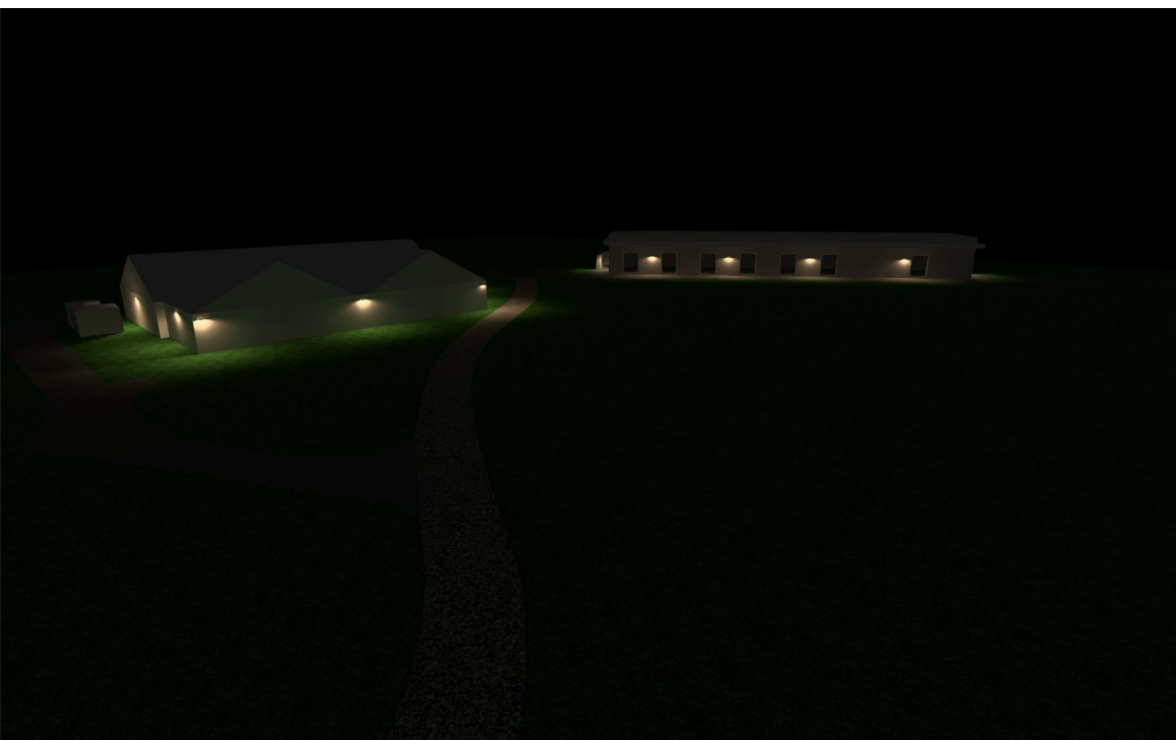




38245 - Billingbear Park Golf Course

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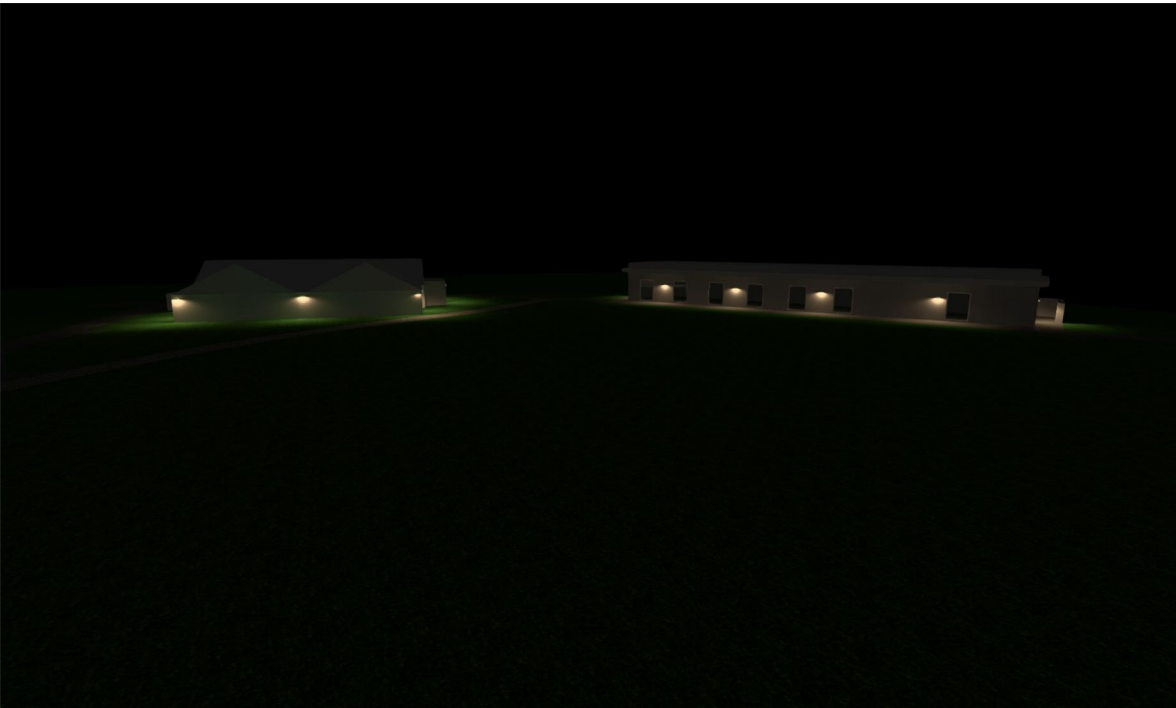
Building Perimeter

