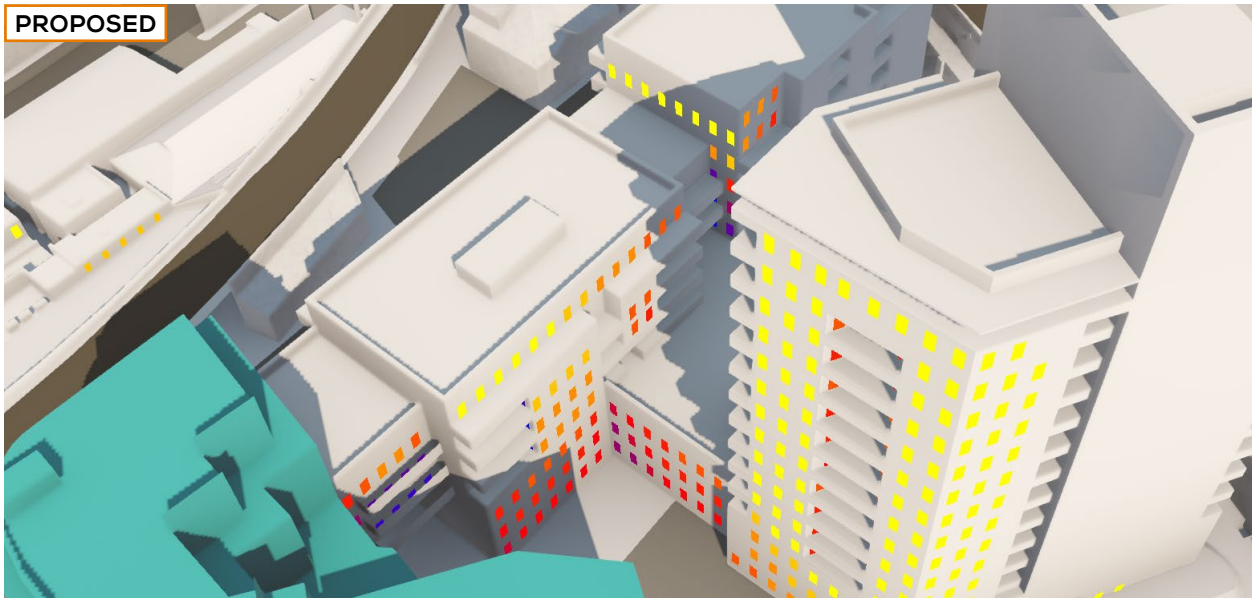


Figure 122: Indicative VSC values

DAYLIGHT AMENITY WITHIN THE SITE

The illustrative massing arrangement sees excellent levels of daylight potential to all its street frontages, while the rear elevations are more obstructed, predominantly as a result of the buildings located to the south, in close proximity.

The lowest daylight levels are seen at the bottom part of the scheme (rear elevation, lowest four storeys), however daylight access progressively increases towards the top of the building.

Should residential accommodation be provided where low levels of daylight are available, larger windows and shallow layouts will be required.

The most challenging areas are highlighted in magenta in Views 4 and 6, where it can be seen how some can be mitigated with use of dual-aspect and through aspect units.

Overall, the scheme has a good daylight potential

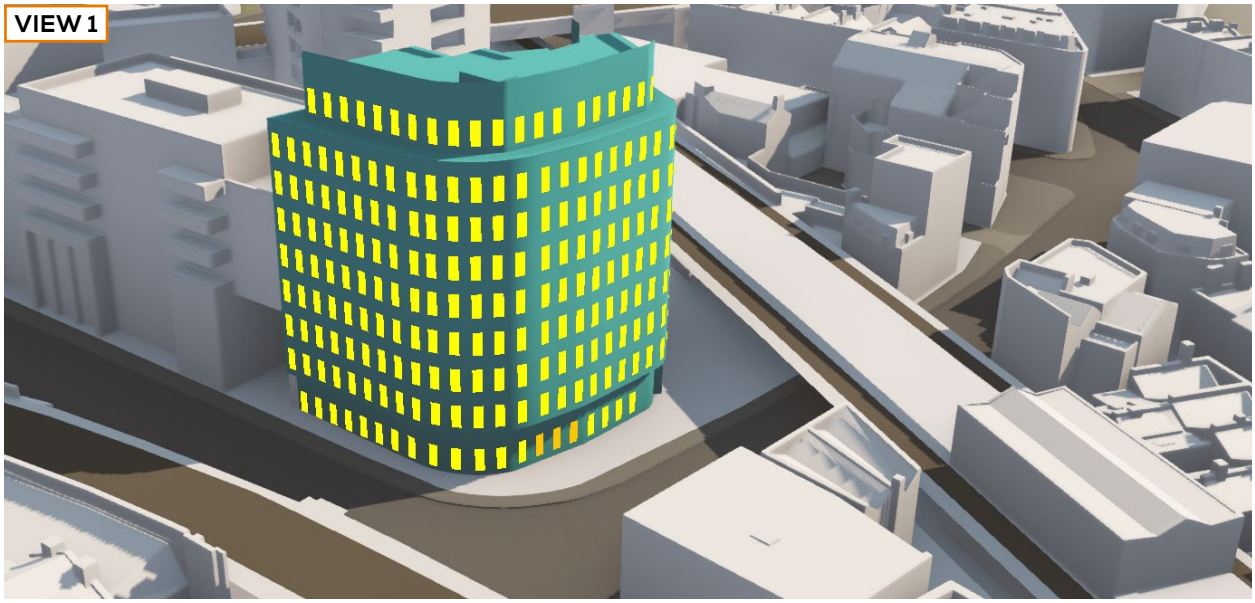


Figure 123: Daylight Potential (VSC)

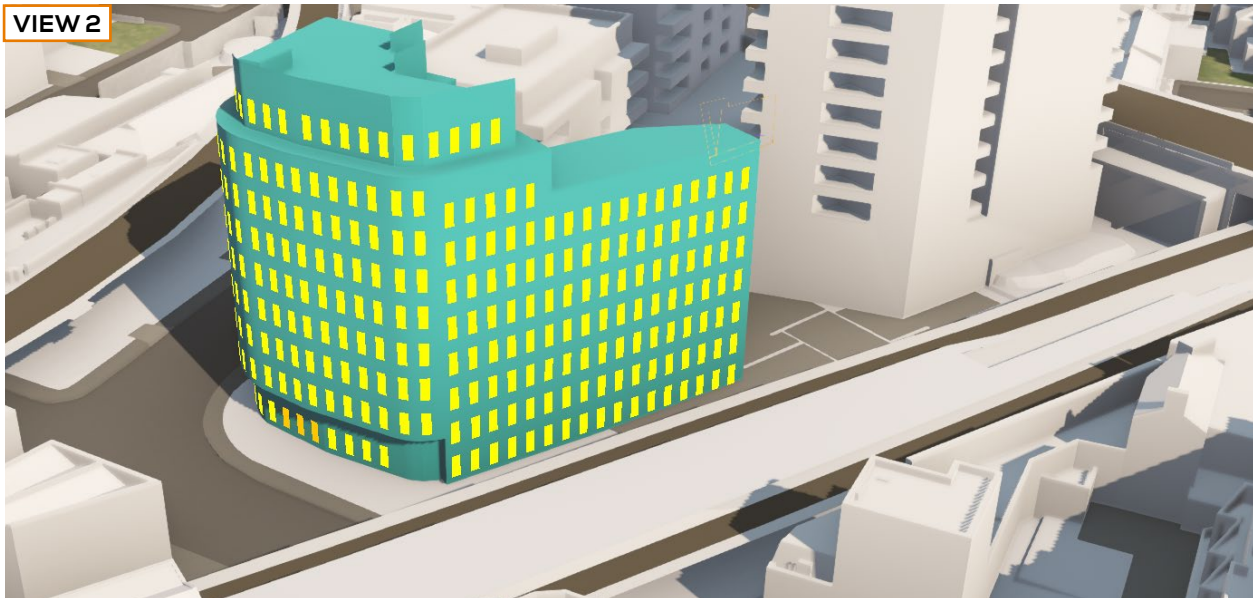
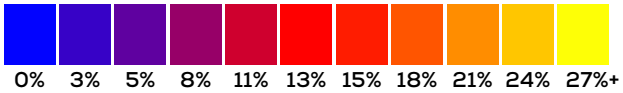


Figure 124: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



and the isolated areas of lower availability are in line with expectations for schemes of this density in this context.

It should be noted that balconies inherently restrict the access to daylight and sunlight to the windows set below them (if projecting) or behind them (if recessed). Therefore, their effects should be mitigated, where possible, by providing rooms with additional windows free of obstructions, or by staggering balconies or internal layouts so that the windows serving the living areas are not overhung.

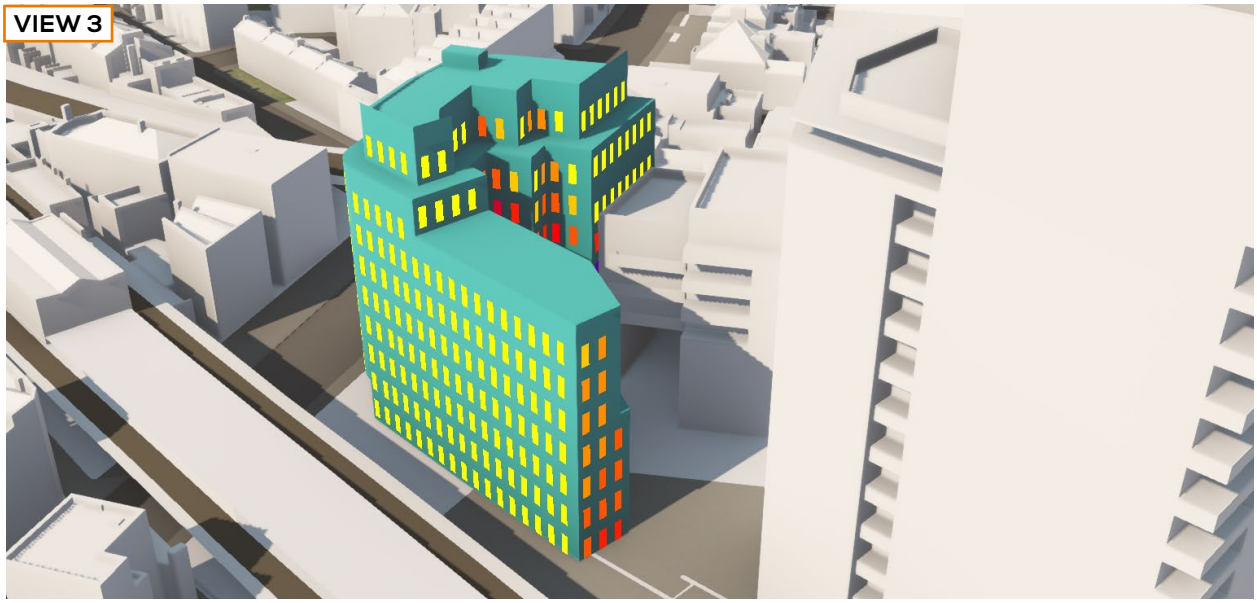


Figure 125: Daylight Potential (VSC)

