POWERLED ELECTRICS

SAMPLE PROPOSAL

Smart home control system

Five-bedroom family home, London

Lighting, climate, shading, audio, intercom, door entry, CCTV, network and security on one Loxone system, designed for Shabbos and Yom Tov.

Project	Five-bedroom family home: Loxone smart home	Reference	PL-SAMPLE-PR01
Prepared for	Private client (name withheld)	Revision	F
Design basis	The interior designer's drawings	Date	18 November 2026
Prepared by	Powerled Electrics Ltd	Status	Sample

A sample of our work. This is one of our proposals, for a five-bedroom family home in London. To protect our client's privacy, their name, their address, the prices and the detail of the drawings are withheld.

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Document information

Project	Five-bedroom family home, London: Loxone smart home control system
Document	Proposal and scope of works, with device layouts and wiring instructions
Reference	PL-SAMPLE-PR01
Design basis	The interior designer's drawings: first-floor and loft lighting plans, ground-floor plan. The ground-floor lighting is assumed until its lighting plan is issued. The basement is not included.
Prepared by	Powerled Electrics Ltd, 33 Leadale Road, London N16 6BZ

Revision

Rev	Date	Description	Status
F	18 Nov 2026	Proposal for review: lighting switched by relays in the room ceilings on one supply per floor; LED strips dimmed per room; blinds on the control panel; options for the family to choose	Sample

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About this sample. This is one of our proposals, shared as an example of our work. To protect our client's privacy, their name, their address, the prices and the detail of the drawings are withheld; everything else is as proposed.

About Powerled Electrics. We design, build and commission building control systems: Loxone homes, building management and room management systems, networks and security, with our own control panels built and tested in our workshop before they reach site. One team is responsible from design to handover and support.

1 Summary

Powerled Electrics proposes a complete Loxone smart home for a five-bedroom family home in London, designed from the interior designer's drawings. One Loxone Miniserver runs lighting, presence, heating and cooling, Shabbat hot water, blinds, music, wall tablets, the room-to-room intercom, door entry, cameras and the alarm. Everything works without the internet, keeps to the Hebrew calendar for Shabbos and Yom Tov, and keeps running on battery in a power cut.

20 rooms controlled	**32** Touch Slim Flex switches	**74** lighting zones	**32** ceiling lighting relays	**19** heating zones, AC in 7
29 motorised windows (4 Velux)	**8** music zones	**10** wall tablets and intercoms	**5** 4K cameras, recorded on site	**11** linked fire detectors

Investment summary

Item	Price ex VAT	Price inc VAT
The complete system, sections 1 to 13 (see section 5)	[illegible]	[illegible]
Optional: low-voltage cabling by Powerled instead of the electrician (section 14)	[illegible]	[illegible]
Total with the low-voltage cabling	[illegible]	[illegible]

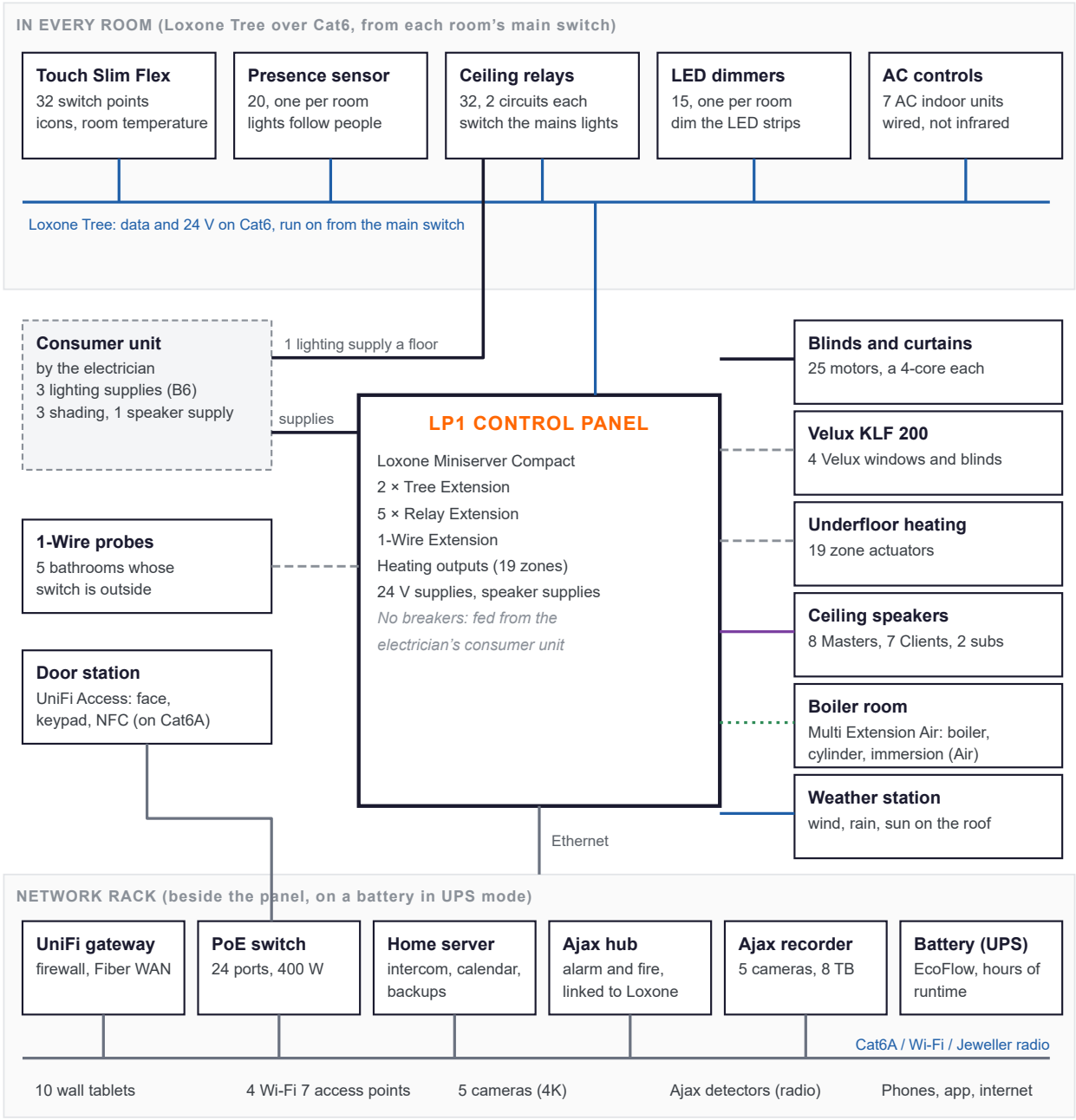
Options the family can choose, such as dimmers in the living rooms and bedrooms or a different switch, are priced room by room in section 6. The prices are blurred in this sample: every home is priced from its own design.

Design principles

Lighting	Each room's lights are switched by small Loxone relays in its ceiling, fed by one lighting supply per floor. The electrician runs 3 lighting supplies instead of 52 cables back to the panel. Mains lights switch on and off; LED strips dim.
Control	A Loxone Touch Slim Flex at every switch, with the family's own icons; presence sensors in every room; the tablets and the Loxone app for everything else.
Shabbos and Yom Tov	Modes and schedules from the Hebrew calendar: lighting, heating, hot water, presence, music and the door all follow them, with no internet needed.
Resilience	The network rack and the controls run on a battery for hours in a power cut. One wall panel, built and tested in our workshop.
Wired for both	The first fix also suits a conventional house: if Loxone is not fitted, standard relays and push-buttons use the same cables (section 7).

2 System overview

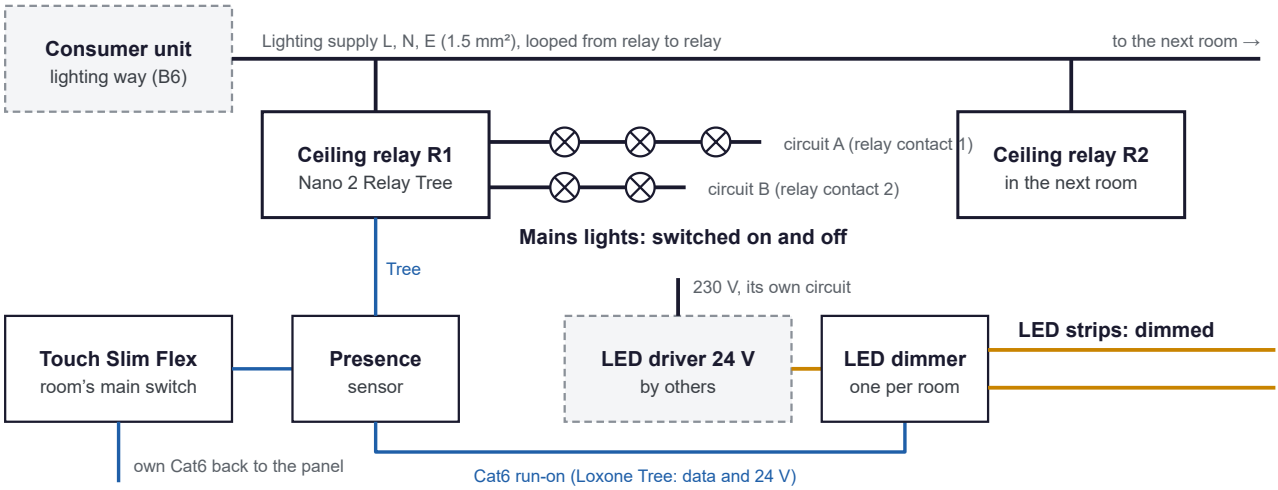
One Loxone Miniserver in one wall panel runs the house; each room's devices share one Cat6 from its main switch.



Link	What it carries	Cable
Loxone Tree	Switches, presence sensors, ceiling relays, LED dimmers, AC controls: one branch a floor	Cat6 (data pair, 24 V pair)
230 V	Lighting: one supply a floor looped through the ceiling relays; each blind motor from its panel relays	1.5 mm² T&E; 4-core a motor
Control, low voltage	Velux interface, underfloor heating actuators, bathroom 1-Wire probes	Cat6, multicore
Tree Turbo	The Master ceiling speakers and their Clients and subs	Loxone Tree Turbo
Loxone Air	The boiler-room module, by radio from the Miniserver	none
Network	Tablets, Wi-Fi, cameras, door station, home server, Ajax hub and recorder	Cat6A to the rack

3 Lighting design

Every mains lighting circuit is switched by a Loxone Nano 2 Relay Tree in its room's ceiling, at the first light of its circuits, where it can be reached through the light's hole. One lighting supply per floor loops from relay to relay. LED strips dim on one Loxone LED dimmer per room.



Important: mains lights switch, they do not dim. Downlights, pendants and wall lights on the ceiling relays switch on and off. The LED strips dim. Dimming the mains lights is an option in the study, living/dining room, kitchen and bedrooms (section 6); halls, landings and bathrooms stay switched.

