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REEF GROUP

TRIBECA

CAMDEN

EXTERNAL LIGHTING STATEMENT

REVISION P01



Document History

SUITABILITY	REVISION	DATE	DETAILS	BY	CHKD
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1.0 INTRODUCTION

This statement provides details of the lighting strategy for the proposed Tribeca development at 2-6 St Pancras Way London NW1 0TB and is provided to discharge Planning condition 44 of the Decision Notice for application reference 2017/5497/P and condition 41 of the Decision Notice for application reference 2021/2671/P.

2.0 PLANNING CONDITIONS

The Condition wording is the same for each Notice and is as follows:

Before the relevant part of each Plot commences full details of a lighting strategy, to include information about potential light spill on to the canal, buildings, trees and lines of vegetation, shall be submitted to and approved by the Local Planning Authority in writing. The development shall not be carried out otherwise than in accordance with the details thus approved and shall be fully implemented before the premises are first occupied.

3.0 PROPOSED LIGHTING DESIGN

3.1 Development Site

The site is located in Camden, London and is indicated in the plan below. The site is bounded by Regent's Canal to the East, St Pancras Way to the West and Granary Street to the South.



Site Plan

3.2 Applicable Standards and Reference Documents

To ensure the lighting requirements within the Camden Local Plan (adopted October 2017) are met, the external lighting installation has been designed to the following relevant standards and industry guidelines:



- Local and National Planning Policy
- The Camden Local Plan (adopted October 2017).
- ILP Guidance note for the reduction of obtrusive light GN01/21:2021.
- CIBSE Lighting Guide 6 – The Exterior Environment.
- SLL Code for Lighting 2022.
- BS 5489-1: 2020 - Design of Road Lighting. Lighting of Roads and Public Amenity Areas. Code of practice.
- BS EN 12464-2: 2014 - Light and Lighting - Lighting of Outdoor work places.
- BS 8300-1: 2018 – Design of an accessible and inclusive built environment. External Environment – Code of practice.
- BS 5266-1: 2016 - Emergency lighting. Code of practice for the emergency lighting of premises.
- BREEAM Credit: Pollution (Pol) 04 - Reduction of night time light pollution.

3.3 Environmental Zone

The ILP Guidance Notes define environmental zones for different area types, as set out in the following table. Based on the site location and the existing environment and ambient conditions, the environmental zone for the development is deemed to be **E4**.

Zone	Surrounding	Lighting environment	Examples
E0	Protected	Dark (SQM 20.5+)	Astronomical Observable dark skies, UNESCO starlight reserves, IDA dark sky places
E1	Natural	Dark (SQM 20 to 20.5)	Relatively uninhabited rural areas, National Parks, Areas of Outstanding Natural Beauty, IDA buffer zones etc.
E2	Rural	Low district brightness (SQM ~15 to 20)	Sparsely inhabited rural areas, village or relatively dark outer suburban locations
E3	Suburban	Medium district brightness	Well inhabited rural and urban settlements, small town centres of suburban locations
E4	Urban	High district brightness	Town / City centres with high levels of night-time activity

Environmental Zones (ILP Guidance Note 01)

The ILP Guidance Note provides design guidance for each environmental zone, as set out in the table below, and the external lighting for the development has been designed and assessed to comply with this quantitative criterion.



Light technical parameter	Application conditions	Luminaire group (projected area A_p in m^2)					
		$0 < A_p \leq 0.002$	$0.002 < A_p \leq 0.01$	$0.01 < A_p \leq 0.03$	$0.03 < A_p \leq 0.13$	$0.13 < A_p \leq 0.50$	$A_p > 0.5$
Maximum luminous intensity emitted by luminaire (I in cd) ⁵	E0 Pre-curfew Post-curfew	0 0	0 0	0 0	0 0	0 0	0 0
	E1 Pre-curfew Post-curfew	0.29 <i>d</i> 0	0.63 <i>d</i> 0	1.3 <i>d</i> 0	2.5 <i>d</i> 0	5.1 <i>d</i> 0	2,500 0
	E2 Pre-curfew Post-curfew	0.57 <i>d</i> 0.29 <i>d</i>	1.3 <i>d</i> 0.63 <i>d</i>	2.5 <i>d</i> 1.3 <i>d</i>	5.0 <i>d</i> 2.5 <i>d</i>	10 <i>d</i> 5.1 <i>d</i>	7,500 500
	E3 Pre-curfew Post-curfew	0.86 <i>d</i> 0.29 <i>d</i>	1.9 <i>d</i> 0.63 <i>d</i>	3.8 <i>d</i> 1.3 <i>d</i>	7.5 <i>d</i> 2.5 <i>d</i>	15 <i>d</i> 5.1 <i>d</i>	10,000 1,000
	E4 Pre-curfew Post-curfew	1.4 <i>d</i> 0.29 <i>d</i>	3.1 <i>d</i> 0.63 <i>d</i>	6.3 <i>d</i> 1.3 <i>d</i>	13 <i>d</i> 2.5 <i>d</i>	26 <i>d</i> 5.1 <i>d</i>	25,000 2,500

