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PUBLIC LIGHTING REPORT
FOR
PROPOSED RESIDENTIAL DEVELOPMENT
AT
CLONATTIN ROAD, GOREY, Co. WEXFORD
FOR
AXIS CONSTRUCTION

Project Reference:	J616
Revision Ref:	B
Date Issued:	29 th January 2021

1. INTRODUCTION

Axis Construction, intends to apply to An Bord Pleanála for permission for a strategic housing development on an approximate site area of 15.7ha, located to the South of Clonattin Village in the townland of Clonattin Upper, Gorey Bridge, Gorey, Co. Wexford. To the north of the site is the Clonattin Village residential estate, to the west is The Hillcrest Drive residential estate, with open lands to the east and south.

The proposed development includes the provision of footways, footpaths to facilitate pedestrian movement within and through the scheme and to provide easy and convenient access to facilities and services adjacent to the scheme, 6 no. ESB unit sub-stations, car parking, bin & bicycle storage, public open spaces, hard and soft landscaping, boundary treatments and public lighting. Access to the development will be via a series of new vehicular entrances off Clonattin Village Road and Courtown Road (R742) to the south.

The proposed development will consist of 363 new homes alongside sustainable commercial interests, community, and educational spaces. The residential dwellings have been parcelled into Blocks (A-N).

The masterplan anticipates that the proposals will be delivered over 5 distinct phases.

Phase 1: Blocks A-C, central open space, key public realm elements (front Loaded).

Phase 2: Blocks D-G

Phase 3: Blocks H-I

Phase 4: Blocks J-K

Phase 5: Blocks L-N.

2. EXECUTIVE SUMMARY

This report was prepared in accordance with the document 'Wexford County Council - Public Lighting Specification': December 2017 to ensure the development will be provided with adequate lighting to the standards of Wexford County Council.

Design of the public lighting is based on the current British Standards for Road Lighting BS 5489 and International Standards IS EN 13201-2:2015. Class for the design is P4 with S/P ratio of 1.4.

The lighting design complies with the above requirements and detailed output is on the following pages:

DATE: 9 November 2020
DESIGNER: Graham Sheehan + AN
PROJECT No: SES 13020 Rev B
PROJECT NAME: Clonattin Dev. JAK Consulting



Designed in accordance with ISEN13201-1:2015 Class P4 for residential roads and Class P3 for distributor road.

Rev A: Distributor Rd added.
Rev B: Updated site layout & additional area added.

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	716391.00	659631.00	288.00	235.00	1.50	1.50
2	Grid 2	716391.00	659471.00	367.00	160.00	1.50	1.50
3	Grid 3	716679.00	659631.00	222.00	235.00	1.50	1.50
4	Grid 4	716901.00	659751.00	255.00	222.00	1.50	1.50
5	Grid 5	716747.00	659348.00	201.00	283.00	1.50	1.50
6	Grid 6	716773.00	659063.00	175.00	285.00	1.50	1.50

Luminaires

Luminaire A Data



Supplier	C U Phosco
Type	P852-12-P4-NW-CB0550-21W
Lamp(s)	740C NW
Lamp Flux (klm)	2.72
File Name	P852-12-P4-NW-CB0550-21W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	760.6, 161.3, 0.8
No. in Project	116

Luminaire B Data



Supplier	C U Phosco
Type	P852-12-R3B-NW-CB0200-9W
Lamp(s)	740C NW
Lamp Flux (klm)	1.11
File Name	P852-12-R3B-NW-CB0200-9W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	896.4, 62.1, 1.9
No. in Project	1

Luminaire C Data



Supplier	C U Phosco
Type	P862-32-R2-NW-F0500-51W
Lamp(s)	740P NW
Lamp Flux (klm)	6.51
File Name	P862-32-R2-NW-F0500-51W.ies
Maintenance Factor	0.82
Imax70,80,90(cd/klm)	557.0, 27.3, 0.0
No. in Project	18

