

DATE: 20 November 2023
DESIGNER: Umar Shah
PROJECT No: 100009506-PCL-LCP-4-P00-1-V0
PROJECT NAME: DBC Orchard Theatre

**PROJECT
CENTRE**

Dartford DBC Orchard Theatre Calc
Target Lighting Class
Loading, unloading turning vehicles (Grid 3)
Eav (min): 50lux , Emin/Eav (min) - 0.40
Front and Back Entrance of Theatre (Grid 1,2) C2
Eav (min): 20lux , Emin/Eav (min) - 0.40
Maintenance factor (A) 0.83 using P863 325mA: 72 months, <=6m, E3/E4
Maintenance factor (B) 0.79 using P863 mA750: 72 months, <=6m, E3/E4

Dartford Orchard Theatre Lighting

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: Front Theatre Entr...	554090.37	174158.56	64.58	118.25	1.50	1.50
2	Grid 2: Back Theatre	554035.69	174138.29	46.59	96.02	1.50	1.50
3	Grid 3: Loading and unload...	554076.53	174104.55	66.02	59.96	1.50	1.50

Luminaires



Luminaire A Data

Supplier	C U Phosco
Type	P863-128-P4-740-W5-325-43W
Lamp(s)	740SS
Lamp Flux (klm)	6.35
File Name	P863-128-P4-740-W5-325-43W.ies
Maintenance Factor	0.83
Lum. Int. Class	G2
No. in Project	8



Luminaire B Data

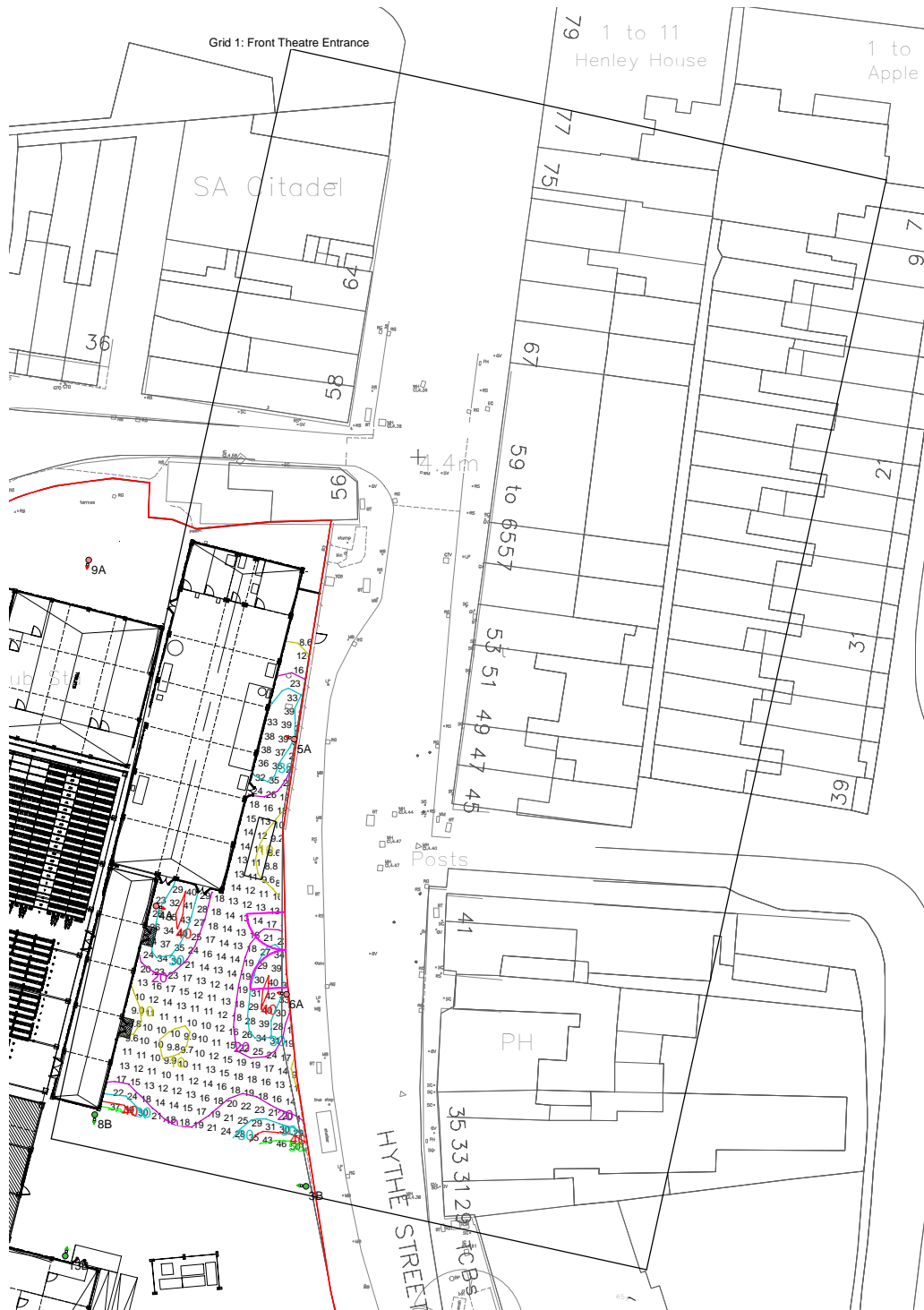
Supplier	C U Phosco
Type	P863-128-F2-740-W5-750-95W
Lamp(s)	740SS
Lamp Flux (klm)	14.53
File Name	P863-128-F2-740-W5-750-95W.ies
Maintenance Factor	0.79
Lum. Int. Class	G4
No. in Project	5