Limits for luminous intensity (ILP Guidance Note 01)

3.4 Lighting Strategy Overview

External lighting will be provided to enhance the site's architecture and amenity and will be designed, installed and operated to provide safe and secure environments, appropriate to the function and use of each area. External lighting has been carefully detailed and integrated into the architecture and landscape of the scheme.

New external lighting will be energy efficient, utilising LED sources, and will be automatically controlled via time clocks and sensors as appropriate. The light fixtures will be 3000K warm white colour temperature and be suitable for outdoor installation purposes.

The installation will include lighting to the building entrances, public realm, pedestrian walkways, and landscaping. The strategy for each of these areas is summarised below and the proposed luminaires are included in Appendix 1.

Building entrances

The building entrances and surrounding pedestrian walkways shall be provided with suitable lighting for general access and emergency escape generally comprising building mounted luminaires.

Decorative luminaires shall highlight the architectural façade details making a feature during the evening hours. These shall generally be façade mounted downlights / mini projectors directed downward to limit upwards light spill.

Target Lux Levels:	30-50 lux at Entrance Areas
	5-10 lux on Façades

Public Realm and Landscaped Areas

The public realm and landscaped areas shall be illuminated to provide areas for activity, vibrancy, and socializing. Lighting will aim to highlight planting and trees, architecture and areas of interest while providing adequate light levels to pathways. Decorative mini projector luminaires shall illuminate trees and plants, mini projector luminaires shall provide lighting effect to the central plaza with LED strip lighting to illuminate steps.

Target Lux Levels:	10-50 lux
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Site plan indicating different treatment areas

Light Pollution

All luminaries directed upwards will be capped using the facade or tree canopies to reduce light pollution to the area and night sky (CIBSE - LG6: 2.1.11 – Dark Sky Park, A4.1).

This will be done by the use of anti-glare and control louvers, tilting the light fixtures toward vertical surfaces wherever possible (CIBSE - LG6: 2.1.11 - 2.13, ILP - GN01 For the reduction of obtrusive light).

Security

The lighting scheme shall provide uniform lighting levels with good colour rendition and be sufficient to cater for lawful after dark activity around the site. It will not cause glare or light pollution and will be design to support both formal and informal surveillance of the site. The lighting scheme is coordinated with the site CCTV installation and the landscape design to minimise any conflicts and to ensure that the lighting is sufficient to support a CCTV system and reduce visual clutter to the site. (CIBSE - LG6: 2.3, 2.5, 2.7, 3.2).



Ecology and Biodiversity

The lighting scheme will be respectful to the surrounding environment and will also be dimmable and controlled via time clocks to minimise the impact to the local plant and wildlife. All guidelines and recommendation for lighting considerations will be followed and adhered to (CIBSE - LG6: A4.3, A4.8, A4.9).

Internal Lighting

Internal lighting will be designed in the line with all relevant guidance and regulations and will minimise obtrusive light spill and glare to the surrounding area.

