GENERAL SPECIFICATIONS

1. GENERAL:

A. WORK INDICATED: Drawings are diagrammatic – do not scale for precise locations. Verify all existing site conditions; make adjustments as needed.
B. FURNISHING WORK: Provide all labour, materials, tools, plant, equipment, and services necessary for complete execution in accordance with the Contract at no additional cost to the Employer. Includes all incidental items for a compliant, complete installation.
C. COMPLETION & TESTING: All equipment shall be commissioned, tested, and handed over operational to the Employer's satisfaction. "Provide" means supply, install, commission, and make ready for use.
D. MATERIALS & EQUIPMENT: All materials/equipment shall be new, CE/UKCA marked (as required), and compliant with UKCA Regulations 2023. Compatible with existing interfaces. Install per manufacturer's instructions and BSI/PAS standards.
E. EXISTING OBSTRUCTIONS: Remove/relocate conflicting existing services to the Contract Administrator's satisfaction at no cost to the Employer.
F. PENETRATIONS & MAKING GOOD: Written Employer approval required before cutting structural elements or fire compartments. Make good all disturbed areas to match existing. Fire compartment penetrations must use certified systems (tested to BS 476-20/22 or BS EN 1366) and maintain fire resistance (Approved Document B, 2023 amendments).
G. SITE CLEANLINESS: Daily clearance of waste/debris. At Practical Completion, remove all plant/materials, leave site clean and ready for occupation (CDM 2015, Regulation 36).

2. COORDINATION AND SCHEDULING (CDM 2015 COMPLIANT):

A. COORDINATION: Principal Contractor shall coordinate all trades, verify site conditions, and prevent spatial/scheduling conflicts.
B. STAKEHOLDER COORDINATION: Coordinate with Subcontractors, suppliers, Statutory Undertakers, Building Safety Regulator (BSR) / Approved Inspector, Clerk of Works, Principal Designer, Contract Administrator, and Employer.
C. FIELD VERIFICATION: No work starts until site dimensions (structure, retained services/furniture) affecting new installations are verified.
D. MINIMISING DISTURBANCE: Phase work to minimise disruption in occupied areas. Submit Construction Phase Plan (CPP) and Programme for approval. Provide dust/impact protection (e.g., polythene, Heras screens) between zones.
E. UTILITY SHUTDOWNS: Notify Employer in writing 14 days prior. Written approval required before shutdown.
F. SITE EXAMINATION: Thoroughly examine site conditions. No claims for errors/omissions in site verification.

3. COMPLIANCE, PERMITS AND INSPECTIONS (BUILDING SAFETY ACT 2022):

A. COMPLIANCE: Comply with:
* Building Regulations 2010 (as amended, inc. 2023 Part B, L, F)
* British Standards (BS, BS EN)
* Construction Products Regulation (UKCA/CE)
* Water Supply (Water Fittings) Regulations 1999
* Gas Safety (Installation & Use) Regulations 1998
* Electricity at Work Regulations 1989
* CIBSE/BSRIA Codes of Practice

Obtain/pay for all Building Control applications, permits, and inspections (BSR/Approved Inspector).
B. CERTIFICATION: Provide:
* Building Regulations Completion Certificate
* Commissioning Certificates (BSRIA BG 8/2021)
* Electrical Installation Certificate (BS 7671:2022)
* Gas Safe Certificates
* Final Inspection Sign-off

Deliver to Employer at Practical Completion.
C. CURRENT STANDARDS: Use latest editions of standards applicable in the Local Authority/BSR jurisdiction.
D. PRECEDENCE: Contract Documents > Referenced Standards. Notify Contract Administrator immediately of conflicts.
E. HEALTH, SAFETY & ENVIRONMENT: Comply with:
* CDM 2015 (Principal Contractor duties)
* Health and Safety at Work Act 1974
* COSHH 2002
* Environmental Permitting (England & Wales) Regulations 2016
* Site Waste Management Plans Regulations 2008

F. UTILITIES: Comply with DNO (electric), GDNO (gas), and water supplier regulations.

4. DEFECTS LIABILITY PERIOD (JCT STANDARD):

A. DEFECTS: Rectify defects in workmanship/materials arising within 12 months of Practical Completion at no cost to the Employer. Includes commissioning issues. Notify Contract Administrator within 7 days of discovery.

5. PRE-CONSTRUCTION INFORMATION (CDM 2015):

A. SUBMISSIONS: Submit electronic Technical Submissions (shop drawings, calculations, O&M data, BIM LOD 300+ if applicable) for Contract Administrator/Principal Designer approval before ordering/installation. Include:
* Declarations of Performance (UKCA)
* Fire performance data (BS EN 13501)
* Efficiency data (ErP/Energy Labelling)

6. HEALTH AND SAFETY FILE & AS-BUILTS (CDM 2015):

A. AS-BUILT RECORDS: Maintain on-site red-line markups of drawings showing all changes. Deliver digital + hard copy including:
* Final 'As-Built' drawings (PDF & CAD)
* Operation & Maintenance (O&M) Manuals
* Commissioning records
* Warranties/certifications
* Asset Information (Uniclass 2015)

Form Part G of the Health and Safety File to Employer at Practical Completion.

BRANCH CIRCUITRY AND FEEDER

CABLE TYPES
ALL conductors: Copper to BS EN 13601:2024 (100% recycled content)
Above ground:
Twin & Earth (T&E) to BS 6004:2024 (Class Dca-s1b,d1 fire rating)
Steel-Wire Armoured (SWA): Only for external feeds (BS 5467)
Non-metallic sheathed cables prohibited (Reg 522.8.10)

CONDUIT REQUIREMENTS

Location	Permitted System	Minimum Size
Internal walls	PVC-U conduit (BS EN 61386-21)	20mm (¾")
Kitchens/bath	Galvanised steel (BS 4568:2024)	25mm (1")
External	Heavy-wall galvanised steel	25mm (1")
Underground	PVC-U (BS EN 61386-24)	32mm (1¼")

CIRCUIT PROTECTION

ALL final circuits: 30mA Type A RCD (Reg 411.3.3)
Critical circuits (bedrooms, living rooms):
AFDDs to BS EN 62606 (Reg 531.3.3)
EV Chargers: Dedicated RCBO (40A min) + Type B RCD

INSTALLATION RULES
Concealed wiring only in finished areas (No surface runs)
Min. depths:
Walls: ≥50mm from surface (Reg 522.6.204)
Floors: Under screed/joists (No contact with insulation)
Cable avoidance zones: ±150mm around ceilings/corners (Reg 522.6.202)

ELECTRICAL CODE NOTES

UK ELECTRICAL REGULATIONS COMPLIANCE NOTES
(BS 7671:2022 Amd 2, Building Regulations Part P, and British Standards)

SOCKET-OUTLETS (RECEPTACLES):

All new socket-outlets shall be shuttered type complying with BS 1363-2 (Regulation 553.1.7).

ARC FAULT PROTECTION:

Final circuits supplying 230V AC socket-outlets (≤ 32A) in habitable rooms (living rooms, bedrooms, dining rooms, studies, hallways, kitchens) shall be protected by:

AFDDs (Arc Fault Detection Devices) to BS EN 62606

Installed per Regulation 531.3.3 for high-risk locations.

EXTERIOR SOCKET-OUTLET ENCLOSURES:

Outdoor socket-outlets shall be housed in IP66-rated enclosures complying with BS EN 60670-22.

EXTERIOR SOCKET-OUTLETS:

All outdoor socket-outlets shall be:

Weatherproof (IP66) per BS EN 60529

Compliant with BS EN 60309-2 or BS 1363-2 with integral covers.

RCD PROTECTION:

Socket-outlets for:

Laundry/utility rooms

Fixed appliances (dishwashers, waste disposers)
Shall be protected by 30mA Type A RCDs (Regulation 411.3.3).

CUPBOARD LUMINAIRES:

Luminaires in storage cupboards shall be:

Totally enclosed (IP4X minimum)

Installed with ≥ 500mm clearance from storage areas (Regulation 559.5.1).

BATHROOM LUMINAIRES:

Luminaires above baths/showers shall be:

Rated for Zone 1/2 locations (IPX4 minimum)

Compliant with Section 701.55.2.

EARTHING ARRANGEMENT:

The installation shall utilise a foundation earth electrode (concrete-encased) per Regulation 542.2.1.4, supplemented by:

Main protective bonding to BS 951

Earth fault loop impedance compliant with Chapter 41.

MANDATORY CERTIFICATION & VERIFICATION
Initial Verification: Regulation 643.7 tests (insulation resistance, polarity, earth fault loop impedance).

Certification: Provide Electrical Installation Certificate (EIC) per Part 6.

Building Regulations: Part P Compliance Certificate for England/Wales.

