

## BILL OF QUANTITIES - FINAL ISSUE

| Electrical Services - UPS System, Distribution Boards, Sub-Main Cabling, Containment, Earthing & T&C |                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PROJECT                                                                                              | XXXXXX                                                                                                                                                                                                                                                                                                                                                                                                                |
| CLIENT                                                                                               | XXXXXX                                                                                                                                                                                                                                                                                                                                                                                                                |
| PREPARED BY                                                                                          | Optimar Consulting                                                                                                                                                                                                                                                                                                                                                                                                    |
| CONSULTANT                                                                                           | XXXXXX                                                                                                                                                                                                                                                                                                                                                                                                                |
| CONTRACT TYPE                                                                                        | Design & Build - RIBA Stage 2.5 Tender                                                                                                                                                                                                                                                                                                                                                                                |
| DRAWING BASIS                                                                                        | XXXXXX Series - T01 / Rev A0 & A1 (Tender Issue, XX.XX.XXXX)                                                                                                                                                                                                                                                                                                                                                          |
| SPEC BASIS                                                                                           | LD8825 Electrical Services Specification T01 (Stage 2.5)                                                                                                                                                                                                                                                                                                                                                              |
| DATE                                                                                                 | XXXXXX                                                                                                                                                                                                                                                                                                                                                                                                                |
| REVISION                                                                                             | P02 - Final Merged Issue                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| SCOPE (LPM BRIEF)                                                                                    | Take-off & costing for: Tenants UPS Main DB (as per schematic) · 300kVA Tenants UPS with 120-min (2hr) VRLA battery autonomy · All associated sub-main cabling · Containment (cable tray, ladder, basket, trunking, conduit) · Earthing & bonding · Testing & commissioning. NOTE: Lighting, fire alarm, small power and ancillary services are EXCLUDED - these are outside LPM's scope as per their original brief. |
|                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| QUANTITY BASIS                                                                                       | ★ Quantities marked with ★ are measured from drawing markups provided with the tender documents and the uploaded estimate. ⚠ Quantities marked ⚠ are professional estimator's allowances where no measured data was available (Stage 2 'Do Not Scale' drawings).                                                                                                                                                      |
| RATE BASIS                                                                                           | Material rates: UK market Q1 2026 (Socomec, Nexans/Prysmian, Legrand, Furze). Labour: JIB Approved Electrician rate + London weighting = £34/hr blended. Full sources in 'Pricing Basis & Sources' sheet.                                                                                                                                                                                                             |
|                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| ⚠ IMPORTANT                                                                                          | Client requested a tender-stage quote, not a formally measured schedule. This is a budgetary BoQ appropriate to RIBA Stage 2. All quantities subject to revision at Stage 3 & 4 once dimensioned coordinated drawings are available.                                                                                                                                                                                  |
|                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| BILLS INCLUDED                                                                                       | Bill 1: UPS System & Equipment · Bill 2: Distribution Boards & Switchgear · Bill 3: Sub-Main Cabling · Bill 4: Containment · Bill 5: Earthing & Bonding · Bill 6: Testing & Commissioning                                                                                                                                                                                                                             |

## Electrical Sample | Final Merged BoQ

Scope: UPS System · Distribution Boards · Sub-Main Cabling · Containment · Earthing & Bonding · Testing & Commissioning

| Bill          | Description                      | Materials (£) | Labour (£) | Total (£)    |
|---------------|----------------------------------|---------------|------------|--------------|
| <b>Bill 1</b> | UPS System & Equipment           | £1,28,350.00  | £4,907.90  | £1,33,257.90 |
| <b>Bill 2</b> | Distribution Boards & Switchgear | £67,600.00    | £1,632.00  | £69,232.00   |
| <b>Bill 3</b> | Sub-Main Cabling                 | £66,830.00    | £113.90    | £66,943.90   |
| <b>Bill 4</b> | Containment                      | £19,724.00    | £120.02    | £19,844.02   |
| <b>Bill 5</b> | Earthing & Bonding               | £4,092.50     | £418.88    | £4,511.38    |
| <b>Bill 6</b> | Testing & Commissioning          | £8,200.00     | £3,672.00  | £11,872.00   |

|  |                                                                  |                     |                   |                     |
|--|------------------------------------------------------------------|---------------------|-------------------|---------------------|
|  | <b>GRAND TOTAL (excl. VAT, prelims, profit &amp; attendance)</b> | <b>£2,94,796.50</b> | <b>£10,864.70</b> | <b>£3,05,661.20</b> |
|--|------------------------------------------------------------------|---------------------|-------------------|---------------------|

*COMPARISON NOTE: Uploaded estimate total = £161,497 (includes out-of-scope items: lighting, fire alarm, small power, ancillary services). This BoQ covers clients brief only. Key corrections made: (1) UPS unit rate £45k→£85k (Socomec MODULYS GP market rate); (2) UPS Main DB £1.8k→£15k (custom 630A multi-way panel); (3) VRLA batteries added (omitted from uploaded estimate); (4) Sub-main armoured cables added (tray was priced but cables were omitted); (5) T&C added (entirely omitted); (6) Earth bar qty 3→5 No., rate £45→£220 per bar; (7) AC/DC rectifiers, diodes, fused switch removed (integral UPS components, not separate items); (8) DB count corrected to 10 No. (Broadcast/Market Ceremony DB is the 10th).*

*EXCLUSIONS: (1) VAT (2) Contractor's preliminaries, overhead and profit (3) Lighting, fire alarm, small power, underfloor power track, grommets - outside client's brief (4) Structural reinforcement works (if required post-Stage 2 survey) (5) Phasing / out-of-hours premium (6) Attendance on nominated sub-contractors (7) Any works associated with Level 5 existing installation until site survey completed.*

| BILL 1 - UPS SYSTEM & EQUIPMENT                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                               |      |      |              |               |         |                 |               |                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|--------------|---------------|---------|-----------------|---------------|----------------|
| 300kVA Modular UPS · 120-min (2hr) VRLA Battery Autonomy · Socomec or equal · Spec: Ss_70_30_45_92                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                               |      |      |              |               |         |                 |               |                |
| BASIS: This BoQ merges (a) measured quantities from the uploaded estimate drawing markups where available and (b) Optimar's market-rate pricing corrected to current UK Q1 2026 levels. Scope is limited to client's brief: UPS system, distribution boards, sub-main cabling, containment, earthing & T&C only. |                                                                                                                                                                                                                                                                                                                                                                                                               |      |      |              |               |         |                 |               |                |
| Item                                                                                                                                                                                                                                                                                                             | Description                                                                                                                                                                                                                                                                                                                                                                                                   | Unit | Qty  | Mat Rate (£) | Mat Total (£) | Lab Hrs | Lab Rate (£/hr) | Lab Total (£) | Item Total (£) |
| A UPS UNIT                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                               |      |      |              |               |         |                 |               |                |
| 1                                                                                                                                                                                                                                                                                                                | Supply of 300kVA modular online double-conversion UPS - N+1 resilience, 4×100kVA hot-swappable modules, online double conversion. To BS EN 62040-1 & -3. Socomec MODULYS GP or equal approved. Includes SNMP adaptor for BMS/network monitoring. IP20, duplicate forced ventilation fans, LCD display, event log (min 64 events), integral audible alarm 65dBA. Output power factor ≥0.99, efficiency ≥97.3%. | nr   | 1.0  | £85,000.00   | £85,000.00    | 0.0     | £34.00          | £0.00         | £85,000.00     |
| 2                                                                                                                                                                                                                                                                                                                | Installation of 300kVA UPS system - mechanical handling, positioning, levelling, interconnection of UPS modules, internal wiring, BMS connection, identification labelling (UPS-A-Traders, UPS-B-Traders, UPS-A-Comms, UPS-B-Comms). Method statement and structural engineer weight coordination included.                                                                                                   | nr   | 1.0  | £0.00        | £0.00         | 80.0    | £34.00          | £2,720.00     | £2,720.00      |
| B VRLA BATTERY SYSTEM & BATTERY MANAGEMENT                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                               |      |      |              |               |         |                 |               |                |
| 3                                                                                                                                                                                                                                                                                                                | Supply of VRLA battery system on open racks - minimum 10yr design life, 12V cells, Battery Management System (BMS), fused parallel battery strings, automatic disconnection of faulty string, automatic temperature and float voltage compensation, microprocessor-based monitoring. 2hr autonomy at 300kW load at end of life.                                                                               | lot  | 1.0  | £30,000.00   | £30,000.00    | 0.0     | £34.00          | £0.00         | £30,000.00     |
| 4                                                                                                                                                                                                                                                                                                                | Installation of VRLA battery racks - positioning, interconnection of cells, battery circuit breaker interconnection with UPS unit, BMS wiring and commissioning preparation.                                                                                                                                                                                                                                  | lot  | 1.0  | £0.00        | £0.00         | 40.0    | £34.00          | £1,360.00     | £1,360.00      |
| C EXTERNAL MAINTENANCE BYPASS PANEL                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                               |      |      |              |               |         |                 |               |                |
| 5                                                                                                                                                                                                                                                                                                                | Supply of 800A External Maintenance Bypass Panel - fully interlocked Castell key system enabling: UPS inverter operation, mains bypass operation, UPS testing in bypass. BMS connected. By-pass panel by UPS supplier. ★ Qty: 1 No. confirmed from riser markup legend.                                                                                                                                       | nr   | 1.0  | £10,000.00   | £10,000.00    | 0.0     | £34.00          | £0.00         | £10,000.00     |
| 6                                                                                                                                                                                                                                                                                                                | Installation of 800A External Maintenance Bypass Panel - interconnection with UPS, mains supply and load as Drawing 60002. Castell interlocking commissioning and BMS interface testing.                                                                                                                                                                                                                      | nr   | 1.0  | £0.00        | £0.00         | 24.0    | £34.00          | £816.00       | £816.00        |
| D UPS ACCESSORIES                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                               |      |      |              |               |         |                 |               |                |
| 7                                                                                                                                                                                                                                                                                                                | Supply and fix rubber safety matting - suitably rated/certified insulation resistance rubber matting to front of all UPS units, bypass panel and STS units as specification.                                                                                                                                                                                                                                  | m²   | 10.0 | £85.00       | £850.00       | 0.4     | £34.00          | £11.90        | £861.90        |
| 8                                                                                                                                                                                                                                                                                                                | Factory Acceptance Test (FAT) - attendance at witnessed factory test to BS EN 62040-3 (4 weeks notice). Includes balanced load test, efficiency test, harmonic test, inrush current test. Test equipment calibration certificates and report to be submitted.                                                                                                                                                 | item | 1.0  | £2,500.00    | £2,500.00     | 0.0     | £34.00          | £0.00         | £2,500.00      |
| Subtotal - UPS System & Equipment                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                               |      |      |              | £1,28,350.00  |         |                 | £4,907.90     | £1,33,257.90   |
| TOTAL - BILL 1 - UPS SYSTEM & EQUIPMENT                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                               |      |      |              | £1,28,350.00  |         |                 | £4,907.90     | £1,33,257.90   |

