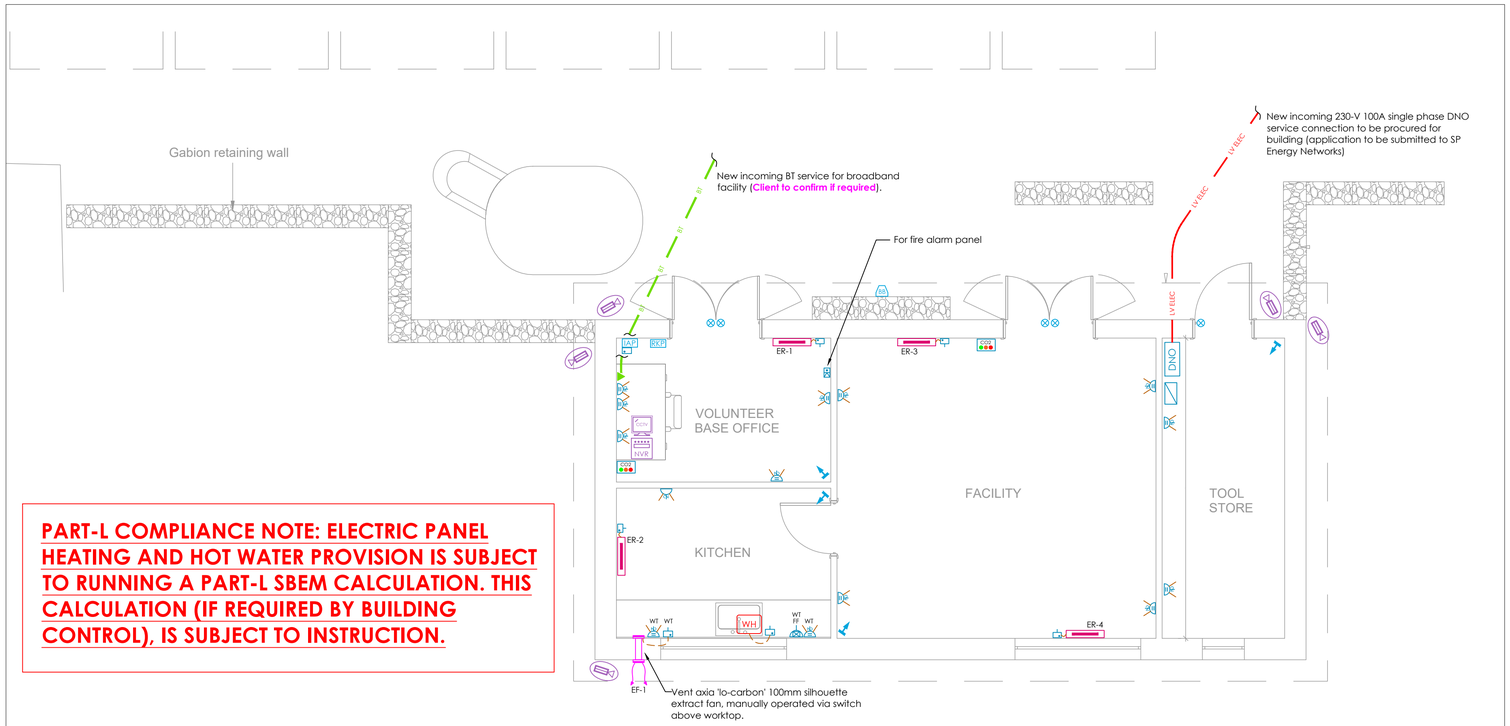
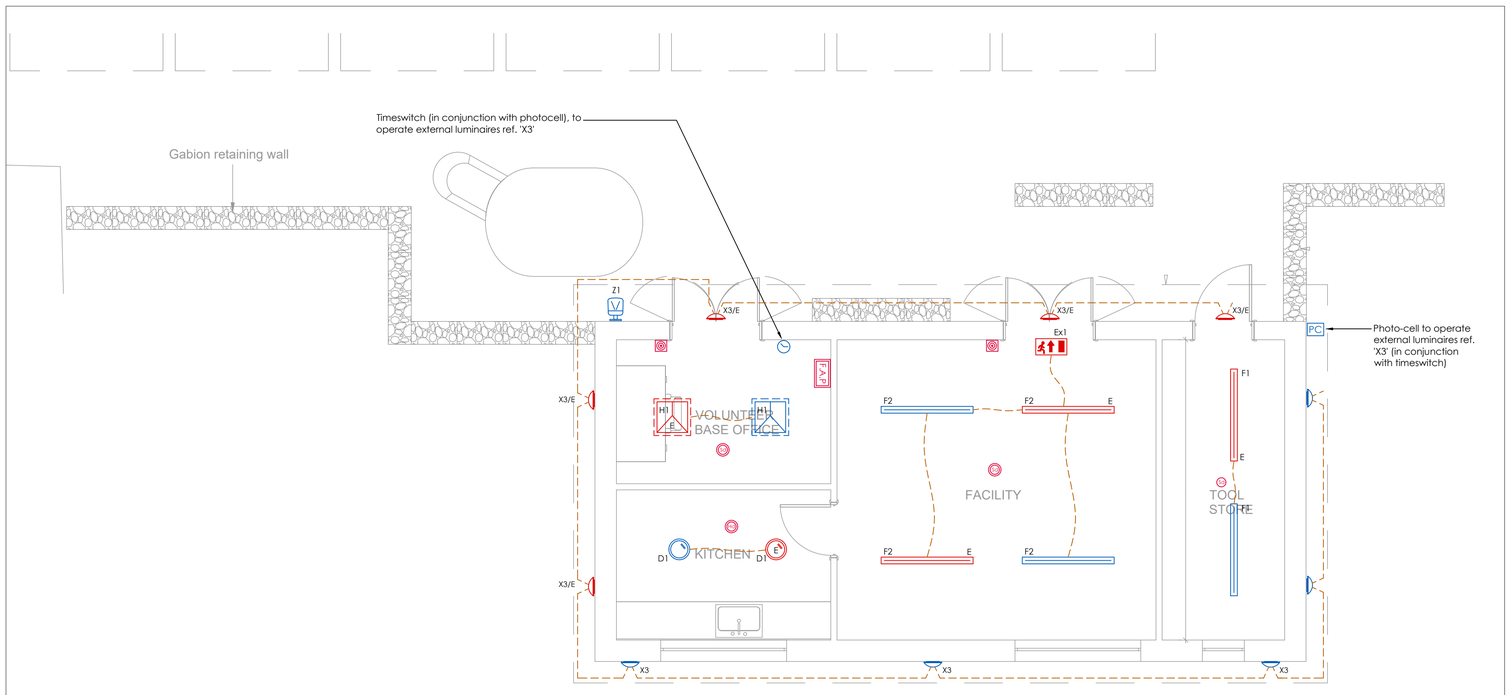
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Do not scale from this drawing.



