

DATE: 25 August 2022
DESIGNER: Patrick Redmond
PROJECT No: 22085
PROJECT NAME: Gordon Park Revision



Lighting designed to comply with I.S. EN 13201-2:2015 P4 within the development, and to comply with I.S. EN 13201-2:2015 P2 on the Old Naas Road to blend with existing levels, with a neutral (4,000K) source. Energy consumption assessed in accordance with I.S. EN 13201-5:2015.

LMF 0.92 x LDF 0.9 x LSF 1 = MF 0.83 at 100,000 hours at 25 degrees ambient. Photometry measured at minimum 15 degree ambient.

Luminaire A = 17W. Luminaire B = 12W. Luminaire C = 6W.
Luminaire D = 5W. Luminaire E = 10W. Luminaire F = 20W.
Luminaire G = 41W.

Connected load, averaged for CLO.

Lighting Level ~ Full Output

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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	Phase 1	705379.58	728724.91	165.85	147.83	1.49	1.49
2	Phase 2	705399.26	728787.09	146.49	164.98	1.32	1.50
3	Frontage 1	705363.75	728793.28	34.67	79.45	1.28	1.50
4	Frontage 2	705382.07	728872.77	31.61	81.99	1.44	1.49
5	Crossing assessment	705391.55	728912.23	13.81	2.11	0.99	0.53
6	Crossing vertical assessme...	705391.77	728913.22	13.75	2.00	0.60	0.50

Luminaires

Luminaire A Data



Supplier	Philips
Type	BGP291 DW52
Lamp(s)	LED-HB 5.2S 740
Lamp Flux (klm)	3.00
File Name	LumiStreet Gen2 Micro_BGP291_DW52_300_0_20LED_5.2S_CLO_L90_740.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	639.6, 45.2, 0.0
No. in Project	10

Luminaire B Data



Supplier	Philips
Type	BGP291 DM12
Lamp(s)	LED-HB 5.2S 740
Lamp Flux (klm)	2.00
File Name	LumiStreet Gen2 Micro_BGP291_DM12_200_0_10LED_5.2S_CLO_L90_740.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	742.0, 45.4, 0.0
No. in Project	4

Luminaire C Data



Supplier	Philips
Type	BGP291 DN09
Lamp(s)	LED-HB 5.2S 740
Lamp Flux (klm)	1.00
File Name	LumiStreet Gen2 Micro_BGP291_DN09_1000_6LED_5.2S_CLO_L90_740.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	986.5, 116.6, 0.0
No. in Project	3

Luminaire D Data



Supplier	Philips
Type	BGP291 DRN1
Lamp(s)	LED-HB 5.2S 740
Lamp Flux (klm)	0.80
File Name	LumiStreet Gen2 Micro_BGP291_DRN1_800_6LED_5.2S_CLO_L90_740.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	431.4, 23.6, 0.0
No. in Project	3

Luminaire E Data



Supplier	Philips
Type	BGP291 DM10
Lamp(s)	LED-HB 5.2S 740
Lamp Flux (klm)	1.60
File Name	LumiStreet Gen2 Micro_BGP291_DM10_160_0_6LED_5.2S_CLO_L90_740.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	534.0, 55.4, 0.0
No. in Project	1

Luminaire F Data



Supplier	Philips
Type	BGP291 DM10
Lamp(s)	LED-HB 5.2S 740
Lamp Flux (klm)	3.40
File Name	LumiStreet Gen2 Micro_BGP291_DM10_340_0_20LED_5.2S_CLO_L90_740.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	534.0, 55.4, 0.0
No. in Project	1