| BILL 2 - DISTRIBUTION BOARDS & SWITCHGEAR                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                     |      |      |              |               |         |                 |               |                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|--------------|---------------|---------|-----------------|---------------|----------------|
| Tenant UPS Main DB · 10 No. UPS-Fed Comms Room DBs · Riser Markup Confirmed Quantities · Drawing 60002 / 60003                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                     |      |      |              |               |         |                 |               |                |
| ★ All DB and switchgear quantities confirmed from riser markup legend on Drawing 60002-A1. DB count of 10 confirmed: 4× Comms DB-A + 5× Comms DB-B + 1× Broadcast/Market Ceremony DB (with ATS). Rates are Q1 2026 UK market - note uploaded estimate underpriced DBs by 5×. |                                                                                                                                                                                                                                                                                                                                                                     |      |      |              |               |         |                 |               |                |
| Item                                                                                                                                                                                                                                                                         | Description                                                                                                                                                                                                                                                                                                                                                         | Unit | Qty  | Mat Rate (£) | Mat Total (£) | Lab Hrs | Lab Rate (£/hr) | Lab Total (£) | Item Total (£) |
| A TENANT UPS MAIN DISTRIBUTION BOARD                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                     |      |      |              |               |         |                 |               |                |
| 1                                                                                                                                                                                                                                                                            | Supply of Tenant UPS Main Distribution Board - custom fabricated steel enclosure, rust-proofed, gasketed lockable hinged cover, fully shrouded live parts. Contains: 630A TPN switch disconnectors (×4 outgoing feeders), 630A TPN MCCBs ×3 (incoming/bus), 160A MCCBs ×10 (individual DB outgoing ways). Trefolyte labelling. ★ Qty: 1 No. confirmed riser markup. | nr   | 1.0  | £15,000.00   | £15,000.00    | 0.0     | £34.00          | £0.00         | £15,000.00     |
| 2                                                                                                                                                                                                                                                                            | Installation of Tenant UPS Main DB - positioning, mechanical fixing, cable entry gland plates (top entry), internal bussing, labelling and commissioning preparation.                                                                                                                                                                                               | nr   | 1.0  | £0.00        | £0.00         | 40.0    | £34.00          | £1,360.00     | £1,360.00      |
| B 160A MCCBs & 630A TPN OUTGOING GEAR (within Tenant UPS Main DB)                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                     |      |      |              |               |         |                 |               |                |
| 3                                                                                                                                                                                                                                                                            | Supply of 160A MCCB - 4-pole, individual comms room DB outgoing ways at Tenant UPS Main DB. ★ Qty: 10 No. confirmed from riser markup legend.                                                                                                                                                                                                                       | nr   | 10.0 | £220.00      | £2,200.00     | 0.0     | £34.00          | £0.00         | £2,200.00      |
| 4                                                                                                                                                                                                                                                                            | Supply of 630A TPN Switch Disconnecter / MCCB - for outgoing sub-main circuits from Tenant UPS Main DB. ★ Qty: 7 No. confirmed from riser markup legend.                                                                                                                                                                                                            | nr   | 7.0  | £1,200.00    | £8,400.00     | 0.0     | £34.00          | £0.00         | £8,400.00      |
| 5                                                                                                                                                                                                                                                                            | Supply of ATS (Automatic Transfer Switch) - for Broadcast & Market Ceremony DB at Level 5 Comms Room. ★ Qty: 1 No. confirmed from riser markup legend.                                                                                                                                                                                                              | nr   | 1.0  | £4,500.00    | £4,500.00     | 0.0     | £34.00          | £0.00         | £4,500.00      |
| C COMMS ROOM UPS-FED DISTRIBUTION BOARDS (10 No.)                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                     |      |      |              |               |         |                 |               |                |
| 6                                                                                                                                                                                                                                                                            | Supply of comms room UPS Distribution Board Type A (Comms DB-A) - MCB switchboard, steel enclosure, gasketed lockable cover, fully shrouded live parts, RCD/RCBO protection, Trefolyte labelling. As Drawing 60003. ★ Qty: 4 No. confirmed from riser markup legend (Lower Ground, L3 North, L3 South, L5).                                                         | nr   | 4.0  | £3,200.00    | £12,800.00    | 0.0     | £34.00          | £0.00         | £12,800.00     |
| 7                                                                                                                                                                                                                                                                            | Supply of comms room UPS Distribution Board Type B (Comms DB-B) - as Type A above. ★ Qty: 5 No. confirmed from riser markup legend (Lower Ground, L3 North, L3 South, L5 ×2 including Broadcast/Market Ceremony DB circuit protection).                                                                                                                             | nr   | 5.0  | £3,200.00    | £16,000.00    | 0.0     | £34.00          | £0.00         | £16,000.00     |
| 8                                                                                                                                                                                                                                                                            | Supply of Broadcast & Market Ceremony Distribution Board (DB/T/5B/BR-MC) - Level 5 Comms Room, MCB switchboard with ATS as Drawing 60002/60003. This is the 10th DB - separate from Comms DB-A and DB-B.                                                                                                                                                            | nr   | 1.0  | £4,200.00    | £4,200.00     | 0.0     | £34.00          | £0.00         | £4,200.00      |
| 9                                                                                                                                                                                                                                                                            | Supply of UPS Output Distribution Board - central output DB fed from Tenant UPS Main DB.                                                                                                                                                                                                                                                                            | nr   | 1.0  | £4,500.00    | £4,500.00     | 0.0     | £34.00          | £0.00         | £4,500.00      |
| 10                                                                                                                                                                                                                                                                           | Installation of all comms room distribution boards - all 10 No. boards, positioning, mechanical fixing, cable entry gland plates, labelling and commissioning preparation.                                                                                                                                                                                          | nr   | 10.0 | £0.00        | £0.00         | 8.0     | £34.00          | £272.00       | £272.00        |
|                                                                                                                                                                                                                                                                              | Subtotal - Distribution Boards & Switchgear                                                                                                                                                                                                                                                                                                                         |      |      |              | £67,600.00    |         |                 | £1,632.00     | £69,232.00     |
|                                                                                                                                                                                                                                                                              | TOTAL - BILL 2 - DISTRIBUTION BOARDS & SWITCHGEAR                                                                                                                                                                                                                                                                                                                   |      |      |              | £67,600.00    |         |                 | £1,632.00     | £69,232.00     |

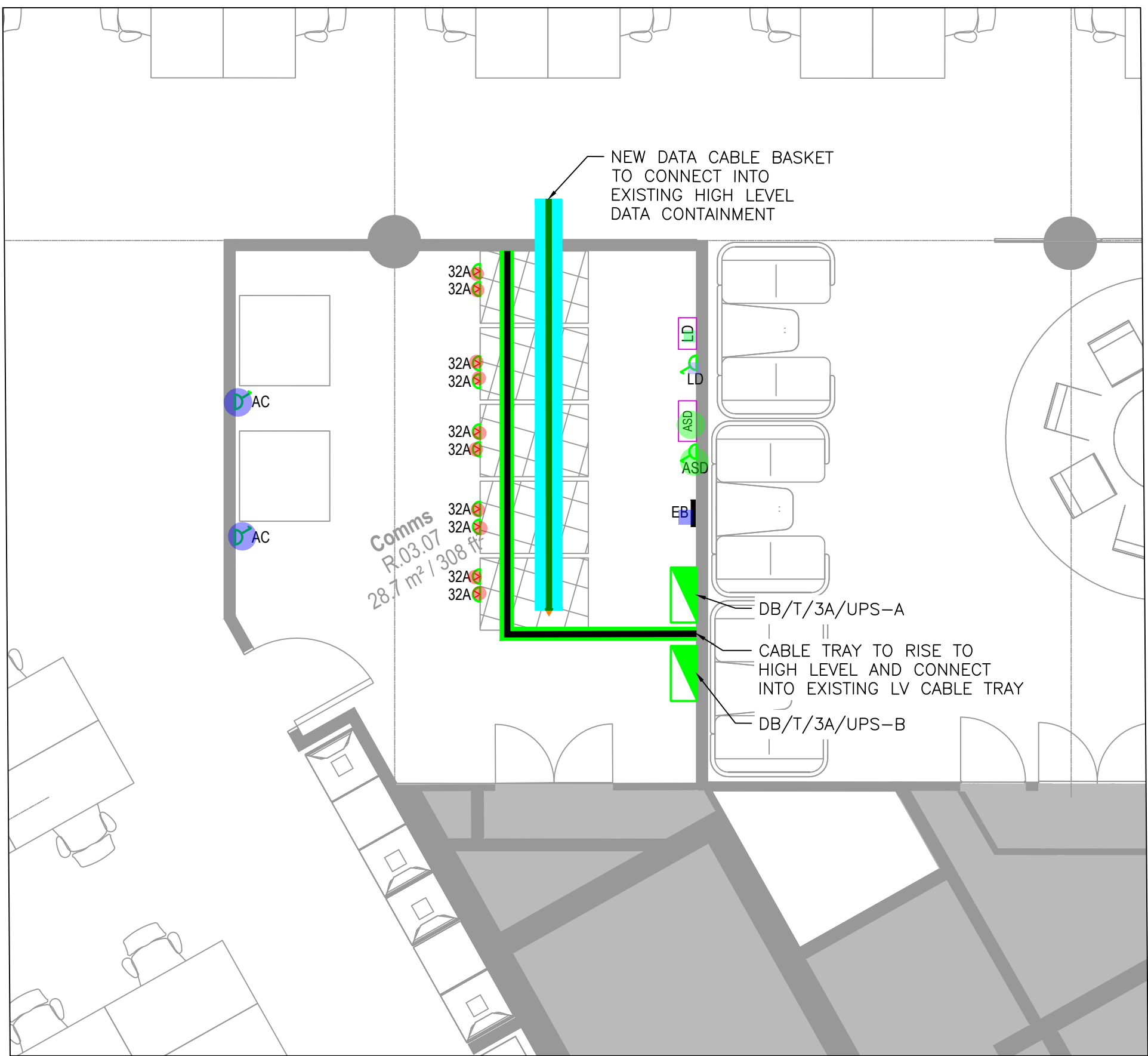
| BILL 3 - SUB-MAIN CABLING                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                    |      |       |              |               |         |                 |               |                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|--------------|---------------|---------|-----------------|---------------|----------------|
| LSHF Thermosetting Armoured Cables · Spec: Ss_70_30_45_45 / Pr_65_70_48_90 · Includes 15% waste/bends allowance                                                                                                                                                                                                                                             |                                                                                                                                                                                                                    |      |       |              |               |         |                 |               |                |
| ⚠ Sub-main cable quantities are estimator's allowances - the uploaded estimate priced cable TRAY but did NOT include the actual armoured cables running on the tray. These cables represent the largest single material cost item and cannot be omitted. Quantities derived from total tray run (150m confirmed from riser markup) plus routing allowances. |                                                                                                                                                                                                                    |      |       |              |               |         |                 |               |                |
| Item                                                                                                                                                                                                                                                                                                                                                        | Description                                                                                                                                                                                                        | Unit | Qty   | Mat Rate (£) | Mat Total (£) | Lab Hrs | Lab Rate (£/hr) | Lab Total (£) | Item Total (£) |
| A MAIN UPS FEEDER CABLES (Tenant UPS Main DB → Comms Room Incomers)                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                    |      |       |              |               |         |                 |               |                |
| 1                                                                                                                                                                                                                                                                                                                                                           | Supply of 4×300mm² + 150mm² CPC XLPE/SWA/LSHF armoured cable (BS 5467 / BS EN 60502) - main UPS sub-main feeder circuits to comms rooms. LSHF (Low Smoke Halogen Free) throughout as specification Pr_65_70_48_90. | m    | 150.0 | £210.00      | £31,500.00    | 0.0     | £34.00          | £0.00         | £31,500.00     |
| 2                                                                                                                                                                                                                                                                                                                                                           | Installation of 4×300mm² + 150mm² CPC armoured cable - pulling-in, cleating at 500mm centres, bending, dressing, armour clamps, glands and terminations at both ends.                                              | m    | 150.0 | £0.00        | £0.00         | 0.5     | £34.00          | £17.00        | £17.00         |
| B COMMS ROOM DISTRIBUTION CABLES (to individual Comms DB-A & DB-B)                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                    |      |       |              |               |         |                 |               |                |
| 3                                                                                                                                                                                                                                                                                                                                                           | Supply of 4×95mm² + 50mm² CPC XLPE/SWA/LSHF armoured cable - individual UPS-A and UPS-B DB sub-main circuits to Lower Ground and Level 3 North & South comms rooms (3 locations × 2 circuits = 6 runs).            | m    | 220.0 | £75.00       | £16,500.00    | 0.0     | £34.00          | £0.00         | £16,500.00     |
| 4                                                                                                                                                                                                                                                                                                                                                           | Installation of 4×95mm² + 50mm² CPC armoured cable - pulling-in, cleating, glands and terminations both ends.                                                                                                      | m    | 220.0 | £0.00        | £0.00         | 0.3     | £34.00          | £10.20        | £10.20         |
| 5                                                                                                                                                                                                                                                                                                                                                           | Supply of 4×120mm² + 70mm² CPC XLPE/SWA/LSHF armoured cable - Level 5 Comms Room UPS-A, UPS-B and Broadcast/Market Ceremony DB sub-mains (longest runs, additional voltage drop allowance).                        | m    | 150.0 | £95.00       | £14,250.00    | 0.0     | £34.00          | £0.00         | £14,250.00     |
| 6                                                                                                                                                                                                                                                                                                                                                           | Installation of 4×120mm² + 70mm² CPC armoured cable - pulling-in, cleating, glands and terminations both ends.                                                                                                     | m    | 150.0 | £0.00        | £0.00         | 0.4     | £34.00          | £11.90        | £11.90         |
| C SECURITY CONTROLLER SUB-MAINS (UPS Main DB → Riser Security Controllers)                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                    |      |       |              |               |         |                 |               |                |
| 7                                                                                                                                                                                                                                                                                                                                                           | Supply of 4×16mm² + 6mm² CPC XLPE/SWA/LSHF armoured cable - UPS-backed sub-mains to riser-mounted security controllers at Levels 1, 2 and 4 (3 No. circuits).                                                      | m    | 90.0  | £22.00       | £1,980.00     | 0.0     | £34.00          | £0.00         | £1,980.00      |
| 8                                                                                                                                                                                                                                                                                                                                                           | Installation of 4×16mm² + 6mm² CPC armoured cable - pulling-in, cleating, glands and terminations both ends.                                                                                                       | m    | 90.0  | £0.00        | £0.00         | 0.2     | £34.00          | £6.80         | £6.80          |
| D CABLE TERMINATION KITS & IDENTIFICATION                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                    |      |       |              |               |         |                 |               |                |
| 9                                                                                                                                                                                                                                                                                                                                                           | Supply and fix SWA armoured cable termination kits - glands, shrouds, lock-nuts, all sizes to suit all cable terminations at both ends of all circuits.                                                            | item | 1.0   | £2,200.00    | £2,200.00     | 0.0     | £34.00          | £0.00         | £2,200.00      |
| 10                                                                                                                                                                                                                                                                                                                                                          | Supply and fix cable identification markers - heat shrink ferrules and cable tags at both termination points and at intervals along all cable runs.                                                                | item | 1.0   | £400.00      | £400.00       | 2.0     | £34.00          | £68.00        | £468.00        |
|                                                                                                                                                                                                                                                                                                                                                             | Subtotal - Cable Terminations & ID                                                                                                                                                                                 |      |       |              | £2,600.00     |         |                 | £68.00        | £2,668.00      |
|                                                                                                                                                                                                                                                                                                                                                             | TOTAL - BILL 3 - SUB-MAIN CABLING                                                                                                                                                                                  |      |       |              | £66,830.00    |         |                 | £113.90       | £66,943.90     |