PART-L COMPLIANCE NOTE: ELECTRIC PANEL HEATING AND HOT WATER PROVISION IS SUBJECT TO RUNNING A PART-L SBEM CALCULATION. THIS CALCULATION (IF REQUIRED BY BUILDING CONTROL), IS SUBJECT TO INSTRUCTION.

Power & ancillaries overview



Lighting & fire alarm overview

luminaire schedule

All luminaires shall incorporate a colour temperature of 4000K/neutral white (internal) & <3000K/warm white (external), and be LED sourced.

D1: Ø330mm 15-watt (1200-lumen) 3000K IP54 low profile circular polycarbonate bulkhead complete with white bezel and opal diffuser
Minimum luminaire efficacy - 100 LL/CW
Switchgear - standard
Manufacturer - Luceco Sierra bulkhead, or equal & approved



E: Denotes integral 3-hour conversion within general lighting luminaire

Ex1: LED 3hr, NM wall mounted emergency bulkhead luminaire with appropriate EURO ISO 7010 'UP' direction legend & white bezel
Switchgear - non-maintained
Manufacturer: Luceco Tempus EXIT-Box



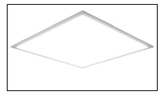
F1: 1500mm (approx), IP65 surface mounted linear polycarbonate luminaire
Minimum luminaire efficacy - 174 LL/CW
Switchgear - standard
Manufacturer - Luceco Climate-Extra



F2: 1500mm (approx), surface mounted slimline linear luminaire with white steel body and curved polycarbonate opal diffuser
Minimum luminaire efficacy - 120 LL/CW
Switchgear - standard
Manufacturer - Luceco luxpack batten-Essence



H1: 600 x 600mm IP44 surface modular back-lit luminaire complete with white bezel and TPa rated UGR19 opal flat panel diffuser
Minimum luminaire efficacy - 156 LL/CW
Switchgear - Standard
Manufacturer - Luceco Luxpanel extra + surface frame



