

GENERAL SPECIFICATIONS
1. GENERAL (All specifications on this sheet as applicable)
A. Work indicated on these drawings is diagrammatic and shall not be scaled. The drawings are intended to convey the scope of works and indicate the general arrangement of engineered systems. The Contractor shall verify all existing site conditions, dimensions, and services and make all necessary adjustments to complete the works in accordance with the Contract Documents.
B. Provide all labour, materials, plant, tools, equipment, and services required to execute the works in accordance with the Contract Documents. All supplementary or incidental items necessary for a complete, safe, and fully operational installation shall be deemed included, whether or not specifically shown, at no additional cost to the Client.
C. All equipment under this contract shall be fully installed, tested, commissioned, and left operational to the satisfaction of the Client and Engineer. These drawings are intended to represent finished works, tested and ready for use. Wherever the word "provide" is used, it shall mean supply, install, test, and commission complete.
D. All materials and equipment shall be new, of first quality, UKCA/CE marked where applicable, and compatible with existing systems. Installation shall be carried out strictly in accordance with manufacturers' recommendations, relevant British Standards, and recognised good engineering practice.
E. Where existing pipework, ductwork, containment, cabling, or other obstructions are encountered, the Contractor shall remove, reroute, rearrange, or relocate such items as necessary, subject to approval, at no additional cost.
F. The Contractor shall obtain written approval prior to cutting or forming penetrations through slabs, walls, ceilings, roofs, or shafts for services. All disturbed areas shall be made good using matching materials and finishes. All penetrations through fire-resisting elements shall be sealed with approved fire-stopping systems to maintain fire integrity in accordance with Building Regulations Approved Document B.
G. The Contractor shall maintain a clean and safe site at all times. Waste and debris shall be removed regularly. Upon completion, all tools, surplus materials, and temporary works shall be removed and the site left clean and ready for occupation.
2. COORDINATION AND PROGRAMMING
A. The Contractor shall fully coordinate and programme the works of all trades. All existing site conditions shall be verified to avoid conflicts in routing, sequencing, and installation.
B. The Contractor shall be responsible for full coordination between all subcontractors, suppliers, statutory authorities, utility providers, Building Control, the Architect/Engineer, building management, and the Client.
C. No work shall commence until accurate site measurements and verification of existing structures, ceilings, services, and retained installations have been completed, where these may affect the installation of new systems or equipment.
D. Works shall be phased and programmed to minimise disruption to occupied areas. A detailed programme shall be submitted for approval. Temporary partitions, dust control, and protective barriers shall be provided where necessary.
E. The Contractor shall provide a minimum of fourteen (14) days' written notice prior to any required shutdown of utilities and shall obtain written approval before proceeding.
F. The Contractor shall be deemed to have examined the premises and understood all conditions under which the works are to be carried out. No allowance shall be made for errors or omissions arising from failure to inspect the site.
3. CODES, PERMITS, AND INSPECTIONS (UK)
A. All works shall be carried out in accordance with the latest applicable UK legislation, regulations, and standards. The Contractor shall obtain and pay for all required permits and approvals and arrange all inspections by the relevant Authorities Having Jurisdiction.
B. Final approval and sign-off by Building Control and all relevant authorities shall be obtained at project completion. All completion certificates shall be issued and provided to the Client.
C. Works shall comply with the current editions of all applicable British Standards, Building Regulations, and statutory requirements enforced at the project location.
D. Codes and standards referenced represent minimum requirements. Where Contract Documents require a higher standard, the Contract Documents shall take precedence. Any conflicts shall be reported in writing prior to commencement.
E. The Contractor shall comply with all Health and Safety Executive (HSE) requirements, including the Health and Safety at Work Act 1974 and CDM Regulations 2015.
F. The Contractor shall comply with all requirements of statutory utility providers and local authorities.
4. WARRANTY
A. All works shall be free from defects in workmanship and materials for a period of twelve (12) months from the date of Practical Completion. Any defects arising within this period shall be rectified by the Contractor at no additional cost.
5. SHOP DRAWINGS
A. Shop drawings and product data shall be submitted electronically to the Engineer, Architect, and Client for approval. Submittals shall include manufacturers' technical data and certified performance information for all new equipment.
6. RECORD DRAWINGS / AS-BUILTS
A. The Contractor shall maintain a complete and up-to-date set of marked-up drawings on site, recording all changes made during construction. Final as-built drawings and associated documentation shall be submitted to the Client upon completion of the works.

SPRINKLER SYSTEM SPECIFICATIONS
A. The building is presently fully protected by an automatic fire sprinkler system. Modify and extend the existing system in accordance with the new layouts shown by the Architectural drawings.
B. All works shall be carried out by an LPCB-approved and third-party certified fire sprinkler contractor, experienced in installations of a similar nature and complexity and familiar with current UK standards and regulations.
C. The Contractor shall familiarise themselves with the existing sprinkler pipework layout. Ceiling voids are restricted and require full coordination with all building services. Sprinkler mains and branch pipework shall be rerouted as necessary to avoid clashes with lighting, ductwork, diffusers, pipework, equipment, and ceiling level changes. Claims arising from lack of coordination shall not be accepted.
D. All sprinkler works shall be designed and installed to the appropriate hazard classification in accordance with BS EN 12845, Approved Document B, and the requirements of the local Fire and Rescue Authority. Within thirty (30) days of contract award, submit full technical submittals to the Engineer for approval, including pipework, hangers, sprinkler heads, and associated components, together with any information required by the Authorities Having Jurisdiction.
E. Prior to commencement of works, the Contractor shall verify all site dimensions and examine adjacent works upon which the sprinkler installation depends. Any discrepancies or conflicts shall be reported in writing before installation proceeds.
F. Provide all pipework, fittings, valves, supports, and accessories necessary to connect the new sprinkler works to the existing system.
G. Coordinate all shutdowns of the existing sprinkler system with the Client. Shutdown duration shall be kept to an absolute minimum and carried out at times agreed with the Client.
H. Open ceiling voids or plenum spaces exceeding 900 mm in depth shall be sprinkler-protected in accordance with BS EN 12845 requirements.
I. Provide a twelve (12) month warranty covering all sprinkler system materials and workmanship under this project.
J. The Contractor shall obtain and pay for all permits, approvals, and certifications required for the sprinkler works.
K. The Contractor shall obtain all necessary water supply and flow test data required to carry out hydraulic calculations for the sprinkler system.
L. Where connecting to the existing system, pipework, fittings, and sprinkler head types shall match the existing installation unless otherwise approved.
M. Submit all sprinkler design drawings, calculations, and documentation to the local Fire Authority and/or Building Control for approval. Upon approval, provide the Client with one (1) approved construction set prior to installation and two (2) sets of as-built drawings upon completion.
N. All sprinkler pipework shall be installed above ceilings, within walls, or in concealed spaces. All cutting, making good, and reinstatement required for sprinkler installation shall be included within the Contractor's scope of works.
O. Upon completion, the sprinkler system shall be hydrostatically tested in accordance with BS EN 12845 and local authority requirements. Testing shall be witnessed where required. Provide a minimum of three (3) days' notice prior to testing and submit completed test certificates and commissioning documentation upon successful completion.

