

# 10.0 LIGHTING STRATEGY

LIGHTING DESIGNER:  
**SPEIRS + MAJOR**

This report has been prepared by Speirs + Major for Almacantar to outline the lighting design strategy for the external image of Centre Point Tower, Centre Point Link, Centre Point House and the Affordable Housing. The proposal is based upon the architectural information as provided by Conran and Partners and Rick Mathers Architects, and informed by the landscape information as provided by Gillespies.

The lighting strategy as outlined in this report has been carefully developed with consideration to a wide variety of functional and aesthetic criteria, including the impact of the lighting on the overall visual quality and character of the site and its local context.

This strategy provides a framework to inform the lighting design development, ensuring that a holistic and balanced approach will be used, considering less tangible 'qualitative' issues such as atmosphere, perception and legibility, alongside the more quantitative issues of visual function and efficacy. The lighting design will provide a practical and sustainable response that enhances the user experience of the site both when viewed from a distance as well as from the adjoining public realm.

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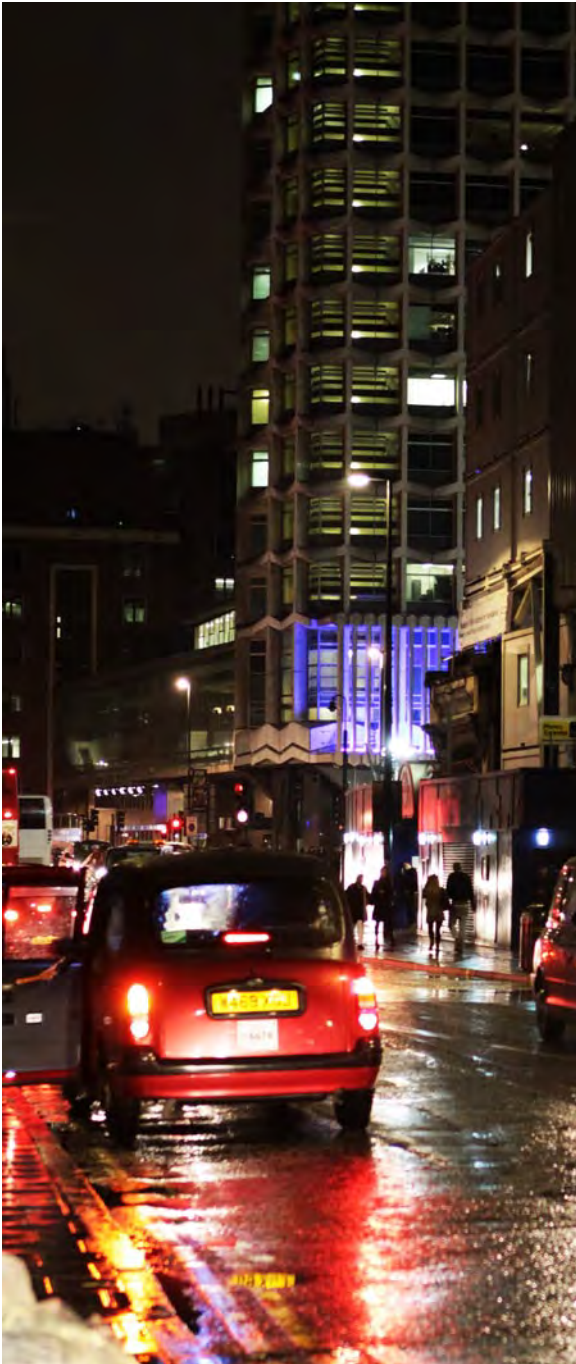
View from Oxford Street



View from Oxford Street



View from Earnshaw Street



View from Oxford Street



# APPROACH

## 10.1 CONTEXT

The Centre Point buildings sit on the junction between Bloomsbury, Covent Garden, Fitzrovia and Soho, making for an extremely diverse immediate urban context at street level. After dark, the surrounding streets are full of visual noise. From the lights of Soho, to theatres, restaurants and late-night shopping, the night-time economy of the area is extremely strong, with many buildings competing for attention. Whilst there is a significant presence of illuminated signage, the ambient light levels of the surrounding streets are relatively muted, other than at critical traffic junctions, where light levels are significantly higher, resulting in light spilling onto the site.

Given the predominance of relatively low rise buildings surrounding the site, the visibility of the Tower significantly widens the urban context of the building. The Tower is visible from a number of distant views and the signage at the top of the Tower acts as a visual way-finding beacon.



View from New Oxford Street



View of Tottenham Court Road



View from St Giles High Street



View from Earnshaw Street



10.2 HERITAGE

The architectural design epitomised the style of the 1960’s, with textured facades providing visual interest and shadow play. The interior lighting was produced by a manufacturer called Troughton & Young, who produced luminaires for the shared entrance and circulation areas, as well as the offices above. This interior lighting determined the appearance of the buildings after dark, as there is no record of any exterior architectural lighting in the original design.

There have been a number of lighting interventions on the Tower over its lifetime, including the addition of the landmark illuminated signage at roof level. Images have also been found showing that the façade was floodlit at some point reinforcing the texture of the façade with a blanket of light.

Most recently in the life of the building, there is no floodlighting to the façade, but there is blue coloured light has been applied to the podium base and roof underside of the Tower and the illuminated roof signage remains.



RIBA Journal, January 1995



Building, May 1968



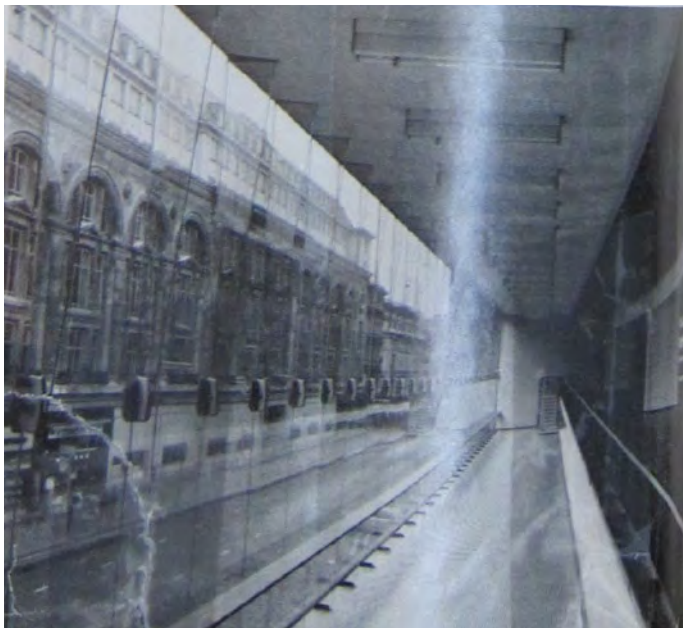
Floodlighting Scheme



Troughton and Young Leaflet



RIBA Journal, January 1995



Building, May 1968





Crown



Podium



Facade

### 10.3 IDENTITY

The identity of the Centre Point buildings after-dark, is largely determined by the position from which the building is viewed.

