



**PUBLIC LIGHTING REPORT
RESIDENTIAL DEVELOPMENT
MONASTERY ROAD DEVELOPMENT**

Propiteer Ibis Red Cow Ltd

**Proposed Residential Development,
Monastery Rd
Clondalkin
Dublin 22**

**Project: 2022
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Project Details:

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1. Introduction

This report outlines the lighting design for the proposed development at Monastery Road, Clondalkin, Dublin 22 as developed by Fallon Design to provide adequate illuminance to meet all regulations and requirements as follows;

- To provide adequate illumination contributing toward the safe use of the access roads and pathways for vehicular and pedestrians.
- Minimise lighting pollution on surrounding areas and neighbours
- Reduce glare on pedestrians and other users of the access areas
- Use of highly efficient artificial lighting to reduce energy consumption

The complete installation will be required to meet the following regulatory standards and policies:

- S.I. No. 291 of 2013: Safety, Health and Welfare at work (Construction Reg. 2013)
- ETCI National Rules for electrical Installation ET101-2008
- BS 5489-1:2013 Code of Practice for the design of road lighting
- IS EN 13201-1 & 2 -2015
- IS EN 13201-5-2015 S2 & ME4A
- CIBSE Lighting Guide 7
- Housing Scheme: Guidebook ESB Networks Standards for Electrical Services
- Guidance Note 08/18: Bats and artificial lighting in the UK (Bat Conservation Trust, 2018)
- Bats & Lighting Guidance notes for: Planners, engineers, architects and developers (12/2010)
- County Council Street Lighting Technical Specification

2. Development Description

The proposed development provides for a total of 115 no. build-to-rent apartments (10 no. studio 1-bed units, 62 no. 1-bed, 38 no. 2-bed units and 5 no. 3-bed units), with ancillary residential services & amenities including conference room (75m²), gym (61m²), studio (21m²), meeting room (23m²), 2 no. lounges (71m² & 54m²), games room (44m²), concierge (27m²) and managers office (27m²) and associated underground car parking, car share & bicycle parking, 1 no. ESB substation, landscaping including semi-private open space courtyard & communal roof top terrace, pathway & boundary treatments, and all associated engineering and site development works necessary to facilitate the development.

3. Design Concept

The public lighting design for co-living development is to provide adequate illuminance for vehicular and pedestrian access for the residents and general public.

The design of the public lighting uses low energy LED lighting throughout. Energy efficient light fittings are a key element in reducing the developments energy consumption.

4. Detailed Design

The design proposes to use a mixture of fittings across the development to achieve a compliant lux level and an atmospheric outdoor space.

- Type A: 4 No. Veelite – LED Bollard 6W LED 4K, Asymmetric XW.
- Type B: 4 No. Veelite – Chi 19W 16 LED 350 mA 4000K Street Optic Wide A13.
- Type C: 21No. Veelite – Vero Size 2 9W LED 4000K 26° x 48° x 30° Beam

Proposed luminaire design layout as per drawings.

- 2022-FDE-SS-50-01

Lighting Calculations Design Standards:

- These levels comply with class P2 of IS EN 13201-2:2015 / BS 5489-1:2020 for paths / pedestrian areas (10 lux average, 2 lux minimum).