PLUMBING GENERAL NOTES & SPECIFICATIONS
A. All water supply and vent pipework shall be routed as high as practicable and concealed above ceilings unless noted otherwise. All soil and waste pipework shall be routed as high as practicable below floor slab or floor structure unless noted otherwise.
B. All soil and waste pipework shall be installed at gradients appropriate to pipe size and in accordance with BS EN 12056 and Approved Document H. All gradients and invert levels shall be verified prior to installation to ensure correct falls are maintained. The Contractor shall confirm that pipe routes and connections are feasible before commencing works.
C. Provide complete and proper soil, waste, vent, hot water, and cold water connections to all fixtures and equipment, whether or not all branches, fittings, or connections are shown on the drawings. Refer to sanitary waste and water rider diagrams for pipe sizes and system configuration.
D. The potable water system shall be flushed, cleaned, and disinfected in accordance with BS EN 806, Water Supply (Water Fittings) Regulations 1999, and local water authority requirements.
E. The Plumbing Contractor shall coordinate with relevant subcontractors regarding the quantity and locations of access panels required for valves and fittings within walls and ceilings. Access panels shall be provided by the appropriate trade.
F. Where horizontal water pipework conflicts with vent pipework within wall cavities, the Contractor shall provide additional water pipe drops or alternative routing to maintain compliance and accessibility.
G. All pipe penetrations below sinks shall be sealed. All pipe penetrations through floor slabs or fire-resisting elements shall be sealed with approved fire-stopping materials in accordance with Approved Document B.
H. Provide individual isolation valves to all plumbing fixtures and appliances. Valves shall be full-bore WRAS-approved ball valves suitable for potable water systems, with threaded, compression, or soldered connections as appropriate.
I. The Contractor shall verify on site the exact location, depth, and direction of flow of all existing drainage and sewer pipework within the building and below ground prior to commencement of works.
J. All pipework shall be adequately supported from existing or new structure using suitable proprietary pipe hangers and supports. Design, selection, spacing, and installation shall comply with relevant British Standards, manufacturers' recommendations, and good engineering practice.
K. Slab Penetrations: Prior to any cutting or coring of slabs, suitable detection methods (such as ground-penetrating radar or equivalent) shall be used to identify reinforcement, post-tensioning cables, services, or conduits. Written approval from the Structural Engineer shall be obtained before proceeding.
L. The Contractor shall make good all existing finishes, surfaces, and elements damaged during construction to match existing, unless otherwise noted.
M. Provide and install dielectric or insulating unions where connections are made between dissimilar metals, as required to prevent galvanic corrosion.
N. No new pipework shall be installed above new or existing electrical switchboards, distribution boards, panelboards, or motor control centres.
O. Provide escutcheon plates at all locations where pipework passes through walls, floors, or ceilings. Plates shall fully cover penetration openings or sleeves. Finishes shall be chrome or nickel plated in exposed areas and primed/painted finish in concealed areas.

PLUMBING PIPING & INSULATION
DOMESTIC WATER PIPING
1. Above ground domestic water pipework shall be copper tube manufactured in accordance with BS EN 1057, hard-drawn (R250) temper, complete with wrought copper fittings. Joints shall be made using lead-free solder and non-corrosive flux suitable for potable water systems, installed in accordance with Water Supply (Water Fittings) Regulations 1999.
2. Provide full-bore isolation ball valves of dezincification-resistant brass or bronze construction, WRAS-approved for potable water use, with threaded, compression, or soldered ends as appropriate. Valves shall be suitable for the system operating pressure and temperature.
WASTE AND VENT PIPING
1. Soil, waste, and vent pipework shall be installed in accordance with BS EN 12056 and Approved Document H, using one of the following approved materials: Cast iron soil pipe systems to BS EN 877 Copper waste and vent pipework to BS EN 1057 Galvanised steel pipework where permitted All fittings shall be compatible with the selected pipe material and system type.
2. Plastic pipework (PVC-U, HDPE, or other approved materials) may be used for cold water, hot water, soil, waste, and vent systems where permitted by Building Regulations and the local authority. All materials shall be installed in accordance with Approved Document H. Where roofs are accessible or used by occupants, vent pipes shall terminate at a safe height above roof level in accordance with regulations.
INSULATION
1. Provide thermal insulation to all pipework and equipment in accordance with BS 5422 and Building Regulations Approved Document L. Insulation materials shall achieve appropriate fire performance classifications in accordance with BS EN 13501-1. Installation shall comply strictly with the insulation manufacturer's instructions. All cold water pipework shall be provided with a continuous vapour barrier to prevent condensation. External pipework insulation shall be protected with a suitable weather-resistant jacket.
1.1. Domestic cold water pipework: minimum 13 mm thickness 1.2. Domestic hot water pipework: minimum 25 mm thickness 1.3. Domestic circulating hot water pipework: minimum 25 mm thickness

PLUMBING CODE NOTES
1. Condensate Drainage Condensate drains shall not be connected to the sanitary sewer system and shall not discharge into mop sinks or similar plumbing fixtures. Condensate shall be disposed of in accordance with applicable plumbing codes and local AHJ requirements.
2. Water Hammer Arrestors Provide water hammer arrestors at all quick-closing valves and fixtures, including but not limited to: Water closets Dishwashers Clothes washers Other solenoid- or fast-acting valve equipment, as applicable Water hammer arrestors shall conform to ASSE 1010 and be installed in accordance with manufacturer's recommendations.
3. Trap Seal Protection Provide trap primers or approved barrier-type trap seal protection devices for all floor drains subject to evaporation or infrequent use. Trap seal protection devices shall comply with ASSE 1072 and shall be installed per the manufacturer's installation instructions.

