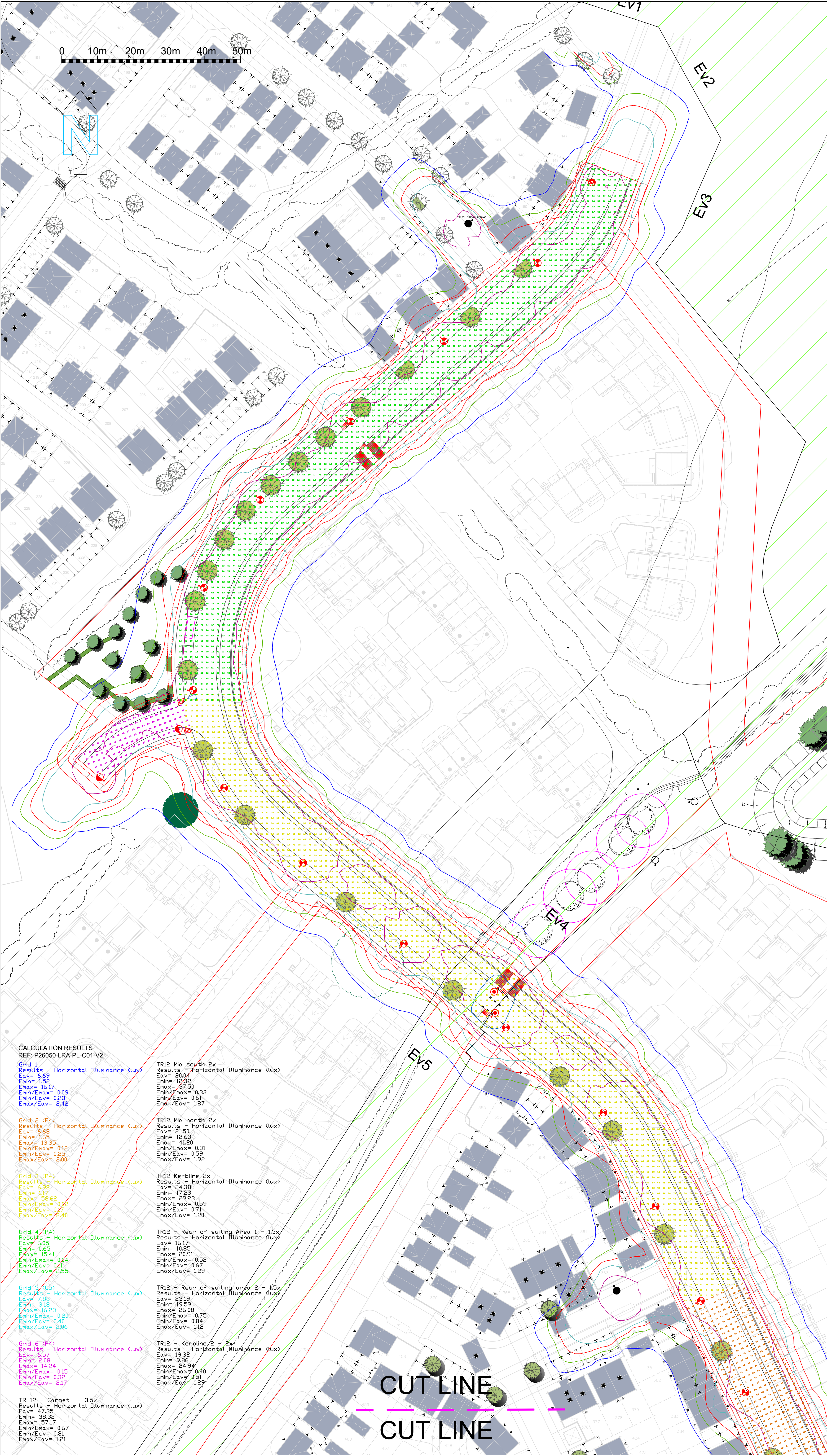




KEY TO LUMINAIRE SYMBOLS

Proposed new adoptable lighting

- Type A
8m column with LED Luminaire mounted post-top at 0°
Luminaire: Urbis Schreder AXIA 3.1 38W c/w 3000K
LEDs driven at 760mA, DALI enabled driver, 7-pin
NEMA socket and type '52673' optic. Flux: 5.56klm
Wiltshire ref: Axia3.1-C5.5-3K
- Type B
8m column with LED Luminaire mounted post-top at 0°
Luminaire: Urbis Schreder AXIA 3.1 38W c/w 2700K
LEDs driven at 760mA, DALI enabled driver, 7-pin
NEMA socket, type '52673' optic and fitted with the
manufacturer's rear louvre assembly. Flux: 5.27klm
Wiltshire ref: Axia3.1-C5.2-27K-BL
- Type C
6m column with LED Luminaire mounted post-top at 0°
Luminaire: Urbis Schreder AXIA 3.1 23W c/w 3000K
LEDs driven at 460mA, DALI enabled driver, 7-pin
NEMA socket, type '52673' optic and fitted with the
manufacturer's rear louvre assembly. Flux: 3.65klm
Wiltshire ref: Axia3.1-C3.6-3K
- Type D
6m Belisha Beacon with LED luminaire mounted
post-top at 0°
Luminaire: Urbis Schreder AMPERA EVO 23.6W c/w
10no 4000K (neutral white) LEDs driven at
700mA, DALI enabled driver, 7-pin NEMA socket and
type '5370' (zebra left) optic. Flux: 2.99klm