| BILL 4 - CONTAINMENT                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                        |      |       |              |               |         |                 |               |                |
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| Cable Tray, Ladder, Basket, Trunking & Conduit · 25% spare capacity mandated · Spec: Ss_75_10_21_21                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                        |      |       |              |               |         |                 |               |                |
| ★ All containment quantities taken from measured drawing markups in uploaded estimate and riser markup drawing. These supersede our earlier provisional estimates. Rates corrected to Q1 2026 UK market. |                                                                                                                                                                                                                                                                                                                                                                                        |      |       |              |               |         |                 |               |                |
| Item                                                                                                                                                                                                     | Description                                                                                                                                                                                                                                                                                                                                                                            | Unit | Qty   | Mat Rate (£) | Mat Total (£) | Lab Hrs | Lab Rate (£/hr) | Lab Total (£) | Item Total (£) |
| A CABLE TRAY (Galvanised Steel - LV Power Routes)                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                        |      |       |              |               |         |                 |               |                |
| 1                                                                                                                                                                                                        | Supply and fix 300mm wide galvanised steel cable tray on support brackets at 1200mm centres - UPS sub-main routes through risers and to comms rooms as Drawing 60002. ★ Qty: 150m from riser markup (UPS schematic); 40.16m from comms room markup = 190.16m. Including all bends, tees, reducers and fixings.                                                                         | m    | 190.0 | £28.00       | £5,320.00     | 0.4     | £34.00          | £13.60        | £5,333.60      |
| 2                                                                                                                                                                                                        | Supply and fix 300mm wide galvanised steel cable tray - Level 5 ancillary services routes as Drawing 61001. ★ Qty: 57.46m from measured markup.                                                                                                                                                                                                                                        | m    | 57.0  | £28.00       | £1,596.00     | 0.4     | £34.00          | £13.60        | £1,609.60      |
| 3                                                                                                                                                                                                        | Supply and fix 300mm wide galvanised steel cable tray - LV schematic riser connection, 3m floor height allowance. ★ Qty: 3m from uploaded estimate.                                                                                                                                                                                                                                    | m    | 3.0   | £28.00       | £84.00        | 0.4     | £34.00          | £13.60        | £97.60         |
|                                                                                                                                                                                                          | Subtotal - Cable Tray - LV Power                                                                                                                                                                                                                                                                                                                                                       |      |       |              | £7,000.00     |         |                 | £40.80        | £7,040.80      |
| B CABLE TRAY (Comms Cabling & Security Cabling - Level 5)                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                        |      |       |              |               |         |                 |               |                |
| 4                                                                                                                                                                                                        | Supply and fix cable tray - new cable tray for comms cabling Level 5. ★ Qty: 72.99m from measured markup Drawing 61001.                                                                                                                                                                                                                                                                | m    | 73.0  | £24.00       | £1,752.00     | 0.4     | £34.00          | £11.90        | £1,763.90      |
| 5                                                                                                                                                                                                        | Supply and fix cable tray - new cable tray for security cabling Level 5. ★ Qty: 71.46m from measured markup Drawing 61001.                                                                                                                                                                                                                                                             | m    | 71.0  | £24.00       | £1,704.00     | 0.4     | £34.00          | £11.90        | £1,715.90      |
|                                                                                                                                                                                                          | Subtotal - Cable Tray - Comms & Security                                                                                                                                                                                                                                                                                                                                               |      |       |              | £3,456.00     |         |                 | £23.80        | £3,479.80      |
| C DATA CABLE BASKET (Comms Rooms)                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                        |      |       |              |               |         |                 |               |                |
| 6                                                                                                                                                                                                        | Supply and fix steel wire mesh cable basket on drop-rod support - data cable routes within and between comms rooms as Drawing 60003. ★ Qty: 48.42m measured from comms room markup.                                                                                                                                                                                                    | m    | 48.0  | £20.00       | £960.00       | 0.3     | £34.00          | £9.52         | £969.52        |
|                                                                                                                                                                                                          | Subtotal - Data Cable Basket                                                                                                                                                                                                                                                                                                                                                           |      |       |              | £960.00       |         |                 | £9.52         | £969.52        |
| D TRUNKING & CONDUIT                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                        |      |       |              |               |         |                 |               |                |
| 7                                                                                                                                                                                                        | Supply and fix 100mm×100mm galvanised steel cable trunking on surface - local LV routes within UPS room and comms rooms. Spec Pr_65_70_11_18.                                                                                                                                                                                                                                          | m    | 60.0  | £24.00       | £1,440.00     | 0.3     | £34.00          | £10.88        | £1,450.88      |
| 8                                                                                                                                                                                                        | Supply and fix 32mm heavy-grade galvanised welded-seam conduit (Class 4 hot-dip zinc coat, min 32mm per spec) - access control and security cabling to riser security controllers Levels 1, 2 and 4. ⚠ Branch lighting conduit 80.69m confirmed from conduit markup (3.04m + 77.65m) - this is the lighting conduit for reference only; security conduit qty is estimator's allowance. | m    | 80.0  | £11.00       | £880.00       | 0.3     | £34.00          | £9.52         | £889.52        |
| 9                                                                                                                                                                                                        | Supply and fix galvanised steel 100mm×100mm×75mm junction boxes (tamper-proof fixings in exposed areas) - for access control conduit system at security controller locations.                                                                                                                                                                                                          | nr   | 9.0   | £32.00       | £288.00       | 0.8     | £34.00          | £25.50        | £313.50        |
|                                                                                                                                                                                                          | Subtotal - Trunking & Conduit                                                                                                                                                                                                                                                                                                                                                          |      |       |              | £2,608.00     |         |                 | £45.90        | £2,653.90      |
| E FIRE STOPPING & BUILDERS WORK                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                        |      |       |              |               |         |                 |               |                |
| 10                                                                                                                                                                                                       | Supply and install intumescent fire stopping to all containment penetrations through walls, floors and fire barriers - proprietary system, maintain fire rating. Containment internal fire stopping included.                                                                                                                                                                          | item | 1.0   | £3,500.00    | £3,500.00     | 0.0     | £34.00          | £0.00         | £3,500.00      |
| 11                                                                                                                                                                                                       | Builders work in connection - all core drilling, cutting, chasing and making good. Includes restoration of acoustic barriers where penetrated.                                                                                                                                                                                                                                         | item | 1.0   | £2,200.00    | £2,200.00     | 0.0     | £34.00          | £0.00         | £2,200.00      |
|                                                                                                                                                                                                          | Subtotal - Fire Stopping & Builders Work                                                                                                                                                                                                                                                                                                                                               |      |       |              | £5,700.00     |         |                 | £0.00         | £5,700.00      |
|                                                                                                                                                                                                          | TOTAL - BILL 4 - CONTAINMENT                                                                                                                                                                                                                                                                                                                                                           |      |       |              | £19,724.00    |         |                 | £120.02       | £19,844.02     |

