

DATE: 2 October 2026
DESIGNER: Alex Naper
PROJECT No: SES 06526 Rev D
PROJECT NAME: Old Connaught Phase A1 LRD



Client: Castlethorn Old Conna ULC

MF derived from: 0.92×0.90 or 0.97×0.99 (LMF (Low pollution environment & 72 month cleaning cycle) $\times$ LLMF $\times$ LSF) LLMF & LSF values @ 100,000 hours & 25 degrees C Ta.

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

Link Road designed in accordance with EN13201-2:2015 Category P2.

Junctions designed in accordance with EN13201-2:2015 Category C3.

Rev A: Client and project name updated.

Rev B: Red line updated.

Rev C: Red line updated.

Rev D: Red line updated (pump station added)

Outdoor Lighting Report

PREPARED BY: Sabre Electrical Services Ltd.
Unit 11,
Bellview Industrial Estate,
Tolka Valley Road,
Dublin 11
D11 VN59
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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	725055.37	719305.60	78.00	332.56	1.50	1.50
2	Grid 2	724931.55	719622.22	146.59	138.00	1.50	1.50
3	Grid 3	725064.06	719417.11	146.59	138.00	1.50	1.50
4	Grid 4	724914.26	719607.69	146.59	171.00	1.50	1.50
5	Grid 5	724925.85	719441.20	146.59	171.00	1.50	1.50
6	Grid 6	725024.04	719721.85	13.50	25.50	1.50	1.50
7	Grid 7	725026.12	719642.90	10.50	13.50	1.50	1.50
8	Grid 8	725027.69	719581.94	10.50	13.50	1.50	1.50
9	Grid 9	725038.77	719520.16	10.50	30.00	1.50	1.50
10	Grid 10	724973.22	719292.28	120.00	131.84	1.50	1.50

Luminaires

Luminaire A Data



Supplier	C U Phosco
Type	P863-128-R2E-730-W3-650-83W
Lamp(s)	730SS
Lamp Flux (klm)	11.58
File Name	P863-128-R2E-730-W3-650-83W.ies
Maintenance Factor	0.88
Imax70,80,90(cd/klm)	463.7, 84.3, 0.0
No. in Project	15

Luminaire B Data



Supplier	C U Phosco
Type	E950-28-P4A-730-C600-15W
Lamp(s)	730N
Lamp Flux (klm)	2.25
File Name	E950-28-P4A-730-C600-15W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	25

Luminaire C Data



Supplier	C U Phosco
Type	E950-28-P4A-730-B2-C0250-7W
Lamp(s)	730N
Lamp Flux (klm)	0.85
File Name	E950-28-P4A-730-B2-C0250-7W.ies
Maintenance Factor	0.88
Imax70,80,90(cd/klm)	709.7, 142.6, 0.4
No. in Project	18

Luminaire D Data



Supplier	C U Phosco
Type	P863-128-R2E-730-BB-W3-200-28W
Lamp(s)	730SS
Lamp Flux (klm)	3.53
File Name	P863-128-R2E-730-BB-W3-200-28W.ies
Maintenance Factor	0.90
Imax70,80,90(cd/klm)	492.1, 89.5, 0.0
No. in Project	3

Luminaires**Luminaire E Data**

Supplier	C U Phosco
Type	E950-28-A2A-730-C600-15W
Lamp(s)	730N
Lamp Flux (klm)	2.06
File Name	E950-28-A2A-730-C0600-15W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	470.3, 22.7, 0.9
No. in Project	4

**Luminaire F Data**

Supplier	C U Phosco
Type	E950-28-F2A-730-C600-15W
Lamp(s)	730N
Lamp Flux (klm)	2.28
File Name	E950-28-F2A-730-C0600-15W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	623.6, 113.9, 0.3
No. in Project	1

