

DATE: 11 September 2023
DESIGNER: James Molloy
PROJECT No: PL2338
PROJECT NAME: Elm Grove Fermoy

**LIGHTING
REALITY**

Design to BS EN 5489-1: 2020

Grid 1 Class P4
Eav> 5 Lux, Emin> 1 Lux, UO> 0.2

Grid 2 Class M4
Eav> 10 Lux, Emin> 4 Lux, UO> 0.4

Outdoor Lighting Report

Layout Report

General Data

Dimensions in Metres Angles in Degrees

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	Grid 1	580928.54	599999.92	152.48	123.82	1.49	1.49
2	Grid 2	580914.87	599980.34	154.14	23.93	1.50	1.50

Luminaires

Luminaire A Data



Supplier	Philips
Type	BGP702 DW10
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	2.80
File Name	Luma Gen2 Micro_BGP702_DW10_2800_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	438.8, 62.1, 0.0
No. in Project	14

Luminaire B Data



Supplier	Philips
Type	BGP703 DM10
Lamp(s)	LED-HB 5.2S 740
Lamp Flux (klm)	8.00
File Name	Luma Gen2 Mini_BGP703_DM10_8000_40LED_5.2S_CLO_L90_740.ies
Maintenance Factor	0.84
Imax70,80,90(cd/klm)	523.4, 90.0, 0.0
No. in Project	2

Luminaire C Data



Supplier	_Historic Lanterns
Type	SGS201 TP PC P1
Lamp(s)	SON-I-70W-CO
LampFlux(klm)/Colour	5.60 -/
File Name	SGS201 1xSON-I-70W-CO TP PC P1.jdt
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	178.5, 23.7, 4.1
No. in Project	2

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	581061.66	599981.74	6.00	74.00	0.00	0.00	0.30			
2	A	581082.27	600001.09	6.00	350.00	0.00	0.00	0.30			
3	A	581077.38	599971.36	6.00	136.00	0.00	0.00	0.30			
4	A	581034.22	599989.39	6.00	75.00	0.00	0.00	0.30			
5	A	581017.71	599981.00	6.00	141.00	0.00	0.00	0.30			
6	A	581005.99	599964.93	6.00	142.00	0.00	0.00	0.30			
7	A	581000.27	599979.90	6.00	323.00	0.00	0.00	0.30			
8	A	581006.63	599996.74	6.00	77.00	0.00	0.00	0.30			
9	A	580989.52	600001.49	6.00	74.00	0.00	0.00	0.30			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
10	A	580992.53	600021.08	6.00	166.00	0.00	0.00	0.30			
11	A	580976.58	600023.38	6.00	334.00	0.00	0.00	0.30			
12	A	581013.02	600018.37	6.00	354.00	5.00	0.00	0.30			
13	A	581027.77	600027.97	6.00	265.00	0.00	0.00	0.30			
14	A	581038.27	600008.35	6.00	169.00	5.00	0.00	0.30			
15	C	580996.68	599933.81	6.00	59.00	5.00	0.00	0.30			
16	C	580937.86	599990.84	10.00	270.00	0.00	0.00	2.00			
17	B	580963.69	599974.54	8.00	238.00	0.00	0.00	0.30			
18	B	580984.06	599957.40	8.00	234.00	0.00	0.00	0.30			

Horizontal Illuminance (lux)

Grid 1

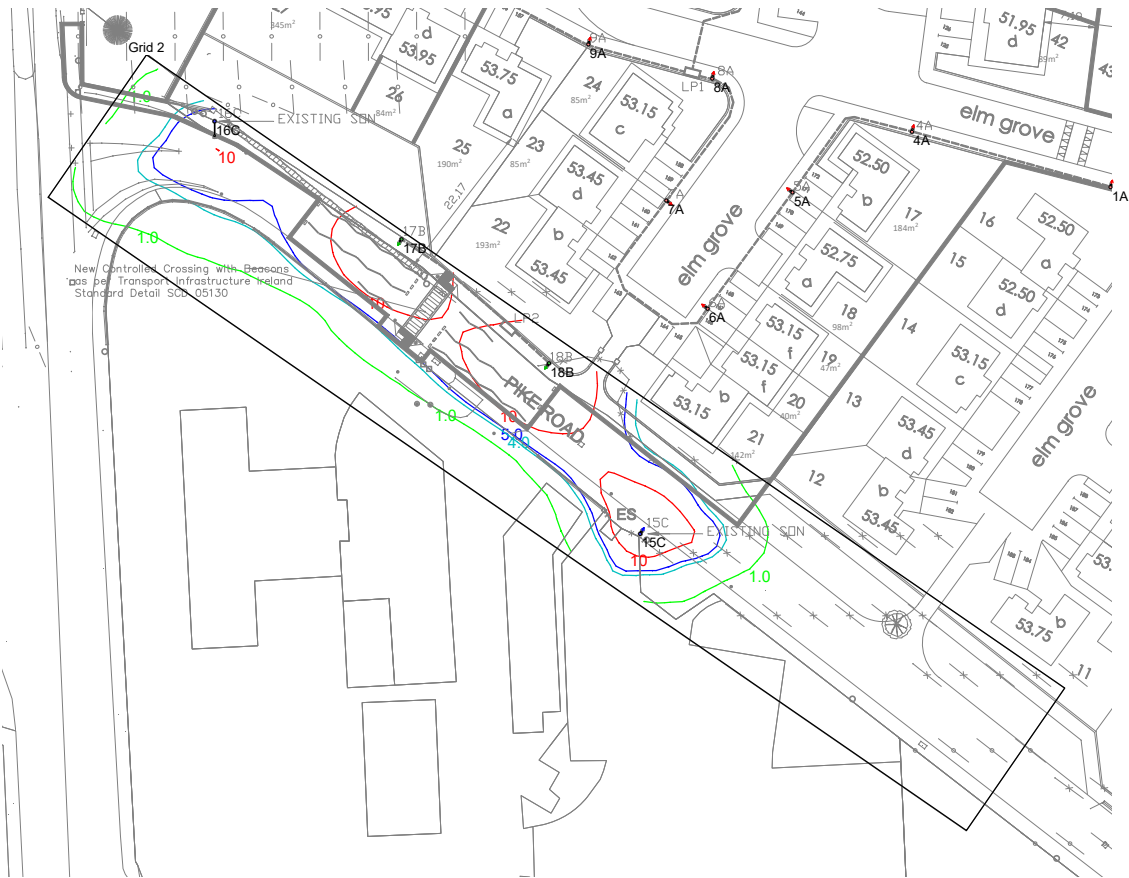


Results

Eav	6.31
Emin	1.45
E _{max}	12.58
E _{min} /E _{max}	0.12
E _{min} /E _{av}	0.23

Horizontal Illuminance (lux)

Grid 2



Results

Eav	11.34
Emin	4.69
E _{max}	25.65
E _{min} /E _{max}	0.18
E _{min} /E _{av}	0.41