

Dimensions are not to be scaled from this drawing



Kingfisher Lighting

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BREEAM New Construction 2018 (UK)

44337G Envision Battery Manufacturing Plant in Sunderland

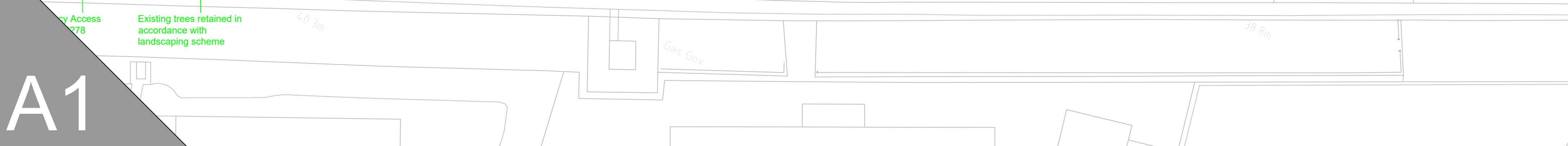
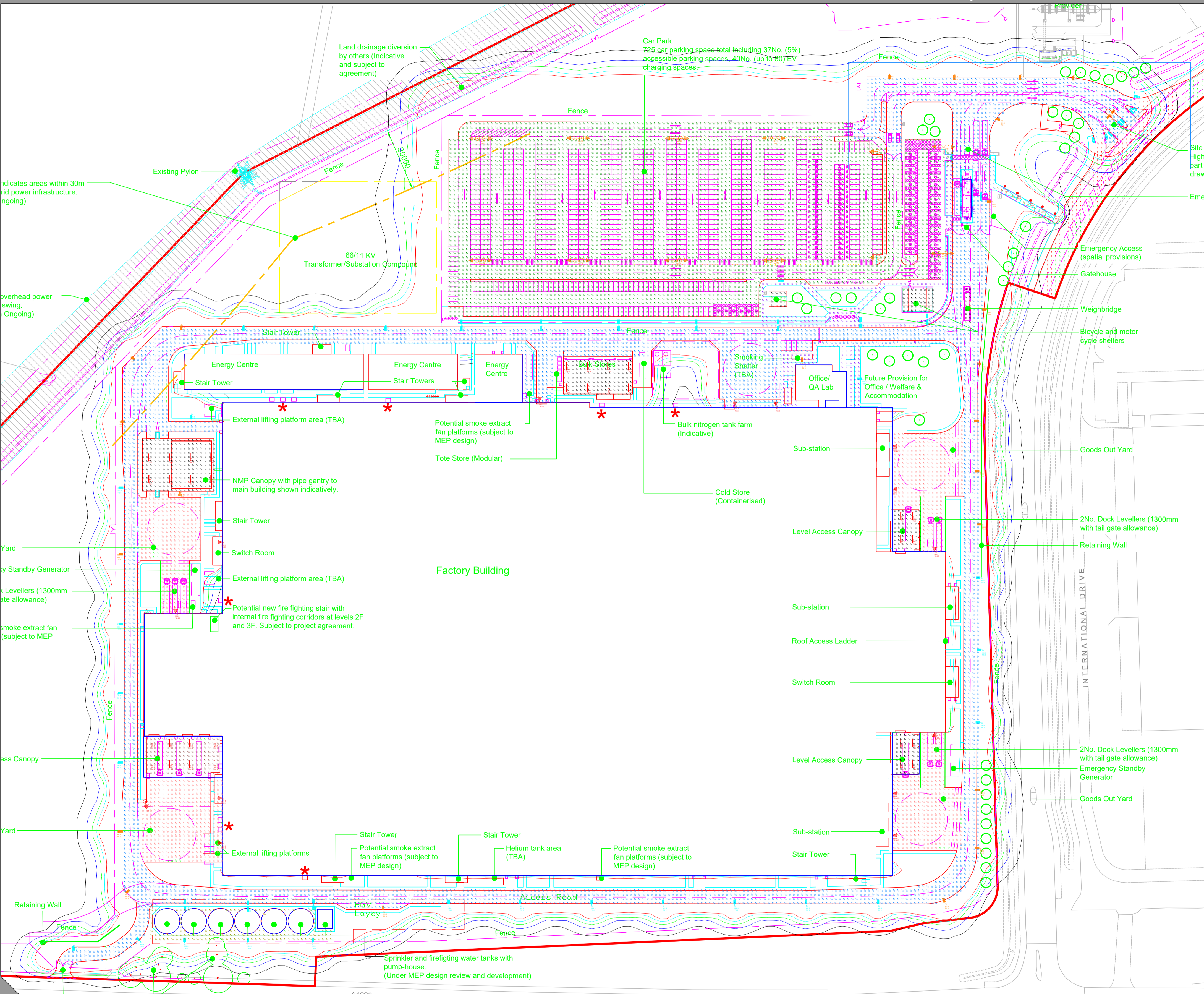
Colour Temperature (K)	Qty	Range	Light Source	Luminaire Lumens (lm)	Watts (W)	lm/W	LM	Total Lumens	LM/ft²	LM/ft² (max)	LM/ft² (min)	LM/ft² (avg)	LM/ft² (std dev)
4000	24	Viva City PRO	High LED PRO	13300	80	166.25	300%	319200	0.076	0	>100	32	1.37
4000	44	Viva City PRO	High LED PRO	13200	80	165.00	300%	580800	0.076	0	>100	32	1.34
4000	24	Zetta	High LED PRO	22300	100	223.00	300%	535200	0.076	0	>100	32	1.36
4000	3	Zetta	High LED PRO	22300	100	223.00	300%	66900	0.076	0	>100	32	0.15
4000	22	Zetta	High LED PRO	14200	70	202.86	300%	312400	0.076	0	>100	32	1.16
4000	6	Delta Urban	High LED PRO	13700	70	195.71	300%	82200	0.076	0	>100	32	0.66
4000	5	MiniType 2.0	High LED	1000	13	76.92	300%	38450	0.076	1.037	>100	32	0.67
4000	12	Delta Urban	High LED	8000	70	114.29	300%	96000	0.076	0	>100	32	0.88