From a distance, the 'crown' of the Tower provides the identity for the building. It defines the highest point of the building, visible from the greatest distances, and currently identifies the name of the building through the illuminated signage.

From mid-distant views, the identity of the building is determined by the facades of the Tower, Link and House. The interior lighting defines the use of space within the building and its degree of inhabitation.

From the near view, the podium forms the identity of the buildings. The soffits of the Link building and the stairways, the facades at ground and first floor level, and the surrounding public realm.

The lighting approach must be carefully considered to address each of these views, in order to create a cohesive identity for the appearance of the overall development after-dark.

10.4 FORM

There are a number of unique elements within the architecture of each building that together produce the composite image of the development. The lighting approach for each of these elements must be considered both independently and as part of the whole. The lighting approach for each element of the building must respond to the aesthetic and functional lighting requirements, as well as considering the material reflectance, colour and texture and its position in the architectural hierarchy of the development.

The entrances into the buildings must be clearly defined in order to produce a legible public realm that infers natural way-finding. The entrances must respond to the public image of the building, as well as the private nature of the residential building function.

The internal lighting of the retail units will significantly impact upon the image of the building. It is proposed that retail guidelines are developed so as to ensure that the illuminated retail windows produce a harmonious lit environment around the base of the buildings, making a positive contribution to the overall appearance and visitor experience of the site.

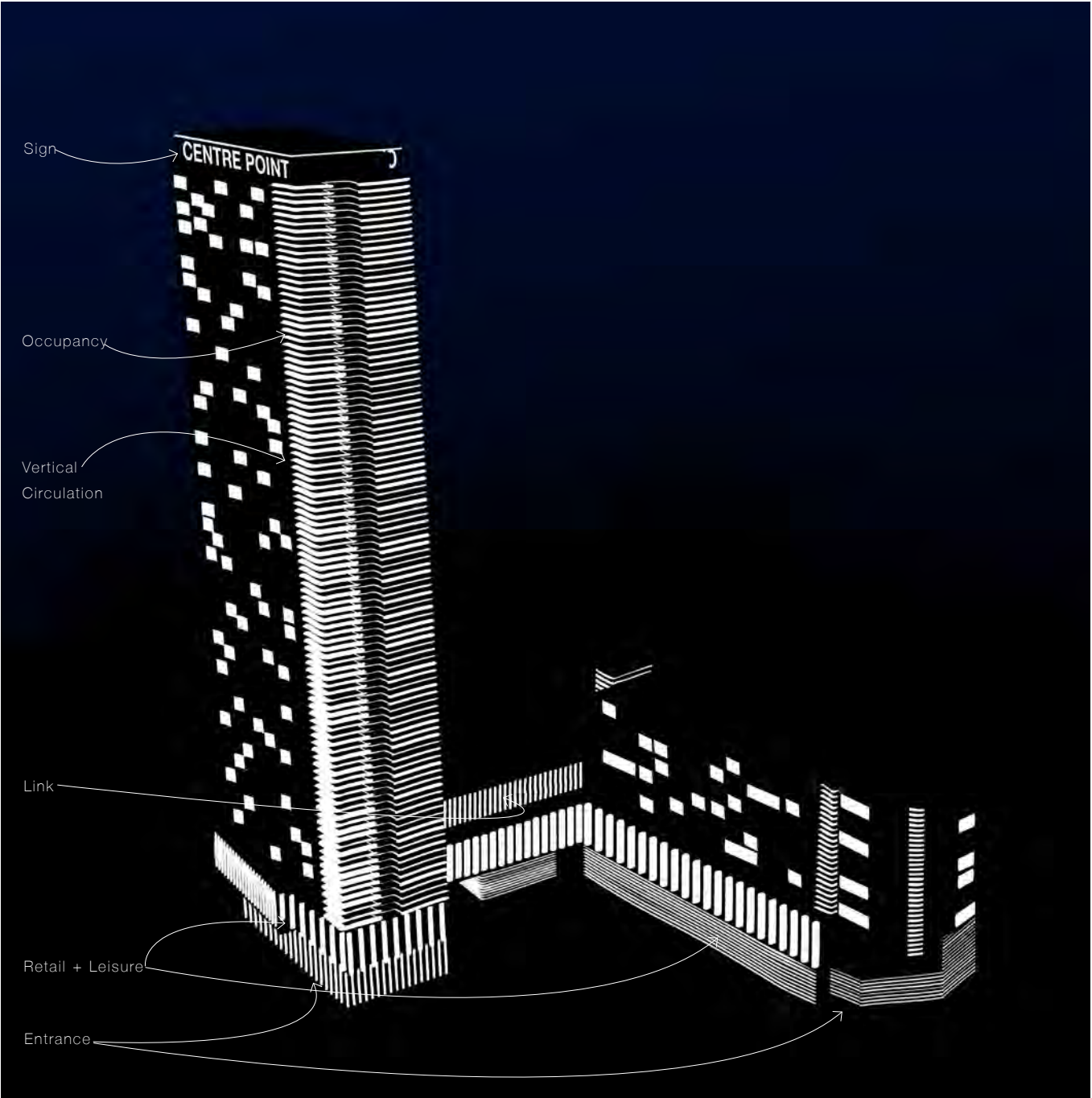
The lighting of the leisure and spa areas at the base of the tower will contrast with the interior lighting of the retail units, with a more subtle approach. This will contribute to the definition of the form of the base of the Tower.

The internal lighting of the Link building will provide the visual connection between the Centre Point buildings. Given the significant expanse of glazing, including that of the ground floor retail unit below, careful consideration of the internal lighting is critical.

There are circulation spaces running vertically up both sides of the Tower, up the edges of Centre Point House and the west facade of the affordable housing. The internal illumination of these spaces will provide a vertical continuity in terms of the interior lighting.

The occupancy of the residential apartments will provide a tapestry of constantly changing internal lighting, both in terms of which apartments are occupied, but also in terms of the light intensity and colour temperature that individual apartments choose to use.

The signage and roof edge provide the opportunity to ‘crown’ the building, defining the extent of the height of the tower.

