



APPENDIX 9-3

PUBLIC LIGHTING REPORT

DATE: 17 August 2022
DESIGNER: Graham Sheehan + AN
PROJECT No: SES 01122 Rev D
PROJECT NAME: Site A – Strategic Employment Zone - Sky Castle Ltd.



R157 Designed in accordance with ISEN 13201-2:2015 Class P2.
New junction design to Class C3.

The internal roads within the business park are designed to Class P3. The parking areas to ISEN 12464-2:2014 Table 5.9.2.

Rev A: Updated site layout.
Rev B: Updated site layout.
Rev C: Updated road section.
Rev D: Existing HID Luminaires added.

Outdoor Lighting Report

PREPARED BY: Sabre Electrical Services Ltd.
Unit 11,
Bellview Industrial Estate,
Tolka Valley Road,
Dublin 11
Phone Number: 01 8110875
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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	Grid 1	694686.35	739019.05	66.00	60.00	1.50	1.50
2	Grid 2	694752.76	739026.84	308.00	48.00	1.50	1.50
3	Grid 3	694667.18	738694.30	48.00	337.00	1.50	1.50
4	Grid 4	694601.06	739058.92	84.00	45.00	1.50	1.50
5	Grid 5	694766.00	739060.00	288.00	220.00	1.50	1.50
6	Grid 6	694614.73	739435.10	368.91	57.00	1.50	1.50
7	Grid 7	694639.18	738530.98	48.00	164.96	1.50	1.50
8	Grid 8	694445.03	738803.13	233.57	138.00	1.50	1.50

Luminaires

Luminaire A Data



Supplier	C U Phosco
Type	P862-256-R2E-730-W3-250-64W
Lamp(s)	730SS
Lamp Flux (klm)	8.84
File Name	P862-256-R2E-730-W3-250-64W.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	458.4, 47.0, 0.0
No. in Project	4

Luminaire B Data



Supplier	C U Phosco
Type	P862-256-R2E-730-W3-300-76W
Lamp(s)	730SS
Lamp Flux (klm)	10.70
File Name	P862-256-R2E-730-W3-300-76W.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	458.4, 47.0, 0.0
No. in Project	32

Luminaire C Data



Supplier	C U Phosco
Type	P863-128-R2E-730-W3-350-46W
Lamp(s)	730SS
Lamp Flux (klm)	6.50
File Name	P863-128-R2E-730-W3-350-46W.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	463.7, 84.3, 0.0
No. in Project	33

Luminaire D Data

Supplier	C U Phosco
Type	E950-28-P4A-730-C400-11W
Lamp(s)	730N
Lamp Flux (klm)	1.55
File Name	E950-28-P4A-730-C0400-11W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	11

Luminaires



Luminaire F Data

Supplier	C U Phosco
Type	P863-128-R4-730-W3-300-40W
Lamp(s)	730SS
Lamp Flux (klm)	5.53
File Name	P863-128-R4-730-W3-300-40W.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	386.2, 27.2, 0.4
No. in Project	10



Luminaire G Data

Supplier	C U Phosco
Type	P863-128-R2E-730-W3-425-55W
Lamp(s)	730SS
Lamp Flux (klm)	7.78
File Name	P863-128-R2E-730-W3-425-55W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	463.7, 84.3, 0.0
No. in Project	2

Luminaire J Data

Supplier	
Type	2685 SNN-1C#
Lamp(s)	1 ST 150 17500 2000 E40
LampFlux(klm)/Colour	17.50 1950 / 23
File Name	Arc 2685 SNN 1C# 1 ST 150 17500 1950 E 40.Idt
Maintenance Factor	0.75
Imax70,80,90(cd/klm)	352.0, 100.0, 5.0
No. in Project	6