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	716480.28	659721.36	6.00	191.00	5.00	0.00	0.40			
2	A	716487.58	659682.58	6.00	190.00	5.00	0.00	0.40			
3	A	716486.54	659638.39	6.00	10.00	5.00	0.00	0.40			
4	A	716493.94	659610.18	6.00	104.00	5.00	0.00	0.40			
5	A	716460.64	659601.37	6.00	101.00	5.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
6	A	716435.85	659596.85	6.00	99.00	5.00	0.00	0.40			
7	A	716412.63	659592.89	6.00	11.00	5.00	0.00	0.40			
8	A	716415.67	659566.55	6.00	4.00	5.00	0.00	0.40			
9	A	716419.17	659536.28	6.00	9.00	5.00	0.00	0.40			
10	A	716446.03	659530.48	6.00	89.00	5.00	0.00	0.40			
11	A	716451.29	659512.36	6.00	1.00	5.00	0.00	0.40			
12	A	716481.77	659532.19	6.00	91.00	5.00	0.00	0.40			
13	A	716475.62	659573.30	6.00	2.00	5.00	0.00	0.40			
14	A	716486.83	659599.93	6.00	188.00	5.00	0.00	0.40			
15	A	716452.99	659482.23	6.00	90.00	5.00	0.00	0.40			
16	A	716489.47	659506.08	6.00	359.00	5.00	0.00	0.40			
17	A	716517.11	659532.89	6.00	94.00	5.00	0.00	0.40			
18	A	716507.53	659561.29	6.00	357.00	5.00	0.00	0.40			
19	A	716507.40	659598.44	6.00	3.00	5.00	0.00	0.40			
20	A	716536.87	659520.67	6.00	181.00	5.00	0.00	0.40			
21	A	716525.83	659491.66	6.00	8.00	5.00	0.00	0.40			
22	A	716553.58	659532.38	6.00	94.00	5.00	0.00	0.40			
23	A	716583.21	659529.63	6.00	96.00	5.00	0.00	0.40			
24	A	716595.20	659544.61	6.00	274.00	5.00	0.00	0.40			
25	A	716616.25	659534.21	6.00	97.00	5.00	0.00	0.40			
26	A	716617.08	659554.88	6.00	178.00	5.00	0.00	0.40			
27	A	716616.14	659583.29	6.00	176.00	5.00	0.00	0.40			
28	A	716615.27	659611.92	6.00	183.00	5.00	0.00	0.40			
29	A	716651.14	659528.90	6.00	71.00	5.00	0.00	0.40			
30	A	716531.30	659613.89	6.00	94.00	5.00	0.00	0.40			
31	A	716565.86	659616.19	6.00	101.00	5.00	0.00	0.40			
32	A	716592.52	659617.80	6.00	93.00	5.00	0.00	0.40			
33	A	716633.08	659618.32	6.00	92.00	5.00	0.00	0.40			
34	A	716566.94	659643.91	6.00	180.00	5.00	0.00	0.40			
35	A	716567.09	659675.92	6.00	183.00	5.00	0.00	0.40			
36	A	716567.16	659708.26	6.00	183.00	5.00	0.00	0.40			
37	A	716567.40	659736.93	6.00	191.00	5.00	0.00	0.40			
38	A	716554.75	659761.36	6.00	226.00	5.00	0.00	0.40			
39	A	716429.63	659836.39	6.00	93.00	5.00	0.00	0.40			
40	A	716458.73	659822.86	6.00	62.00	5.00	0.00	0.40			
41	A	716492.12	659804.07	6.00	64.00	5.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
42	A	716521.86	659787.24	6.00	66.00	5.00	0.00	0.40			
43	A	716480.34	659831.82	6.00	321.00	5.00	0.00	0.40			
44	A	716503.85	659841.36	6.00	278.00	5.00	0.00	0.40			
45	A	716547.15	659778.05	6.00	78.00	5.00	0.00	0.40			
46	A	716559.59	659772.39	6.00	156.00	5.00	0.00	0.40			
47	A	716667.95	659613.92	6.00	89.00	5.00	0.00	0.40			
48	A	716690.79	659639.50	6.00	183.00	5.00	0.00	0.40			
49	A	716690.53	659671.56	6.00	183.00	5.00	0.00	0.40			
50	A	716690.45	659703.83	6.00	183.00	5.00	0.00	0.40			
51	A	716690.51	659740.96	6.00	179.00	5.00	0.00	0.40			
52	A	716695.15	659765.00	6.00	163.00	5.00	0.00	0.40			
53	A	716704.11	659726.09	6.00	271.00	5.00	0.00	0.40			
54	A	716729.13	659709.11	6.00	85.00	5.00	0.00	0.40			
55	A	716740.98	659727.28	6.00	266.00	5.00	0.00	0.40			
57	A	716764.07	659714.74	6.00	238.00	5.00	0.00	0.40			
58	A	716697.86	659628.41	6.00	245.00	5.00	0.00	0.40			
59	A	716727.17	659626.87	6.00	253.00	5.00	0.00	0.40			
60	A	716729.81	659603.90	6.00	78.00	5.00	0.00	0.40			
61	A	716656.42	659596.82	6.00	183.00	5.00	0.00	0.40			
62	A	716657.10	659573.36	6.00	183.00	5.00	0.00	0.40			
63	A	716658.12	659544.15	6.00	183.00	5.00	0.00	0.40			
64	A	716681.26	659534.08	6.00	250.00	5.00	0.00	0.40			
65	A	716695.19	659513.44	6.00	84.00	5.00	0.00	0.40			
66	A	716721.15	659525.77	6.00	345.00	5.00	0.00	0.40			
67	A	716731.77	659565.41	6.00	345.00	5.00	0.00	0.40			
68	A	716739.95	659597.18	6.00	345.00	5.00	0.00	0.40			
69	A	716746.78	659631.26	6.00	348.00	5.00	0.00	0.40			