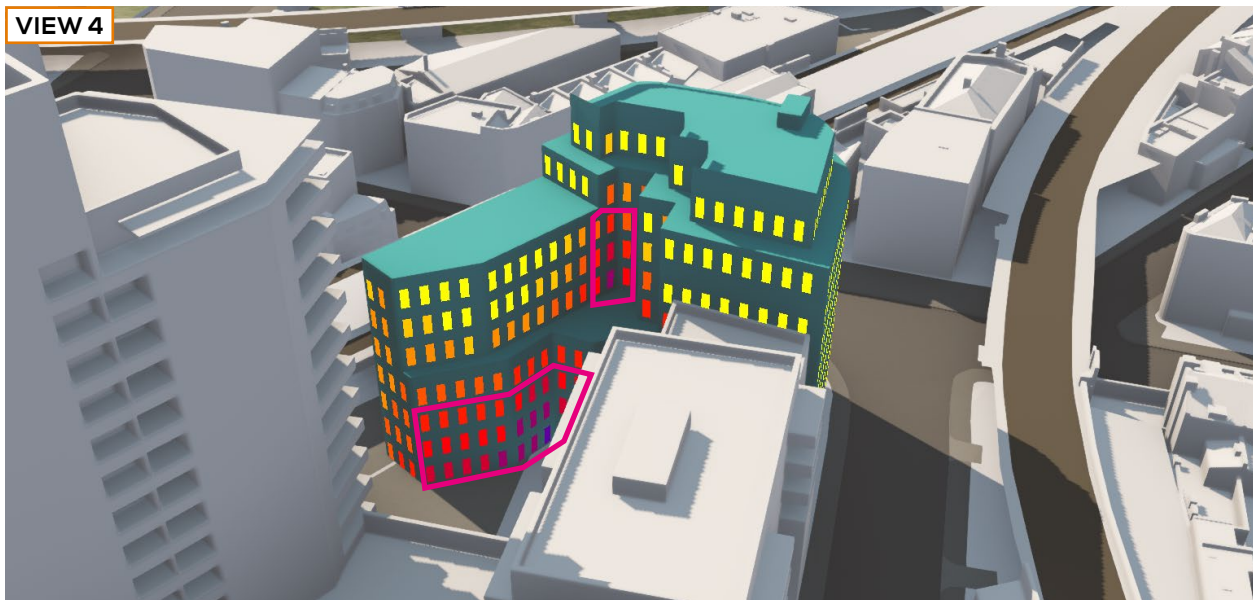
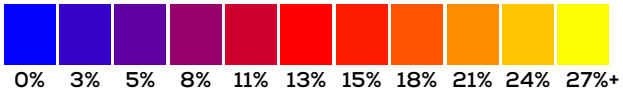


Figure 126: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



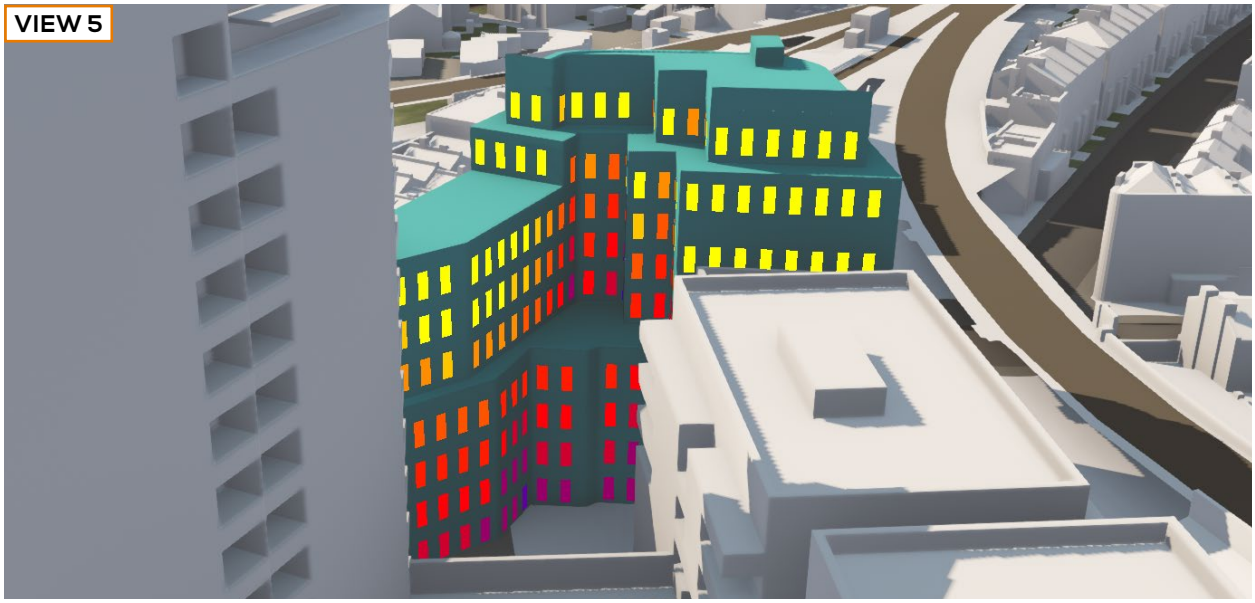


Figure 127: Daylight Potential (VSC)

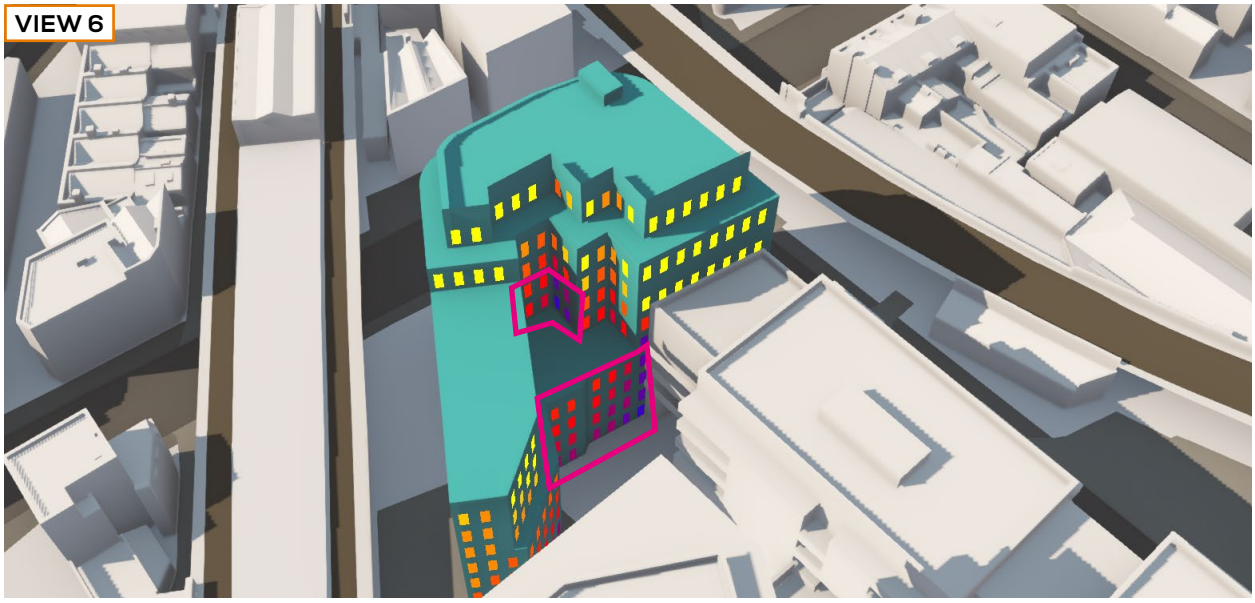
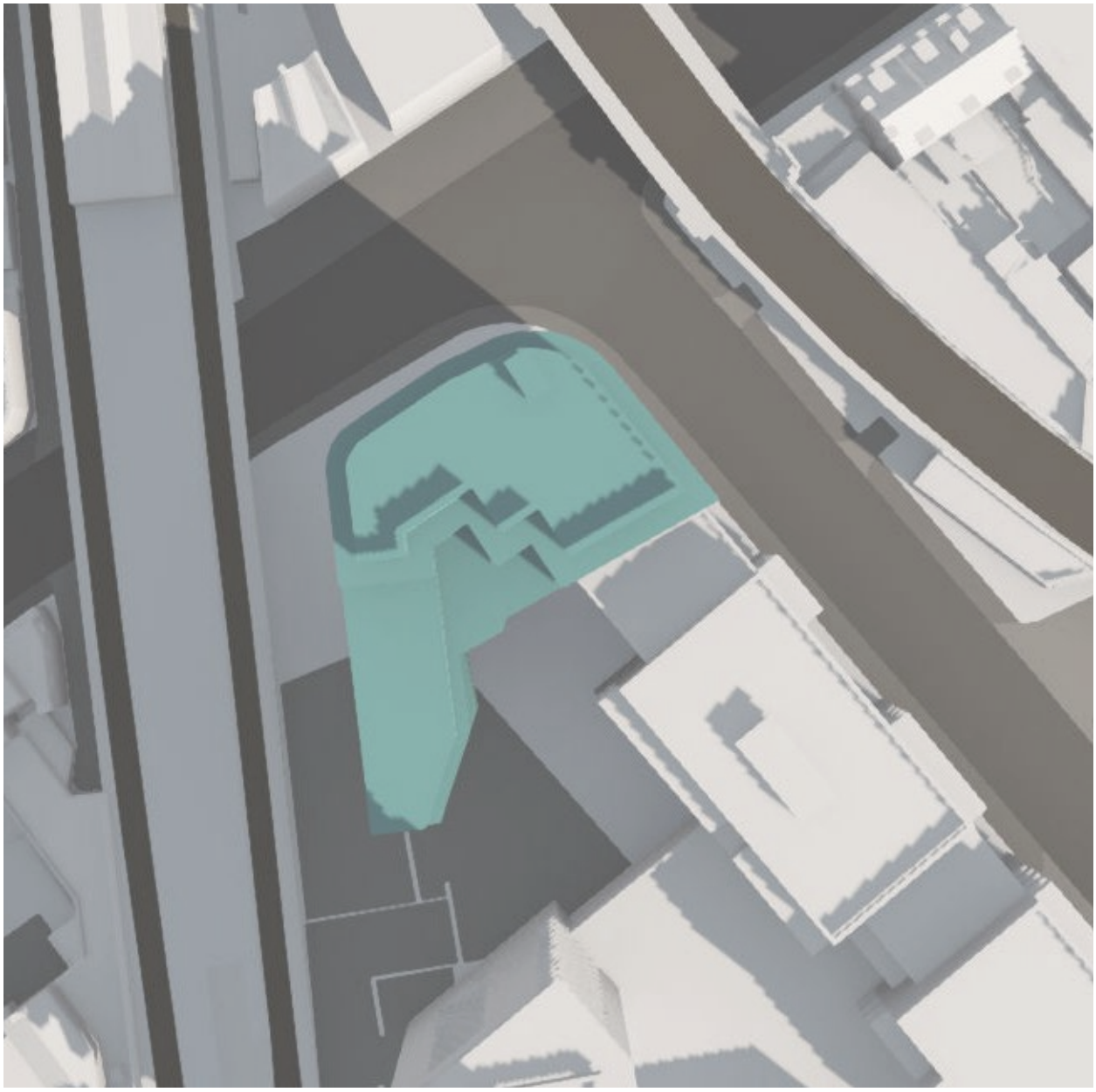