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	694702.09	739063.00	10.00	302.00	0.00	0.00	0.50			
2	A	694726.44	739065.53	10.00	217.00	0.00	0.00	0.50			
3	A	694729.85	739046.09	10.00	99.00	0.00	0.00	0.50			
4	A	694705.25	739037.46	10.00	25.00	0.00	0.00	0.50			
5	B	694685.89	739062.82	8.00	262.00	0.00	0.00	0.50			
6	B	694753.86	739069.75	10.00	286.00	0.00	0.00	0.50			
7	B	694792.00	739081.61	10.00	290.00	0.00	0.00	0.50			
8	B	694830.21	739094.96	10.00	293.00	0.00	0.00	0.50			
9	B	694866.30	739112.84	10.00	293.00	0.00	0.00	0.50			
10	B	694900.64	739133.35	10.00	299.00	0.00	0.00	0.50			
11	B	694932.47	739154.50	10.00	305.00	0.00	0.00	0.50			
12	B	694963.70	739181.43	10.00	302.00	0.00	0.00	0.50			
13	B	694707.14	739017.70	10.00	358.00	0.00	0.00	0.50			
14	G	694663.59	739056.72	8.00	60.00	0.00	0.00	0.50			
15	B	694996.54	739204.04	10.00	299.00	0.00	0.00	0.50			
16	B	694924.62	739131.86	10.00	123.00	0.00	0.00	0.50			
17	B	694709.66	738982.79	10.00	0.00	0.00	0.00	0.50			
18	B	694712.34	738943.81	10.00	2.00	0.00	0.00	0.50			
19	B	694708.40	738905.17	10.00	351.00	0.00	0.00	0.50			
20	B	694699.87	738867.02	10.00	350.00	0.00	0.00	0.50			
21	B	694692.21	738829.23	10.00	351.00	0.00	0.00	0.50			
25	B	694723.16	739097.64	10.00	182.00	0.00	0.00	0.50			
26	C	694906.39	739146.80	8.00	27.00	0.00	0.00	0.50			
27	C	694891.99	739174.97	8.00	27.00	0.00	0.00	0.50			
28	C	694875.58	739209.72	8.00	27.00	0.00	0.00	0.50			
29	C	694816.52	739218.66	8.00	104.00	0.00	0.00	0.50			
30	C	694855.45	739227.64	8.00	103.00	0.00	0.00	0.50			
31	C	694800.81	739235.58	8.00	105.00	0.00	0.00	0.50			
32	D	694816.55	739249.88	5.00	197.00	0.00	0.00	0.40			
33	D	694811.12	739274.00	5.00	197.00	0.00	0.00	0.40			
34	D	694806.33	739295.68	5.00	197.00	0.00	0.00	0.40			
35	D	694971.49	739240.36	5.00	207.00	0.00	0.00	0.40			
36	D	694979.90	739216.94	5.00	205.00	0.00	0.00	0.40			
37	D	694726.18	739138.76	5.00	112.00	0.00	0.00	0.40			
38	C	694923.09	739257.53	8.00	99.00	0.00	0.00	0.50			
39	C	694886.41	739249.50	8.00	118.00	0.00	0.00	0.50			