70	A	716753.42	659665.03	6.00	339.00	5.00	0.00	0.40			
71	A	716785.59	659730.40	6.00	325.00	5.00	0.00	0.40			
72	A	716815.95	659769.44	6.00	314.00	5.00	0.00	0.40			
73	A	716784.61	659754.52	6.00	49.00	5.00	0.00	0.40			
74	A	716769.65	659774.07	6.00	34.00	5.00	0.00	0.40			
75	A	716843.99	659788.12	6.00	288.00	5.00	0.00	0.40			
76	A	716881.25	659796.11	6.00	272.00	5.00	0.00	0.40			
77	A	716911.46	659791.92	6.00	253.00	5.00	0.00	0.40			
78	A	716868.70	659813.90	6.00	200.00	5.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
79	A	716847.02	659828.56	6.00	291.00	5.00	0.00	0.40			
80	A	716846.33	659808.04	6.00	110.00	5.00	0.00	0.40			
81	A	716765.70	659695.51	6.00	331.00	5.00	0.00	0.40			
82	A	716938.74	659788.80	6.00	253.00	5.00	0.00	0.40			
83	A	716921.78	659813.39	6.00	200.00	5.00	0.00	0.40			
84	A	716935.96	659830.35	6.00	126.00	5.00	0.00	0.40			
85	A	716970.86	659788.89	6.00	273.00	5.00	0.00	0.40			
86	A	717004.26	659796.67	6.00	285.00	5.00	0.00	0.40			
87	A	717040.20	659793.60	6.00	97.00	5.00	0.00	0.40			
88	A	717068.08	659808.87	6.00	297.00	5.00	0.00	0.40			
89	A	717091.54	659824.12	6.00	306.00	5.00	0.00	0.40			
90	A	717114.11	659824.93	6.00	160.00	5.00	0.00	0.40			
91	A	717096.47	659846.10	6.00	25.00	5.00	0.00	0.40			
92	A	717082.75	659873.64	6.00	24.00	5.00	0.00	0.40			
93	A	717114.60	659863.70	6.00	301.00	5.00	0.00	0.40			
94	A	717131.95	659858.00	6.00	118.00	5.00	0.00	0.40			
95	A	717139.61	659873.56	6.00	201.00	5.00	0.00	0.40			
96	A	717068.45	659902.92	6.00	26.00	5.00	0.00	0.40			
97	A	717089.15	659916.00	6.00	121.00	5.00	0.00	0.40			
98	A	717106.10	659929.58	6.00	204.00	5.00	0.00	0.40			
99	A	717059.38	659942.09	6.00	209.00	5.00	0.00	0.40			
100	A	717065.22	659874.29	6.00	118.00	5.00	0.00	0.40			
101	A	717029.06	659856.54	6.00	119.00	5.00	0.00	0.40			
102	A	717038.77	659812.19	6.00	199.00	5.00	0.00	0.40			
103	A	717026.64	659839.10	6.00	202.00	5.00	0.00	0.40			
104	A	717006.28	659886.88	6.00	206.00	5.00	0.00	0.40			
105	A	716991.42	659919.66	6.00	205.00	5.00	0.00	0.40			
106	A	716981.16	659869.94	6.00	113.00	5.00	0.00	0.40			
107	A	716958.65	659847.31	6.00	124.00	5.00	0.00	0.40			
108	B	717048.59	659943.23	4.00	203.00	0.00	0.00	0.40			
109	A	717000.02	659866.95	6.00	23.00	5.00	0.00	0.40			
110	C	716767.36	659612.80	8.00	250.00	5.00	0.00	0.40			
111	C	716801.11	659596.40	8.00	241.00	5.00	0.00	0.40			
112	C	716832.01	659572.93	8.00	224.00	5.00	0.00	0.40			
113	C	716857.60	659544.91	8.00	217.00	5.00	0.00	0.40			
114	C	716878.64	659513.64	8.00	210.00	5.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
115	C	716895.44	659478.50	8.00	205.00	5.00	0.00	0.40			
116	C	716906.79	659441.86	8.00	195.00	5.00	0.00	0.40			
117	C	716912.51	659404.39	8.00	183.00	5.00	0.00	0.40			
118	C	716912.94	659366.25	8.00	173.00	5.00	0.00	0.40			
119	C	716907.98	659331.59	8.00	169.00	5.00	0.00	0.40			
120	C	716900.29	659297.85	8.00	168.00	5.00	0.00	0.40			
121	C	716890.82	659261.38	8.00	165.00	5.00	0.00	0.40			
122	C	716884.86	659229.98	8.00	164.00	5.00	0.00	0.40			
123	C	716876.12	659196.42	8.00	171.00	5.00	0.00	0.40			
124	C	716857.53	659160.13	8.00	137.00	5.00	0.00	0.40			
125	C	716833.31	659130.29	8.00	146.00	5.00	0.00	0.40			
126	C	716818.76	659102.29	8.00	145.00	5.00	0.00	0.40			
127	C	716802.28	659077.67	8.00	152.00	5.00	0.00	0.40			
128	A	716538.45	659752.00	6.00	116.00	5.00	0.00	0.40			
129	A	716502.92	659739.65	6.00	104.00	5.00	0.00	0.40			
130	A	716473.06	659741.58	6.00	287.00	5.00	0.00	0.40			
131	A	716445.11	659753.88	6.00	206.00	5.00	0.00	0.40			
132	A	716424.00	659828.68	6.00	207.00	5.00	0.00	0.40			
133	A	716438.66	659791.19	6.00	195.00	5.00	0.00	0.40			
134	A	716491.84	659551.69	6.00	177.00	5.00	0.00	0.40			
135	A	716557.72	659503.70	6.00	257.00	5.00	0.00	0.40			
136	A	716554.96	659486.45	6.00	81.00	5.00	0.00	0.40			