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	725012.70	719748.23	10.00	266.00	0.00	0.00	0.50			
2	A	724973.07	719750.34	10.00	266.00	0.00	0.00	0.50			
3	A	724931.14	719752.31	10.00	273.00	0.00	0.00	0.50			
4	A	725039.15	719734.42	10.00	176.00	0.00	0.00	0.50			
5	A	725039.08	719694.44	10.00	185.00	0.00	0.00	0.50			
6	A	725040.22	719654.46	10.00	185.00	0.00	0.00	0.50			
7	E	725017.65	719653.78	6.00	277.00	0.00	0.00	0.50			
8	C	725011.11	719662.21	6.00	286.00	0.00	0.00	0.50			
9	A	725041.06	719620.38	10.00	185.00	0.00	0.00	0.50			
10	A	725042.27	719587.37	10.00	185.00	0.00	0.00	0.50			
11	A	725046.90	719549.66	10.00	193.00	0.00	0.00	0.50			
12	A	725051.35	719521.36	10.00	193.00	0.00	0.00	0.50			
13	A	725057.69	719482.06	10.00	189.00	0.00	0.00	0.50			
14	A	725073.72	719410.49	10.00	194.00	0.00	0.00	0.50			
15	A	725087.57	719381.09	10.00	204.00	0.00	0.00	0.50			
16	A	725088.66	719345.43	10.00	35.00	0.00	0.00	0.50			
17	B	725018.71	719479.77	6.00	282.00	0.00	0.00	0.40			
18	B	725025.90	719532.69	6.00	105.00	0.00	0.00	0.40			
19	B	725018.26	719592.95	6.00	271.00	0.00	0.00	0.40			
20	D	725074.03	719548.15	8.00	277.00	0.00	0.00	0.40			
21	B	725119.44	719519.17	6.00	189.00	0.00	0.00	0.40			
22	B	725099.73	719531.81	6.00	5.00	0.00	0.00	0.40			
23	D	725133.76	719558.36	8.00	276.00	0.00	0.00	0.40			
24	B	725105.18	719496.37	6.00	9.00	0.00	0.00	0.40			
25	B	725127.72	719467.12	6.00	193.00	0.00	0.00	0.40			
26	B	725111.27	719460.00	6.00	10.00	0.00	0.00	0.40			
27	C	725124.92	719490.98	5.00	281.00	0.00	0.00	0.40			
28	C	725150.65	719494.93	5.00	277.00	0.00	0.00	0.40			
29	C	725149.07	719533.83	5.00	15.00	0.00	0.00	0.40			
30	C	725155.60	719507.30	5.00	19.00	0.00	0.00	0.40			
31	C	725161.80	719482.33	5.00	16.00	0.00	0.00	0.40			
32	C	725166.97	719461.63	5.00	15.00	0.00	0.00	0.40			
33	C	725163.93	719453.72	5.00	94.00	0.00	0.00	0.40			
34	C	725141.55	719450.21	5.00	98.00	0.00	0.00	0.40			
35	D	725105.62	719554.07	8.00	279.00	0.00	0.00	0.40			
36	C	725113.22	719445.59	5.00	101.00	0.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
37	C	725087.15	719441.75	5.00	96.00	0.00	0.00	0.40			
38	B	725122.77	719499.26	6.00	189.00	0.00	0.00	0.40			
39	B	724922.98	719729.71	6.00	189.00	0.00	0.00	0.40			
40	B	724925.19	719699.38	6.00	189.00	0.00	0.00	0.40			
41	B	724937.83	719686.74	6.00	260.00	0.00	0.00	0.40			
42	B	724970.50	719684.91	6.00	264.00	0.00	0.00	0.40			
43	B	724985.01	719676.22	6.00	139.00	0.00	0.00	0.40			
44	C	724960.97	719671.81	5.00	234.00	0.00	0.00	0.40			
45	C	724928.52	719660.42	5.00	73.00	0.00	0.00	0.40			
46	C	724933.43	719649.89	5.00	346.00	0.00	0.00	0.40			
47	C	724955.15	719663.26	5.00	276.00	0.00	0.00	0.40			
48	C	724981.00	719661.76	5.00	64.00	0.00	0.00	0.40			
49	A	725063.60	719445.31	10.00	189.00	0.00	0.00	0.50			
50	E	724989.44	719651.24	6.00	284.00	0.00	0.00	0.40			
51	E	724960.84	719645.16	6.00	284.00	0.00	0.00	0.40			
52	E	724932.23	719639.22	6.00	284.00	0.00	0.00	0.40			
53	B	724934.47	719621.31	6.00	194.00	0.00	0.00	0.40			
54	B	724931.54	719588.11	6.00	10.00	0.00	0.00	0.40			
55	B	724951.15	719582.28	6.00	281.00	0.00	0.00	0.40			
56	B	724987.78	719590.16	6.00	281.00	0.00	0.00	0.40			
57	B	724993.07	719525.74	6.00	101.00	0.00	0.00	0.40			
58	B	724962.94	719519.40	6.00	104.00	0.00	0.00	0.40			
59	B	724976.88	719515.37	6.00	194.00	0.00	0.00	0.40			
60	B	724983.47	719484.33	6.00	196.00	0.00	0.00	0.40			
61	B	724998.60	719475.32	6.00	288.00	0.00	0.00	0.40			
62	C	724942.56	719538.54	5.00	192.00	0.00	0.00	0.40			
63	C	724936.71	719565.34	5.00	202.00	0.00	0.00	0.40			
64	B	725048.14	719409.51	6.00	281.00	0.00	0.00	0.40			
65	B	725017.52	719403.92	6.00	280.00	0.00	0.00	0.40			
66	F	724996.24	719384.38	6.00	95.00	0.00	0.00	0.40			

Horizontal Illuminance (lux)