Layout Continued

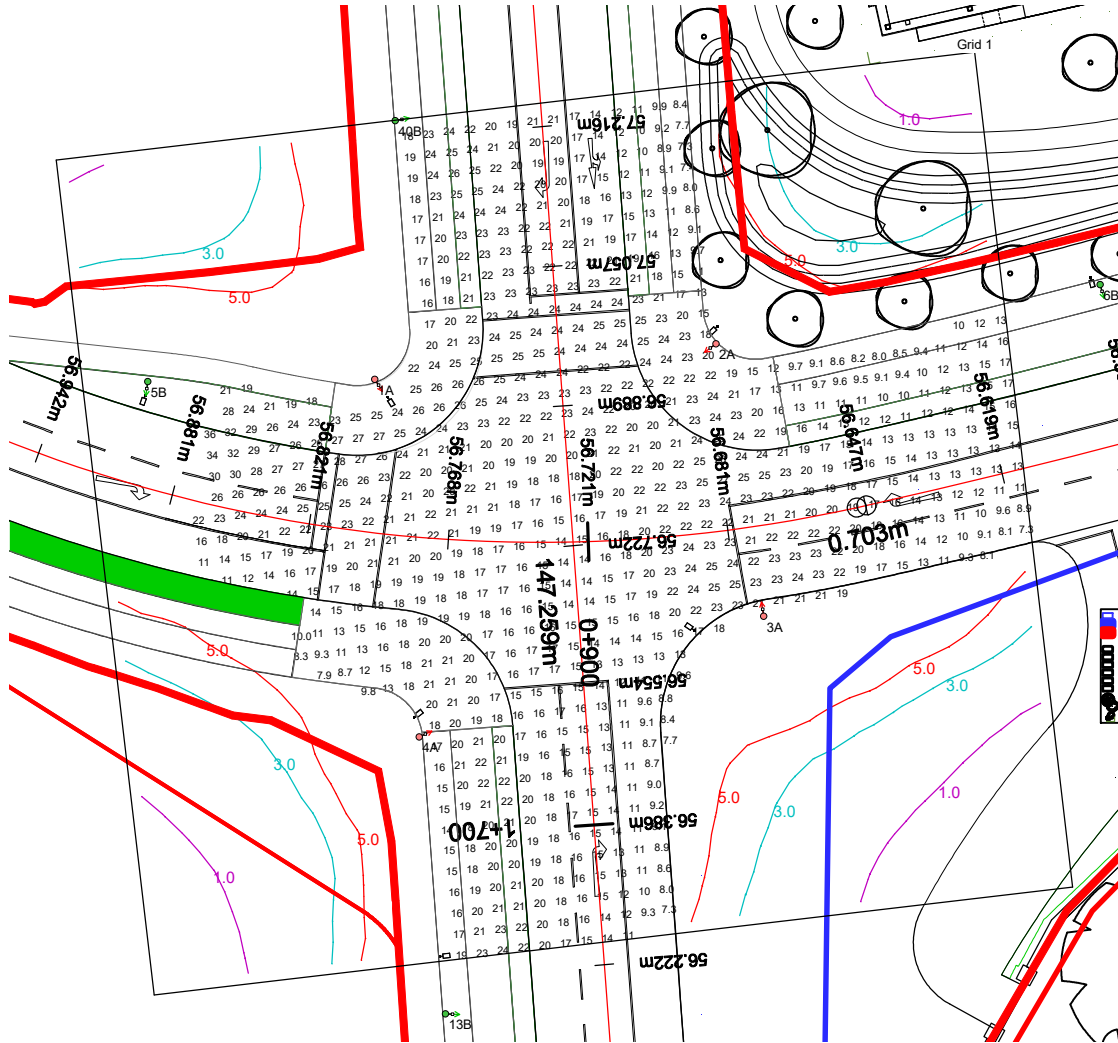
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
40	B	694703.55	739081.45	10.00	11.00	0.00	0.00	0.50			
41	B	694692.60	739267.94	10.00	194.00	0.00	0.00	0.50			
42	B	694669.63	739287.79	10.00	8.00	0.00	0.00	0.50			
43	B	694675.39	739328.23	10.00	195.00	0.00	0.00	0.50			
44	B	694700.00	739131.37	10.00	3.00	0.00	0.00	0.50			
45	B	694714.01	739165.87	10.00	198.00	0.00	0.00	0.50			
46	B	694707.61	739198.32	10.00	192.00	0.00	0.00	0.50			
47	B	694700.16	739232.21	10.00	192.00	0.00	0.00	0.50			
48	B	694662.20	739367.96	10.00	192.00	0.00	0.00	0.50			
49	B	694650.42	739399.30	10.00	203.00	0.00	0.00	0.50			
50	B	694637.45	739432.60	10.00	212.00	0.00	0.00	0.50			
52	C	694886.69	739267.85	8.00	291.00	0.00	0.00	0.50			
53	C	694927.63	739277.04	8.00	286.00	0.00	0.00	0.50			
54	C	694953.94	739266.93	8.00	212.00	0.00	0.00	0.50			
55	C	694942.32	739243.48	8.00	102.00	0.00	0.00	0.50			
56	C	694912.49	739236.80	8.00	103.00	0.00	0.00	0.50			
57	C	694903.51	739226.53	8.00	207.00	0.00	0.00	0.50			
58	C	694913.60	739204.81	8.00	202.00	0.00	0.00	0.50			
59	C	694805.57	739223.19	8.00	196.00	0.00	0.00	0.50			
60	C	694816.74	739218.13	8.00	286.00	0.00	0.00	0.50			
61	C	694855.56	739227.29	8.00	286.00	0.00	0.00	0.50			
62	C	694862.50	739192.11	8.00	105.00	0.00	0.00	0.50			
63	C	694824.74	739183.55	8.00	101.00	0.00	0.00	0.50			
64	C	694819.26	739175.56	8.00	190.00	0.00	0.00	0.50			
65	C	694826.38	739144.87	8.00	193.00	0.00	0.00	0.50			
66	C	694788.89	739174.66	8.00	104.00	0.00	0.00	0.50			
67	C	694751.05	739166.04	8.00	102.00	0.00	0.00	0.50			
68	C	694732.72	739158.12	8.00	16.00	0.00	0.00	0.50			
69	C	694727.02	739182.52	8.00	16.00	0.00	0.00	0.50			
70	C	694749.90	739202.76	8.00	286.00	0.00	0.00	0.50			
