

DATE: 9 January 2023
DESIGNER: Mason Lelliott
PROJECT No: 330510523
PROJECT NAME: Gorse Ride - Phase 2B/2C

**LIGHTING
REALITY**

As per Wokingham Borough Council Street Lighting Specification the following criteria has been used within the design:

- Maintenance factor of 0.90
- Philips Signify Micro Luma BGP615 DM10 1,600lm NW LED (Reduced from 2,000lm to meet lighting classification)
- Columns height of 6m
- Tilt of 0 degrees
- Post top mounted luminaires
- Designed to pedestrian class P5

Lighting requirements for Pedestrian Class P5:

Eav - 3.00 to 4.50 lux

Emin - 0.60min

Advised by Signify BGP615 has now been replaced by BGP702. Design meets P5 classification with either product version.

Outdoor Lighting Report

PREPARED BY: Stantec
Caversham Bridge House,
Waterman Place
Reading, United Kingdom
RG1 8DN
+44 1189 500761
reading.uk@stantec.com
www.stantec.com

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 2B/C Road - P5	479380.73	164853.44	250.00	275.00	1.50	1.49
2	Car Park 1 - P5	479506.95	165069.62	35.00	25.00	1.46	1.47
3	Car Park 2 - P5	479473.00	165042.03	50.00	25.00	1.47	1.47
4	Car Park 3 - P5	479522.00	165019.15	30.00	35.00	1.50	1.46
5	Grid 5 - Export	479404.62	164863.42	263.18	275.00	1.50	1.49

Luminaires

Luminaire A Data

Supplier	
Type	BGP615 DM10
Lamp(s)	LED-HB 5.1S 730
Lamp Flux (klm)	1.60
File Name	Luma Micro_BGP615_DM10_1600_6LED_5.1S_CLO_L90_WW 730.ies
Maintenance Factor	0.90
Imax70,80,90(cd/klm)	540.9, 56.1, 0.0
No. in Project	31