Summary / Light scene 1 5

Site 1

Outdoor space 7

Summary / Light scene 1 7

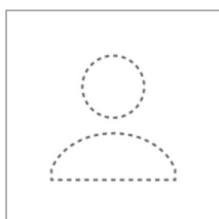


Description

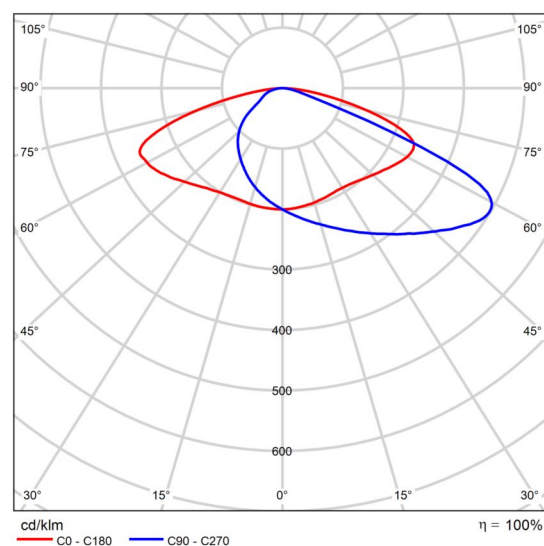
The external lighting scheme has been designed in line with ILP Guidance Note 01/21 to minimise obtrusive light and comply with dark sky principles. All luminaires are fully shielded, with 0% upward light output (ULOR), and use controlled beam angles to reduce spill. Colour temperatures are kept below 3000K to limit ecological disruption, particularly to nocturnal species. The layout ensures compliance with environmental zone E1–E2 limits, protecting the natural character of the site and its surroundings.