Category	Target	Actual	Status
Overall Compliance	100%	100%	Pass
Energy Efficiency	100%	100%	Pass
Water Efficiency	100%	100%	Pass
Health & Wellbeing	100%	100%	Pass
Materials	100%	100%	Pass
Waste	100%	100%	Pass
Global Warming Potential	100%	100%	Pass
Acid Equivalents	100%	100%	Pass
Global Warming Potential (excl. Land Use Change)	100%	100%	Pass
Acid Equivalents (excl. Land Use Change)	100%	100%	Pass
Global Warming Potential (excl. Land Use Change & F-Gases)	100%	100%	Pass
Acid Equivalents (excl. Land Use Change & F-Gases)	100%	100%	Pass



Item No.	Qty	Label	Arrangement	LM	Description	Luminaire Lx	LM/ft²	LM/ft² (max)
1	24	SHD	1x1	13300	High LED PRO Viva City PRO with PFC (see section 4.1)	1000	0.076	1.37
2	44	SHD	1x1	13200	High LED PRO Viva City PRO with PFC (see section 4.1)	1000	0.076	1.34
3	24	SHD	1x1	22300	High LED PRO Zetta with PFC (see section 4.1)	1000	0.076	1.36
4	3	SHD	1x1	22300	High LED PRO Zetta with PFC (see section 4.1)	1000	0.076	0.15
5	22	SHD	1x1	14200	High LED PRO Zetta with PFC (see section 4.1)	1000	0.076	1.16
6	6	SHD	1x1	13700	High LED PRO Delta Urban with PFC (see section 4.1)	1000	0.076	0.66
7	5	SHD	1x1	1000	High LED MiniType 2.0 (see section 4.1)	1000	0.076	0.67
8	12	SHD	1x1	8000	High LED Delta Urban (see section 4.1)	1000	0.076	0.88

Label	Calc Type	Units	Req	Max	Conformity (Req/Max)	Conformity (Min/Max)	Notes	Description
Access road for car park	Maintenance	Lux	30.18	43	0.70	0.23	Horizontal	
Bulk Store Canopy	Maintenance	Lux	51.21	64	0.79	0.59	Horizontal	
Car Park	Maintenance	Lux	30.02	37	0.27	0.10	Horizontal	
Circle on the Left	Maintenance	Lux	25.22	30	0.24	0.07	Horizontal	
Circle on the Right	Maintenance	Lux	25.22	30	0.24	0.06	Horizontal	
Goods In Yard Top	Maintenance	Lux	26.91	34	0.45	0.14	Horizontal	
Goods In Yard Top	Maintenance	Lux	21.31	31	0.45	0.15	Horizontal	
Goods Out Canopy Bottom	Maintenance	Lux	62.27	84	0.48	0.38	Horizontal	
Goods Out Canopy Top	Maintenance	Lux	47.47	63	0.47	0.30	Horizontal	
Goods Out Yard Bottom	Maintenance	Lux	39.38	50	0.43	0.16	Horizontal	
Goods Out Yard Top	Maintenance	Lux	38.43	50	0.39	0.16	Horizontal	
Highway Road	Maintenance	Lux	1.47	12	0.10	0.00	Horizontal	
MHP and Waste Water Canopy	Maintenance	Lux	42.23	74	0.37	0.20	Horizontal	
Pathways	Maintenance	Lux	35.23	46	0.28	0.12	Horizontal	
Plant area at the bottom	Maintenance	Lux	26.12	37	0.28	0.18	Horizontal	
Road at the bottom	Maintenance	Lux	1.47	12	0.10	0.00	Horizontal	
Roof and Landing areas	Maintenance	Lux	35.22	46	0.28	0.07	Horizontal	
Top Light Outputs	Maintenance	Lux	44.23	57	0.44	0.24	Horizontal	
Under canopy building	Maintenance	Lux	25.21	33	0.26	0.08	Horizontal	
Weighbridge	Maintenance	Lux	26.21	33	0.26	0.29	Horizontal	



Envision Battery Manufacturing Plant in Sunderland

Scale: 1:1000 at A1

Project Number: D443171

Date: 31 July 2023

Drawing No.: D44317/LKM/I

Lighting Designer: Laura Karaleviciute

HEA HEMSA ILP

For our LED lighting designs a 0.9mf has been used. If this differs from the maintenance period for this project then you must advise us accordingly

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