

NOTES

CONCRETE
THE CONCRETE TO BE IN ACCORDANCE WITH THE SPECIFICATION AND ATTAIN THE RELEVANT CUBE CRUSHING STRENGTH AT 28 DAYS.

FOUNDATIONS (CONCRETE 38N/mm² 28 DAY CUBE STRENGTH)
FOUNDATIONS TO BE SET ON UNDISTURBED INORGANIC STRATA THAT PROVIDE THE REQUIRED MINIMUM DESIGN SAFE GROUND BEARING CAPACITY.

FLOOR (CONCRETE 38N/mm² 28 DAY CUBE STRENGTH)
A FLAT, LEVEL AND SMOOTH FLOOR SURFACE IS ESSENTIAL FOR INSTALLATION OF PLANT. TOLERANCE TO FINISHED LEVEL EXPRESSED AS A MAXIMUM PERMISSIBLE DEVIATION BELOW A STRAIGHT EDGE WITH FEET PLACED ANYWHERE ON THE FLOOR SHALL NOT EXCEED 1mm IN 1M OR 3mm IN 3M. FLOOR TO BE CURED, PREPARED & PAINTED WITH 2 No. COATS OF NON-SLIP FLOOR PAINT ON COMPLETION.

BRICKWORK
ALL BRICKWORK BELOW D.P.C. TO BE H.D. CATEGORY 1 MIN. 75N/mm² MEAN COMPRESSIVE STRENGTH AND MAX. 7% M.A. AND DURABILITY DESIGNATION F2 S2 (EX-ENGINEERING BRICKWORK CLASS B) IN ENGLISH BOND EXCEPT FOR EXPOSED FACES. EXTERNAL FACING BRICKS TO BE H.D. CATEGORY 1 MIN. 30N/mm² MEAN COMPRESSIVE STRENGTH. MAXIMUM 12% M.A. AND DURABILITY DESIGNATION F1 S1 OR BETTER.
INTERNAL BRICKS TO BE FAIR FACED SMOOTH TEXTURED
REAR AND SIDE ELEVATIONS TO BE BUILT TO MATCH INTERNAL FACING BRICKS. SIZE TO MATCH COMPRESSIVE STRENGTH AND WITH A MIN. COMPRESSIVE STRENGTH OF NOT LESS THAN 20N/mm², CLASS III MORTAR.

WALLS
TO BE 215mm ENGLISH GARDEN WALL BOND. ALTERNATIVELY LEAVES OF COLLAR JOINTED DOUBLE STRETCHER WALLS TO BE TIED TOGETHER BY MEANS OF TYPE 1 OR TYPE 2 STAINLESS STEEL TIES LAID IN EVERY 4TH COURSE AT 375mm CENTRES AND SET BACK 38mm FROM OUTER FACE. TIES ARE TO BE STAGGERED.

DOORS
REFER TO DWG SP4000543 FOR TYPICAL APPROVED HARDWOOD DOOR CONSTRUCTION DETAILS FOR SECONDARY SUBSTATIONS.
DETAILS OF PROPOSED GRP GRP FACED ALUMINIUM OR STEEL SECURITY DOORS SHALL BE SUBMITTED TO ENERGY NETWORKS FOR COMMENT. BEFORE WORK COMMENCES.

CABLE TRENCH AND SLOTS
ON COMPLETION OF CABLEING, CABLE TRENCH AND SLOTS TO BE FILLED WITH DRY SAND & TRENCH TOPPED WITH A MINIMUM 150mm DEPTH OF ROUNDED GRAVEL CHIPPINGS (TOP TO BE LEVEL WITH F.F.L.).