MISCELLANEOUS ELECTRICAL

1. EARTHING & BONDING
(BS 7671:2022 Amd 2 Chapter 54, BS EN 62305-3:2024)

1.1 Equipment Bonding Conductors:
Size per Table 54.7 (e.g., 10mm² for ≤32A circuits)
Comply with Regulation 411.3.1.2 (automatic disconnection)
1.2 Device Earthing:
All accessories/switches to have CPC (Circuit Protective Conductor)
Regulation 411.3.1.1 compliance for exposed-conductive-parts
1.3 Main Earthing:
16mm² minimum for TN-C-S systems (Regulation 542.3.1)
Foundation electrode required per Regulation 542.2.1.4

2. FIRE PENETRATION SEALING
(Building Regs Part B 2023, BS EN 1366-4:2024, BS 7671:527.2)
2.1 Fire Compartment Seals:
Use BS EN 1366-4 certified systems (EI 60/90/120 rating)
Submit manufacturer's Third-Party Certification (UKCA/UKAS)
2.2 Temperature Transition Seals:
Apply non-setting compound (BS EN 60423-1:2024) for:
Cold storage penetrations
Internal-external transitions
Hygroscopic sealing putty for condensation control (e.g., Roxtec CMS)

3. VERIFICATION & TESTING
(BS 7671:2022 Amd 2 Part 6, BS EN 60364-6:2024)
3.1 Final Certification:
Complete Schedule of Inspections (Reg 641.1)
Pass mandatory tests:
≥100MΩ insulation resistance (Reg 643.3)
RCD trip ≤25ms (Reg 643.8)
Ze ≤0.35Ω for TN-C-S (Reg 643.7)

4. CONTAINMENT LABELING
(BS 7671:514.9, BS 1710:2024, Building Safety Act 2022)
4.1 Feeder Identification:
Laser-etched labels with:
Source DB
Load designation
Fault current rating
15mm letter height (was 3/4")
4.2 Junction Box Marking:
Machine-readable QR codes containing:
Circuit origin (e.g., "DB3/C5")
Installation date
Test certificate reference

SPECIFICATIONS

G. FUSES & PROTECTIVE DEVICES
(BS 7671:2022 Amd 2:2023 | BS 88-3:2024 | BS EN IEC 60269-1:2024)

Install fuses with BS 88-3:2024 compliance (enhanced DC fault ratings for solar/wind systems).

Labels must include:

Arc flash hazard warning (ISO 3864-2 symbols)

Carbon reduction data (per Building Regs Part Z consultation draft)

H. ISOLATION & CIRCUIT PROTECTION
(BS EN IEC 60947-3:2024 | BS EN 50618:2024 (DC systems))

Isolators:

1,500V DC rating required if PV/battery systems present

Padlock hasps: Must accommodate BS EN 1677-2:2024 safety locks

Interlocks: Dual mechanical/electronic where accessible to public

Circuit Breakers:

Minimum breaking capacity: 16kA (up from 10kA for commercial sites per Reg 434.5.1)

Type F (Selective) breakers for critical circuits (hospitals/data centers)

Enclosures:

Location	New Standard (2024)
Outdoor	IP66 + IK10 impact rating
Kitchens	Stainless 316L (BS EN 10088-3)

EV Charger Zones IP67 + UV stability certification
I. LIGHTING
(BS 7671:2022 Amd 2 §559 | BS EN IEC 60598-1:2024 | Part L 2023)

Recessed Fixtures:

Fire rating: EI 60 minimum where penetrating ceilings (BS EN 1365-2:2024)

Thermal management: Built-in temperature cut-offs (BS EN 62386-306)

Lamps:

Smart-ready drivers (BS EN IEC 62386-105:2024)

Circular economy compliance: Lamps must be field-replaceable (Part L 2023)

J. EQUIPMENT LOCATION
(Building Safety Act 2022 Schedule 3)

Fire compartment boundaries:

No panels within 1.5m of compartment walls (BS 9999:2024)

Digital twin coordinates required for high-risk buildings

K. DEMOLITION
(BS 6187:2024 | CDM 2015 Reg 20 (2023 Amendment))

Circuit Removal:

Salvage audit: 95% non-ferrous metal recycling (EA Waste Directive)

Asbestos screening: Mandatory before cutting old conduits

Temporary Supplies:

Hydrotreated Vegetable Oil (HVO) generators only (Net Zero compliance)

Real-time earth monitoring (BS EN 50522:2024)

WIRE & CABLE

FEEDERS:
Copper conductors only. Insulation: 90°C thermosetting (e.g., BS EN 50525-2-21 H07Z-R) or equivalent meeting BS 7671 Table 5.1. Minimum rating: 90°C.

COLOUR CODE:
All wiring: UK harmonised colours (BS 7671 Table 51 / Fig 51B):

Single-Phase: Brown (L), Blue (N), Green/Yellow (CPC).

Three-Phase: Brown (L1), Black (L2), Grey (L3), Blue (N), Green/Yellow (CPC).
Pre-2004 colours (e.g., Red/Black) prohibited.

CONDUCTORS:
All conductors: Copper. Minimum size:

1.5 mm² (lighting circuits),

2.5 mm² (general socket/radial circuits).
(Note: 1.0 mm² permitted for lighting per BS 7671, but 1.5 mm² specified for robustness/voltage drop).

CIRCUIT PROTECTIVE CONDUCTORS (CPC / EARTHING):
All final circuits: Include separate CPC. Minimum size:

1.5 mm² (if mechanically protected) / 2.5 mm² (standard practice) for circuits ≤ 32A with 2.5 mm² phase conductors (per BS 7671 Table 54.7).

CIRCUIT DISTRIBUTION & NEUTRAL SIZING:

For IT equipment/circuits with high harmonic currents:
Neutral conductor ≥ 200% capacity of phase conductors.
(Oversizing required per BS 7671 Appendix 11 to mitigate harmonic overheating).

VOLTAGE DROP MANAGEMENT:
230V circuits > 30 metres run length:
Size conductors to ensure ≤ 3% drop (lighting) / ≤ 5% drop (other) (BS 7671 Appendix 4). Typically requires ≥ 4.0 mm² for longer runs/higher loads.

SPECIFICATIONS

A. TRUNKING, BOXES AND CONDUITS:
1. OUTDOOR WIRING METHODS – INSTALLATION TO BE IN ACCORDANCE WITH BS 7671 AND BS EN STANDARDS:
a. Exposed installations: Use galvanised steel conduit to BS EN 61386.
b. Concealed installations: Use heavy-gauge steel conduit in compliance with BS EN 61386.
c. Underground installations: Use heavy-duty PVC-U ducting conforming to BS EN 61386-24 unless otherwise stated.
d. Connection to vibrating equipment: Use liquid-tight flexible metallic conduit or steel-wire armoured flexible cable.
e. Boxes and enclosures: Minimum IPX4 or IP65-rated enclosures for outdoor use.

2. INDOOR WIRING METHODS:
a. Connection to vibrating equipment: Use flexible metallic conduit or SY cable. In wet/damp areas, use liquid-tight conduit or equivalent rated cabling.
b. Damp or wet locations: Use galvanised steel conduit or SWA cable rated for the environment.
c. Exposed locations: Use galvanised steel conduit or surface-mounted trunking systems.
d. Concealed installations: Use steel conduit or LSZH (Low Smoke Zero Halogen) twin & earth cable in trunking or chased into walls.
e. Boxes and enclosures: Use IP20-rated boxes for dry indoor locations, IP66 stainless steel or GRP for wet/damp areas.

3. All final circuits in finished areas shall be installed concealed wherever practical.
4. Minimum conduit/trunking size shall be 20 mm diameter (or equivalent cross-sectional area).
5. All conduit fittings shall be of metallic compression type, with nylon grommets or insulated bushings at entry points.
6. All wiring shall be installed neatly, clipped or supported as high as practical and routed parallel/perpendicular to walls or ceiling lines.
7. Exposed extra-low voltage wiring (e.g. data, fire, security) shall be installed within suitable trunking or conduit unless otherwise indicated.
8. Install 100 mm square boxes (minimum) with appropriate surface or flush front plates as required.
9. Where walls are to be dry-lined or faced, and existing accessories are retained, provide approved back box extensions or relocate to align with new surface finishes.
B. CABLES AND CONDUCTORS
1. All fixed wiring shall be copper conductors, with LSZH insulation complying with BS EN 50525 or BS 6004. Minimum size: 1.5 mm² for lighting, 2.5 mm² for sockets.
2. All cable sizes and current ratings shall comply with BS 7671 and the IET On-Site Guide.
3. Armoured or flexible metallic cables shall include an internal green/yellow CPC (Circuit Protective Conductor) unless otherwise specified.
4. For radial or ring final circuits over 30 metres, increase conductor size to reduce voltage drop in accordance with BS 7671, typically to 4 mm².
C. WIRING ACCESSORIES AND COMMUNICATION OUTLETS
1. Verify exact location of all outlets, accessories and communication points with the Contract Administrator or Architect prior to installation. Minor relocations (within 1.5 m) shall be made without additional cost to the Employer.
2. Accessory faceplates shall be selected for finish and colour by the Architect (e.g., stainless steel, white moulded, etc.).
3. Data and communications outlet locations to be confirmed with Architect. Structured cabling and telephone wiring by specialist installer (others).
4. All fixings and supports shall meet BS 7671 regulations and relevant building standards. Provide robust, non-corrosive support systems.
D. ELECTRICAL IDENTIFICATION
1. All distribution boards, isolators, and major electrical equipment shall be fitted with engraved traffolyte or equivalent labels, with minimum 25 mm high characters where visible to the public, 10 mm for plant room usage.
2. Label access panels and doors concealing electrical apparatus with appropriate safety and identification signage in accordance with BS 7671 and Health & Safety regulations.
E. EARTHING & BONDING
1. All installations shall be earthed and bonded to comply with BS 7671 (latest edition). Equipotential bonding shall be provided as required.
2. All final circuits shall include a CPC. All socket circuits shall include a minimum 2.5 mm² CPC for 2.5 mm² ring final circuits or 1.5 mm² CPC for 1.5 mm² radial circuits.
3. Where a separately derived system (e.g., transformer or generator) is installed, provide a TT, TN-S, or TN-C-S earthing arrangement in accordance with design and local DNO approval.
F. DISTRIBUTION BOARDS
1. 'Space' in a distribution board shall include provision for future circuit protection devices, neutral and earth bars, and proper labelling.
2. Final circuit layout and board schedules must match the design drawings. Any changes must be authorised by the project engineer.
3. Distribution board busbars shall be copper. All final circuit breakers shall be Type B or C MCBs or RCBOs as appropriate.
4. Confirm characteristics of motor protection devices (curve types, trip ratings) with the mechanical services provider prior to ordering.
5. Surface-mounted boards shall be installed with Unistrut-type steel framing or equivalent to provide structural support and clearances from the wall.
6. For recessed boards, provide a 20 mm conduit stub for every 3 spare ways to allow future additions.
7. Distribution boards to be from reputable manufacturers such as Schneider (Acti9), Hager, Eaton, ABB, or equivalent with UKCA/CE marking.
8. Provide neatly typed and framed circuit schedules at each board showing clearly the load served by each circuit. All existing schedules impacted by new works shall be updated accordingly.