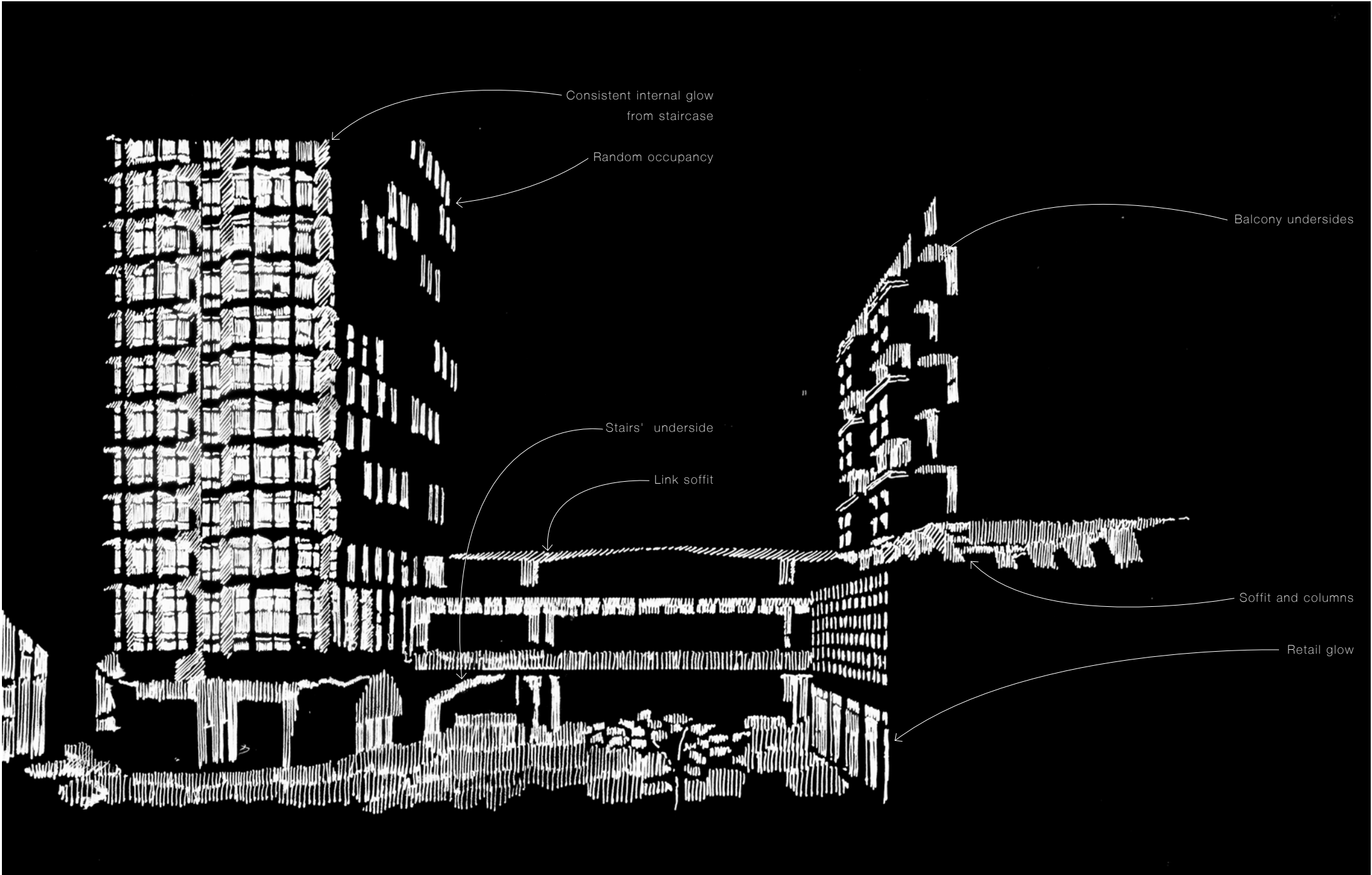


Form diagram



10.5 LIGHT + SHADE

Illuminating key soffits of the Centre Point buildings will visually lift the form of the building, positively contributing to the character of the building after dark, particularly at low level when viewed from the public realm.



10.6 THEMES

The building as a lantern...  
The illumination of the interior spaces of a building significantly contribute to the image of the building after dark. By carefully considering the interior lighting within glazed areas, the building can appear to be a lantern, revealing the internal functions of the building and creating a silhouette or the built form. The inner edges of window reveals and overhangs become illuminated by the interior light.

Inverting the shadows...  
All areas of a building that are naturally in shadow by day, are those surfaces that can contribute to the building appearing gloomy or unsafe by night. Buildings are predominantly viewed from below, so it is the soffits that visually dominate the image of the building.

Living up to the image...  
The building identity has a strong heritage and the lighting approach must reinforce and enhance this image.

Enhancing the offer...  
Lighting will be integrated into the development of the scheme, so as to enhance the architecture and landscape, providing intangible the qualities of atmosphere and character. Light can be incorporated into temporary and permanent artworks to further enhance the development.

Enjoying the view...  
The lighting needs to respect the residential nature of the apartments and protect their views out over the London skyline.



The building as a lantern



Inverting the shadows



Living up to the image



Enhancing the offer



Enjoying the view



10.7 JOURNEY

The development will be experienced as part of a journey and so consideration must be given to the distant view, the progressive approach, the arrival within the public realm and the entrances into the buildings. Each step of the journey needs to be addressed in terms of ensuring that the lighting meets the aesthetic and functional requirements.