Horizontal Illuminance (lux)

Grid 1



Results

Eav	5.09
Emin	1.00
Emax	19.96
Emin/Emax	0.05
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 1

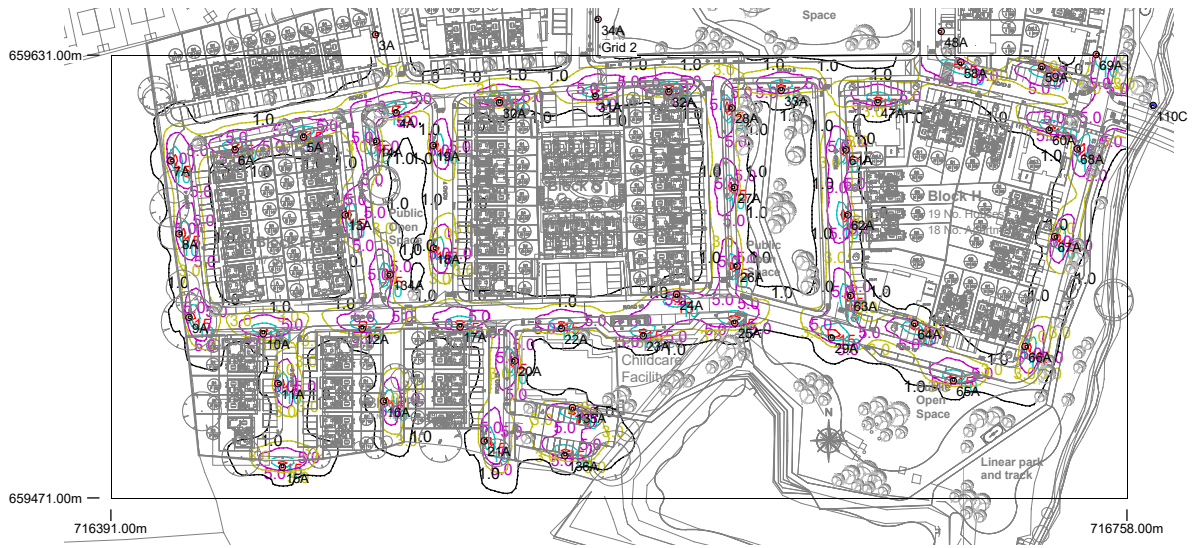


Results

Eav	5.09
Emin	1.00
Emax	19.96
Emin/Emax	0.05
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 2

