

DATE: 9 June 2022
DESIGNER: Alex Naper
PROJECT No: SES 15021 Rev C
PROJECT NAME: Newcastle South - Cairn Homes Properties Ltd



Residential roads designed in accordance with EN13201-2:2015 Category P4.

Access road designed in accordance with EN13201-2:2015 Category P3.

Junction onto L6002 designed in accordance with EN13201-2:2015 Category C4.

Rev B: Updated site layout.
Rev C: Updated layout.

Outdoor Lighting Report

PREPARED BY: Sabre Electrical Services Ltd.
Unit 11,
Bellview Industrial Estate,
Tolka Valley Road,
Dublin 11
Phone Number: 01 8110875
Contact: Graham Sheehan
eMail: graham@sabrelighting.ie

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	699472.92	728538.20	372.00	90.00	1.50	1.50
2	Grid 2	699571.07	728589.78	189.91	76.29	1.50	1.50
3	Grid 3	699520.12	728307.79	251.58	272.36	1.50	1.50
4	Grid 4	699771.66	728295.53	186.00	287.23	1.50	1.50
5	Grid 5	699479.86	728565.66	81.00	34.44	1.50	1.50
6	Grid 6	699501.72	728533.71	78.00	33.00	1.50	1.50

Luminaires



Luminaire A Data

Supplier	C U Phosco
Type	P863-128-R2E-730-W3-325-43W
Lamp(s)	730SS
Lamp Flux (klm)	6.03
File Name	P863-128-R2E-730-W3-325-43W.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	463.7, 84.3, 0.0
No. in Project	14

Luminaire B Data

Supplier	C U Phosco
Type	E950-28-F2A-730-C600-16W
Lamp(s)	730N
Lamp Flux (klm)	2.28
File Name	E950-28-F2A-730-C0600-16W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	623.6, 113.9, 0.3
No. in Project	32

Luminaire C Data

Supplier	C U Phosco
Type	E950-28-P4A-730-C600-16W
Lamp(s)	730N
Lamp Flux (klm)	2.25
File Name	E950-28-P4A-730-C0600-16W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	37

Luminaire D Data

Supplier	C U Phosco
Type	E950-28-P4A-730-C250-8W
Lamp(s)	730N
Lamp Flux (klm)	0.98
File Name	E950-28-P4A-730-C0250-8W.ies
Maintenance Factor	0.84
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	18



Luminaire E Data

Supplier	C U Phosco
Type	P852-12-P4-WW-CA0550-21W
Lamp(s)	730C WW
Lamp Flux (klm)	2.56
File Name	P852-12-P4-WW-CA0550-21W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	730.4, 161.4, 0.8
No. in Project	1

Luminaire F Data

Supplier	C U Phosco
Type	E950-28-R3A-730-C300-9W
Lamp(s)	730N
Lamp Flux (klm)	1.21
File Name	E950-28-R3A-730-C0300-9W.ies
Maintenance Factor	0.84
Imax70,80,90(cd/klm)	716.7, 30.6, 0.3
No. in Project	3

Luminaires

Luminaire G Data

Supplier	C U Phosco
Type	E950-28-A2A-730-C250-8W
Lamp(s)	730N
Lamp Flux (klm)	0.90
File Name	E950-28-A2A-730-C0250-8W.ies
Maintenance Factor	1.00
Imax70,80,90(cd/klm)	470.3, 22.7, 0.9
No. in Project	1