Distance View



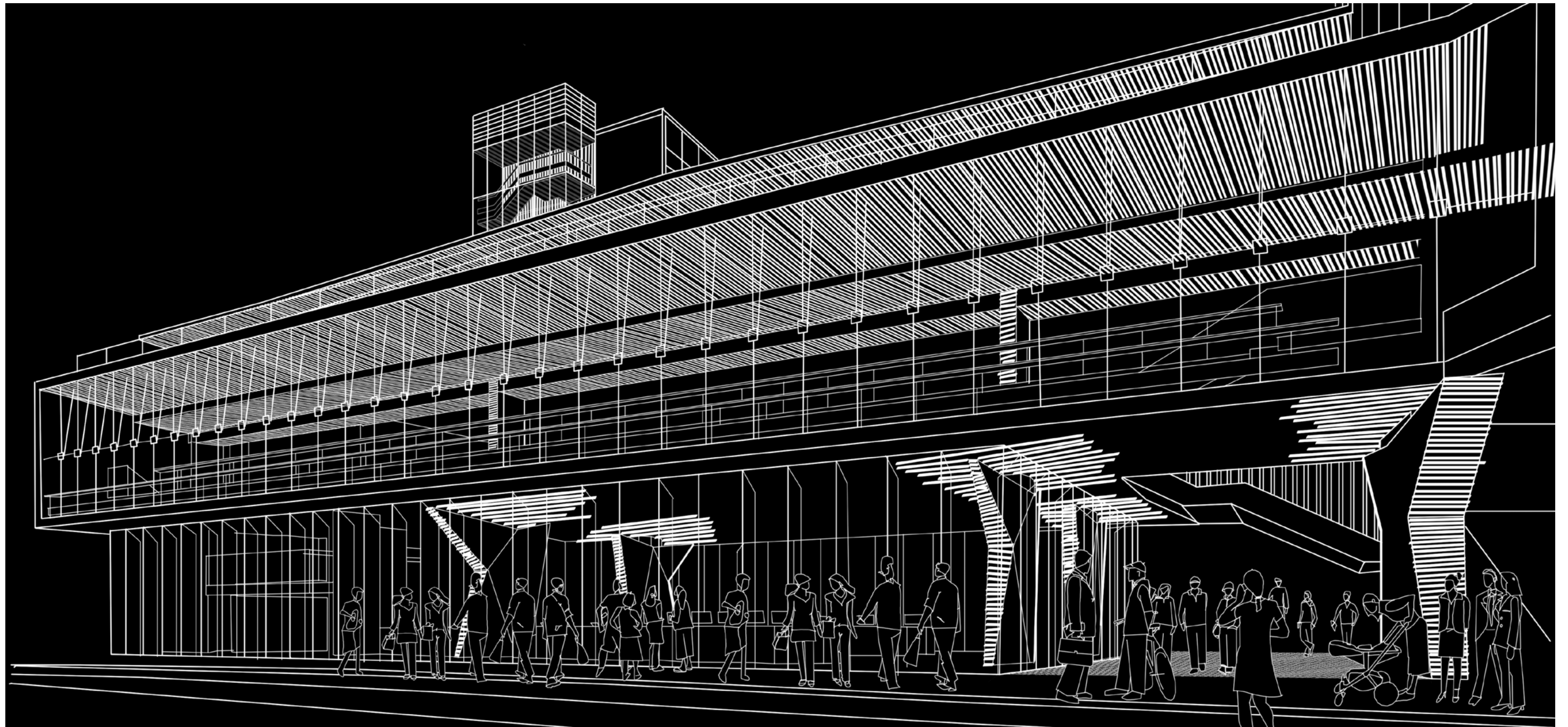


Mid View



Near View





Near View



# LIGHTING STRATEGY

## 10.8 PUBLIC REALM: LIGHTING STANDARD COMMENTARY

The public realm lighting has been designed by Studio Fractal in accordance with the landscape designed by Gillespies. The lighting within the public realm will have a significant impact upon the perception of the overall development, both in terms of the physical appearance and fixing locations of the equipment used to achieve the scheme, as well as the overall character and experience of the space.

Reviewing the proposed lighting design for the public realm has raised some concerns about the intensity and uniformity of the light, as well as the impact of the proposed luminaire fixing locations on the external image of the buildings, both by day and by night.

### Lighting Standards

The lighting scheme proposes an illumination level of 25 lux (maintained average) with a uniformity of 40% for the main open area of the new square, rising to 34 lux (maintained average) beneath the link bridge. These light levels are comparable to the lighting standards required for vehicular and pedestrian conflict zones (CE1/CE2). The high level of illumination and uniformity negate the opportunity to create an inviting space with an after-dark character that encourages people to enjoy the space, rather than just walk straight through it.

In reviewing the British Standards BS54891:2003 (Code of practice for the design of road lighting and public amenity areas) and EN 13201-2:2003 (Road lighting performance requirements), it is felt that a much lower lighting standard could safely be applied to the public realm. It is proposed that an average illuminance of approximately 15 lux with a maximum uniformity of 30% could be applied to the perimeter of the public realm spaces, but that the light level and uniformity to decrease further in the centre of the square. This would result in the provision of well illuminated routes around the perimeter of the space that feel safe, as well as giving definition to the space. A lower light level in the centre of the square will enable decoratively illuminated elements such as the trees, to stand out to much greater effect. The contrast in intensity

across the public realm will provide visual interest and better intuitive way-finding.

### Lighting Equipment

The public realm lighting scheme proposes the use of column and building-mounted luminaires. There are some concerns over the positions of the building mounted luminaires and their potential detrimental impact on the image of the buildings. Given the above commentary about the need to reconsider the lighting standards, it is proposed that the lighting equipment and mounting positions should also be reconsidered. If a lower light level is to be applied, then smaller, lower power luminaires, fixed at a lower height, are likely to be more suitable.

Given the visual impact of building mounted luminaires, it is proposed that any amendments to the public realm lighting proposal should be considered alongside the lighting proposals for the buildings themselves, to avoid any conflict of interests.

### A.10 Lighting situations — set E2

Table A.19 — Recommended lighting classes

Crime risk	Facial recognition	Traffic flow pedestrians					
		Normal			High		
		←	0	→	←	0	→
Normal	Unnecessary	S5	S4	S3 <sup>a</sup>	S4	S3	S2 <sup>a</sup>
	Necessary	S3	S2	S1 <sup>b</sup>	S3	S2	S1 <sup>b</sup>
Higher than normal		S2	S1	CE2 <sup>b</sup>	S2	S1	CE2 <sup>b</sup>
* Alternative A classes of comparable lighting level to recommended S classes can be found in Table 4.							
* Additional ES and EV classes to recommended S and CE classes can be found in Table 5.							