NATURAL GAS PIPING
1. GENERAL Gas installation shall conform to the requirements of the Gas Safety (Installation and Use) Regulations (GSIUR), BS 6891, IGE/MUP/2, IGE/MUP/1, and all applicable UK standards and Local Authority / Gas Transporter requirements.
2. PIPING A. Steel Pipe – 50 mm (2") and Smaller Carbon steel pipework shall comply with BS EN 10255 (Medium Grade), black steel, threaded ends. Threaded joints shall be in accordance with BS 21. Malleable iron threaded fittings shall comply with BS EN 10242, Class A or B. B. Steel Pipe – 65 mm (2½") and Larger Carbon steel pipework shall comply with BS EN 10255 (Medium or Heavy Grade), welded joints. Steel butt-weld fittings shall comply with BS EN 10253.
3. VALVE LOCATIONS Gas isolation valves shall not be installed within ceiling voids or air plenums and shall remain readily accessible for operation and maintenance in accordance with BS 6891.
4. CONCEALED PIPING A. Concealed Locations Gas pipework installed in concealed locations shall use approved permanent jointing methods only. The following fittings and joint types are not permitted in concealed locations: Unions Compression fittings Gasketed joints Mechanical couplings Bushings Swing joints Running threads All concealed joints shall be welded, brazed, or threaded as permitted by UK standards.
B. Piping in Partitions Gas pipework shall not be embedded in solid walls, concrete, or masonry. Pipework routed within partitions shall be sleeved or otherwise protected against mechanical damage. Pipework passing through walls or partitions shall be sleeved and sealed in accordance with BS 6891.
5. UNIONS Where permitted, unions shall comply with BS EN 10242, malleable iron, ground-joint type, suitable for gas service, and installed only in accessible locations.
6. DIELECTRIC JOINTS Where dissimilar metals are connected, provide approved insulating joints to prevent galvanic corrosion in accordance with IGE/M standards and manufacturer recommendations.
7. CORROSION PROTECTION Where gas pipework is exposed to corrosive environments or installed externally, pipe and fittings shall be protected using: Factory-applied protective coating or Site-applied corrosion protection system suitable for gas installations Protection systems shall comply with BS EN ISO 12944 and manufacturer requirements.
8. PLUG VALVES (65 mm and Larger) Plug valves shall comply with BS EN 331 or BS EN 13774, suitable for gas service with a minimum pressure rating appropriate to the system design. Gas valves shall not be installed above ceilings.
9. GAS COCKS (50 mm and Smaller) Gas cocks shall be: CE-marked and approved for gas service Bronze or brass body Suitable for operating pressure of the system Provided with lever or square head handles Threaded connections complying with BS 21
10. BALL VALVES Ball valves shall be: Full-bore type CE-marked and approved for gas service Brass or steel body with appropriate seal Rated for the system design pressure Installed in accessible locations only
11. GAS PRESSURE REGULATORS Gas pressure regulators shall be: CE-marked and approved for gas service Suitable for the inlet pressure, outlet pressure, and gas flow rate indicated Installed in well-ventilated, accessible locations Regulators shall be vented to atmosphere where required by: The Gas Transporter The regulator manufacturer Vent piping shall: Be of the same material as the gas pipework Discharge externally to a safe, non-hazardous location Terminate with a downward-facing outlet fitted with corrosion-resistant insect screening
12. TESTING AND COMMISSIONING Gas pipework shall be pressure tested, purged, and commissioned in accordance with: BS 6891 IGE/MUP/1 or IGE/MUP/2 Gas Transporter requirements Local Authority and Building Control regulations Test certificates shall be submitted prior to system energisation.

PLUMBING SYMBOLS		
SYMBOL	ABBREVIATION	DESCRIPTION
		EXISTING PIPING OR EQUIPMENT TO REMAIN
		EXISTING PIPING OR EQUIPMENT TO BE REMOVED
	CW	DOMESTIC COLD WATER
	HW	DOMESTIC HOT WATER
	HWC	DOMESTIC HOT WATER RECIRCULATION
	WP	SANITARY SOIL AND WASTE
	VP	SANITARY VENT
	D	DRAIN LINE
	PD	PUMPED DISCHARGE
	G	NATURAL GAS
	ST	STORM WATER
		PIPE TURNING UP
		PIPE TURNING DOWN
		VALVE IN VERTICAL
		PIPE BRANCH BOTTOM TAKEOFF
		PIPE BRANCH TOP TAKEOFF
		CAPPED PIPE
		BALL VALVE
		CHECK VALVE
		UNION
		GATE VALVE
	PRV	PRESSURE REDUCING VALVE
		GAS COCK
		GAS METER
		COMBINATION BALANCING AND SHUT-OFF VALVE
	FDC	FIRE DEPARTMENT CONNECTION
		PIPE DIRECTION OF FLOW
	FD	FLOOR DRAIN
		POINT OF REMOVAL
		POINT OF CONNECTION TO EXISTING
		KEYED NOTE, DEMOLITION
		KEYED NOTE, NEW WORK

ABBREVIATIONS
(E) EXISTING TO REMAIN (R) EXISTING TO BE REMOVED AND RELOCATED (RE) RELOCATED EQUIPMENT (X) DEMOLISHED EQUIPMENT ABV ABOVE ADA AMERICANS WITH DISABILITIES ACT AFF ABOVE FINISHED FLOOR BFP BACKFLOW PREVENTER BTU BRITISH THERMAL UNITS CISPI CAST IRON SOIL PIPE INSTITUTE CLG CEILING CO CLEANOUT CONT CONTINUATION CM COFFEE MAKER DF DRINKING FOUNTAIN DFU DRAINAGE FIXTURE UNITS DN DOWN DW DISHWASHER DWG DRAWING EA EACH ELEC ELECTRIC, ELECTRICAL ELEV ELEVATION EWC ELECTRIC WATER COOLER °F DEGREES FAHRENHEIT FLOOR CLEANOUT FCO FLOOR CLEANOUT FD FLOOR DRAIN GAL GALLON, GALLONS GD GARBAGE DISPOSAL GPH GALLONS PER HOUR GPM GALLONS PER MINUTE HB HOSE BIB HD HUB DRAIN IM ICE MAKER INV INVERT ELEVATION KW KILOWATTS L LAVATORY LBS POUNDS MAX MAXIMUM MECH MECHANICAL MBH THOUSANDS OF BTU'S PER HOUR MIN MINIMUM MS MOP SINK NSF NATIONAL SANITARY FOUNDATION OD OVERFLOW DRAIN OSD OPEN SITE DRAIN PH PHASE PSI POUNDS PER SQUARE INCH RD ROOF DRAIN REF REFRIGERATOR RL RAIN LEADER RL SHOWER SK SINK SQ FT SQUARE FOOT, FEET SS SERVICE SINK TPV TRAP PRIMER VALVE TS TAMPER SWITCH TYP TYPICAL U URINAL V VOLT, VOLTS VS VENT STACK VTR VENT THROUGH ROOF W/ WITH WC WATER CLOSET WH WATER HEATER WHA WATER HAMMER ARRESTOR WS WASTE STACK