5. Luminaires:

5.1 Luminaire A

Veelite – LED Bollard 6W LED 4K, Asymmetric XW



5.2 Luminaire B

Veelite – Chi 19W 16 LED 350 mA 4000K Street Optic Wide A13



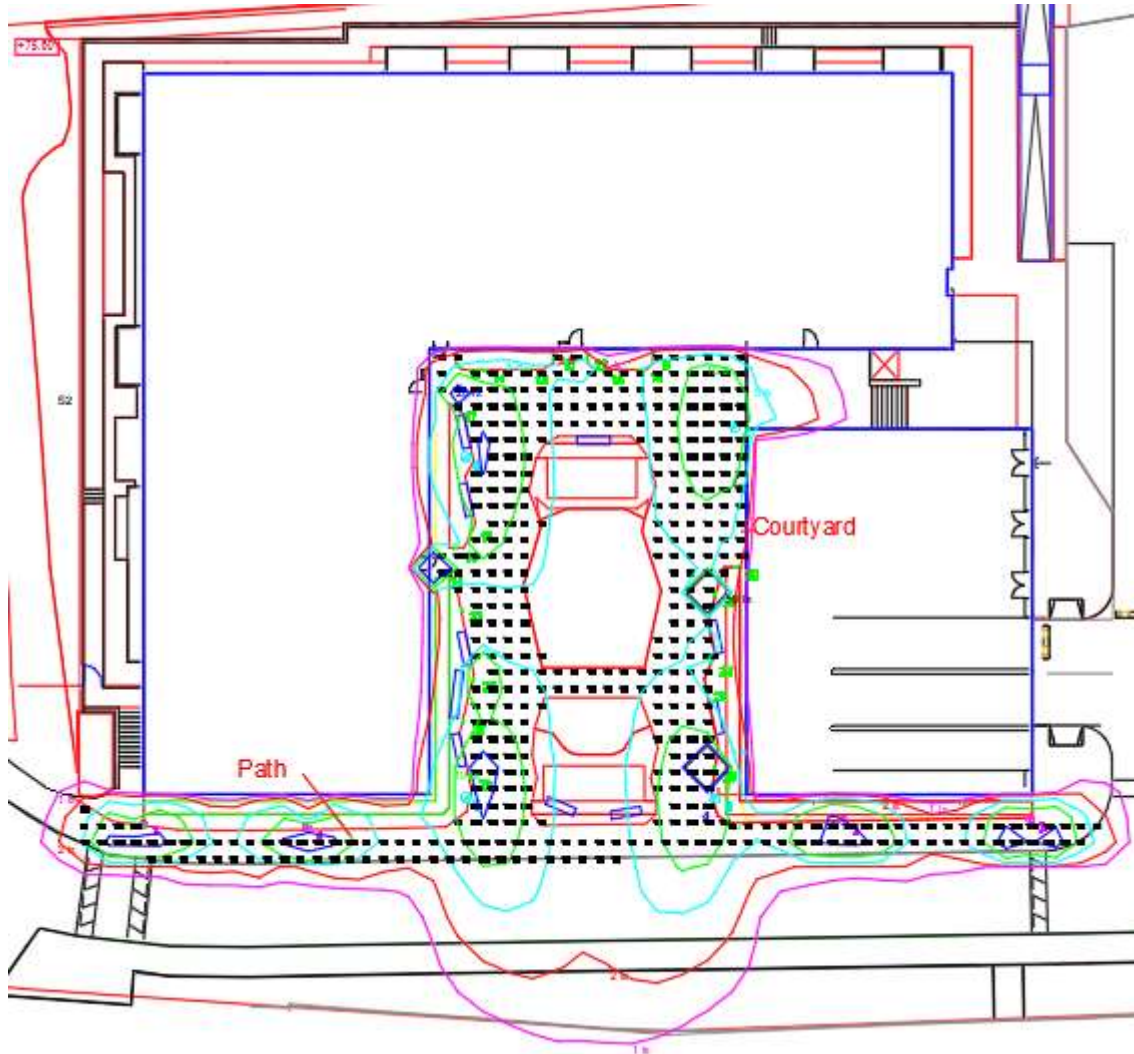
5.3 Luminaire C

Veelite – Vero Size 2 9W LED 4000K 26° x 48° x 30° Beam



6. Grid Results

6.1 Lighting Calculation Results – Lux Contours



| Calculation Summary | | | | | | | | | |
|----------------------------|------------|------------|------------|----------------|----------------|--------------|----------------|----------------|--------------|
| Description | Avg | Max | Min | Min/Avg | Min/Max | Units | PtSpcLr | PtSpcTb | # Pts |
| Courtyard | 13.04 | 337.0 | 2.2 | 0.17 | 0.01 | Lux | 1 | 1 | 308 |
| Path | 11.22 | 50.6 | 2.4 | 0.21 | 0.05 | Lux | 1 | 1 | 118 |