

To
Columbia Threadneedle
78 Cannon Street
London
EC4N 6AG

From
Tuffin Ferraby Taylor
18 Holborn
London EC1N 2LE
+44 (0) 20 3479 77 77
www.tftconsultants.com

Date

Your reference

Our reference

20 July 2021

2021/CoU/RN

Tuffin Ferraby Taylor LLP
is a limited liability
partnership registered
in England and Wales

Registration number:
OC306766

Registered office:
18 Holborn
London EC1N 2LE

Dear Sirs,

COUNTY HOUSE, FRIAR STREET, READING, RG1 1DB – DAYLIGHT AND SUNLIGHT AMENITY

TFT have been instructed by Columbia Threadneedle to undertake a non-technical desk-top review in consideration of Daylight and Sunlight amenity, with regards to the Studio RBA's residential proposals for County House, Friar Street, Reading, issued to TFT on 16th July 2021.

These residential conversion proposals fall under permitted development rights pursuant to the Town and Country Planning (General Permitted Development) (England) Order 2015. One of the prior approval matters associated with Permitted Development Rights for new dwellings is the requirement to consider the “*provision of adequate natural light*” within the proposed habitable rooms.

The commonly accepted reference document for Local Authorities when considering Daylight and Sunlight is the BRE Report 209 ‘*Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice, 2011*’ (“BRE Guidelines”). This document provides guideline criteria and methodology for considering the daylight amenity performance within new dwellings. We have therefore considered the amenity internally within the proposed first to fourth floor dwellings, in accordance with this document.

Guidance and policy context is important in establishing acceptable levels of Daylight and Sunlight amenity. National policy seeks to ensure that the planning system encourages more efficient use of land and promotes a flexible approach when applying guidance to avoid inhibiting these objectives, which includes specific reference to Daylight and Sunlight. The guidelines should not be considered as a matter of planning policy, but instead with an appropriate degree of flexibility in relation to Daylight and Sunlight within new dwellings.

The summary section of the BRE Guidelines state that they are ‘*purely advisory and that the numerical target values within it may be varied to meet the need of the development and its location*’. For example, the numerical targets are based on traditional low density suburban housing, therefore it is often considered appropriate to apply more flexible targets when dealing with modern dwelling configurations in an urban environment. It should also be considered that whilst many buildings are appropriate for conversion, permitted development rights bring with them inherent constraints, such as fixed window positions, internal structural configurations, and orientation. Therefore, the determination of what is deemed ‘adequate natural light’ requires professional judgement and a degree of flexibility.

County House is located in Reading town centre, close to Reading railway station. It is indicated in green on the site plan view below.

To: Columbia Threadneedle
 Date: 20 July 2021
 Page: 2



Figure 1: Site plan view of County House (Google 2021).

An aerial 'birds eye' view photograph facing north (Google 2021), below, illustrates the property in context within the local surrounding environment.

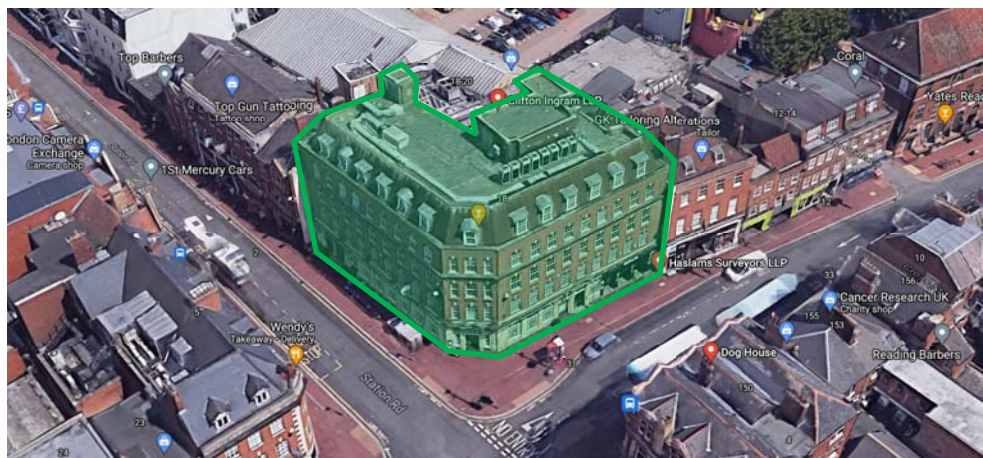


Figure 2: 3D site view of Imperial House (Google 2021).

As can be seen from the images above, County House is a large L-shaped building, situated on the corner of Station Road and Friar Street, and at the corner of a block of terraced commercial buildings, sharing boundary walls to the north and east. The building is fully extended at ground level but includes a rear courtyard to the north. From first floor it enjoys almost unobstructed views to the north and east, but to the south, and west it overlooks buildings of a similar size and scale.