71	C	694778.99	739209.16	8.00	286.00	0.00	0.00	0.50			
79	C	694802.77	739158.92	8.00	9.00	0.00	0.00	0.50			
80	C	694809.30	739129.09	8.00	16.00	0.00	0.00	0.50			
81	C	694752.32	739155.89	8.00	195.00	0.00	0.00	0.50			
83	C	694769.94	739188.52	8.00	283.00	0.00	0.00	0.50			
84	C	694845.03	739206.63	8.00	284.00	0.00	0.00	0.50			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
76	D	694795.55	739121.73	5.00	282.00	0.00	0.00	0.40			
77	D	694785.82	739100.13	5.00	10.00	0.00	0.00	0.40			
75	B	694685.83	738789.84	10.00	351.00	0.00	0.00	0.50			
76	B	694681.25	738750.51	10.00	351.00	0.00	0.00	0.50			
77	B	694676.16	738711.64	10.00	351.00	0.00	0.00	0.50			
81	G	694634.11	739074.59	8.00	61.00	0.00	0.00	0.50			
82	F	694672.76	738806.84	8.00	87.00	0.00	0.00	0.50			
83	F	694643.38	738811.92	8.00	70.00	0.00	0.00	0.50			
84	F	694623.37	738828.30	8.00	248.00	0.00	0.00	0.50			
85	F	694598.21	738828.86	8.00	55.00	0.00	0.00	0.50			
86	F	694577.50	738853.05	8.00	241.00	0.00	0.00	0.50			
87	F	694548.77	738871.01	8.00	233.00	0.00	0.00	0.50			
88	F	694521.07	738876.31	8.00	62.00	0.00	0.00	0.50			
89	F	694502.12	738899.77	8.00	238.00	0.00	0.00	0.50			
90	F	694484.83	738881.02	8.00	327.00	0.00	0.00	0.50			
91	F	694473.36	738906.00	8.00	45.00	0.00	0.00	0.50			
92	B	694706.38	738806.91	10.00	170.00	0.00	0.00	0.50			
93	D	694982.01	739202.37	5.00	124.00	0.00	0.00	0.40			
94	D	694957.29	739185.81	5.00	130.00	0.00	0.00	0.40			
95	D	694931.79	739169.63	5.00	123.00	0.00	0.00	0.40			
93	J	694686.59	738669.53	10.00	175.00	5.00	0.00	2.00			
94	J	694683.66	738647.24	10.00	175.00	5.00	0.00	2.00			
95	J	694681.32	738629.82	10.00	175.00	5.00	0.00	2.00			
96	J	694679.91	738609.03	10.00	171.00	5.00	0.00	2.00			
97	J	694674.20	738565.02	10.00	183.00	5.00	0.00	2.00			
98	J	694670.45	738542.92	10.00	175.00	5.00	0.00	2.00			