Floor	Room	Mains circuits (switched)	Ceiling relays	LED circuits (dimmed)	Dimmer upgrade
GF	Hallway	4	2	1	–
GF	Study	1	1	1	Optional, +
GF	Living / dining room	4	2	2	Optional, +
GF	WC	1	1	–	–
GF	Kitchen	3	2	2	Optional, +
GF	Cloakroom	1	1	–	–
GF	Outside lights	3	2	–	–
1F	First-floor landing	4	2	–	–
1F	Family bathroom	2	1	1	–
1F	Bedroom 2	2	1	1	Optional, +
1F	Hall 2	2	1	–	–
1F	Bedroom 1	7	4	1	Optional, +
1F	En-suite (bedroom 1)	2	1	1	–
1F	Utility	1	1	1	–
Loft	Loft landing	4	2	–	–
Loft	Bedroom 4	3	2	1	Optional, +
Loft	En-suite (bedroom 4)	1	1	1	–
Loft	Bedroom 5	3	2	3	Optional, +
Loft	En-suite (bedroom 5)	1	1	3	–
Loft	En-suite (bedroom 3)	1	1	2	–
Loft	Bedroom 3	2	1	1	Optional, +
	Whole house	**52**	**32**	**22**	**All 8 rooms +**

4 Scope of works, by section

Prices are for supply, installation, programming and commissioning, ex VAT. Quantities follow the take-off from the interior designer's drawings.

4.1 Control panel and Loxone core

[redacted] ex VAT

A single wall-mounted control panel (LP1), built, wired and tested in our workshop, houses the Loxone Miniserver Compact and its extensions. It holds no protective devices: every supply is protected in the electrician's consumer unit. The Miniserver runs the house without the internet and keeps the Hebrew calendar for Shabbos and Yom Tov modes.

QTY	EQUIPMENT	MAKE / PART
1	Loxone Miniserver Compact (Link, Tree, Air and Tree Turbo built in)	Loxone 100512
2	Loxone Tree Extension	Loxone 100218
1	Steel wall enclosure 1200 × 1000 × 300 mm with mounting plate	Schneider Spacial S3D
1	24 V controls supply, 240 W, fed from the rack battery	Mean Well SDR-240-24
1	DIN rail, trunking, about 416 terminals, labelling	



Loxone Miniserver Compact

Services: Workshop build and test; installation on site; Loxone set-up (users, Hebrew calendar, Shabbos and Yom Tov modes, power-cut mode, backups); whole-system testing and commissioning.

By others / note: The supplies to the panel from the consumer unit (electrician). The panel (1200 mm) and the rack (600 mm) need about 2 m of wall side by side: location to agree.

4.2 Lighting control

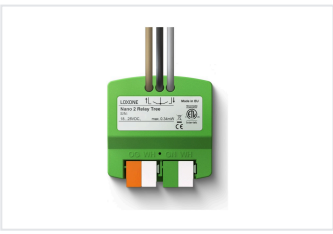
[redacted] ex VAT

Every mains lighting circuit is switched by a Loxone relay in its room's ceiling, fed by one lighting supply per floor, so no lighting cables return to the panel. Mains lights switch on and off; the LED strips dim on one Loxone LED dimmer per room, each strip on its own channel. A Loxone Touch Slim Flex at every switch point carries the family's own icons and also measures the room's temperature and humidity.

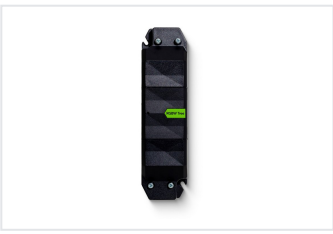
QTY	EQUIPMENT	MAKE / PART
32	Touch Slim Flex Tree, white or anthracite, with frames	Loxone 100686/7
32	US 1-gang switch boxes, supplied to the electrician	
32	Nano 2 Relay Tree in a ceiling enclosure (2 circuits each)	Loxone 100395
15	RGBW 24V Compact Dimmer Tree (4 channels)	Loxone 100325



Touch Slim Flex



Nano 2 Relay Tree



RGBW Compact dimmer

Services: Switch layouts designed and signed off with the family; devices fitted and addressed; 74 lighting zones programmed (scenes, presence, night lighting, Shabbos and Yom Tov schedules, astronomical clock); commissioning with the electrician.

By others / note: Light fittings, LED strip and 24 V LED drivers; the 230 V cabling to our wiring instructions (electrician). The switches are made to order (about 4 weeks) and cannot be returned.

4.3 Presence and room sensors

[redacted] ex VAT

A flush ceiling presence sensor in every room lets lighting follow occupancy and daylight; presence actions are suspended on Shabbos and Yom Tov. Room temperatures come from the switches, with 1-Wire probes in the five bathrooms whose switch is outside the room.

QTY	EQUIPMENT	MAKE / PART
20	Presence Sensor Tree, flush ceiling mounted	Loxone 100466
1	1-Wire Extension	Loxone 100014
5	1-Wire temperature probe in a slotted plate	Loxone 200077

Services: Sensors fitted, connected and addressed; presence zones, brightness and night mode set up.



Presence Sensor Tree

4.4 Heating and cooling

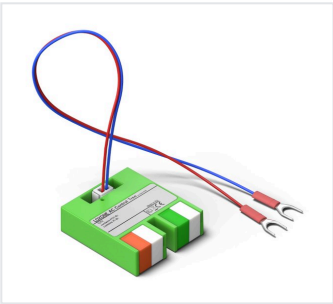
[redacted] ex VAT

Underfloor heating in all 19 rooms, each its own zone controlled from the room temperature, with schedules from the Hebrew calendar and heat demand to the boiler. The AC units in the five bedrooms, kitchen and living/dining room are wired into Loxone, and the balcony heater runs on a timer.

QTY	EQUIPMENT	MAKE / PART
5	RGBW 24V Dimmer Tree as 24 V heating outputs (19 zones)	Loxone 100239
7	AC Control Tree in each AC indoor unit	Loxone
1	Nano 2 Relay Tree and 25 A contactor for the balcony heater	Loxone / Hager

Services: Heating zones programmed (room control, schedules, warm bathroom floors, heat demand, frost protection); AC modes and limits; commissioning with the heating engineer and AC installer.

By others / note: UFH actuators and manifolds (heating engineer); AC units (AC installer) of a supported make: Daikin, Fujitsu, Gree, LG, Mitsubishi, Panasonic, Sinclair or Toshiba.



AC Control Tree

4.5 Shabbat hot water

[redacted] ex VAT

The cylinder is heated before Shabbos and Yom Tov from the Hebrew calendar, then its heating is locked until it ends, so a hot tap never starts the boiler. A Loxone Multi Extension Air in the boiler room controls the boiler, cylinder and immersion, with a manual Auto/Off/On switch.

QTY	EQUIPMENT	MAKE / PART
1	Multi Extension Air in a small enclosure with a 24 V supply	Loxone 100116
3	Temperature probes: cylinder top and bottom, boiler flow	Loxone 200077
1	Immersion contactor 25 A and Auto/Off/On switch	Hager



Multi Extension Air

Services: Plant points wired in the boiler room; Shabbat hot water programmed (multi-day Yom Tov, weekday boost, temperatures on the tablets, alerts); a full Shabbos test cycle with the plumber.

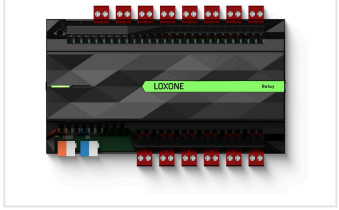
By others / note: A 230 V spur in the boiler room (electrician). For a gas boiler with an unvented cylinder; the rules are agreed with the family's Rav.

4.6 Blinds, curtains and Velux

[redacted] ex VAT

All 25 blind and curtain motors are driven from relays in the control panel, each on its own cable, so any make of 230 V motor can be used. The four Velux windows connect through a Velux KLF 200 interface, and a roof weather station adds sun, wind and rain protection.

QTY	EQUIPMENT	MAKE / PART
5	Relay Extension: 2 relays a motor, the Velux and alarm outputs	Loxone 100038
1	Velux KLF 200 interface	Velux
1	Weather Station Tree	Loxone 100246



Relay Extension


Weather Station

Services: Motor cables terminated in the panel; travel times set; sun, privacy, night, wind and rain schedules and scenes programmed; commissioning motor by motor with the blind company.

By others / note: Blinds, curtains and 230 V motors (blind company); a 4-core cable from the panel to each motor (electrician); Velux INTEGRA windows (window supplier).

4.7 Audio

[redacted] ex VAT

Loxone Master/Client ceiling speakers in eight zones: the hall, the living/dining room and the kitchen (four speakers and a subwoofer each), and one speaker in each bedroom. Spotify, AirPlay, radio and Bluetooth in every zone, a doorbell chime, and off on Shabbos and Yom Tov.

QTY	EQUIPMENT	MAKE / PART
8	Install Speaker 7 Master (active)	Loxone 610149
7	Install Speaker 7 Client	Loxone 610151
2	Install Sub 10 subwoofer	Loxone 610163
2	Speaker power supplies, 480 W	Mean Well SDR-480-24

Services: Speakers cut in and fitted; zones programmed; sources, favourites and chime set up; sound check room by room.

By others / note: A closed 30-60 litre box in the ceiling for each subwoofer (drylining contractor). Fire hoods, if Building Control asks for them, are extra.



Install Speaker 7



Install Sub 10

4.8 Wall tablets

[redacted] ex VAT

Ten 11-inch Samsung tablets, surface-mounted in the kitchen, study, both landings, the five bedrooms and the front hall, each powered and connected by one network cable. They run only the approved apps, charge to 80% for a long battery life and go dark on Shabbos.

QTY	EQUIPMENT	MAKE / PART
10	Samsung Galaxy Tab A11+ Wi-Fi, 128 GB	Samsung SM-X230
10	Surface wall mount with PoE to USB-C power	
10	Kiosk licence (approved apps only)	Fully Kiosk PLUS

Services: Tablets fixed and set up: kiosk, 80% charge limit, cameras off, Shabbos dark screen, remote management.



Samsung Galaxy Tab A11+

4.9 Room-to-room intercom

[redacted] ex VAT

Call any room from any tablet; room calls answer themselves. All-call, door calls that ring and wake every tablet, night do-not-disturb, off on Shabbos and Yom Tov. It runs on our own server in the rack with a free, open-source app: no monthly fees.

QTY	EQUIPMENT	MAKE / PART
1	Home server (intercom, Hebrew calendar, backups)	Lenovo ThinkCentre M70q
10	Intercom app with two SIP accounts per tablet	baresip (free)

Services: Server and intercom set up; call plan; calls tested room to room and from the door.

4.10 Door entry

[redacted] ex VAT

A door station with camera, face recognition, keypad and key-fob entry. It rings every tablet and the family's phones, and the door opens from them; off on Shabbos and Yom Tov.

QTY	EQUIPMENT	MAKE / PART
1	UniFi Access Intercom with flush mount	UniFi
1	Door Hub Mini	UniFi
1	12 V fail-secure electric strike (or the door's motor lock)	
10	Key fobs	UniFi UA-Pocket



UniFi Access Intercom

Services: Door station and strike fitted; users, face unlock, fobs and door calls set up; tested with the door supplier.

By others / note: A frame prepared for the strike (door supplier).

4.11 CCTV

[redacted] ex VAT

Five Ajax 4K cameras outside, recorded at home on an Ajax recorder (about three weeks on 8 TB), viewed on the tablets and phones beside the alarm. An HDMI outlet in the kitchen shows the cameras on a screen there without the internet.