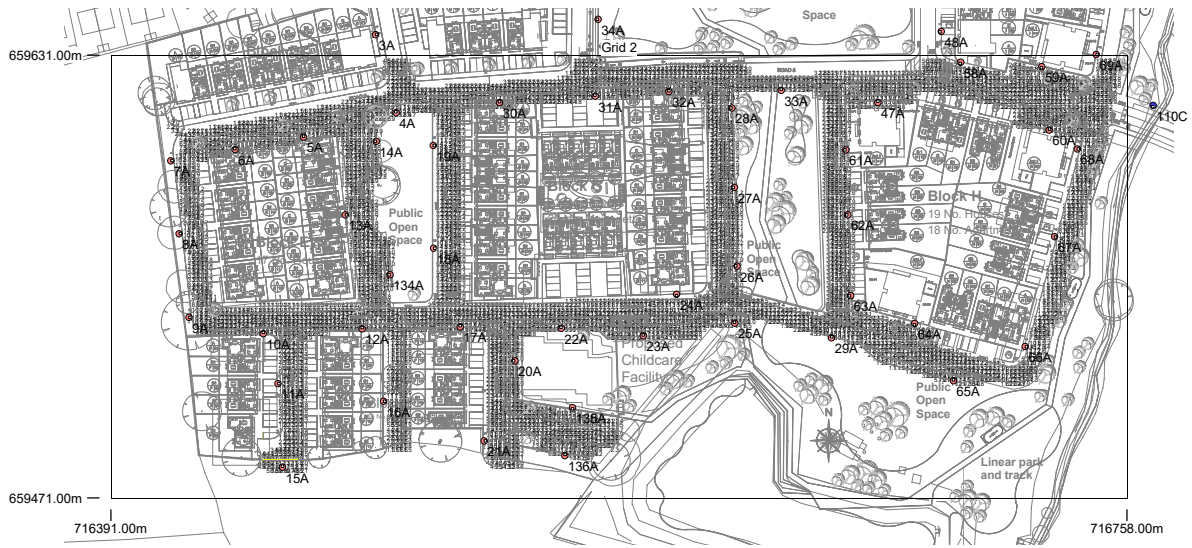


Results

Eav	5.29
Emin	1.06
Emax	18.55
Emin/Emax	0.06
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 2

