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Knowsley Lane Knowsley

External Lighting Strategy for Planning

Client: Caddick Developments

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1.0 Introduction

This report covers the proposed external lighting to the development of three B2/B8 units at Knowsley Lane, Knowsley. The lighting philosophy to the external realm is based on achieving appropriate levels of maintained illuminance to areas of operation, vehicle and pedestrian movement. A key consideration will be to avoid light pollution to surrounding areas from spillage and glare, particularly surrounding residences.

The lighting scheme will be based on energy efficient LED luminaires which will illuminate roadways, pathways, car parking and external operational areas. The external lighting also takes into consideration both the level and uniformity of lighting required for security, CCTV operation, and safe movement of visitors and staff to the buildings and around the site.

The associated layout drawing provides the preliminary lighting design strategy. It should be noted that this will be subject to development and possible minor changes during detail design of the project, however provides the basis for the final design.

2.0 Design Standards, Policy and Guidance

The external lighting design has been carried out in accordance with the following standards: -

- SLL Code for Lighting
- BS 12464-2:2014
- BS5489-1: 2020 Code of practice for the design of road lighting
- CIBSE guide LG6 – 2016
- ILP Guidance Note 1 (reduction of obtrusive light)
- ILP Guidance Note 8 (Bats and artificial lighting) where relevant

The lighting scheme seeks to limit lighting pollution by preventing upward light pollution through optimal mounting heights and control of light distribution, and by utilising energy efficient LED lighting luminaires that limit glare through design.

It is important that the lighting provides the appropriate lux levels and uniformity to ensure the adequate illumination of roadways and pedestrian routes. Lighting will be installed to provide sufficient illumination for safe circulation and to promote a feeling of safety and security.

3.0 Overview of the Particular Design

The external lighting design to the site provides functional lighting by way of building mounted LED flood lights, building mounted perimeter bulkheads, and column mounted LED lighting.

All lighting within the site boundary will be supplied from landlord / private supplies within the site. No lighting is proposed to be adopted.

3.1 Access Roads

Vehicular access routes will be illuminated utilising column mounted lanterns. Height and distribution optics will be coordinated to provide optimal illumination and quantity of columns.

3.2 Car Parks

Car Parks will be illuminated utilising a combination of column and building mounted lanterns. Height and distribution optics will be coordinated to provide optimal illumination and quantity of columns, however control spillage and glare to neighbouring areas. Multiple lanterns shall be mounted on a single column, where possible, to reduce quantity of columns and visual clutter.

3.3 HGV Docking Yards / Service Yards

Docking yards and service yards will be illuminated by building mounted floodlighting. Heights and angles shall be carefully designed to reduce glare and light spill to neighbouring properties.

3.4 Building perimeter lighting

Perimeter lighting around the buildings is required for security, maintenance and safe emergency egress. This will be provided by wall mounted 'bulkhead' style luminaires. The design of these luminaires will be such to control light distribution downwards and avoid glare.

4.0 Lighting Control

The site is expected to be operational 24hrs per day. Lighting control will be provided as follows:

4.1 Access Roads & Car Parks

Column mounted lanterns will be equipped with photocell control integral to the lantern. Building mounted lighting will be controlled by a central photocell. Timeclock and manual override control will also be provided at the electrical supply position.

4.2 HGV Docking Yards / Service Yards

Floodlighting will be controlled by a central photocell. Timeclock and manual override control will also be provided at the electrical supply position.

4.3 Building perimeter lighting

Floodlighting will be controlled by a central photocell. Timeclock and manual override control will also be provided at the electrical supply position