Table A.20 — Recommended selection from range

Ambient luminance		
Low	Medium	High
←	0	→

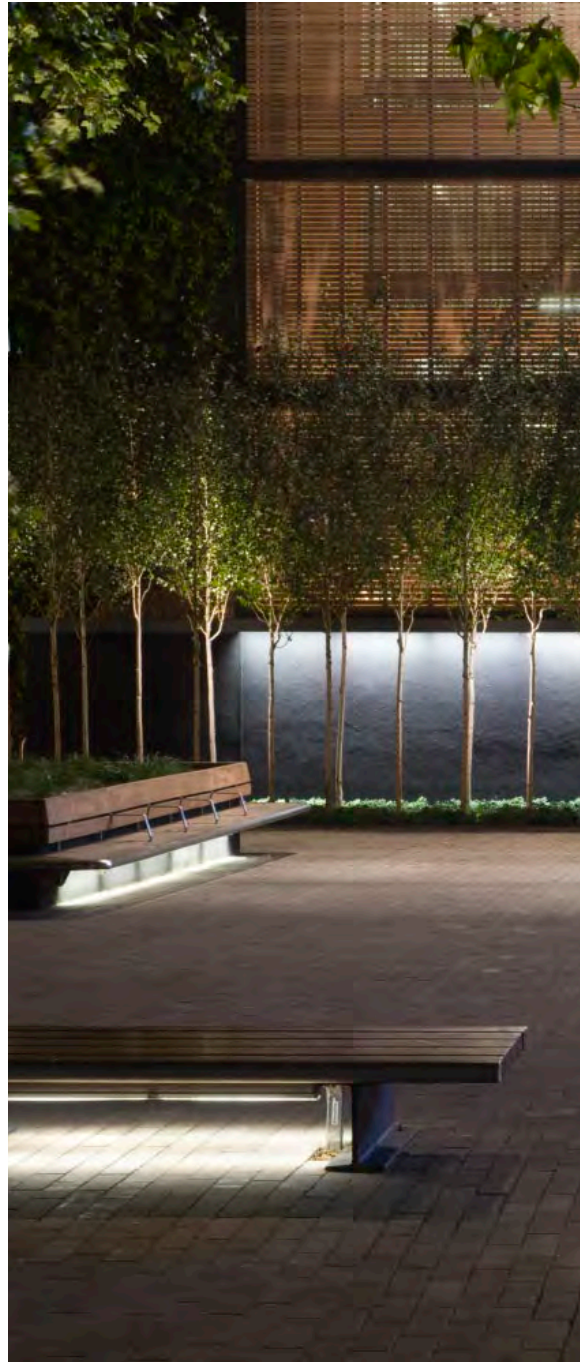
Table 3 — S-series of lighting classes

Class	Horizontal illuminance	
	$\overline{E}$ in lx <sup>a</sup> [minimum maintained]	$E_{min}$ in lx [maintained]
S1	15	5
S2	10	3
S3	7,5	1,5
S4	5	1
S5	3	0,6
S6	2	0,6
S7	performance not determined	performance not determined
<sup>a</sup> To provide for uniformity, the actual value of the maintained average illuminance may not exceed 1,5 times the minimum $\overline{E}$ value indicated for the class.		

Table 2 — CE-series of lighting classes

Class	Horizontal illuminance	
	$\overline{E}$ in lx [minimum maintained]	$U_0$ [minimum]
CE0	50	0,4
CE1	30	0,4
CE2	20	0,4
CE3	15	0,4
CE4	10	0,4
CE5	7,5	0,4

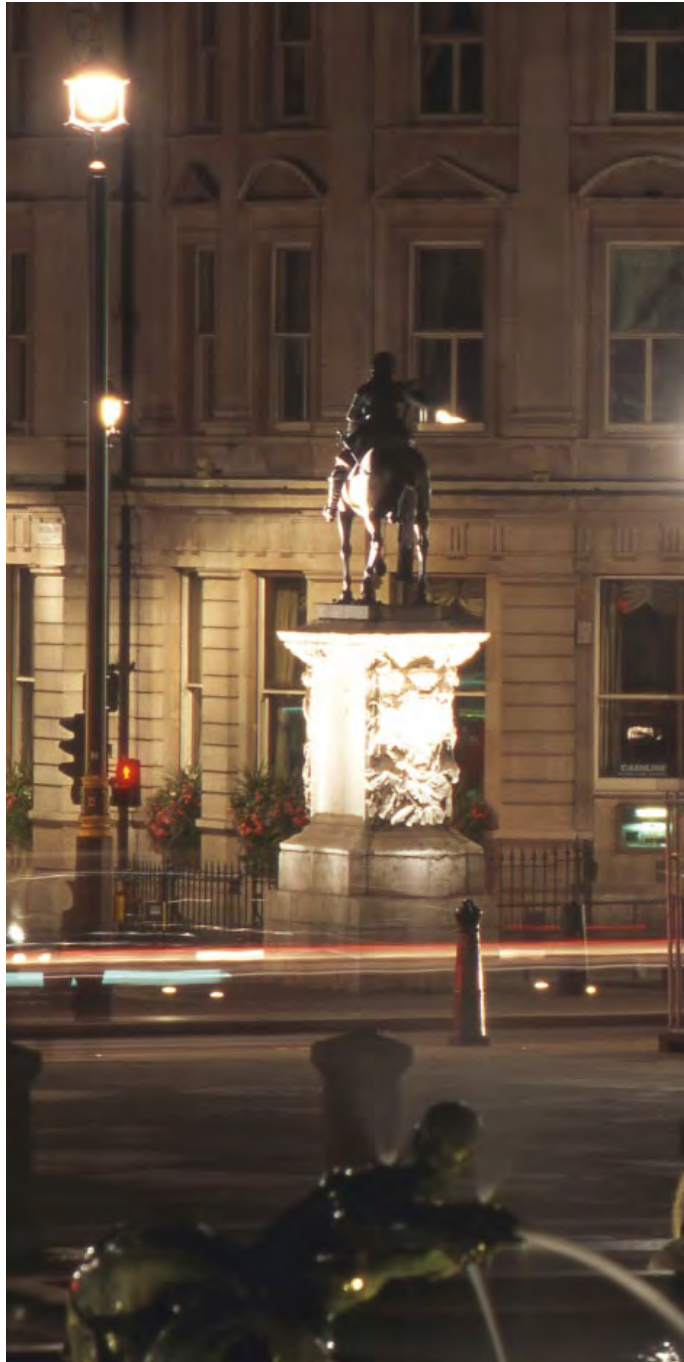




Wharf Green, Swindon - 13 lux ave., 0.25 uniformity



Queen's Walk, Southbank - 1-5 lux ave.



Trafalgar Square- 5-10 lux ave.

## PUBLIC REALM: PRECEDENT

There are a number of urban public realm environments that provide a precedent for using a lower intensity of light, that feel both safe and visually appealing.

Queen's Walk, Southbank  
1-5 lux average

The Southbank has a high footfall, yet an extremely low average illuminance level. A greater light intensity is provided by lighting columns along the route immediately beside the water's edge, but most people choose to walk along the tree avenue, in the lower level of light. The space feels safe and well illuminated due to the lighting within the trees and concealed beneath the benches.

Trafalgar Square  
5-10 lux average, with a light level of less than 1 lux in the centre of the square.

Trafalgar Square has a high pedestrian footfall and has a large number of tourists who may not be familiar with the space. Compared with the numerical recommendations of Lighting Standards, the light levels are very low, yet the space feels safe and well illuminated. This is largely due to the illumination of vertical surfaces providing spatial awareness.