Layout

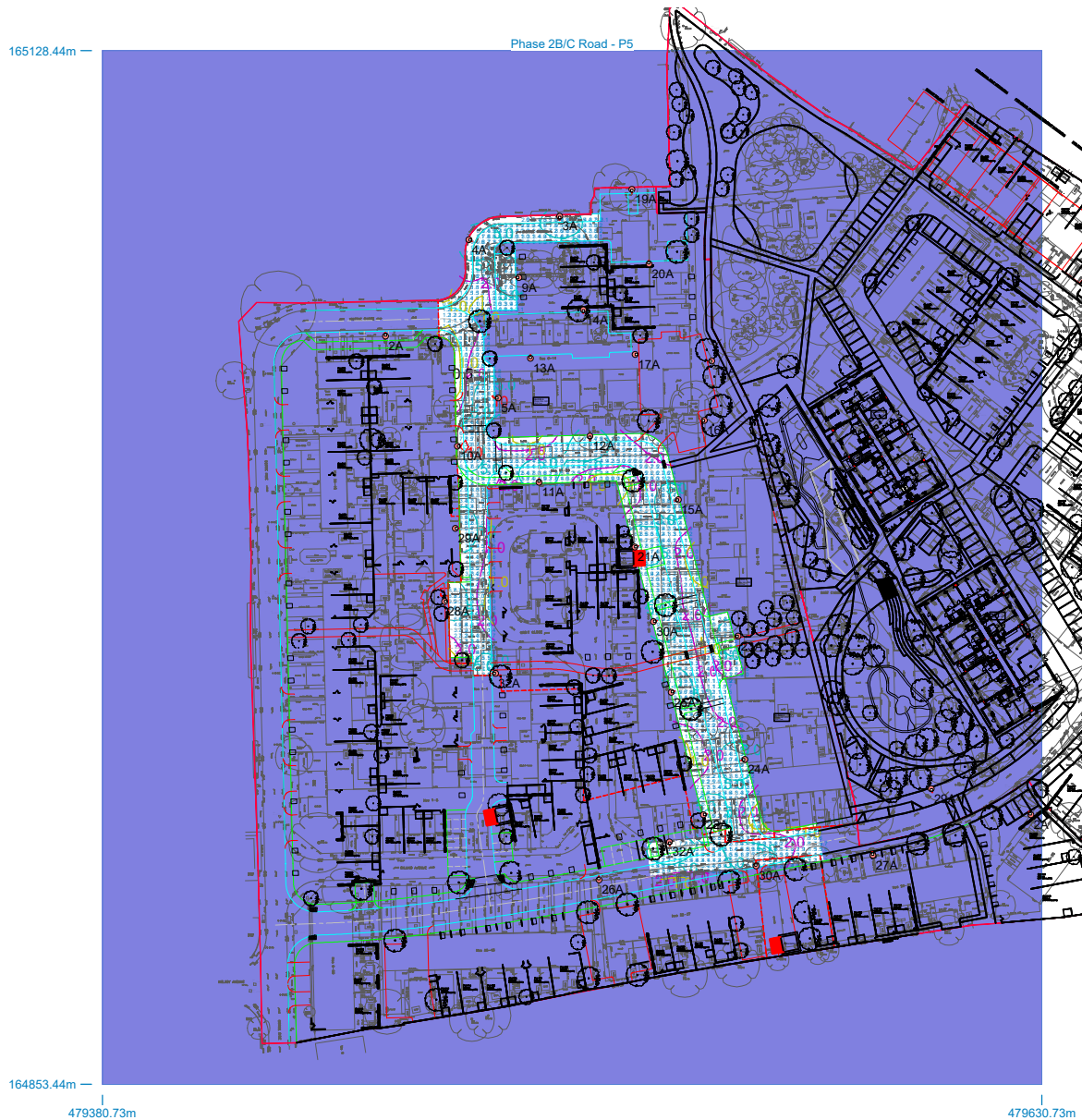
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
2	A	479627.74	164925.19	6.00	123.00	0.00	0.00	0.30			
2	A	479456.00	165052.50	6.00	90.00	0.00	0.00	0.30			
3	A	479502.41	165084.34	6.00	270.00	0.00	0.00	0.30			
4	A	479478.25	165078.19	6.00	330.00	0.00	0.00	0.30			
5	A	479486.00	165036.09	6.00	180.00	0.00	0.00	0.30			
29	A	479601.18	164932.07	6.00	289.00	0.00	0.00	0.30			
30	A	479554.61	164911.53	6.00	96.00	0.00	0.00	0.30			
9	A	479491.54	165068.10	6.00	182.00	0.00	0.00	0.30			
10	A	479475.17	165023.21	6.00	1.00	0.00	0.00	0.30			
11	A	479496.87	165013.61	6.00	91.00	0.00	0.00	0.30			
12	A	479510.38	165025.90	6.00	271.00	0.00	0.00	0.30			
13	A	479494.57	165046.58	6.00	88.00	0.00	0.00	0.30			
14	A	479508.67	165059.47	6.00	272.00	0.00	0.00	0.30			
15	A	479533.97	165008.97	6.00	195.00	0.00	0.00	0.30			
16	A	479540.88	165030.08	6.00	195.00	0.00	0.00	0.30			
17	A	479522.43	165047.63	6.00	2.00	0.00	0.00	0.30			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
18	A	479542.83	165045.90	6.00	195.00	0.00	0.00	0.30			
19	A	479521.58	165091.53	6.00	272.00	0.00	0.00	0.30			
20	A	479526.12	165071.69	6.00	92.00	0.00	0.00	0.30			
21	A	479522.35	164996.40	6.00	20.00	0.00	0.00	0.30			
22	A	479540.63	164925.19	6.00	15.00	0.00	0.00	0.30			
23	A	479549.86	164972.73	6.00	196.00	0.00	0.00	0.30			
24	A	479551.62	164939.87	6.00	195.00	0.00	0.00	0.30			
25	A	479532.06	164957.80	6.00	17.00	0.00	0.00	0.30			
26	A	479512.83	164907.90	6.00	95.00	0.00	0.00	0.30			
27	A	479585.72	164914.40	6.00	100.00	0.00	0.00	0.30			
28	A	479471.74	164981.94	6.00	2.00	0.00	0.00	0.30			
29	A	479474.63	165001.36	6.00	2.00	0.00	0.00	0.30			
30	A	479527.34	164976.55	6.00	17.00	0.00	0.00	0.30			
32	A	479485.29	164962.79	6.00	179.00	0.00	0.00	0.30			
32	A	479531.60	164917.93	6.00	275.00	0.00	0.00	0.30			

Horizontal Illuminance (lux)