Grid 1

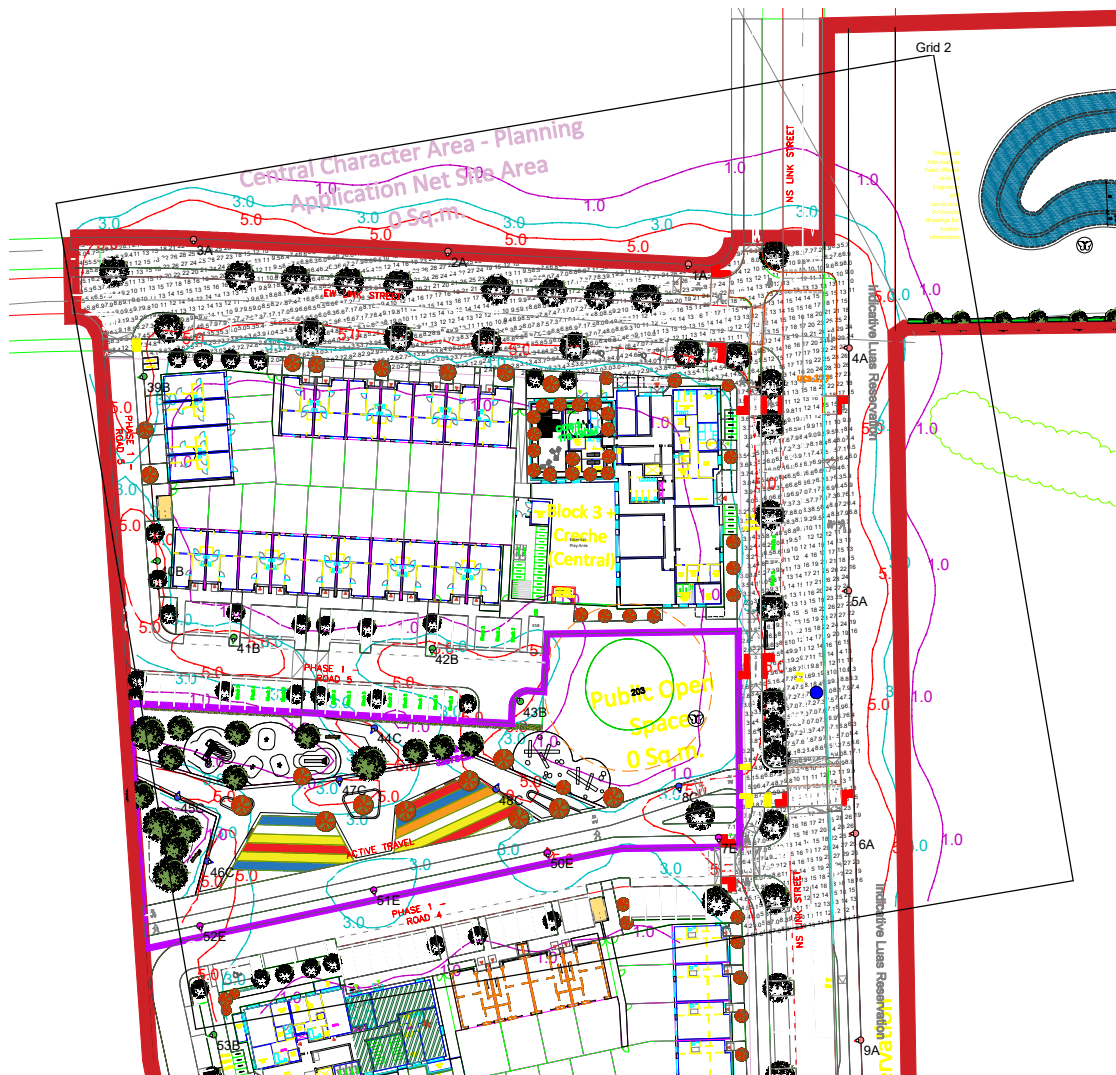


Results

Eav	11.74
Emin	2.23
Emax	29.29
Emin/Emax	0.08
Emin/Eav	0.19

Horizontal Illuminance (lux)

Grid 2



Results

Eav	10.38
Emin	2.03
Emax	29.69
Emin/Emax	0.07
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 3

