

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	LUF	Description	
	6	A Roadway	SINGLE	0.900	60w LED 4000K 4 module 850mA Italo 1 with S95 Optic column mounted at 8m	
	3	A	SINGLE	0.900	60w LED 4000K Viva City Pro 600mA with FW70 Optic column mounted at 6m	
	3	A2	BACK-BACK	0.900	2x 60w LED 4000K Viva City Pro 600mA with FW70 Optic column mounted at 6m	
	3	AW	SINGLE	0.900	60w LED 4000K Viva City Pro 600mA with FW70 Optic wall mounted at 6m	
	4	BW	SINGLE	0.900	40w LED 4000K Viva City Pro 804mA with FL50 Optic wall mounted at 6m	
	3	C	SINGLE	0.900	250w LED 4000K Zactis Floodlight with FW70 Optic column mounted at 10m	
	3	CW	SINGLE	0.900	250w LED 4000K Zactis Floodlight with FW70 Optic wall mounted at 10m	
	2	D	SINGLE	0.900	160w LED 4000K Zactis Floodlight with FW70 Optic column mounted at 10m	
	6	DW	SINGLE	0.900	160w LED 4000K Zactis Floodlight with FW70 Optic wall mounted at 10m	
	12	EW	SINGLE	0.900	24w 4000K LED Semita Urban bollard with flood optic wall mounted at 6m	
	24	FW	SINGLE	0.900	11.1w LED 4000K Semita Urban bollard with cycle optic wall mounted at 4m	
	3	D Split Shie	SINGLE	0.900	160w LED 4000K Zactis Floodlight with FW70 Optic with spill shield column mounted at 10m	

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Min/Avg	Min/Max
Shared Roadway	Illuminance	Lux	20.42	36	9	0.39	0.22
Unit 1 Car Park	Illuminance	Lux	26.04	51	10	0.38	0.20
Unit 1 Cycle Store	Illuminance	Lux	31.50	36	26	0.83	0.72
Unit 1 Loading Bays	Illuminance	Lux	61.30	78	42	0.69	0.54
Unit 1 Perimeter	Illuminance	Lux	20.12	45	6	0.40	0.16
Unit 1 Service Yard	Illuminance	Lux	39.90	74	19	0.49	0.26
Unit 2 Car Park	Illuminance	Lux	22.24	73	6	0.27	0.08
Unit 2 Cycle Store	Illuminance	Lux	15.00	19	13	0.87	0.68
Unit 2 Loading Bays	Illuminance	Lux	60.63	94	26	0.43	0.28
Unit 2 Perimeter	Illuminance	Lux	15.92	50	7	0.44	0.14
Unit 2 Service Yard	Illuminance	Lux	39.70	76	24	0.60	0.32
Unit 3 12no Cycle Store	Illuminance	Lux	8.83	13	6	0.68	0.46
Unit 3 6no Cycle Store	Illuminance	Lux	13.78	16	12	0.87	0.75
Unit 3 Car Park	Illuminance	Lux	18.83	51	7	0.37	0.14
Unit 3 Loading Bays	Illuminance	Lux	69.96	81	37	0.62	0.46
Unit 3 Loading bays new	Illuminance	Lux	70.83	82	58	0.82	0.71
Unit 3 Perimeter	Illuminance	Lux	17.32	36	7	0.40	0.19
Unit 3 Service Yard	Illuminance	Lux	36.07	75	15	0.42	0.20