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	699511.23	728608.02	8.00	256.00	0.00	0.00	0.45			
2	A	699543.46	728599.35	8.00	250.00	0.00	0.00	0.45			
3	A	699575.99	728591.56	8.00	253.00	0.00	0.00	0.45			
4	A	699606.33	728583.76	8.00	254.00	0.00	0.00	0.45			
5	A	699626.82	728579.91	8.00	269.00	0.00	0.00	0.45			
6	A	699665.32	728586.29	8.00	273.00	0.00	0.00	0.45			
7	A	699702.13	728589.93	8.00	272.00	0.00	0.00	0.45			
8	A	699694.64	728571.63	8.00	95.00	0.00	0.00	0.45			
9	A	699739.39	728584.11	8.00	97.00	0.00	0.00	0.45			
10	A	699774.79	728583.91	8.00	94.00	0.00	0.00	0.45			
11	A	699816.41	728582.13	8.00	90.00	0.00	0.00	0.45			
12	C	699791.39	728567.54	6.00	351.00	0.00	0.00	0.45			
13	B	699810.60	728564.67	6.00	177.00	0.00	0.00	0.45			
14	C	699585.92	728599.00	6.00	335.00	0.00	0.00	0.45			
15	C	699602.86	728626.47	6.00	165.00	0.00	0.00	0.45			
16	C	699627.99	728643.69	6.00	274.00	0.00	0.00	0.45			
17	C	699613.99	728630.53	6.00	99.00	0.00	0.00	0.45			
18	C	699656.69	728639.09	6.00	99.00	0.00	0.00	0.45			
19	C	699692.66	728643.89	6.00	97.00	0.00	0.00	0.45			
20	C	699723.76	728647.91	6.00	99.00	0.00	0.00	0.45			
21	D	699695.68	728553.62	6.00	266.00	0.00	0.00	0.45			
22	C	699739.81	728640.11	6.00	179.00	0.00	0.00	0.45			
23	C	699741.86	728609.45	6.00	183.00	0.00	0.00	0.45			
24	C	699648.04	728567.00	6.00	189.00	0.00	0.00	0.45			
25	C	699640.67	728549.50	6.00	30.00	0.00	0.00	0.45			
26	C	699668.25	728533.57	6.00	86.00	0.00	0.00	0.45			
27	C	699698.60	728531.23	6.00	86.00	0.00	0.00	0.45			
28	C	699717.41	728523.50	6.00	18.00	0.00	0.00	0.45			
29	C	699718.22	728501.62	6.00	354.00	0.00	0.00	0.45			
30	C	699716.39	728474.21	6.00	354.00	0.00	0.00	0.45			
31	C	699715.29	728443.73	6.00	0.00	0.00	0.00	0.45			
32	C	699717.18	728408.93	6.00	8.00	0.00	0.00	0.45			
33	C	699719.54	728370.40	6.00	4.00	0.00	0.00	0.45			
34	C	699720.95	728345.46	6.00	355.00	0.00	0.00	0.45			
35	C	699734.80	728328.03	6.00	177.00	0.00	0.00	0.45			
36	B	699741.49	728380.72	6.00	276.00	0.00	0.00	0.45			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
37	B	699778.03	728384.14	6.00	277.00	0.00	0.00	0.45			
38	B	699760.53	728373.78	6.00	98.00	0.00	0.00	0.45			
39	C	699703.82	728406.53	6.00	275.00	0.00	0.00	0.45			
40	B	699667.88	728401.50	6.00	356.00	0.00	0.00	0.45			
41	C	699697.61	728471.58	6.00	264.00	0.00	0.00	0.45			
42	C	699660.11	728474.66	6.00	267.00	0.00	0.00	0.45			
43	D	699634.62	728471.39	6.00	30.00	0.00	0.00	0.45			
44	D	699628.25	728494.49	6.00	220.00	0.00	0.00	0.45			
45	B	699612.13	728509.22	6.00	76.00	0.00	0.00	0.45			
46	C	699615.50	728536.72	6.00	308.00	0.00	0.00	0.45			
47	C	699640.70	728542.82	6.00	287.00	0.00	0.00	0.45			
48	D	699745.71	728567.16	6.00	171.00	0.00	0.00	0.45			
49	D	699743.07	728536.74	6.00	177.00	0.00	0.00	0.40			
50	D	699740.74	728504.64	6.00	171.00	0.00	0.00	0.40			
51	D	699738.45	728472.33	6.00	177.00	0.00	0.00	0.40			
52	D	699736.41	728442.85	6.00	177.00	0.00	0.00	0.40			
53	D	699734.32	728414.35	6.00	177.00	0.00	0.00	0.40			