Figure 128: Daylight Potential (VSC)

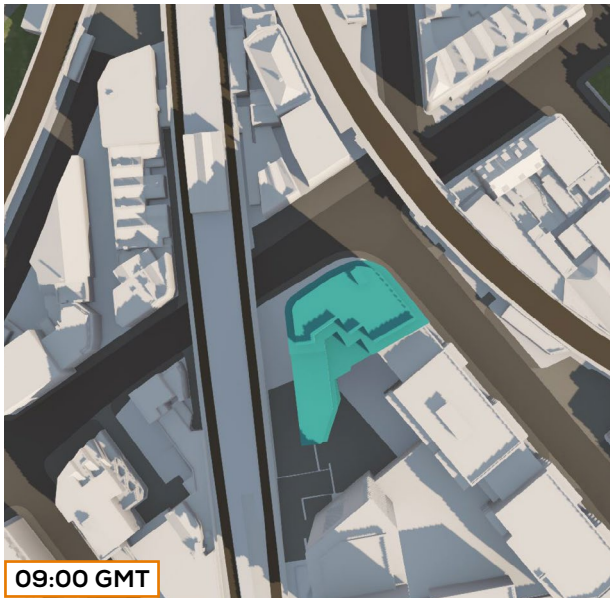
OVERSHADOWING

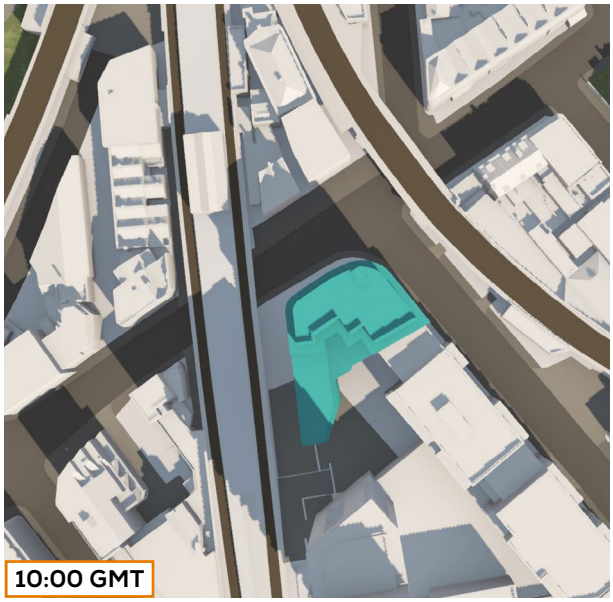
No sensitive open spaces have been identified that would be noticeably affected by shadows cast by the indicative scheme.

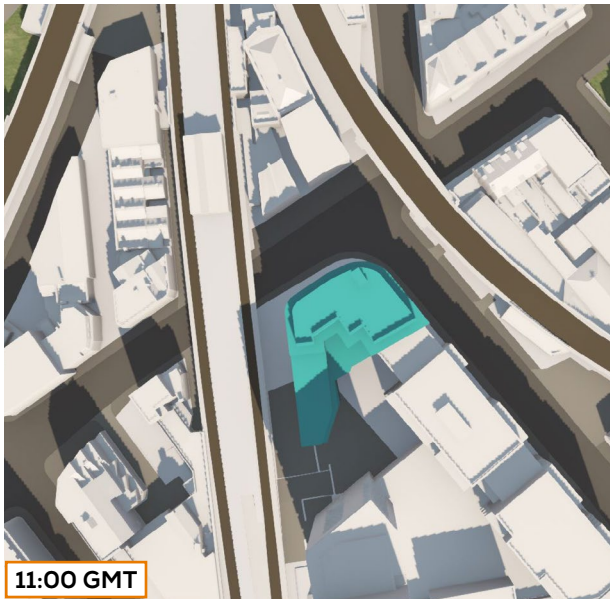
The roof top areas within the indicative scheme will all see very good levels of sunlight and so would be appropriate to place PV panels or to be used as amenity areas.

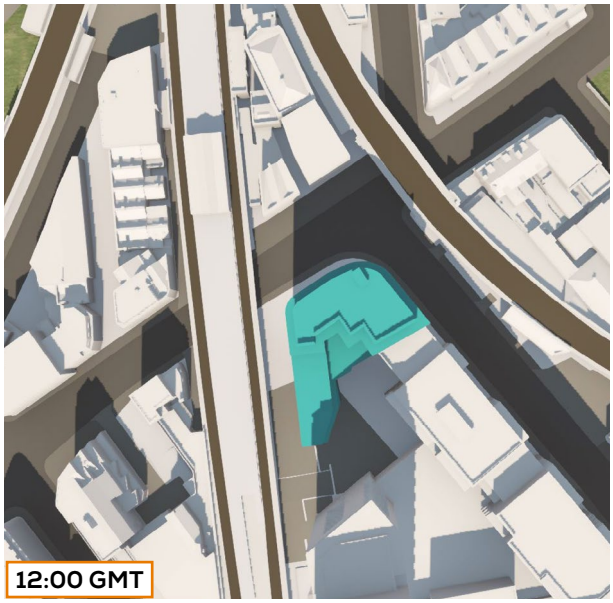


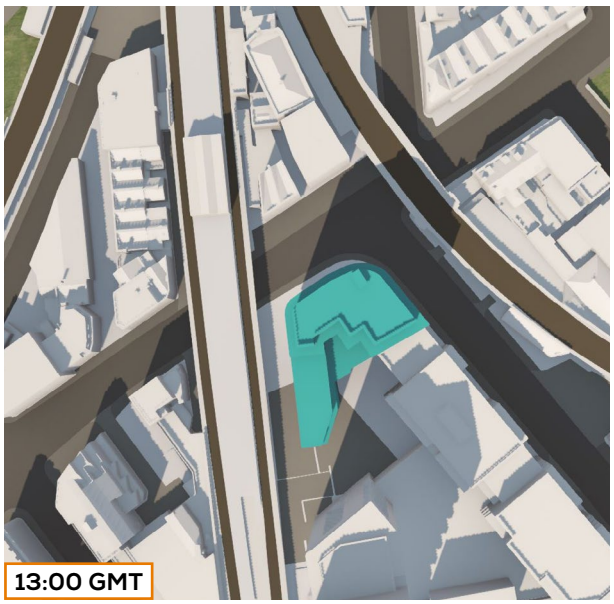
TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH

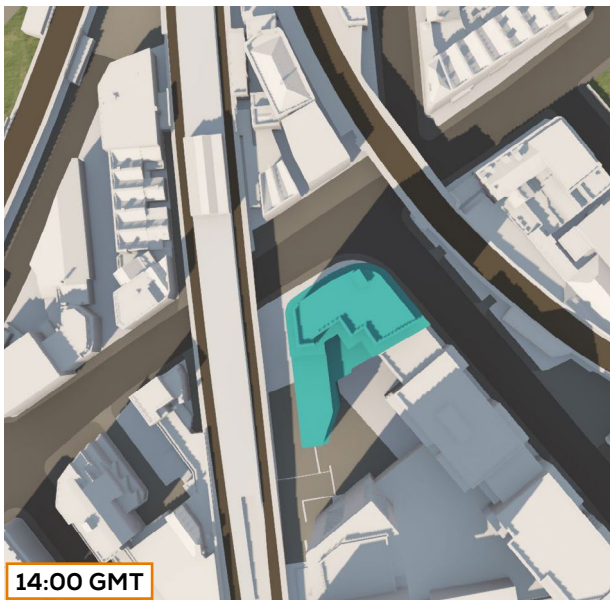




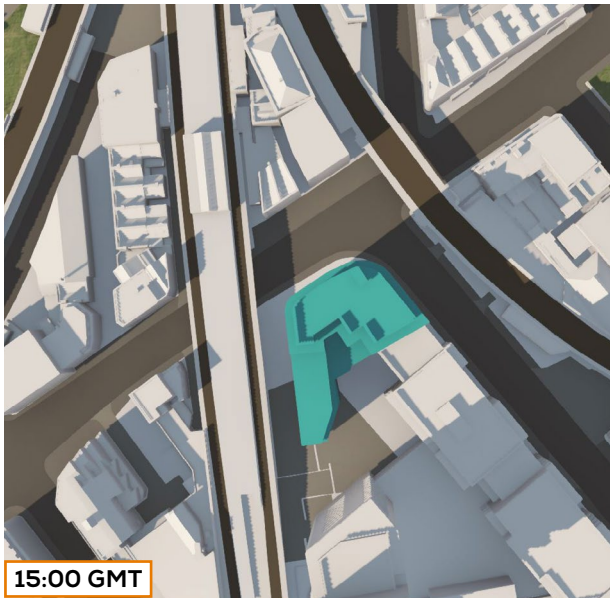


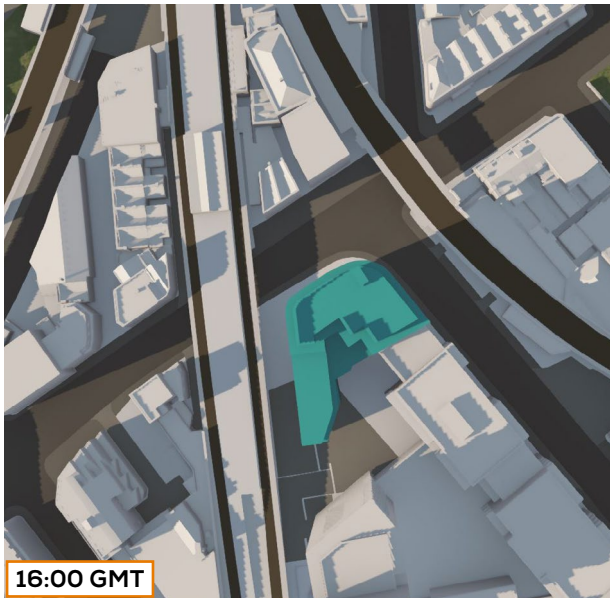






TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH





21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

N

gia

16 SITE 24: KING'S COLLEGE HOSPITAL, DENMARK HILL SE5

INTRODUCTION AND SCOPE

Having identified the surrounding uses and site facing windows, Vertical Sky Component (VSC) facade studies were completed to understand daylight potential in the existing and indicative scenarios. In line with the BRE Guidelines, the focus was on residential properties along with any non-domestic buildings where occupants may have a reasonable expectation for daylight; i.e. schools, hospitals, hotels and places of worship.