3.5 Artificial Lighting Simulation and Results

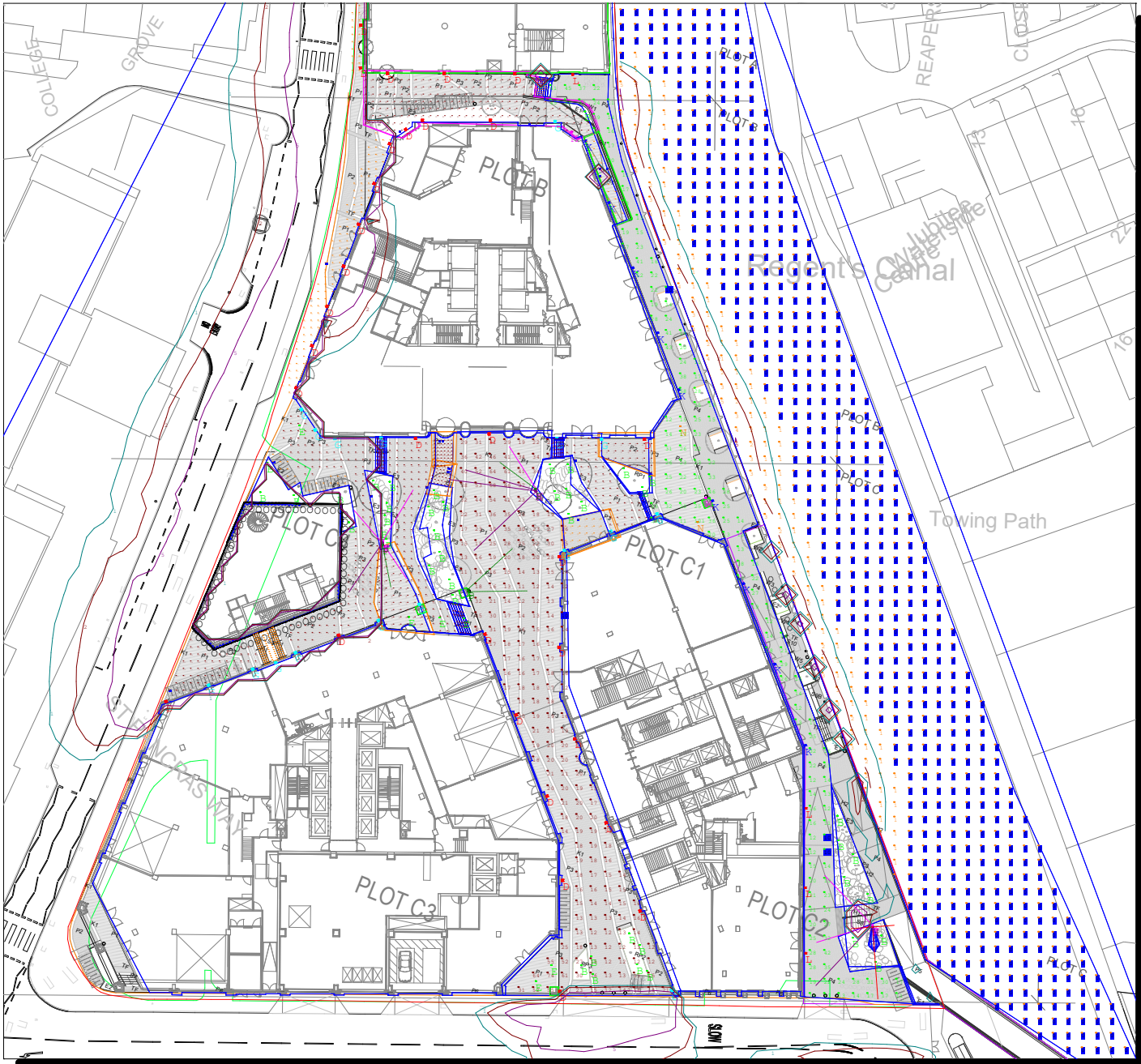
To ensure that the proposed external lighting scheme is in accordance with relevant guidance and standards, artificial lighting simulation calculations have been carried out. These calculations have been used to developed and guide the external lighting scheme by assessing the impact the lighting solutions would have on the surrounding areas.

Special consideration has been taken in the selection and positioning of the luminaires required adjacent to the canal to mitigate spill light in this area.

An overview of the results can be found within Appendix 1. The proposed external lighting installation meets the applicable standards, codes and guidance notes and is compliant with the requirements applicable to the environmental zone (E4). Light spill on to the canal, buildings, trees and lines of vegetation has been minimised.