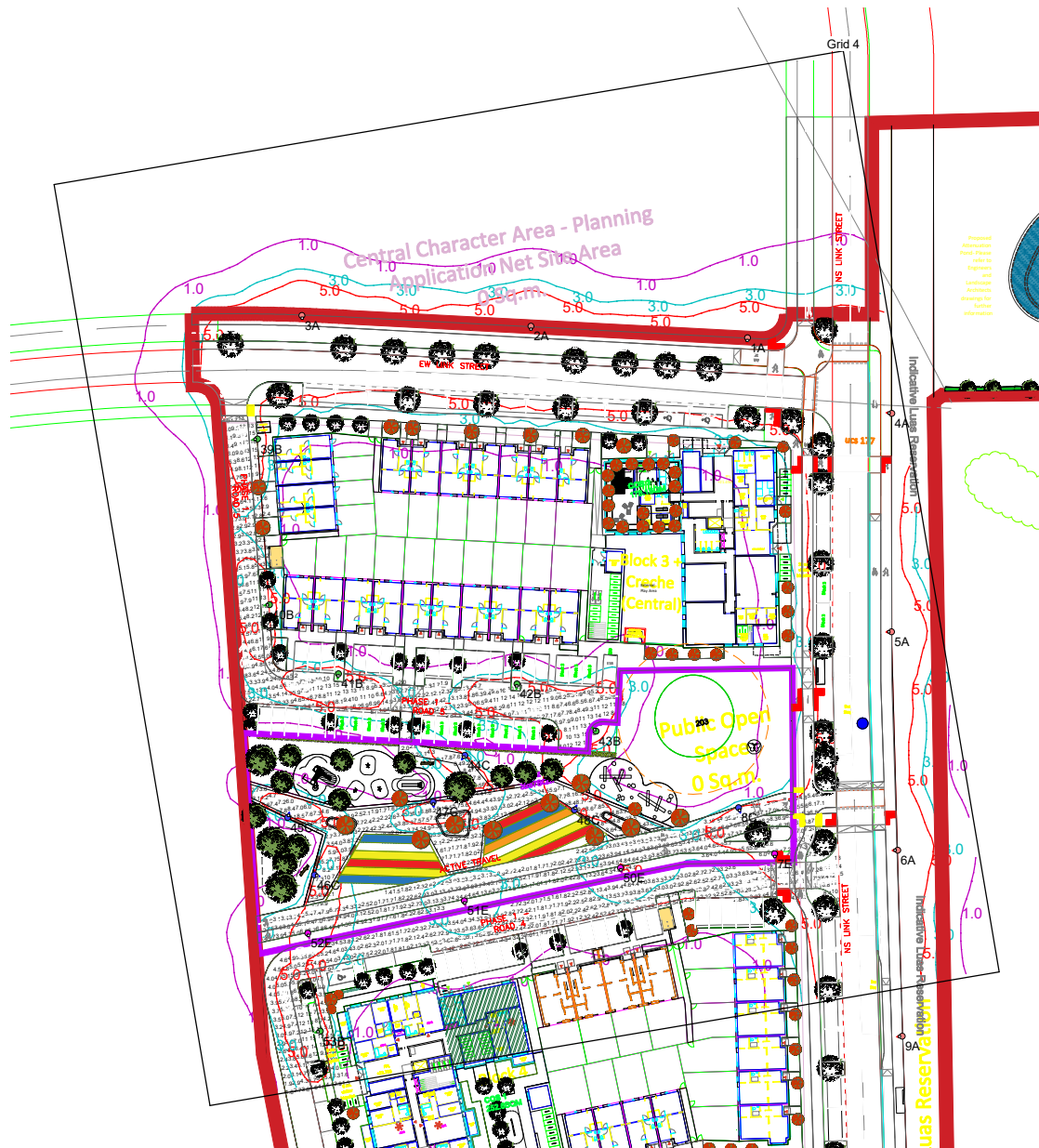


Results

Eav	5.12
Emin	1.06
E _{max}	15.89
E _{min} /E _{max}	0.07
E _{min} /E _{av}	0.21

Horizontal Illuminance (lux)