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
2	B	554114.61	174136.15	6.00	89.00	0.00	0.00	0.50			
3	B	554117.38	174153.54	6.00	173.00	0.00	0.00	0.50			
4	A	554101.50	174183.24	6.00	341.00	0.00	0.00	0.50			
5	A	554116.13	174200.91	6.00	160.00	0.00	0.00	0.50			
6	A	554115.30	174173.88	6.00	169.00	0.00	0.00	0.50			
8	B	554094.99	174161.11	6.00	265.00	0.00	0.00	0.50			
9	A	554094.34	174219.90	6.00	258.00	0.00	0.00	0.50			
10	A	554066.22	174169.32	6.00	343.00	0.00	0.00	0.50			
11	A	554071.36	174191.03	6.00	347.00	0.00	0.00	0.50			
13	B	554091.87	174146.14	6.00	78.00	0.00	0.00	0.50			
13	A	554060.31	174146.54	6.00	348.00	0.00	0.00	0.50			
12	B	554100.56	174134.73	6.00	98.00	0.00	0.00	0.50			
13	A	554076.92	174211.68	6.00	357.00	0.00	0.00	0.50			

Horizontal Illuminance (lux)

Grid 1: Front Theatre Entrance

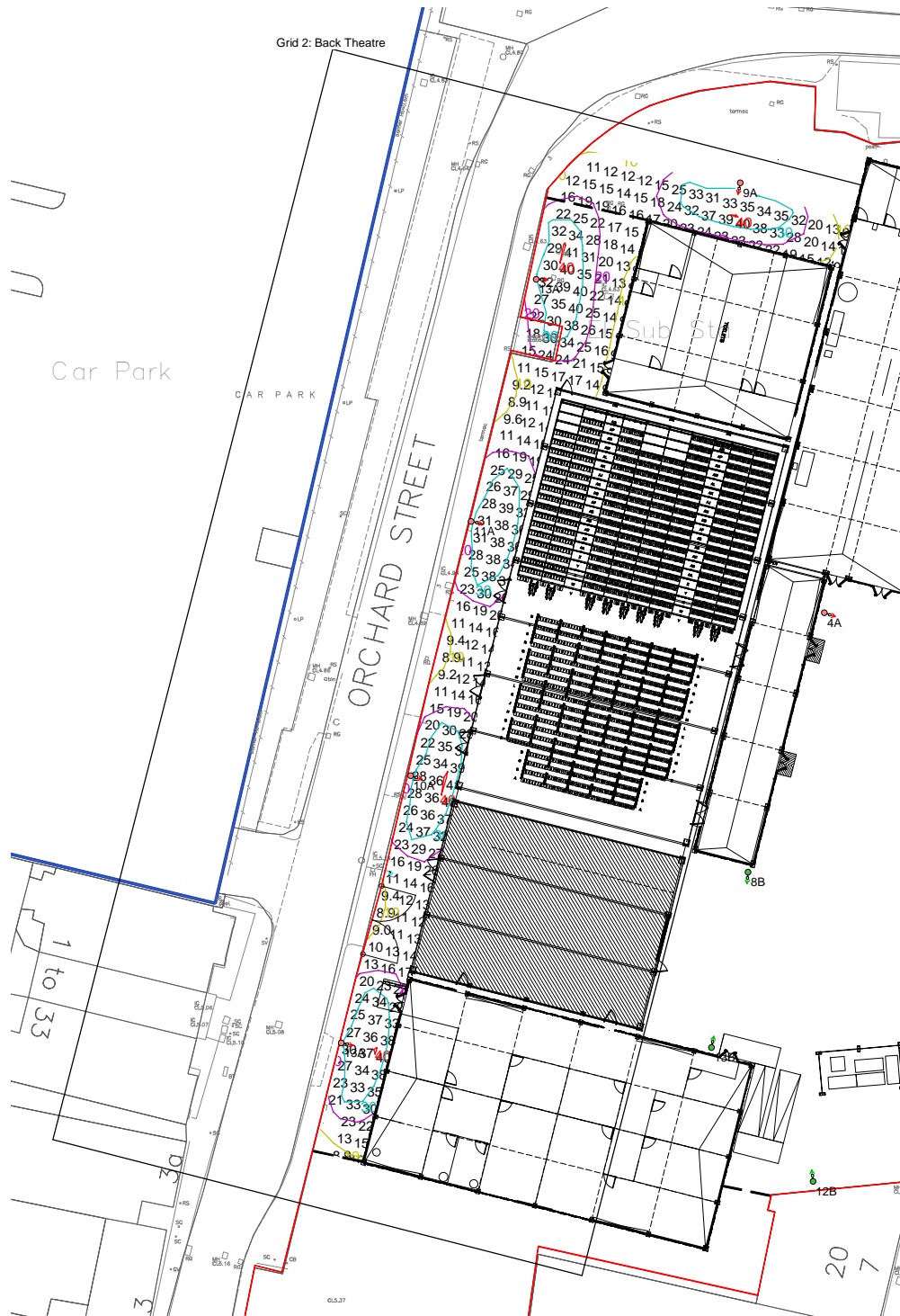


Results

Eav	20.11
Emin	8.47
Emax	49.61
Emin/Emax	0.17
Emin/Eav	0.42

Horizontal Illuminance (lux)

Grid 2: Back Theatre

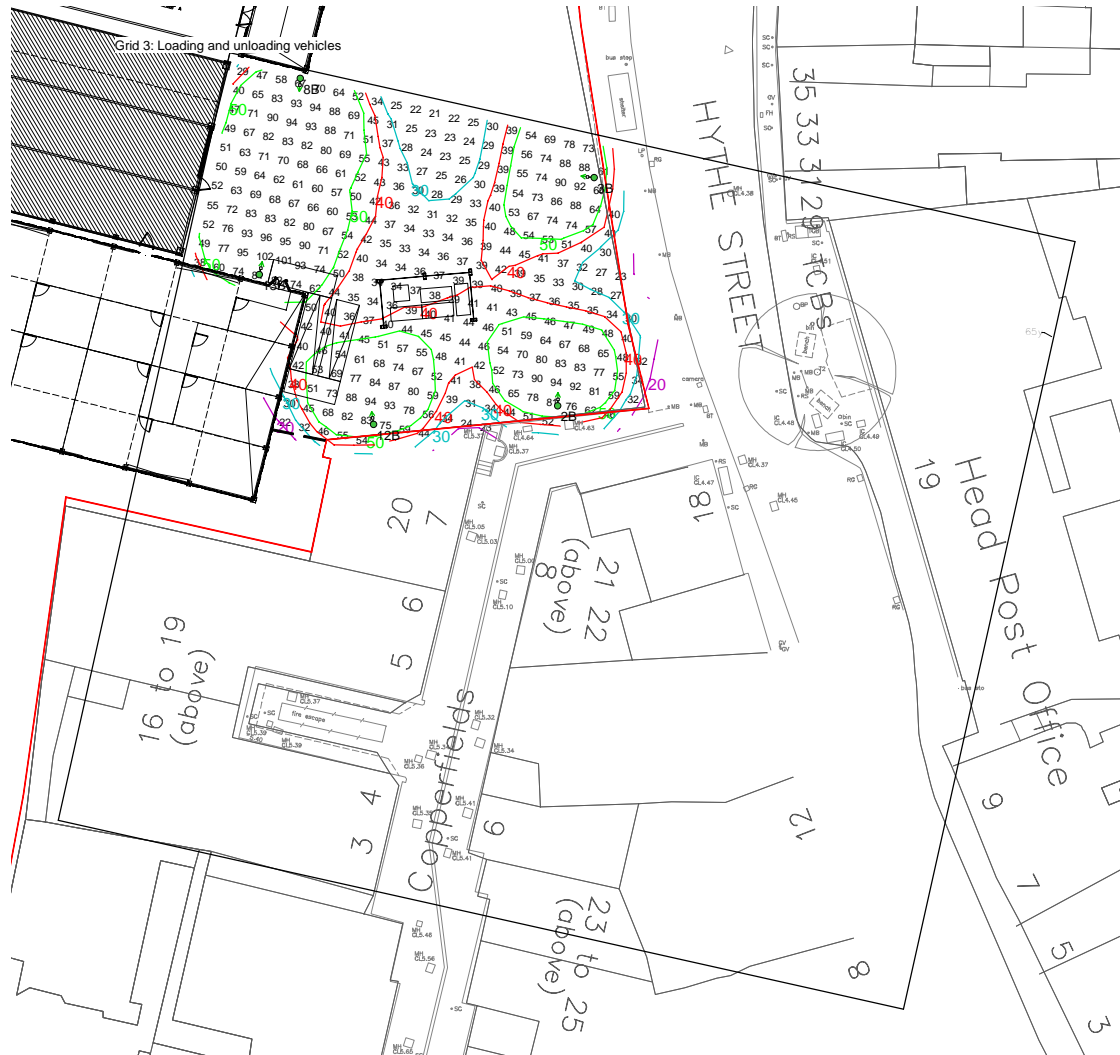


Results

Eav	22.39
Emin	8.86
Emax	40.67
Emin/Emax	0.22
Emin/Eav	0.40

Horizontal Illuminance (lux)

Grid 3: Loading and unloading vehicles



Results

Eav	53.29
Emin	21.07
Emax	101.90
Emin/Emax	0.21
Emin/Eav	0.40