

**DATE:** 4 April 2022  
**DESIGNER:** Graham Sheehan  
**PROJECT No:** SES 16319 Rev E  
**PROJECT NAME:** Oldtown Phase 5 Liffey-Gannon



Designed in accordance with BS5489-1:2013 Class P4 with S/P Ratio 1.64. Millers Ave see SES 00118.

Rev A: Column relocation as requested by Doyle-OThroithigh  
Rev B: Latest layout used redesigned to suit.  
Rev C: Latest layout used redesigned to suit.  
Rev D: Slight adjustments to suit Landscaping etc.  
Rev E: Latest layout used redesigned to suit.

## **Outdoor Lighting Report**

**PREPARED BY:** Sabre Electrical Services Ltd.  
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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	716004.00	748363.00	229.00	344.00	1.50	1.50
2	Grid 2	716136.00	748685.00	318.00	274.00	1.50	1.50

### Luminaires

#### Luminaire A Data



Supplier	C U Phosco
Type	P852-12-P4-NW-CB0450-18W
Lamp(s)	740C NW
Lamp Flux (klm)	2.28
File Name	P852-12-P4-NW-CB0450-18W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	760.6, 161.3, 0.8
No. in Project	89

#### 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	0.83
Imax70,80,90(cd/klm)	896.4, 62.1, 1.9
No. in Project	6

#### Luminaire D Data



Supplier	C U Phosco
Type	P851-12-M-WID-G6-NW-D0650-95W
Lamp(s)	740P NW
Lamp Flux (klm)	9.35
File Name	P851-12-M-WID-G6-NW-D0650-95W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	325.4, 87.6, 0.0
No. in Project	8

#### Luminaire E Data



Supplier	C U Phosco
Type	P862-32-F3-NW-F0650-65W
Lamp(s)	740P NW
Lamp Flux (klm)	7.46
File Name	P862-32-F3-NW-F0650-65W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	763.6, 374.6, 0.0
No. in Project	9

### Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	716232.80	748483.48	6.00	63.00	5.00	0.00	0.40			
2	A	716222.86	748505.72	6.00	243.00	5.00	0.00	0.40			
3	A	716195.89	748506.63	6.00	58.00	5.00	0.00	0.40			
4	A	716185.45	748494.23	6.00	162.00	5.00	0.00	0.40			
5	A	716172.63	748467.68	6.00	153.00	5.00	0.00	0.40			
6	A	716158.38	748450.10	6.00	21.00	5.00	0.00	0.40			
7	A	716184.79	748431.31	6.00	67.00	5.00	0.00	0.40			
8	A	716206.77	748424.72	6.00	71.00	5.00	0.00	0.40			
9	A	716218.78	748439.93	6.00	330.00	5.00	0.00	0.40			