Grid 4

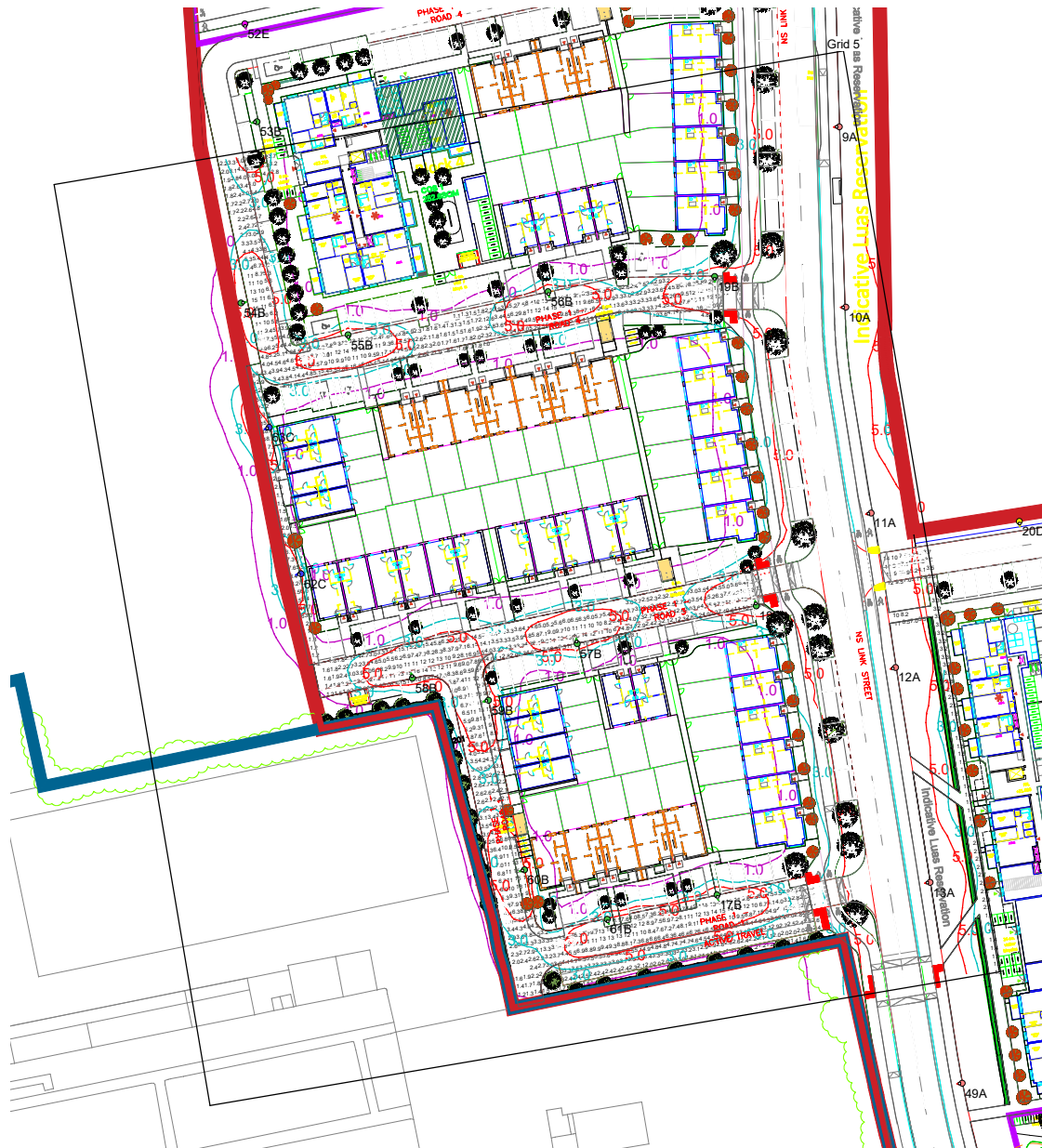


Results

Eav	5.02
Emin	1.41
E _{max}	16.33
E _{min} /E _{max}	0.09
E _{min} /E _{av}	0.28

Horizontal Illuminance (lux)