54	D	699733.10	728385.22	6.00	190.00	0.00	0.00	0.40			
55	D	699753.49	728489.73	6.00	265.00	0.00	0.00	0.40			
56	D	699779.45	728486.96	6.00	266.00	0.00	0.00	0.40			
57	B	699776.48	728320.13	6.00	273.00	0.00	0.00	0.40			
58	D	699749.72	728320.32	6.00	274.00	0.00	0.00	0.40			
59	B	699808.80	728543.32	6.00	176.00	0.00	0.00	0.40			
60	C	699789.52	728545.08	6.00	354.00	0.00	0.00	0.40			
61	B	699808.44	728523.59	6.00	174.00	0.00	0.00	0.40			
62	C	699786.17	728513.68	6.00	352.00	0.00	0.00	0.40			
63	B	699804.78	728499.83	6.00	171.00	0.00	0.00	0.40			
64	D	699800.76	728490.11	6.00	230.00	0.00	0.00	0.40			
65	C	699793.68	728471.81	6.00	352.00	0.00	0.00	0.40			
66	B	699812.48	728459.18	6.00	172.00	0.00	0.00	0.40			
67	C	699791.09	728440.66	6.00	353.00	0.00	0.00	0.40			
68	B	699810.09	728436.67	6.00	172.00	0.00	0.00	0.40			
69	C	699787.18	728405.58	6.00	354.00	0.00	0.00	0.40			
70	B	699808.41	728415.77	6.00	167.00	0.00	0.00	0.40			
71	C	699801.68	728396.80	6.00	171.00	0.00	0.00	0.40			
72	B	699797.81	728377.28	6.00	90.00	0.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
73	B	699824.63	728386.95	6.00	279.00	0.00	0.00	0.40			
74	B	699841.25	728373.25	6.00	86.00	0.00	0.00	0.40			
75	B	699851.56	728388.13	6.00	274.00	0.00	0.00	0.40			
76	B	699875.30	728374.03	6.00	96.00	0.00	0.00	0.40			
77	B	699903.17	728388.84	6.00	270.00	0.00	0.00	0.40			
78	B	699915.66	728372.89	6.00	94.00	0.00	0.00	0.40			
79	E	699942.39	728388.99	6.00	262.00	0.00	0.00	0.40			
80	B	699873.01	728394.59	6.00	357.00	0.00	0.00	0.40			
81	B	699824.78	728365.51	6.00	177.00	0.00	0.00	0.40			
82	B	699835.42	728348.67	6.00	273.00	0.00	0.00	0.40			
83	B	699832.08	728329.19	6.00	93.00	0.00	0.00	0.40			
84	B	699854.89	728349.47	6.00	271.00	0.00	0.00	0.40			
85	B	699858.11	728330.25	6.00	85.00	0.00	0.00	0.40			
86	B	699888.51	728349.32	6.00	266.00	0.00	0.00	0.40			
87	B	699888.20	728328.39	6.00	92.00	0.00	0.00	0.40			
88	B	699831.14	728315.20	6.00	178.00	0.00	0.00	0.40			
89	B	699813.82	728344.25	6.00	345.00	0.00	0.00	0.40			
90	B	699942.14	728370.05	6.00	93.00	0.00	0.00	0.40			
91	C	699806.39	728323.12	6.00	275.00	0.00	0.00	0.40			
92	D	699782.73	728493.38	6.00	350.00	0.00	0.00	0.40			
93	A	699480.33	728614.95	8.00	330.00	0.00	0.00	0.45			
94	A	699482.37	728587.64	8.00	148.00	0.00	0.00	0.45			
95	A	699501.08	728626.96	8.00	156.00	0.00	0.00	0.45			
96	D	699873.97	728361.36	6.00	183.00	0.00	0.00	0.40			
97	C	699509.81	728579.10	6.00	167.00	0.00	0.00	0.45			
98	D	699663.63	728556.98	6.00	262.00	0.00	0.00	0.45			
99	D	699728.03	728551.37	6.00	261.00	0.00	0.00	0.45			
100	C	699596.05	728526.79	6.00	252.00	0.00	0.00	0.45			
101	C	699568.39	728538.94	6.00	338.00	0.00	0.00	0.45			
102	F	699662.83	728422.59	6.00	204.00	0.00	0.00	0.45			
103	F	699657.55	728446.88	6.00	180.00	0.00	0.00	0.45			
104	F	699672.73	728460.02	6.00	91.00	0.00	0.00	0.45			
105	B	699902.80	728338.66	6.00	177.00	0.00	0.00	0.45			
106	G	699810.29	728488.85	6.00	213.00	0.00	0.00	0.45			