The identified uses are illustrated in Figure 129 below.

Similarly, a VSC facade study was undertaken on the indicative façades, to understand the potential for the indicative scheme to provide future occupants with good levels of daylight and sunlight.

Finally, an overshadowing study was also completed showing how the shadow cast by the indicative massing would affect the open spaces within and around the site.

Images illustrating the results of these assessments are shown within Sections 2, 3 and 4.

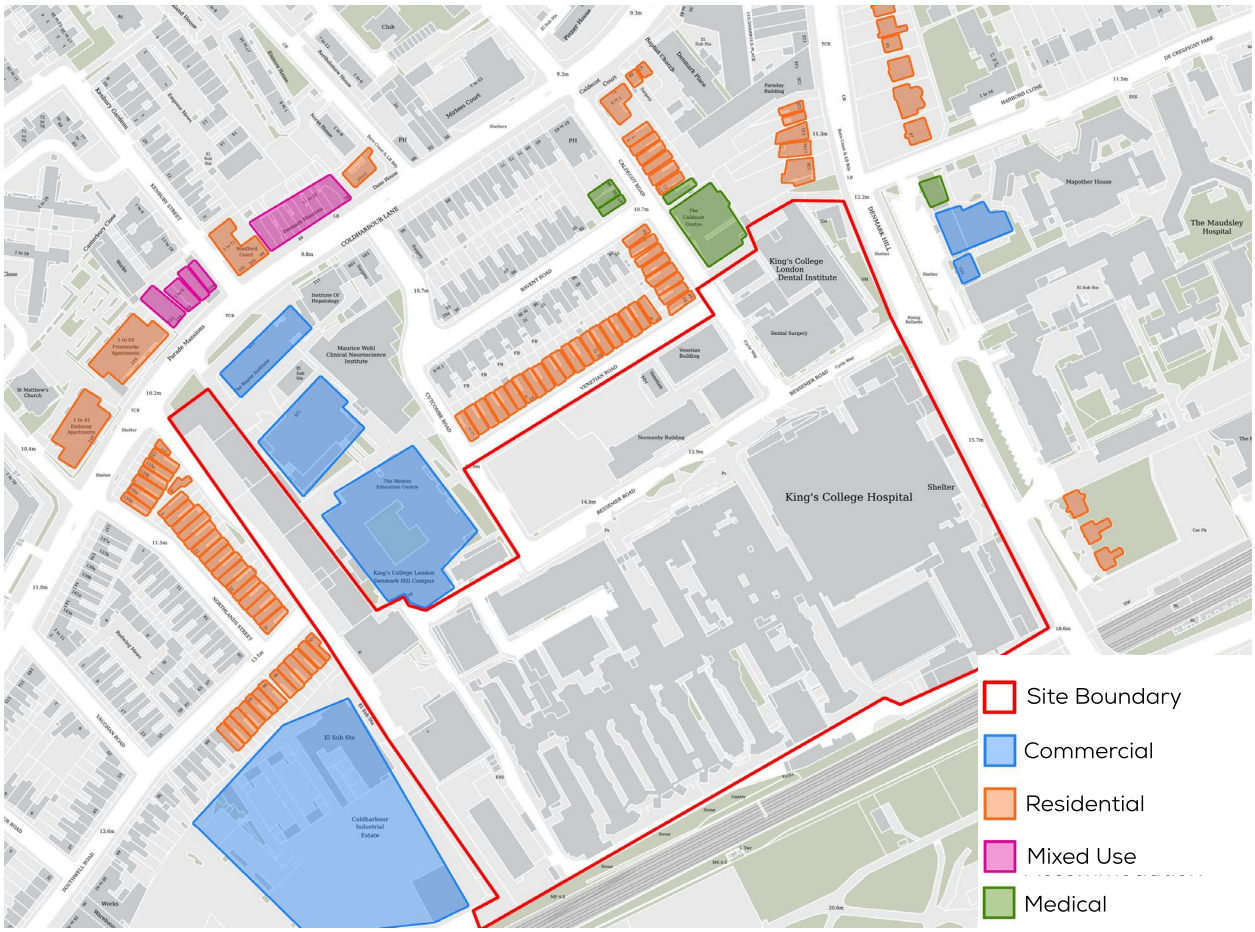


Figure 129: Use map

GIA's façade study identified little or no change in daylight to the vast majority of neighbouring properties surrounding the site. Where change is evident, retained VSC levels are considered to be good.

There are lower retained values at Caldecot Centre. As this is a Medical Clinic, it is unknown if any of the site facing windows serve rooms that are sensitive to, or have expectation for natural daylight.

Overall, given the use of the property at Caldecot Centre, GIA consider the indicative massing is appropriate for its context with consideration of neighbouring daylight amenity.

VSC ASSESSMENT - VIEW 1 **PROPERTIES TO THE WEST OF THE SITE (6-32 NORTHLANDS STREET)**

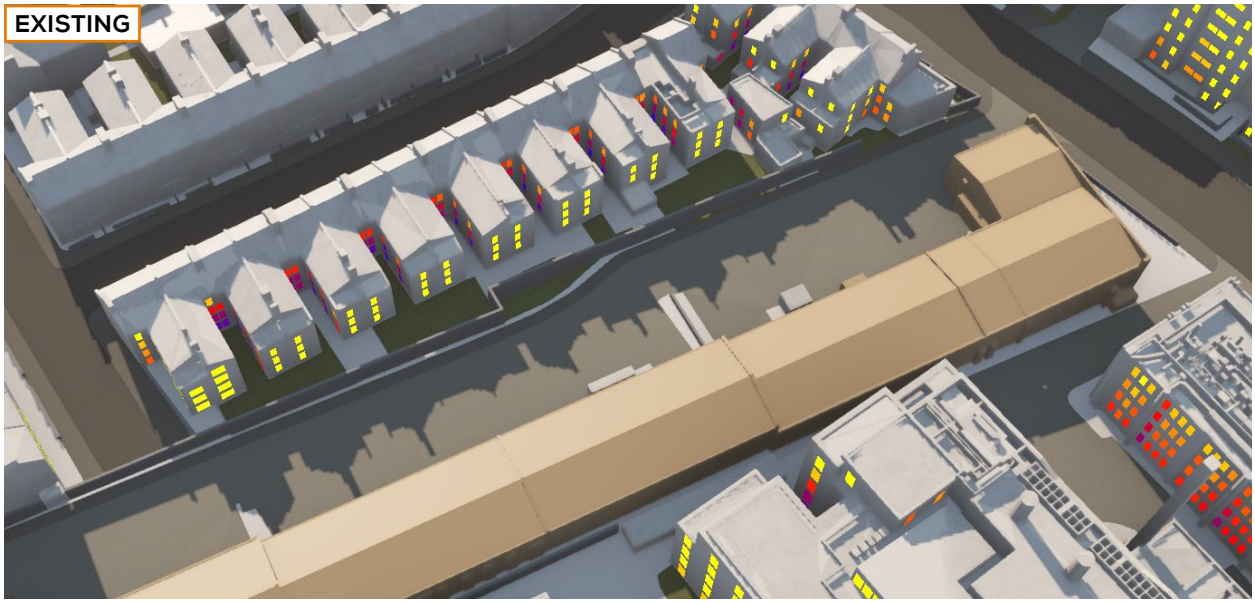


Figure 130: Existing VSC values

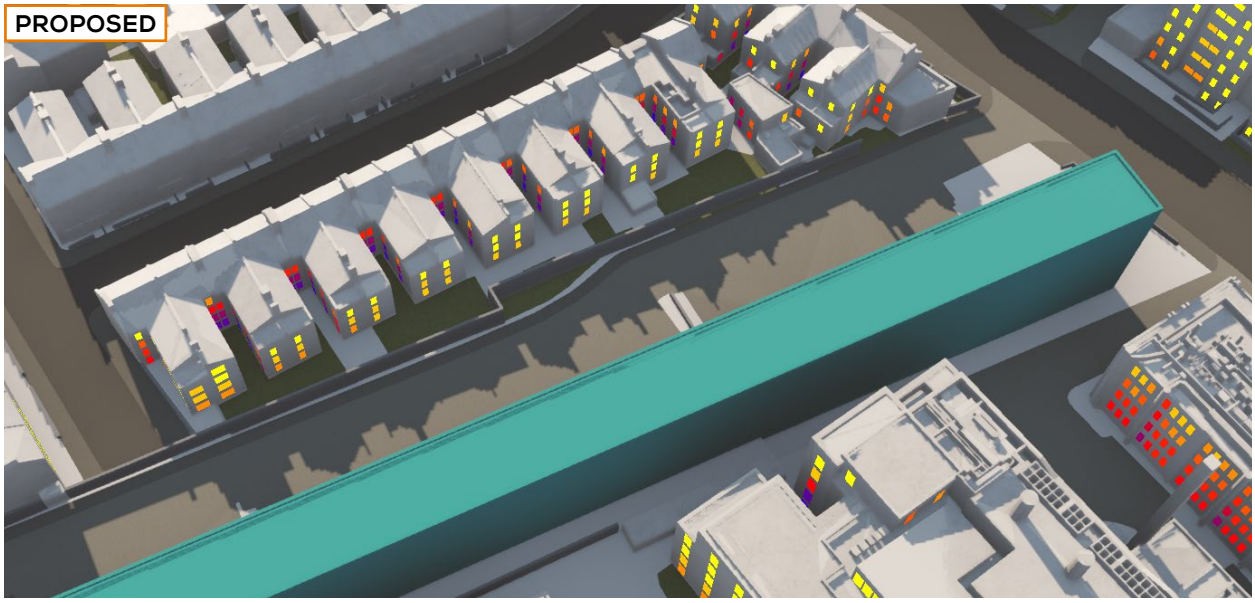
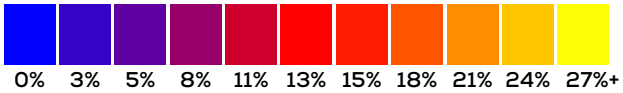