Grid 5

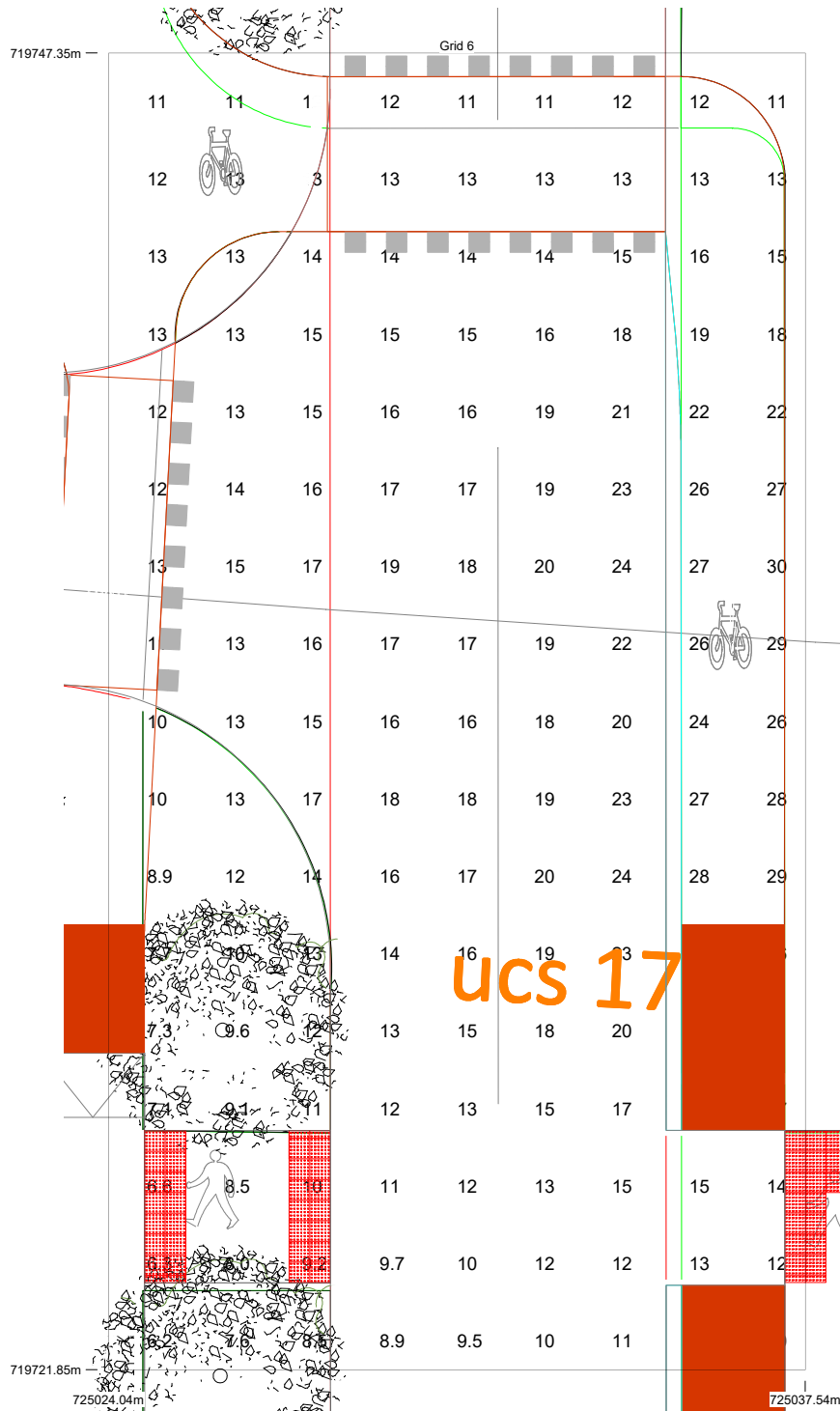


Results

Eav	5.61
Emin	1.13
Emax	16.83
Emin/Emax	0.07
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 6