Product data sheet

Steon Ltd. - Harrier Midi 10W LED - 2700K



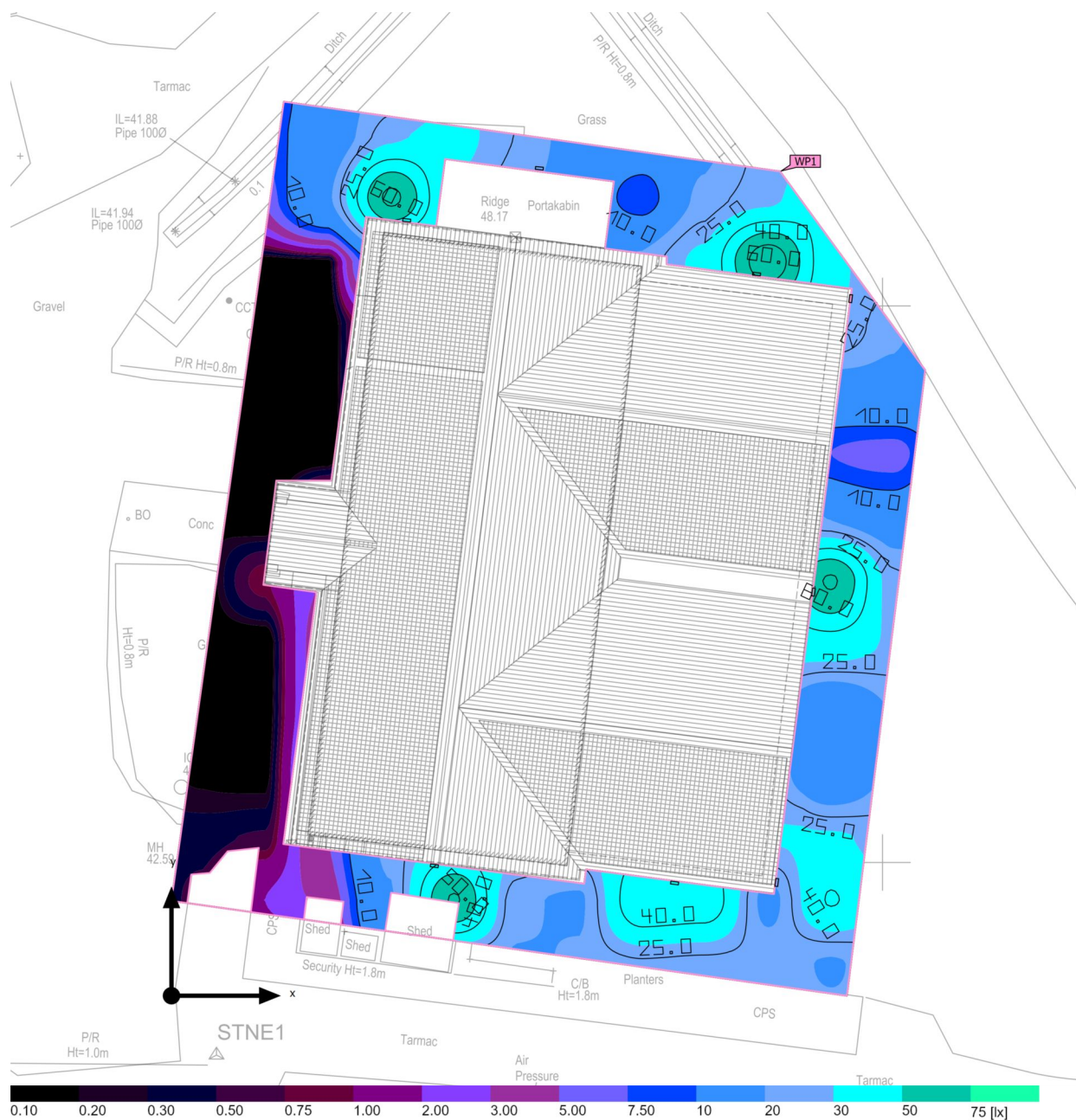
Article No.	65-271-470-402 / 65-271-470-402
P	10.0 W
Φ_{Lamp}	1593 lm
$\Phi_{\text{Luminaire}}$	1593 lm
η	100.00 %
Luminous efficacy	159.3 lm/W
CCT	2700 K
CRI	70



Polar LDC

Building Perimeter (Light scene 1)

Summary



		Mounting height	2.200 m
Ground area	265.88 m ²	Height _{Working plane}	0.000 m
Maintenance factor	0.80 (fixed)	Wall zone _{Working plane}	0.000 m

Building Perimeter (Light scene 1)

Summary

Results

	Symbol	Calculated	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	18.6 lx	WP1
	$U_o (g_1)$	0.000	WP1
Energy estimation ⁽²⁾	Consumption	701 kWh/a	
Space	Lighting power density	0.30 W/m ²	
		1.61 W/m ² /100 lx	

(1) Based on a rectangular space of 24.500 m x 29.000 m and SHR of 0.25.

