

A nighttime photograph of a street scene. A street lamp illuminates the road, and several cars are visible in the distance. The scene is dark, with the light from the lamp creating a bright spot on the road.

Land at Lottage Farm,
Lottage Road,
Aldbourn, Wiltshire,
SN8 2ED

Lighting Strategy

April 2026

Rev: -

Land at Lottage Farm, Lottage Road, Aldbourne, Wiltshire, SN8 2ED Lighting Strategy

Issue Register

[illegible]

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1. Introduction

1.1 Background

Ashford Homes is proposing to build a thirty one dwelling residential development on Land at Lottage Farm, Lottage Road, Aldbourne, Wiltshire, SN8 2ED . A general layout of the site masterplan is included in Appendix A.

EDS was subsequently appointed to assess the potential impact of artificial light and develop a lighting strategy to support the planning application.

1.2 Objective

This report forms the lighting strategy and describes the exterior lighting proposals and how environmental impact is minimised.

The key objectives of the lighting strategy is to discharge Condition 8 of the outline planning permission;

Reserved Matters applications shall be accompanied by a 'Lighting Design Strategy for Biodiversity'. The strategy will cover both construction and operation phase and shall:

- 1. Identify those features/ routes that are important to light sensitive/ nocturnal species such as bats, badgers and hedgehog and to be retained within dark corridors.*
- 2. Show full details of proposed construction and operational lighting, including lux plots to show there is no lighting impact to the features/ routes identified. Lux plots should be presented on a scaled site drawing and the light levels must be shown at ground level and at 2m above the ground (horseshoe bats fly typically within this range). The light levels should also be shown as "from new", not as normally calculated levels after some months or years of use.*

All external lighting shall be installed in accordance with the specifications and locations set out in the strategy, and these shall be maintained thereafter in accordance with the strategy. Under no circumstances should any other external lighting be installed without prior consent from the local planning authority.

In addressing these objectives there is also a need to provide a sustainable solution that minimises energy usage and carbon emissions.

1.3 Scope

The study will consider the potential impact of artificial light at the sensitive locations advised by the project team.

The strategy will include a proposed lighting layout supported with a luminaire specification, positions and lux contours suitable for planning.

2. Environmental Considerations

In order to minimise obtrusive light and its impact on the local ecology within and beyond the development special considerations are necessary, the key objectives being to:

- Keep the number and wattage of light sources to a minimum;
- Keep the height of light sources to a minimum;
- Avoid direct upward light above the horizontal to maintain a 'dark sky';
- Maintain 'dark corridors' and minimise light trespass at environmentally sensitive locations, e.g. bat roosts and flight lines; and
- Follow the principles described in the Institution of Lighting Professionals Guidance Notes for the Avoidance of Obtrusive light (GN01:2021).

3. Lighting Proposals

The proposed lighting design is outlined on drawing in Appendix B. The drawing shows indicative luminaire locations positions, details of a suitable luminaire and projected lux contours (horizontal).

It should be noted that the lux values exclude the screening effect of rear shields, buildings, trees etc. The 0.2 lux contour is of particular significance as the generally accepted threshold for illuminance in the vicinity of bat habitats.

Private Property mounted lighting proposals;

Special consideration is required to reduce the spill of light due to bat activity, therefore a downward LED light source has been specified. Downward lighting has been proposed throughout the site (Unit type A shown in Figure 1). Manufacturer's literature is included in Appendix C.

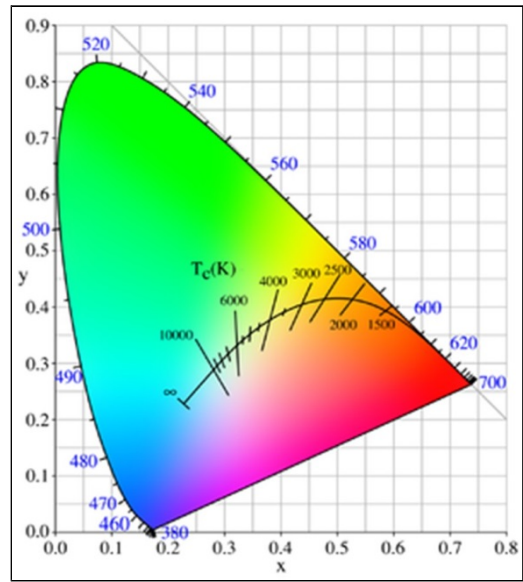
***Figure 1 - Proposed (Lux Layout Unit Ref A)
Ansell Reef Directional (No upward lighting)***