Horizontal Illuminance (lux)

Grid 1



Results

Eav	18.29
Emin	7.28
Emax	35.91
Emin/Emax	0.20
Emin/Eav	0.40

Horizontal Illuminance (lux)

Grid 2

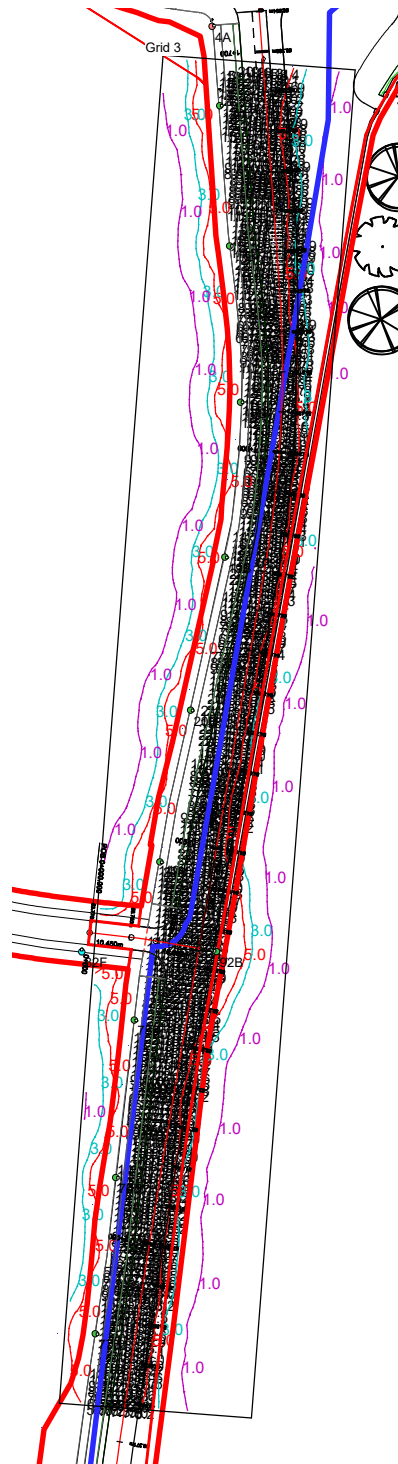


Results

Eav	12.33
Emin	2.92
Emax	29.72
Emin/Emax	0.10
Emin/Eav	0.24

Horizontal Illuminance (lux)