Phase 2B/C Road - P5

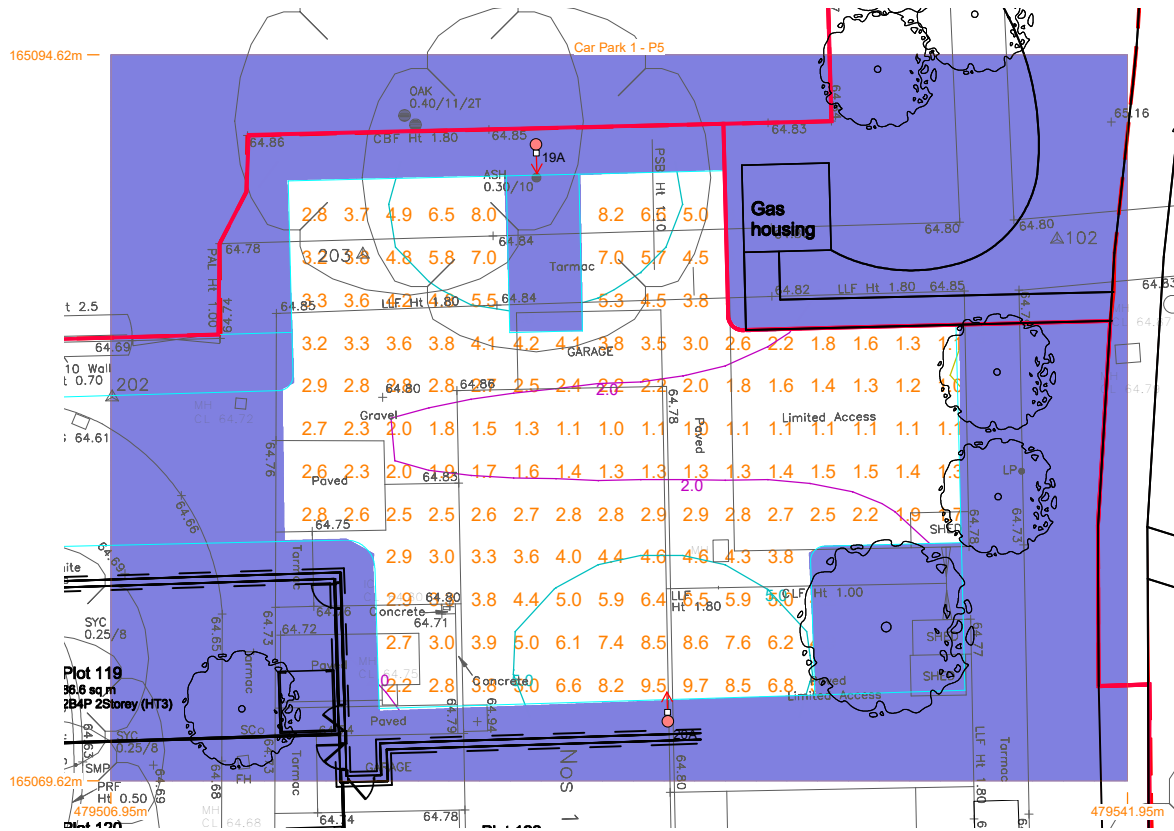


Results

Eav	3.99
Emin	0.73
Emax	10.72
Emin/Emax	0.07
Emin/Eav	0.18

Horizontal Illuminance (lux)

