



Cabbagefield
Row,
Leigh Park,
Havant

External Lighting Design Strategy Statement

July 2021



Ref: 20-7165

1. INTRODUCTION	4
2. PLANNING POLICY/ GUIDANCE	4
3. EXTERNAL LIGHTING MEASURES.....	5
4. CONCLUSION	8

Quality Standards Control

The signatories below verify that this document has been prepared in accordance with our quality control requirements. These procedures do not affect the content and views expressed by the originator.

<i>Revision</i>	<i>Initial</i>	<i>Rev A</i>	<i>Rev B</i>	<i>Rev C</i>
Date	27/07/2021	29/07/2021		
Prepared by	S. Phillips	S. Phillips		
Checked by	M. Buck	M. Buck		
Authorised by	Y. Choi	Y. Choi		

1. Introduction

This report demonstrates the initial external lighting design strategy of the proposed development at **Cabbagefield Row, Leigh Park, Havant**. The proposed new development of 150 new homes at Cabbagefield Row, Havant shall consist of a new external lighting scheme to ensure sufficient illumination to all pathways, highways and communal areas as required.

Light fitting selection shall be carefully considered to ensure illumination levels are achieved to fulfil the categories of amenity, safety and security. The lighting will be provided to enhance the security of the development and associated buildings with minimised impact on the surrounding environment and the design will satisfy the minimum lighting level requirements. Recommended illuminance levels will be achieved by selection of particular luminaires, lamp sources and optical control/accessories.

2. Planning Policy/ Guidance

It is assumed the highways and footpaths across the site shall be adopted by the local authority and shall therefore be illuminated in conjunction with the light criteria and category class requirements as determined by the local authority. The Lighting design shall ensure compliance with the Highways Act 1980, CIBSE Code for External Lighting Design and the ILP Guidance for the Reduction of Obtrusive Light and relevant British Standards.

Consideration of the protection of the natural environment and local wildlife habitats including roosting bats shall be incorporated into the design following the findings of the relevant Ecological studies. The external lighting scheme shall take into consideration any species of bats identified and for any potential future roosting of local bats and wildlife dark corridors as identified within the ecological reports. All external lighting shall comply with the following:

- Bat Conservation Trust
- ILP Guidance - ILP Bats and artificial lighting in the UK - 'Bats and built environment'.
- Environmental Protection Act 1990

3. External Lighting Measures

See below the summary of the measures that shall be taken into consideration in order to comply with the above standard/ guidance:

- The external lighting shall be of low lux level across the site with only specific areas illuminated as required to ensure highways, walkways, steps and essential paths are illuminated to ensure minimum task lighting levels are achieved and to meet the statutory requirements as outlined by the local authority.
- All light sources are angled directly downwards. All fittings are to be fixed in downward position to ensure there is no accidental adjustment to the fitting orientation.
- There is no upwards light spill across the site from any of the light fittings
- No fittings located on the façade of any property are located on any recognised bat flight paths or near any potential roosting sites.
- All external lights are controlled automatically by daylight sensors which shall bring the fittings on/off automatically
- Fittings at ground floor level on all properties are mounted no more than 2m above finished floor level (AFFL).
- Appropriate selection of the LED lamp to ensure compliance with the ILP guidance as below:
 - LED lamp has a sharp cut-off, lower intensity and have a good colour rendering
 - LED has no UV or near IR radiation

The LED lamps shall have a warm white spectrum (2700-3000 Kelvin) which reduces the blue light component which is disruptive to wildlife.

Lux level calculations shall be produced during the detailed design stage to ensure compliance with the above.

Light fitting selection shall take into consideration any accessories required to ensure the control of the beam angles to minimise spillage of light into residential properties and to comply with the above.

Any external lights shall be located to ensure that any dark corridors in the existing surrounding woodlands are maintained.

3.1. Highways, Parking Spaces and All Public Pedestrian Footpaths

The highway, parking spaces and footpaths shall be illuminated by LED Lanterns mounted on 5m-8m high poles. Each fitting shall be complete with integral dusk to dawn sensors for automatic on/off control of the fittings.

All fittings shall be fitted with 2700K - 3000K (warm white) integral LED lamps/drivers and shall be fitted with glare shields or cowls to assist with reducing light spillage from the proposed direction of illumination. Fittings shall be positioned carefully to avoid inwards light glare into adjacent nearby residential properties, sensitive areas and surrounding woodlands as identified within the ecological study. All fittings to be fed from the HCC owned power distribution network or detailed within the design to ensure the fittings are metered independently to allow for appropriate metering and billing.

3.2. Bin Stores

All bin stores shall have LED wall mounted bulkheads controlled via daylight sensors for automatic on/off control. The fitting shall have an integral LED and be 2700K-3000K. Fittings to be provided with glare shields or cowls to assist with reducing light spillage from the proposed direction of illumination and to avoid upwards sky glow. Fittings shall be positioned to ensure sufficient illumination is provided for safe and secure access to the bin stores without the requirement for additional sources of illumination. If deemed a requirement during detailed design the fittings can be controlled via PIR motion sensors to ensure fittings are only switched on when the bin stores are in use. All fittings to be fed from the private landlords power supply.

3.3. Residential Dwellings

All individual dwellings shall have an external light fitting to illuminate the entrance to each individual dwelling. Fittings shall be wall mounted downwards directional, narrow beamed decorative LED fittings complete with a 2700K-3000K lamp. The fitting shall be complete with an integral daylight PIR sensor to activate only when movement is detected. Fittings can be complete with a manual override switch but this shall be to the discretion of the designer during the detailed design period and to align with any ecological restrictions. All fittings to be fed from the private dwellings power supply.

To the rear of the property fittings shall be mounted on the external façade in order to illuminate the rear gardens. Lighting shall be positioned to minimise the spread of light to the rear of each property. Lighting to be contained within each dwelling rear garden only. Fittings shall be of similar specification to the front of the property. The fitting shall only be switched manually from inside of each property. Fittings shall be mounted no higher than 2m AFFL and only of downwards direction. All fittings shall comply with the design guidance as set out above to avoid sky glow and minimise the impact on neighboring properties and sensitive areas. All fittings to be fed from the private dwellings power supply.

3.4. Residential Apartments Blocks

All apartment blocks shall have external light fittings mounted at the entrance and exit points to the property. Fittings shall be LED (2700K-3000K) and provide sufficient lux levels at the immediate vicinity of each entrance and exit door to the apartment blocks. Fittings shall be switch via daylight sensors and shall remain illuminated throughout all hours of insufficient natural daylight. Emergency lighting shall be located adjacent to each final exit from the apartment buildings.

If and where balconies are incorporated into the design of the apartment blocks then lighting shall be mounted on the external façade in order to illuminate each individual balcony area. Lighting shall be located to ensure the lighting is localised to each individual balcony. Fitting shall be wall mounted downwards directional decorative LED fittings complete with a 2700K-3000K lamp. Fittings shall be mounted no higher than 2m AFFL and only downwards directional. Fittings to comply with the guidance as set out above to ensure minimal light spillage.

4. Conclusion

At this early design stage, this report explores the initial external lighting design strategy of the proposed development at Cabbagefield Row, Leigh Park, Havant. The lighting within the proposed development will be provided to enhance the security of the development and associated buildings with minimised impact on the surrounding environment and satisfy the relevant guidance and requirements.