QTY	EQUIPMENT	MAKE / PART
5	Ajax TurretCam HL 8 MP (4K) with junction box	Ajax
1	Ajax NVR (8 channels) with an 8 TB drive	Ajax / WD Purple
1	HDMI extender and kitchen HDMI outlet	



Ajax TurretCam

Services: Cameras fixed, aimed and set up (recording, detection zones, privacy masks); recorder and live view configured.

By others / note: Camera positions to agree. The kitchen screen is the family's.

4.12 Network and Wi-Fi

[redacted] ex VAT

A UniFi gateway and firewall, a 24-port PoE switch and Wi-Fi 7 on every floor, in a wall rack on a battery that keeps the network, server and controls running for hours in a power cut. Everything except remote access and streaming works without the internet.

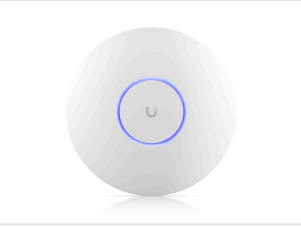
QTY	EQUIPMENT	MAKE / PART
1	Cloud Gateway Fiber (UCG-Fiber)	UniFi
1	Pro Max 24 PoE switch, 400 W	UniFi
4	U7 Pro Wi-Fi 7 access point	UniFi
1	15U wall cabinet, patch panel, power strips	
1	Battery unit in UPS mode, 1,024 Wh	EcoFlow DELTA 3 Plus

Services: Rack built and patched; separate networks, firewall, VPN and Wi-Fi set up; power-cut and internet-loss tests.

By others / note: The broadband line (the family).



UniFi Cloud Gateway Fiber



UniFi U7 Pro

4.13 Intruder alarm and fire detection

[redacted] ex VAT

An Ajax wireless alarm with a range extender in the loft, and 11 Ajax mains fire detectors linked by radio, all fully linked to Loxone without the internet. Loxone arms, disarms and sets Night mode from its app, the tablets and the Shabbos schedule; on a fire or alarm the lights come on, blinds open and music stops.

QTY	EQUIPMENT	MAKE / PART
1	Hub 2 Plus and ReX 2 range extender	Ajax
7 + 5	MotionProtect detectors, DoorProtect contacts	Ajax
11	FireProtect 2 AC (smoke/heat, heat, CO)	Ajax
1	KeyPad Plus, indoor and outdoor sirens	Ajax
1	Relays and MultiTransmitter: the link to Loxone	Ajax

Services: Devices fitted and paired; alarm and fire set-up; walk, siren and fire tests; Ajax fully linked to Loxone.

By others / note: A 230 V feed to each fire detector (electrician). Ajax is EN 50131 Grade 2; a monitored or certificated alarm, if the insurer asks, is by a certificated installer.



Ajax Hub 2 Plus



FireProtect 2 AC

4.14 Low-voltage cabling (optional)

[redacted] ex VAT

Instead of the electrician, Powerled pulls and tests every low-voltage cable for the systems above. Without this section the electrician pulls them to our wiring instructions (Appendix B). The 230 V cabling, including the blind motor cables, is the electrician's either way.

QTY	CABLING	TYPE
34	From the panel to each switch point, and 2 to the Velux interface	Cat6
77	Run-ons in the rooms: switch to presence sensor, ceiling relays, LED dimmer, AC	Cat6
22	To the tablets, Wi-Fi, cameras, door station and kitchen HDMI	Cat6A
8 + 9	To the Master speakers, and links to their Clients and subs	Tree Turbo
1 set	1-Wire line, underfloor heating link, risers and panel containment	–

5 Investment

Prices blurred in this sample: every home is priced from its own design

No.	Section	Price ex VAT
1	Control panel and Loxone core	[redacted]
2	Lighting control	[redacted]
3	Presence and room sensors	[redacted]
4	Heating and cooling	[redacted]
5	Shabbat hot water	[redacted]
6	Blinds, curtains and Velux	[redacted]
7	Audio	[redacted]
8	Wall tablets	[redacted]
9	Room-to-room intercom	[redacted]
10	Door entry	[redacted]
11	CCTV	[redacted]
12	Network and Wi-Fi	[redacted]
13	Intruder alarm and fire detection	[redacted]
	Subtotal, sections 1 to 13	[redacted]
	VAT at 20%	[redacted]
	Total, the complete system (inc VAT)	[redacted]

No.	Optional	ex VAT	inc VAT
14	Low-voltage cabling by Powerled (section 4.14)	[redacted]	[redacted]
	Support plan: remote fixes by the next working day and one service visit a year (per month)	[redacted]	[redacted]
	Basement, when its plans arrive: a guide price per room (sections 2-4 and 6-8)	[redacted]	[redacted]

6 Options

The family may choose any of these. Each line shows the change to the price; a minus is a saving.

6.1 Dimmable mains lights, room by room

Room	Circuits that dim	ex VAT	inc VAT
Study	Downlights (1 circuit)	+	+
Living / dining room	All 4 circuits	+	+
Kitchen	All 3 circuits	+	+
Bedroom 1	5 of 7 (mirror and balcony lights stay switched)	+	+
Bedroom 2	Both circuits	+	+
Bedroom 3	Both circuits	+	+
Bedroom 4	2 of 3 (the shelf lights stay switched)	+	+
Bedroom 5	All 3 circuits	+	+
All eight rooms		**+**	**+**



Loxone Nano Dimmer Air

A Loxone Nano Dimmer Air at the first light of each dimmed circuit replaces its ceiling relay: up to 110 VA of dimmable LED lamps a circuit, checked at second fix. Not offered in halls, landings or bathrooms.

6.2 Loxone Touch Tree instead of the Touch Slim Flex

In the room	Rooms	ex VAT	inc VAT
1 switch	Study, WC, cloakroom, utility, hall 2, both landings and the 5 bathrooms	−	−
2 switches	Hallway, kitchen, bedrooms 2, 3 and 4	−	−
3 switches	Living / dining room, bedroom 5	−	−
4 switches	Bedroom 1	−	−
The whole house (32 switches)		**−**	**−**



Loxone Touch Tree

The classic Loxone Touch Tree: five fixed touch points, temperature and humidity built in, white or anthracite. No custom icons, but no US boxes, frames or 4-week lead time.

6.3 Security and other savings

Option	ex VAT	inc VAT
Loxone alarm instead of the Ajax intruder alarm: the presence sensors in every room, a Loxone contact on the front door and two Texecom external sirens (front and back); the Ajax fire detectors stay	−	−
The Loxone alarm, and the Ajax fire detectors left out too (the electrician's mains smoke alarms only)	−	−
Only the Ajax fire detectors left out (the electrician's mains smoke alarms)	−	−
Blinds only in the bedrooms, living/dining room and kitchen (6 motors fewer)	−	−
No subwoofers (living/dining room and kitchen)	−	−
5 MP outside cameras instead of 8 MP (4K)	−	−



Loxone Door & Window Contact Air

Insurance. The Loxone alarm works well, but it is not a graded alarm (EN 50131), so the household insurer may not accept it. Please check with the insurer before choosing it: some insurers now accept smart alarms like this.

7 Responsibilities and programme

7.1 Who does what

Item	Powerled	Electrician	Others
Control panel, rack, all Loxone and network equipment	Supply, build, install		
Consumer unit: 3 lighting, 3 shading and 1 speaker way (RCBOs)		Supply and install	
Lighting: one supply per floor looped to the ceiling relay positions; circuits to the lights		First fix to Appendix B	
Ceiling relay enclosures	Supply	Fit at first fix	
Ceiling relays: fitted, connected, addressed	Second fix		
Switch boxes (US 1-gang) at every switch point	Supply	Fit at first fix	
Low-voltage cables (Cat6, Cat6A, speaker, 1-Wire)	Optional (section 14)	Or pull to Appendix B	
Blind motor cables (4-core from the panel)		Supply and install	
Light fittings, LED strip, 24 V LED drivers		Install	Lighting supplier
Blinds, curtains and motors; Velux windows	Connect and set up		Blind company, window supplier
AC units; UFH actuators and manifolds; boiler and cylinder	Control interface		AC, heating, plumbing
Fire detector feeds; sockets for the rack, Velux interface and range extender		Supply and install	
Door frame prepared for the strike; subwoofer ceiling boxes			Door supplier, drylining
Programming, commissioning, handover and training	All systems	Attend lighting tests	

7.2 Wired for both

The electrician's first fix also suits a conventional house. Each floor's lights hang off one supply looped through the relay positions, every blind motor has its own cable back to the panel, and every switch has its own Cat6 back to the panel, with no 230 V at any switch. With Loxone, the relays and Touch Slim Flex switches go in. Without it, impulse relays go in the same positions, worked by push-buttons over the same Cat6. Nothing is re-run.

7.3 Programme

1. **Options chosen; drawings confirmed**
   The ground-floor lighting plan, the basement, and the panel and rack location.
2. **Formal quotation**
   Issued from our system with the payment terms, for acceptance.
3. **Switch design**
   Layouts and icons signed off; long-lead items ordered (switches about 4 weeks).
4. **First fix**
   The electrician wires to Appendix B; we set out on site and check before the ceilings close.
5. **Workshop build**
   The control panel built and tested in our workshop.
6. **Second fix**
   Devices fitted, connected and addressed, room by room.
7. **Commissioning**
   Programming and testing, including a full Shabbos cycle.
8. **Handover**
   Walk-through, the app on the family's phones, as-built documents and support.

8 Assumptions, exclusions and terms

Assumptions

- Quantities follow the interior designer's drawings. The ground-floor lighting is assumed until its plan is issued.
- Mains lights are LED fittings suited to switching by relays; dimmable lamps only where the dimmer upgrade is chosen.
- Wet underfloor heating in every room; a gas boiler with an unvented cylinder.
- AC units of a make supported by the Loxone AC Control.
- Access to working areas during normal hours; power and lighting on site.
- The broadband line is in place before commissioning.

Exclusions

- The basement (priced when its plans arrive).
- The consumer unit and all 230 V cabling, light fittings, LED strip and drivers.
- Blinds, curtains and motors, AC units, underfloor heating, the boiler and plumbing.
- Builder's work, making good and decoration; fire hoods if required.
- Streaming subscriptions and the broadband contract.

Terms

- Prices are in pounds sterling, ex VAT unless shown; VAT is at the standard rate (20%).
- This proposal is valid for 30 days from 18 November 2026.
- Equipment prices follow the makers' UK list prices of November 2026.
- A formal quotation with the payment terms follows once the options are chosen.
- The Touch Slim Flex switches are made to order and cannot be returned once ordered.
- The Ajax alarm is EN 50131 Grade 2. Building Control to accept the Ajax fire detectors as the house's smoke alarms.

Acceptance

I accept this proposal with the options ticked below, subject to the formal quotation.