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REV. NO.	DESCRIPTION	DATE	BY
PROJECT: OFFICE ELECTRICAL DESIGN			
TITLE: PLUMBING GENERAL NOTE			
PROJ. NO.	PROJ. ENGR.	SCALE @ 24X36:	
	AA	N/A	
DATE : May 11, 2026			
DRAWING NO.		REV.	
M-00			



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REV. NO.	DESCRIPTION	DATE	BY

PROJECT: OFFICE ELECTRICAL DESIGN

TITLE: DRAINAGE PLAN

PROJ. NO. AA SCALE @ 24X36: 1:1200

DATE : May 11, 2026

DRAWING NO. M-01 REV.

PLUMBING LEGEND	
	BALL VALVE (BV)
	GATE VALVE (GV)
	MIXING VALVE (MV)
	FLOOR CLEAN OUT (FCO)
	FLOOR DRAIN (FD)
	HUB DRAIN (HD)
	FLOOR SINK (FS)
	PIPE TURNING UP
	PIPE TURNING DOWN
	EXISTING PIPE
	NEW PIPE
	INSTANT WATER HEATER
	GAS METER
	WATER METER
LINES TYPE LEGEND	
	COLD WATER LINE (CWL)
	HOT WATER LINE (HWS)
	SEWER LINE (S)
	GAS LINE (G)

NOTE:

Scope & Regulatory Compliance
This Plumbing Layout Plan has been prepared for 100 Bunhill Row, London, EC1Y 8ND, United Kingdom
All plumbing systems—including potable cold water supply, hot water generation and distribution, sanitary drainage, venting, stormwater systems, plumbing fixtures, backflow prevention, and associated materials—have been designed and documented to comply with all applicable statutory building regulations, water supply regulations, public health requirements, and water hygiene obligations applicable in England and enforced by the local authority and statutory undertakers.
The design also incorporates measures to control the risk of Legionella bacteria in accordance with current health and safety legislation and guidance.
Applicable Codes, Standards & Regulatory Framework
The plumbing design and installation are based on the following current UK regulations, guidance documents, and standards, as adopted and enforced in England:
a. The Building Regulations 2010 (as amended) – statutory framework governing building works, including plumbing installations, sanitation, drainage, water supply, hygiene, safety, and water efficiency.
b. Approved Document G – Sanitation, Hot Water Safety and Water Efficiency – guidance on the provision of wholesome water, prevention of scalding, water efficiency, and sanitary facilities.
c. Approved Document H – Drainage and Waste Disposal – requirements for foul water drainage, surface water disposal, ventilation, and protection against contamination.
d. The Water Supply (Water Fittings) Regulations 1999 – legal requirements controlling the design, installation, and maintenance of water fittings to prevent contamination, waste, misuse, undue consumption, and incorrect connection of water supplies.
e. HSE Approved Code of Practice (ACoP) L8 – "Legionnaires' disease: The control of legionella bacteria in water systems" – mandatory guidance for the assessment and control of legionella risk in hot and cold water systems.
f. Relevant British Standards (BS / BS EN) applicable to plumbing materials, fittings, pipework, testing, commissioning, and workmanship, as referenced by the above regulations and accepted professional practice.
g. Local Authority and Water Undertaker Requirements (including Thames Water or relevant statutory undertaker) for notification, inspection, approval, and commissioning of plumbing installations.