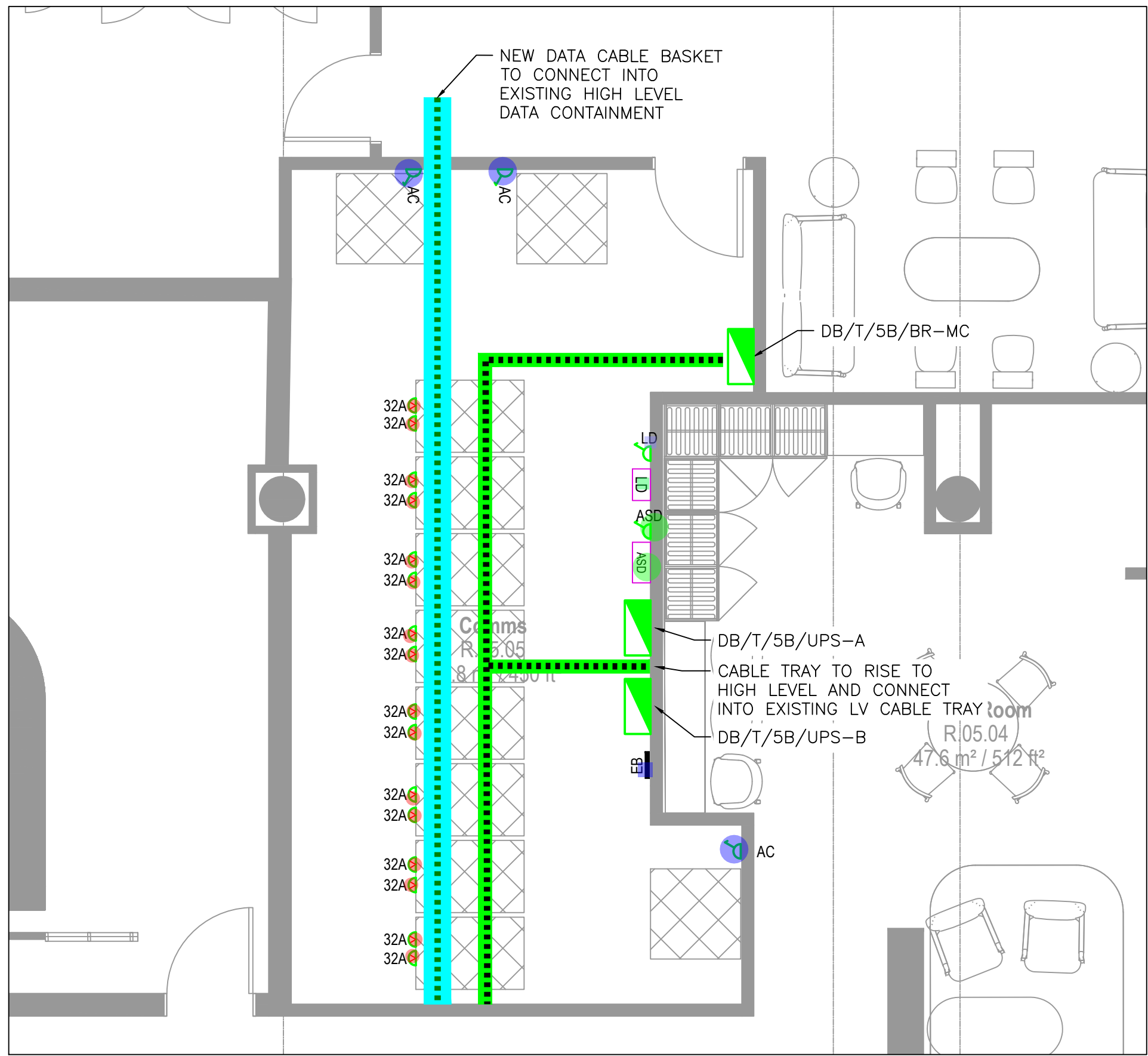
| BILL 5 - EARTHING & BONDING                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                              |      |       |              |               |         |                 |               |                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|--------------|---------------|---------|-----------------|---------------|----------------|
| High Integrity Earthing · Comms Rooms & UPS Room · Spec: Ss_70_30_25_25                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                              |      |       |              |               |         |                 |               |                |
| NOTE: Uploaded estimate priced earth bars at £45 each - market rate for 50×6mm pre-drilled copper earth bars is £180–£250 each. Rates corrected. Qty: 3 earth bars in uploaded estimate but spec requires one per comms room + UPS room = 5 No. |                                                                                                                                                                                                                                                                                                                                              |      |       |              |               |         |                 |               |                |
| Item                                                                                                                                                                                                                                            | Description                                                                                                                                                                                                                                                                                                                                  | Unit | Qty   | Mat Rate (£) | Mat Total (£) | Lab Hrs | Lab Rate (£/hr) | Lab Total (£) | Item Total (£) |
| A DEDICATED EARTH BARS                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                              |      |       |              |               |         |                 |               |                |
| 1                                                                                                                                                                                                                                               | Supply and fix dedicated 50mm×6mm pre-drilled copper earth bar on stand-off insulators - 5 No. locations: Lower Ground Comms Room, Level 3 North, Level 3 South, Level 5 Comms Room, UPS Room. Including all fixings and connections to main earthing terminal. NOTE: Uploaded estimate had 3 No. - corrected to 5 No. per spec requirement. | nr   | 5.0   | £220.00      | £1,100.00     | 4.0     | £34.00          | £136.00       | £1,236.00      |
|                                                                                                                                                                                                                                                 | Subtotal - Dedicated Earth Bars                                                                                                                                                                                                                                                                                                              |      |       |              | £1,100.00     |         |                 | £136.00       | £1,236.00      |
| B EARTH CABLES - IT RACKS & UPS EQUIPMENT                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                              |      |       |              |               |         |                 |               |                |
| 2                                                                                                                                                                                                                                               | Supply of 16mm² single core LSHF (green/yellow) cable H07Z-R, BASEC certified - connections from local earth bars to each IT rack and UPS equipment within comms rooms and UPS room.                                                                                                                                                         | m    | 75.0  | £9.50        | £712.50       | 0.0     | £34.00          | £0.00         | £712.50        |
| 3                                                                                                                                                                                                                                               | Installation of 16mm² single core LSHF earth cable - cutting, stripping, lugging, ferrule ID and bolted connections to earth bar and equipment earth points.                                                                                                                                                                                 | m    | 75.0  | £0.00        | £0.00         | 0.2     | £34.00          | £6.80         | £6.80          |
| 4                                                                                                                                                                                                                                               | Supply of 4mm² single core LSHF (green/yellow) CPCs - high integrity earthing circuits for all comms room and UPS room circuits. Minimum 4mm² per specification.                                                                                                                                                                             | m    | 150.0 | £3.20        | £480.00       | 0.0     | £34.00          | £0.00         | £480.00        |
| 5                                                                                                                                                                                                                                               | Installation of 4mm² CPCs - drawn into containment and terminated at each end.                                                                                                                                                                                                                                                               | m    | 150.0 | £0.00        | £0.00         | 0.1     | £34.00          | £4.08         | £4.08          |
|                                                                                                                                                                                                                                                 | Subtotal - Earth Cables                                                                                                                                                                                                                                                                                                                      |      |       |              | £1,192.50     |         |                 | £10.88        | £1,203.38      |
| C SUPPLEMENTARY BONDING                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                              |      |       |              |               |         |                 |               |                |
| 6                                                                                                                                                                                                                                               | Supplementary bonding - 16mm² LSHF bonding conductors with earthing clamps to all exposed metallic items within comms room and UPS room boundaries (containment, steelwork, racks, door frames, etc.) as specified.                                                                                                                          | item | 1.0   | £1,800.00    | £1,800.00     | 8.0     | £34.00          | £272.00       | £2,072.00      |
|                                                                                                                                                                                                                                                 | Subtotal - Supplementary Bonding                                                                                                                                                                                                                                                                                                             |      |       |              | £1,800.00     |         |                 | £272.00       | £2,072.00      |
|                                                                                                                                                                                                                                                 | TOTAL - BILL 5 - EARTHING & BONDING                                                                                                                                                                                                                                                                                                          |      |       |              | £4,092.50     |         |                 | £418.88       | £4,511.38      |

| BILL 6 - TESTING & COMMISSIONING                                                                                                                                                                          |                                                                                                                                                                                                                                             |      |     |              |               |         |                 |               |                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|--------------|---------------|---------|-----------------|---------------|----------------|
| BS 7671 / BSRIA BG 8/2009 / BS EN 62040-3 · CSA Commissioning Specialist required per specification                                                                                                       |                                                                                                                                                                                                                                             |      |     |              |               |         |                 |               |                |
| NOTE: Testing & commissioning was entirely omitted from the uploaded estimate. This bill covers all mandatory T&C obligations under the specification - these cannot be omitted from a tender submission. |                                                                                                                                                                                                                                             |      |     |              |               |         |                 |               |                |
| Item                                                                                                                                                                                                      | Description                                                                                                                                                                                                                                 | Unit | Qty | Mat Rate (£) | Mat Total (£) | Lab Hrs | Lab Rate (£/hr) | Lab Total (£) | Item Total (£) |
| A PRE-COMMISSIONING & STATIC TESTING                                                                                                                                                                      |                                                                                                                                                                                                                                             |      |     |              |               |         |                 |               |                |
| 1                                                                                                                                                                                                         | Pre-commissioning checks - insulation resistance testing, continuity, polarity checks and visual inspection of all circuits, DBs and UPS connections prior to energisation. Preparation of static test schedules and results documentation. | item | 1.0 | £0.00        | £0.00         | 24.0    | £34.00          | £816.00       | £816.00        |
| 2                                                                                                                                                                                                         | Continuity testing of all earthing connections and bonding - earth loop impedance and bonding continuity at all comms rooms and UPS room earth bars. Including test certificates.                                                           | item | 1.0 | £0.00        | £0.00         | 8.0     | £34.00          | £272.00       | £272.00        |
|                                                                                                                                                                                                           | Subtotal - Pre-Commissioning & Static Testing                                                                                                                                                                                               |      |     |              | £0.00         |         |                 | £1,088.00     | £1,088.00      |
| B UPS SYSTEM COMMISSIONING                                                                                                                                                                                |                                                                                                                                                                                                                                             |      |     |              |               |         |                 |               |                |
| 3                                                                                                                                                                                                         | UPS system setting to work and commissioning - battery charge, system run-up, bypass transfer testing, BMS interface testing, alarm verification and SNMP configuration.                                                                    | item | 1.0 | £0.00        | £0.00         | 24.0    | £34.00          | £816.00       | £816.00        |
| 4                                                                                                                                                                                                         | 300kW resistive load bank commissioning test - test UPS at rated 300kW load to verify 2hr battery autonomy at end of life. Load bank by UPS supplier. Includes test programme, witnessed test, results log and report.                      | item | 1.0 | £1,500.00    | £1,500.00     | 16.0    | £34.00          | £544.00       | £2,044.00      |
| 5                                                                                                                                                                                                         | Factory Acceptance Test (FAT) coordination - witnessed FAT to BS EN 62040-3 (4 weeks advance notice). Balanced load test, efficiency test, harmonic test and inrush current test. Calibration certificates required.                        | item | 1.0 | £0.00        | £0.00         | 8.0     | £34.00          | £272.00       | £272.00        |
|                                                                                                                                                                                                           | Subtotal - UPS System Commissioning                                                                                                                                                                                                         |      |     |              | £1,500.00     |         |                 | £1,632.00     | £3,132.00      |
| C DISTRIBUTION & CIRCUIT COMMISSIONING                                                                                                                                                                    |                                                                                                                                                                                                                                             |      |     |              |               |         |                 |               |                |
| 6                                                                                                                                                                                                         | Commissioning of all distribution boards - energisation, circuit labelling verification, MCCB trip tests, RCD/RCBO tests, functional testing of all outgoing ways.                                                                          | item | 1.0 | £0.00        | £0.00         | 20.0    | £34.00          | £680.00       | £680.00        |
| 7                                                                                                                                                                                                         | Commissioning of sub-main cabling - voltage drop verification, cable temperature checks under load, phase rotation checks, circuit identification confirmation.                                                                             | item | 1.0 | £0.00        | £0.00         | 8.0     | £34.00          | £272.00       | £272.00        |
|                                                                                                                                                                                                           | Subtotal - Distribution & Circuit Commissioning                                                                                                                                                                                             |      |     |              | £0.00         |         |                 | £952.00       | £952.00        |
| D CERTIFICATION & DOCUMENTATION                                                                                                                                                                           |                                                                                                                                                                                                                                             |      |     |              |               |         |                 |               |                |
| 8                                                                                                                                                                                                         | Electrical Installation Certificate (EIC) - full certification for all new works to BS 7671 (latest edition). Signed by competent qualified person.                                                                                         | item | 1.0 | £1,200.00    | £1,200.00     | 0.0     | £34.00          | £0.00         | £1,200.00      |
| 9                                                                                                                                                                                                         | CSA commissioning specialist - appointment of CSA member specialist for UPS and LV works. Commissioning plan, method statements, programme and final signed commissioning report.                                                           | item | 1.0 | £3,500.00    | £3,500.00     | 0.0     | £34.00          | £0.00         | £3,500.00      |
| 10                                                                                                                                                                                                        | Operating & maintenance manuals - two copies (electronic + paper) covering UPS, battery, bypass operation, DB schedules, cable schedules, test results, maintenance procedures and warranty documentation.                                  | item | 1.0 | £800.00      | £800.00       | 0.0     | £34.00          | £0.00         | £800.00        |
| 11                                                                                                                                                                                                        | Record drawings - as-installed drawings for all UPS, DB, cable and containment works. Electronic CAD format and printed copies.                                                                                                             | item | 1.0 | £1,200.00    | £1,200.00     | 0.0     | £34.00          | £0.00         | £1,200.00      |
|                                                                                                                                                                                                           | Subtotal - Certification & Documentation                                                                                                                                                                                                    |      |     |              | £6,700.00     |         |                 | £0.00         | £6,700.00      |
|                                                                                                                                                                                                           | TOTAL - BILL 6 - TESTING & COMMISSIONING                                                                                                                                                                                                    |      |     |              | £8,200.00     |         |                 | £3,672.00     | £11,872.00     |