White light sources such as LED have the benefit of excellent colour rendering properties with the ability to improve the night-time environment for users. LEDs also emit virtually no ultra violet light given that other light sources with a high UV content, particularly at the blue end of the spectrum can be detrimental to ecology and have a negative impact on bats and invertebrates.

LED luminaires are predominantly available in 'neutral' white with colour temperatures of 4000°K. With reference to the chromaticity diagram below (Figure 2) it can be seen that the proposed 'warm' white 3000°K LEDs are nearer the yellow/orange end of the colour spectrum.

Figure 2 - Chromaticity Diagram with Black Body Locus



4. Summary

The proposed exterior lighting scheme for the development is optimised to minimize light spill and the potential effects of artificial light on local ecology. An LED light source is specified with no UV content and a warm colour temperature with a lower blue light content that is more sympathetic to bats.

Due to the sensitivity of bats to artificial light sources, illuminance levels close to natural moonlight ≤ 0.5 lux are normally preferred. The projected horizontal illuminance contours indicate that the impact on the environment and local ecology will be low. The key features are:

- An environmentally sensitive lighting scheme with low lighting levels and a directional LED light source to reduce lightspill and maintain dark corridors throughout the site.
- The proposals follow the principles and guidance set out in Institute of Lighting Engineers in their publications "Guidance Notes for the Reduction of Obtrusive Light (ILE, 2005)" and Guidance Note 08/23 Bats and Artificial Lighting in the UK

In summary, the sympathetic lighting design and control measures will ensure that any adverse impacts in all sensitive receptors are minimal, including ecological receptors (primarily bats), the night sky and viewpoints in the surrounding area.

Appendix A

Proposed Site Legal Plan



Revit Links Schedule - Shifted T Junction		
Name	Type Mark	Mark*
1	Wolverland	OM
2	Wolverland	OM
3	Elmhurst (Gable Fronted)	OM
4	Pickford	OM
5	Pickford	OM
6	Elmhurst (Gable Fronted)	OM
7	Elmhurst (Gable Fronted)	OM
8	Fulwell	OM
9	Wolverland (SW)	OM
10	Elmhurst (Gable Fronted)	OM
11	Pickford (SW)	OM
12	Fulwell (SW)	OM
13	Pickford (SW)	OM
14-16	Bratton 2B4P Terrace x3	AR
17	2B4P Wide Bratton Type (68sqm)	SO
18	2B4P Wide Bratton Type (68sqm)	SO
19	Bratton 3B5P All Footprint (62.2sqm)	SO
20	2B4P Bungalow	OM
21	Longhaven	SO
22	Longhaven	SO
23-24	Bratton 1B Flat Type x2	AR
25-26	Bratton 1B Flat Type x2	AR
27	Hazel	OM
28	Hazel	OM
29	Elmhurst	OM
30	Elmhurst	OM
31	Elmhurst (Gable Fronted)	OM

* OM - Open Market
AR - Affordable Rent
SO - Shared Ownership

- Bin Storage
- Paved Paths
- Affordable Housing

0 5m

P9	18/03/2026	For coordination	RB
P8	16/03/2026	For coordination	RB
P7	10/03/2026	For discussion	RB
P6	03/02/2026	For use	RB
P5	19/01/2026	For use	RB

Rev.	Date	Notes	Init.
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Lottage Farm - Lottage Road
Aldbourne

Site Plan Sketches 2

Drawing Number	Revision
25058-NPA-XX-XX-DR-A-0002	P9

Project Number 25058
Suitability DRAFT
Scale 1 : 500 @A1
Drawn by RB

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Responsibility is not accepted for errors made by others in scaling from this drawing.
Contractors must check all dimensions on site. Discrepancies must be reported immediately to the architect before proceeding. This drawing is copyright ©2024 Nash Partnership. All rights reserved.