X4: IP65 wall mounted 'hooded' wedged downward facing bulkhead with 0% direct ULOR & integral microwave sensor (with adjustable activation settings).
Luminaire efficacy - 120 LL/CW (min)
Switchgear - standard
Manufacturer: Ansell wolf-mini (or similar)-3000K



Z1: IP65 LED security floodlight (30 watt, 3150-lumen output) fixed to underside of soffit. Floodlight to be complete with 360° ball-joint adjuster for optimum angle adjustment and integral PIR.
Mounting heights - TBC on site
Minimum luminaire efficacy - 105 LL/CW
Switchgear - standard
Manufacturer - Luceco Essence Security floodlight+PIR - 3000K



ELECTRIC HEATER SCHEDULE

Ref:	Heater description:	Output rating	Manufacturer / Range / dims
ER-1	Electric panel heater with integral 24-hr, 7-day timer & temp. control	0.5 kW	Myson / Rio-plus / 0.5(L) x 0.4(H)
ER-2	Electric panel heater with integral 24-hr, 7-day timer & temp. control	0.5 kW	Myson / Rio-plus / 0.5(L) x 0.4(H)
ER-3	Electric panel heater with integral 24-hr, 7-day timer & temp. control	0.75 kW	Myson / Rio-plus / 0.5(L) x 0.5(H)
ER-4	Electric panel heater with integral 24-hr, 7-day timer & temp. control	0.75 kW	Myson / Rio-plus / 0.5(L) x 0.5(H)

Suggested lighting controls :

- Tool store & office - movement sensors
- Facility- Manual switching
- Kitchen - manual switching
- External bulkheads - integral motion sensor

**NOTES IN MAGENTA:
FOR CLIENT
FEEDBACK/CONSIDERATION**

legend

Lighting
- 1-way light switch (x denotes no of gangs)
- Multi-gang emergency test key switch
- 2-way light switch (x denotes no of gangs)
- 360° motion sensor (recessed where permits) (Ø7metre range) (on/off function only)
- 360° IP55 motion sensor (recessed where permits) (Ø7metre range) (on/off function only)
- 1-channel, 24hr, 7day timeswitch
- Programmable photo-electric cell

Fire alarm
- Fire alarm panel
- Smoke detector (optical)
- Heat detector (fixed temp.)
- Automatic detector incorporating sounder base
- Manual call point

Power
- Incoming DNO LV cut-out & billing meter
- SPN type 'A' MCB distribution board (metered)
- Twin switched 13A socket outlet mounted @ 0.45M AFFL (unless stated otherwise)
- Twin switched 13A socket + integral dual USB-C outlet mounted @ 0.45M AFFL (unless stated otherwise)
- 13A switched fused connection unit c/w neon indicator.
- 13A unswitched fused connection unit c/w neon indicator.
- 20A DP switch c/w neon indicator
- Switched fused connection unit c/w neon indicator above worktop operating single unswitched 13A single socket below.
- 20A DP fire alarm isolator keyswitch
- CO2 detector incorporating "traffic-light" warning diode, final connection by fused connection unit @2.1M AFFL

Telecommunications
- Incoming BT connection

Intruder alarm
- Intruder alarm panel (dual zone)
- Dualtech movement sensor
- Magnetic door contact
- External sounder/strobe unit
- Remote set keypad

CCTV
- POE IP fixed turret external-grade colour CCTV camera, incorporating varifocal lens and automatic infrared illumination (Cn denotes unique camera reference).
- 24" LED flat screen colour monitor, mouse & keyboard
- 8channel NVR PoE switch/storage

Electric heating
- Electric panel heater (refer to separate schedule)

Abbreviations

HL	High level
LL	Low level
WT	Accessory installed 150mm above worktop/desk
FF	Fridge freezer

rev	date	description	by	appd
P2	04/11/25	PRELIMINARY ISSUE External lighting updated to reflect change of bulkhead lighting to downward facing luminaire with warm-white lamp and integral motion sensor control.	MC	WW
P1	23/04/25	PRELIMINARY ISSUE RIBA stage 3	MC	WW

status: PRELIMINARY

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client: Groundwork North Wales

project: Clywedog Valley, North Wales

title: Minera Quarry
Electrical services overview

drawn by: MC	date: 23/06/2025	scale: 1:50 @ A1
approved: WW		
dwg no: 25817/E/004		rev: P2