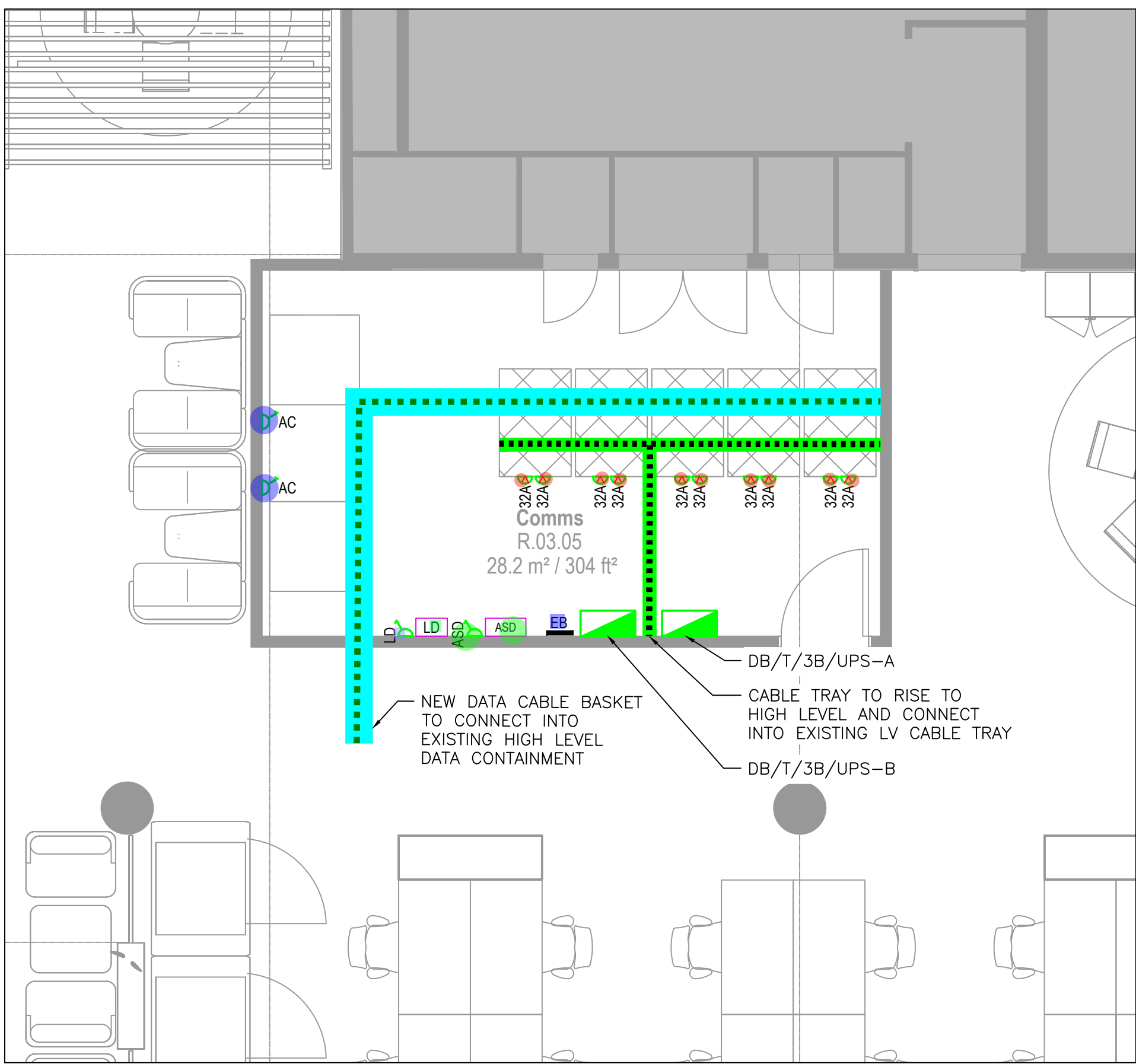
LEVEL 03 NORTH COMMS ROOM



LEVEL 05 COMMS ROOM

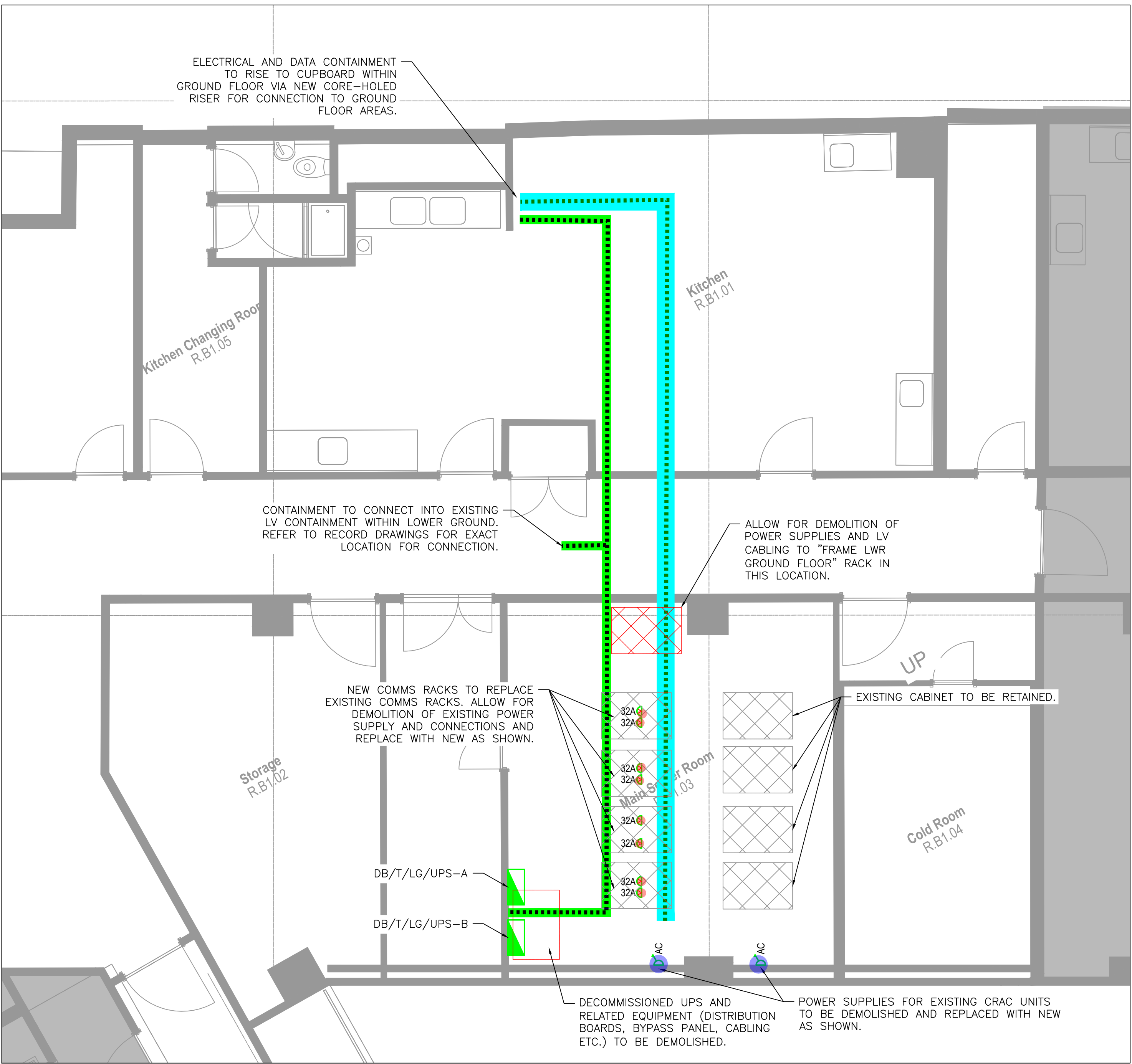


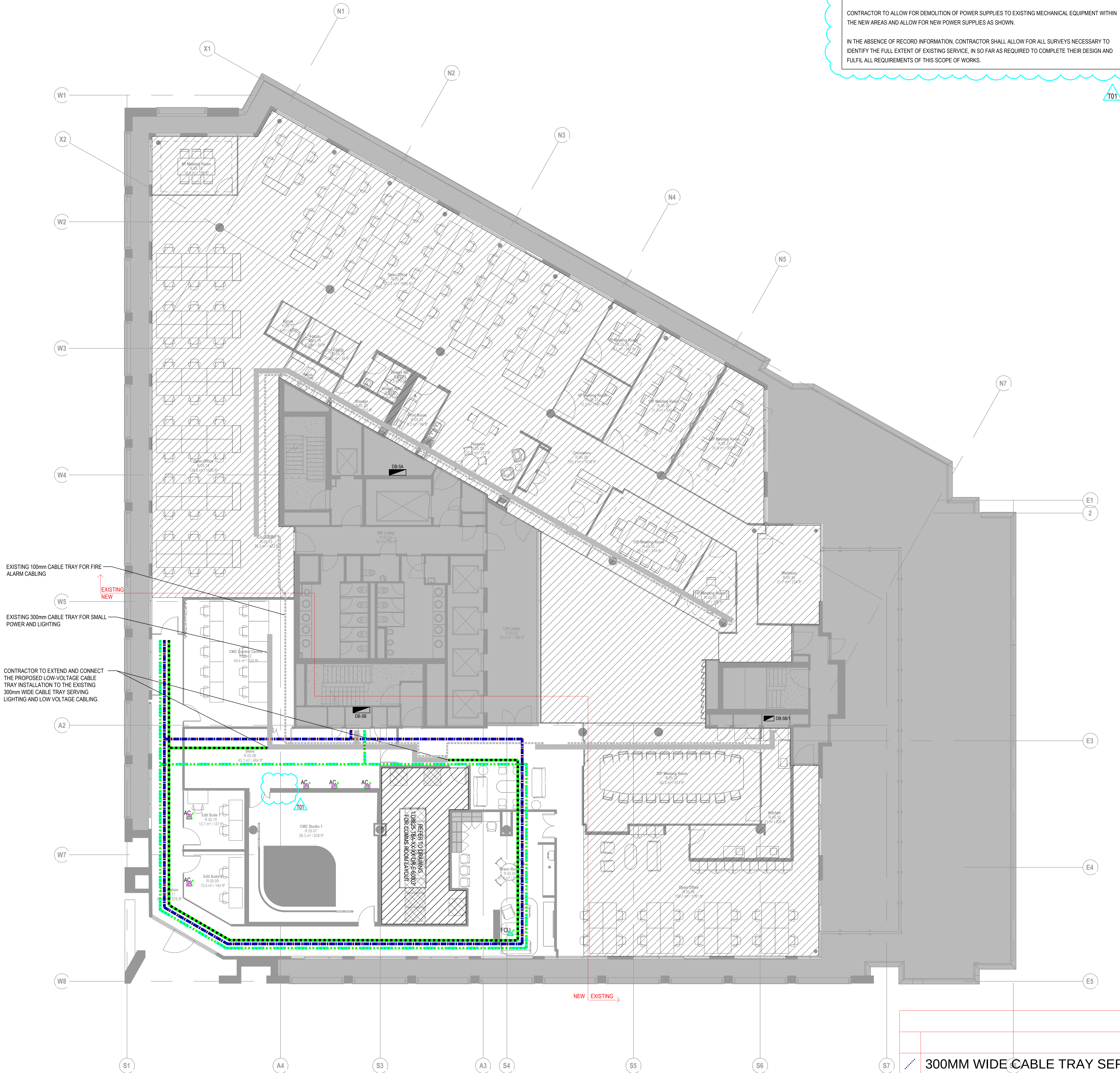
LEVEL 03 SOUTH COMMS ROOM



| Legend                                                                   |  |          |       |
|--------------------------------------------------------------------------|--|----------|-------|
| Description                                                              |  | Quantity | Unit  |
| 32A-NEW COMMANDO OUTLET                                                  |  | 44       | Count |
| AC-NEW SWITCH FUSED CONNECTION UNIT(AIR CONDITIONING UNIT)               |  | 9        | Count |
| ASD-NEW ASPIRATING SMOKE DETECTOR PANEL                                  |  | 3        | Count |
| ASD-NEW SWITCHED FUSED CONNECTION UNIT (ASPIRATING SMOKE DETECTOR PANEL) |  | 3        | Count |
| CABLE TRAY                                                               |  | 6.35     | m     |
| CABLE TRAY                                                               |  | 33.82    | m     |
| EB-NEW EARTH BAR                                                         |  | 3        | Count |
| LD-NEW LEAK DETECTION PANEL                                              |  | 4        | Count |
| LD-NEW SWITCH FUSED CONNECTION UNIT(LEAK DETECTION PANEL)                |  | 3        | Count |
| NEW DATA CABLE BASKET                                                    |  | 4.56     | m     |
| NEW DATA CABLE BASKET                                                    |  | 9.62     | m     |
| NEW DATA CABLE BASKET                                                    |  | 34.24    | m     |

LOWER GROUND COMMS ROOM





RECORD DRAWINGS ARE UNAVAILABLE FOR LEVEL 5. WITHIN THE EXISTING AREAS, CONTRACTOR TO ALLOW FOR LOCAL RELOCATIONS OF MECHANICAL POWER SUPPLIES AS PER THE MECHANICAL DRAWINGS.  
CONTRACTOR TO ALLOW FOR NEW POWER SUPPLIES FOR NEW LIGHTING CONTROL MODULES. ALL POWER SUPPLIES TO BE FROM EXISTING DISTRIBUTION BOARD OF EACH AREA.

WITHIN THE EXISTING AREAS, CONTRACTOR TO ALLOW FOR ADDITIONAL PRIMARY AND SECONDARY CONTAINMENT TO SUIT UPDATED LAYOUT. CONTAINMENT TO BE OF THE SAME TYPE AS EXISTING.

CONTRACTOR TO ALLOW FOR DEMOLITION OF POWER SUPPLIES TO EXISTING MECHANICAL EQUIPMENT WITHIN THE NEW AREAS AND ALLOW FOR NEW POWER SUPPLIES AS SHOWN.

IN THE ABSENCE OF RECORD INFORMATION, CONTRACTOR SHALL ALLOW FOR ALL SURVEYS NECESSARY TO IDENTIFY THE FULL EXTENT OF EXISTING SERVICE. IN SO FAR AS REQUIRED TO COMPLETE THEIR DESIGN AND FULFIL ALL REQUIREMENTS OF THIS SCOPE OF WORKS.

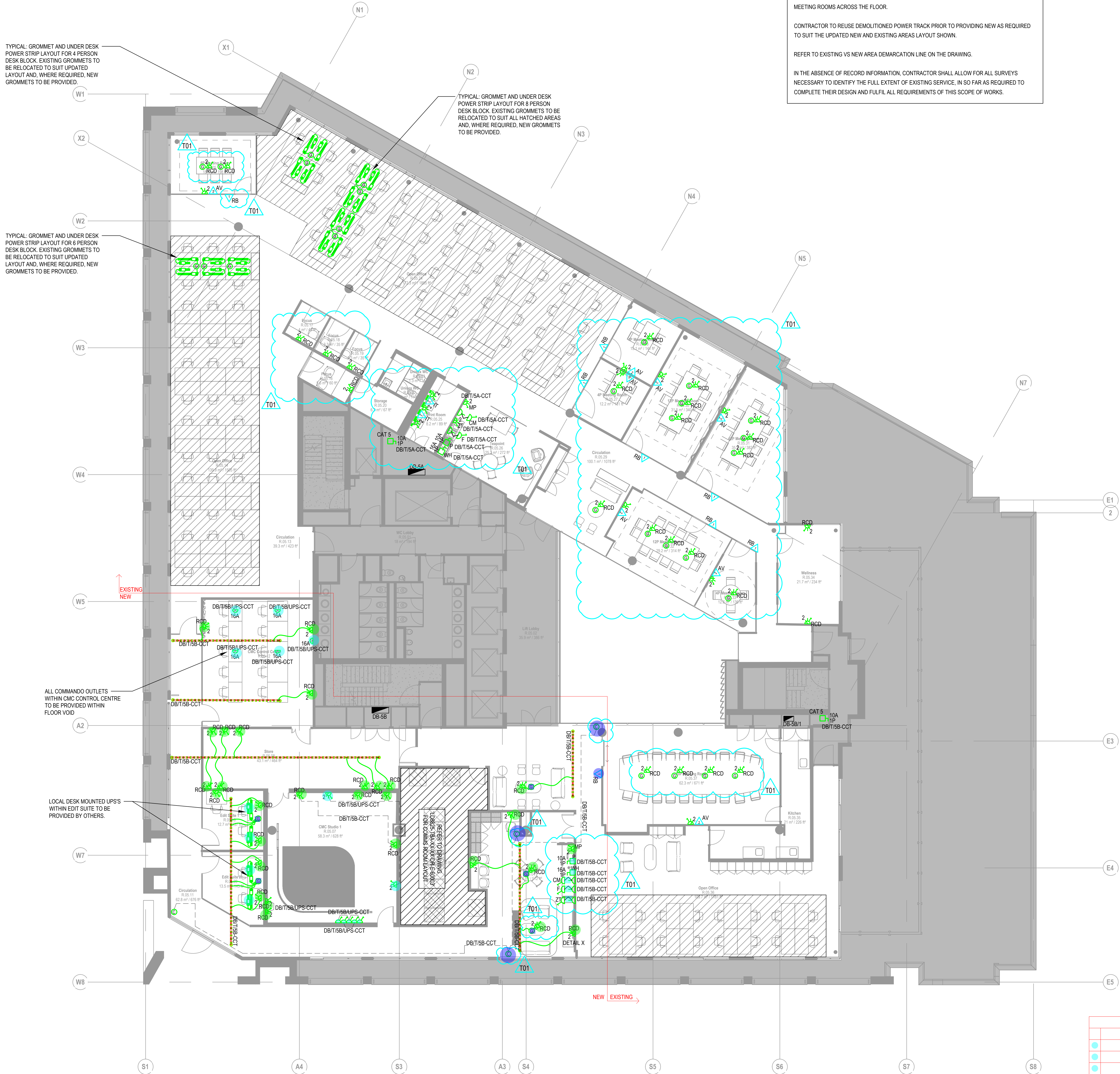