Figure 131: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



VSC ASSESSMENT - VIEW 2 **PROPERTIES TO THE NORTH OF THE SITE (PRINTWORKS APARTMENTS)**

EXISTING

Figure 132: Existing VSC values

PROPOSED

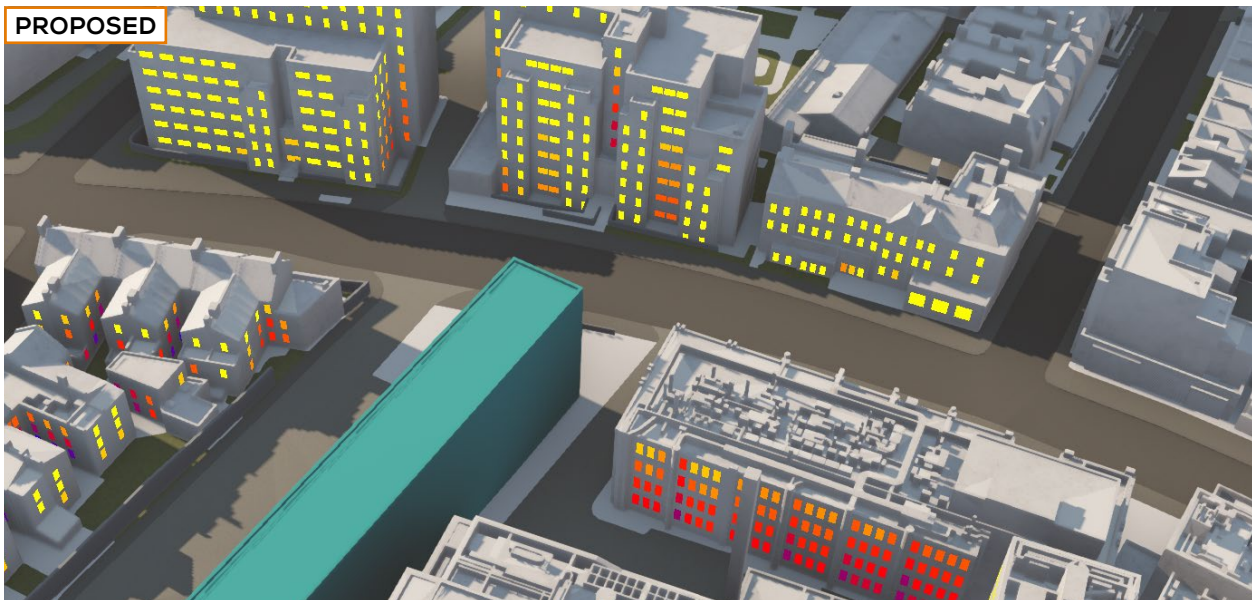


Figure 133: Indicative VSC values

VSC ASSESSMENT - VIEW 3 PROPERTIES TO THE NORTH OF THE SITE (2-40 VENETIAN ROAD)

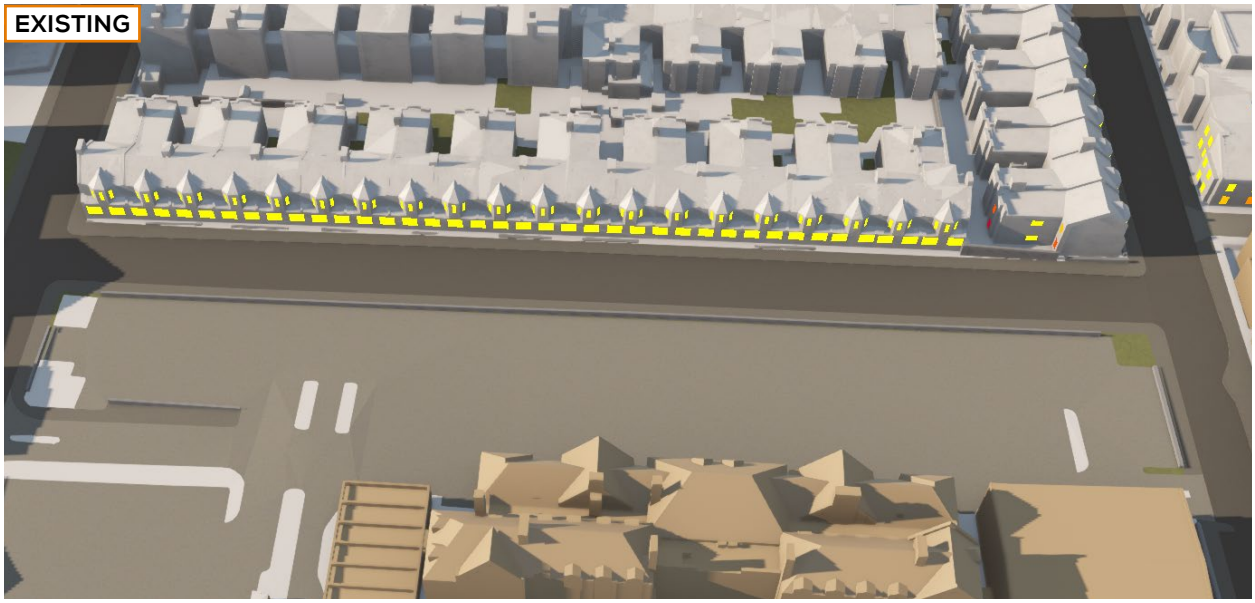


Figure 134: Existing VSC values

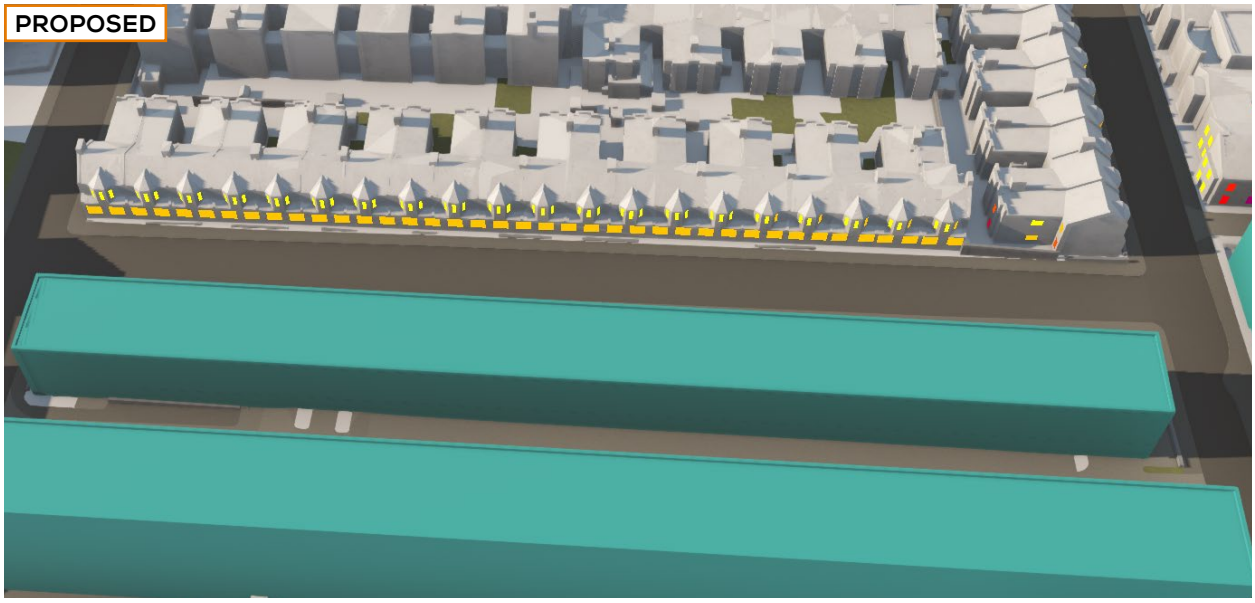
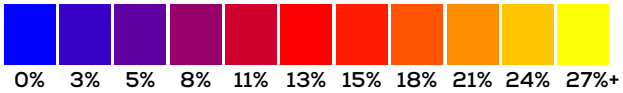


Figure 135: Indicative VSC values

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



VSC ASSESSMENT - VIEW 4 **PROPERTIES TO THE WEST OF THE SITE (10-15 AND 49-62 CALDECOT ROAD AND)**

Figure 136: Existing VSC values

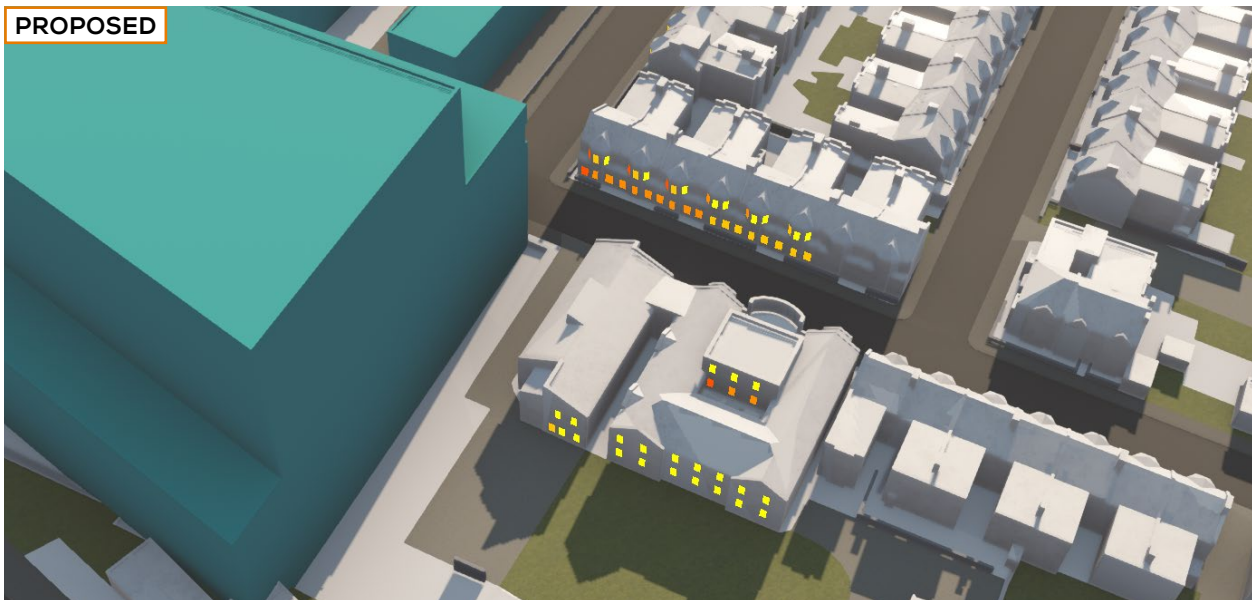
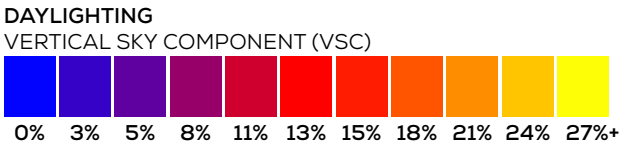


Figure 137: Indicative VSC values

DAYLIGHT IMPACTS TO NEIGHBOURING PROPERTIES



VSC ASSESSMENT - VIEW 5 **PROPERTIES TO THE NORTH OF THE SITE**

Figure 138: Existing VSC values

Figure 139: Indicative VSC values

DAYLIGHT AMENITY WITHIN THE SITE

The illustrative massing arrangement is understood not to include residential accommodation, which has the highest sensitivity to daylight and sunlight access.