Horizontal Illuminance (lux)

Grid 1

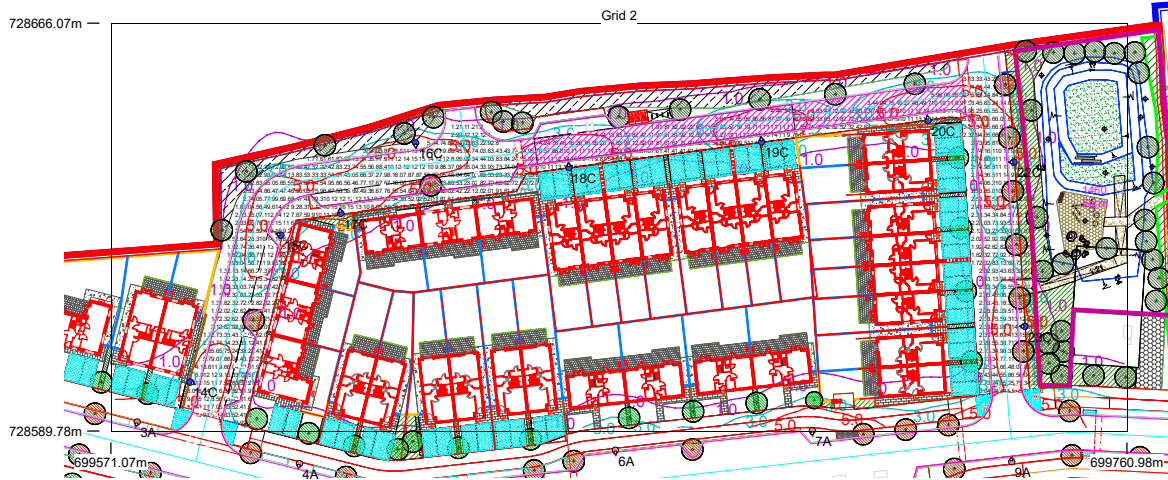


Results

Eav	7.93
Emin	1.57
Emax	23.78
Emin/Emax	0.07
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 2



Results

Eav	5.46
Emin	1.11
Emax	16.42
Emin/Emax	0.07
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 3