Grid 3

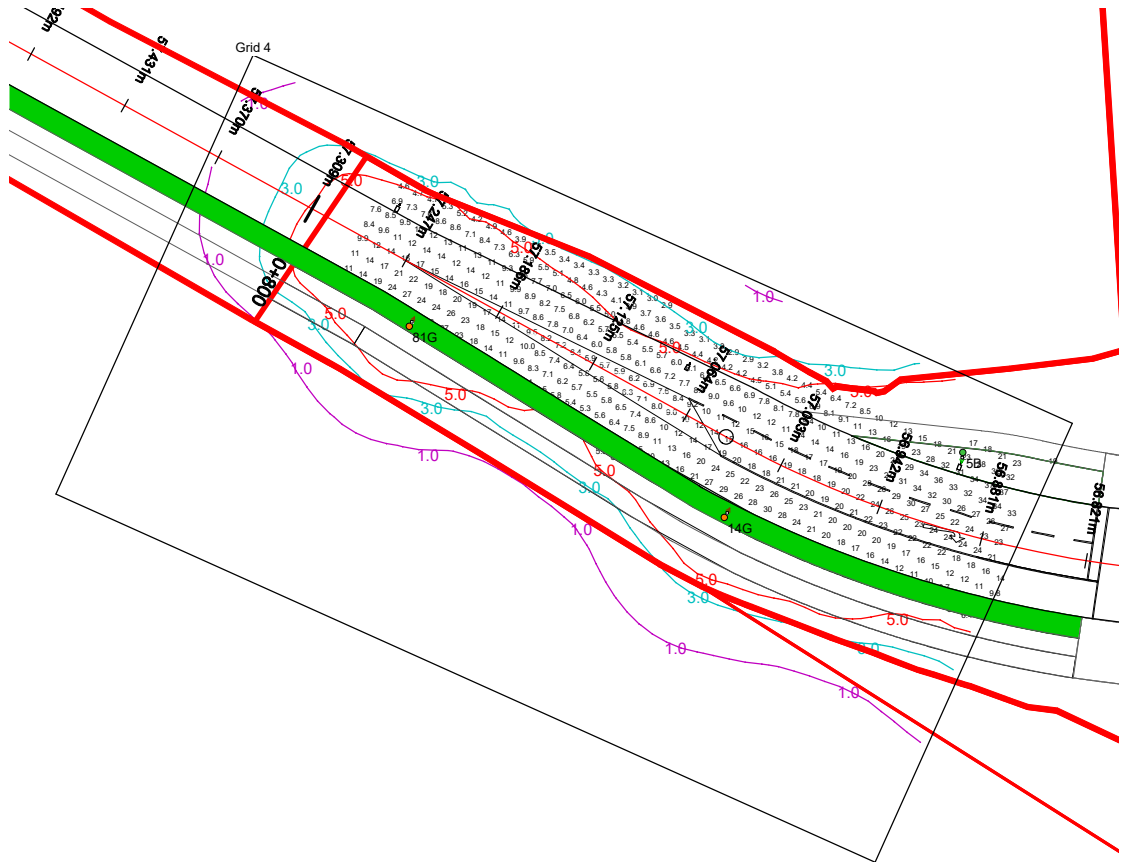


Results

Eav	11.94
Emin	2.75
E _{max}	25.37
E _{min} /E _{max}	0.11
E _{min} /E _{av}	0.23

Horizontal Illuminance (lux)

Grid 4



Results

Eav	13.80
Emin	2.87
E _{max}	36.59
E _{min} /E _{max}	0.08
E _{min} /E _{av}	0.21

Horizontal Illuminance (lux)