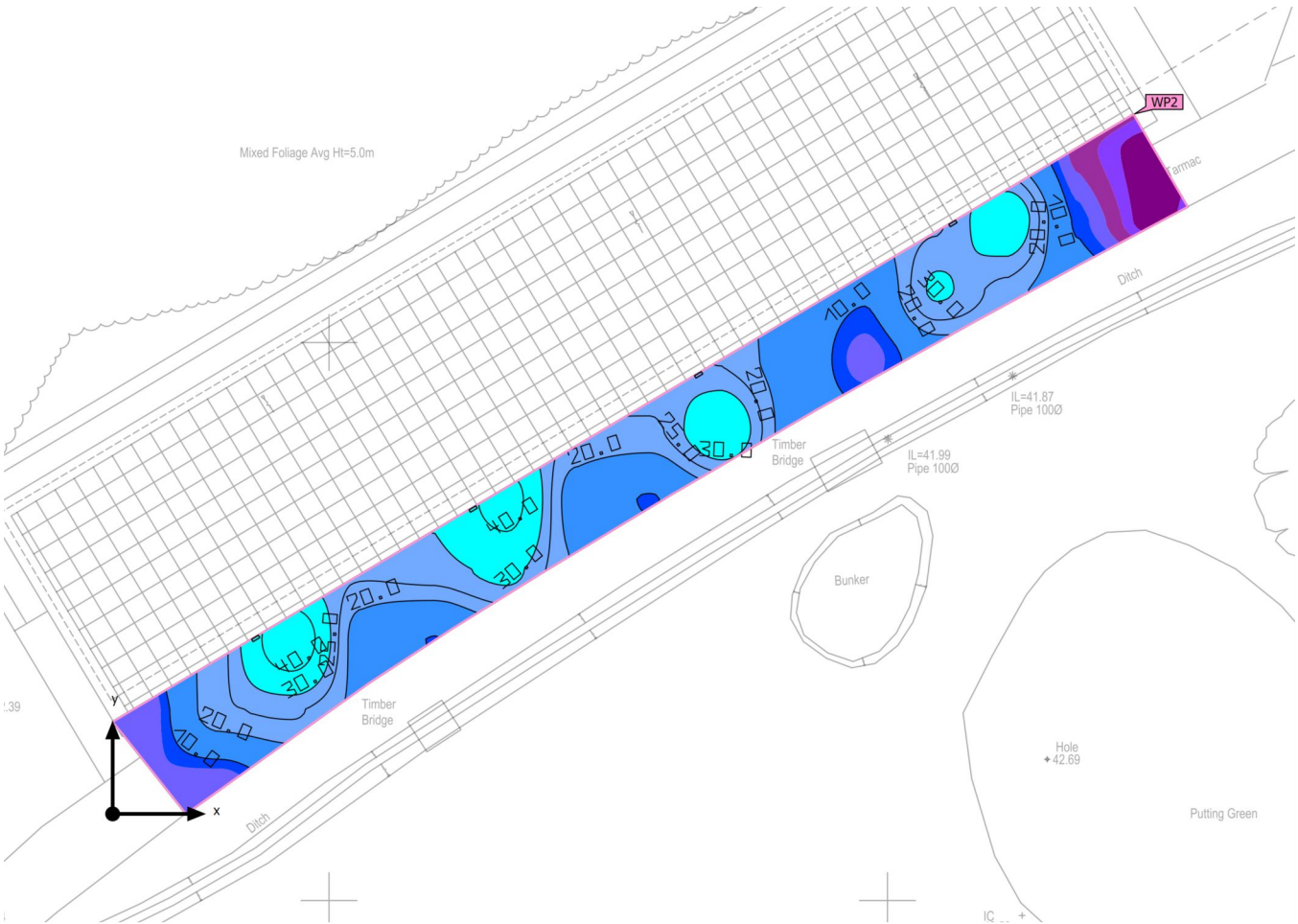
(2) Calculated using DIN:18599-4.

Utilisation profile: General circulation areas at outdoor workplaces (5.1.2 Traffic areas for slow-moving vehicles (max.10 km/h), e.g. bicycles, excavators)

Luminaire list

pcs.	Manufacturer	Article No.	Article name	R _{UG}	P	Φ	Luminous efficacy
8	Steon Ltd.	65-271-470-402 / 65-271-470-402	Harrier Midi 10W LED - 2700K	–	10.0 W	1593 lm	159.3 lm/W

Outdoor space 7 (Light scene 1)
Summary



		Mounting height	2.198 m
Ground area	147.66 m ²	Height _{Working plane}	0.000 m
Maintenance factor	0.80 (fixed)	Wall zone _{Working plane}	0.000 m

Outdoor space 7 (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Index
Working plane	$\bar{E}_{\text{perpendicular}}$	19.4 lx	≥ 20.0 lx	WP2
	$U_o (g_1)$	0.065	≥ 0.40	WP2
Energy estimation ⁽²⁾	Consumption	350 kWh/a	max. 5200 kWh/a	
Space	Lighting power density	0.27 W/m ²	–	
		1.40 W/m ² /100 lx	–	

(1) Based on a rectangular space of 42.550 m x 4.181 m and SHR of 0.25.