☐ Dimmer upgrade in: _____

☐ Touch Tree instead of the Touch Slim Flex

☐ Loxone alarm instead of the Ajax intruder alarm

☐ Other options: _____

☐ Low-voltage cabling by Powerled (section 14)

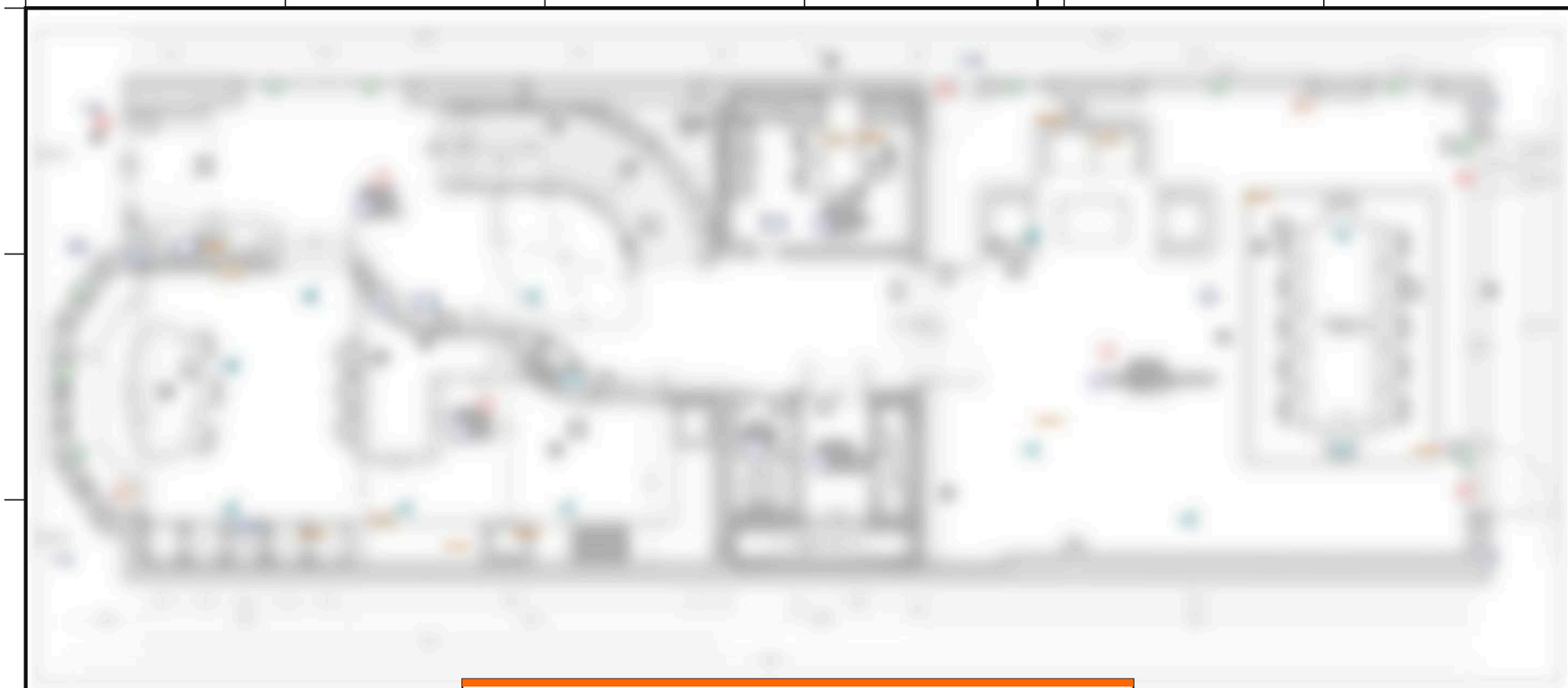
Signed	Name	Date

APPENDIX A

Device layout drawings

Where each device goes, floor by floor, on the interior designer's plans. Drawings PL-SAMPLE-101 to 103, A3.

In this sample the drawings are blurred to protect our client's privacy.



SAMPLE DRAWING

Detail blurred to protect our client's privacy

REV	DATE	DESCRIPTION	BY	CHK
E	17.11.26	Device plans, lighting in the panel	PLE	
F	18.11.26	Lighting on ceiling relays, one supply per floor	PLE	

Powerled Electrics
powerledelectrics.co.uk

PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Ground floor: device layout

DRAWING NO.	REV	SHEET
PL-SAMPLE-101	**F**	**1 of 3**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		



SAMPLE DRAWING

Detail blurred to protect our client’s privacy

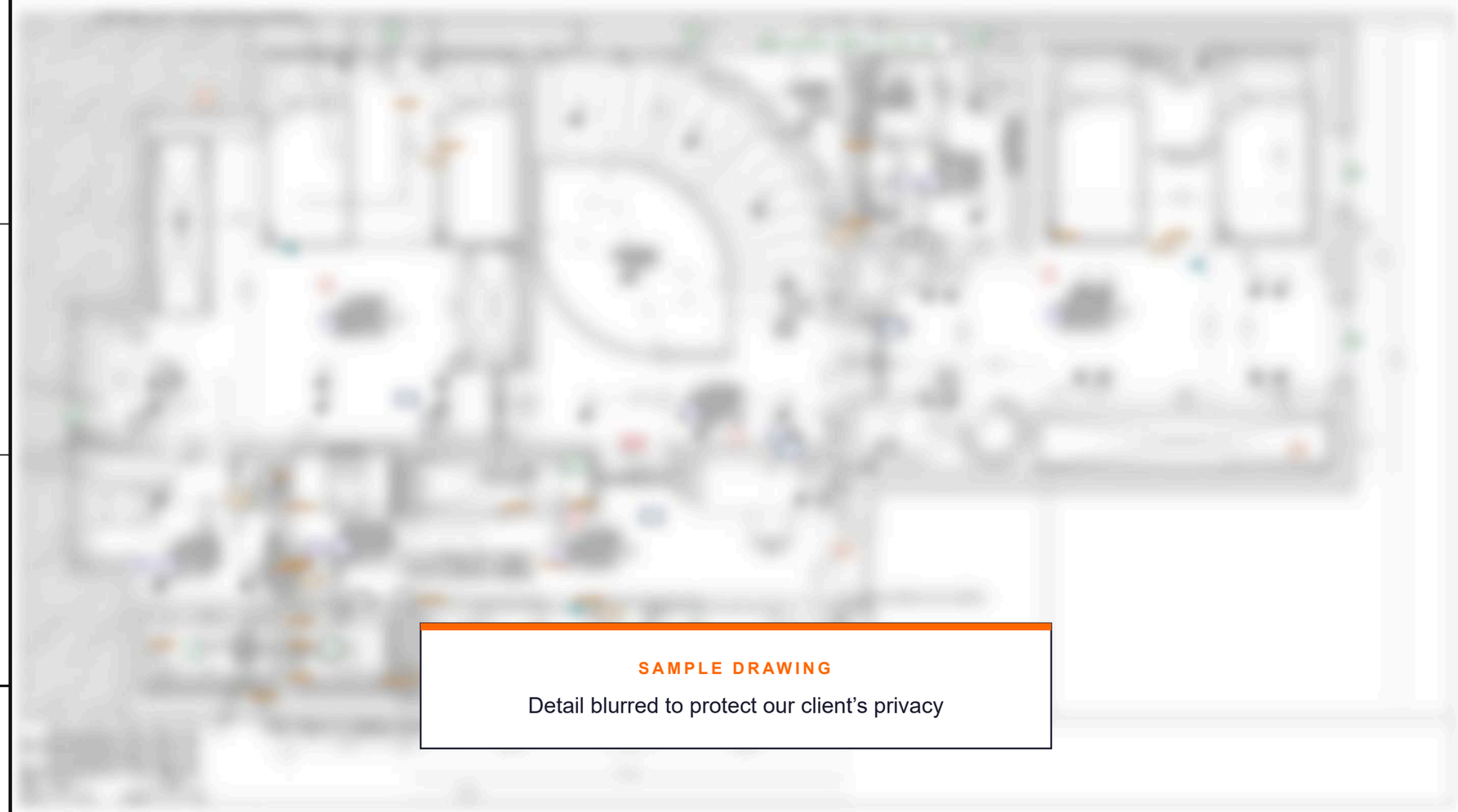
REV	DATE	DESCRIPTION	BY	CHK
E	17.11.26	Device plans, lighting in the panel	PLE	
F	18.11.26	Lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
First floor: device layout

DRAWING NO.	REV	SHEET
PL-SAMPLE-102	**F**	**2 of 3**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		



SAMPLE DRAWING

Detail blurred to protect our client’s privacy

REV	DATE	DESCRIPTION	BY	CHK
E	17.11.26	Device plans, lighting in the panel	PLE	
F	18.11.26	Lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Loft: device layout

DRAWING NO.	REV	SHEET
PL-SAMPLE-103	**F**	**3 of 3**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		

APPENDIX B

Wiring instructions for the electrician

The distribution, the ceiling relay and lighting schematics, the shading and control schematics, the floor layouts and the cable schedules. Drawings PL-SAMPLE-401 onward, A3.

In this sample the drawings are blurred to protect our client's privacy.

SAMPLE DRAWING

Detail blurred to protect our client’s privacy

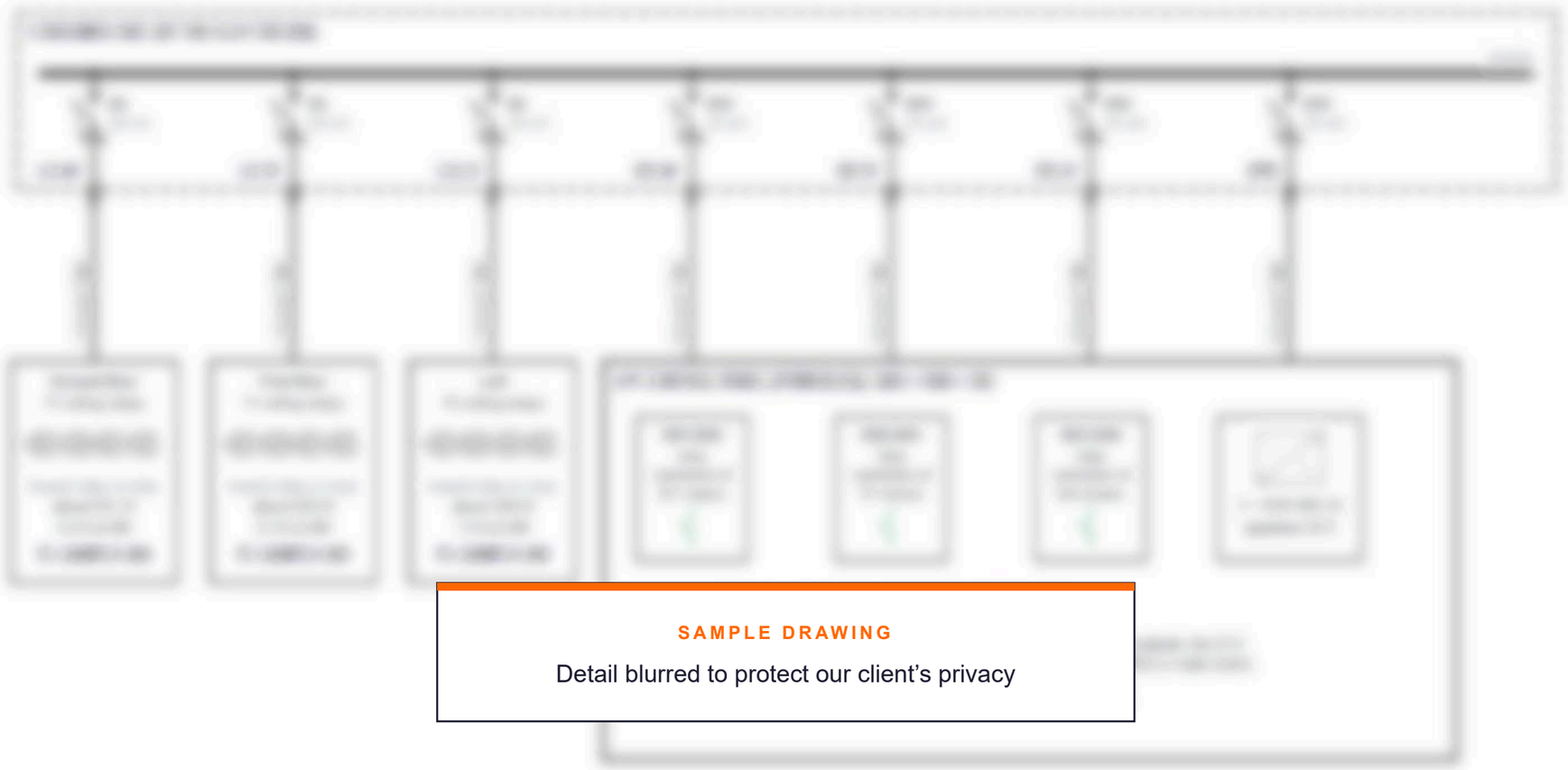
REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Drawing register, notes and symbols