LEGEND

- NOTIONAL ROUTE FOR NEW CABLE TRAY FOR LOW VOLTAGE LIGHTING AND POWER CABLING
- NOTIONAL ROUTE FOR NEW CABLE TRAY FOR COMMS CABLING
- NOTIONAL ROUTE FOR NEW CABLE TRAY FOR SECURITY CABLING
- EXISTING 300mm CABLE TRAY FOR LIGHTING AND LOW VOLTAGE CABLING
- EXISTING 100mm CABLE TRAY FOR FIRE ALARM CABLING
- EXISTING DISTRIBUTION BOARD
- NEW OR RELOCATED SWITCHED FUSED CONNECTION UNIT
- ARROW TO SHOW EXISTING EQUIPMENT BEING RELOCATED TO SUIT UPDATED LAYOUT.
- EXISTING SWITCHED FUSED CONNECTION UNIT TO BE RETAINED OR RELOCATED
- EXISTING MICRO-SWITCH TO BE RELOCATED
- NEW OR RELOCATED MICRO-SWITCH
- EXISTING 13A TWIN SWITCHED SOCKET OUTLET TO BE DEMOLISHED
- EXISTING SWITCHED FUSED CONNECTION UNIT TO BE DEMOLISHED

ABBREVIATIONS

- AC - DENOTES AIR CONDITIONING UNIT
- FCU - DENOTES FAN COIL UNIT
- SW - DENOTES SLIDING WALL
- MS - DENOTES MICRO SWITCH

| Legend |                                                                |          |       |
|--------|----------------------------------------------------------------|----------|-------|
|        | Description                                                    | Quantity | Unit  |
|        | 300MM WIDE CABLE TRAY SERVING LIGHTING AND LOW VOLTAGE CABLING | 57.46    | m     |
|        | AC-NEW SWITCH FUSED CONNECTION UNIT(AIR CONDITIONING UNIT)     | 5        | Count |
|        | FCU-NEW SWITCH FUSED CONNECTION UNIT(FAN COIL UNIT)            | 1        | Count |
|        | NEW CABLE TRAY FOR COMMS CABLING                               | 72.99    | m     |
|        | NEW CABLE TRAY FOR SECURITY CABLING                            | 71.46    | m     |



RECORD DRAWINGS UNAVAILABLE FOR LEVEL 5. SMALL POWER WITHIN THE EXISTING AREAS IS TO BE RETAINED AS A WHOLE. SMALL POWER LAYOUT FOR THE NEW AREAS SHALL BE AS SHOWN.

CONTRACTOR TO SURVEY THE EXISTING AREAS ON THIS FLOOR FOR LOCATIONS AND QUANTITIES OF EXISTING UNDER FLOOR POWER TRACK AND ACCESS GROMMETS AND ALLOW FOR RELOCATION TO SUIT UPDATED EXISTING AREA LAYOUT AS SHOWN.

CONTRACTOR TO ALLOW FOR DEMOLITION OF ANY EXISTING UNDER FLOOR POWER TRACK AND FLOOR MOUNTED SERVICES WITHIN THE NEW AREAS AND AV RELATED SMALL POWER WITHIN ALL MEETING ROOMS ACROSS THE FLOOR.

CONTRACTOR TO REUSE DEMOLITIONED POWER TRACK PRIOR TO PROVIDING NEW AS REQUIRED TO SUIT THE UPDATED NEW AND EXISTING AREAS LAYOUT SHOWN.

REFER TO EXISTING VS NEW AREA DEMARCATION LINE ON THE DRAWING.

IN THE ABSENCE OF RECORD INFORMATION, CONTRACTOR SHALL ALLOW FOR ALL SURVEYS NECESSARY TO IDENTIFY THE FULL EXTENT OF EXISTING SERVICE. IN SO FAR AS REQUIRED TO COMPLETE THEIR DESIGN AND FULFIL ALL REQUIREMENTS OF THIS SCOPE OF WORKS.