(2) Calculated using DIN:18599-4.

Utilisation profile: General circulation areas at outdoor workplaces (5.1.3 Regular vehicle traffic (max. 40km/h))

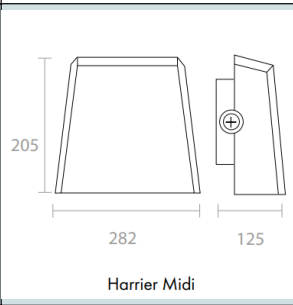
Luminaire list

pcs.	Manufacturer	Article No.	Article name	R _{UG}	P	Φ	Luminous efficacy
4	Steon Ltd.	65-271-470-402 / 65-271-470-402	Harrier Midi 10W LED - 2700K	–	10.0 W	1593 lm	159.3 lm/W

Project: Billingbear Park Golf Club

Revision: A

LIGHTSOURCE

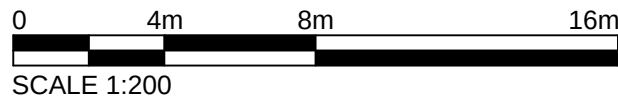
Luminaire Schedule							
Reference	Location	Description	Luminaire		Image	Dimensions	Notes
X2	Building external perimeter	Harrier LED: Slim wall pack luminaire, zero upward light, IP66, IK08, available in two sizes (mini or midi), 2700k colour temperature as standard, CRI 70 as standard, 100,000 hrs LED life expectancy, luminous efficacy up to 159lm/W, die-cast aluminium body, polycarbonate clear lens, powder coated black	Manufacturer	Lightsource			Dark sky compliant
			Finish	Black			
			Dimensions	W282xH205xD125mm			
			Colour Temp	2700k			
			Colour Rendering	70			
			Luminaire Output (lm)	1593			
			Power (W)	10			
			Efficacy (lm/W)	159.3			
			Control	Switched			
			Emergency	Optional			
			IP Rating	66			
			IK Rating	08			
					Harrier Midi		



REF X2

NOTES

- Where dimensions are not given drawings must not be scaled
- Contractors must check all dimensions on site
- The drawing represents design intent only and may vary slightly due to site conditions.
- Any discrepancies must be reported to the Architect or Lighting Designer prior to commencement of works
- In the event of a conflict on site the contractor must contact the Architect or Lighting Designer prior to commencement of works
- All driver locations are to be confirmed by the electrical contractor and must be in accordance with the manufacturers recommendations.
- Electrical contractor to note channels where low loads are present and ensure correct dimmer modules are installed.
- This drawing is the Intellectual Property of Lightsource and shall not be reproduced in whole or part without prior expressed permission of Lightsource.
- Data sheets/installation manuals should be reviewed by the electrician/contractor prior to installation. Particularly overall size of luminaire, and cut-out sizes if required.
- When installing wall lights, it is the responsibility of the electrical contractor/electrician to check how best to connect wiring in to wall light, as some architectural wall lights are too small to fit 2No. 3-core flex cables. Lightsource would advise to wire all wall lights with a single 3-core flex cable.



Lightsource Legend

External Luminaires		
		Wall Light
Luminaire Schedule		
Ref	Manufacturer	Description
X2	Steon	Harrier Midi 10W 1593lm 2700K IP66 IK08 CR180 0% upward light dark sky compliant grey finish

B	General layout revision	SW	OJ	10-11-25
A	General layout revision	SW	OJ	06-11-25
rev	description	by	check	date

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PROJECT NAME
BILLINGBEAR PARK GOLF CLUB

DRAWING TITLE
LIGHTING LAYOUT BUILDING AREA

DRAWING NUMBER
LS01-38245-BPGC-LTG-SITE

scale
1:200@A1

by
SW

check
AB

date
30-05-19

revision
B

LIGHTING PLAN

Scale: 1:200 @ A1

NOTES

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PROJECT NAME				
BILLINGBEAR PARK GOLF CLUB				
DRAWING TITLE				
LIGHTING LAYOUT SITE				
DRAWING NUMBER				status
LS02-38245-BPGC-LTG-SITE				PROPOSAL
scale	by	check	date	revision
1:500@A1	SW	AB	30-05-19	B

LIGHTING PLAN

Scale: 1:500 @ A1