Luminaires



Luminaire G Data

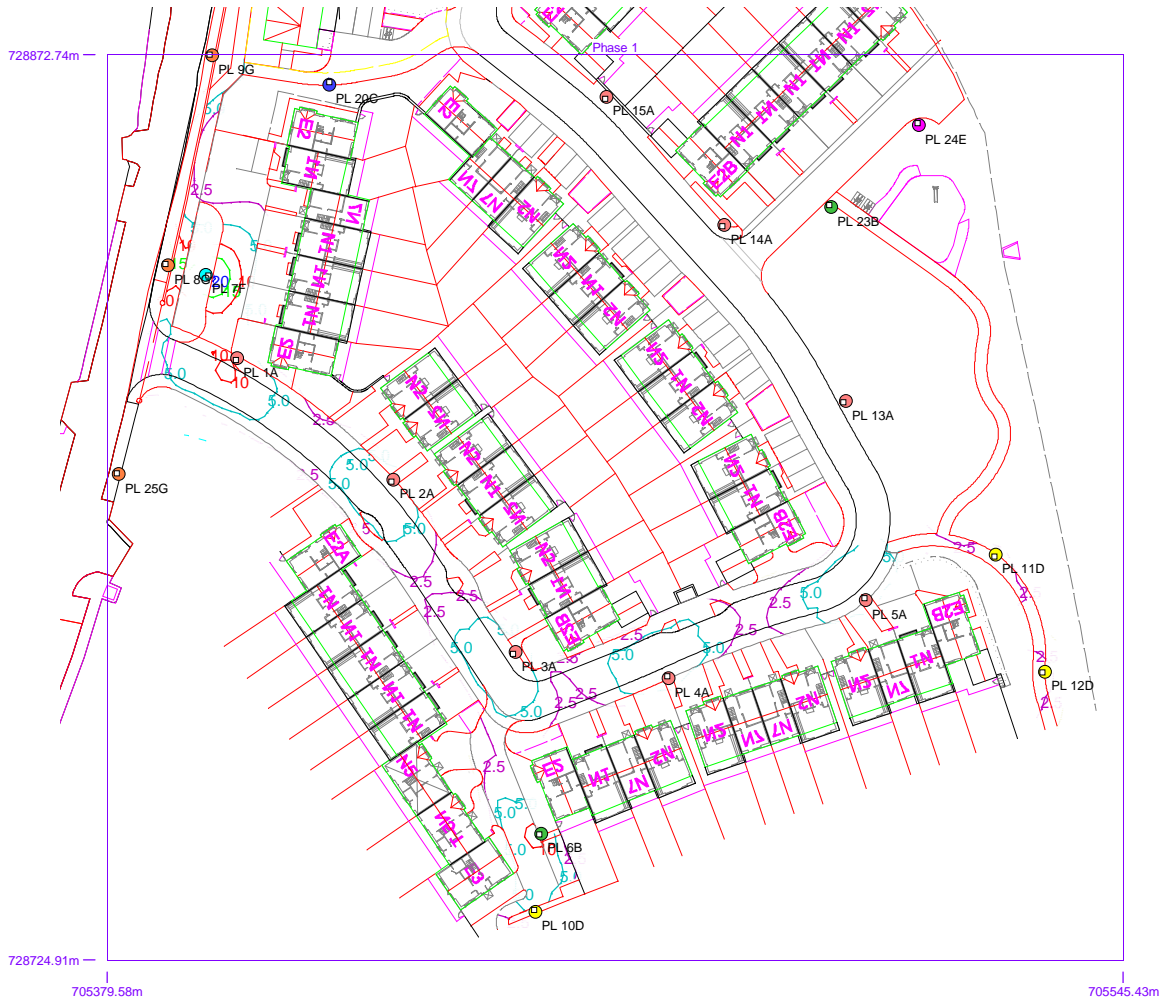
Supplier	Philips
Type	BGP292 DM31
Lamp(s)	LED-HB 5.2S 740
Lamp Flux (klm)	7.50
File Name	LumiStreet Ger2 Mini_BGP292_DM31_7500_40LED_5.2S_CLO_L90_740.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	245.2, 15.7, 0.0
No. in Project	5