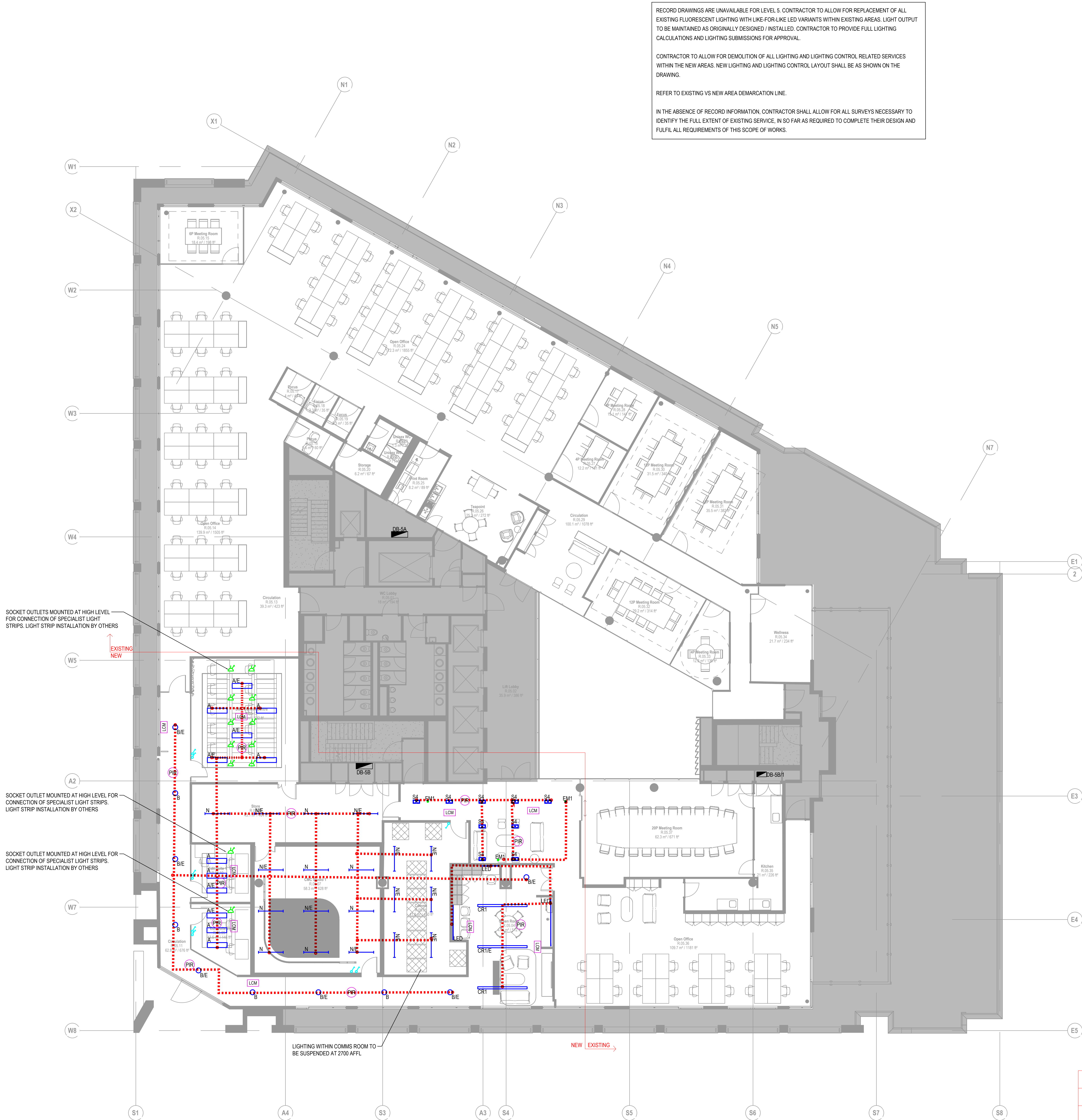
**LEGEND**

- EXISTING DISTRIBUTION BOARD
- NEW UNDER FLOOR POWER TRACK
- NEW GROMMET
- NEW SINGLE GANG RECESSED FLOOR HIVE DEDICATED FOR CLEANERS USE. CLEANERS SOCKETS TO BE CABLED ON DEDICATED RING CIRCUIT FROM THE ON FLOOR DB AS INDICATED. SOCKET TO BE FITTED WITH INTEGRATED RCBO PROTECTION
- NEW 4 COMPARTMENT FLOOR BOX WITH TWIN SOCKET OUTLETS IN 1 COMPARTMENT AND OTHER COMPARTMENTS PROVIDED WITH BLANK PLATES FOR IT/AV.
- NEW TWIN SWITCHED SOCKET OUTLET
- NEW FUSED CONNECTION UNIT
- NEW SINGLE UNSWITCHED SOCKET OUTLET
- NEW COMMANDO SOCKET OUTLET  
XA - DENOTES SIZE RATING
- NEW ISOLATOR  
XP - DENOTES NUMBER OF POLES  
XA - DENOTES SIZE RATING
- NEW POWER STRIP
- NEW WALL MOUNTED BACK BOX FOR AV / DATA. WIRING BY OTHERS. Y DENOTES NUMBER OF GANGS
- NEW DATA BACK BOX FOR ROOM BOOKING PANEL. WIRING BY OTHERS. Y DENOTES NUMBER OF GANGS
- NEW 2 COMPARTMENT IN-WALL TRUNKING FROM CEILING VOID TO FLOOR VOID FOR CABLEING OF AV AND POWER
- NEW 2 COMPARTMENT TRUNKING FOR CABLEING OF AV AND POWER
- ARROW TO SHOW EXISTING EQUIPMENT BEING RELOCATED TO SUIT UPDATED LAYOUT.
- OPEN PLAN WORKSTATION AREA. TYPICAL DESK LAYOUTS TO BE APPLIED ACROSS THE FLOOR AS SHOWN ON THE DRAWING.
- EXISTING 13A TWIN SWITCHED SOCKET OUTLET TO BE DEMOLISHED
- EXISTING COMMANDO SOCKET OUTLET
- EXISTING DATA OUTLET BACK BOX TO BE DEMOLISHED
- EXISTING FLOOR GROMMET TO BE DEMOLISHED
- EXISTING AUDIO VISUAL OUTLET TO BE DEMOLISHED
- EXISTING ROTOSOC TO BE DEMOLISHED
- EXISTING ISOLATOR TO BE DEMOLISHED
- EXISTING SLAB BOX TO BE DEMOLISHED
- EXISTING FLOOR BOX TO BE DEMOLISHED
- EXISTING 2 WAY POWER MODULE WITH RCBO PROTECTION TO BE DEMOLISHED
- EXISTING 4 WAY POWER MODULE WITH RCBO PROTECTION TO BE DEMOLISHED
- EXISTING SINGLE SWITCHED SOCKET OUTLET FOR CLEANERS/ MAINTENANCE (TO BE RETAINED OR RELOCATED)
- EXISTING FLOOR GROMMET FOR CLEANERS/ MAINTENANCE. SINGLE SWITCHED SOCKET OUTLET
- EXISTING 4 COMPARTMENT FLOORBOX (TO BE RETAINED OR RELOCATED)
- EXISTING UNDERFLOOR POWER TRACK (TO BE RETAINED)
- EXISTING FLOOR GROMMET (TO BE RETAINED)

**ABBREVIATIONS**

- AV - DENOTES AUDIO VISUAL
- CCT - DENOTES CIRCUIT
- CM - DENOTES COFFEE MACHINE
- F - DENOTES FRIDGE
- MP - DENOTES MILK PURGLER
- P - DENOTES PUMP
- RB - DENOTES ROOM BOOKING PANEL
- RCD - DENOTES RESIDUAL CURRENT DEVICE
- SG - DENOTES SECURITY GATES
- WH - DENOTES WATER HEATER
- ZT - DENOTES ZIP TAP

| Legend                                                                            |          |       |
|-----------------------------------------------------------------------------------|----------|-------|
| Description                                                                       | Quantity | Unit  |
| 10A,1P- NEW ISOLATOR(PUMP)                                                        | 1        | Count |
| 16A-NEW COMMANDO SOCKET OUTLET                                                    | 5        | Count |
| 16A,1P- NEW ISOLATOR(WATER HEATER)                                                | 1        | Count |
| CLEANERS SOCKETED                                                                 | 3        | Count |
| CM-NEW FUSED CONNECTION UNIT WITH NEW TWIN SWITCHED SOCKET OUTLET(COFFFF MACHINE) | 1        | Count |
| F-NEW FUSED CONNECTION UNIT WITH NEW TWIN SWITCHED SOCKET OUTLET(FRIDGE)          | 1        | Count |
| MP-NEW TWIN SWITCH SOCKET OUTLET(MILK PURGLER)                                    | 1        | Count |
| NEW FUSED CONNECTION UNIT                                                         | 5        | Count |
| NEW GROMMET                                                                       | 5        | Count |
| NEW POWER STRIP                                                                   | 4        | Count |
| NEW TWIN SWITCHED SOCKET OUTLET                                                   | 2        | Count |
| NEW UNDER FLOOR POWER TRACK                                                       | 42.02    | m     |
| RB-NEW DATA BACK BOX                                                              | 1        | Count |
| RCD-NEW TWIN SWITCH SOCKET OUTLETWITH RESIDUAL CURRENT DEVICE                     | 28       | Count |
| ZT-NEW FUSED CONNECTION UNIT WITH NEW TWIN SWITCHED SOCKET OUTLET(ZIP TAP)        | 1        | Count |



