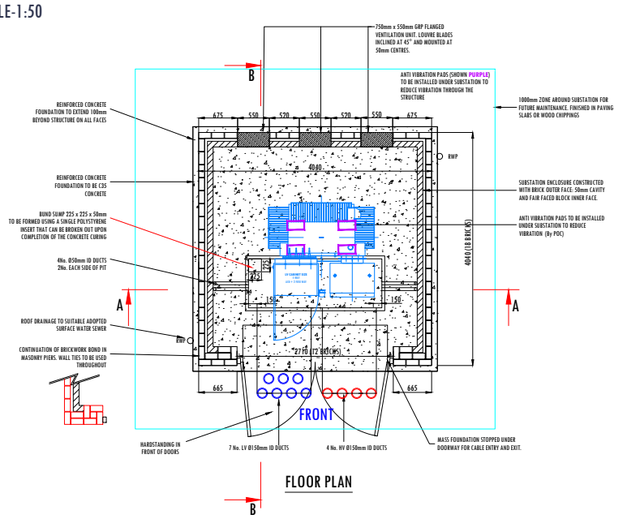
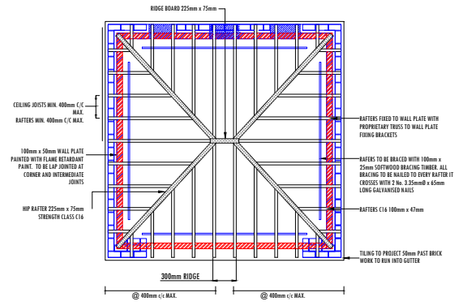
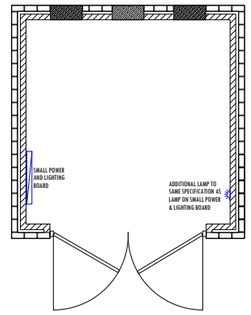
SCALE-1:50



FLOOR PLAN



ROOF PLAN



ELECTRICAL LAYOUT

GENERAL NOTES

ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT BRITISH STANDARDS, CODES OF PRACTICE AND BUILDING PRACTICE.

ALL DIMENSIONS TO BE CHECKED PRIOR TO STARTING THE WORKS ON SITE. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER IMMEDIATELY.

CONTRACTOR TO ASCERTAIN THE LOCATION OF SERVICES ON SITE PRIOR TO STARTING THE WORK AND ENSURE **NO** THIRD PARTY SERVICES TRAVEL THROUGH OR UNDER THE SUBSTATION.

EARTHWORKS

ALL FOUNDATIONS SHALL BE SET OUT ON UNDISTURBED INORGANIC STRATA THAT PROVIDE MINIMUM SAFE ALLOWABLE BEARING CAPACITY OF 50kN/m².

THE BOTTOM OF THE EXCAVATED AREA SHALL BE LEVEL AND WELL RAMMED OR OTHERWISE COMPACTED. ALL EXCAVATIONS SHALL BE KEPT FREE FROM ALL WATER.

AN ADOPTED ACTIVE SOIL DRAINAGE SYSTEM WILL BE INSTALLED WHERE THE WATER TABLE CAN RISE WITHIN 250MM OF THE SUBSTATION PLINTH.

CONCRETE

MASS CONCRETE FORMS WILL BE CURED WITH A MINIMUM CEMENT CONTENT OF 220kg/m³, GENS CONCRETE MIX WITH A MIN. STRENGTH CLASS OF C16/20 AND CONSISTENCE CLASS OF S3

REINFORCED CONCRETE FORMS WILL BE CURED WITH A WATER CEMENT RATIO OF 0.6 AND A MINIMUM CEMENT CONTENT OF 280kg/m³, RC30/25 CONCRETE MIX WITH A MINIMUM STRENGTH CLASS OF 28/35 AND CONSISTENCE CLASS OF S3 .

WHERE NOT FORMED AGAINST UNDISTURBED GROUND THE FORMED SURFACES SHALL BE TO AN F2 FINISH WITH VOIDS IN THE SURFACE BEING NOT BE GREATER THAN 10MM DIAMETER, FINISH TO EXPOSED FLOORS AND PLINTHS WILL BE W2/W3.

IT IS ESSENTIAL THAT TOLERANCES FOR A FLAT, LEVEL AND SMOOTH SURFACE OF 1mm OVER 1m OR 3mm OVER 3m ARE MET .

EXPOSED PLINTH EDGES SHALL HAVE a 50mm CHAMFER. EDGES OR CORNERS OVER WHICH CABLES SHALL PASS SHALL BE ROUNDED.