**Layout Continued**

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
10	A	716234.76	748472.21	6.00	334.00	5.00	0.00	0.40			
11	A	716180.80	748414.75	6.00	332.00	5.00	0.00	0.40			
12	A	716166.99	748412.49	6.00	247.00	5.00	0.00	0.40			
13	A	716188.12	748398.11	6.00	160.00	5.00	0.00	0.40			
14	A	716167.97	748382.66	6.00	339.00	5.00	0.00	0.40			
15	A	716159.24	748362.12	6.00	340.00	5.00	0.00	0.40			
16	B	716188.52	748379.28	6.00	70.00	5.00	0.00	0.40			
17	A	716173.50	748337.96	6.00	248.00	5.00	0.00	0.40			
18	A	716144.65	748340.22	6.00	344.00	5.00	0.00	0.40			
19	A	716179.16	748448.14	6.00	247.00	5.00	0.00	0.40			
20	A	716190.26	748530.07	6.00	165.00	5.00	0.00	0.40			
21	A	716200.94	748561.44	6.00	161.00	5.00	0.00	0.40			
22	A	716223.79	748569.98	6.00	74.00	5.00	0.00	0.40			
23	A	716252.30	748559.56	6.00	59.00	5.00	0.00	0.40			
24	A	716268.84	748544.83	6.00	47.00	5.00	0.00	0.40			
25	A	716246.59	748503.12	6.00	327.00	5.00	0.00	0.40			
26	A	716263.38	748527.84	6.00	314.00	5.00	0.00	0.40			
27	D	716200.40	748308.59	10.00	148.00	5.00	0.00	0.40			
28	D	716185.78	748332.31	10.00	335.00	5.00	0.00	0.40			
29	D	716214.52	748341.36	10.00	161.00	5.00	0.00	0.40			
30	D	716203.07	748372.55	10.00	335.00	5.00	0.00	0.40			
31	D	716230.52	748378.86	10.00	148.00	5.00	0.00	0.40			
32	D	716220.31	748404.12	10.00	337.00	5.00	0.00	0.40			
33	D	716243.87	748416.95	10.00	148.00	5.00	0.00	0.40			
34	D	716235.91	748443.98	10.00	331.00	5.00	0.00	0.40			
35	E	716260.62	748456.55	8.00	166.00	5.00	0.00	0.40			
36	A	716293.01	748560.74	6.00	308.00	5.00	0.00	0.40			
37	E	716274.67	748483.47	8.00	159.00	5.00	0.00	0.40			
38	E	716291.73	748508.92	8.00	142.00	5.00	0.00	0.40			
39	E	716312.84	748532.60	8.00	135.00	5.00	0.00	0.40			
40	E	716335.20	748552.09	8.00	134.00	5.00	0.00	0.40			
41	E	716361.92	748570.87	8.00	125.00	5.00	0.00	0.40			
42	E	716390.57	748585.14	8.00	111.00	5.00	0.00	0.40			
43	E	716414.26	748595.52	8.00	115.00	5.00	0.00	0.40			
44	E	716450.26	748614.45	8.00	122.00	5.00	0.00	0.40			
45	A	716319.18	748582.63	6.00	309.00	5.00	0.00	0.40			

**Layout Continued**

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
46	A	716317.95	748592.16	6.00	38.00	5.00	0.00	0.40			
47	A	716311.88	748618.45	6.00	220.00	5.00	0.00	0.40			
48	A	716198.05	748581.56	6.00	354.00	5.00	0.00	0.40			
49	A	716211.69	748617.32	6.00	167.00	5.00	0.00	0.40			
50	A	716225.11	748639.65	6.00	163.00	5.00	0.00	0.40			
51	A	716287.27	748625.07	6.00	58.00	5.00	0.00	0.40			
52	A	716238.80	748644.51	6.00	76.00	5.00	0.00	0.40			
53	A	716263.01	748637.49	6.00	66.00	5.00	0.00	0.40			
54	A	716315.61	748632.24	6.00	126.00	5.00	0.00	0.40			
55	A	716355.67	748659.64	6.00	118.00	5.00	0.00	0.40			
56	A	716380.64	748680.24	6.00	294.00	5.00	0.00	0.40			
57	A	716427.73	748632.09	6.00	19.00	5.00	0.00	0.40			
58	A	716418.74	748652.25	6.00	25.00	5.00	0.00	0.40			
59	A	716411.35	748697.29	6.00	152.00	5.00	0.00	0.40			
60	A	716405.73	748671.21	6.00	59.00	5.00	0.00	0.40			
61	A	716421.16	748727.86	6.00	149.00	5.00	0.00	0.40			
62	A	716390.81	748701.79	6.00	217.00	5.00	0.00	0.40			
63	A	716366.17	748712.77	6.00	37.00	5.00	0.00	0.40			
64	A	716350.68	748736.51	6.00	38.00	5.00	0.00	0.40			
65	A	716330.18	748663.64	6.00	214.00	5.00	0.00	0.40			
66	A	716314.59	748683.17	6.00	214.00	5.00	0.00	0.40			
67	A	716292.35	748695.42	6.00	281.00	5.00	0.00	0.40			
68	A	716257.07	748696.94	6.00	255.00	5.00	0.00	0.40			
69	A	716220.13	748672.13	6.00	1.00	5.00	0.00	0.40			
70	A	716225.72	748703.62	6.00	345.00	5.00	0.00	0.40			
71	A	716244.20	748719.28	6.00	170.00	5.00	0.00	0.40			
72	A	716244.09	748776.54	6.00	352.00	5.00	0.00	0.40			
73	A	716252.76	748805.52	6.00	352.00	5.00	0.00	0.40			
74	A	716272.36	748792.91	6.00	71.00	5.00	0.00	0.40			
75	A	716303.76	748785.08	6.00	78.00	5.00	0.00	0.40			
76	A	716312.54	748713.23	6.00	159.00	5.00	0.00	0.40			
77	A	716318.54	748736.17	6.00	162.00	5.00	0.00	0.40			
78	A	716325.93	748759.17	6.00	160.00	5.00	0.00	0.40			
79	A	716324.85	748777.77	6.00	36.00	5.00	0.00	0.40			
80	A	716327.02	748808.06	6.00	343.00	5.00	0.00	0.40			
81	A	716313.12	748863.39	6.00	62.00	5.00	0.00	0.40			

