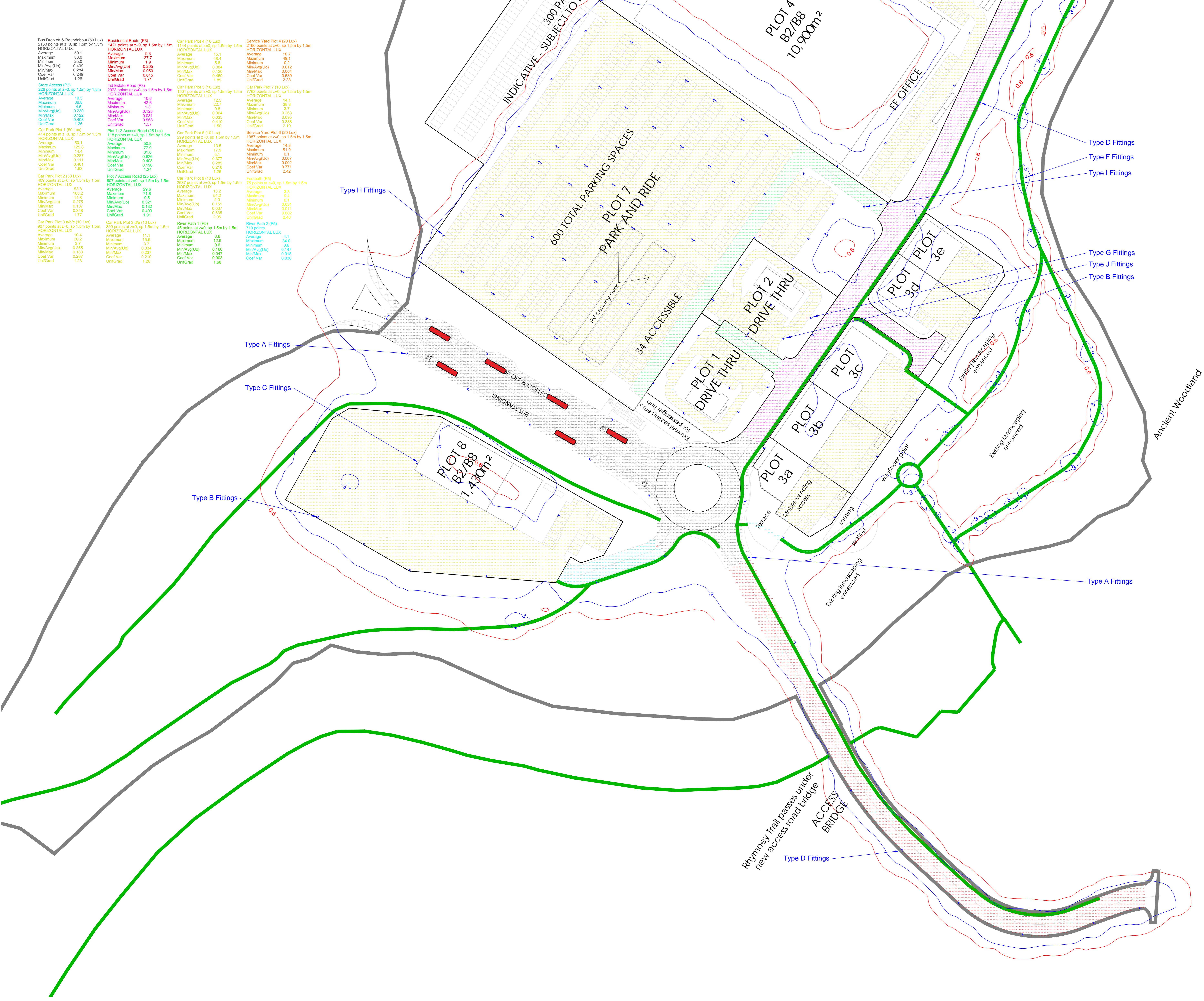


Bus Drop off & Roundabout (50 Lux) 2150 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 50.1 Maximum 88.0 Minimum 25.0 Min/Avg(Uo) 0.489 Min/Max 0.284 Coef Var 0.269 Uni/Grad 1.28	Residential Route (P3) 1423 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 9.3 Maximum 37.7 Minimum 1.9 Min/Avg(Uo) 0.295 Min/Max 0.050 Coef Var 0.815 Uni/Grad 1.71	Car Park Plot 4 (10 Lux) 1144 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 15.1 Maximum 48.4 Minimum 5.8 Min/Avg(Uo) 0.384 Min/Max 0.120 Coef Var 0.489 Uni/Grad 1.85	Service Yard Plot 4 (20 Lux) 2160 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 16.7 Maximum 49.1 Minimum 0.2 Min/Avg(Uo) 0.012 Min/Max 0.004 Coef Var 0.539 Uni/Grad 2.38
Store Access (P3) 205 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 19.5 Maximum 36.8 Minimum 4.5 Min/Avg(Uo) 0.230 Min/Max 0.122 Coef Var 0.408 Uni/Grad 1.26	Ind Estate Road (P3) 2913 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 10.6 Maximum 42.6 Minimum 1.3 Min/Avg(Uo) 0.123 Min/Max 0.031 Coef Var 0.568 Uni/Grad 1.57	Car Park Plot 5 (10 Lux) 1501 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 12.5 Maximum 32.7 Minimum 0.8 Min/Avg(Uo) 0.084 Min/Max 0.035 Coef Var 0.410 Uni/Grad 1.55	Car Park Plot 7 (10 Lux) 7763 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 14.1 Maximum 38.1 Minimum 3.7 Min/Avg(Uo) 0.293 Min/Max 0.095 Coef Var 0.389 Uni/Grad 2.19
Car Park Plot 1 (50 Lux) 414 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 50.1 Maximum 129.8 Minimum 14.4 Min/Avg(Uo) 0.287 Min/Max 0.111 Coef Var 0.461 Uni/Grad 1.63	Plot 1+2 Access Road (25 Lux) 118 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 50.8 Maximum 77.9 Minimum 31.5 Min/Avg(Uo) 0.806 Min/Max 0.408 Coef Var 0.196 Uni/Grad 1.21	Car Park Plot 6 (10 Lux) 290 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 13.5 Maximum 17.9 Minimum 5.1 Min/Avg(Uo) 0.377 Min/Max 0.285 Coef Var 0.216 Uni/Grad 1.26	Service Yard Plot 6 (20 Lux) 1897 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 14.8 Maximum 51.9 Minimum 0.1 Min/Avg(Uo) 0.007 Min/Max 0.002 Coef Var 0.771 Uni/Grad 2.42