NOTE: NEW STANDARD BS EN 206-1 / BS 8500-1 NOW APPLIES. STRUCTURAL ENGINEER TO ENSURE ALL CONCRETE GRADES LISTED ABOVE CONFORM TO A MINIMUM OF CLASS 3.

MASONRY

ALL MASONRY TO BE IN ACCORDANCE WITH BS5628-3:2001.

INNER AND OUTER SKINS SHALL BE LAID IN STRETCHER BOND, AND TIED WITH STAINLESS STEEL WALL TIES, MINIMUM DIAMETER "DOUBLE TRIANGLE", VERTICAL TWIST FISHTAIL. TIES SHALL BE EVENLY DISTRIBUTED AT MAXIMUM 300mm CENTRES VERTICALLY AND 375MM HORIZONTALLY, STAGGERED IN ALTERNATIVE COURSES WITH ADDITIONAL TIES AT OPENINGS.

THE WALLS SHALL COMPRISE OF AN OUTER SKIN OF FACING BRICKWORK OR COURSE STONE TO MATCH ADJACENT PROPERTIES, AND AN INNER SKIN OF SOLID FAIR-FACED CONCRETE BLOCKS. BRICKS MAY BE USED FOR THE INNER SKIN. THE MINIMUM OF BELOW GROUND MASONRY WILL BE HIGH DENSITY (HD) CATEGORY 1 CLAY BRICKWORK OF MINIMUM 75N/mm² MEAN COMPRESSIVE STRENGTH, 7.0% MAXIMUM MOISTURE ABSORPTION AND DURABILITY DESIGNATION F2 S2 (DI "ENGINEERING CLASS B" QUALITY OR EQUIVALENT).

EXTERNAL MASONRY SHALL BE CLAY-FACING BRICKWORK OF MINIMUM 9N/mm² MEAN COMPRESSIVE STRENGTH AND A DURABILITY DESIGNATION F1 S2 OR BETTER.

INTERNAL MASONRY SHALL BE LIGHT COLOURED SOLID SMOOTH FAIR FACED CONCRETE FACING BLOCKWORK WITH A MINIMUM COMPRESSIVE STRENGTH OF 3.6N/mm² AND A DRY DENSITY OF 600kg/m³

THE DPC, TO BOTH INTERNAL AND EXTERNAL WALL SKINS, SHALL COMPRISE 2 COURSES OF BLUE ENGINEERING BRICKS OR PROPRIETARY DPC MEMBRANE.

MORTAR SHALL BE SAND LIME, MIX 1:1:6, WHERE REQUIRED, THE USE OF SULPHATE RESISTING CEMENT (E.G. BELOW GROUND) WILL BE USED.

EXTERNAL AND INTERNAL POINTING TO BE "BUCKET HANDLE" FINISH. OTHER POINTING STYLES, E.G. WEATHER STRUCK, RECESSED, ETC MAY ONLY BE USED WHERE REQUIRED TO MATCH ADJACENT BUILDINGS.

FINISHES

WALLS & CEILINGS SHALL RECEIVE TWO COATS OF WHITE EMULSION PAINT FOR DUST SEALING.

FLOORS SHALL RECEIVE TWO COATS OF GREY CONCRETE FLOOR PAINT.

DRAINAGE

ROOF GUTTERS TO BE UPVC 100mm HALF ROUND OR EQUIVALENT "SQUARE SECTION". ROOF DOWN PIPES ARE TO BE 63MM DIA OR EQUIVALENT "SQUARE SECTION" UPVC. ALL GUTTERS AND FIXINGS TO BE BLACK UNLESS OTHERWISE REQUIRED TO MATCH ADJACENT BUILDINGS.
THE CONSTRUCTION OF THE HARD STANDING IN FRONT OF THE SUBSTATION SHALL BE SUCH THAT ALL WATER DRAINS AWAY FROM THE THRESHOLD OF THE DOOR.
ALL DRAINAGE MUST DISCHARGE INTO AN ADOPTED SURFACE WATER DRAINAGE SYSTEM.

VENTILATION

EACH STANDARD SUNRAY ENGINEERING SET OF LOUVRES (VENTS AND DOORS) IS AT LEAST 41.7% EFFICIENT. GENERATOR FLAP REQUIRED IN ONE OF THE LOUVRES.

ROOF CONSTRUCTION

ROOF MATERIALS SHALL BE SELECTED TO MAXIMISE DURABILITY CONSISTENT WITH THE ARCHITECTURAL OR PLANNING REQUIREMENT FOR THE SUBSTATION.
ALL TIMBER TO PITCHED ROOFS SHALL BE VACUUM PROCESS PRESERVATIVE TREATED.
THE USE OF LEAD AS PART OF WATERPROOFING SYSTEMS SHOULD BE AVOIDED UNLESS ESSENTIAL.
ALL WORKS TO COMPLY WITH CURRENT EDITIONS OF MANUFACTURER'S TECHNICAL LITERATURE FOR PRODUCTS SELECTED.