However daylight potential images have been produced for completeness. These highlight those areas of the scheme seeing better daylight levels and they should be preferentially used to accommodate those functions where natural light would be most enjoyed, for example learning spaces.

Areas with low or no expectation for sunlight (for example office areas, storage etc.) should ideally be located where less daylight is available,

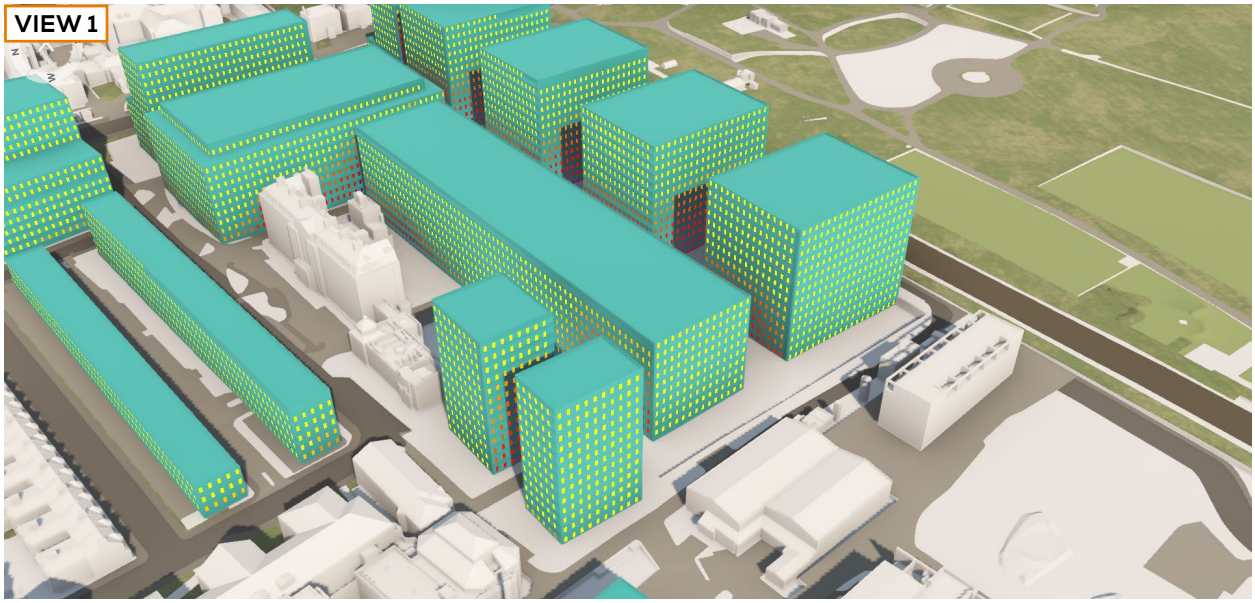


Figure 140: Daylight Potential (VSC)

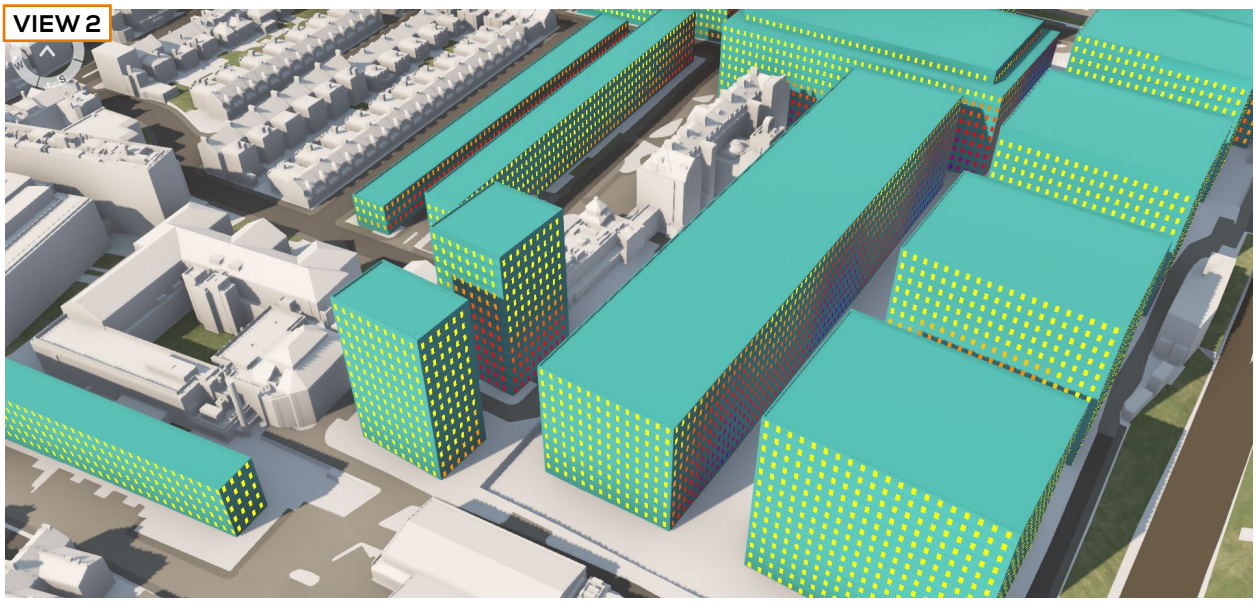
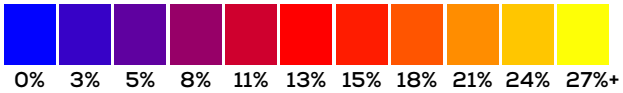


Figure 141: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



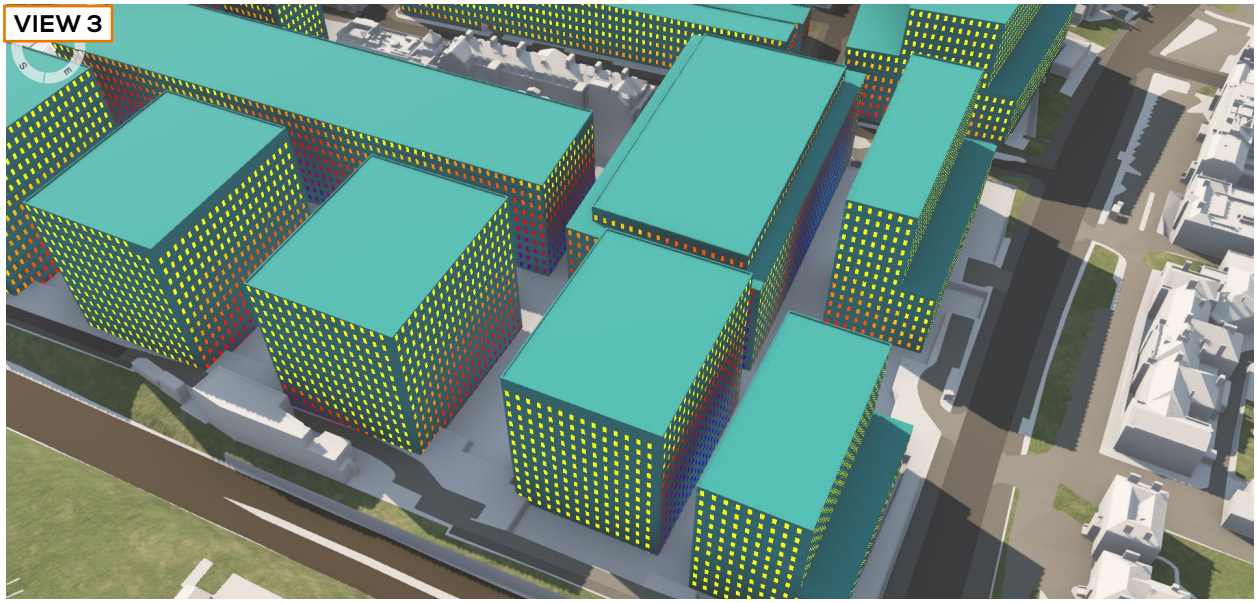


Figure 142: Daylight Potential (VSC)