Wharf Green, Swindon  
13 lux average, 0.25 uniformity

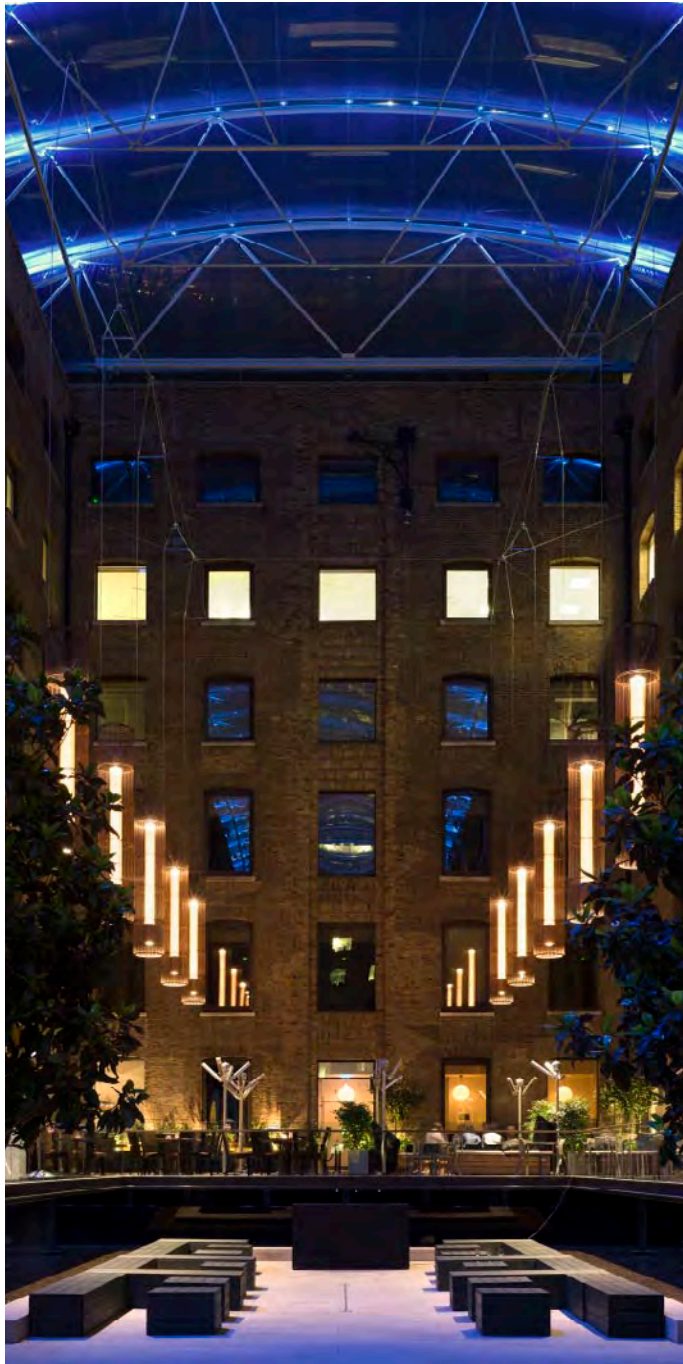
Wharf Green is located in a fairly rough area of Swindon, which would traditionally be treated with high levels of light in an attempt to make the space feel safe. Whilst the light levels are higher than the two precedents above, it is the visual contrast from the illuminated landscape elements that make the space feel safe, not the average illuminance across the ground surface. The landscape lighting brings visual contrast, colour and texture to the environment.



**PUBLIC REALM: CHARACTER OF THE NEW PIAZZA**

The character of the public realm after-dark is largely determined by the application of light. Variation in light intensity intrinsically guides people through a space and provides visual clues as to the nature of that particular environment. Illuminating vertical surfaces and elements within the landscape help provide spatial awareness which in turn improves a feeling of safety, without the need for a uniform blanket of light across the entire space.

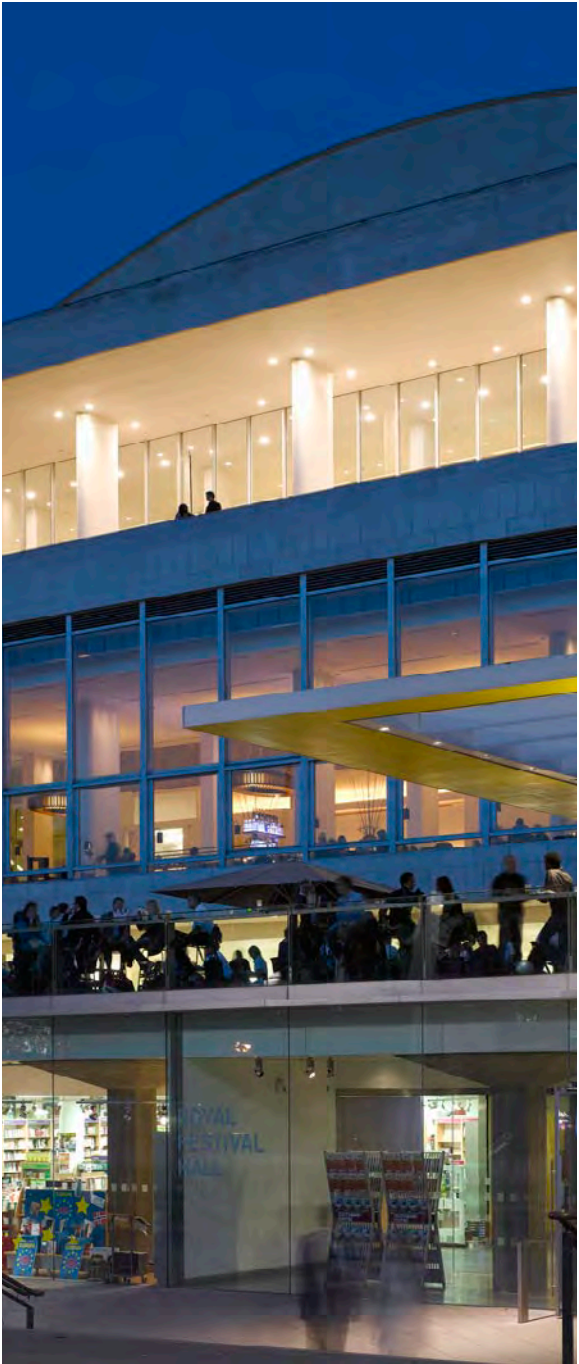
Extreme levels of contrast in the after-dark environment, such as glowing light sources or glare sources, can make an environment seem darker than it is and subsequently feel less safe. To encourage the use of a public realm after dark, lighting should provide sufficient light onto people’s faces to promote a perception of safety



Devonshire Square, London



New Street Square, London



Royal Festival Hall, London





Trellick Tower



Seagram Building



Barbican

## PUBLIC REALM: CHARACTER OF THE TOWER

The character of tower architecture after-dark is largely determined by the lighting of the internal spaces that is visible through the glazing. For office buildings, it may be possible to have some level of continuity in the internal lighting, to produce some consistency in the building appearance. This is the case for Mies van de Rohe's Seagram building, where the lighting designer Richard Kelly designed a consistent lighting detail at the glazing perimeter of every floor. This type of approach would not be possible in a residential building.