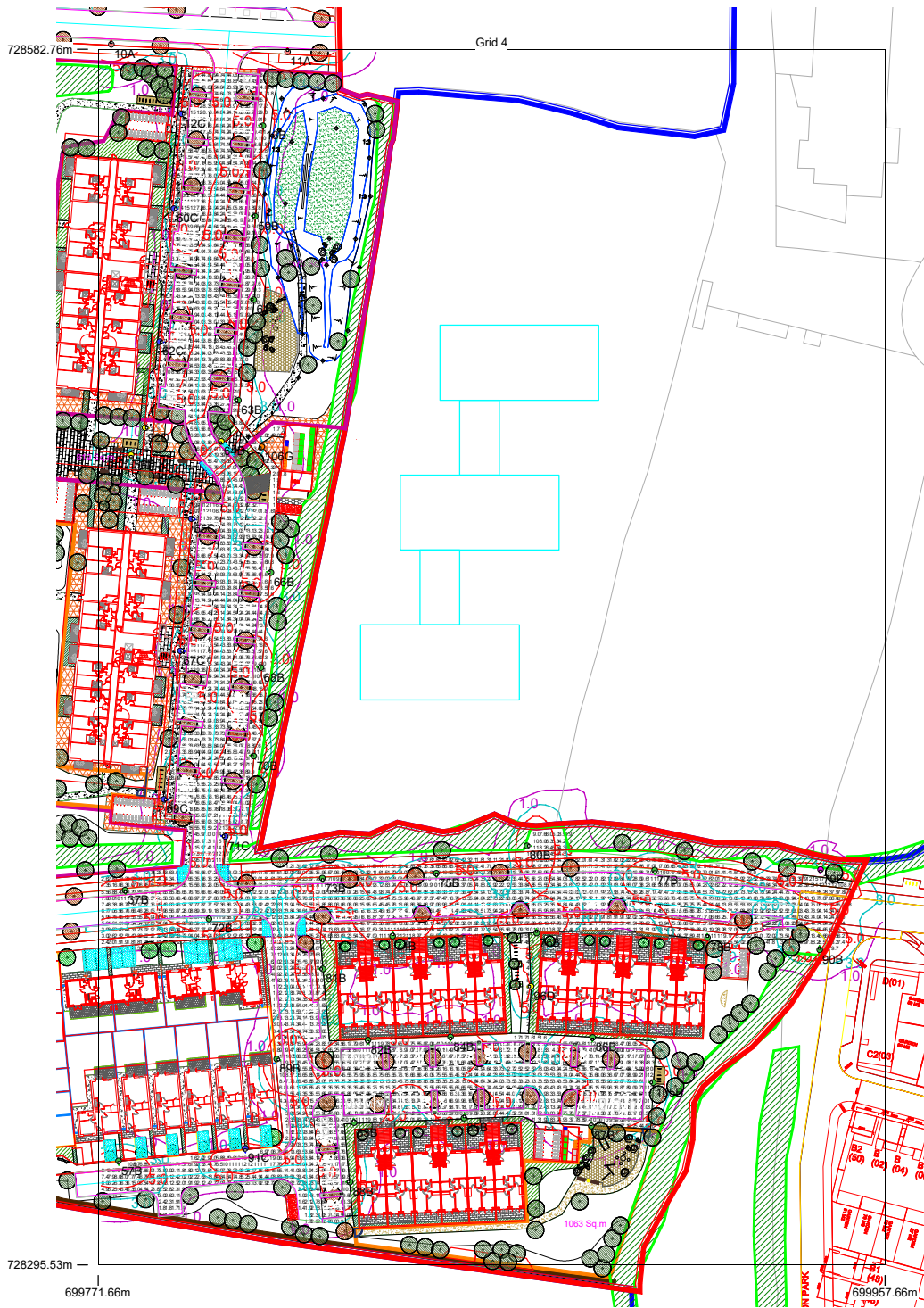


Results

Eav	5.01
Emin	1.01
Emax	17.03
Emin/Emax	0.06
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 4

