



Havant S.a.r.l. (Luxembourg)
c/o XLB Property LTD

Planning Application
for Development
at
Langstone Technology Park
Phase 2
Havant

Footpath 51
External Lighting
Assessment

Issue 1



Client Name	Havant S.a.r.l. (Luxembourg) c/o XLB Property LTD
Client Address	Silver House 31-35 Beak Street London W1F 9DP
Property:	Langstone Technology Park – Phase 2 Havant
Project Reference:	5490
Issue:	Planning Submission – Issue 1
Date:	September 2024
Prepared by:	PDJ
Checked by:	MDC
Validated by:	MDC



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APPENDIX

Drawing No. 5490-WPL-XXX-100-DR-EL-54012 – Footpath 51 Lighting Layout



1.00 INTRODUCTION

The purpose of this document is to summarise the intended external lighting scheme to be provided to the footpath identified as Footpath 51 at the site known as Langstone Technology Park – Phase 2 on behalf of Havant S.a.r.l. (Luxembourg) c/o XLB Property LTD

The Footpath 51 external lighting assessment supports the Planning Application for the redevelopment of the site, providing a lighting installation taking into consideration the request by Hampshire County Council (HCC) in May 2024 to adopt the footpath.



2.00 EXTERNAL LIGHTING

The proposed external lighting scheme for Footpath 51 and the luminaires should comply with the recommendation of:

- BS5489 Code of practice for the design of road lighting, Part 1 Lighting of roads and public amenity areas
- BS EN 13201 Road Lighting, Part 2 Performance Requirements
- Institution of Lighting Professions (ILP) Guidance Notes for the Reduction of Obtrusive Light GN01: 2011
- Institute of Lighting Professionals (ILP) Guidance Note 08/18 – Bats and artificial lighting in the UK.
- Hampshire County Council (HCC) -TG13 – Technical Guidance Note – Street Lighting
- BS 7671:2018+A3:2024 – Requirements for Electrical Installations.

In accordance with the ILP Guidance Notes the site has been assessed as Environmental Zone Category E3 (a small-town centre or suburban location with a medium district brightness lighting environment).

Footpath 51 will be used by pedestrians and cyclists.

It has been assessed that the lighting for the path should meet Class P6 requirements based on the following parameters:

- Low travel speed.
- Very low traffic volume.
- Pedestrians and cyclists only traffic composition.
- Parked vehicles are not present.
- Low ambient luminance.
- Facial recognition is not a requirement.

To meet the requirements of Lighting Class P6, the lighting installation to Footpath 51 will meet the following parameters:

Footpath 51	2 lux average 0.4 lux minimum
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An environmental zone has been identified adjacent to Footpath 51, with vegetation and a water stream.

The following aspects were considered and incorporated on the design to minimise the impact of the external lighting scheme:

- All proposed luminaires lack UV elements.
- All luminaires have an LED light source.
- All luminaires have 0% upward light ratio with good optical control.
- All luminaires are to be installed without upward tilt.



In addition to the above considerations, the lighting in Footpath 51 incorporates the recommendations from the ILP Guide Note 08/18:

- The luminaires will have a colour temperature of 2700K to reduce the blue light component.
- The lighting will be provided by LED luminaires installed in 5-meter columns as requested by HCC.
- The luminaire will be provided with internal back light shield to reduce the amount of lighting spilling onto the water stream.
- Each luminaire is to be provided with lighting control (Mayflower Remote Monitoring System), via the provision of individual Mayflower CMS nodes fit into 6-pin sockets (S6000).

A lighting calculation has been conducted to assess the proposed external lighting scheme.

The overall maintenance factor utilised in the lighting calculations is 0.85 as dictated by the HCC Guidance Notes for new equipment.

The luminaire to be installed is as manufactured by Philips Lighting, their Micro Luma model, BGP702 DM10 BL2, with 2700K LED and internal back louvre.



3.00 POWER SUPPLY

The power supply for the Footpath 51 lighting will be derived from the sitewide electrical infrastructure. It will be a private cable electrical supply. The electrical supply will be provided with a MID meter located in a landlord feeder pillar adjacent to the site private substation.

The cable will be installed in 100mm diameter orange PVC ducts, with the necessary chambers/draw pits and laid at in accordance with the NJUG guidelines, 450mm deep in footpaths and 600mm deep in carriage ways. A 150mm wide yellow heavy gauge PVC tape will be provided along the route. Draw ropes will be provided in the duct.

The power supply will be wired in 4sqmm XLE/SWA/PVC cable, protected by a 10A HRC fuse.

The installation will be provided with an Electrical Test Certificate and O&M information at completion.



4.00 CONCLUSION

The following conclusions can be drawn from this assessment.