Car Park Plot 2 (50 Lux) 400 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 53.8 Maximum 108.2 Minimum 14.6 Min/Avg(Uo) 0.275 Min/Max 0.107 Coef Var 0.348 Uni/Grad 1.77	Plot 7 Access Road (25 Lux) 607 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 29.6 Maximum 71.8 Minimum 9.5 Min/Avg(Uo) 0.321 Min/Max 0.132 Coef Var 0.403 Uni/Grad 1.91	Car Park Plot 8 (10 Lux) 2637 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 13.2 Maximum 54.2 Minimum 2.0 Min/Avg(Uo) 0.151 Min/Max 0.037 Coef Var 0.635 Uni/Grad 2.05	Footpath (P5) 73 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 3.3 Maximum 9.4 Minimum 0.1 Min/Avg(Uo) 0.031 Min/Max 0.014 Coef Var 0.771 Uni/Grad 2.40
Car Park Plot 3 (50 Lux) 907 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 10.4 Maximum 20.2 Minimum 3.7 Min/Avg(Uo) 0.355 Min/Max 0.183 Coef Var 0.267 Uni/Grad 1.23	Plot 3 Access Road (25 Lux) 391 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 11.1 Maximum 15.0 Minimum 3.7 Min/Avg(Uo) 0.334 Min/Max 0.221 Coef Var 0.210 Uni/Grad 1.20	Car Park Plot 9 (10 Lux) 45 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 3.6 Maximum 12.9 Minimum 0.6 Min/Avg(Uo) 0.166 Min/Max 0.047 Coef Var 0.903 Uni/Grad 1.68	River Path 2 (P5) 710 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 4.1 Maximum 34.0 Minimum 0.147 Min/Avg(Uo) 0.016 Min/Max 0.002 Coef Var 0.830
Car Park Plot 3a (10 Lux) 907 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 10.4 Maximum 20.2 Minimum 3.7 Min/Avg(Uo) 0.355 Min/Max 0.183 Coef Var 0.267 Uni/Grad 1.23	Car Park Plot 3b (10 Lux) 391 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 11.1 Maximum 15.0 Minimum 3.7 Min/Avg(Uo) 0.334 Min/Max 0.221 Coef Var 0.210 Uni/Grad 1.20	River Path 1 (P5) 45 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 3.6 Maximum 12.9 Minimum 0.6 Min/Avg(Uo) 0.166 Min/Max 0.047 Coef Var 0.903 Uni/Grad 1.68	River Path 2 (P5) 710 points at z=0, sp 1.5m by 1.5m HORIZONTAL LUX Average 4.1 Maximum 34.0 Minimum 0.147 Min/Avg(Uo) 0.016 Min/Max 0.002 Coef Var 0.830