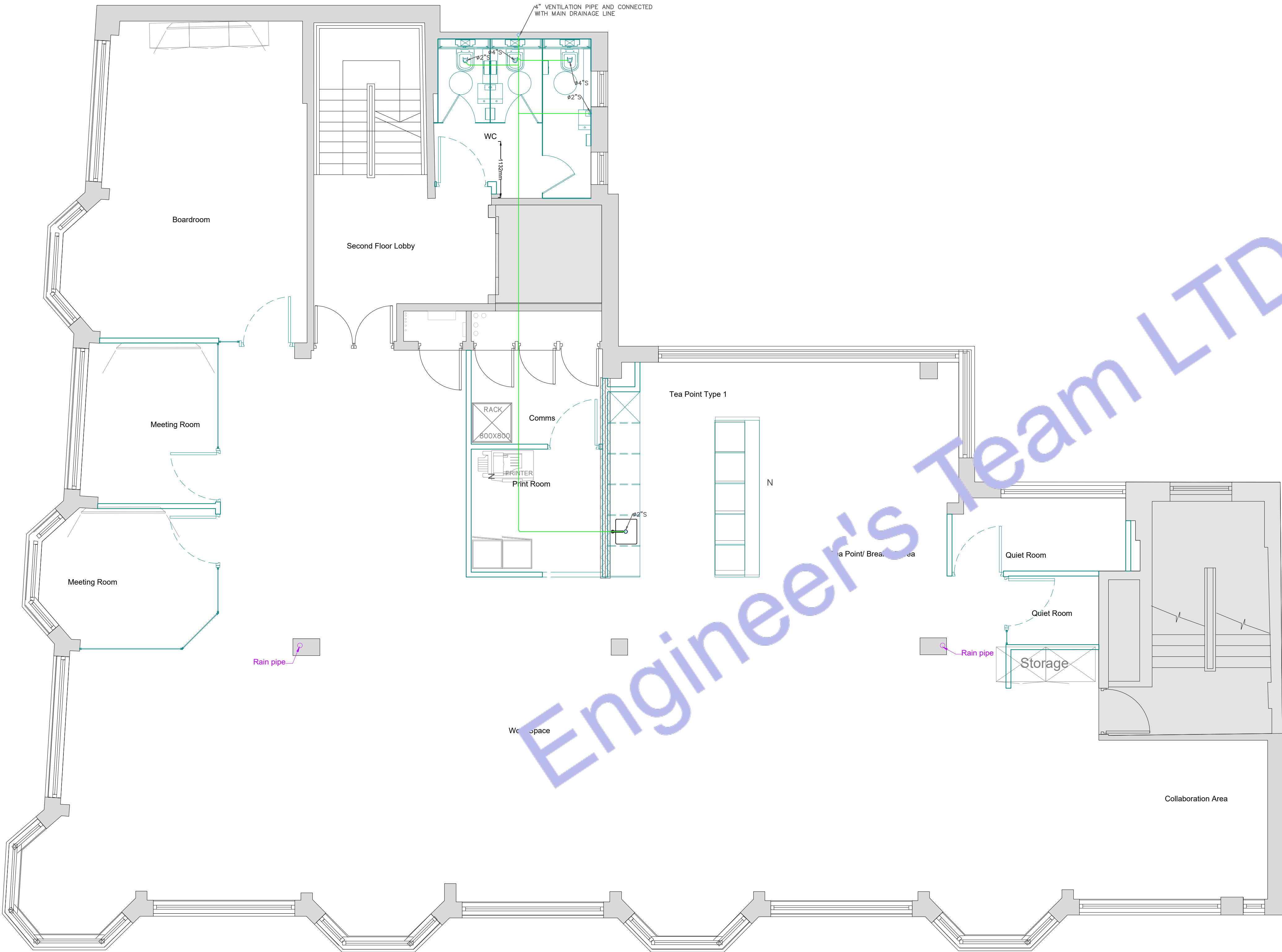
Product & Equipment Approval
"100 Bunhill Row, London, EC1Y 8ND, United Kingdom" – Product Approval Requirements
a. All plumbing products, fixtures, valves, fittings, water heaters, storage vessels, backflow prevention devices, traps, wastes, and flexible connectors shall be approved, certified, or listed by recognised third-party schemes acceptable to the Authority Having Jurisdiction (AHJ).
b. All materials and fittings in contact with potable water shall comply with Regulation 4 of the Water Supply (Water Fittings) Regulations 1999, confirming suitability for use with wholesome water.
c. Products shall be WRAS approved, or otherwise demonstrated to meet equivalent regulatory acceptance where WRAS approval is not available.
d. Manufacturer's technical data sheets, installation instructions, performance data, hygiene classifications, and test certificates shall be submitted for review where required.
e. Any proposed alternative or non-standard product shall be submitted for written approval by the design professional and AHJ prior to installation.
f. Non-compliant or unapproved products shall not be installed and shall be replaced at the contractor's cost.

Water Hygiene & Legionella Control (L8 Compliance)
a. The plumbing system design incorporates measures to minimise the risk of Legionella growth, in accordance with HSE ACoP L8 and HSG274 guidance.
b. Hot water systems shall be designed to:
Store hot water at ≥60°C
Distribute hot water such that ≥50°C is achieved at outlets within one minute (or as otherwise justified)
Provide thermostatic mixing valves (TMVs) where required for scald protection
c. Cold water systems shall be designed to maintain water temperatures below 20°C under normal operating conditions.
d. Pipework layouts shall minimise:
Dead legs and redundant pipework
Oversized storage or distribution volumes
Stagnation and low-use outlets
e. Suitable access shall be provided for inspection, flushing, disinfection, temperature monitoring, and maintenance of water systems.
f. The contractor shall support the client's dutyholder obligations by providing installation information necessary for the Legionella risk assessment and ongoing management.

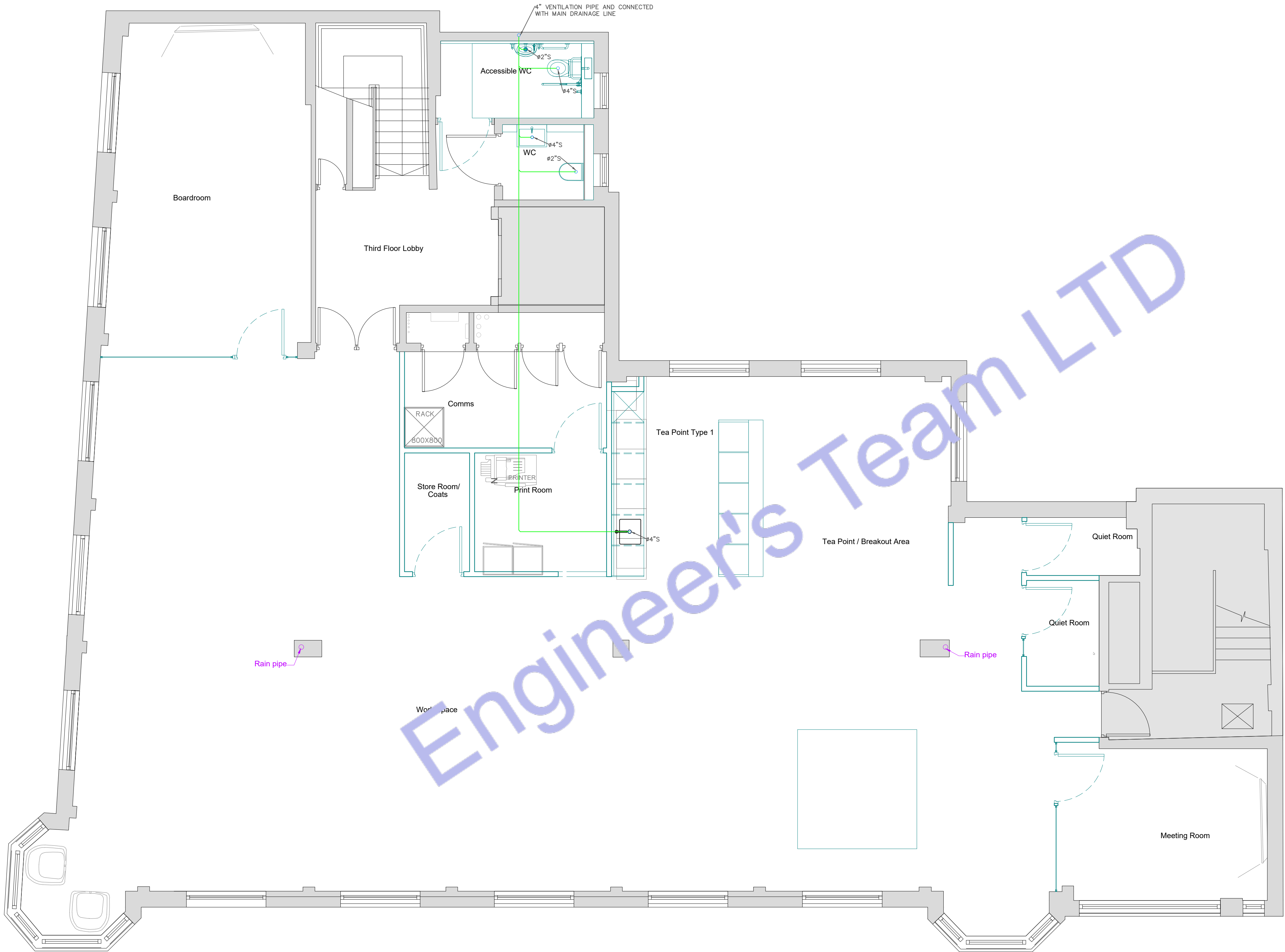
Permitting, Inspection & Statutory Compliance
a. All plumbing work shall be carried out under valid Building Control approval and, where required, notification to the relevant water undertaker in accordance with the Water Supply Regulations.
b. Plumbing installations shall be subject to staged inspections, including:
Rough-in pipework inspection
Pre-concealment testing
Final inspection and commissioning
c. All plumbing works shall be carried out or supervised by competent persons holding appropriate UK-recognised qualifications or scheme registrations, as required by regulation or Building Control.