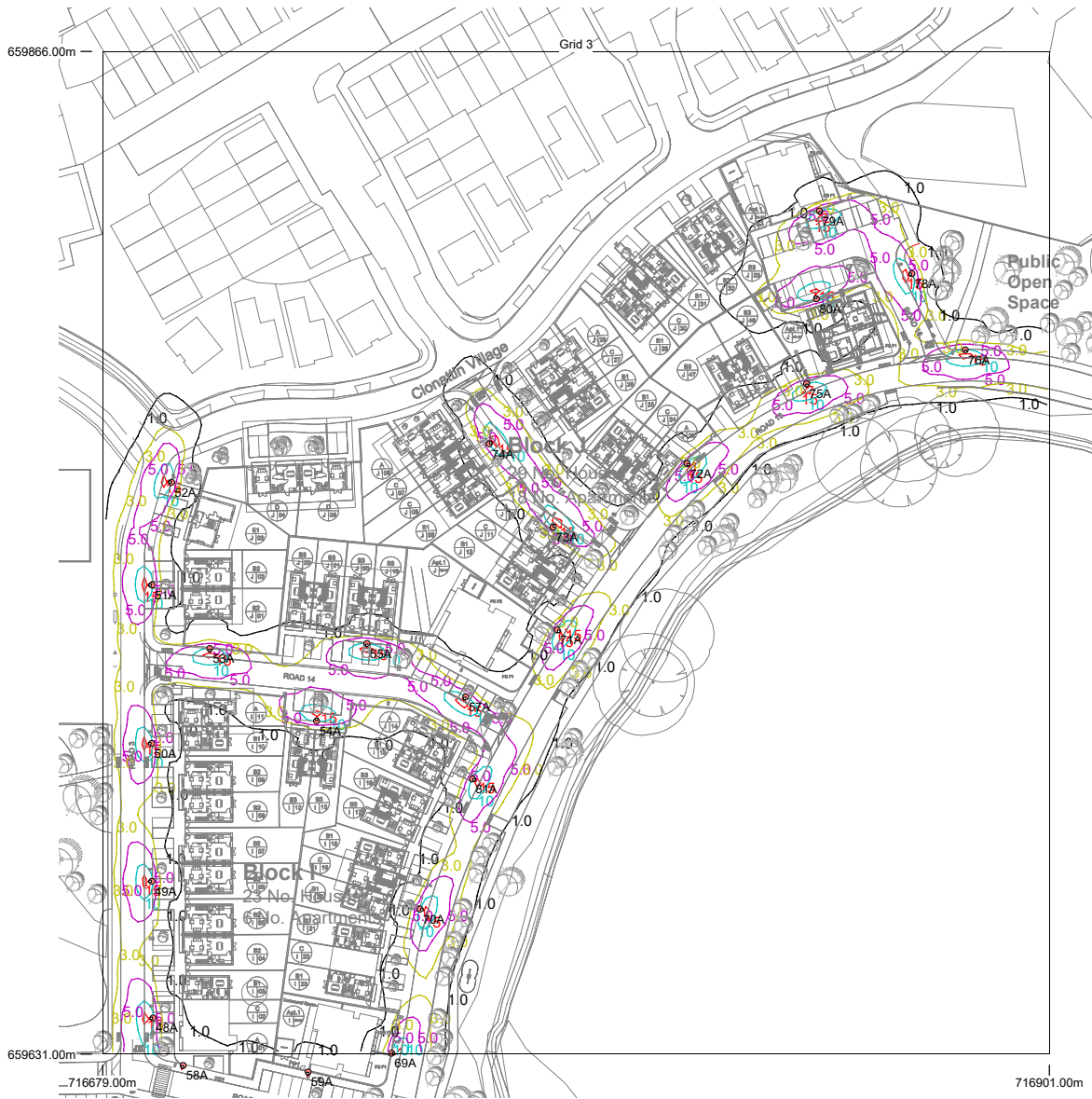


Results

Eav	5.29
Emin	1.06
Emax	18.55
Emin/Emax	0.06
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 3



Results

Eav	5.37
Emin	1.14
Emax	16.95
Emin/Emax	0.07
Emin/Eav	0.21

Horizontal Illuminance (lux)

Grid 3



Results

Eav	5.37
Emin	1.14
Emax	16.95
Emin/Emax	0.07
Emin/Eav	0.21

Horizontal Illuminance (lux)

Grid 4



Results

Eav	5.52
Emin	1.09
Emax	22.46
Emin/Emax	0.05
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 4