Appendix B

Proposed Lighting Drawing & Calculations

Supplier	Luminaire A
Type	Recessed LED Directional Wall Light
Lamp(s)	
Lamp Flux (lm)	0.44
Maintenance Factor	1.00
No. in Project	60



-354.27m
39.52m

LIGHTING REALITY	
PROJECT NAME: Land at Lottage Farm	
PROJECT No:	1101
SCALE: 1:250	DATE: 19 April 2020
CALCULATION: Horizontal Illuminance (lux)	
DESIGNER: EDS	
PREPARED BY:	
Results Grid 1	
Eav	0.89
Emm	0.00
Emax	58.81
EmmEmax	0.00
EmmEav	0.00

DATE: 10 April 2026
DESIGNER: EDS
PROJECT No: 1101
PROJECT NAME: Land at Lottage Farm

**LIGHTING
REALITY**

Unit Type A - Ansell Reef 3000K Warm White colour temperature,
Directional (Downward Light only)
Mounted at 1.8m height

Outdoor Lighting Report

Layout Report

General Data

Dimensions in Metres Angles in Degrees
Grid Origin 39.5m x -354.3m
Area 189.5m x 286.8m
Sample Spacing 1.49m x 1.49m

Luminaires

Luminaire A Data

Supplier	
Type	Reef LED Directional Wall Light
Lamp(s)	
Lamp Flux (klm)	0.44
File Name	AREELEDWLD (3000K).ldt
Maintenance Factor	1.00
Imax70,80,90(cd/klm)	81.3, 35.8, 2.8
No. in Project	86