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
PL 1	A	705400.80	728823.25	6.00	243.00	0.00	0.00	0.40			
PL 2	A	705426.27	728803.36	6.00	220.00	0.00	0.00	0.40			
PL 3	A	705446.16	728775.25	6.00	214.00	0.00	0.00	0.40			
PL 4	A	705471.13	728770.96	6.00	116.00	0.00	0.00	0.40			
PL 5	A	705503.34	728783.77	6.00	129.00	0.00	0.00	0.40			
PL 6	B	705450.42	728745.68	6.00	199.00	0.00	0.00	0.40			
PL 7	F	705395.64	728836.79	6.00	348.00	0.00	0.00	0.40			
PL 8	G	705389.50	728838.43	8.00	164.00	0.00	0.00	0.40			
PL 9	G	705396.72	728872.61	8.00	169.00	0.00	0.00	0.40			
PL 10	D	705449.46	728732.85	6.00	116.00	0.00	0.00	0.40			
PL 11	D	705524.55	728791.21	6.00	237.00	0.00	0.00	0.40			
PL 12	D	705532.57	728772.09	6.00	199.00	0.00	0.00	0.40			
PL 13	A	705500.08	728816.25	6.00	206.00	0.00	0.00	0.40			
PL 14	A	705480.22	728844.97	6.00	217.00	0.00	0.00	0.40			
PL 15	A	705461.09	728865.83	6.00	221.00	0.00	0.00	0.40			
PL 16	A	705435.83	728883.55	6.00	351.00	0.00	0.00	0.40			
PL 17	B	705441.12	728911.28	6.00	349.00	0.00	0.00	0.40			
PL 18	B	705458.13	728898.95	6.00	134.00	0.00	0.00	0.40			
PL 19	A	705455.58	728911.81	6.00	70.00	0.00	0.00	0.40			
PL 20	C	705415.87	728867.86	6.00	98.00	0.00	0.00	0.40			
PL 21	G	705403.21	728906.99	8.00	174.00	0.00	0.00	0.40			
PL 22	G	705408.05	728941.72	8.00	174.00	0.00	0.00	0.40			
PL 23	B	705497.72	728847.89	6.00	136.00	0.00	0.00	0.40			
PL 24	E	705512.04	728861.23	6.00	133.00	0.00	0.00	0.40			
PL 25	G	705381.50	728804.37	8.00	167.00	0.00	0.00	0.40			
PL 26	C	705406.88	728923.05	6.00	351.00	0.00	0.00	0.40			
PL 29	C	705402.19	728887.32	6.00	351.00	0.00	0.00	0.40			

Horizontal Illuminance (lux)

Phase 1



Results

Eav	5.08
Emin	1.27
E _{max}	20.44
E _{min} /E _{max}	0.06
E _{min} /E _{av}	0.25

Horizontal Illuminance (lux)

Phase 2



Results

Eav	5.22
Emin	1.27
E _{max}	11.33
E _{min} /E _{max}	0.11
E _{min} /E _{av}	0.24

Horizontal Illuminance (lux)