Grid 5

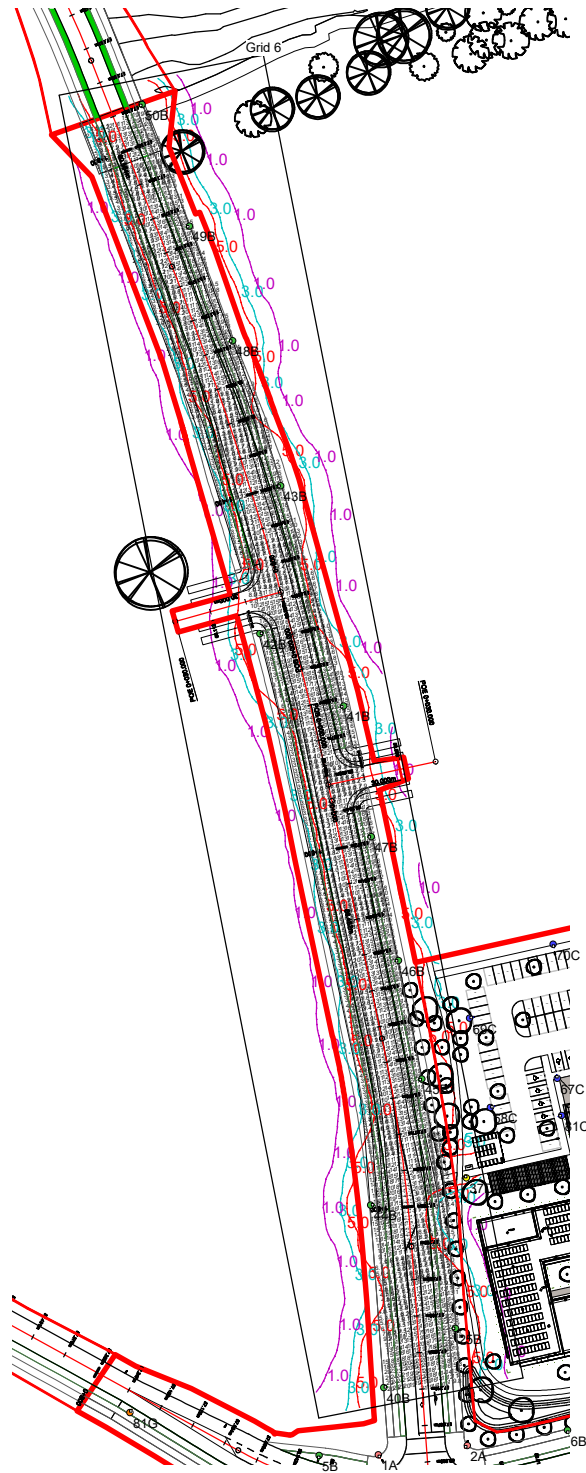


Results

Eav	11.00
Emin	2.61
Emax	33.13
Emin/Emax	0.08
Emin/Eav	0.24

Horizontal Illuminance (lux)