ABBREVIATIONS

A	Ampere
AFF	Above Finished Floor
AIC	Amps Interrupting Capacity (Minimum)
BCP	Bonding Conductor Protective
CB	Circuit Breaker
C	Conduit
CCT	Circuit
CPC	Circuit Protective Conductor
EC	Emipty Conduit
(E)	Existing to remain, continue in service
FA	Fire Alarm
FLA	Full Load Current (Amps)
G	Earth (Ground – UK uses "Earth")
HP	Horsepower
Ics/Icu	Short-Circuit Breaking Capacity (BS EN 60947-2)
IP	Ingress Protection Rating
kVA	Kilovolt-Amps
kW	Kilowatt
L	Live
LSZH	Low Smoke Zero Halogen
LTG	Lighting
MCB	Miniature Circuit Breaker
MH	Mounting Height
MLO	Main Lug Only (not common in UK – state "main terminals only")
N	Neutral
(N)	New item
NIC	Not in Contract
OEM	Original Equipment Manufacturer
OFCI	Owner Furnished Contractor Installed
P	Pole (e.g., 1P, 3P)
PNL	Panel (Distribution Board / Consumer Unit)
PH / Ø	Phase
(R)	Remove existing and relocate
(RE)	Relocated equipment
RECPT	Receptacle (UK: Socket Outlet)
RCD	Residual Current Device
SPD	Surge Protective Device
SWA	Steel Wire Armoured Cable
TBD	To Be Determined
UON	Unless Otherwise Noted
V	Volt
W	Wire
W	With
WP	Weatherproof (IP rated)
XFMR	Transformer
(X)	Remove with all associated wiring

SYMBOLS/LEGENDS

- WALL LIGHT 10W
- ADJUSTABLE FRAME RECESSED DOWLIGHT 40W
- 30W CEILING MOUNT SANDAL LIGHT
- 10W CEILING MOUNT SANDAL LIGHT
- 40W CEILING MOUNT SANDAL LIGHT
- IP RATED RECESSED DOWLIGHT 20W
- 3-GANG ROCKERY SWITCH
- 2-GANG ROCKERY SWITCH
- SINGLE GANG ROCKERY SWITCH
- SD SMOKE DETECTOR
- EXTRACT FAN 40W
- LINEAR LED STRIP
- 2 DOUBLE SOCKET OUTLET 120V
- Single Socket
- C COOKER/HOB
- H HOOD
- F/F FREDGE/FREEZER
- 5 AMP SOCKET FOR LIGHTING 120V
- MW Microwave
- WC Wine Cooler
- 2 MID MID LEVEL DOUBLE SOCKET OUTLET 120V
- 2 HIGH HIGH LEVEL DOUBLE SOCKET OUTLET 120V
- 2 LOW LOW LEVEL DOUBLE SOCKET OUTLET 120V
- HIGH LEVEL SINGLE SOCKET OUTLET 120V
- UFH UNDER FLOOR HEATING
- AC COMFORT COOLING CONTROL
- VE VIDEO ENTRY SYSTEM
- INTRUDER ALARM MOTION SENSOR
- CCTV CAMERA
- PIR MOTION SENSOR FOR LIGHTING
- CT CAT6 TO THE COMMUNAL DISTRIBUTION BOX (BT)
- D CAT6 INTERNAL ETHERNET
- SD SMOKE DETECTOR
- SMOKE & CARBON MONOXIDE DETECTOR WITH SOUNDER
- EXTRACT FAN
- FUSE BOX
- 3-GANG ROCKERY SWITCH
- 2-GANG ROCKERY SWITCH
- SINGLE GANG ROCKERY SWITCH
- FUSED SPUR SWITCH
- SHAVER SOCKET
- HD HEAT DETECTOR WITH SOUNDER
- CS CEILING RECESSED SPEAKER
- DC DOOR CONTACT SENSOR FOR LIGHTING
- K INTRUDER ALARM KEYPAD
- USB SOCKET OULTET
- WCS INTRUDER ALARM WINDOW CONTACT SWITCH
- DCS INTRUDER ALARM DOOR CONTACT SWITCH

SITE SPECIFIC HAZARDS

IN ACCORDANCE WITH THE REQUIREMENTS OF THE CDM REGULATIONS 2007 THE FOLLOWING SIGNIFICANT RESIDUAL HAZARDS HAVE NOT BEEN DESIGNED OUT OF THIS PROJECT AND MUST BE TAKEN INTO CONSIDERATION BY CONTRACTORS PLANNING TO UNDERTAKE THE WORKS SHOWN ON THIS DRAWING:

Rev	Description	Date	By

Key Plan:

Note:

N

Project: Flat 7, Second floor 7 Sloane Street London SW1X 9LE

Client: ----

Drawing No.: E-0

Drawing's Name: General Note of Electrical Plan

Date:	Paper Size:	Scale on A3:	Author:	Checker:
07/30/2025	A3	1:100	MP	AT

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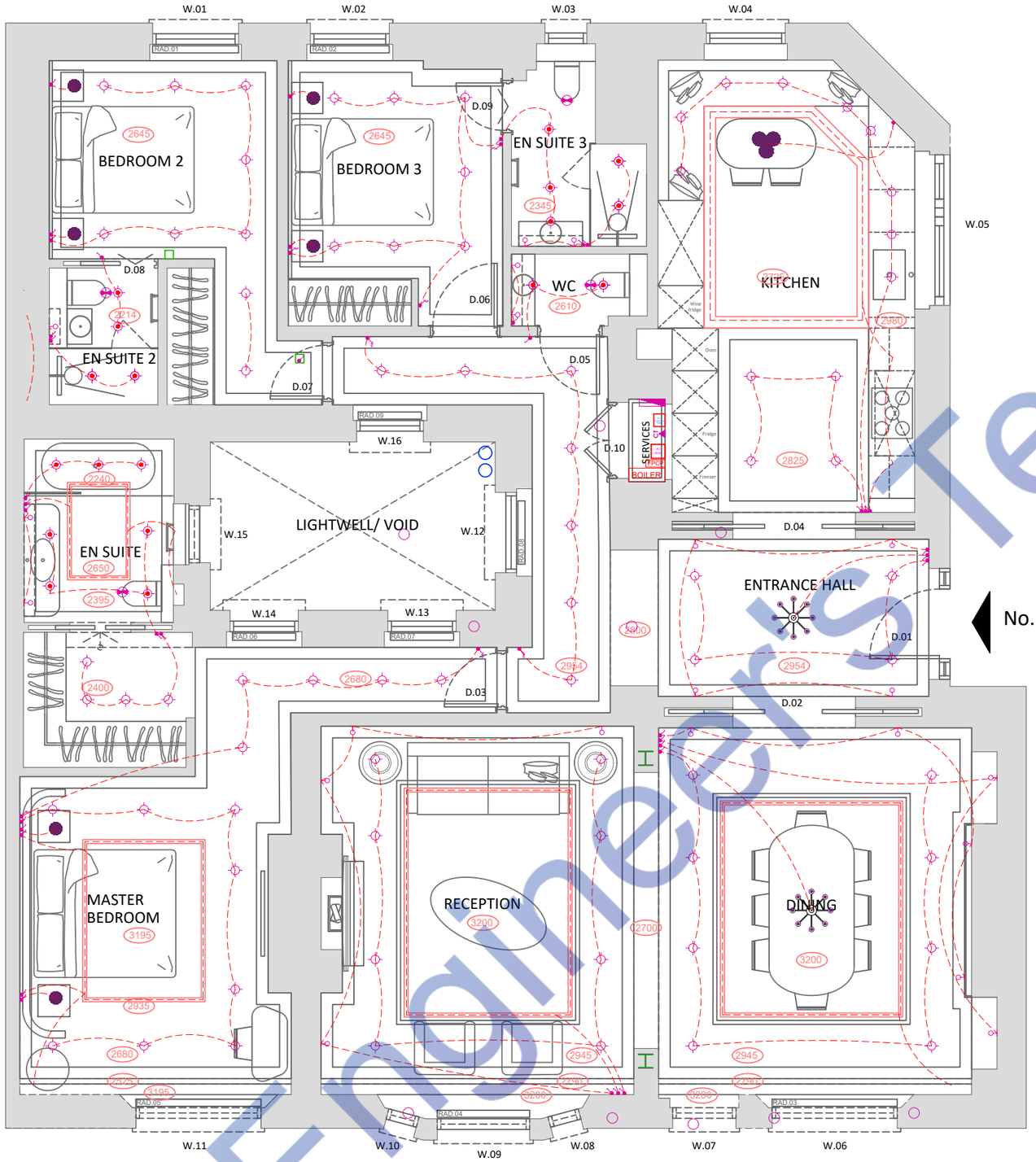