The typical character of a residential tower after-dark, is one of a dark silhouette, with a random tapestry of internal illumination according to which apartments are inhabited at the time. The reason that so few residential towers are externally illuminated is to protect the views out from the apartments. There is no way to create continuity across the internal residences, but consistency can be provided by the illumination of public areas such as stair cores, and elements of the façade that do not impact upon the views out from the apartments, but that help to inform the image of the building when viewed from the street.



10.9 CENTRE POINT

Earnshaw Street

Centrepont House is viewed against a backdrop of the Tower when the development is viewed from Earnshaw Street, juxtaposing the building elements in a sequence of incrementally increasing scale. The lighting approach must respond to this architectural composition.

Retail + Leisure

The large expanse of glazed retail frontage at ground level will dominate the image of the ground floor. Retail guidelines will ensure that the interior lighting, particularly in the window displays, will have some visual continuity between adjoining units, in terms of maximum light intensity, hours of operation and the use or restriction of illuminated signage.

Screen

The horizontal screen on the first floor of Centre Point House provides the opportunity to produce a highly textured illuminated façade, accentuating the form of the architecture and inverting the daylight image of the screen by illuminating those surfaces that are usually viewed in shadow. Given that there are retail units behind the screen, any external architectural lighting should have no detrimental impact on the interior space.

Stairs

The stairways of the both Centre Point House, the Tower and the affordable housing run up the edges of each of the buildings, providing the opportunity through the use of light to visually ‘book-end’ the buildings. As the stairways are public areas within the otherwise residential buildings, the illumination of the stairways enable there to be a consistent vertical lighting treatment on both buildings. The lighting control of these stairways will inform the external image of the building.

Occupancy

The residential nature of the buildings means that there will be a constantly changing tapestry of inhabitation, visible through the windows of the apartments. The light intensity

and colour temperature will differ in every window. It is therefore proposed that there are careful applications of architectural lighting that visually tie-together the otherwise disparate lit image of the buildings.

Balconies

The balconies of the residential apartments in Centre Point House, the Tower and the affordable housing are private spaces that will be illuminated as determined by the inhabitant. Whilst external lighting for the benefit of the inhabitant’s use on the balcony may be designed into the apartment fit-out, providing the opportunity for some consistency in the lit appearance of the balconies, the use of this lighting cannot be enforced in private dwellings. It is therefore proposed that any architectural lighting applied to the building façade for the benefit of the image of the building after-dark, should not impinge upon the views out from the apartments.

Signage

The iconic signage at the top of the Centre Point Tower acts as a way-finding tool in the surrounding environment, as well as announcing the development. The means by which the signage is illuminated must minimise the impact of the illumination on the apartment that sits behind the lettering.

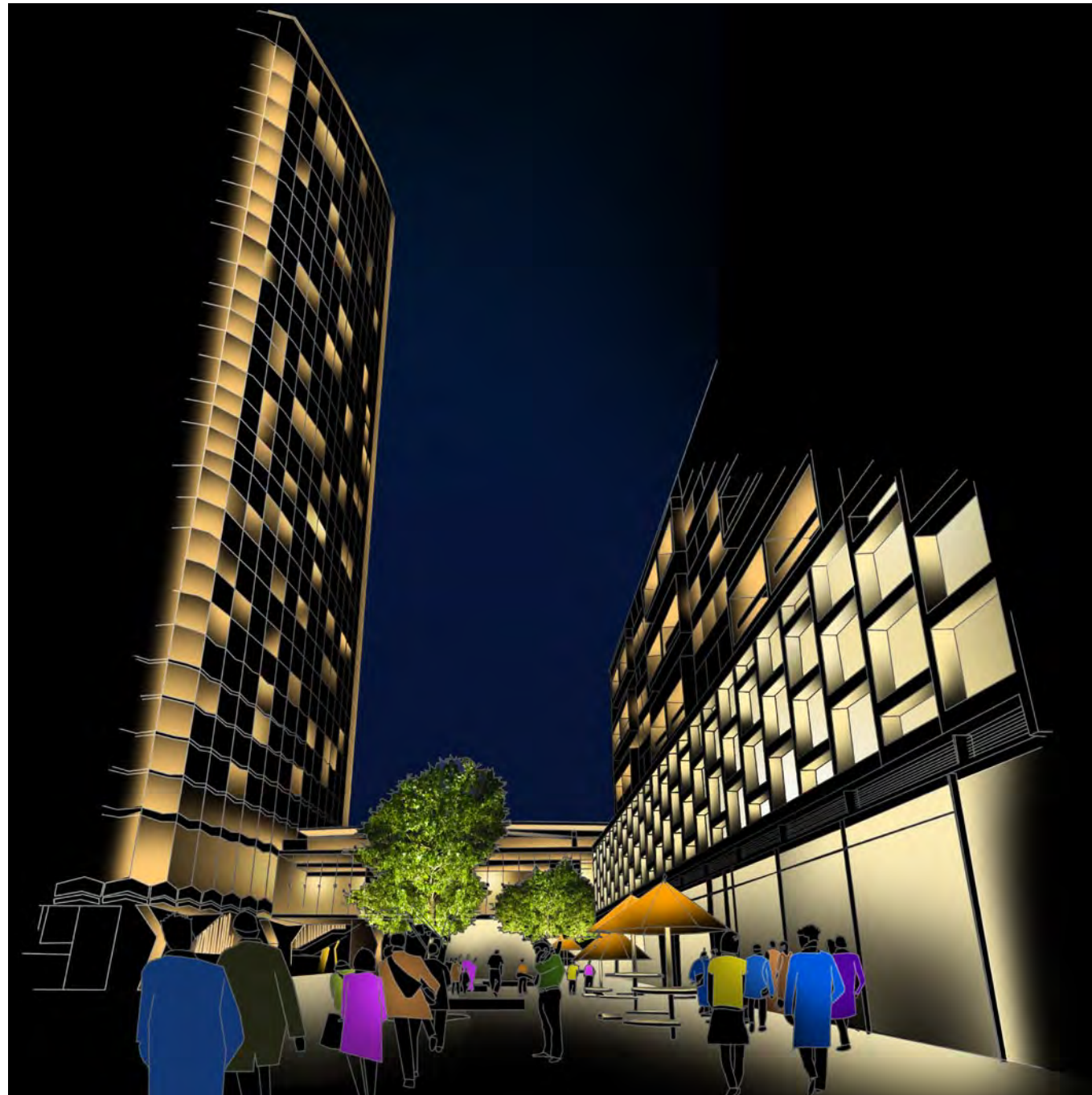
Public Realm

A glimpse of the public realm is revealed at the corner of the affordable housing. The lighting within this entrance to the public realm must be inviting, providing a flavour of the character of the public square.