**Layout Continued**

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
82	A	716343.39	748845.43	6.00	53.00	5.00	0.00	0.40			
83	A	716385.37	748807.12	6.00	36.00	5.00	0.00	0.40			
84	A	716402.45	748782.25	6.00	33.00	5.00	0.00	0.40			
85	A	716417.66	748754.98	6.00	28.00	5.00	0.00	0.40			
86	A	716432.14	748741.20	6.00	204.00	5.00	0.00	0.40			
87	A	716448.78	748723.28	6.00	243.00	5.00	0.00	0.40			
88	A	716290.88	748873.50	6.00	71.00	5.00	0.00	0.40			
89	A	716270.13	748883.71	6.00	321.00	5.00	0.00	0.40			
90	A	716261.16	748850.81	6.00	344.00	5.00	0.00	0.40			
91	A	716270.80	748827.52	6.00	162.00	5.00	0.00	0.40			
92	A	716326.43	748849.57	6.00	61.00	5.00	0.00	0.40			
93	A	716363.06	748829.35	6.00	60.00	5.00	0.00	0.40			
94	A	716312.95	748799.30	6.00	255.00	5.00	0.00	0.40			
95	A	716283.30	748805.12	6.00	254.00	5.00	0.00	0.40			
96	A	716234.19	748743.73	6.00	345.00	5.00	0.00	0.40			
97	A	716338.41	748757.83	6.00	34.00	5.00	0.00	0.40			
98	A	716341.05	748816.98	6.00	126.00	5.00	0.00	0.40			
99	A	716337.25	748832.90	6.00	307.00	5.00	0.00	0.40			
100	B	716334.21	748739.08	5.00	96.00	0.00	0.00	0.40			
101	A	716280.89	748870.93	6.00	165.00	5.00	0.00	0.40			
102	A	716163.66	748399.08	6.00	66.00	5.00	0.00	0.40			
103	B	716407.58	748716.30	5.00	327.00	5.00	0.00	0.40			
104	A	716310.56	748856.01	6.00	140.00	5.00	0.00	0.40			
105	A	716292.68	748821.69	6.00	347.00	5.00	0.00	0.40			
106	B	716311.02	748844.48	5.00	333.00	5.00	0.00	0.40			
107	B	716422.44	748717.17	5.00	154.00	5.00	0.00	0.40			
108	A	716211.57	748645.56	6.00	333.00	5.00	0.00	0.40			
109	A	716305.46	748814.79	6.00	162.00	5.00	0.00	0.40			
110	B	716314.63	748827.68	5.00	340.00	5.00	0.00	0.40			
111	A	716368.64	748600.46	6.00	294.00	5.00	0.00	0.40			
112	A	716396.83	748613.10	6.00	309.00	5.00	0.00	0.40			

## Horizontal Illuminance (lux)

Grid 1



### Results

Eav	5.37
Emin	1.05
Emax	15.92
Emin/Emax	0.07
Emin/Eav	0.20

# Horizontal Illuminance (lux)

Grid 1



## Results

Eav	5.37
Emin	1.05
Emax	15.92
Emin/Emax	0.07
Emin/Eav	0.20

# Horizontal Illuminance (lux)

Grid 2



## Results

Eav	5.49
Emin	1.07
Emax	18.53
Emin/Emax	0.06
Emin/Eav	0.20



## Horizontal Illuminance (lux)

Grid 2



### Results

Eav	5.49
Emin	1.07
Emax	18.53
Emin/Emax	0.06
Emin/Eav	0.20