CARRY OUT ALL TILING IN ACCORDANCE WITH BS 5534:2003.

DOOR FURNITURE AND SUBSTATION LOCKING

SUNRAY DOORS TO BE SUPPLIED COMPLETE WITH THE APPROVED DOOR FURNITURE AND **NO VARIATION** FROM THESE AGREED SPECIFICATIONS ARE ALLOWED UNLESS APPROVED IN ADVANCE BY ENC. ENC SHALL SUPPLY APPROPRIATE PADLOCKS FOR ALL COMPLETED SUBSTATIONS, INCLUDING A DUAL-LOCKING PADLOCK FOR THE OUTER DOORS. EURO PROFILE KEY OPERATED LOCKS ON OUTER DOORS ARE **NOT** ACCEPTABLE TO ENC

WHEN STEEL DOORS ARE FITTED THE DOOR LEAVES MUST BE BONDED TO THE STEEL DOOR FRAME USING A (MINIMUM) 16mm² FLEXIBLE INSULATED COPPER BONDING STRAP AND STEEL DOOR FRAME CONNECTED TO THE SUBSTATION EARTHING SYSTEM USING 70mm² GREEN/YELLOW PVC INSULATED STRANDED COPPER EARTHING CONDUCTOR.

APPROVED SUPPLIERS

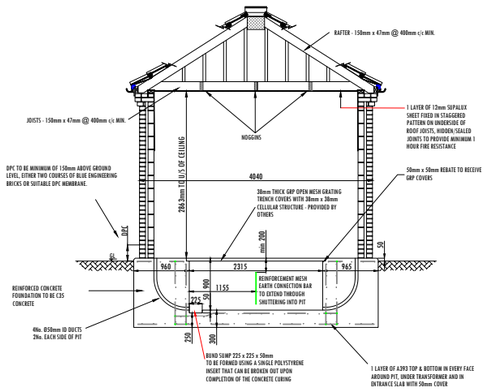
STEEL DOORS AND VENTILATORS:
SUNRAY ENGINEERING LTD, KINGSNORTH INDUSTRIAL ESTATE, WOOTON ROAD, ASHFORD, KENT TN23 6LL
Tel: 01233 629839
Fax: 01233 625137
Email: SALES@SUNRAYDOORS.CO.UK

CADWELDING SYSTEM:
ERICO, 52 MILFORD ROAD, READING, BERKSHIRE, R1 8LJ
Tel: 01189 588386

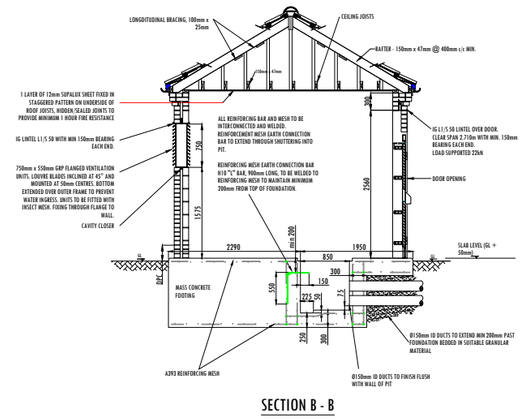
EARTHING

A DETAILED EARTHING ARRANGEMENT SHALL BE PROVIDED SEPARATE TO THIS DRAWING.

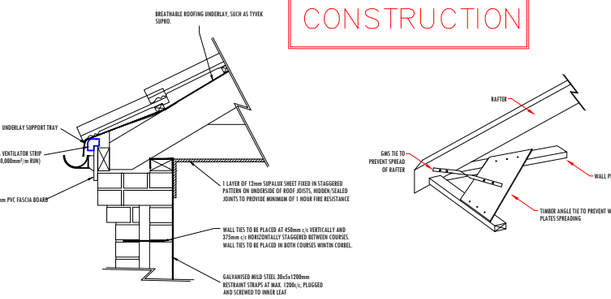
NOTE: IF ADDITIONAL EARTHING MATERIAL OR BUILDERS WORK IS REQUIRED OVER AND ABOVE THE STANDARD EARTHING ARRANGEMENT IN ORDER TO ACHIEVE A SUITABLE RESISTANCE TO EARTH, INCLUDING THE USE OF IMPORTED MATERIALS TO IMPROVE THE RESISTANCE TO EARTH (E.G. BENTONITE OR SIMILAR), ALL COSTS SHALL BE BORNE BY THE DEVELOPER.