Design & Installation Criteria / Field Coordination
a. Cold and hot water pipework shall be sized and routed to deliver adequate pressure, flow, temperature stability, and regulatory performance.
b. Drainage and vent systems shall prevent foul air ingress, trap seal loss, blockage, and contamination, and shall connect to approved foul and surface water systems.
c. Hot water systems shall incorporate temperature control, scald protection, and hygiene safeguards in accordance with Approved Document G and L8.
d. Fixture locations, maintenance clearances, and access requirements shall be coordinated with architectural, structural, fire, and MEP systems.
e. Penetrations through fire-rated elements shall be sealed with approved fire-stopping systems to maintain compartmentation integrity.

Testing, Commissioning & Documentation
a. All plumbing systems shall be tested prior to concealment for:
Leak tightness
Pressure performance
Drainage gradients
Venting integrity
b. Commissioning shall include:
Hot and cold water temperature verification
TMV operation testing
Backflow prevention verification
Flushing and disinfection where required
c. Upon completion, submit:
As-built drawings
Test and commissioning records
Manufacturer manuals
Water hygiene and compliance documentation
Deviations & Site Changes
Any deviation from the approved plumbing layout, referenced regulations, Water Supply Regulations, or L8 requirements shall be documented and submitted for written approval by the design professional and AHJ prior to implementation.
Contractor Responsibility & Design Limitation
These drawings and notes form part of the design and regulatory submission.
The contractor is responsible for:
Verification of site conditions
Safe execution and workmanship
Full compliance with Building Regulations, Water Supply Regulations, and L8
Coordination with other trades and authorities
The design professional's responsibility is limited to the defined design scope. Final installation compliance and statutory acceptance remain the contractor's obligation.



1 LEVEL 02 DRAINAG PLAN
SCALE: 1/100" = 1'-0"



PLUMBING LEGEND	
	BALL VALVE (BV)
	GATE VALVE (GV)
	MIXING VALVE (MV)
	FLOOR CLEAN OUT (FCO)
	FLOOR DRAIN (FD)
	HUB DRAIN (HD)
	FLOOR SINK (FS)
	PIPE TURNING UP
	PIPE TURNING DOWN
	EXISTING PIPE
	NEW PIPE
	INSTANT WATER HEATER
	GAS METER
	WATER METER
LINES TYPE LEGEND	
	COLD WATER LINE (CW)
	HOT WATER LINE (HW)
	SEWER LINE (S)
	GAS LINE (G)



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TITLE: DRAINAGE PLAN		
PROJ. NO.	PROJ. ENGR. AA	SCALE @ 24X36: 1:1200
DATE : May 11, 2026		
DRAWING NO. M-02		REV.

2 LEVEL 03 DRAINAG PLAN
SCALE: 1/100" = 1'-0"



Engineer's Team LTD

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REV. NO.	DESCRIPTION	DATE	BY