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	120.87	-127.64	1.80	90.00	0.00	0.00	0.10			
2	A	127.49	-128.75	1.80	90.00	0.00	0.00	0.10			
3	A	138.71	-127.72	1.80	90.00	0.00	0.00	0.10			
4	A	145.56	-128.75	1.80	90.00	0.00	0.00	0.10			
5	A	134.21	-127.49	1.80	270.00	0.00	0.00	0.10			
6	A	125.70	-136.73	1.80	270.00	0.00	0.00	0.10			
7	A	143.71	-136.56	1.80	270.00	0.00	0.00	0.10			
8	A	131.06	-133.91	1.80	0.00	0.00	0.00	0.10			
9	A	149.00	-133.95	1.80	0.00	0.00	0.00	0.10			
10	A	138.01	-150.25	1.80	0.00	0.00	0.00	0.10			
11	A	132.49	-153.46	1.80	270.00	0.00	0.00	0.10			
12	A	126.35	-150.10	1.80	179.00	0.00	0.00	0.10			
13	A	126.33	-161.87	1.80	179.00	0.00	0.00	0.10			
14	A	125.12	-176.94	1.80	179.00	0.00	0.00	0.10			
15	A	134.65	-161.12	1.80	0.00	0.00	0.00	0.10			
16	A	133.38	-176.19	1.80	0.00	0.00	0.00	0.10			
17	A	131.07	-168.11	1.80	270.00	0.00	0.00	0.10			
18	A	129.86	-183.13	1.80	270.00	0.00	0.00	0.10			
19	A	129.80	-193.46	1.80	86.00	0.00	0.00	0.10			
20	A	123.10	-196.06	1.80	181.00	0.00	0.00	0.10			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
21	A	134.48	-196.99	1.80	358.00	0.00	0.00	0.10			
22	A	115.73	-212.16	1.80	172.00	0.00	0.00	0.10			
23	A	127.06	-214.72	1.80	347.00	0.00	0.00	0.10			
24	A	133.59	-215.88	1.80	346.00	0.00	0.00	0.10			
25	A	147.47	-214.98	1.80	82.00	0.00	0.00	0.10			
26	A	140.03	-219.34	1.80	172.00	0.00	0.00	0.10			
27	A	146.18	-222.46	1.80	254.00	0.00	0.00	0.10			
28	A	166.25	-212.32	1.80	270.00	0.00	0.00	0.10			
29	A	174.99	-214.91	1.80	359.00	0.00	0.00	0.10			
30	A	172.58	-231.87	1.80	270.00	0.00	0.00	0.10			
31	A	177.26	-228.90	1.80	359.00	0.00	0.00	0.10			
32	A	165.49	-227.69	1.80	169.00	0.00	0.00	0.10			
33	A	150.03	-235.58	1.80	79.00	0.00	0.00	0.10			
34	A	141.36	-237.11	1.80	166.00	0.00	0.00	0.10			
35	A	152.27	-241.47	1.80	345.00	0.00	0.00	0.10			
36	A	149.85	-252.73	1.80	345.00	0.00	0.00	0.10			
37	A	149.50	-255.27	1.80	345.00	0.00	0.00	0.10			
38	A	162.70	-250.26	1.80	169.00	0.00	0.00	0.10			
39	A	139.30	-247.90	1.80	169.00	0.00	0.00	0.10			
40	A	137.65	-253.67	1.80	169.00	0.00	0.00	0.10			
41	A	135.82	-265.64	1.80	169.00	0.00	0.00	0.10			
42	A	133.53	-272.00	1.80	169.00	0.00	0.00	0.10			
43	A	144.55	-270.00	1.80	345.00	0.00	0.00	0.10			
44	A	142.96	-274.72	1.80	345.00	0.00	0.00	0.10			
45	A	169.77	-255.44	1.80	345.00	0.00	0.00	0.10			
46	A	164.88	-270.47	1.80	345.00	0.00	0.00	0.10			
47	A	157.51	-267.94	1.80	169.00	0.00	0.00	0.10			
48	A	162.58	-281.14	1.80	169.00	0.00	0.00	0.10			
49	A	151.56	-284.50	1.80	169.00	0.00	0.00	0.10			
50	A	158.04	-290.28	1.80	345.00	0.00	0.00	0.10			
51	A	167.95	-263.75	1.80	169.00	0.00	0.00	0.10			
52	A	148.14	-246.66	1.80	79.00	0.00	0.00	0.10			
53	A	175.96	-221.32	1.80	181.00	0.00	0.00	0.10			
54	A	144.55	-258.80	1.80	256.00	0.00	0.00	0.10			
55	A	142.13	-265.17	1.80	79.00	0.00	0.00	0.10			
56	A	138.89	-276.96	1.80	251.00	0.00	0.00	0.10			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
57	A	135.41	-281.26	1.80	79.00	0.00	0.00	0.10			
58	A	170.87	-243.82	1.80	178.00	0.00	0.00	0.10			
59	A	127.98	-284.11	1.80	165.00	0.00	0.00	0.10			
60	A	125.18	-290.56	1.80	165.00	0.00	0.00	0.10			
61	A	154.71	-295.80	1.80	165.00	0.00	0.00	0.10			
62	A	153.00	-300.73	1.80	165.00	0.00	0.00	0.10			
63	A	151.06	-305.48	1.80	165.00	0.00	0.00	0.10			
64	A	135.71	-283.87	1.80	342.00	0.00	0.00	0.10			
65	A	131.21	-296.16	1.80	342.00	0.00	0.00	0.10			
66	A	161.89	-298.42	1.80	342.00	0.00	0.00	0.10			
67	A	160.43	-303.53	1.80	342.00	0.00	0.00	0.10			
68	A	158.54	-308.40	1.80	342.00	0.00	0.00	0.10			
69	A	128.90	-297.26	1.80	251.00	0.00	0.00	0.10			
70	A	145.11	-321.25	1.80	73.00	0.00	0.00	0.10			
71	A	136.16	-318.97	1.80	73.00	0.00	0.00	0.10			
72	A	128.42	-316.01	1.80	73.00	0.00	0.00	0.10			
73	A	113.58	-310.12	1.80	73.00	0.00	0.00	0.10			
74	A	142.14	-325.70	1.80	257.00	0.00	0.00	0.10			
75	A	135.70	-323.70	1.80	257.00	0.00	0.00	0.10			
76	A	127.54	-321.52	1.80	257.00	0.00	0.00	0.10			
77	A	109.78	-319.67	1.80	257.00	0.00	0.00	0.10			
78	A	123.69	-317.21	1.80	164.00	0.00	0.00	0.10			
79	A	115.29	-315.63	1.80	342.00	0.00	0.00	0.10			
80	A	104.14	-294.49	1.80	340.00	0.00	0.00	0.10			
81	A	105.10	-292.29	1.80	340.00	0.00	0.00	0.10			
82	A	95.12	-291.57	1.80	164.00	0.00	0.00	0.10			
83	A	96.51	-287.68	1.80	164.00	0.00	0.00	0.10			
84	A	99.63	-296.46	1.80	254.00	0.00	0.00	0.10			
85	A	102.41	-286.87	1.80	71.00	0.00	0.00	0.10			
86	A	144.40	-143.04	1.80	181.00	0.00	0.00	0.10			