Frontage 1

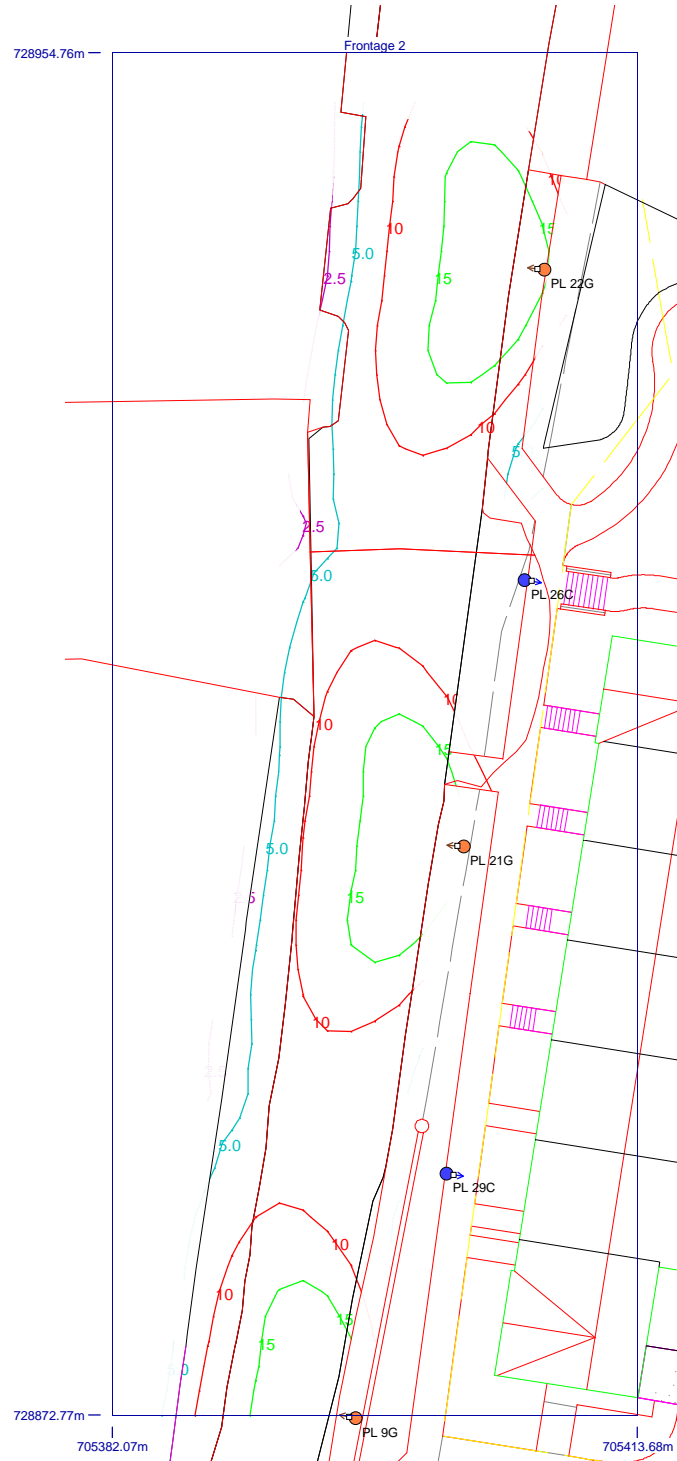


Results

Eav	11.20
Emin	3.27
Emax	19.37
Emin/Emax	0.17
Emin/Eav	0.29

Horizontal Illuminance (lux)

Frontage 2

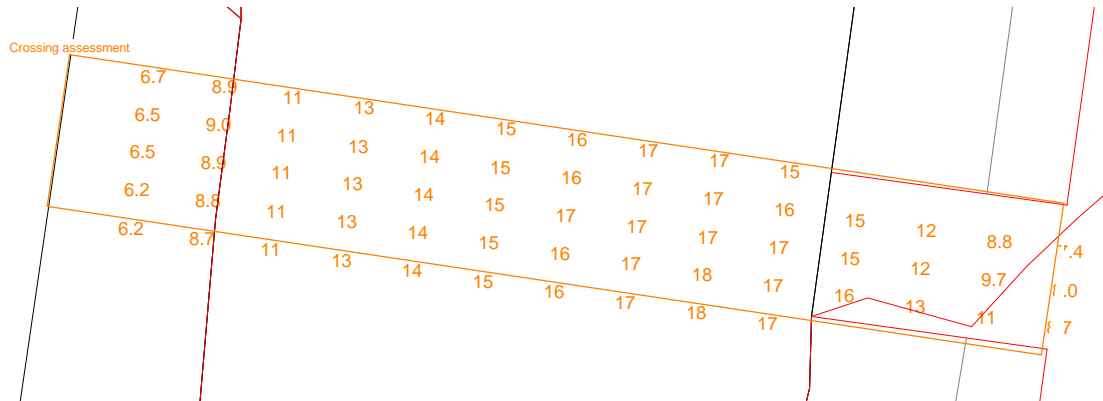


Results

Eav	10.55
Emin	2.29
Emax	19.03
Emin/Emax	0.12
Emin/Eav	0.22

Horizontal Illuminance (lux)

Crossing assessment



Results

Eav	13.16
Emin	6.18
Emax	17.74
Emin/Emax	0.35
Emin/Eav	0.47

Illuminance (lux)

Crossing vertical assessment

1.6	1.9	2.4	3.0	4.1	6.2	8.7	11	13	15	17	19	20	21	22	22	21	20	18	15	11	8.5	6.8	5.4
1.7	2.0	2.6	3.6	5.1	7.1	8.9	11	12	13	14	15	16	17	18	18	17	16	15	13	9.9	7.6	6.2	5.0
1.7	2.2	3.1	4.3	5.8	7.2	8.4	9.5	11	11	12	13	13	14	14	14	14	13	12	11	8.6	6.8	5.7	4.7
2.0	2.7	3.7	4.8	5.9	6.8	7.7	8.5	9.2	9.8	10	11	11	12	12	12	11	11	10	9.0	7.5	6.1	5.3	4.5
2.3	3.2	4.1	4.9	5.6	6.3	6.9	7.5	8.0	8.4	8.8	9.2	9.5	9.8	9.9	9.8	9.5	9.1	8.6	7.7	6.6	5.5	4.9	4.4

Results

Eav	9.45
Emin	1.61
E _{max}	21.97
E _{min} /E _{max}	0.07
E _{min} /E _{av}	0.17