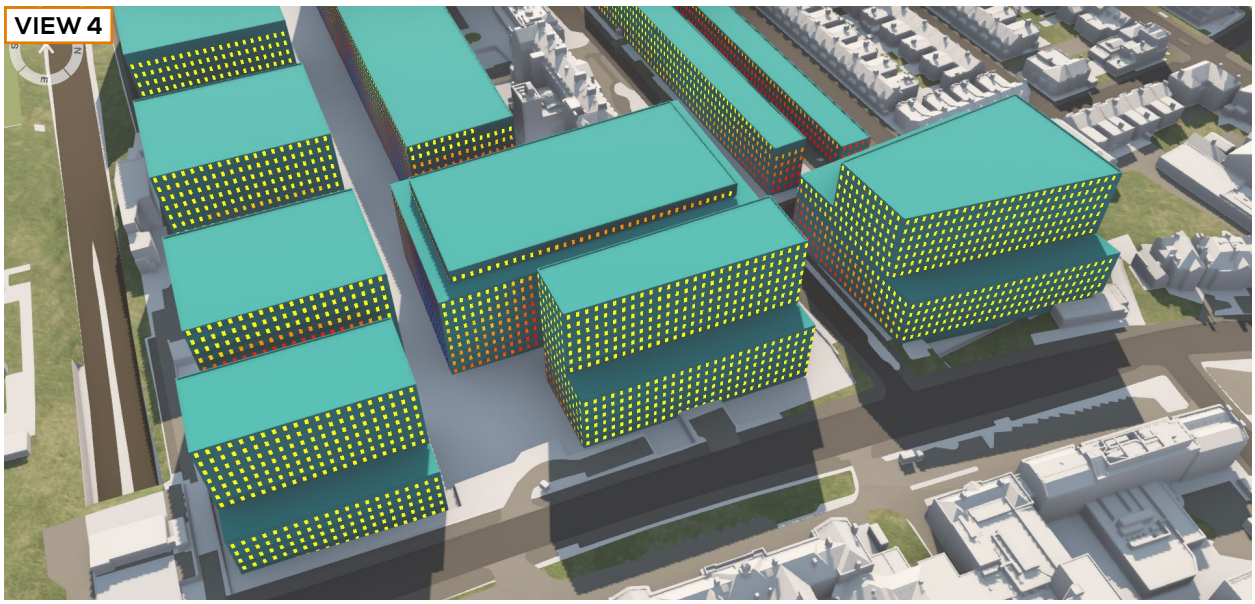
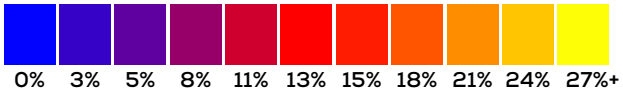


Figure 143: Daylight Potential (VSC)

DAYLIGHTING
VERTICAL SKY COMPONENT (VSC)



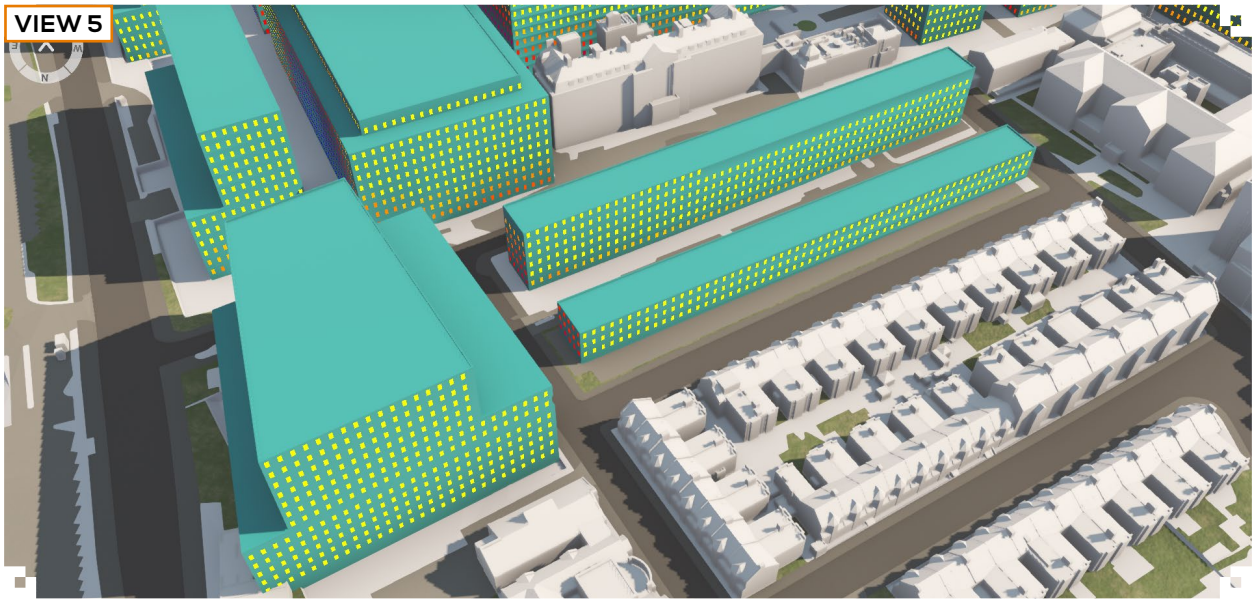


Figure 144: Daylight Potential (VSC)

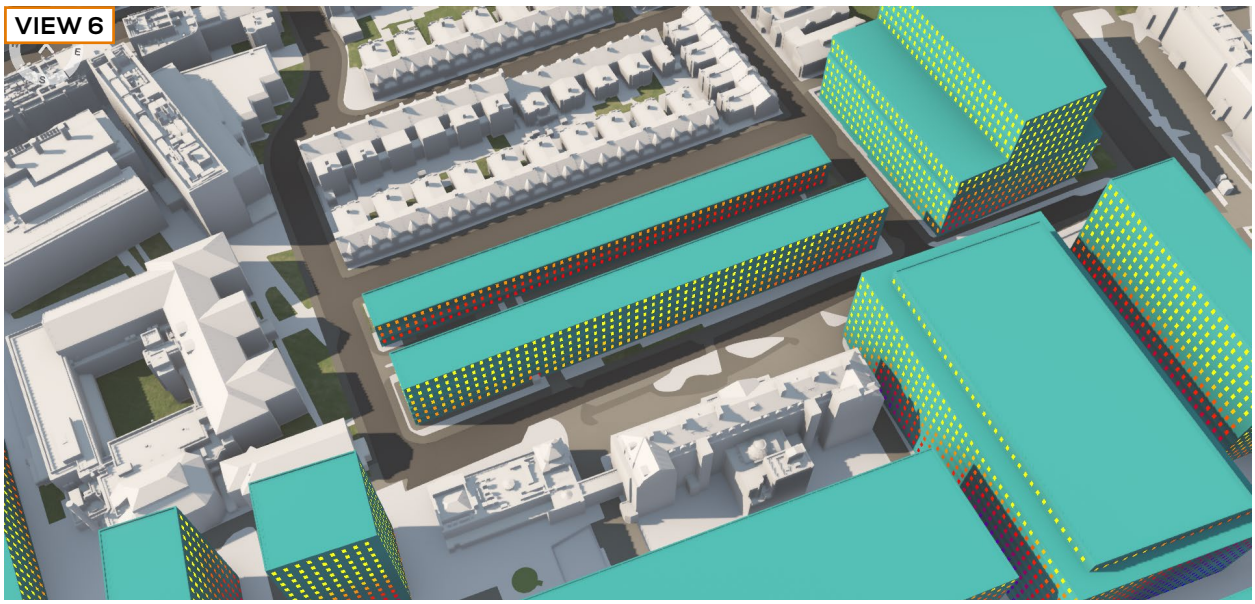


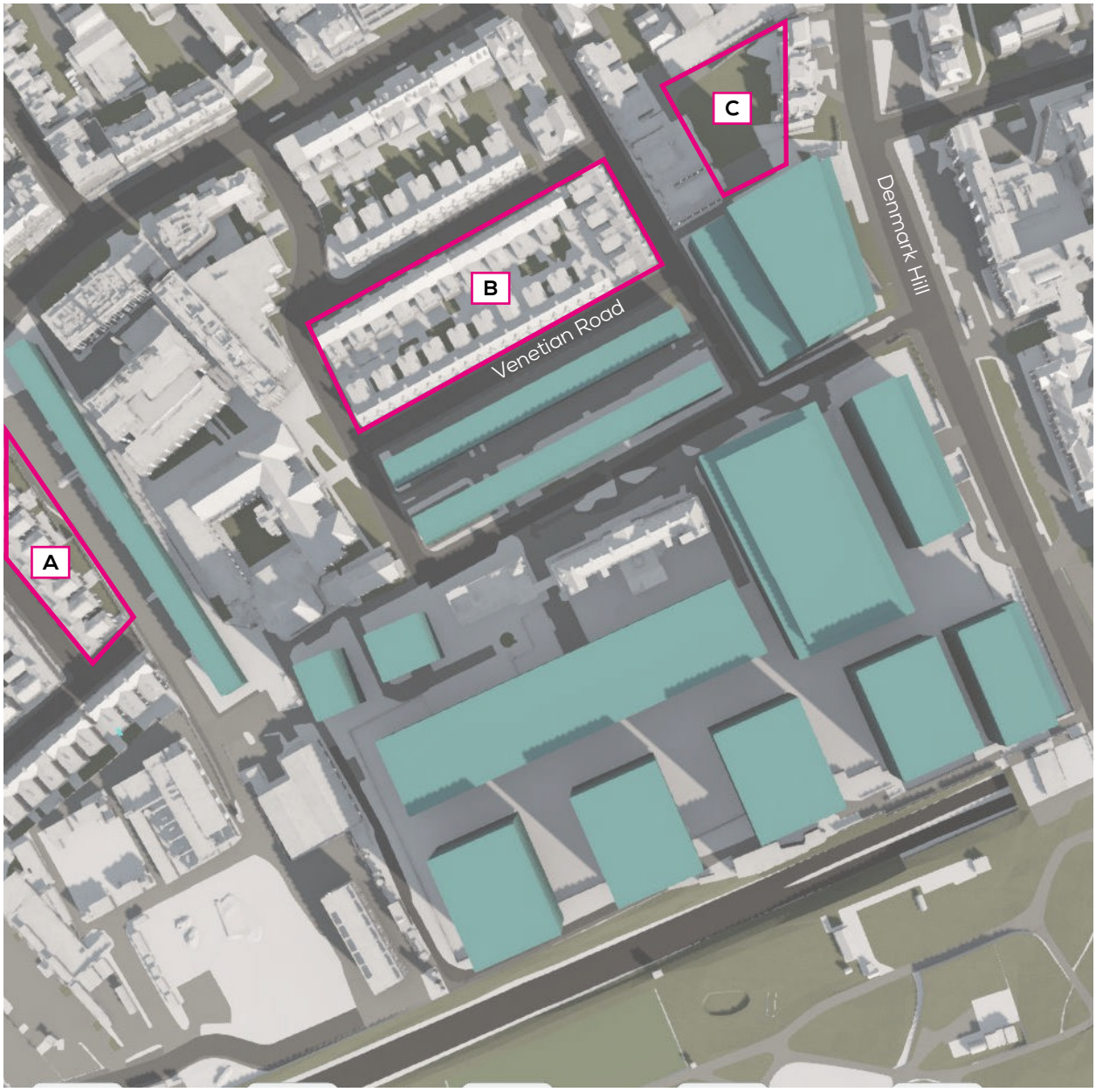
Figure 145: Daylight Potential (VSC)

OVERSHADOWING

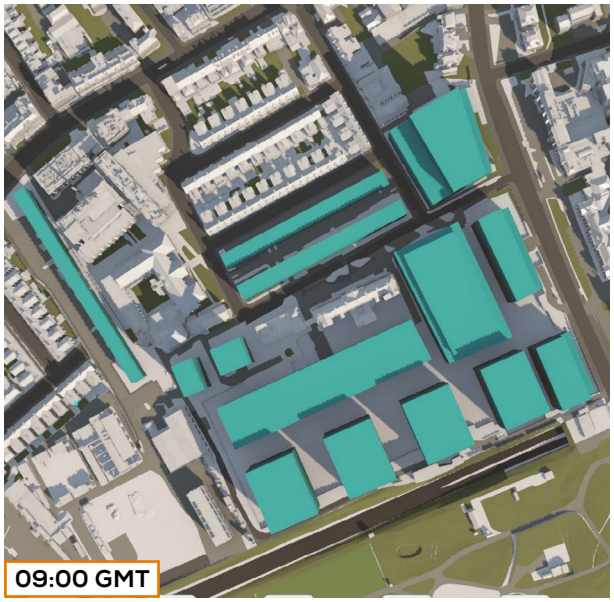
The illustrative scheme steps down towards the terraced houses on Northlands Street (labelled with A in the image below) and Venetian Road (B) and, as a result, only small instances of additional overshadowing are anticipated. Based on the indicative shadow plots provided in this section, alterations to the rear gardens of these properties are expected to be BRE compliant.