DRAWING NO.	REV	SHEET
PL-SAMPLE-401	**F**	**1 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		



SAMPLE DRAWING

Detail blurred to protect our client's privacy

REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Distribution: single-line diagram

DRAWING NO.	REV	SHEET
PL-SAMPLE-402	**F**	**2 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		

SAMPLE DRAWING

Detail blurred to protect our client's privacy





REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
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DRAWING TITLE
Typical connections: relay, wired for both, dimmer option, LED

DRAWING NO.	REV	SHEET
PL-SAMPLE-403	**F**	**3 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		

SAMPLE DRAWING

Detail blurred to protect our client’s privacy

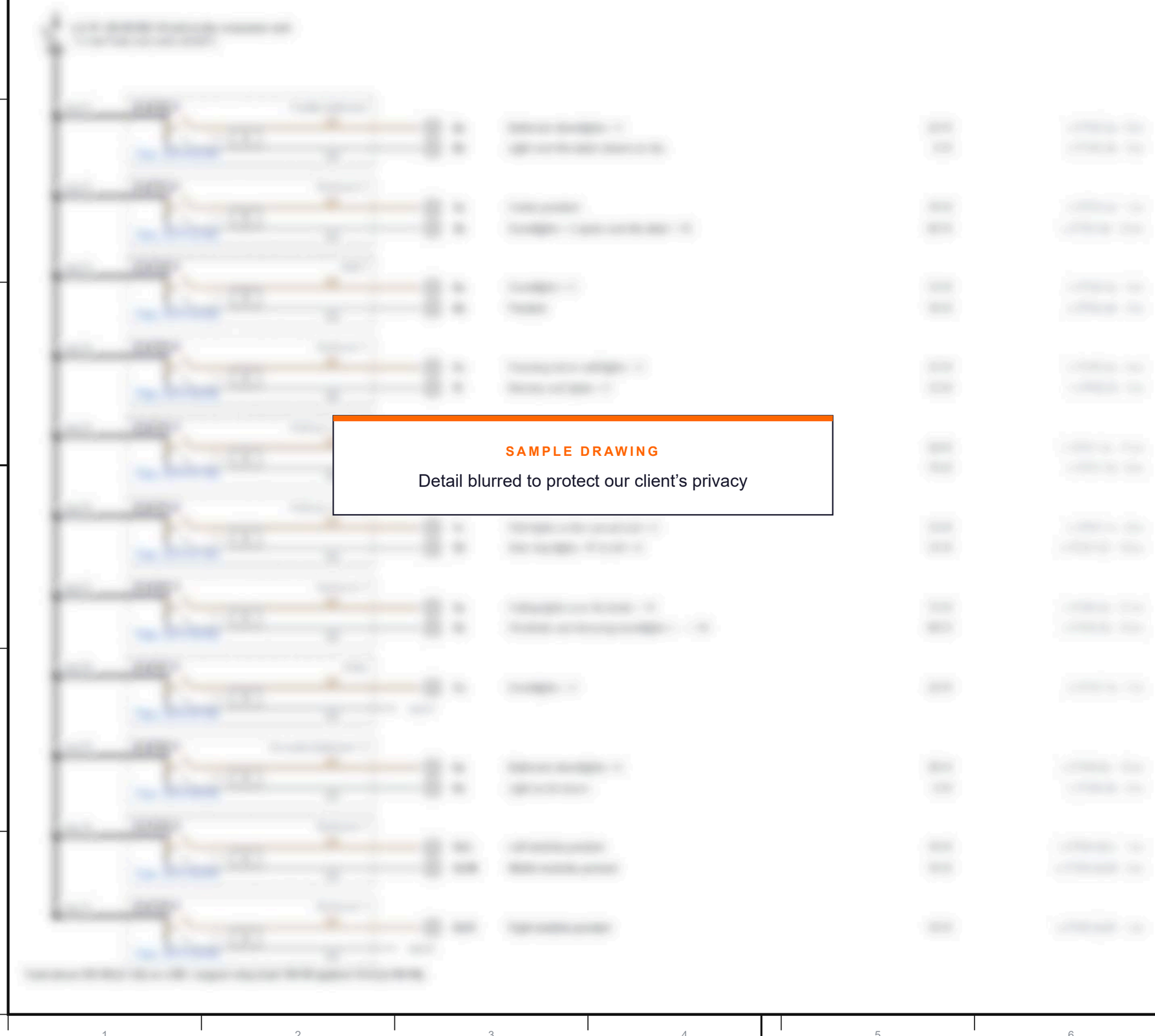
REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Ground floor: lighting schematic

DRAWING NO.	REV	SHEET
PL-SAMPLE-404	**F**	**4 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		



SAMPLE DRAWING

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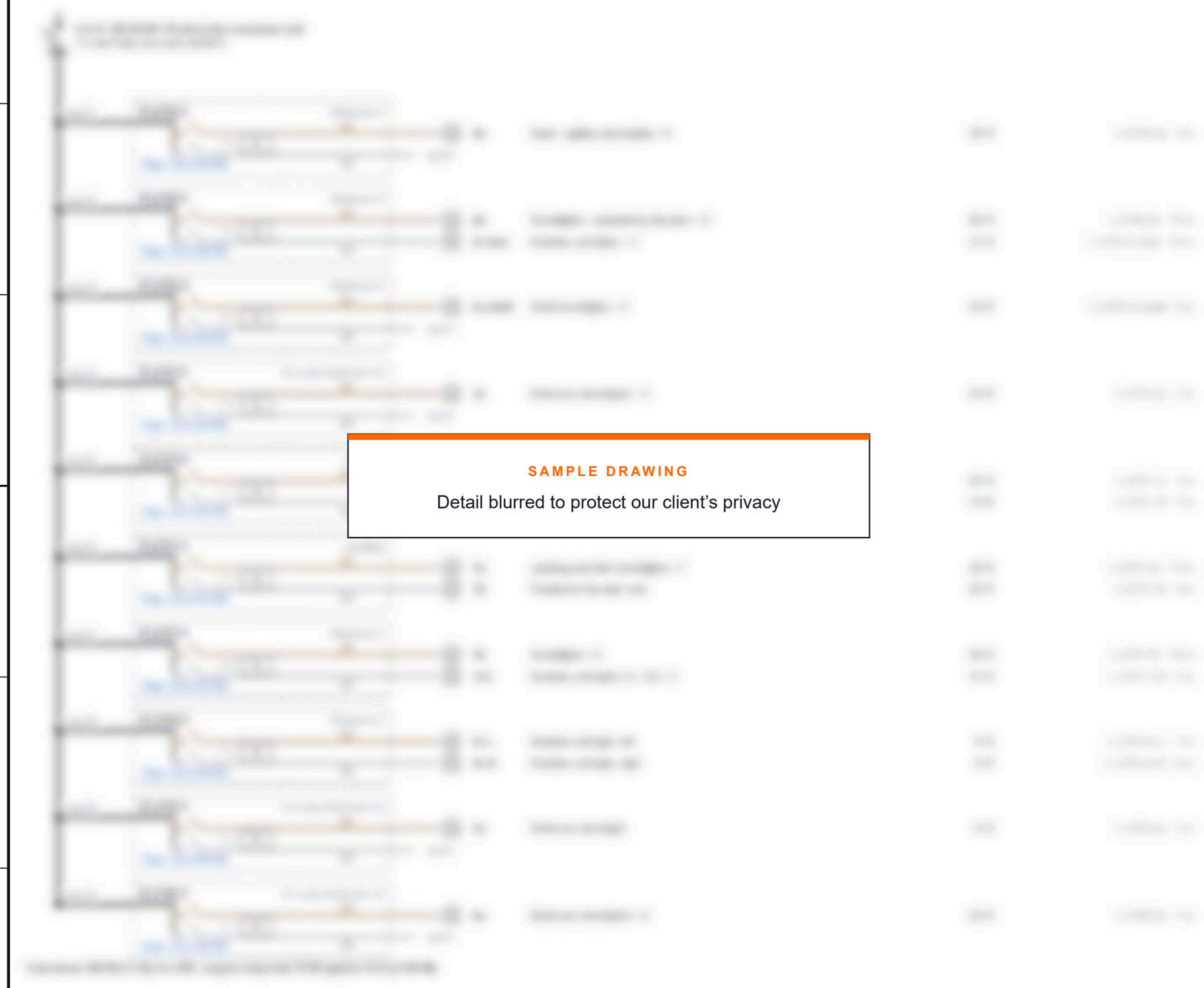
REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
First floor: lighting schematic

DRAWING NO.	REV	SHEET
PL-SAMPLE-405	**F**	**5 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		



SAMPLE DRAWING

Detail blurred to protect our client's privacy

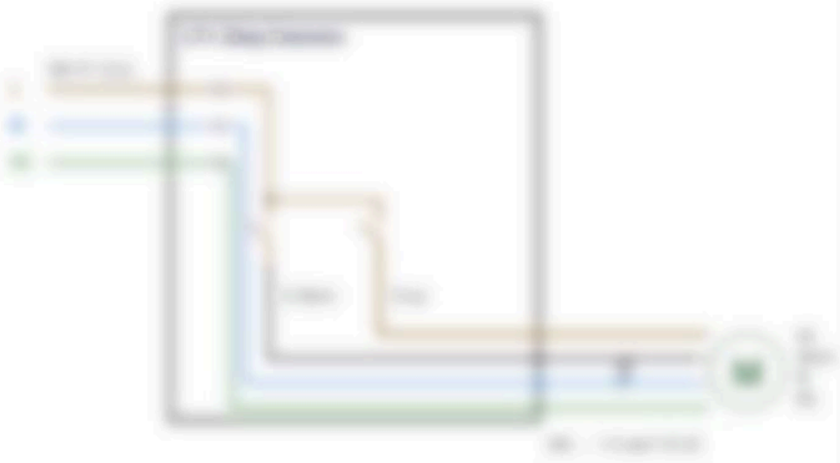
REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