RCP's Legend

- WALL LIGHT 10W
- ADJUSTABLE FRAME RECESSED DOWLIGHT 40W
- 30W CEILING MOUNT SANDAL LIGHT
- 10W CEILING MOUNT SANDAL LIGHT
- 40W CEILING MOUNT SANDAL LIGHT
- IP RATED RECESSED DOWLIGHT 20W
- CCTV CONTROL PANEL
- FIRE PROTECTION CONTROL PANEL
- 3-GANG ROCKERY SWITCH
- 2-GANG ROCKERY SWITCH
- SINGLE GANG ROCKERY SWITCH
- SMOKE DETECTOR
- EXTRACT FAN 40W
- LINEAR LED STRIP
- AV BOX
- ELECTRICAL WIRE

Color Coding Heights:

- Ceiling
- 1600mm
- 1200mm
- 750mm
- 450mm

ELECTRICAL LIGHTING PLAN

SITE SPECIFIC HAZARDS

IN ACCORDANCE WITH THE REQUIREMENTS OF THE CDM REGULATIONS 2007 THE FOLLOWING SIGNIFICANT RESIDUAL HAZARDS HAVE NOT BEEN DESIGNED OUT OF THIS PROJECT AND MUST BE TAKEN INTO CONSIDERATION BY CONTRACTORS PLANNING TO UNDERTAKE THE WORKS SHOWN ON THIS DRAWING:

Rev	Description	Date	By

Key Plan:

Note:

N

Project: Flat 7, Second floor 7 Sloane Street London SW1X 9LE

Client: ----

Drawing No.: E-1

Drawing Name: Electrical Lighting Plan

Date:	Paper Size:	Scale on A3:	Author:	Checker:
07/30/2025	A3	1:100	MP	AT

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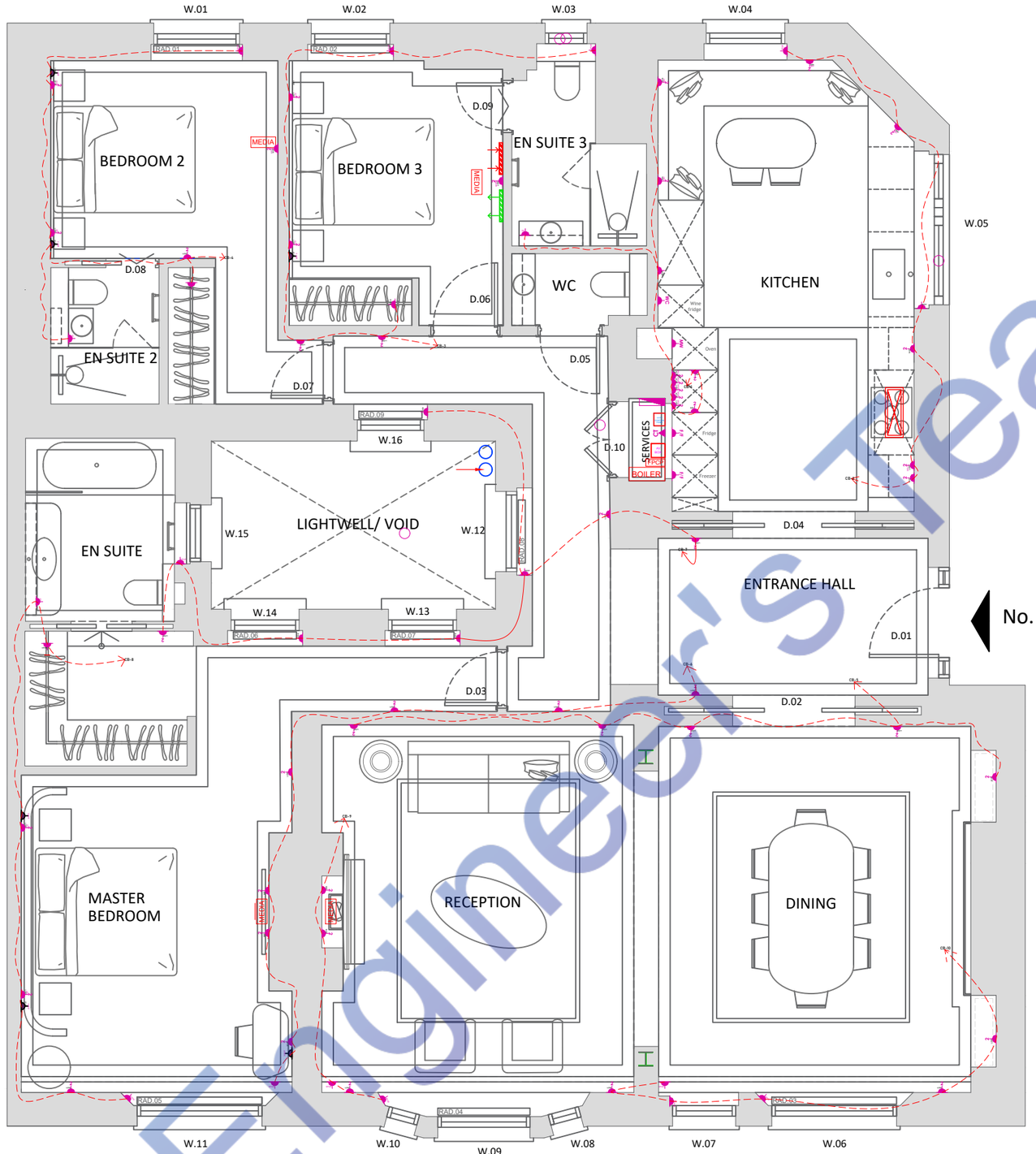

Electrical Fixings

- DOUBLE SOCKET OUTLET 120V
- Single Socket
- COOKER/HOB
- HOOD
- FRIDGE/FREEZER
- 5 AMP SOCKET FOR LIGHTING 120V
- Microwave
- Wine Cooler
- MID LEVEL DOUBLE SOCKET OUTLET 120V
- HIGH LEVEL DOUBLE SOCKET OUTLET 120V
- LOW LEVEL DOUBLE SOCKET OUTLET 120V
- HIGH LEVEL SINGLE SOCKET OUTLET 120V
- UNDER FLOOR HEATING
- COMFORT COOLING CONTROL
- VIDEO ENTRY SYSTEM
- INTRUDER ALARM MOTION SENSOR
- CCTV CAMERA
- PIR MOTION SENSOR FOR LIGHTING
- CCTV CONTROL PANEL
- ELECTRICAL WIRE
- CAT6 TO THE COMMUNAL DISTRIBUTION BOX (BT)
- CAT6 INTERNAL ETHERNET
- SMOKE DETECTOR
- SMOKE & CARBON MONOXIDE DETECTOR WITH SOUNDER
- EXTRACT FAN
- FUSE BOX
- 3-GANG ROCKERY SWITCH
- 2-GANG ROCKERY SWITCH
- SINGLE GANG ROCKERY SWITCH
- FUSED SPUR SWITCH
- SHAVER SOCKET
- HEAT DETECTOR WITH SOUNDER
- CEILING RECESSED SPEAKER
- DOOR CONTACT SENSOR FOR LIGHTING
- INTRUDER ALARM KEYPAD
- USB SOCKET OULTET
- INTRUDER ALARM WINDOW CONTACT SWITCH
- INTRUDER ALARM DOOR CONTACT SWITCH
- AV BOX
- FIRE PROTECTION CONTROL PANEL

Color Coding Heights:

- Ceiling
- 1600mm
- 1200mm
- 750mm
- 450mm

ELECTRICAL POWER PLAN

Rev	Description	Date	By

Key Plan:

Note:

N

Project:
Flat 7, Second floor 7 Sloane Street
London SW1X 9LE

Client:

Drawing No.
E-2

Drawing's Name:
Electrical Power Plan

Date:	Paper Size:	Scale on A3:	Author:	Checker:
07/30/2025	A3	1:100	MP	AT

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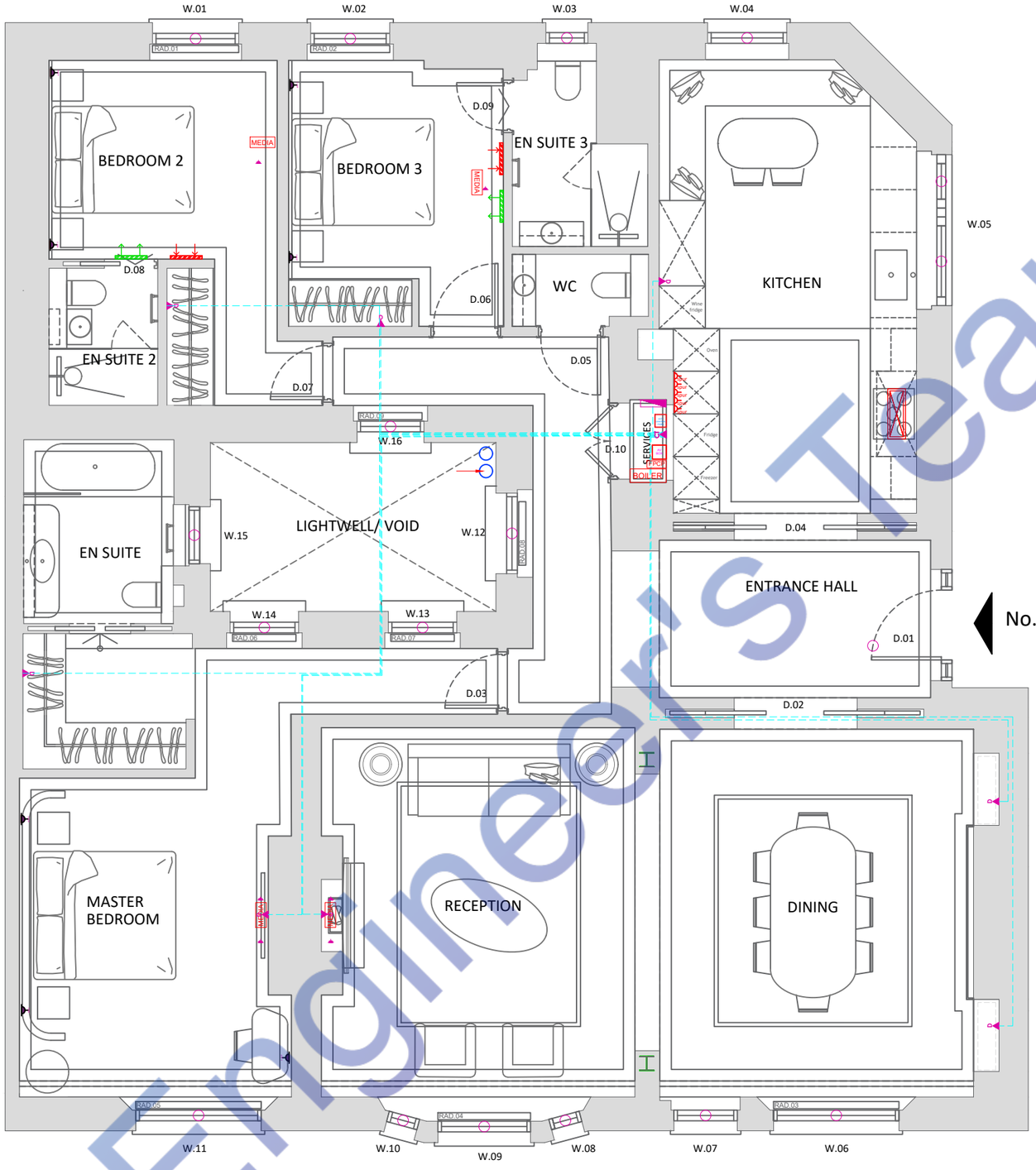

Electrical Fixings

- DOUBLE SOCKET OUTLET 120V
- Single Socket
- COOKER/HOB
- HOOD
- FRIDGE/FREEZER
- 5 AMP SOCKET FOR LIGHTING 120V
- Microwave
- Wine Cooler
- MID LEVEL DOUBLE SOCKET OUTLET 120V
- HIGH LEVEL DOUBLE SOCKET OUTLET 120V
- LOW LEVEL DOUBLE SOCKET OUTLET 120V
- HIGH LEVEL SINGLE SOCKET OUTLET 120V
- UNDER FLOOR HEATING
- COMFORT COOLING CONTROL
- VIDEO ENTRY SYSTEM
- INTRUDER ALARM MOTION SENSOR
- CCTV CAMERA
- PIR MOTION SENSOR FOR LIGHTING
- CCTV CONTROL PANEL
- CAT6 DATA CABLE
- CAT6 TO THE COMMUNAL DISTRIBUTION BOX (BT)
- CAT6 INTERNAL ETHERNET
- SMOKE DETECTOR
- SMOKE & CARBON MONOXIDE DETECTOR WITH SOUNDER
- EXTRACT FAN
- FUSE BOX
- 3-GANG ROCKERY SWITCH
- 2-GANG ROCKERY SWITCH
- SINGLE GANG ROCKERY SWITCH
- FUSED SPUR SWITCH
- SHAVER SOCKET
- HEAT DETECTOR WITH SOUNDER
- CEILING RECESSED SPEAKER
- DOOR CONTACT SENSOR FOR LIGHTING
- INTRUDER ALARM KEYPAD
- USB SOCKET OULTET
- INTRUDER ALARM WINDOW CONTACT SWITCH
- INTRUDER ALARM DOOR CONTACT SWITCH
- AV BOX
- FIRE PROTECTION CONTROL PANEL

Color Coding Heights:

- Ceiling
- 1600mm
- 1200mm
- 750mm
- 450mm

ELECTRICAL ETHERNET PLAN

SITE SPECIFIC HAZARDS

IN ACCORDANCE WITH THE REQUIREMENTS OF THE CDM REGULATIONS 2007 THE FOLLOWING SIGNIFICANT RESIDUAL HAZARDS HAVE NOT BEEN DESIGNED OUT OF THIS PROJECT AND MUST BE TAKEN INTO CONSIDERATION BY CONTRACTORS PLANNING TO UNDERTAKE THE WORKS SHOWN ON THIS DRAWING:

Rev	Description	Date	By

Key Plan:

Note:

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Project:
Flat 7, Second floor 7 Sloane Street
London SW1X 9LE

Client:

Drawing No.
E-3

Drawing's Name
Electrical Ethernet Plan

Date:	Paper Size:	Scale on A3:	Author:	Checker:
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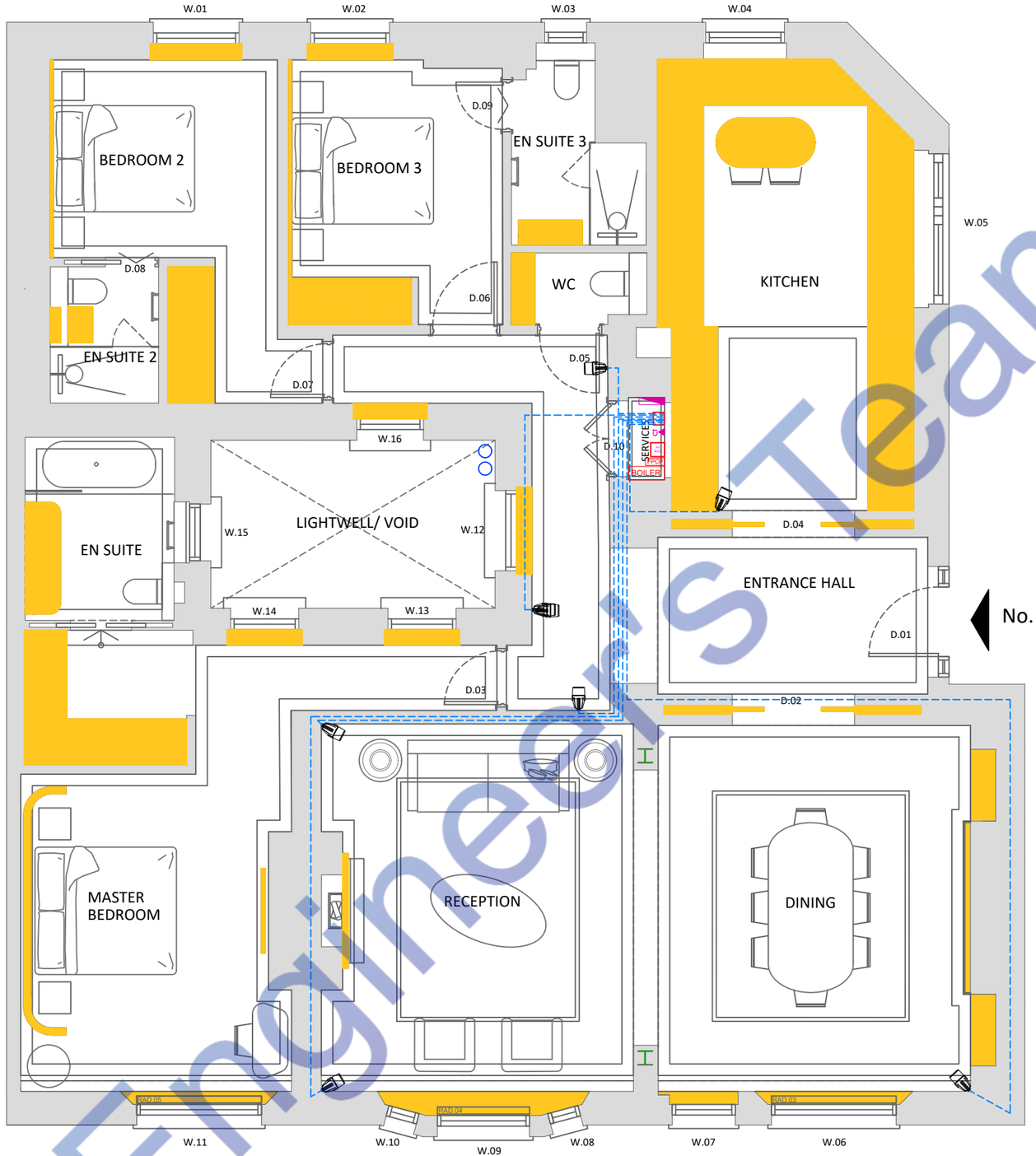