SECTION A - A



SECTION B - B

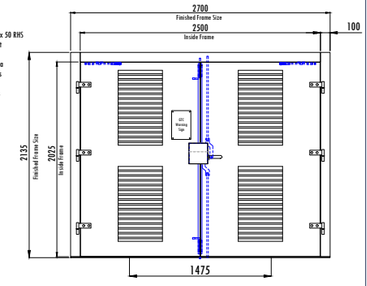


INDICATIVE EAVES DETAIL - TO VARY DEPENDENT ON TILE CHOICE (NOT TO SCALE)

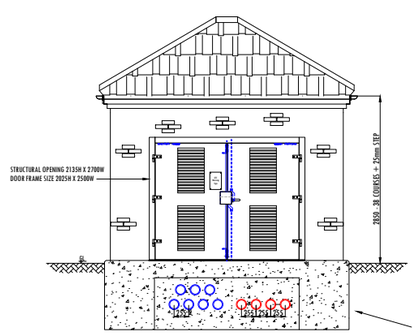
HIPPED ROOF CORNER DETAIL (N.T.S.)

NOT FOR CONSTRUCTION

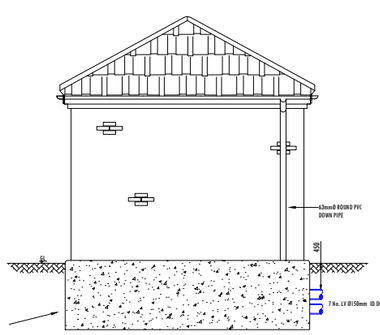
Head and Jambs manufactured from 100 x 50 RHS
Threshold manufactured from 50 x 10 flat
Fully welded frame
Free air = approx 41.7% of Louvred Area
Anti Vermin Mesh to rear of Louvre Areas
Door Stays to Centre Leafs
Leaf Weight = Approx 95kg Centre Leafs
and 60 kg Outer Leafs



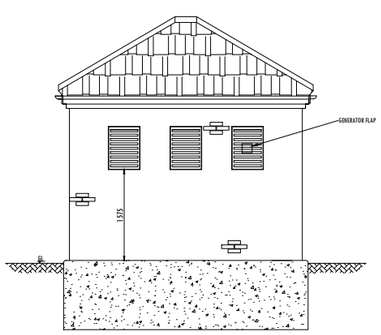
SUBSTATION DOORS WITH LOUVERED OVER PANEL SCALE -1:30



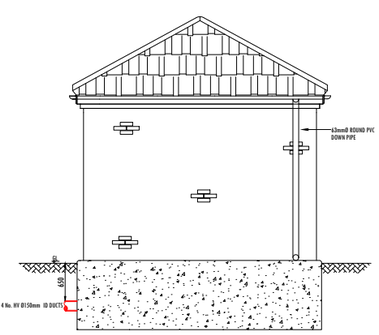
FRONT ELEVATION



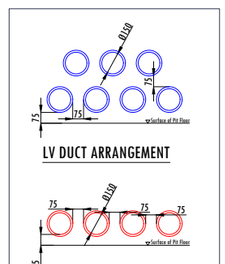
SIDE ELEVATION



REAR ELEVATION



SIDE ELEVATION



LV DUCT ARRANGEMENT

HV DUCT ARRANGEMENT

NB:
- ALL DUCT SIZES REFER TO INTERNAL DIAMETER
- DUCTS SHOWN AS VIEWED FROM **INSIDE** PIT

Scale 1:20

BASED ON GTC DRAWING GTC-E-SS-0012_R1-7 - Pyramid Roof Brick Built Enclosure &
POWER ON LIBRARY DRAWING POC-SS-0002-rev1-Stand Alone Brick Construction Details

Rev	Amendment	Date	Drwn	Chkd
0	ORIGINAL ISSUE			

Drawing Title: SUBSTATION CONSTRUCTION DETAILS

POWER ON
All Utilities. One Provider
DOVECOTE COURT
POTTERS MARSTON HALL
LEICESTERSHIRE, LE9 3JR
TELEPHONE: 03453 223322
enquiries@poweron-uk.co.uk
Electricity Water Wastewater Fibre Heat Gas

Client	PMC CONSTRUCTION & DEVELOPMENT SERVICES LTD
Project Name	FORMER POST OFFICE, EASTLEIGH
Site Address	FORMER POST OFFICE, EASTLEIGH, SO50 5LA

IF IN DOUBT - ASK

Design Engineer	YOUCEF LEBIK	Mobile	07917574927
Construction Engineer/Project Manager	ANDRE LEWIS	Mobile	07970 720327
Scale	VARIES	Orig. Size	A1
Sheet	1/1		
Network Operator Ref.	N0023781-1	Contract Drawing No.	P-0102281/DWG/020