APPENDIX 1 – LIGHTING LAYOUT AND LUX LEVEL PLOT



Luminaire Schedule				
Symbol	Qty	Label	Description	LLF
	4	P	WE-EF FLC220-GP [3K] LED-FT 37W (139-2116)	0.800
	67	O	ADONIS_ARCHITECTURAL_EXL_SW_1	0.300
	2	N	WE-EF DOC110 [B.3K] 6LED 12W (134-1625)	0.800
	4	L	WE-EF OLV334 [R65.3K] 12LED 12W (132-0528)	0.800
	2	M	WE-EF OLV334 [A60.3K] 12LED 12W (132-0530)	0.800
	9	K	WE-EF OLV334 [S70.3K] 12LED 12W (132-0526)	0.800
	6	H	WE-EF FLC321 [M.3K] 6LED 26W (145-7324)	0.800
	17	G	WE-EF OLV344 [A60.3K] 24LED 24W (132-0550)	0.800
	6	F	WE-EF FLC321 [B.3K] 6LED 26W (145-7321)	0.800
	6	E	WE-EF DOC120 [B.3K] 12LED 24W (134-1737)	0.800
	31	D	WE-EF OLV344 [R65.3K] 24LED 24W (132-0548)	0.800
	44	B	WE-EF FLC301 [B.3K] 1LED 4W (145-7181)	0.800

Notes
- Grid values in Lux
- Grid intervals: 2m
- Contour values in Lux
- Contour intervals: 1, 2 & 5 Lux
- Lower column 7m
- Upper column 8m



Adonis



ETV139



FLC220-GP

Calculation Summary					
Label	Avg	Max	Min	Min/Avg	Min/Max
Cycle Store	32.25	43	25	0.78	0.58
Iso Lines	1.22	83	0	0.00	0.00
Lower level path B&C3	45.56	98	21	0.46	0.21
Lower section	33.98	52	17	0.50	0.33
Plot A side	20.05	22	17	0.85	0.77
Plot B Front	20.51	29	13	0.63	0.45
Ramp Between A & B_Top	27.87	56	13	0.47	0.23
Ramp next to B_Top	33.65	50	21	0.62	0.42
River_Top	0.33	6	0	0.00	0.00
Slope C1_Top	21.92	29	18	0.82	0.62
Slope_2_Top	29.07	37	13	0.45	0.35
Slope_3_Top	49.07	59	25	0.51	0.42
Slope_4_Top	20.66	25	14	0.68	0.56
Slope_Top	24.15	26	20	0.83	0.77
Step C3	47.88	55	25	0.52	0.45
Step C3_1	48.75	56	28	0.57	0.50
Step C3_2	48.94	56	28	0.57	0.50
Step C3_3	50.38	58	28	0.56	0.48
Step C3_4	50.13	58	25	0.50	0.43
Step C3_5	50.19	57	32	0.64	0.56
Step C3_6	50.58	57	40	0.79	0.70
Step_1_Top	22.10	25	17	0.77	0.68
Step_11_Top	54.67	64	42	0.77	0.66
Step_12_Top	53.00	62	39	0.74	0.63
Step_13_Top	50.83	59	36	0.71	0.61
Step_14_Top	22.84	74	10	0.44	0.14
Step_15_Top	22.17	27	20	0.90	0.74
Step_16_Top	22.83	27	20	0.88	0.74
Step_17_Top	23.67	27	21	0.89	0.78
Step_18_Top	24.33	28	22	0.90	0.79
Step_19_Top	24.67	28	22	0.89	0.79
Step_2_Top	22.80	25	17	0.75	0.68
Step_20_Top	29.21	36	13	0.45	0.36
Step_21_Top	27.50	31	26	0.95	0.84
Step_23_Top	22.99	101	10	0.43	0.10
Step_3_Top	23.40	26	18	0.77	0.69
Step_5_Top_1	35.69	65	18	0.50	0.28
Step_6_Top	56.33	64	45	0.80	0.70
Step_8_Top	50.33	64	29	0.58	0.45
Step_Top	21.30	24	17	0.80	0.71
Steps Between A & B_2_Top	20.00	32	12	0.60	0.38
Steps Between A & B_3_Top	25.40	31	14	0.55	0.45
Steps Between A & B_4_Top	26.25	31	15	0.57	0.48
Steps Between A & B_5_Top	26.22	35	16	0.61	0.46
Steps Between A & B_6_Top	28.78	35	18	0.63	0.51



OLV344



FLC321



DOC120



FLC301

Drawing Title: Camden Tribeca	
Drawing Number: Rev 3	
Customer: KJ Tait	
Designed By: Katy Smith	
Date: 12.07.23	Scale: 1:500 @ A3



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