PROJECT: OFFICE ELECTRICAL DESIGN

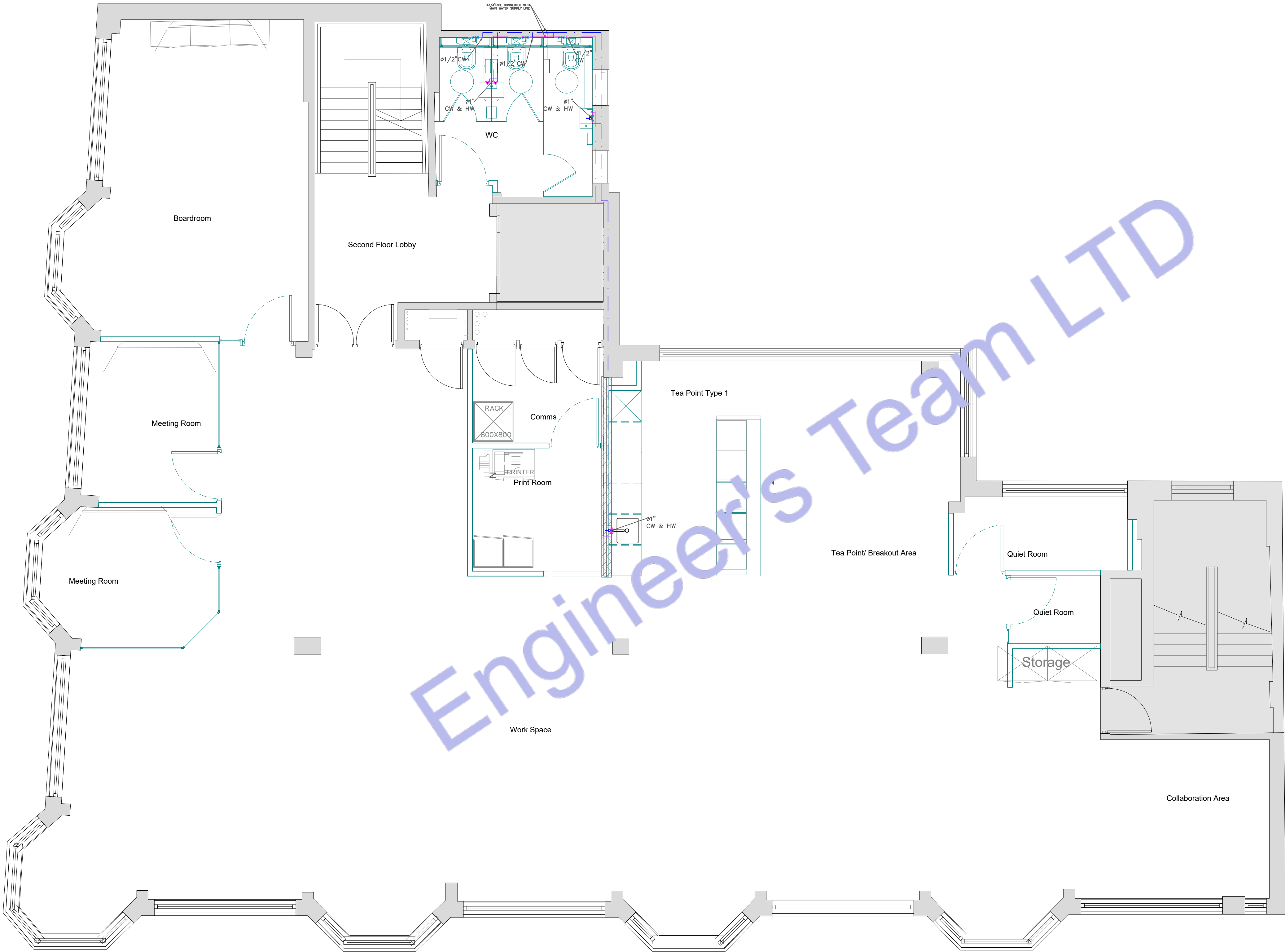
TITLE: WATER SUPPLY PLAN

PROJ. NO.	PROJ. ENGR. AA	SCALE @ 24X36: 1:1200
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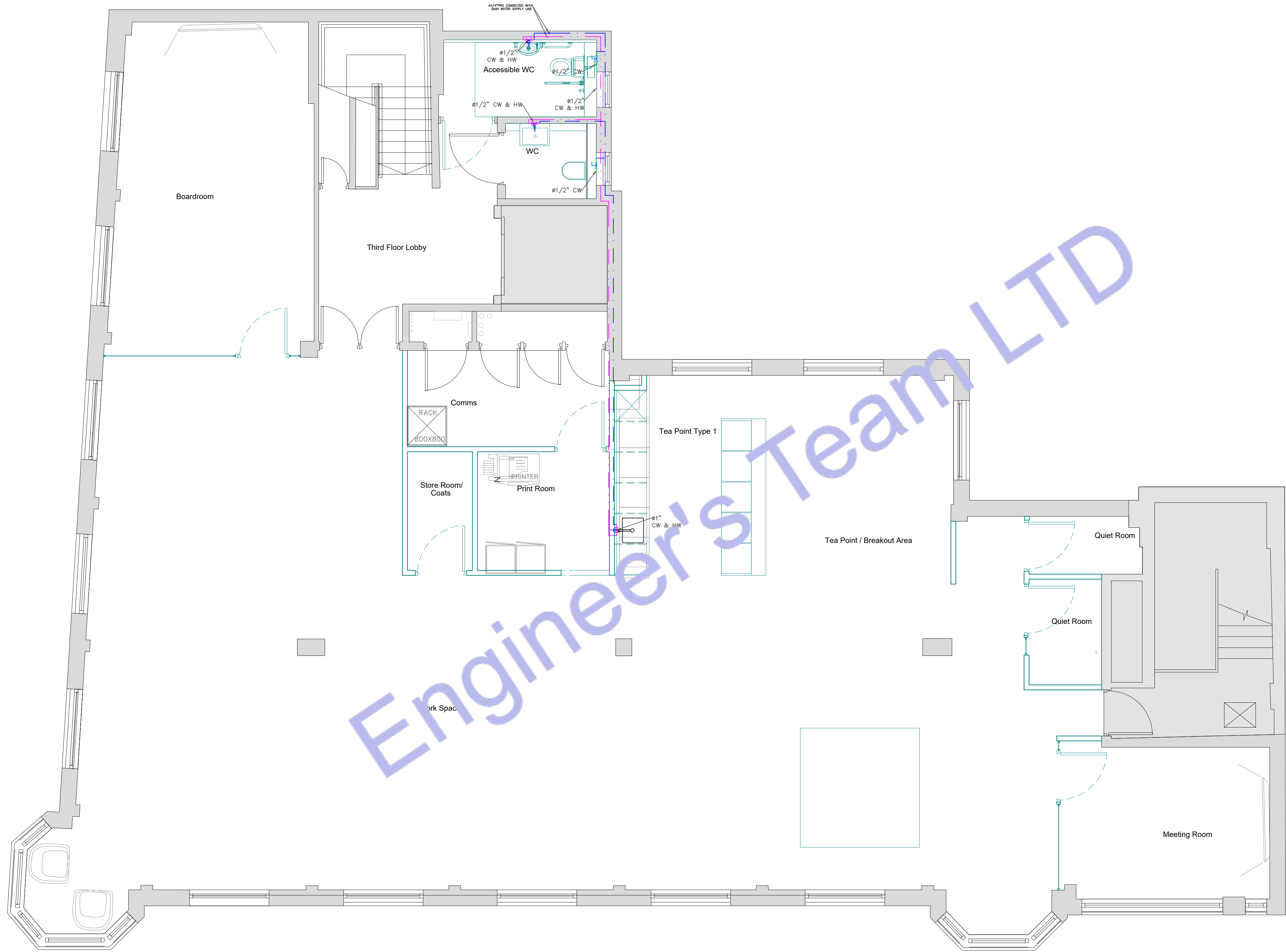
DATE : May 11, 2026