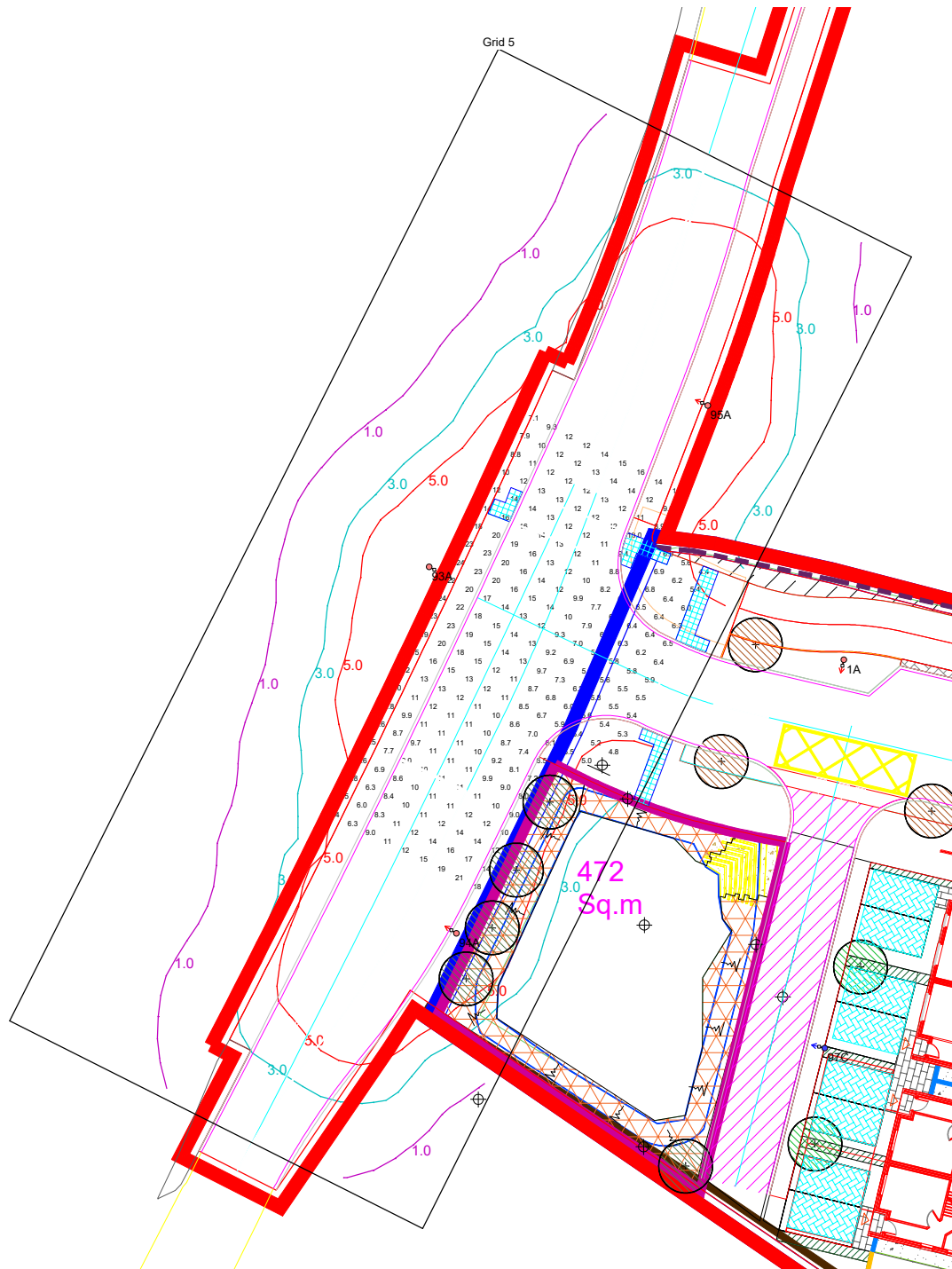


Results

Eav	5.39
Emin	1.06
Emax	16.77
Emin/Emax	0.06
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 5