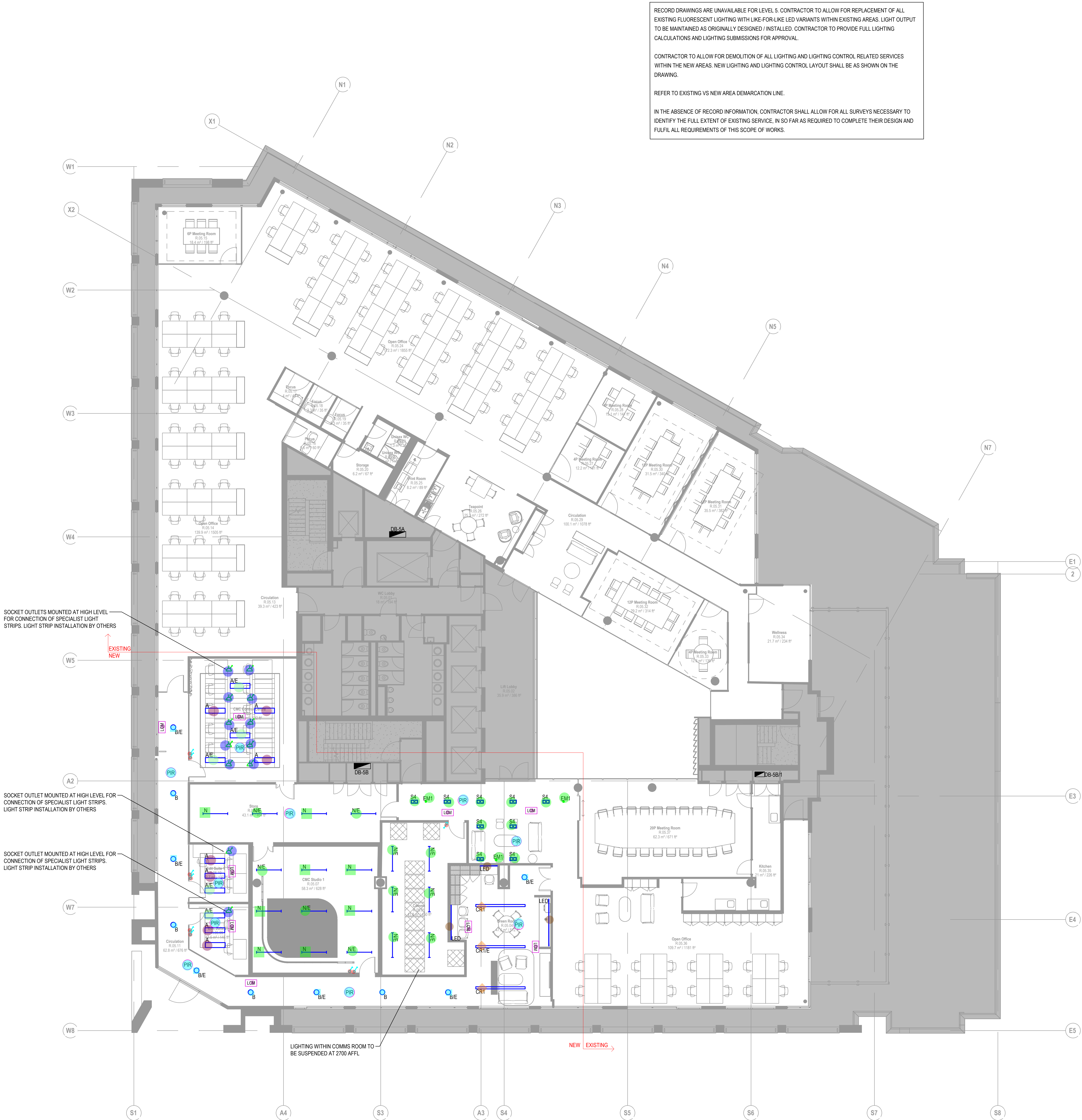
LEGEND

- EXISTING DISTRIBUTION BOARD
- NEW 1200 x 300mm RECESSED LED LUMINAIRE  
'E' DENOTES EMERGENCY INTEGRATED
- NEW LED DOWNLIGHT  
'E' DENOTES EMERGENCY INTEGRATED
- NEW CANNED SURFACE MOUNTED DOWNLIGHT
- NEW CEILING RECESSED LINEAR LED LUMINAIRE  
'E' DENOTES EMERGENCY INTEGRATED
- NEW SURFACE MOUNTED STAND ALONE 3HR EMERGENCY LUMINAIRE
- NEW TRACK MOUNTED STAND ALONE 3HR EMERGENCY LUMINAIRE
- NEW LED STRIP
- NEW TRACK MOUNTED LINEAR LED LUMINAIRE
- NEW IP65 LINEAR LED BATTEN, FITTING TO BE SURFACE MOUNTED UNLESS NOTED OTHERWISE  
'E' DENOTES EMERGENCY INTEGRATED
- NEW TRACK MOUNTED LED SPOTLIGHT
- NEW CEILING RECESSED DOUBLE LED DOWNLIGHT
- NEW 230V ELECTRICAL LIGHTING TRACK
- NEW LIGHTING CONTROL MODULE
- NEW PRESENCE DETECTOR
- NEW SINGLE SWITCHED SOCKET OUTLET
- NEW LIGHT SWITCH

EXISTING LIGHTING, LIGHTING CONTROL AND EMERGENCY LIGHTINGS TO BE RETAINED. REFER TO RECORD DRAWINGS FOR FURTHER INFORMATION REGARDING SYMBOLS AND TYPES.

EXISTING LIGHTING AND EMERGENCY LIGHTING TO BE DEMOLISHED. REFER TO RECORD DRAWINGS FOR FURTHER INFORMATION REGARDING SYMBOLS AND TYPES.

| Legend |                                             |          |      |
|--------|---------------------------------------------|----------|------|
|        | Description                                 | Quantity | Unit |
| ✓      | BRANCH LIGHTING 20A/1P 2#12 1#G IN 3/4 COND | 3.04     | m    |
| ✓      | BRANCH LIGHTING 20A/1P 2#12 1#G IN 3/4 COND | 77.65    | m    |



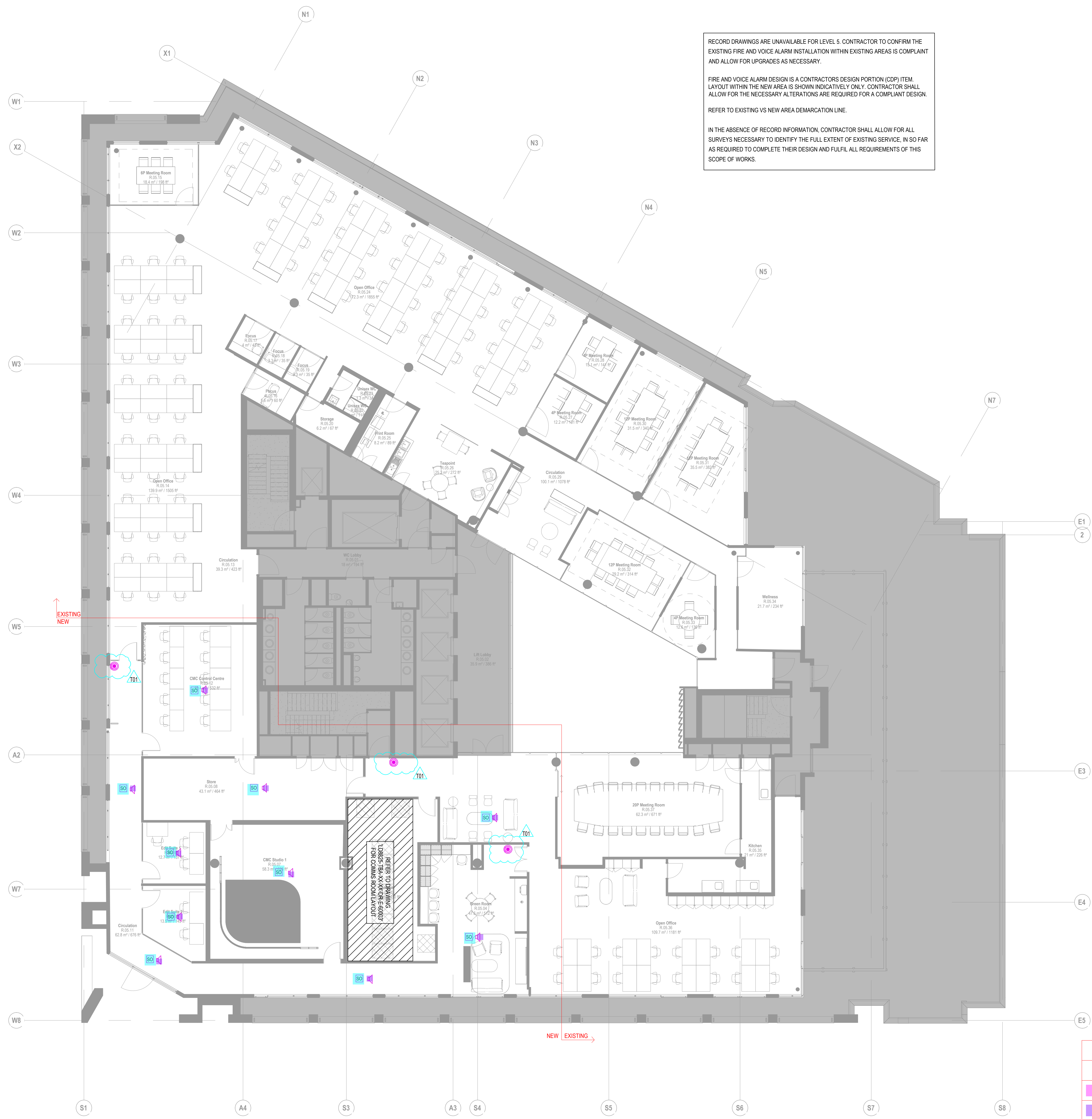
LEGEND

- EXISTING DISTRIBUTION BOARD
- NEW 1200 x 300mm RECESSED LED LUMINAIRE  
'E' DENOTES EMERGENCY INTEGRATED
- NEW LED DOWNLIGHT  
'E' DENOTES EMERGENCY INTEGRATED
- NEW CANNED SURFACE MOUNTED DOWNLIGHT
- NEW CEILING RECESSED LINEAR LED LUMINAIRE  
'E' DENOTES EMERGENCY INTEGRATED
- NEW SURFACE MOUNTED STAND ALONE 3HR EMERGENCY LUMINAIRE
- NEW TRACK MOUNTED STAND ALONE 3HR EMERGENCY LUMINAIRE
- NEW LED STRIP
- NEW TRACK MOUNTED LINEAR LED LUMINAIRE
- NEW IP65 LINEAR LED BATTEN, FITTING TO BE SURFACE MOUNTED UNLESS NOTED OTHERWISE  
'E' DENOTES EMERGENCY INTEGRATED
- NEW TRACK MOUNTED LED SPOTLIGHT
- NEW CEILING RECESSED DOUBLE LED DOWNLIGHT
- NEW 230V ELECTRICAL LIGHTING TRACK
- NEW LIGHTING CONTROL MODULE
- NEW PRESENCE DETECTOR
- NEW SINGLE SWITCHED SOCKET OUTLET
- NEW LIGHT SWITCH

EXISTING LIGHTING, LIGHTING CONTROL AND EMERGENCY LIGHTINGS TO BE RETAINED. REFER TO RECORD DRAWINGS FOR FURTHER INFORMATION REGARDING SYMBOLS AND TYPES.

EXISTING LIGHTING AND EMERGENCY LIGHTING TO BE DEMOLISHED. REFER TO RECORD DRAWINGS FOR FURTHER INFORMATION REGARDING SYMBOLS AND TYPES.

| Legend |                                                             |          |       |
|--------|-------------------------------------------------------------|----------|-------|
|        | Description                                                 | Quantity | Unit  |
|        | A-NEW 1200X300MM RECESSED LED LUMINAIRE                     | 7        | Count |
|        | A/E-NEW EMERGENCY 1200X300MM RECESSED LED LUMINAIRE         | 5        | Count |
|        | B-NEW LED DOWNLIGHT                                         | 4        | Count |
|        | B/E-NEW EMERGENCY LED DOWNLIGHT                             | 6        | Count |
|        | CR1-NEW CEILING RECESSED LINEAR LED LUMINAIRE               | 2        | Count |
|        | CR1/E-NEW EMERGENCY CEILING RECESSED LINEAR LED LUMINAIRE   | 1        | Count |
|        | EM1-NEW SURFACE MOUNTED STAND ALONE 3HR EMERGENCY LUMINAIRE | 3        | Count |
|        | LCM-NEW LIGHTING CONTROL MODULE                             | 9        | Count |
|        | LED-LED STRIP                                               | 3        | Count |
|        | N-NEW IP65 LINEAR LED BATTEN                                | 8        | Count |
|        | N/E-NEW EMERGENCY IP65 LINEAR LED BATTEN                    | 11       | Count |
|        | NEW LIGHT SWITCH                                            | 9        | Count |
|        | NEW SINGLE SWITCHED SOCKET OUTLET                           | 12       | Count |
|        | PIR-NEW PRESENCE DETECTOR                                   | 10       | Count |
|        | S4-NEW CEILING RECESSED DOUBLE LED DOWNLIGHT                | 9        | Count |



| Legend                                 |                                    |          |       |
|----------------------------------------|------------------------------------|----------|-------|
|                                        | Description                        | Quantity | Unit  |
| <span style="color: magenta;">■</span> | NEW OR RELOCATED BREAK GLASS UNIT  | 3        | Count |
| <span style="color: purple;">■</span>  | NEW OR RELOCATION LOUD SPEAKER     | 10       | Count |
| <span style="color: cyan;">■</span>    | SO-NEW OR RELOCATED SMOKE DETECTOR | 10       | Count |