DRAWING NO. M-03	REV.
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PLUMBING LEGEND	
	BALL VALVE (BV)
	GATE VALVE (GV)
	MIXING VALVE (MV)
	FLOOR CLEAN OUT (FCO)
	FLOOR DRAIN (FD)
	HUB DRAIN (HD)
	FLOOR SINK (FS)
	PIPE TURNING UP
	PIPE TURNING DOWN
	EXISTING PIPE
	NEW PIPE
	INSTANT WATER HEATER
	GAS METER
	WATER METER
LINES TYPE LEGEND	
	COLD WATER LINE (CWL)
	HOT WATER LINE (HWS)
	SEWER LINE (SL)
	GAS LINE (GL)



1 LEVEL_02_WATER_SUPPLY_PLAN
SCALE: 1/100" = 1'-0"



PLUMBING LEGEND	
	BALL VALVE (BV)
	GATE VALVE (GV)
	MIXING VALVE (MV)
	FLOOR CLEAN OUT (FCO)
	FLOOR DRAIN (FD)
	HUB DRAIN (HD)
	FLOOR SINK (FS)
	PIPE TURNING UP
	PIPE TURNING DOWN
	EXISTING PIPE
	NEW PIPE
	INSTANT WATER HEATER
	GAS METER
	WATER METER
LINES TYPE LEGEND	
	COLD WATER LINE (CW)
	HOT WATER LINE (HW)
	SEWER LINE (S)
	GAS LINE (G)



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REV. NO.	DESCRIPTION	DATE	BY

PROJECT: OFFICE ELECTRICAL DESIGN		
TITLE: WATER SUPPLY PLAN		
PROJ. NO.	PROJ. ENGR. AA	SCALE @ 24X36: 1:1200
DATE : May 11, 2026		
DRAWING NO. M-04		REV.

2 LEVEL 03 WATER SUPPLY PLAN
SCALE: 1/100" = 1'-0"



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STRUCTURES.

REV. NO.	DESCRIPTION	DATE	BY

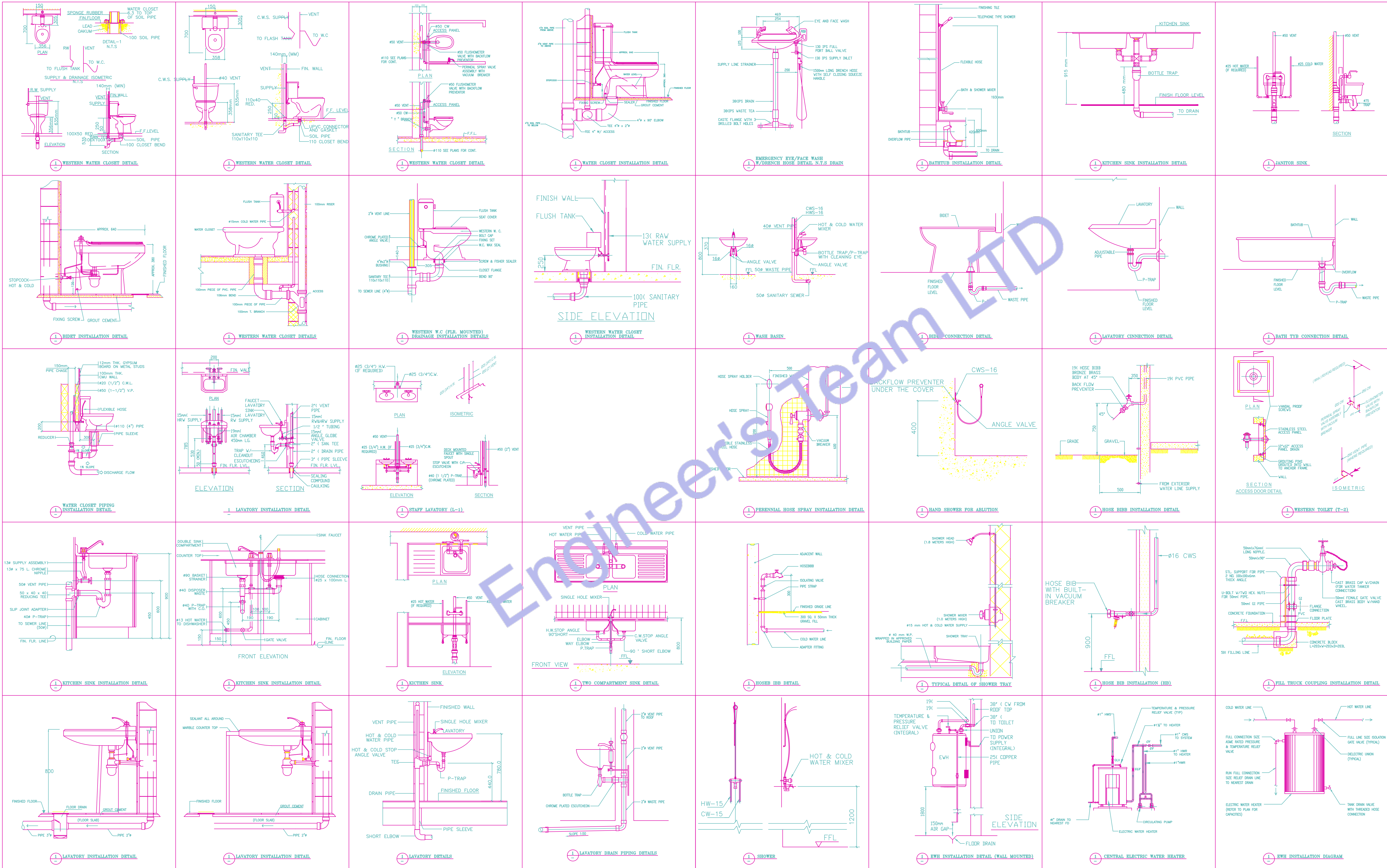
PROJECT: OFFICE ELECTRICAL DESIGN

TITLE: PLUMBING
INSTALLATION

PROJ. NO.	PROJ. ENGR.	SCALE @ 24X36:
	AA	N/A

DATE : May 11, 2026

DRAWING NO.	REV.
M-05	





Designed By Engr. Al Amin (MEP Engineer | Director - Engineer's Team LTD)

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