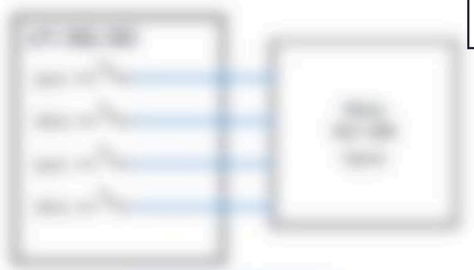
Powerled Electrics
powerledelectrics.co.uk

PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Loft: lighting schematic

DRAWING NO.	REV	SHEET
PL-SAMPLE-406	**F**	**6 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		





SAMPLE DRAWING

Detail blurred to protect our client’s privacy

REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

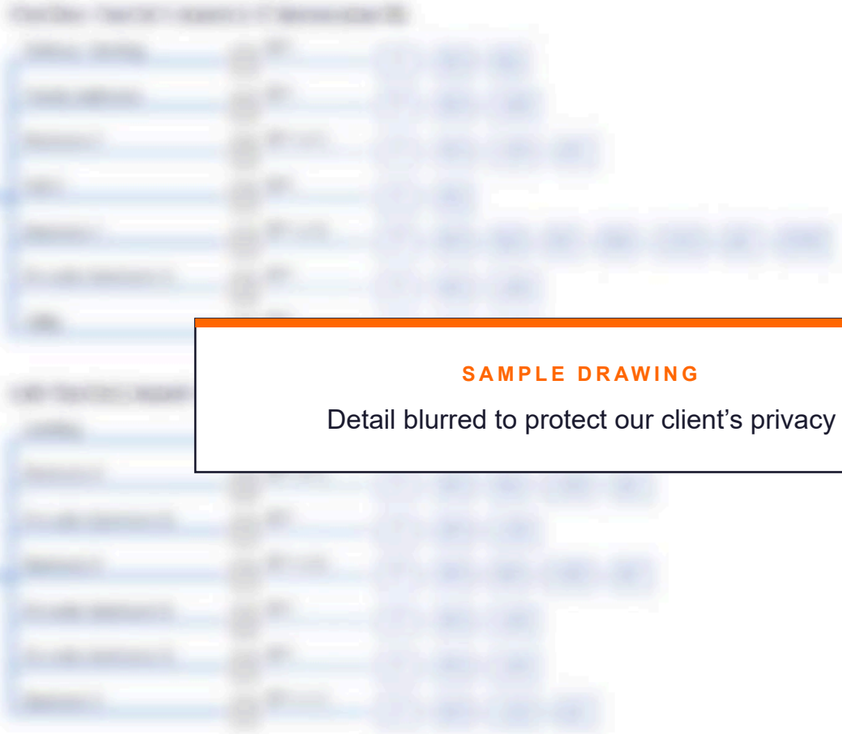
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PROJECT
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DRAWING TITLE
Blinds, Velux and KeyArm: schematic and relays

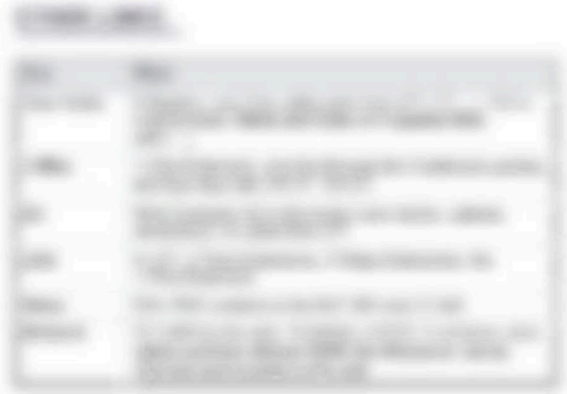
DRAWING NO.	REV	SHEET
PL-SAMPLE-407	**F**	**7 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		

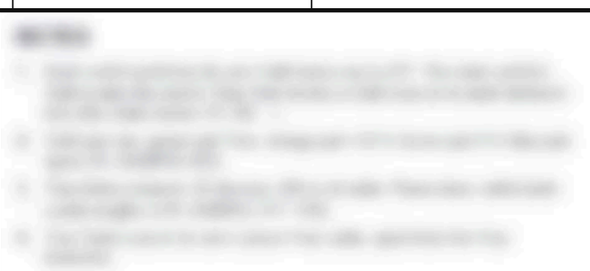




SAMPLE DRAWING

Detail blurred to protect our client’s privacy





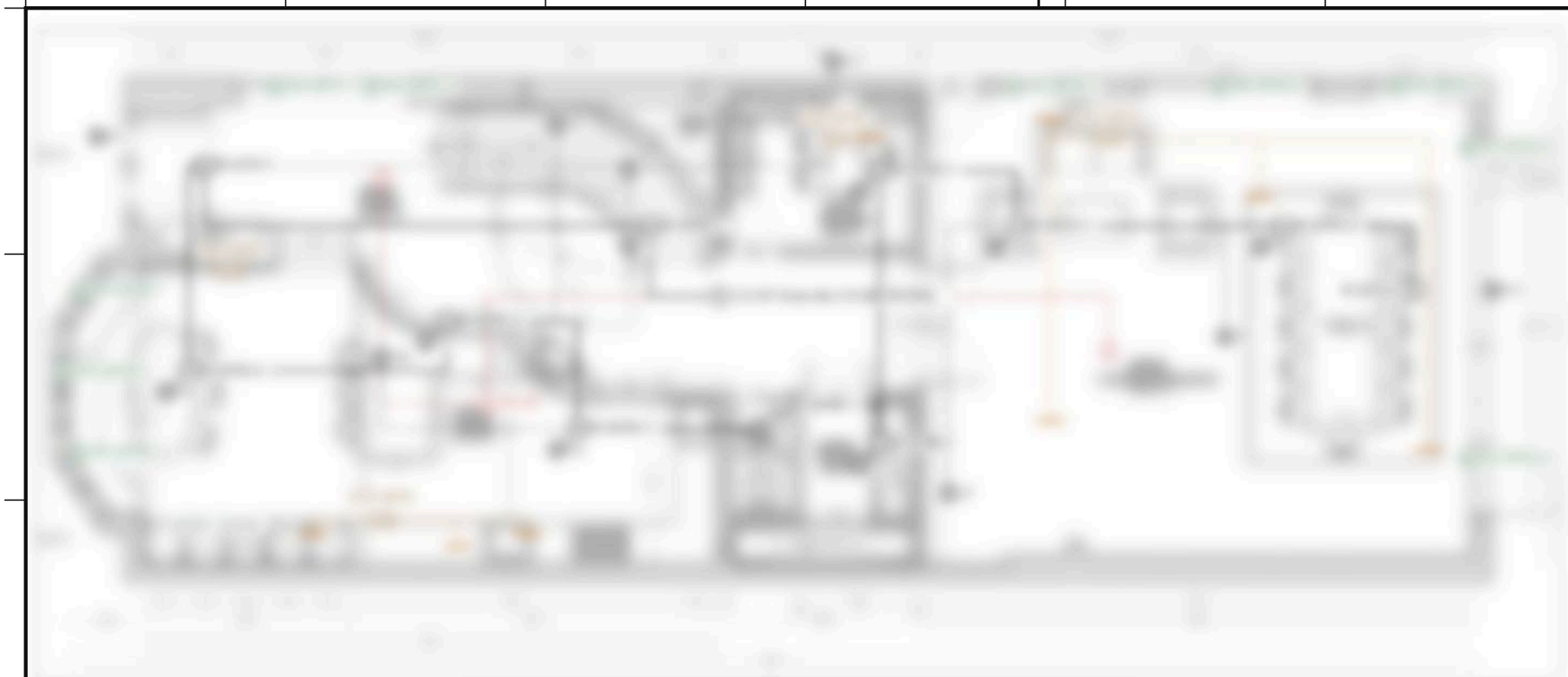
REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
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DRAWING TITLE
Control and data: topology

DRAWING NO.	REV	SHEET
PL-SAMPLE-408	**F**	**8 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		



SAMPLE DRAWING

Detail blurred to protect our client's privacy

REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

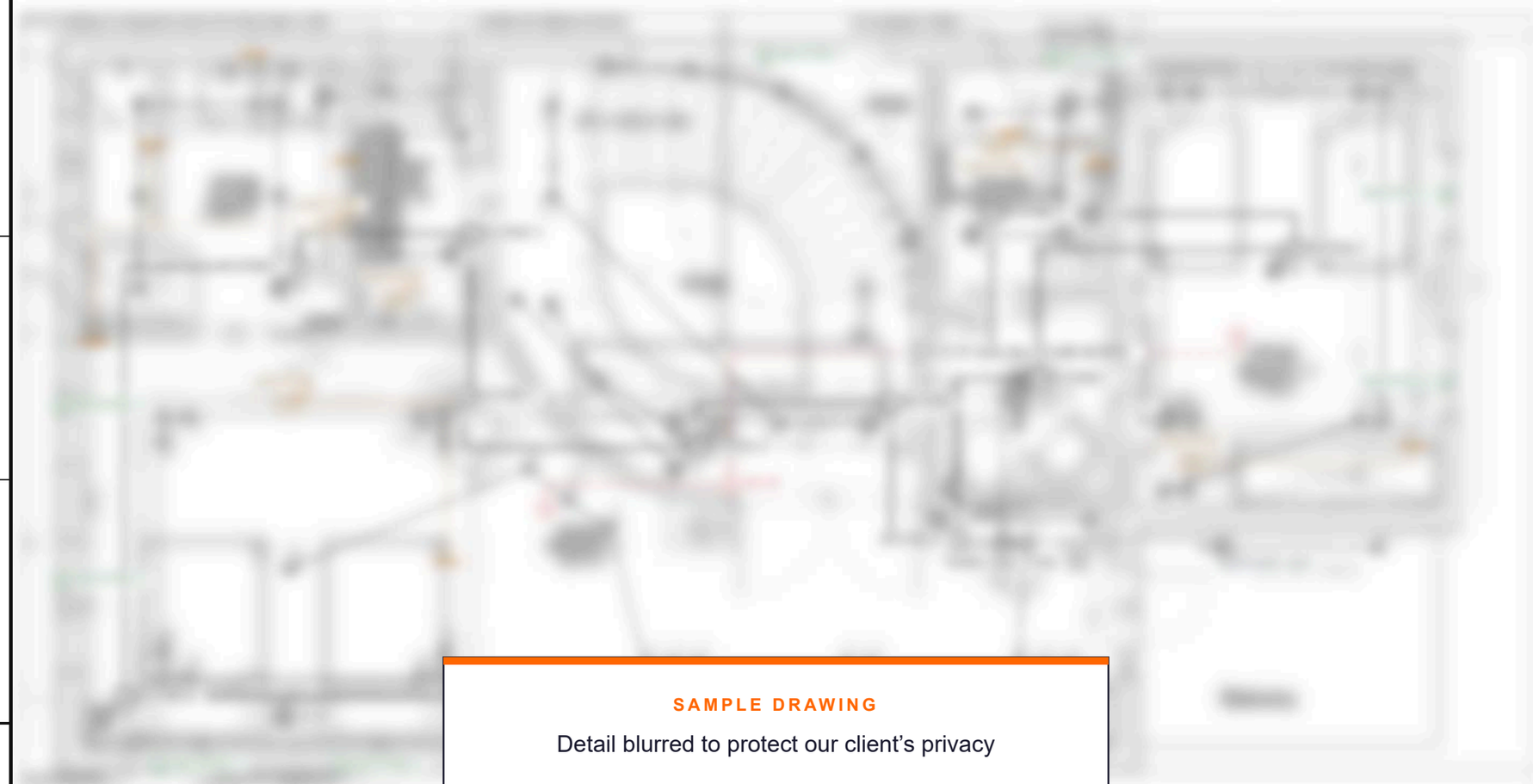
POWERLED ELECTRICS

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Ground floor: 230 V layout

DRAWING NO.	REV	SHEET
PL-SAMPLE-409	**F**	**9 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		