Electrical Fixings

- DOUBLE SOCKET OUTLET 120V
- Single Socket
- COOKER/HOB
- HOOD
- FRIDGE/FREEZER
- 5 AMP SOCKET FOR LIGHTING 120V
- Microwave
- Wine Cooler
- MID LEVEL DOUBLE SOCKET OUTLET 120V
- HIGH LEVEL DOUBLE SOCKET OUTLET 120V
- LOW LEVEL DOUBLE SOCKET OUTLET 120V
- HIGH LEVEL SINGLE SOCKET OUTLET 120V
- UNDER FLOOR HEATING
- COMFORT COOLING CONTROL
- VIDEO ENTRY SYSTEM
- INTRUDER ALARM MOTION SENSOR
- CCTV CAMERA
- PIR MOTION SENSOR FOR LIGHTING
- CCTV CONTROL PANEL
- CCTV WIREING CABLE
- CAT6 TO THE COMMUNAL DISTRIBUTION BOX (BT)
- CAT6 INTERNAL ETHERNET
- SMOKE DETECTOR
- SMOKE & CARBON MONOXIDE DETECTOR WITH SOUNDER
- EXTRACT FAN
- FUSE BOX
- 3-GANG ROCKERY SWITCH
- 2-GANG ROCKERY SWITCH
- SINGLE GANG ROCKERY SWITCH
- FUSED SPUR SWITCH
- SHAVER SOCKET
- HEAT DETECTOR WITH SOUNDER
- CEILING RECESSED SPEAKER
- DOOR CONTACT SENSOR FOR LIGHTING
- INTRUDER ALARM KEYPAD
- USB SOCKET OULTET
- INTRUDER ALARM WINDOW CONTACT SWITCH
- INTRUDER ALARM DOOR CONTACT SWITCH
- AV BOX
- FIRE PROTECTION CONTROL PANEL

Color Coding Heights:

- Ceiling
- 1600mm
- 1200mm
- 750mm
- 450mm

CCTV PLAN

SITE SPECIFIC HAZARDS

IN ACCORDANCE WITH THE REQUIREMENTS OF THE CDM REGULATIONS 2007 THE FOLLOWING SIGNIFICANT RESIDUAL HAZARDS HAVE NOT BEEN DESIGNED OUT OF THIS PROJECT AND MUST BE TAKEN INTO CONSIDERATION BY CONTRACTORS PLANNING TO UNDERTAKE THE WORKS SHOWN ON THIS DRAWING:

Rev	Description	Date	By

Key Plan:

Note:

Project: Flat 7, Second floor 7 Sloane Street London SW1X 9LE

Client: ----

Drawing No.: E-4

Drawing's Name: CCTV Plan

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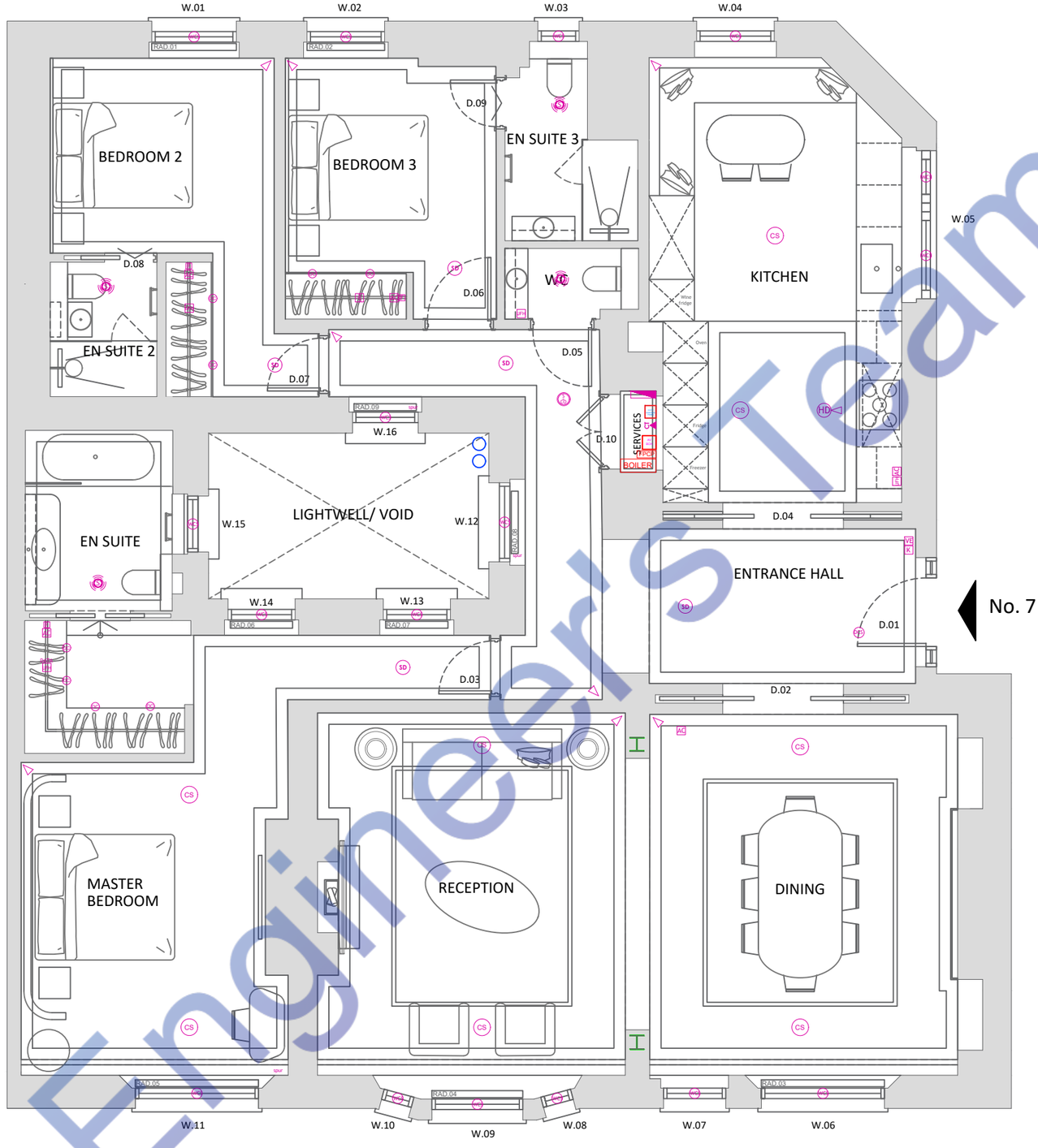

No. 7

Electrical Fixings

- DOUBLE SOCKET OUTLET 120V
- Single Socket
- COOKER/HOB
- HOOD
- FRIDGE/FREEZER
- 5 AMP SOCKET FOR LIGHTING 120V
- Microwave
- Wine Cooler
- MID LEVEL DOUBLE SOCKET OUTLET 120V
- HIGH LEVEL DOUBLE SOCKET OUTLET 120V
- LOW LEVEL DOUBLE SOCKET OUTLET 120V
- HIGH LEVEL SINGLE SOCKET OUTLET 120V
- UNDER FLOOR HEATING
- COMFORT COOLING CONTROL
- VIDEO ENTRY SYSTEM
- INTRUDER ALARM MOTION SENSOR
- CCTV CAMERA
- PIR MOTION SENSOR FOR LIGHTING
- CCTV CONTROL PANEL
- CAT6 TO THE COMMUNAL DISTRIBUTION BOX (BT)
- CAT6 INTERNAL ETHERNET
- SMOKE DETECTOR
- SMOKE & CARBON MONOXIDE DETECTOR WITH SOUNDER
- EXTRACT FAN
- FUSE BOX
- 3-GANG ROCKERY SWITCH
- 2-GANG ROCKERY SWITCH
- SINGLE GANG ROCKERY SWITCH
- FUSED SPUR SWITCH
- SHAVER SOCKET
- HEAT DETECTOR WITH SOUNDER
- CEILING RECESSED SPEAKER
- DOOR CONTACT SENSOR FOR LIGHTING
- INTRUDER ALARM KEYPAD
- USB SOCKET OULTET
- INTRUDER ALARM WINDOW CONTACT SWITCH
- INTRUDER ALARM DOOR CONTACT SWITCH
- AV BOX
- FIRE PROTECTION CONTROL PANEL

Color Coding Heights:

- Ceiling
- 1600mm
- 1200mm
- 750mm
- 450mm

FIRE SAFETY PLAN

SITE SPECIFIC HAZARDS

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Rev	Description	Date	By

Key Plan:

Note:

Project:
Flat 7, Second floor 7 Sloane Street
London SW1X 9LE

Client:

Drawing No.
E-5

Drawing's Name:
Fire Safety Plan

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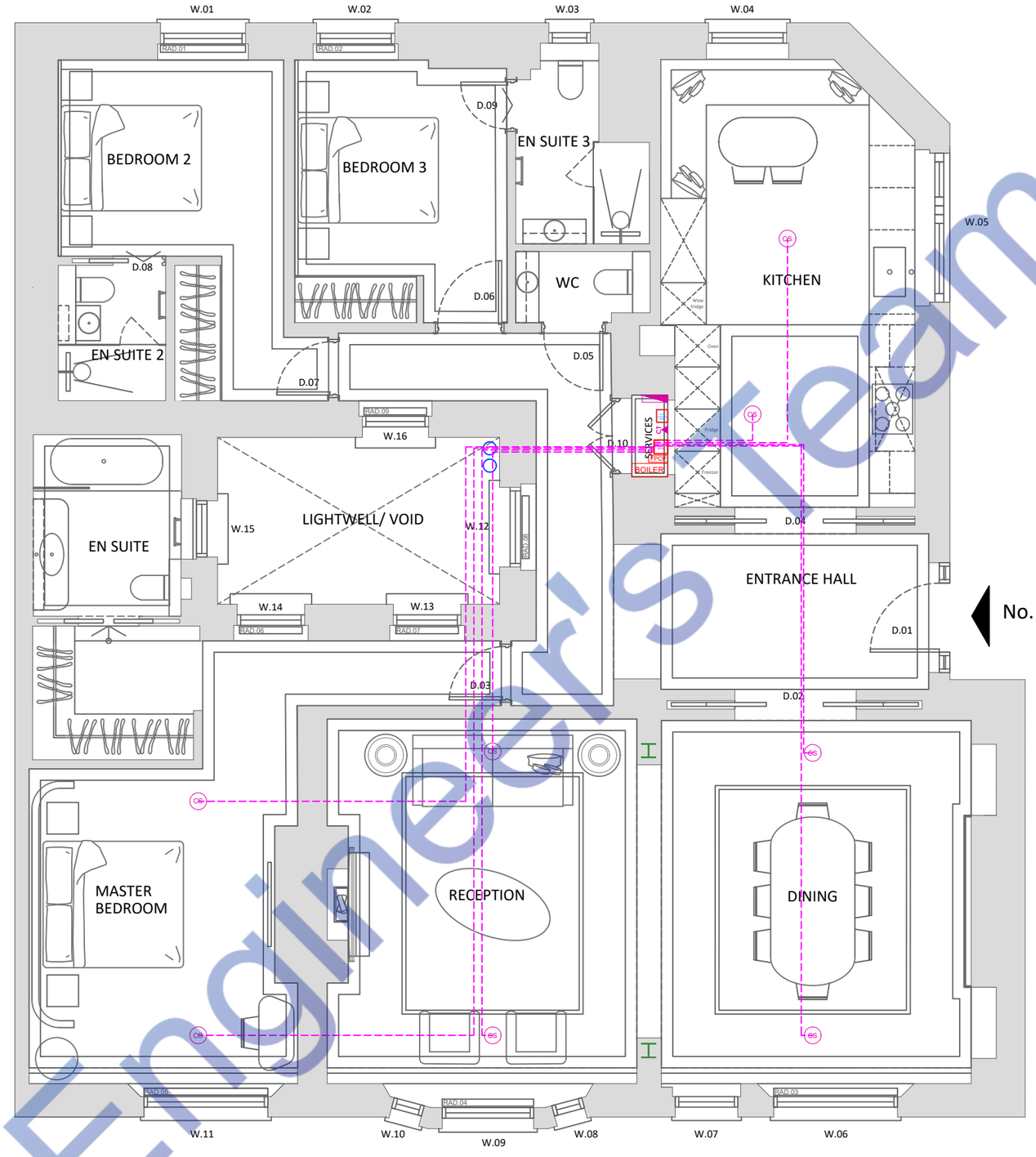

Electrical Fixings

- DOUBLE SOCKET OUTLET 120V
- Single Socket
- COOKER/HOB
- HOOD
- FRIDGE/FREEZER
- 5 AMP SOCKET FOR LIGHTING 120V
- Microwave
- Wine Cooler
- MID LEVEL DOUBLE SOCKET OUTLET 120V
- HIGH LEVEL DOUBLE SOCKET OUTLET 120V
- LOW LEVEL DOUBLE SOCKET OUTLET 120V
- HIGH LEVEL SINGLE SOCKET OUTLET 120V
- UNDER FLOOR HEATING
- COMFORT COOLING CONTROL
- VIDEO ENTRY SYSTEM
- INTRUDER ALARM MOTION SENSOR
- CCTV CAMERA
- PIR MOTION SENSOR FOR LIGHTING
- CCTV CONTROL PANEL
- AV SYSTEM WIRE
- CAT6 TO THE COMMUNAL DISTRIBUTION BOX (BT)
- CAT6 INTERNAL ETHERNET
- SMOKE DETECTOR
- SMOKE & CARBON MONOXIDE DETECTOR WITH SOUNDER
- EXTRACT FAN
- FUSE BOX
- 3-GANG ROCKERY SWITCH
- 2-GANG ROCKERY SWITCH
- SINGLE GANG ROCKERY SWITCH
- FUSED SPUR SWITCH
- SHAVER SOCKET
- HEAT DETECTOR WITH SOUNDER
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- DOOR CONTACT SENSOR FOR LIGHTING
- INTRUDER ALARM KEYPAD
- USB SOCKET OULTET
- INTRUDER ALARM WINDOW CONTACT SWITCH
- INTRUDER ALARM DOOR CONTACT SWITCH
- AV BOX
- FIRE PROTECTION CONTROL PANEL

Color Coding Heights:

- Ceiling
- 1600mm
- 1200mm
- 750mm
- 450mm

AV PLAN

SITE SPECIFIC HAZARDS

IN ACCORDANCE WITH THE REQUIREMENTS OF THE CDM REGULATIONS 2007 THE FOLLOWING SIGNIFICANT RESIDUAL HAZARDS HAVE NOT BEEN DESIGNED OUT OF THIS PROJECT AND MUST BE TAKEN INTO CONSIDERATION BY CONTRACTORS PLANNING TO UNDERTAKE THE WORKS SHOWN ON THIS DRAWING:

Rev	Description	Date	By

Key Plan:

Note:

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Project:
Flat 7, Second floor 7 Sloane Street
London SW1X 9LE

Client:

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E-6

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AV Plan

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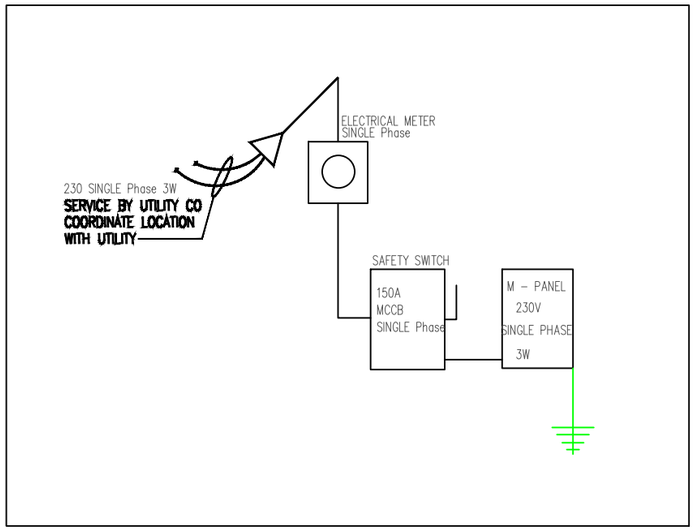
MAIN PANEL

Panel Location-							7 SLOANE STREET LONDON SW1							
Voltage (Phase-Ground/Phase-Phase)		230	415	Source of Supply-From Service Disconnect/Meter										
Phase- 1				Wire- 3										
Rated Amps- 110				AIC- 10k										
MCCB 150 Amps MCCB				Mounting- Wall Surface										
Circuit	Description	New/ Existing	Load Type	Breaker Size	Poles	Wire Size	A		Wire Size	Poles	Breaker Size	Load Type	New/ Existing	Description	Circuit
1	LIGHTING LOAD	N		15	1	#14	3800	200	#12	1	20		N	WINE COOLER	2
3	FRIDGE X2	N		20	1	#12	2000	4000	#12	1	20		N	OVEN	4
5	TV/MEDIA X3	N		20	1	#12	300	600	#12	1	20		N	CB-6	6
7	CB-1	N		20	1	#12	800	500	#12	1	20		N	CB-7	8
9	CB-2	N		20	1	#12	600	500	#12	1	20		N	CB-8	10
11	CB-3	N		20	1	#12	500	300	#12	1	20		N	CB-9	12
13	CB-4	N		20	1	#12	500	500	#12	1	20		N	CB-10	14
15	CB-5	N		20	1	#12	300	8000	#8	1	35		N	BOILER	16
17	LIGHTING LOAD 2	N		15	1	#12	1900	0	--	--	--		--	SPARE	18
19	SPARE	--	--	--		--	0	0	--	--	--		--	SPARE	20

	A
Connected Load (W)	25300
Connected Amps	110
Main Type and Amps Rating	150 Amps MCCB

Demand Load Calcultion

Load Classification	Connected Load	Demand Factor	Estimated Demand
Lighting - Dwelling Unit	3800	125%	4750
Water Heater - Dwelling Unit	8000	100%	8000
Receptacle	13500	65%	8775
Cooling	0	100%	0
Pump	0	125%	0
Other	0	100%	0
Demand Load	25300		21525
Demand Amps			94