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Rev	By	Date	Description	CHK
1	CA	14.04.22	Amended with updated lighting layout.	PRH
2	PRH	18.09.22	Amended with updated lighting layout.	PRH

- All luminaires to be ordered with a lumen output 20% greater than shown below. All luminaires complete with 20' from 2000 Lux, 50' from 100 and 10' per service line.
- H** Luma Gen2 Micro BGP702 3000K DW50 20 LED 5.04m Twin Luminaires
1 lamp(s) per luminaire, 5000 initial lumens per lamp
Maintenance Factor = 0.70, watts per luminaire = 31
90 degree beam angle
Outreach from mounting area to photometric center = 600 mm
mounting height = 6 m
number locations = 34, number luminaires = 68
- H** Luma Gen2 Micro BGP702 3000K DW50 20 LED 5.04m Single Luminaires
1 lamp(s) per luminaire, 5000 initial lumens per lamp
Maintenance Factor = 0.70, watts per luminaire = 31
Outreach from mounting area to photometric center = 400 mm
mounting height = 6 m
number locations = 12, number luminaires = 12
- G** Luma Gen2 Mini BGP703 3000K DW40 7.04m
1 lamp(s) per luminaire, 17000 initial lumens per lamp
Maintenance Factor = 0.70, watts per luminaire = 141
Outreach from mounting area to photometric center = 400 mm
mounting height = 6 m
number locations = 6, number luminaires = 6
- F** Luma Gen2 Micro BGP702 3000K DW10 BL2 1.24m
1 lamp(s) per luminaire, 1200 initial lumens per lamp
Maintenance Factor = 0.80, watts per luminaire = 51
Outreach from mounting area to photometric center = 400 mm
mounting height = 5 m
number locations = 30, number luminaires = 30
- E** Luma Gen2 Medium BGP704 3000K DW50 80 LED 20.6m
1 lamp(s) per luminaire, 20000 initial lumens per lamp
Maintenance Factor = 0.80, watts per luminaire = 120
Outreach from mounting area to photometric center = 400 mm
90 degree beam angle
mounting height = 8 m
number locations = 5, number luminaires = 5
- H** Luma Gen2 Mini BGP703 3000K DW50 40 LED 8.54m Twin Luminaires
1 lamp(s) per luminaire, 8500 initial lumens per lamp
Maintenance Factor = 0.80, watts per luminaire = 51
Outreach from mounting area to photometric center = 600 mm
mounting height = 8 m
number locations = 3, number luminaires = 6
- D** Luma Gen2 Mini BGP703 3000K DW50 40 LED 7.04m
1 lamp(s) per luminaire, 7000 initial lumens per lamp
Maintenance Factor = 0.80, watts per luminaire = 51
Outreach from mounting area to photometric center = 400 mm
mounting height = 6 m
number locations = 24, number luminaires = 24
- C** Clearflood Small BVP100 3000K DW42 20.6m
1 lamp(s) per luminaire, 20000 initial lumens per lamp