By reference to the BRE's initial 25° obstruction angle test, if the 25° angle were struck from any first-floor window of County House, this test would be satisfied, although to the south and west facing, street fronting elevations external obstructions are present due to the neighbouring buildings to the south and west across the road. Nevertheless, given streets in Reading town centre are wider than is typical in other town centres, good access to daylight for windows on all elevations of County House are possible. As a result, the fenestration will enjoy excellent Vertical Sky Component (VSC) values which are likely to achieve or exceed the guidance target value of 27% VSC. The VSC value is one the

To: Columbia Threadneedle
 Date: 20 July 2021
 Page: 3

components of the Average Daylight Factor (ADF) calculation for quantifying daylight levels within the room. Therefore, if a good VSC value is achieved, it indicates a good ADF value is likely.

The Proposals

TFT have reviewed the internal layout information for the proposals and considered the potential light amenity received by the future occupants based on professional judgement.

Given the previous commercial nature of the building, the existing fenestration is comprised of large window openings, typically greater in size than one would expect for a residential property. As previously suggested, we expect each of these windows to have excellent access to daylight.

The apartments feature open plan living/kitchen/dining areas, whereby the main living rooms are located nearest to the main window wall. Therefore, the layouts prioritise daylight to the main living rooms. As per the BRE Guidelines, bedrooms are less important, whilst bathrooms and circulation spaces need not be considered.

Typical modern living requirements within urban locations dictate that the majority of apartments contain kitchens/kitchenettes to the rear of a larger room. Typically, these kitchens are not considered to be habitable due to the small room area and can be excluded from analysis, or these spaces at the rear of the room are only considered as a secondary room use. Therefore, these spaces have been considered by applying the parameters for the primary room use only, i.e. living room or dining room, with an ADF target of 1.5%. The BRE Guidelines advise that indirectly lit kitchens are acceptable, providing they are directly linked to a well day-lit living room.



Figure 3: Proposed first floor plan for County House, Reading (Studio RBA 2021).

To: Columbia Threadneedle
Date: 20 July 2021
Page: 4

The scheme proposal comprises a change of use from offices (class use B1(a)) to form four floors of residential apartments (class use C3). A drawing of the proposed first floor layout is depicted above, and consists of one bed, and two-bedroom apartments. The first-floor layout (figure 3 above) is repeated at second to fourth floors, although as the building profile steps back at higher elevations the plans adapt accordingly. Additional windows serve the flats at second and third floor levels, and dormer windows serve the apartments at fourth floor. As the first-floor plan is indicative of the upper floor layouts, and is at the lowest elevation, it will be subject to greater degrees of external obstruction. Therefore, if good daylighting can be achieved at first floor, then the floors above will be well day-lit.

All main habitable rooms at first floor and above, enjoy access to at least one large main window, and in most cases, more than one large window, providing good daylight distribution within the rooms. These spaces contain small kitchens along the back of the rooms. The kitchens look directly into the well-lit main living spaces. Again, the daylight values at the windows (VSC) should be excellent given the large unobstructed glazed areas. Also, given the excellent glazing-to-room-area ratios, we would expect these to translate to ADF values in excess of the 1.5% ADF target value for a living room and above 2% ADF in many instances. Therefore, we suggest that these spaces, at first to fourth floor, should be considered adequately lit, in accordance with the BRE Guidelines.

Bedrooms are considered 'less important' by the BRE and as such, have lower target ADF value of 1%. All bedrooms are served by at least one window of their own, though in some cases more than one window. Consequently, they will enjoy excellent VSC values. The room sizes coupled with these well day-lit windows indicate they would achieve values in excess of their 1% ADF target criteria. Therefore, these rooms should be considered adequately lit.

In relation to Sunlight, due the existing building configuration it is inevitable that some windows / rooms are predominately north facing. However, conversely, the internal arrangements and L-Shape building orientation dictates that the majority of rooms will be served by at least one large window that is orientated within 90° of due south. Given their largely unobstructed view from their elevated position and their southerly orientation, we would expect these rooms to achieve in excess of the BRE's Annual Probable Sunlight Hours (APSH) target values.

Summary

The apartments will be served by relatively large areas of glazing, which should ensure that adequate light will be provided into the living spaces behind. The apartments have been configured to maximise the light available by locating the main living areas by the windows and providing a multi-glazed arrangement where necessary. These design measures will ensure that access to natural light is maximised to the proposed first to fourth floor apartments at County House, Reading.

To: Columbia Threadneedle
Date: 20 July 2021
Page: 5

The potential for natural light within the scheme proposals as a whole are considered to be adequate and in line with the design principles and recommendations in the BRE Guidelines.

Yours faithfully

A handwritten signature in black ink, appearing to read 'R. Nosworthy', written in a cursive style.

Richard Nosworthy
Technical Partner
For and on behalf of Tuffin Ferraby Taylor LLP

Email: rnosworthy@tftconsultants.com
Telephone: +44 (0) 791 897 3822