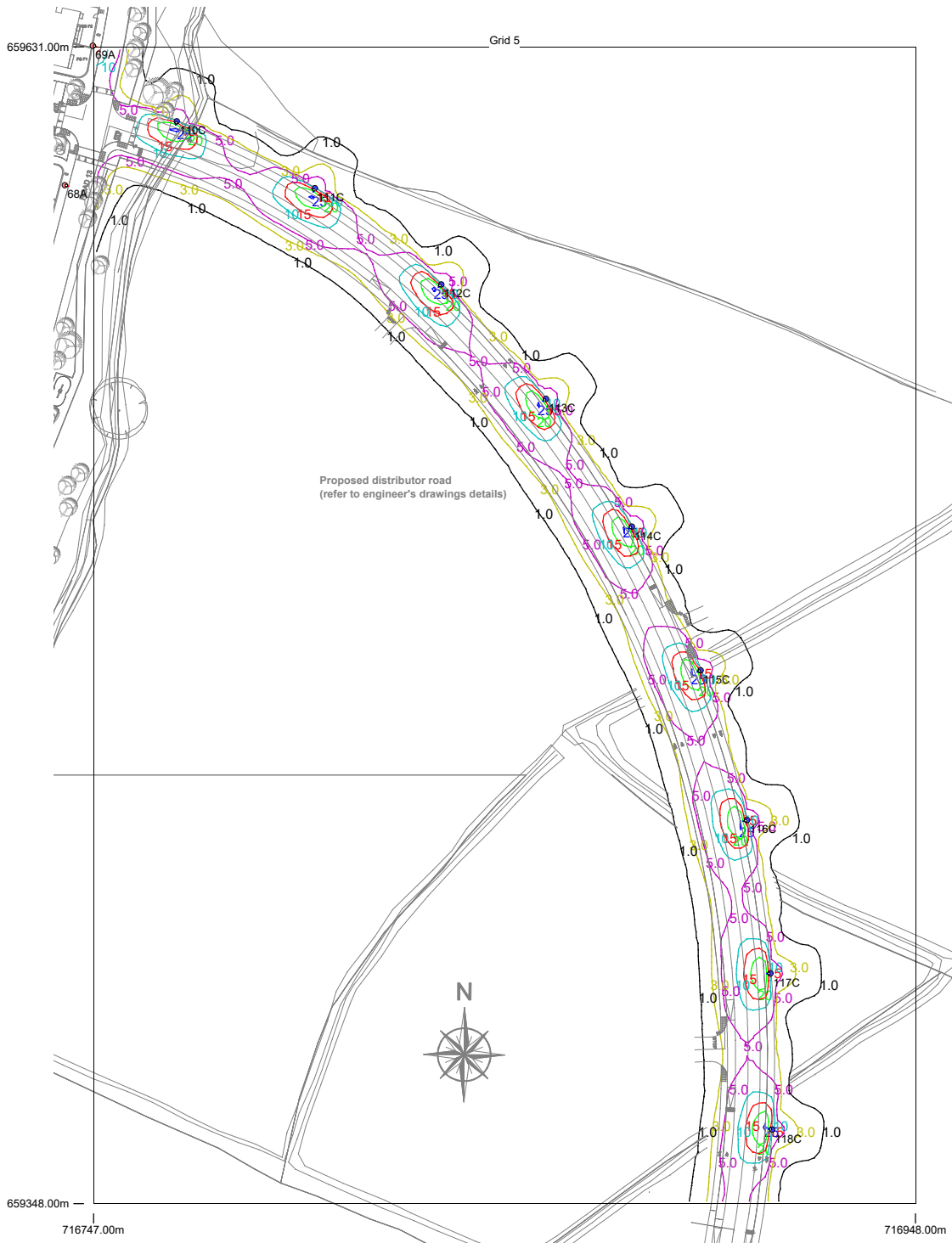


Results

Eav	5.52
Emin	1.09
E _{max}	22.46
E _{min} /E _{max}	0.05
E _{min} /E _{av}	0.20

Horizontal Illuminance (lux)

Grid 5

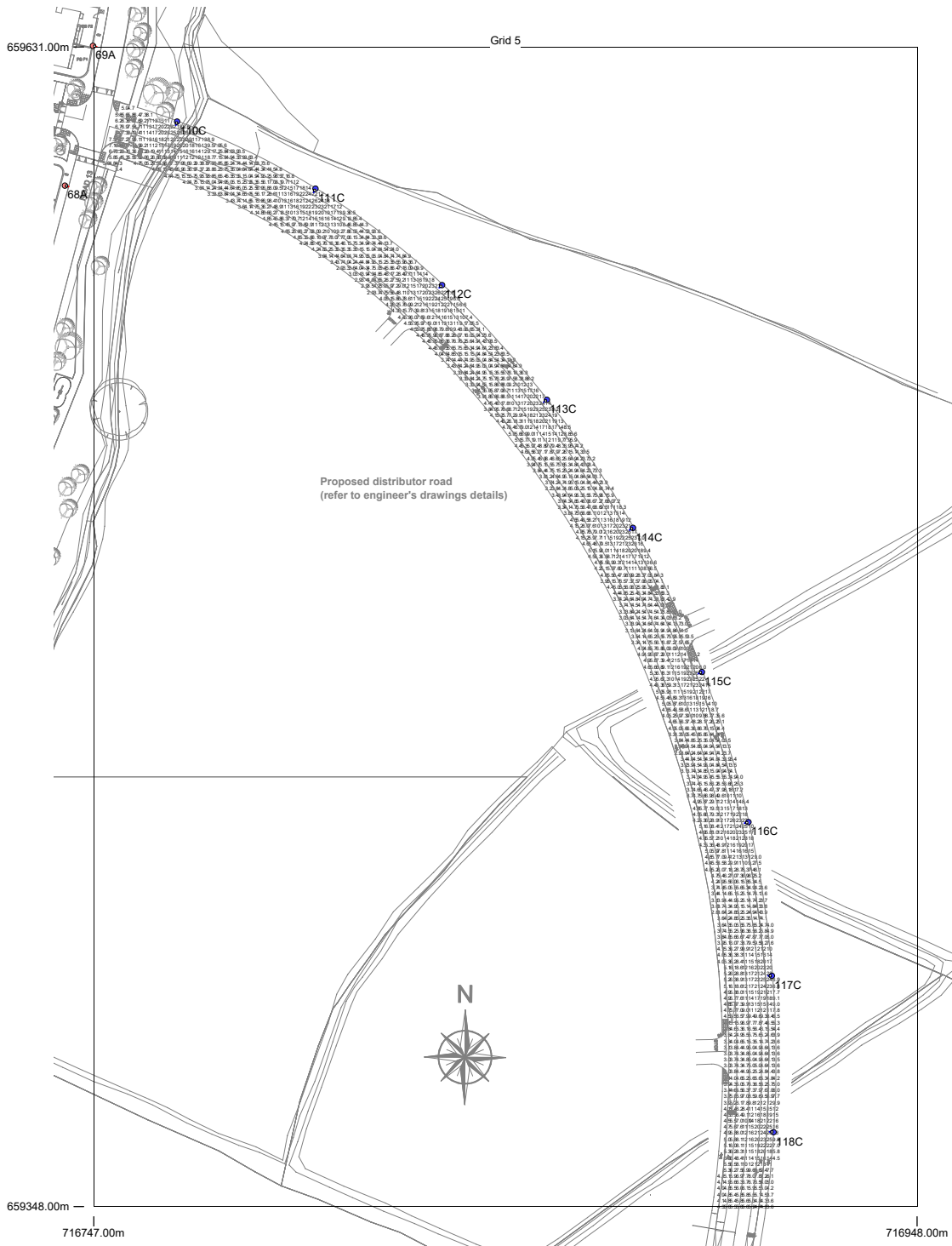


Results

Eav	8.33
Emin	2.85
E _{max}	26.10
E _{min} /E _{max}	0.11
E _{min} /E _{av}	0.34

Horizontal Illuminance (lux)