Qty	Range	Light Source	Lamp Lumens	Circuit Watts	Lm/W	LOR	Luminaire Lumens	ULOR	Upward Lm%	RA	ART Hour Per Day	CO ² Calculation for year		
												CO ² (Tonnes)		Kwh/ hour
5	Italo 1	S95 - 850mA 4 Module	32080	93	111.61	100.0%	51900	0.0%	0	70	12	0.47	2036.70	
12	Viva City PRO	60w LED FW70	8760	60	146.00	100.0%	105120	0.0%	0	70	12	0.73	3153.60	
4	Viva City PRO	40w LED FL50	6280	40	157.00	100.0%	24320	0.0%	0	70	12	0.16	700.80	
6	Zactis	250w LED FW70	34200	250	137.00	100.0%	255000	0.0%	0	60	12	1.52	6201.00	
10	Zactis	160w LED FW70	21520	160	137.00	100.0%	215200	0.0%	0	60	12	1.62	7008.00	
12	Semita Urban	24w LED FL Optic	3000	24	125.00	100.0%	36000	0.0%	0	70	12	0.29	1261.44	
24	Semita Urban	11.1w LED CC Optic	1570	11	141.44	100.0%	37680	0.0%	0	70	12	0.27	1166.88	

Total Installation Lumens	679720.00	Total ULR	0.00%
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Table 1 compliance

Environmental zone	E3
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Sky Glow	Target	Achieved	Status
	5.00%	0.00%	Pass

Source Intensity (candelas)			
Pre curfew	10.000		Pass
Post curfew	1.000		Pass

Light Trespass into windows (Lux)			
Pre curfew	10		Pass
Post curfew	2		Pass

Building Luminance (cd/m²)	10		
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Compliance Status:		
Pre 04	Reduction of night time light pollution	Pass
Ene 03	Energy efficient external lighting	Pass
Hea 01	Internal and external lighting levels	Pass

Total CO ² per year (Tonnes)	5.06
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Total Electrical consumption (Kw)	5.00
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Total Electrical consumption per year (Kwh)	21,897.37
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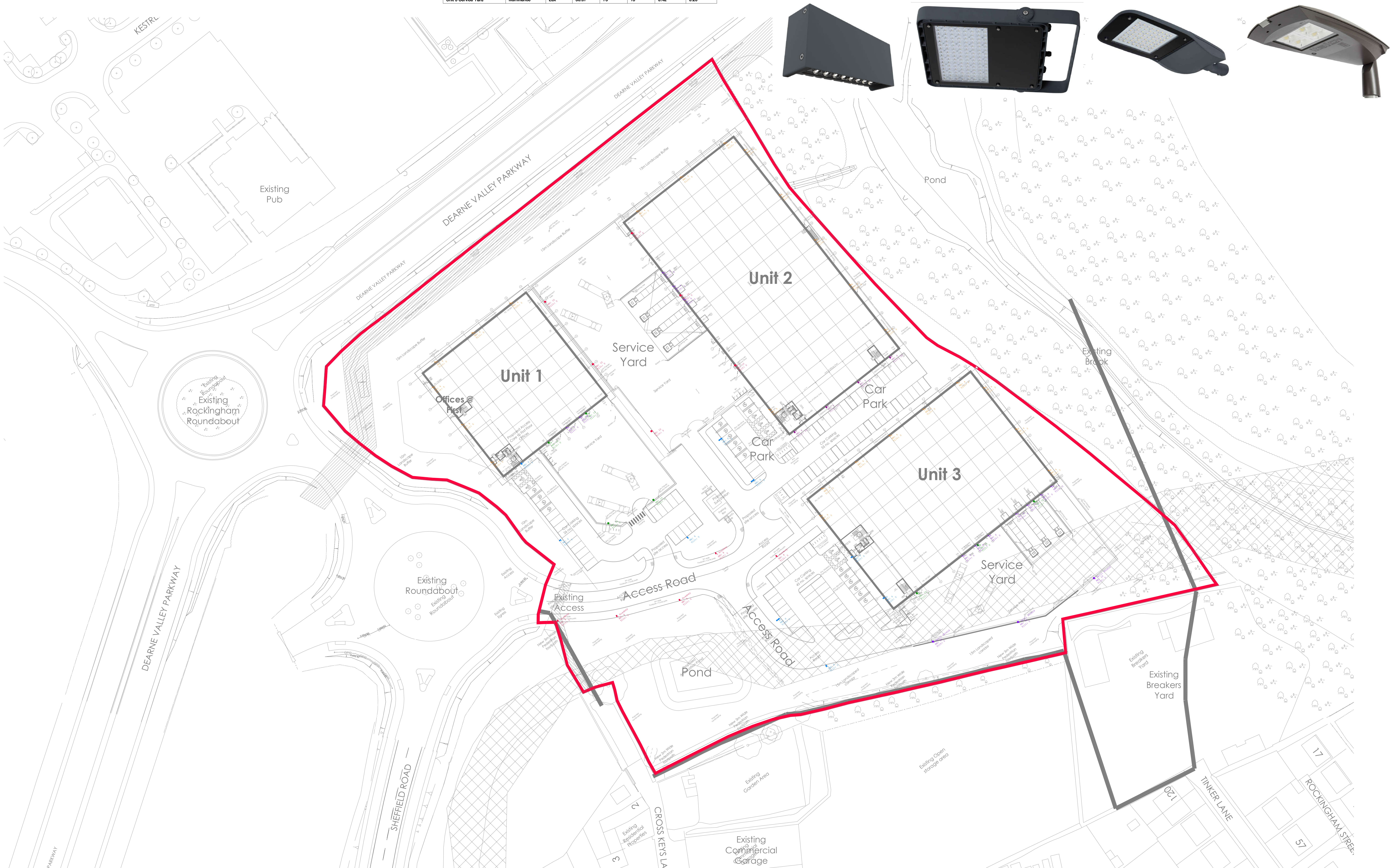
Average luminaire lumens per circuit Watt	135.96
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Notes

