

DAYLIGHT AND SUNLIGHT

BRE Site layout planning for daylight and sunlight extract:

In general, a building will retain the potential for good interior diffuse daylighting provided that on all its main faces:

(a) no obstruction, measured in a vertical section perpendicular to the main face, from a point 2 m above ground level, subtends an angle of more than 25° to the horizontal;

or

(b) if (a) is not satisfied, then all points on the main face on a line 2 m above ground level are within 4 m (measured sideways) of a point which has a vertical sky component of 27% or MORE

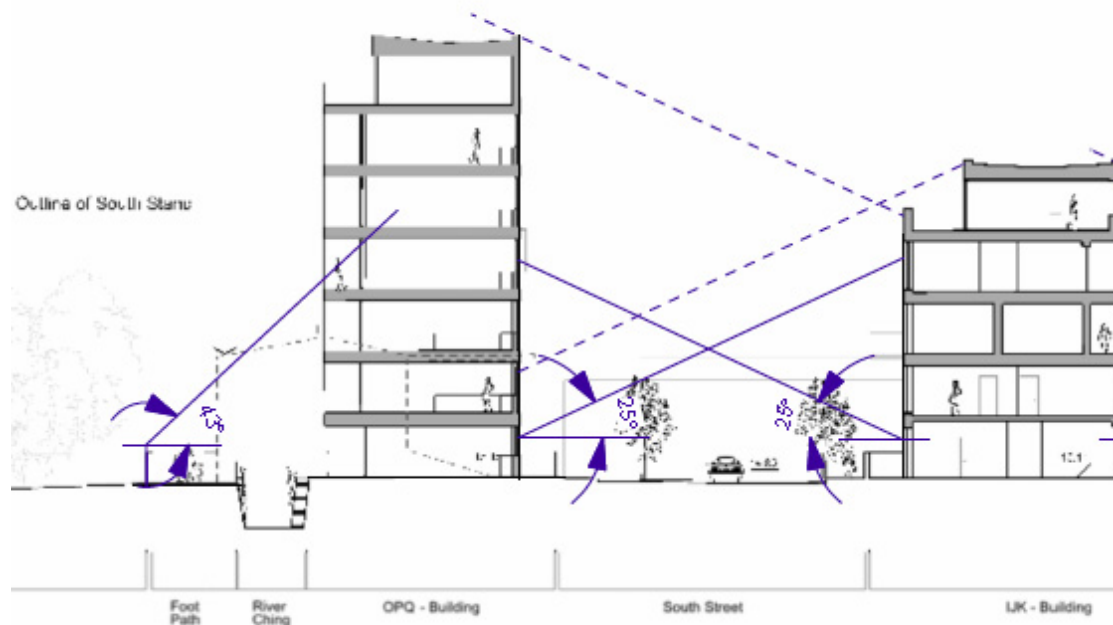
We have attached examples of measuring these 2m 25° lines on the drawings as submitted (see below). These illustrations show that the proposals very rarely comply with condition(a). As such it brings into question the actual daylight within the scheme.

Furthermore the areas that fall below these guidelines need to be assessed in terms of the 4m (measured sideways). This is not feasible in large areas of the scheme due to long monolith blocks that are proposed. This is shown clearly within the daylight report where several of readings show a vertical sky component (VSC) of less than 27%.

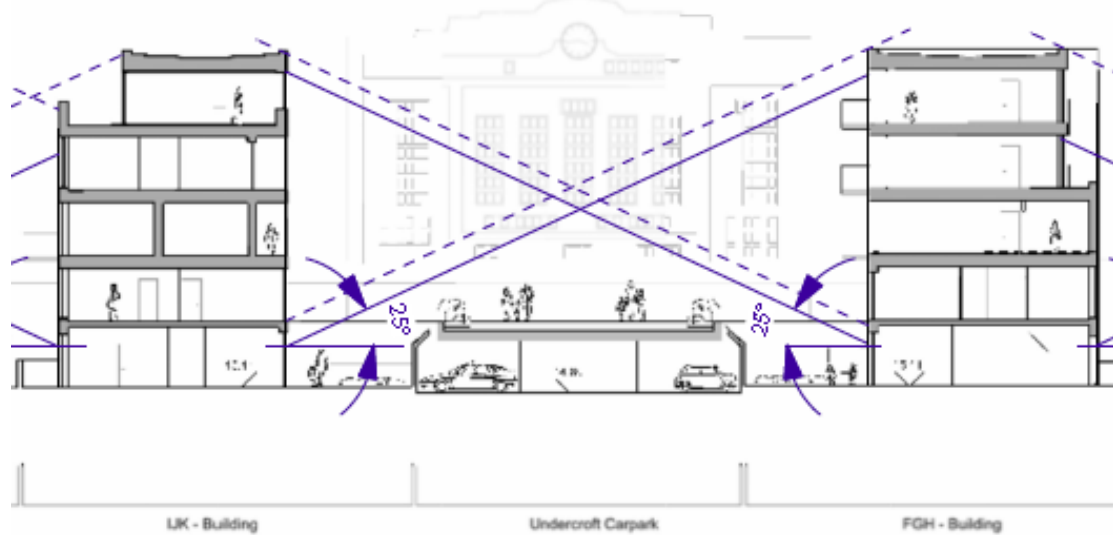
As such the scheme sets out to create 'affordable' accommodation which is wholly reliant on electric lighting in order to get anywhere near a comfortable level of lighting to the majority of the rooms. It a poorly designed scheme that looks at creating such a high density of large tall blocks so tightly packed that they fall down on the basic level of providing daylight to the new accommodation.