Horizontal Illuminance (lux)

Grid 1



Results

Eav	0.69
Emin	0.00
Emax	59.81
Emin/Emax	0.00
Emin/Eav	0.00

Appendix C

Manufacturer's Literature



@ansell_lighting



ansellighting



Ansell Lighting



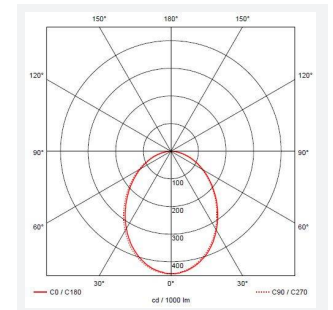
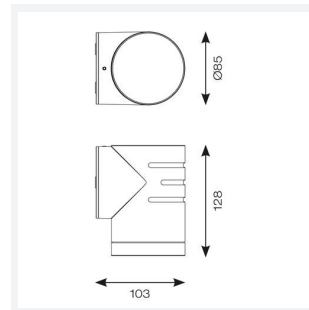
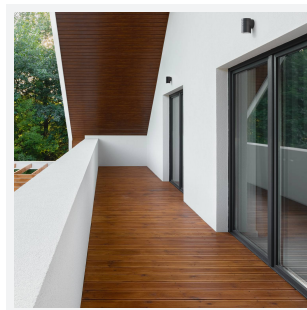
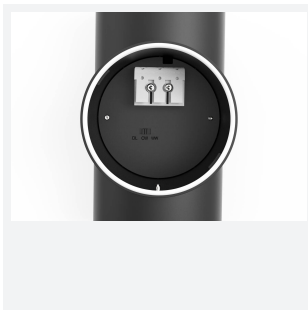
ansell_lighting

Reef Directional

Reef CCT Directional Wall Light Black

Code: AREELEDWLD

Category	Wall Lights
Application	Hospitality, Outdoor, Residential, Retail
Specification	Architectural



PRODUCT FEATURES

- Durable outdoor directional wall light suitable for residential and hospitality applications
- Choice of matt white or black finishes
- CCT selectable between 3000K, 4000K and 6000K
- Non-dimmable
- Installation in either upward or downward orientation
- Polycarbonate construction ideal for coastal applications
- Unique lockable installation base plate with push fit loop-in loop-out terminals for ease of installation

GENERAL INFORMATION	
Wattage	5W
Lumens Delivered	430lm - 410lm (3000K - 6000K)
Lm/W	85lm/W - 82lm/W (3000K - 6000K)
Beam Angle	90
CRI	80
CCT	3000/4000/6000K
Input	220/240V
Operating Temp	-20°C - 40°C
SDCM	6

TECHNICAL INFORMATION	
Light Source	LED
Colour / Finish	Black
IP Rating	IP65
Class Protection	2
Internal / External	Internal / External
Surface / Recessed / Suspended	Wall
Lumen Depreciation	L80 54,000h
Warranty (Years)	3
CE Mark	Yes
Diameter	85 mm
Height	128 mm