Grid 5



Results

Eav	8.33
Emin	2.85
Emax	26.10
Emin/Emax	0.11
Emin/Eav	0.34

Horizontal Illuminance (lux)

Grid 6

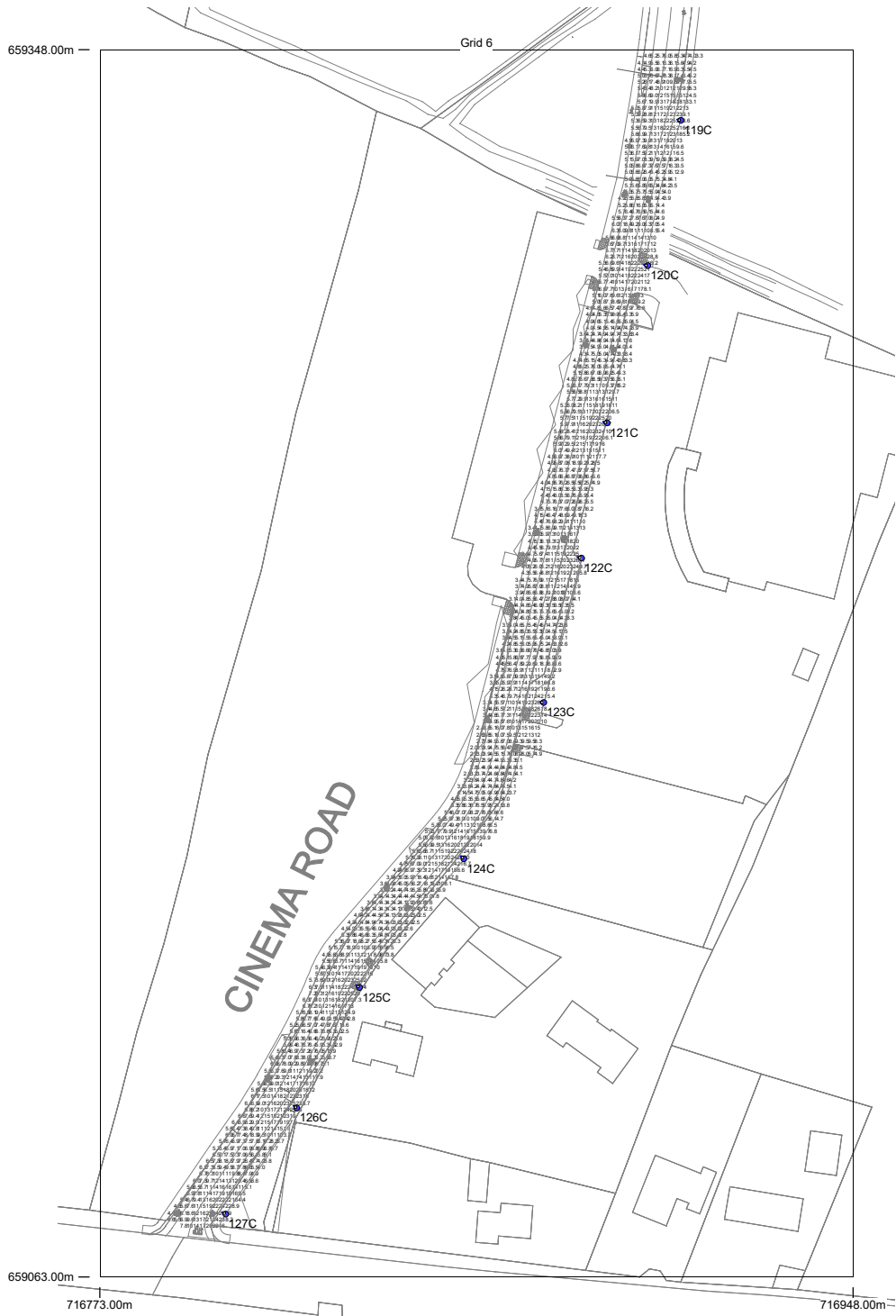


Results

Eav	9.01
Emin	2.01
E _{max}	26.12
E _{min} /E _{max}	0.08
E _{min} /E _{av}	0.22

Horizontal Illuminance (lux)

Grid 6



Results

Eav	9.01
Emin	2.01
Emax	26.12
Emin/Emax	0.08
Emin/Eav	0.22