Illustrated drawing 214: Section 03 with 25° daylight lines

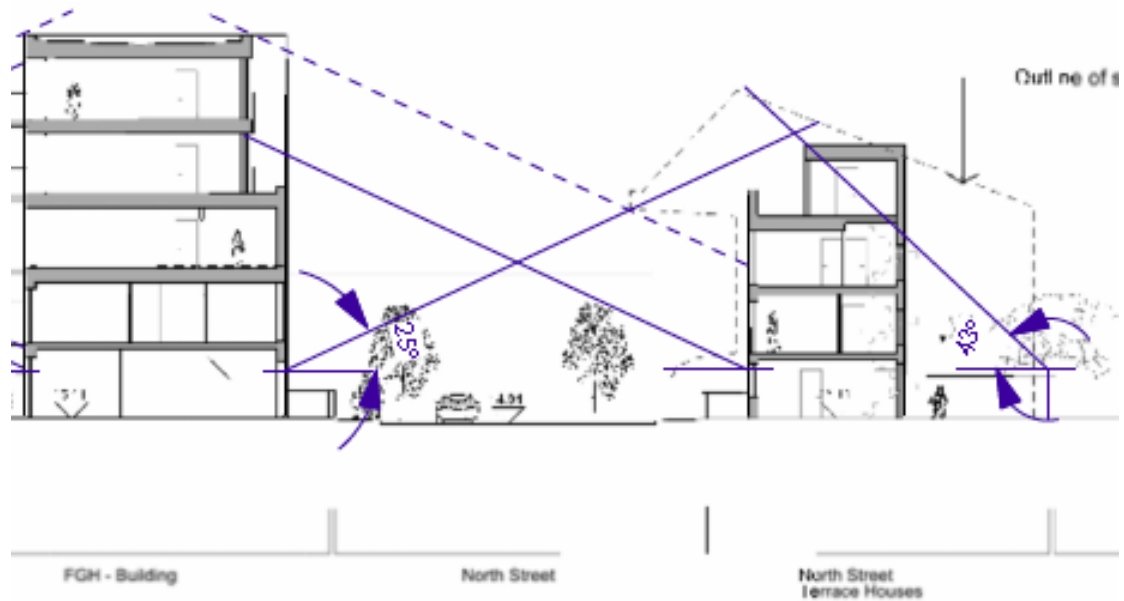
Please note dashed lines show the height at which rooms will start achieving 'good' daylight.



1: Illustration showing relationship on South Street



2. Illustration showing the relationship within the new central block



3. Illustration showing the relationship of the buildings to the new North Street.

The BRE then goes on to talk about the relationship of any new proposal on existing buildings and neighbouring sites. They suggest "a site next to a proposed new building will retain the potential for good diffuse daylighting provided that on each common boundary:

- (a) no new building, measured in a vertical section perpendicular to the boundary, from a point 2m above ground level, subtends an angle of more than 43° to the horizontal;
- or
- (b) If (a) is not satisfied, than all points 2m above the boundary line are within 4m (measured along the boundary) of a point which has a vertical sky component, looking towards the new building(s), of 17% or more.

As you can see from illustration 1 above this 43° line at the boundary offers a large impact on it's neighbours in terms of diffused daylight and also future potential development. The same can be said for illustration 3. The report submitted with the application assess the daylight and sunlight within the actual existing properties but does not make any assessment of the actual impact the proposals have in terms of proximity to boundaries and overall impact at these locations. This is not acceptable as one of the boundaries is public open space that will have a huge reduction in daylight and this impact has not even been considered.