Proposed lighting from adjoining phases, shown
for tie in purposes only (All adjoining proposal
currently at planning stage - positions and
specification subject to change)

- 6m column with LED Luminaire mounted post-top at 0°
Luminaire: Urbis Schreder AXIA 3.1 23W c/w 3000K
LEDs driven and type '52673' optic Flux: 3.65klm
Wiltshire ref: Axia3.1-C3.6-3K
- 5m column with LED Luminaire mounted post-top at 0°
Luminaire: Urbis Schreder AXIA 3.1 15W c/w 3000K
LEDs driven and type '52673' optic Flux: 3.65klm
Wiltshire ref: Axia3.1-C2.1-3K

KEY TO LUMINAIRE SYMBOLS

- 1mx1m adoptable pad constructed to WCC specification
- Dark corridor (0.20 lx horizontal, 0.40 lux vertical limit)

DESIGN COMMENTARY

Brief
This drawing is for planning purposes only, and shows
calculated design levels and proposed specification and
positions of streetlighting to be adopted by Wiltshire County
Council. It pertains to Phase 2 of the infrastructure works
associated with the 'Ashton Park' Development by Barratt
Homes and Persimmon Homes. The infrastructure adjoins
phase 3 of the Barratt Homes development to the west,
phase 2 of the Persimmon Homes development to the east
and phase 2 of the development by David Wilson Redrow to
the north.
Preliminary Lighting designs for each area is currently
underway. Proposed lighting specification and positions are
modelled for tie-in purposes, however currently should be
treated as indicative and are subject to change following
changes to the site layout or client / local authority review.

Environmental zone - E3
Selected based on size of wider development (2000+ houses)
meaning the area, post-development will be in an area of
increased district brightness in line with an 'E3' level

Design levels
Target Lighting class (BSEN13201-2:2015): P4 (Eav: 5lx -
7.5lx, Emin: 1.0lx)
As per Table A.5 of BS5489-1:2020:
Road speed: 30mph (As confirmed by the client)
Traffic flow: busy (vehicular)
Environmental zone: 'E3'

Maintenance factor
(0.87 for 8m columns, 0.80 for 6m columns)
LFF: 0.98 - Specified in LA residential lighting specification
LSF: 0.97 as above
LMF decided using Table C.1 of BS5489-1:2020
8m columns: 0.92
6m columns: 0.84

Equipment specification
Columns - Based on the total area width of 17.70m, spacing
calcs performed demonstrate that 8m columns can provide
adequate lighting to a class P4 in a single sided arrangement,
when installed within the verge on the western-side of the
carriageway, without the requirement for additional lighting
columns to light the cyclepath/footpath on the eastern side of
the road.
Luminaires: All luminaires are selected from the standard
'Palette' of suggested luminaires as typically used by
Wiltshire County Council.

Positions
Lighting columns are positioned 1m offset from the pedestrian
footpath on the west side of the road. This ensures safe
clearance from the carriageway, enables the back-light of the
luminaires to adequately light the footpath behind, and
provides adequate lighting to the cyclepath/pedestrian
footpath on the opposite side of the road whilst ensuring that
obtrusive light into dwelling front elevation windows is not
excessive, (Reference ILP GN01 - Table 3). (Demonstrated
with vertical illuminance grids placed at property
frontages showing no greater than 4 lux with lanterns at full
power. Lanterns will be dimmed to 50% total power, therefore
light spill will be less than 2 lux post curfew.
Additionally, columns offset further back from the
carriageway, will not obscure pedestrians at tactile crossing
areas from the view of oncoming drivers

Dimming
Luminaires will be dimmed to the Wiltshire County Council
residential dimming regime (Elxon variable power switch
regime 'D19') as follows:

Switch on: 20 lux
20:00 - 23:00 - 75% total power
23:00 - 06:00 - 50% total power
06:00 - 20 lux - Switch OFF

NOTES

- This drawing is intended for planning purposes only and is
not to be used for purchasing or construction. Any purchases
or construction works prior to receipt of technical approval from
Wiltshire County Council, following review by their nominated
highways lighting team, are at the developer's risk
- This drawing must be printed in colour
- At present, no formal risk assessment has been undertaken
for this site, other than a risk assessment to determine
appropriate design levels

P02 New landscaping layer	SDL	DPL	12.08.26
P01 First issue	SDL	DPL	29.07.26
Rev	DESCRIPTION	DRWN	CHK DATE

DPL LIGHTING
Grove House | Lutyns Close | Chineham Court |
Basingstoke | Hampshire | RG24 8AG
T 01256 578030 | E enquiries@dpl-lighting.co.uk | W www.dpl-lighting.co.uk

CLIENT/CUSTOMER		
BARRAT HOMES / PERSIMMON HOMES		
PROJECT		
ASHTON PARK INFRASTRUCTURE PH2		
TITLE		
ADOPTABLE LIGHTING CALCULATIONS SUMMARY		
DRAWN	SCALE	DATE
SDL	1: 500 @ A1	29.07.26
DRAWING NUMBER	ISSUE	
P26050-DRG-PL-01-02	P02	

© THIS DRAWING IS THE COPYRIGHT OF DPL LIGHTING LTD
It shall not be used or reproduced in any way without their prior written consent