Grid 6

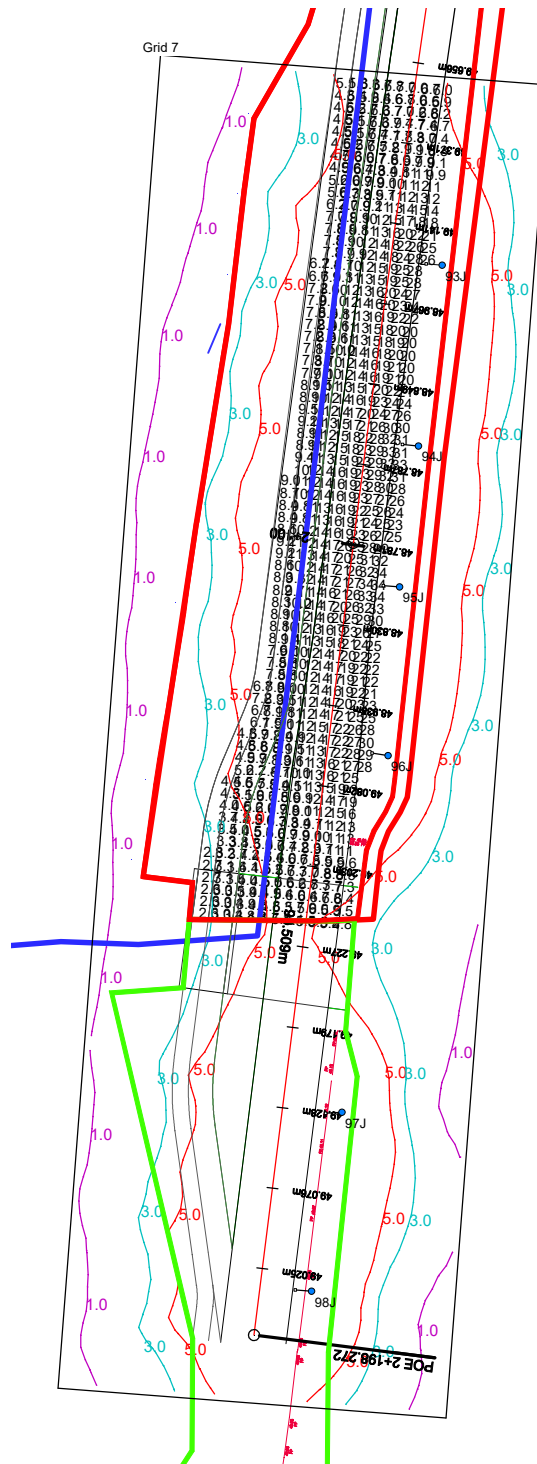


Results

Eav	11.12
Emin	2.36
Emax	24.18
Emin/Emax	0.10
Emin/Eav	0.21

Horizontal Illuminance (lux)

Grid 7

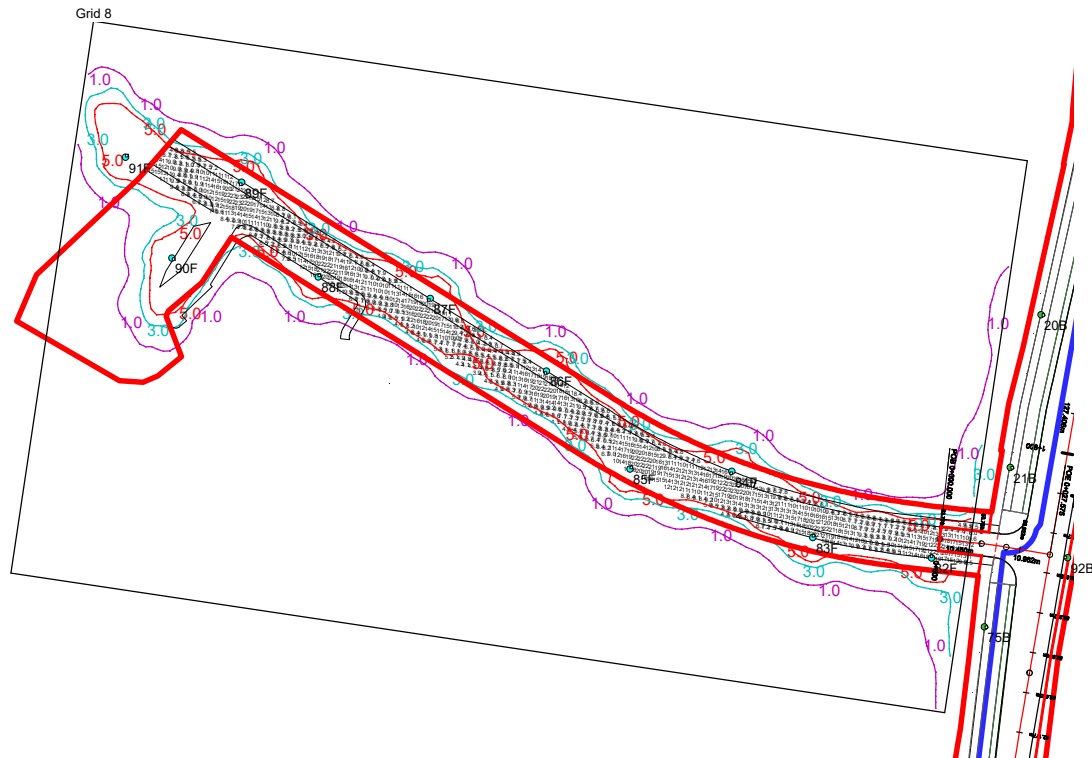


Results

Eav	13.10
Emin	2.57
Emax	34.04
Emin/Emax	0.08
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 8



Results

Eav	11.40
Emin	3.33
Emax	23.13
Emin/Emax	0.14
Emin/Eav	0.29