SAMPLE DRAWING

Detail blurred to protect our client’s privacy

REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

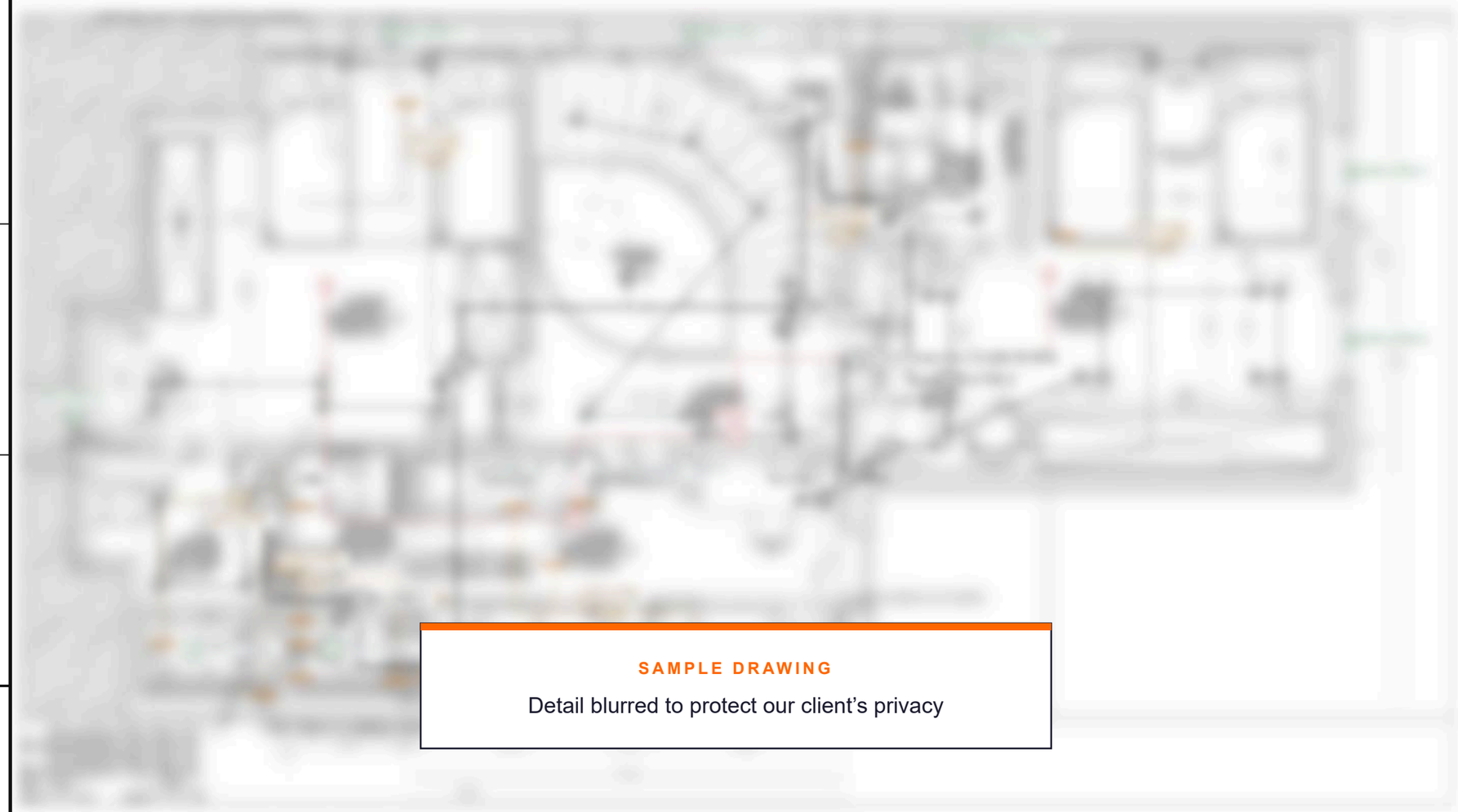
POWERLED ELECTRICS

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
First floor: 230 V layout

DRAWING NO.	REV	SHEET
PL-SAMPLE-410	**F**	**10 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		



SAMPLE DRAWING

Detail blurred to protect our client's privacy

REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

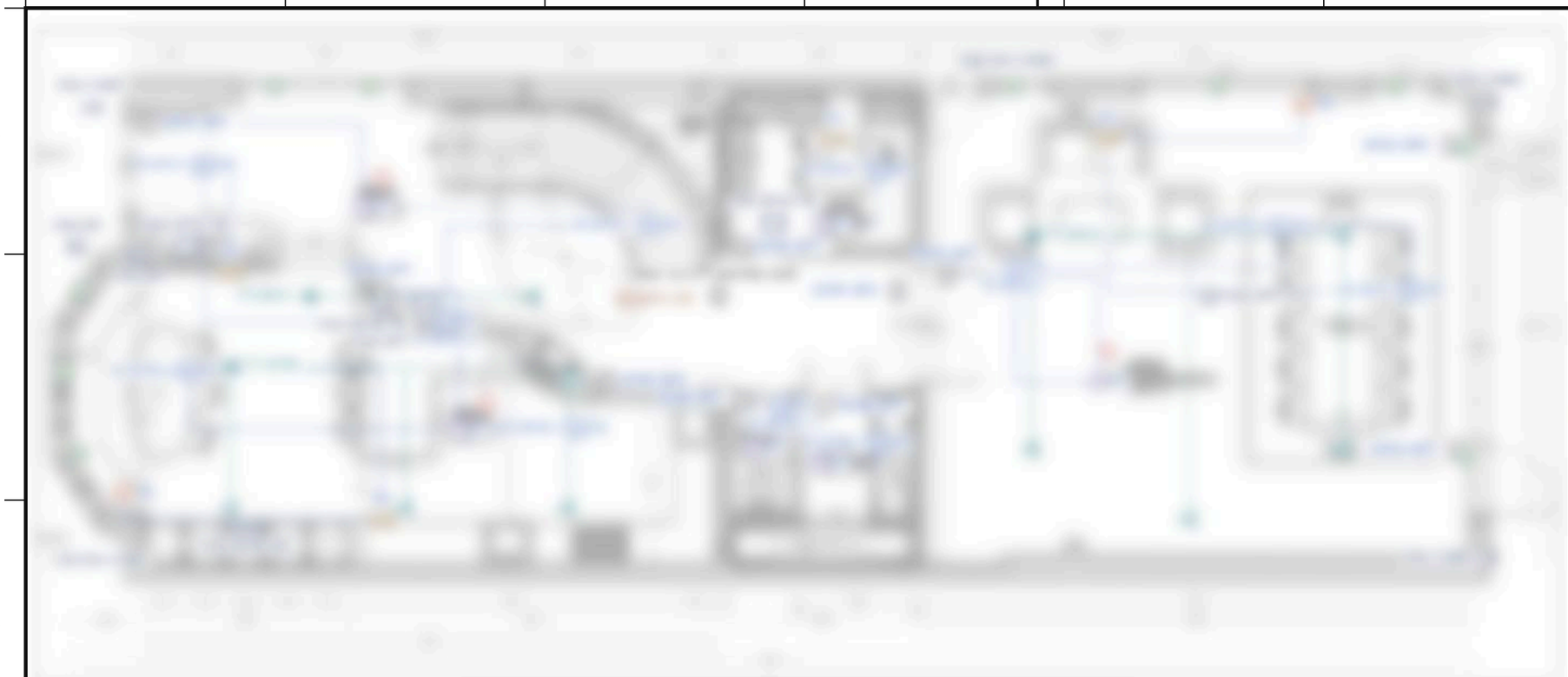
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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Loft: 230 V layout

DRAWING NO.	REV	SHEET
PL-SAMPLE-411	**F**	**11 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		



SAMPLE DRAWING

Detail blurred to protect our client's privacy

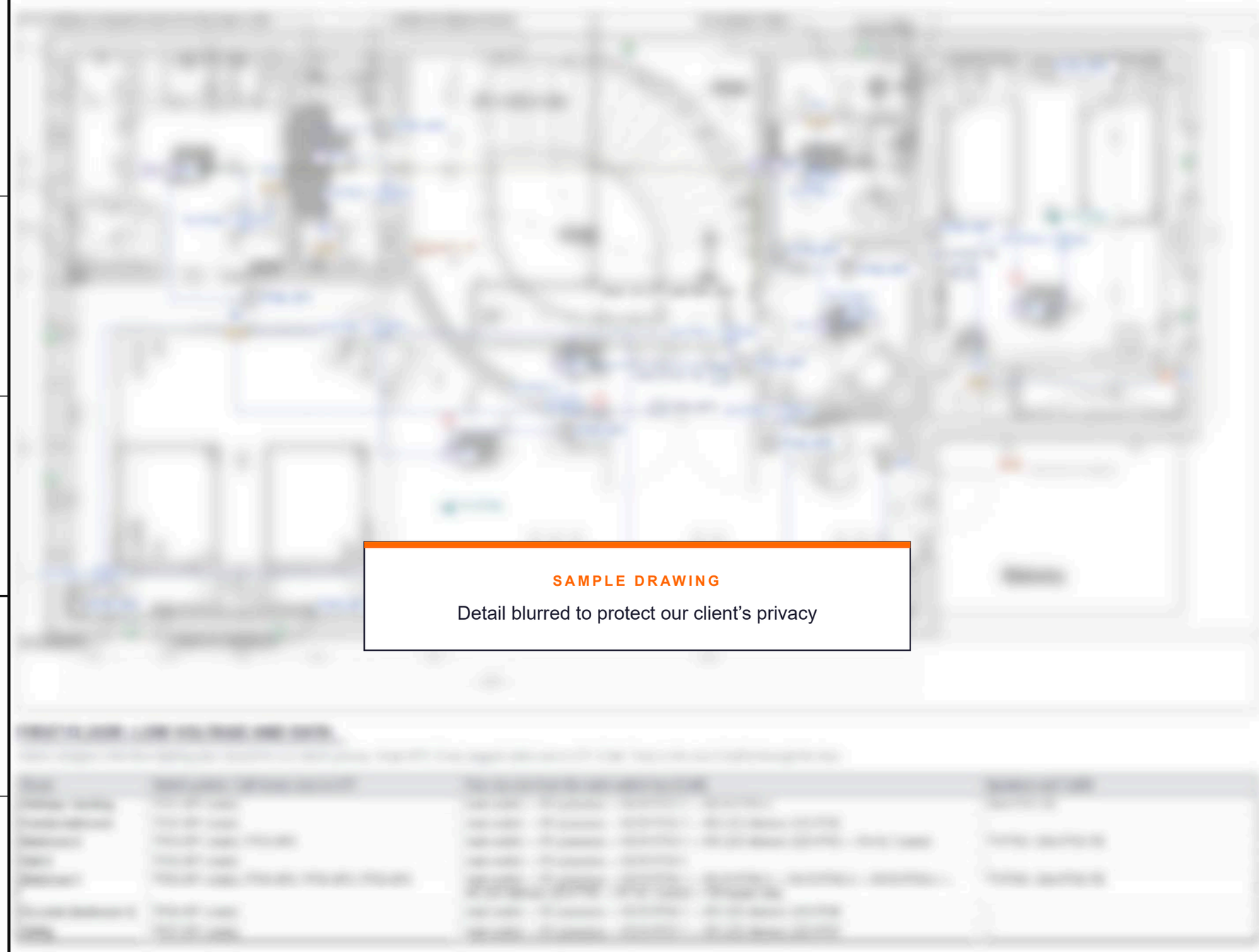
REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Ground floor: low voltage and data layout