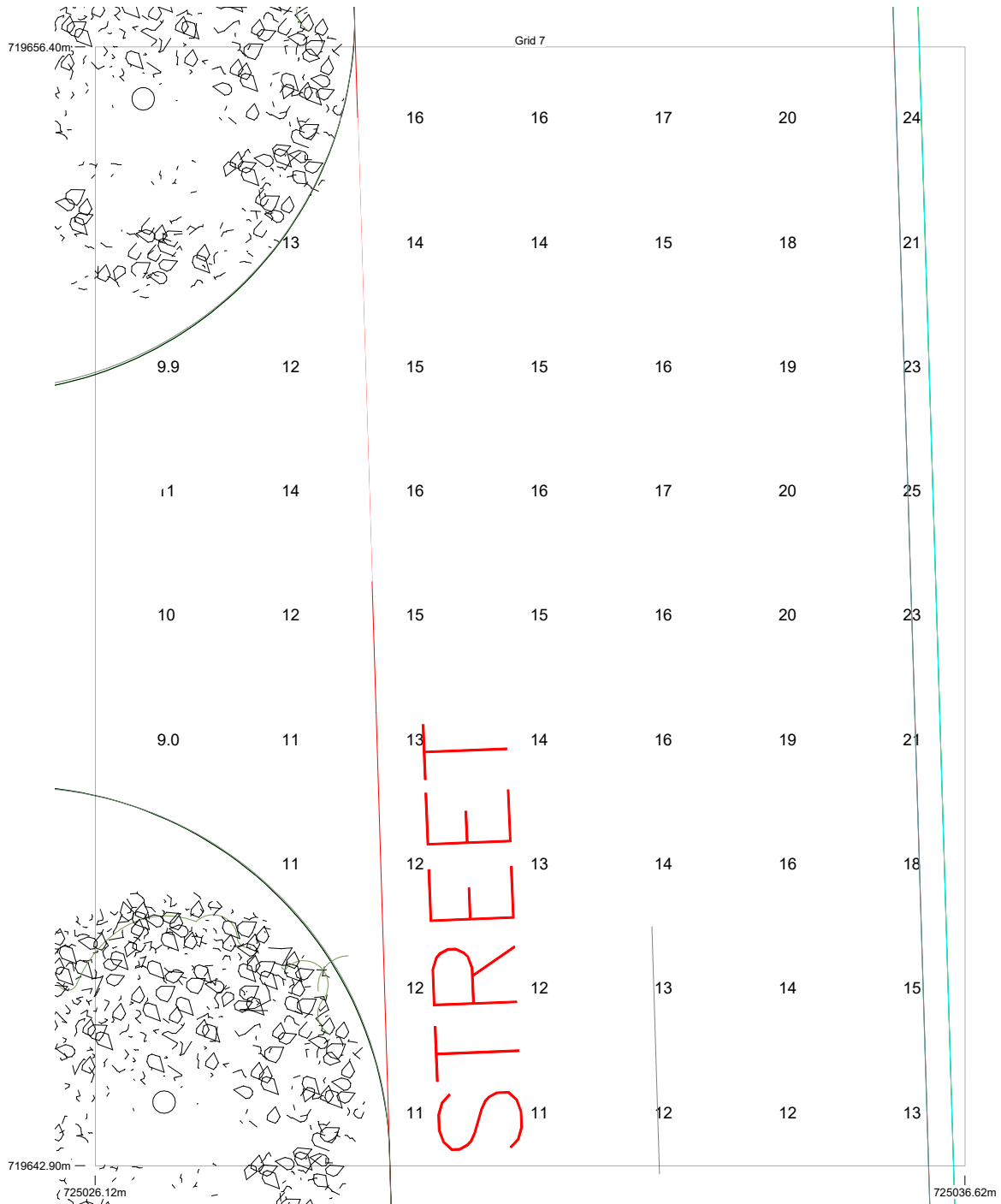


Results

Eav	15.42
Emin	6.18
Emax	29.83
Emin/Emax	0.21
Emin/Eav	0.40

Horizontal Illuminance (lux)

Grid 7

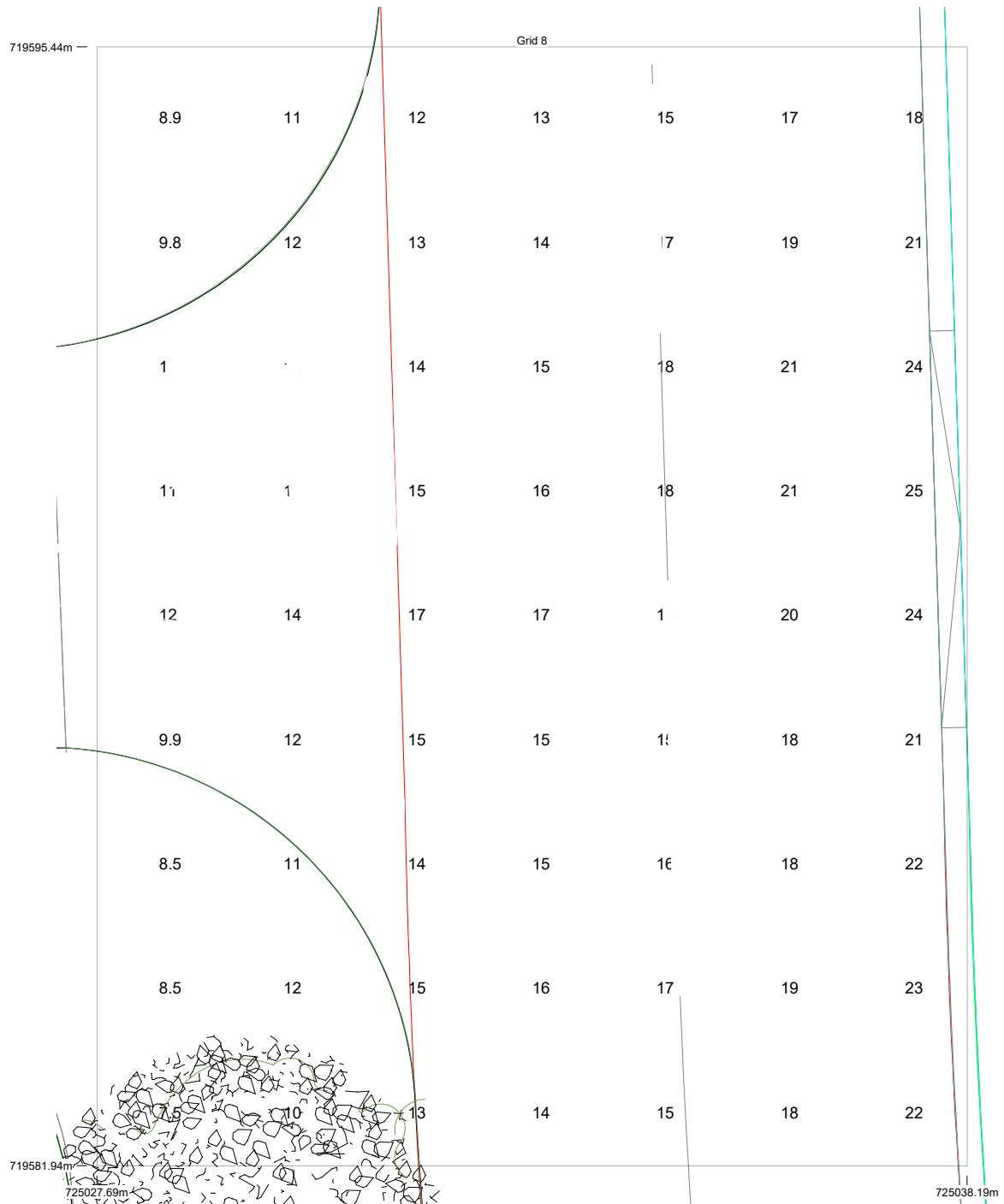


Results

Eav	15.27
Emin	9.03
Emax	24.62
Emin/Emax	0.37
Emin/Eav	0.59

Horizontal Illuminance (lux)