Earnshaw Street





New Public Square

#### New Public Square

The view when stood within the public square reveals the full breadth of the architectural forms and the composition of the lighting approach.

#### Entrance

The building entrances must stand out from the general public areas after-dark, so that people are able to naturally navigate through the space without being entirely reliant upon signage. This may be achieved by the illumination of the pilotis that flank the building entrance.

#### Retail + Leisure

The perimeter of the public square will largely be determined by the appearance of the retail units behind their glazed façade. The window displays may produce considerable spill lighting into the square, so it is imperative that some degree of lighting control is incorporated into the tenant guidelines.

#### Link

The Link Building is the architectural connection between the Centre Point House and Tower and the lighting provides the opportunity to visually connect the buildings after dark, into a composite whole. The undersides of the soffits are highly visible through the glazed facades. The illumination of these soffits would reveal their form, as well as visually lifting those areas that traditionally may have been perceived as being gloomy or feel dangerous. The illumination of the Link soffits within the glazing enclosed retail units will need to be carefully considered so as not to conflict with the tenant interior design.

#### Screen

The lighting approach for the Centre Point House screen will be the same on both sides of the building. This illuminated façade will enhance the sense of enclosure within the square.

#### Stairs

A consistent interior lighting approach applied within the stair core provides an illuminated vertical edge that flanks

both sides of the tower. The plant rooms mirror the stair core location on both ends of the building and also provide the opportunity to produce a consistent lighting approach on all four vertical edges of the building.

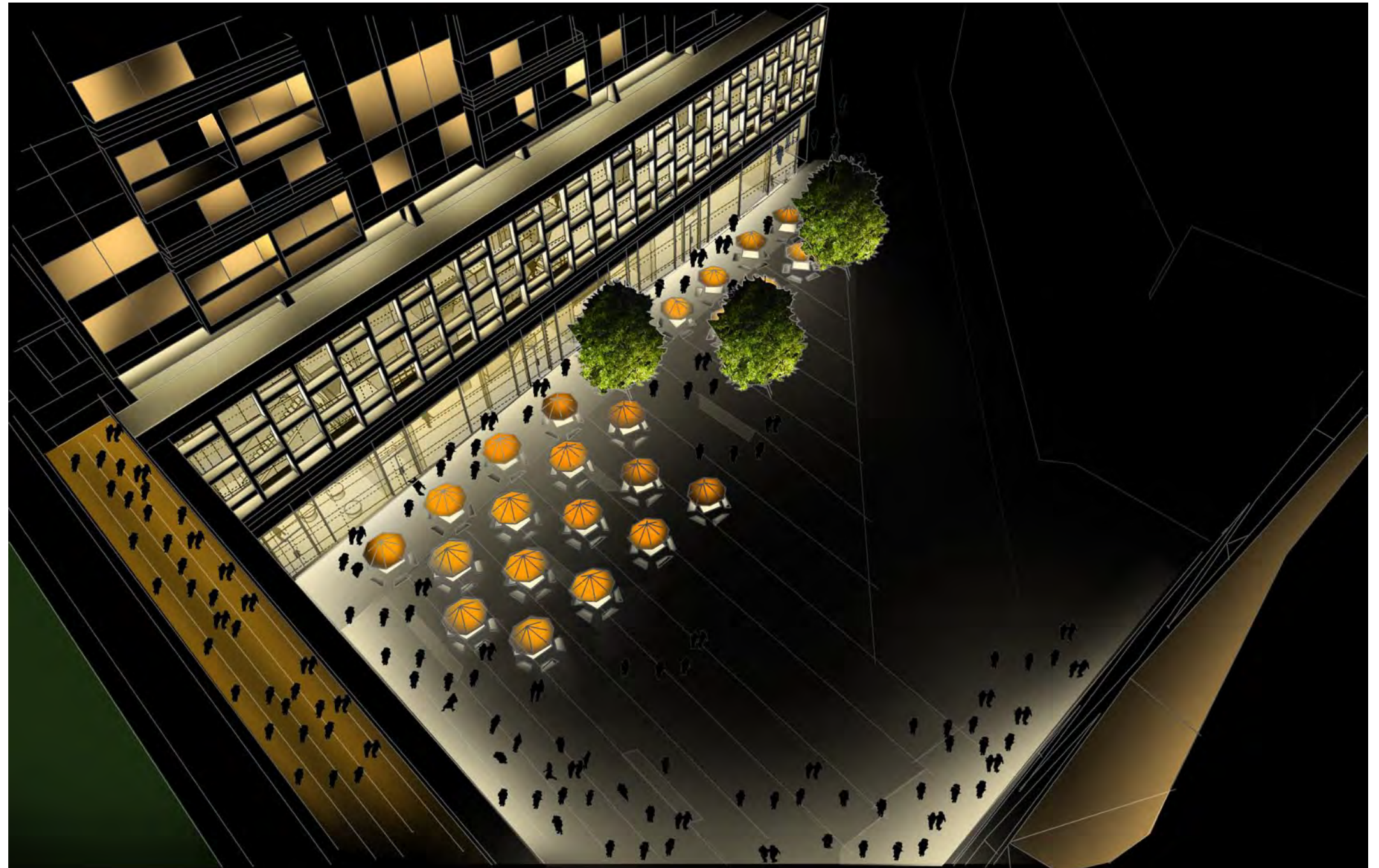
#### Public Realm

The public realm lighting should create an inviting environment, with intensity contrast that provides visual interest, ensures that light is applied only where it is needed to create a space that feels safe and vibrant after-dark.



#### New Public Square viewed from above

It should be remembered that the Public Square is not only experienced at ground level, but is also viewed from the numerous residential apartments above. The view from above reveals the full composition of the square. The public realm lighting scheme must be designed bearing this in mind.



New Public Square from Centre Point Tower



10.10 RETAIL SIGNAGE GUIDELINES

Given the expanse of retail frontages that ground the Centre Point development, it is proposed that some guidelines are written into the retail tenant agreements to ensure that the signage of each individual retail unit does not become too visually dominant. Ensuring that all retail signage is set behind the façade glazing is one way to provide some consistency in the appearance of the signage between different units. It is suggested that all signage design proposals be reviewed prior to their installation to ensure that any integrated lighting does not conflict with the overall character of the development.

It is suggested that the signage guidelines ensure that some level of transparency is retained through every retail façade. This is particularly relevant for the retail units beneath the Link building where the fully glazed facades have been designed to maintain the original architectural form. If large video screens or other illuminated surfaces are to be installed, it is suggested that these must use an open-weave or clear infrastructure that still facilitates views through/between the screen elements.



Lit signage: street view



LED rods: street view



Lit signage: internal view



LED rods: internal view