DRAWING NO.	REV	SHEET
PL-SAMPLE-412	**F**	**12 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		



SAMPLE DRAWING

Detail blurred to protect our client's privacy

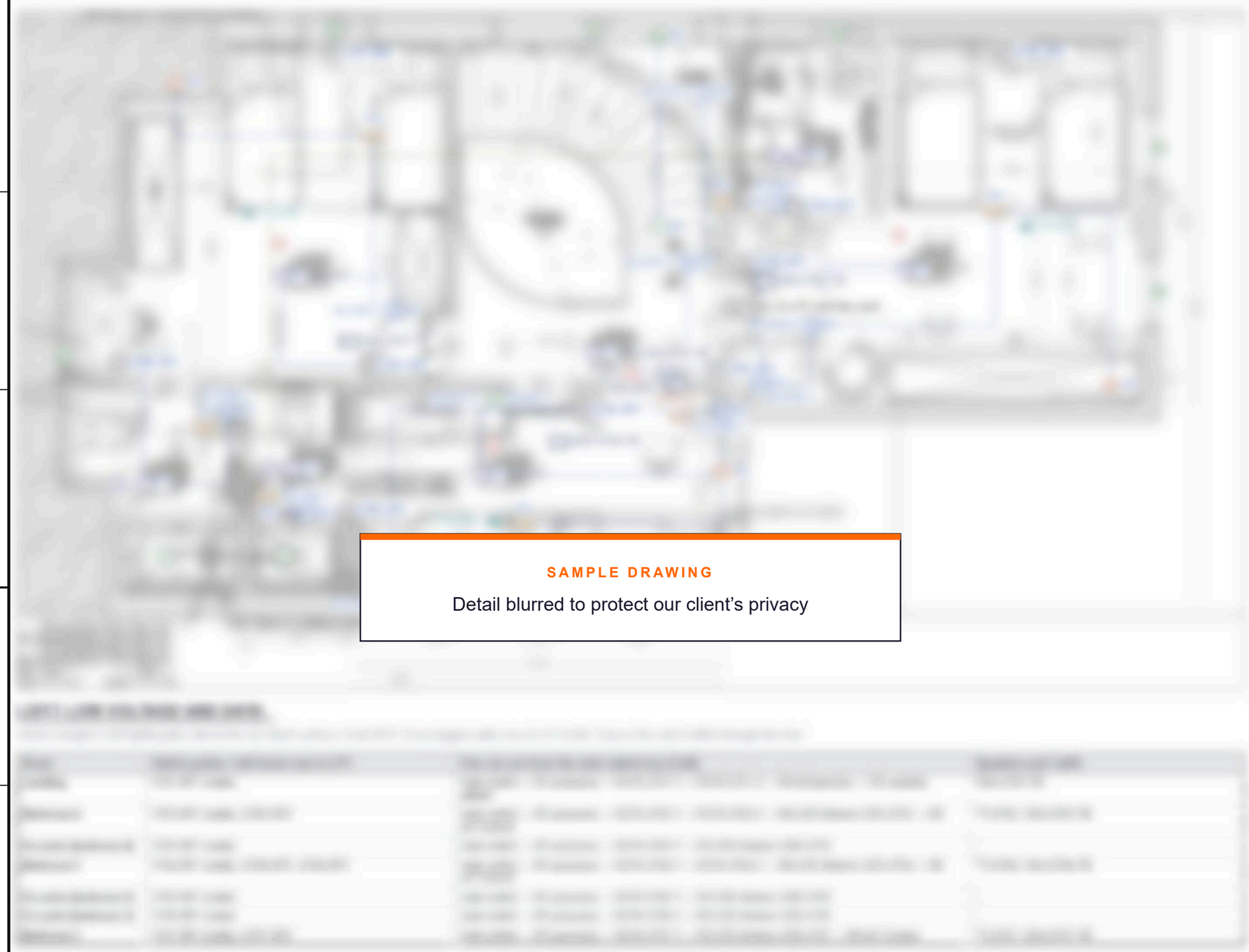
REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
First floor: low voltage and data layout

DRAWING NO.	REV	SHEET
PL-SAMPLE-413	**F**	**13 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		



SAMPLE DRAWING

Detail blurred to protect our client's privacy

REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

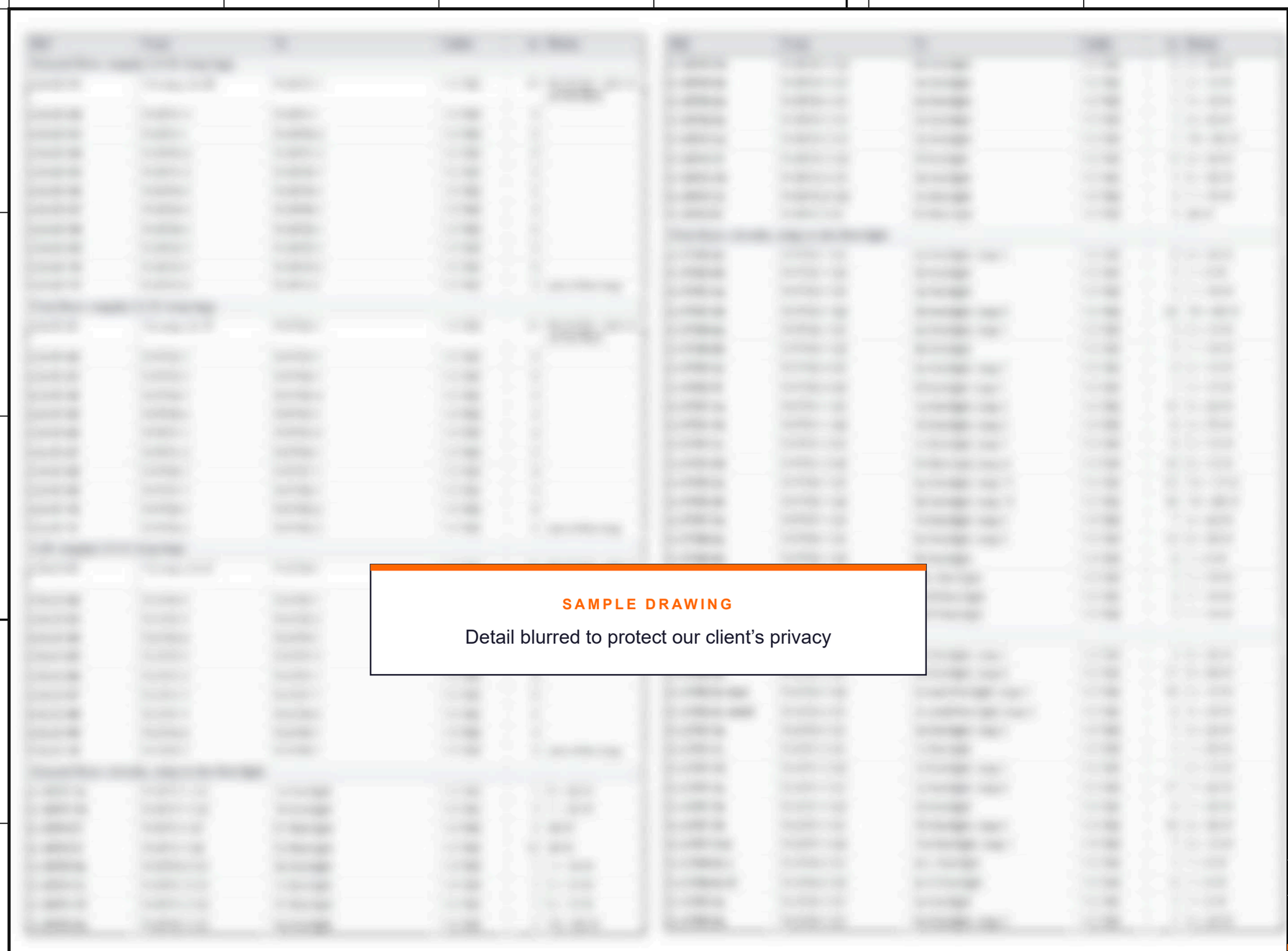
POWERLED ELECTRICS

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Loft: low voltage and data layout

DRAWING NO.	REV	SHEET
PL-SAMPLE-414	**F**	**14 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		



SAMPLE DRAWING

Detail blurred to protect our client's privacy

REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Cable schedule 1: lighting supplies and circuits

DRAWING NO.	REV	SHEET
PL-SAMPLE-415	**F**	**15 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		

SAMPLE DRAWING

Detail blurred to protect our client’s privacy

REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Cable schedule 2: blinds, LED feeds, fire, sockets, supplies

DRAWING NO.	REV	SHEET
PL-SAMPLE-416	**F**	**16 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		

SAMPLE DRAWING

Detail blurred to protect our client’s privacy

REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
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DRAWING TITLE
Cable schedule 3: 24 V strip runs and switch Cat6

DRAWING NO.	REV	SHEET
PL-SAMPLE-417	F	17 of 20
SCALE (A3)	DATE	STATUS
NTS	18 Nov 2026	Sample
DRAWN	CHECKED	APPROVED
PLE		

SAMPLE DRAWING

Detail blurred to protect our client's privacy

REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
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DRAWING TITLE
Cable schedule 4: Tree run-ons

DRAWING NO.	REV	SHEET
PL-SAMPLE-418	**F**	**18 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		

SAMPLE DRAWING

Detail blurred to protect our client’s privacy

REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Cable schedule 5: speakers, network, 1-Wire, Velux, UFH

DRAWING NO.	REV	SHEET
PL-SAMPLE-419	**F**	**19 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		

SAMPLE DRAWING

Detail blurred to protect our client’s privacy

REV	DATE	DESCRIPTION	BY	CHK
F	18.11.26	First issue: lighting on ceiling relays, one supply per floor	PLE	

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PROJECT
Five-bedroom home, London · Loxone smart home

DRAWING TITLE
Consumer unit, LP1 and rack, details and checks

DRAWING NO.	REV	SHEET
PL-SAMPLE-420	**F**	**20 of 20**
SCALE (A3)	DATE	STATUS
NTS	**18 Nov 2026**	**Sample**
DRAWN	CHECKED	APPROVED
PLE		