- Do not scale this drawing. All dimensions must be checked/verified on site, if in doubt ask.
- This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
- All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
- Any discrepancies noted on site are to be reported to the engineer immediately.

Notes

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE PERFORMANCE SPECIFICATION AND ALL OTHER ASSOCIATED DRAWINGS LISTED ON THE BIDDING DRAWING ISSUE SHEETS. ALL OTHER RELEVANT STATUTORY AND LEGISLATIVE DOCUMENTS SHALL ALSO BE REFERRED TO.
- THIS DRAWING SHALL BE USED BY THE CONTRACTOR AS A BASIS FOR THE DESIGN DEVELOPMENT OF THE MECHANICAL AND ELECTRICAL ENGINEERING SERVICES WITHIN THE BUILDING. IN ACCORDANCE WITH THE REQUIREMENTS OF THE DOCUMENTATION LISTED IN NOTE 1 ABOVE AND THE ARCHITECTS' / STRUCTURAL ENGINEERS DESIGN DRAWINGS.
- THE POSITIONS AND NUMBERS OF THE EQUIPMENT ARE INDICATIVE ONLY AND ARE SUBJECT TO THE DETAIL DESIGN (TO BE CARRIED OUT BY THE CONTRACTOR).
- FOR LEGEND OF SYMBOLS REFER TO BWB DRAWING RJB-BWB-00-XX-DR-E-2001.
- CO-ORDINATION BETWEEN OTHER SERVICES INSTALLATIONS AND STRUCTURAL ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL MAKE NECESSARY ALLOWANCES IN ORDER TO COMPLY WITH THE BREXAM REQUIREMENTS AS DETAILED IN THE ACCOMPANYING ELECTRICAL TENDER SPECIFICATION.



P3	24.02.23	Tender Issue	Latest site plan incorporated and external lighting amended to suit	GEM	DA
P2	17.02.23	Tender Issue		GEM	DA
P1	07.04.21	Issued for Information		GCL	DA
Rev	Date	Details of issue / revision		Dnw	Rev

Issues & Revisions

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Client

Gregory Property Group

Project Title

Proposed Industrial Development
Dearne Valley Parkway
Barnsley

Drawing Title

Electrical Services
Proposed External Lighting
Site Plan

Drawn:	G. C. Leeming	Reviewed:	D. Alastair
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BWB Ref:	LDA2634	Date:	07.04.21	Scale@A0:	1:500
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Drawing Status:

TENDER

Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
RJB-BWB-00-XX-DR-E-2301	D2	P3