Rev	Description	Date	By

Key Plan:

Note:

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Project: Flat 7, Second floor 7 Sloane Street London SW1X 9LE

Client: ----

Drawing No.: E-7

Drawing Name: Electrical Load Schedule & SLD

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GENERAL NOTES:

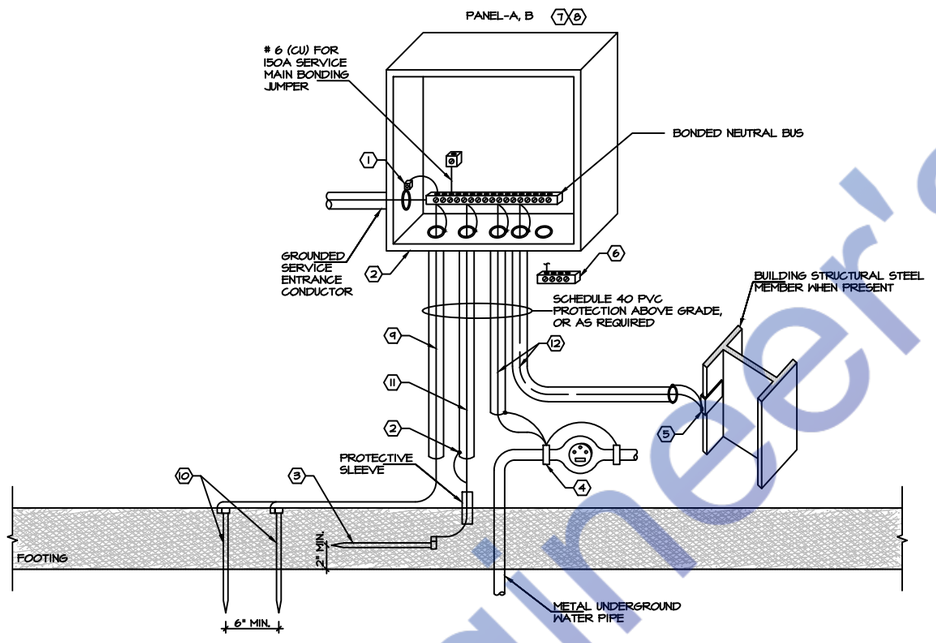
1. A LISTED INTERSYSTEM BONDING TERMINATION PROVIDING THE REQUIRED NUMBER OF TERMINALS (MINIMUM OF THREE) FOR CONNECTING OTHER BUILDING SYSTEMS TO THE GROUNDING SYSTEM OF THE ELECTRICAL POWER SUPPLY (NEC250.94).

KEY NOTES: (#)

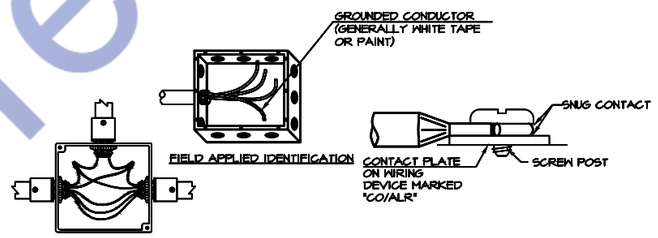
1. ALL METAL CONDUITS ENCLOSING ANY SERVICE SHALL BE FITTED WITH A "BONDING BUSHING".
2. ALL METAL CONDUITS ENCLOSING ANY GROUNDING ELECTRODE CONDUCTOR SHALL BE FITTED WITH A "BONDING BUSHING" AT EACH END.
3. PROVIDE GROUNDING ELECTRODE PER NEC. ELECTRODE SHALL BE IN THE FORM OF A 20'-0" x 1/2" COPPER CLAD GROUND ROD LAID AT LEAST 2" OFF THE BOTTOM OF A CONCRETE FOOTING. SECURE THE GROUND ROD TO THE REBAR WITH STEEL TIE WRAPS. IF THE REBAR BEING USED IN THE FOOTING IS SMALLER THAN 1/2" (#4), THEN USE 20' OF BARE SOLID #4 COPPER WIRE IN PLACE OF THE GROUND ROD. IN REMODEL PROJECTS THAT WILL NOT HAVE NEW FOOTINGS INSTALLED, THIS SUPPLEMENTAL ELECTRODE SHALL BE PER NOTE #4 BELOW OR OTHER ELECTRODE PER NEC 250.52.
4. FOR CONNECTION TO COLD WATER MAIN. CONNECT WITHIN 5 FT. OF CONTACT OF EARTH.
5. IF STRUCTURAL STEEL MEMBER OR REBARS ARE AVAILABLE, BOND IT TO THE SERVICE USING A UL LISTED IRREVERSIBLE CLAMP OR WELDING LUG.
6. PROVIDE A INTERSYSTEM BONDING TERMINATION PER NEC 250.94.

INTERSYSTEM BONDING TERMINATION SHALL:
6.1. BE ACCESSIBLE FOR CONNECTION AND INSPECTION.
6.2. CONSIST OF A SET OF TERMINALS (LISTED AS GROUNDING AND BONDING EQUIPMENT) WITH THE CAPACITY OF NOT LESS THAN THREE INTERSYSTEM BONDING CONDUCTORS.
6.3. BE SECURELY MOUNTED AND ELECTRICALLY CONNECTED TO SERVICE EQUIPMENT, METER ENCLOSURE, OR EXPOSED NON METALLIC SERVICE RACEWAY, OR BE MOUNTED ON ONE OF THESE ENCLOSURES AND BE CONNECTED TO THE ENCLOSURE OR GROUNDING ELECTRODE CONDUCTOR WITH A MINIMUM #6 CU CONDUCTOR.
6.4. BE SECURELY MOUNTED TO THE BUILDING'S DISCONNECTING MEANS, OR BE MOUNTED AT THE DISCONNECTING MEANS AND BE CONNECTED TO THE METALLIC ENCLOSURE OR GROUNDING ELECTRODE CONDUCTOR WITH A MINIMUM #6 CU CONDUCTOR.

7. ALL BRANCH CIRCUIT AND FEEDER CONDUITS ARE TO HAVE AN INSULATED EQUIPMENT GROUNDING CONDUCTOR REGARDLESS OF THE CONDUIT MATERIAL.
8. WHEN THE SERVICE CONSISTS OF MULTIPLE DISCONNECTING MEANS IN SEPARATE ENCLOSURES, CONNECT A TAP CONDUCTOR FROM THE MAIN GROUNDING ELECTRODE CONDUCTOR TO EACH DISCONNECTING MEANS. SIZE THIS TAP BASED ON THE LARGEST SERVICE CONDUCTOR IN THAT SERVICE DISCONNECT ENCLOSURE.
9. #6 COPPER GROUNDING ELECTRODE CONDUCTOR.
10. INSTALL #6 CU TO TWO 5/8"x 8' MIN. GROUND RODS AS SHOWN.
11. #4 COPPER GROUNDING ELECTRODE CONDUCTOR.
12. COPPER GROUNDING ELECTRODE CONDUCTOR. PROVIDE #6 COPPER.

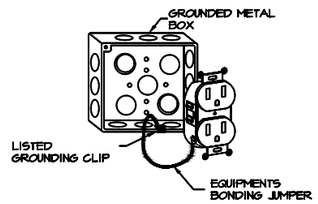


1 E500 GROUNDING ELECTRODE SYSTEM DIAGRAM
SCALE: NOT TO SCALE

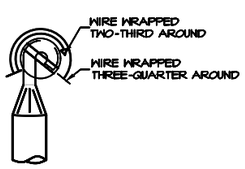


TYPICAL CONNECTION OF WIRES IN JUNCTION BOX

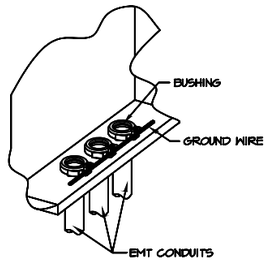
TIGHTEN SCREW TO FULL CONTACT



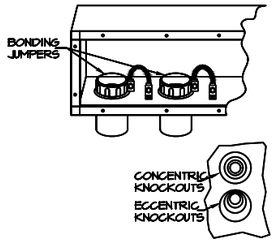
OUTLET BACK BOX & JUNCTION BOX



STRIP INSULATION AND WRAP WIRE



BONDING THE KNOCKOUTS



GROUNDING INSULATION THE BUSHING

1 E-800 BOUNDING DETAILS
SCALE: NOT TO SCALE

SITE SPECIFIC HAZARDS

IN ACCORDANCE WITH THE REQUIREMENTS OF THE CDM REGULATIONS 2007 THE FOLLOWING SIGNIFICANT RESIDUAL HAZARDS HAVE NOT BEEN DESIGNED OUT OF THIS PROJECT AND MUST BE TAKEN INTO CONSIDERATION BY CONTRACTORS PLANNING TO UNDERTAKE THE WORKS SHOWN ON THIS DRAWING:

Rev	Description	Date	By

Key Plan:

Note:

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Project:
Flat 7, Second floor 7 Sloane Street
London SW1X 9LE

Client:

Drawing No.: E-8

Drawing's Name: Electrical Installation

Date:	Paper Size:	Scale on A3:	Author:	Checker:
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