Grid 8

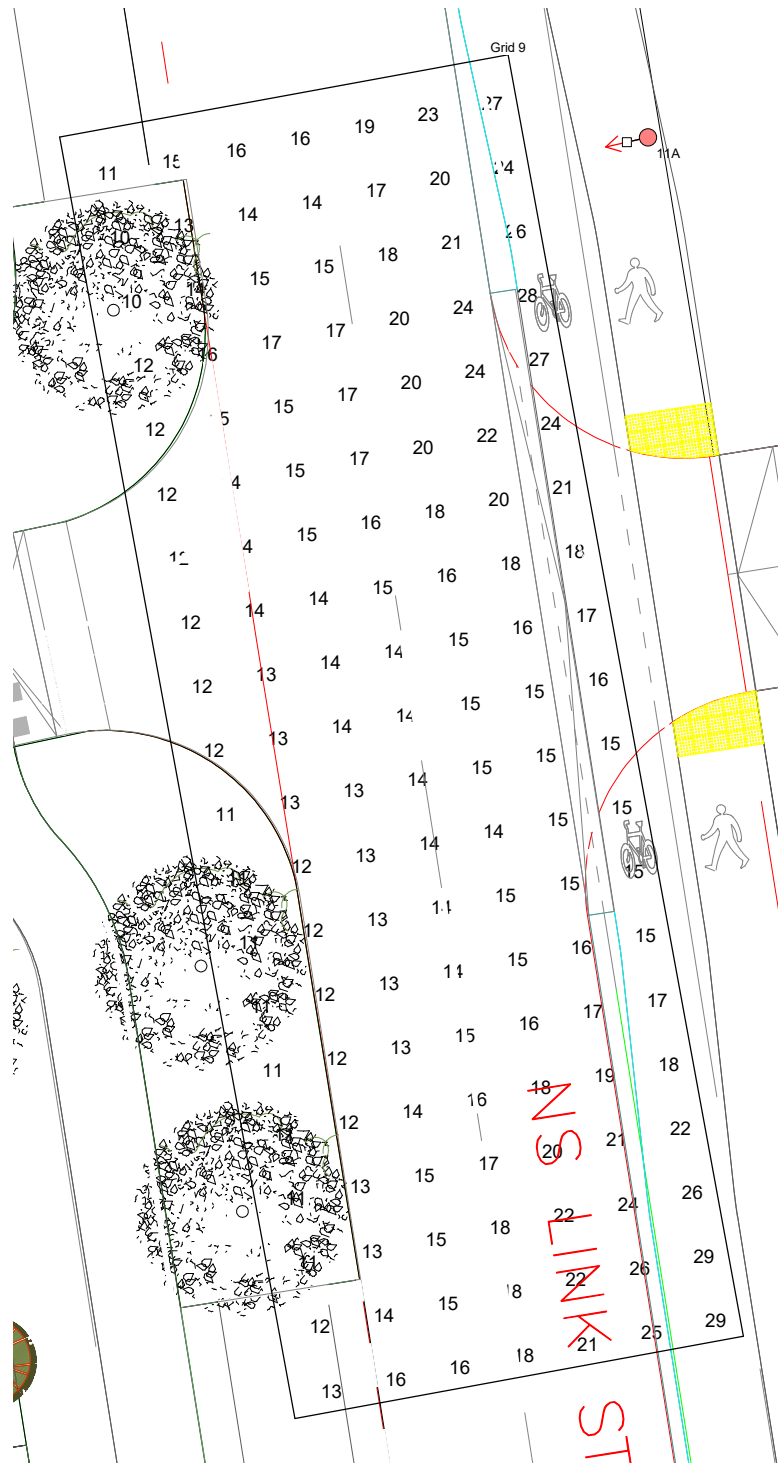


Results

Eav	15.48
Emin	7.48
E _{max}	25.29
E _{min} /E _{max}	0.30
E _{min} /E _{av}	0.48

Horizontal Illuminance (lux)

Grid 9



Results

Eav	16.26
Emin	10.03
Emax	28.94
Emin/Emax	0.35
Emin/Eav	0.62

Horizontal Illuminance (lux)

Grid 10



Results

Eav	5.50
Emin	1.49
Emax	16.70
Emin/Emax	0.09
Emin/Eav	0.27