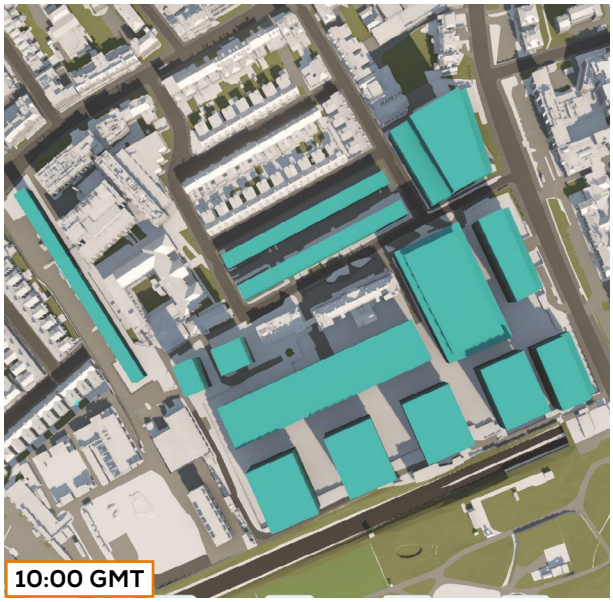
The green space between Caldecot Road and Denmark Hill (C) also appears to retain more than two hours of direct sunlight on half of its area on the equinox, and as such would remain BRE compliant. Detailed testing should be undertaken to ascertain what the impact to each individual gardens is in comparison with the existing massing.

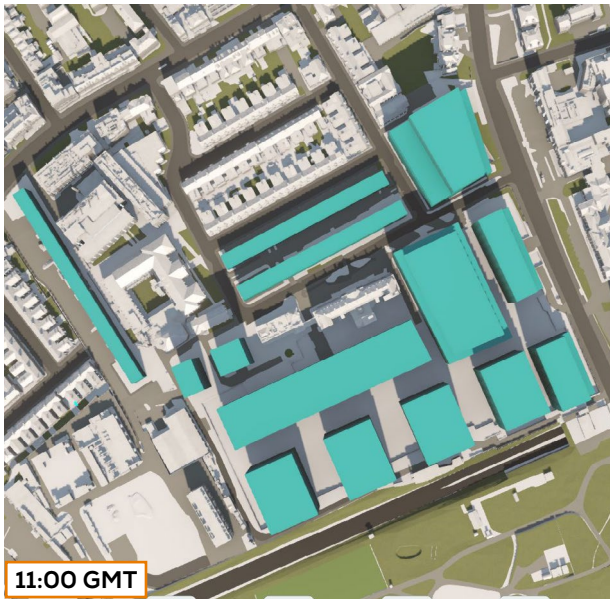
The open spaces within the site appear to mainly serve for circulation, however the shadow plots should ideally inform landscape design to make the most effective use of the available sunlight.

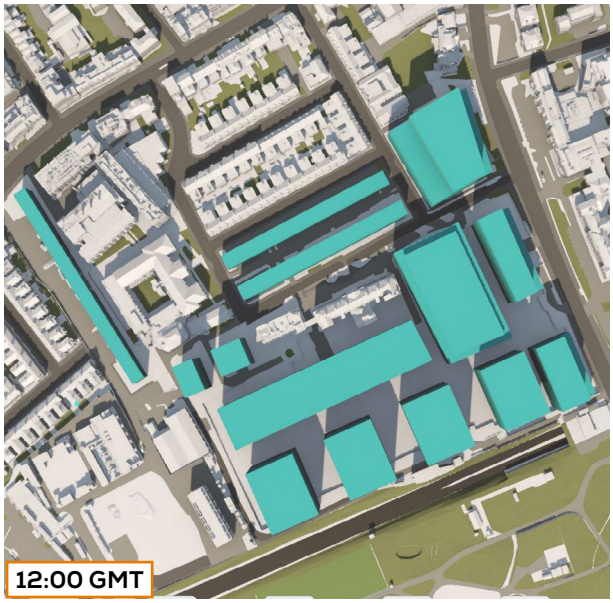


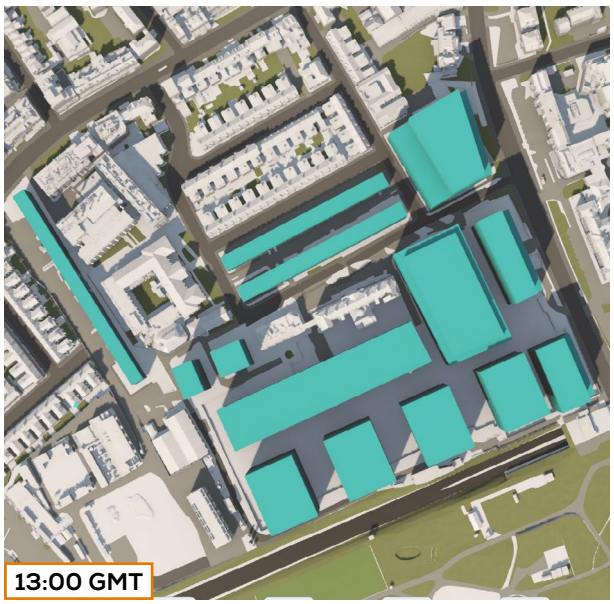
TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH

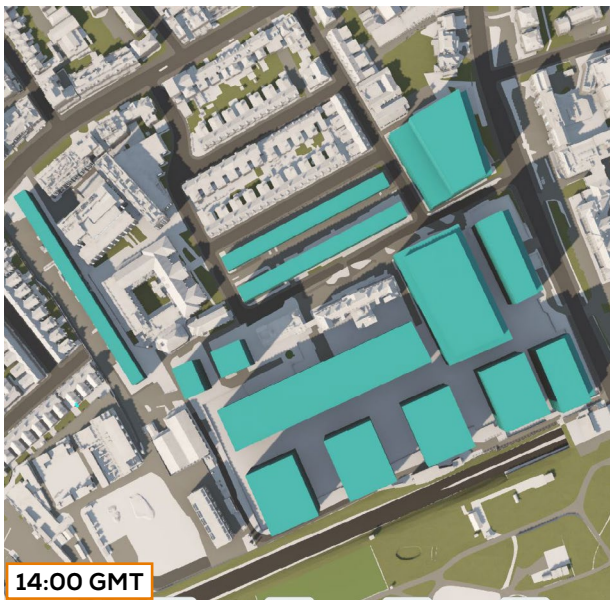




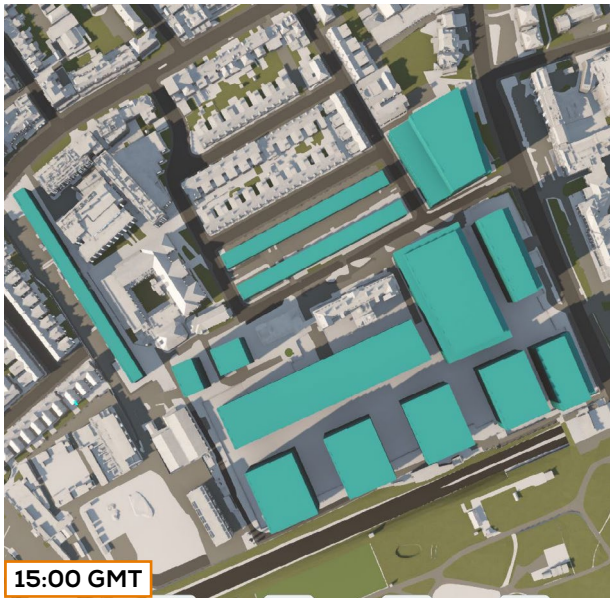


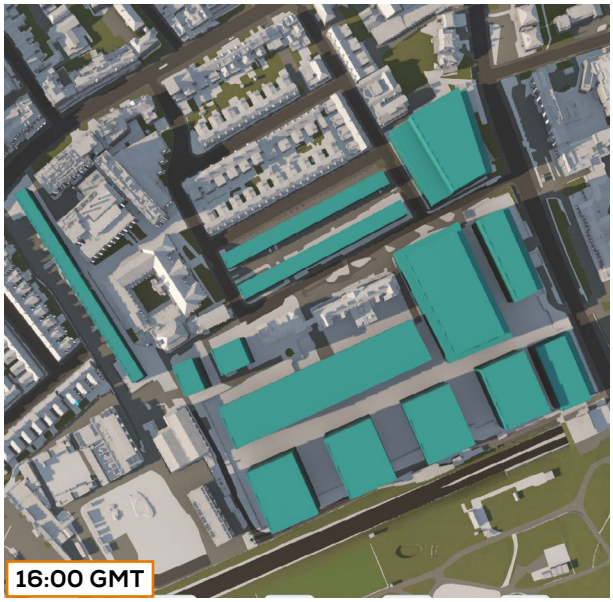






TRANSIENT OVERSHADOWING ASSESSMENT
21ST MARCH





21st March
(SPRING EQUINOX)

LONDON

Latitude:	51.4
Longitude:	0.0
Sunrise:	06:02 GMT
Sunset:	18:14 GMT

Total Available Sunlight:
12hrs 12mins

N

gia

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