Car Park 1 - P5

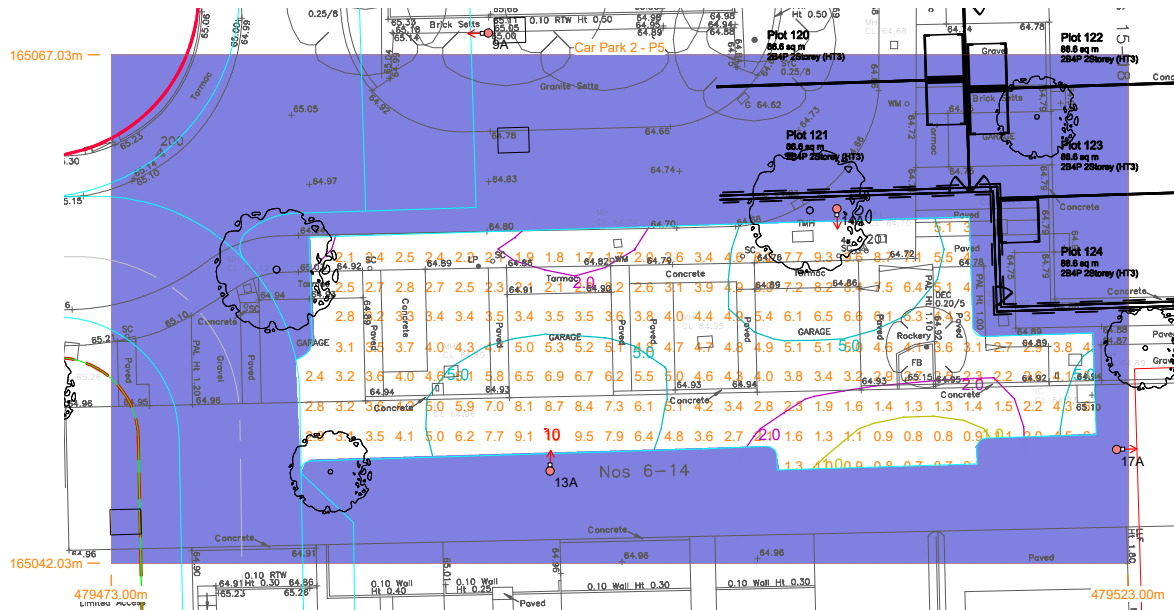


Results

Eav	3.51
Emin	1.04
Emax	9.66
Emin/Emax	0.11
Emin/Eav	0.30

Horizontal Illuminance (lux)

Car Park 2 - P5

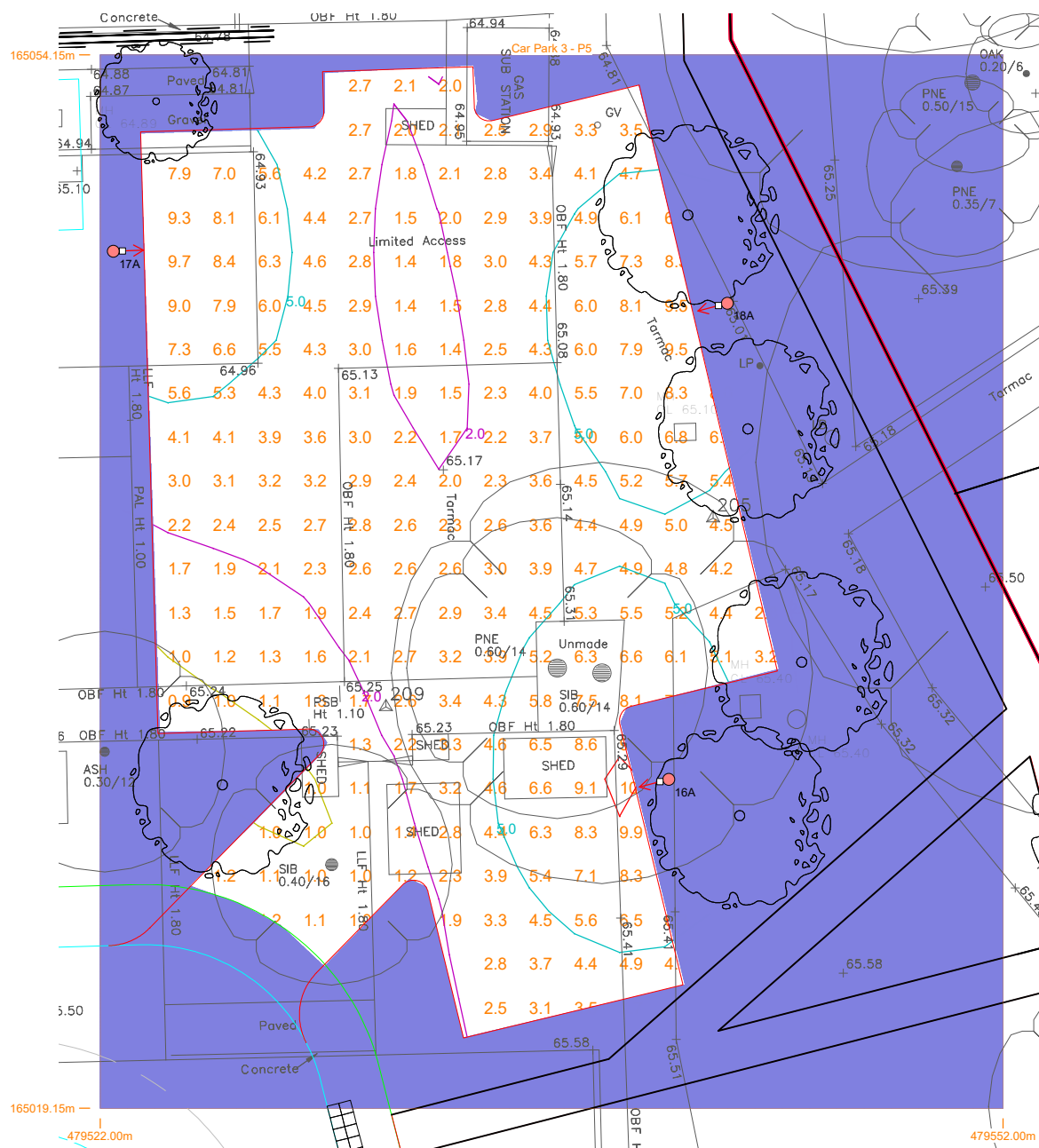


Results

Eav	4.05
Emin	0.67
Emax	10.00
Emin/Emax	0.07
Emin/Eav	0.17

Horizontal Illuminance (lux)

