

# Lighting Application Specialists (LiAS) Preliminary Design

Project Name: Brewshill, Navan, Co Meath R0

LiAS Reference:D-469433

Key Account Manager: Seán Campbell

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# **Lighting Application Notes**

This preliminary design is produced by the Lighting Application Specialist (LiAS) team of Signify based on information supplied by the Customer for the purpose of identifying suitable products and costing the proposal. This design cannot be used for Construction. This design does not purport to eliminate health and safety risks as a risk assessment has not been undertaken. Depending on the level of information received, a number of assumptions may have been applied in order to create an indicative lighting proposal and costing model, according to lighting industry guidelines and incorporating industry best practice methods. These assumptions are documented below and will require confirmation by the Principle Designer nor are we the PSDP (which is not Signify) during the detailed design phase.

### **Project Specific Comments/Assumptions**

- Lighting Calculation has been produced to achieve Lighting Class as specified by Client
- Where column heights have not been provided/specified, these have been assumed to be 6m.
- It has been assumed that luminaires will be mounted post-top on outreach brackets).

### Generic Comments/Assumptions (unless otherwise stated above)

- Preliminary Design proposals produced by the Signify LiAS Team are not to be used for installation purposes. It is the responsibility of the Principle Designer and/or Principle Contractor to ensure all Installation and Maintenance can be done in a safe manner, carried out by competent persons, based on their agreed Risk Assessments and Method Statements.
- The Luminaire Maintenance Factors have been based on 6-year cleaning intervals within an E3/E4 Environmental Zone and it is assumed that lamp/luminaire failures will be replaced on a 'spot replacement'.
- Energy consumptions have been based on the luminaire/s having Constant Light Output (CLO) enabled and the quoted wattage/s are the average over 100,000 hours (without dimming).
- The design calculations produced by Signify do not account for the effect obstructions, such as trees, will cause.
- Signify has not been provided with utility plans showing Buried, Above Ground or Overhead utilities. Therefore, all column/luminaire locations are indicative and are subject to review/verification by the Principle Designer.
- Unless stated otherwise, Signify has not visited site. Therefore, all column/luminaire locations are indicative and are subject to an onsite verification arranged/performed by the Principle Designer.
- Signify has not produced any Private Cable Network electrical calculations or reviewed the DNO network to confirm power supplies to the proposed lighting.
- Signify has not performed any asset condition testing and therefore assumes that any existing lighting columns/wall
  mounted brackets are structurally capable of supporting the weight & windage of the proposed luminaire/s. This must be
  verified by the Principle Designer before installation works commence.
- Unless stated otherwise, Signify is not supplying the new lighting columns (including brackets etc) and therefore it is the responsibility of the Principle Designers to confirm that all proposed equipment is suitable for the intended locations (e.g. raise & lower, ground condition, foundation type, saline environment, etc).
- Unless stated otherwise, luminaires will be supplied in their standard colour.
- WARNING All proposed locations are only adversary and will need to be measured and set back from any ESBN low voltage
  assets 230v, any larger ESBN assets such as 400v or above. We advise you refer to the ESBN guidance docs on set back from
  ESBN assets before setting out the site or sending anyone to work. This will be down to the installation contractor to set out
  the column locations on site.



DATE: 4 August 2022

DESIGNER: Seán Campbell

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6m mounting height MF - 0.76 (E3/E4 zone 6yr clean) Lantern A - 3.8Klm DRM1 3000K 23W Lantern A - 4.0Klm DM50 3000K 25W Lantern A - 4.0Klm DM50 3000K 25W Grid 1 P3.

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# the meaning of light

# Seán Campbell

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# **Layout Report**

# **General Data**

Dimensions in Metres Angles in Degrees Grid Origin 1927.8m x -361.3m Area 87.0m x 88.4m Sample Spacing 1.50m x 1.50m

### **Luminaires**



# **Luminaire A Data**

Supplier				
Туре	BGP291 DRM1 BL2			
Lamp(s)	LED-HB 5.2S 730			
Lamp Flux (klm)	3.80			
File Name	LumiStreet Gen2 Micro_BGP291_DRM1 B L2_3800_20LED_5.2S_CLO_L90_730.ies			
Maintenance Factor	0.76			
Imax70,80,90(cd/klm)	30.9, 5.1, 0.0			
No. in Project	2			

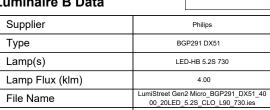
# **Luminaire C Data**

Supplier	Philips
Туре	BGP291 DW50
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	4.00
File Name	LumiStreet Gen2 Micro_BGP291_DW50_4 000_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	609.4, 39.0, 0.0
No. in Project	1

# **Luminaire B Data**

Maintenance Factor Imax70,80,90(cd/klm)

No. in Project



480.9, 32.0, 0.0

## **Layout**

ID	Туре	Х	Y	Height	Angle	Tilt	Cant	Out-	Target	Target	Target
								reach	X	Y	z
1	С	1963.25	-299.42	6.00	117.00	0.00	0.00	0.40			
2	Α	1986.43	-320.07	6.00	205.00	0.00	0.00	0.40			
3	В	1959.33	-323.62	6.00	29.00	5.00	0.00	0.40			
4	Α	1977.91	-302.09	6.00	205.00	0.00	0.00	0.40			

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# **Horizontal Illuminance (lux)**

Grid 1



# Results

Eav	7.55
Emin	2.10
Emax	20.42
Emin/Emax	0.10
Emin/Eav	0.28

91590704

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Grid 1