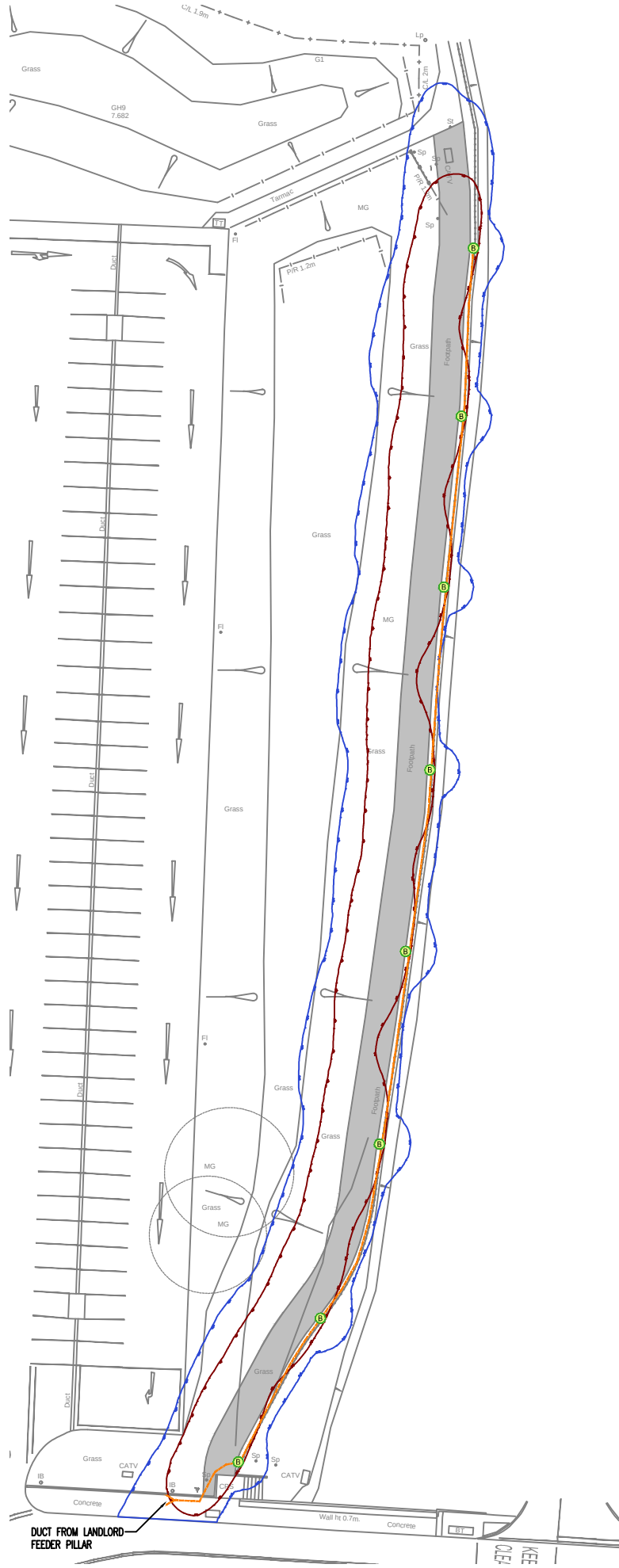
1. The lighting to Footpath 51 considers and includes recommendations from British Standards (BS EN 13201 and BS5489), the ILP Guide Notes GN01 and 08/18 and the HCC technical guide TG13.
2. The proposed installation minimises the light spill onto the environmental zone adjacent to the Footpath. However, there is still a level of light spill due to the environmental zone being immediately adjacent to the footpath.
3. Based on the lux levels plotted on the appended drawing, the average and minimum illuminance values meet the design criteria for lighting class P6.
4. The lighting levels in the water course area are minimised using internal back light shields.

The proposed lighting scheme and results are included in the appendix, in drawing 5490-WPL-XXX-100-DR-EL-54012.



APPENDICES

Drawing No. 5490 - WPL-XXX-100-DR-EL-54012 – Footpath 51 Lighting Layout



Luminaire list (Site 1)								
Index	Manufacturer	Article name	Item number	Fitting	Luminaire flux	Maintenance factor	Connected load	Quantity
B	Philips	BGP702 DM10 BL2		1x LED-HB 3,25 730	1000 lm	0.85	7 W	8
#	Name	Parameter	Min	Max	Average	Min/average	Min/max	
1	Footpath	Perpendicular Illuminance	0.88 lx	7.66 lx	4.09 lx	0.22	0.11	

- NOTES:
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION AND LEGEND DRAWING.
 - DO NOT SCALE FROM THIS DRAWING.

- LEGEND:
- 2 LUX LINE
 - 0.4 LUX LINE
 - 100mm DIAMETER ORANGE PVC DUCT

2	LIGHTING AMENDED TO SUIT NEW FOOTPATH	SEP 2024
Ref.	Revision	Date

TENDER



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Project
LANGSTONE TECHNOLOGY PARK
- PHASE 2

Title
FOOTPATH 51 LIGHTING LAYOUT

Date	JULY 2024	Scale at A1	1:300
Drawn By	PDJ	Validated	
Checked			
Drawing Number	5490-WPL-XXX-100-DR-EL-54012	Revision	2