Car Park 3 - P5

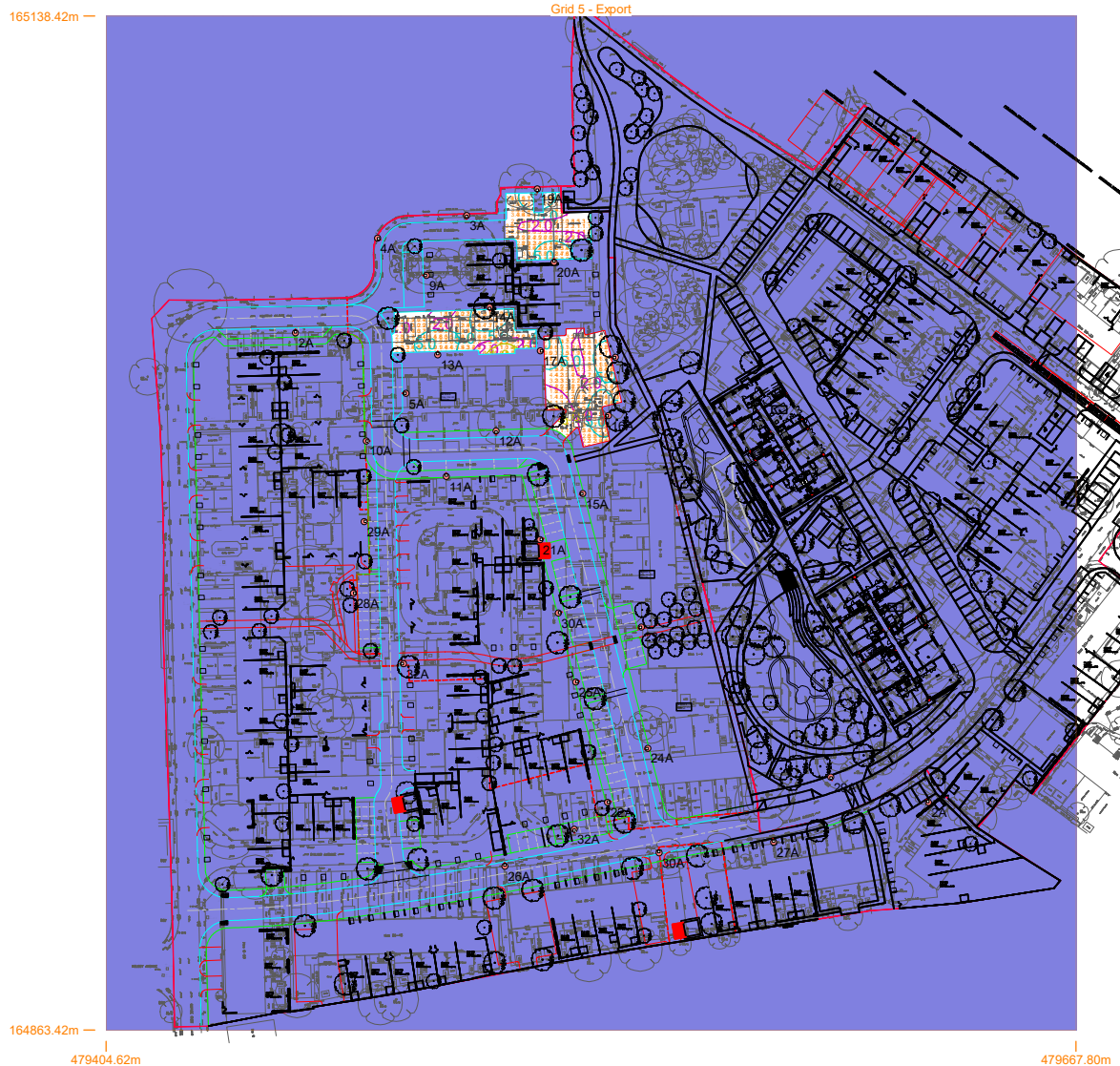


Results

Eav	4.02
Emin	0.91
E _{max}	10.42
Emin/E _{max}	0.09
Emin/Eav	0.23

Horizontal Illuminance (lux)

Grid 5 - Export



Results

Eav	4.02
Emin	0.73
Emax	9.95
Emin/Emax	0.07
Emin/Eav	0.18