Maintenance Factor = 0.80, watts per luminaire = 141
Outreach from mounting area to photometric center = 400 mm
90 degree beam angle
mounting height = 8 m
number locations = 13, number luminaires = 13
- B** Luma Gen2 Mini BGP703 3000K DW50 40 LED 8.54m Single Luminaires
1 lamp(s) per luminaire, 8500 initial lumens per lamp
Maintenance Factor = 0.80, watts per luminaire = 51
Outreach from mounting area to photometric center = 400 mm
mounting height = 8 m
number locations = 30, number luminaires = 30
- A** Luma Gen2 Large BGP705 3000K DW50 180 LED 41.06m
1 lamp(s) per luminaire, 40000 initial lumens per lamp
Maintenance Factor = 0.80, watts per luminaire = 206
Outreach from mounting area to photometric center = 400 mm
mounting height = 10 m
number locations = 14, number luminaires = 14
- J** Existing Twin Luma 1 3000K DW11 12.6m
1 lamp(s) per luminaire, 12000 initial lumens per lamp
Maintenance Factor = 0.80, watts per luminaire = 51
Outreach from mounting area to photometric center = 900 mm
number locations = 1, number luminaires = 2
- J** Luma Gen2 Medium BGP704 3000K DW50 80 LED 20.6m Twin Luminaires
1 lamp(s) per luminaire, 20000 initial lumens per lamp
Maintenance Factor = 0.80, watts per luminaire = 120
Outreach from mounting area to photometric center = 900 mm
mounting height = 8 m
number locations = 1, number luminaires = 2
- I** Luma Gen2 Medium BGP704 3000K DW50 80 LED 13.54m
1 lamp(s) per luminaire, 13500 initial lumens per lamp
Maintenance Factor = 0.70, watts per luminaire = 79
Outreach from mounting area to photometric center = 400 mm
mounting height = 7 m
number locations = 7, number luminaires = 7
- J** Luma Gen2 Medium BGP704 3000K DW50 80 LED 20.6m
1 lamp(s) per luminaire, 20000 initial lumens per lamp
Maintenance Factor = 0.80, watts per luminaire = 120
Outreach from mounting area to photometric center = 400 mm
mounting height = 8 m
number locations = 7, number luminaires = 7
- EL** Luma Gen2 Medium BGP704 3000K DW50 80 LED 20.6m
1 lamp(s) per luminaire, 20000 initial lumens per lamp
Maintenance Factor = 0.80, watts per luminaire = 120
Outreach from mounting area to photometric center = 400 mm
mounting height = 8 m
number locations = 1, number luminaires = 1

Client
**CURTIS HALL
CARDIFF PARK & RIDE EAST**

Architect
**HENRY MEIN
PARTNERSHIP**
ARCHITECTS &
INTERIOR DESIGNERS

Project Address
CARDIFF EAST PARK & RIDE

Drawing Title
EXTERNAL LIGHTING SEC 2/2

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PRELIMINARY

Drawn by CA	Checked by PRH	Authorised by JDG
Scale 1:1000	Size A0	Date MAR 2022
Drawing No 10341-EXT-101	Rev P3	