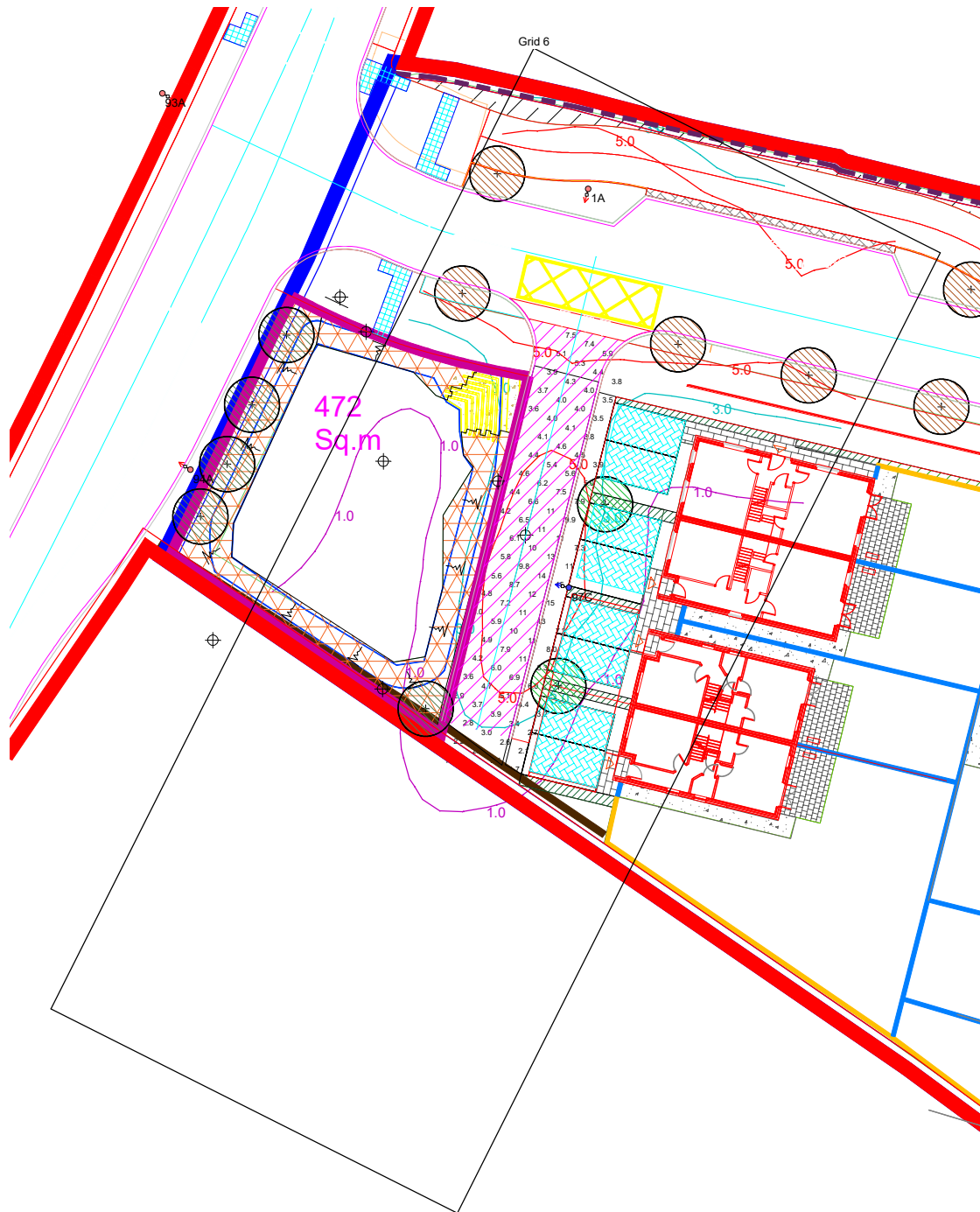


Results

Eav	11.00
Emin	4.42
Emax	23.82
Emin/Emax	0.19
Emin/Eav	0.40

Horizontal Illuminance (lux)

Grid 6



Results

Eav	6.05
Emin	1.69
Emax	14.92
Emin/Emax	0.11
Emin/Eav	0.28