ROOF (CONCRETE 35 N/mm² 28-DAY CUBE STRENGTH)
INTERNAL/EXTERNAL FACES OF CONCRETE TO BE FAIR FACED. ALL EXTERNAL FACES TO BE CURED, PREPARED, PRIMED & FINISHED WITH A TWO COAT HIGH-PERFORMANCE (ALIPHATIC) POLYURETHANE WATERPROOFING SYSTEM (FLAT ROOF GRADE) WITH GLASS FIBRE MAT REINFORCEMENT TO INITIAL COAT. E.G. 1No. COAT OF LPL BONDING PRIMER THEN 2No. COATS OF LPL DECOTTHANE.
OBTAINABLE FROM - LIQUID PLASTICS TEL. 01772 259781. OR EQUAL SYSTEM.

ALL FINISHES TO BE APPLIED STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

WHERE A SUPERIMPOSED PITCHED ROOF IS PROPOSED, THE CONCRETE SUB-ROOF SHALL HAVE A WATERPROOF COATING AND PROVISION MUST BE MADE TO SHED RAINWATER FROM THE ROOF SLAB EXTERNALLY IN THE EVENT OF A FAILURE OF THE PITCHED ROOF.

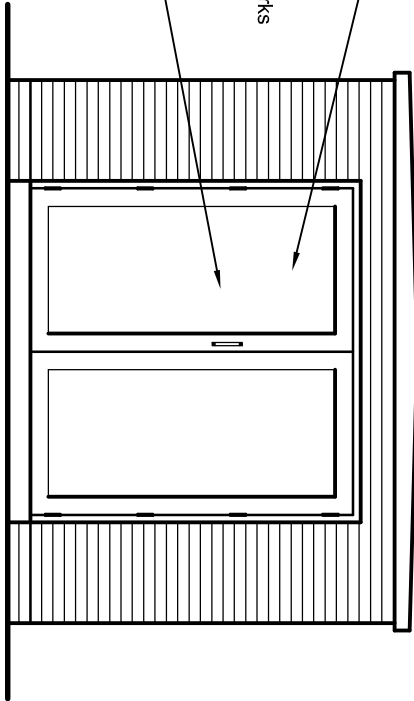
ALL PROPOSALS REGARDING CONSTRUCTION OF THE PITCHED ROOF MUST BE SUBMITTED TO ENERGY NETWORKS FOR COMMENT BEFORE WORK COMMENCES.

VENTILATION SHOWN IS TYPICAL FOR A SINGLE 500kVA TRANSFORMER. VENTILATION UNIT OPENING SIZES FOR 1000kVA TRANSFORMERS SHALL BE A MINIMUM 1002 X 450mm. TYPICAL VENTILATION INDICATED MAY NOT BE ADEQUATE IN CERTAIN SUPPLY CONDITIONS, WHICH MIGHT REQUIRE ADDITIONAL OR ALTERNATIVE VENTILATION ARRANGEMENTS.

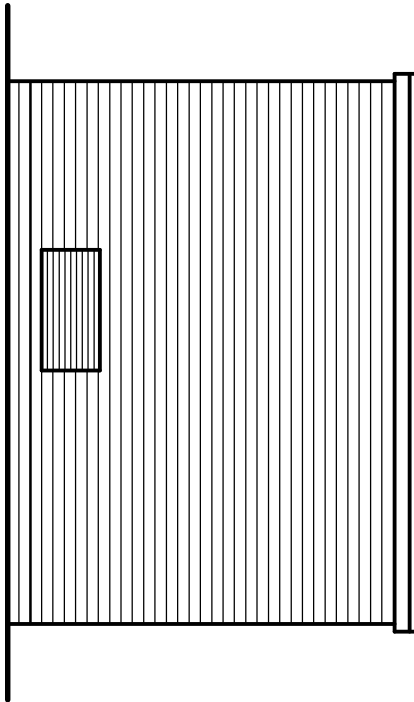
FOUNDATION & FLOOR LAYOUT DETAILS INDICATED ARE TYPICAL FOR SUBSTATION BUILDINGS HOUSING UNIT SUBSTATION EQUIPMENT, AND WOULD NOT THEREFORE BE APPLICABLE TO INDOOR EQUIPMENT OR H.V. SWITCHING STATION LAYOUTS.

RELATED TYPICAL DEEMED TO SATISFY CONSTRUCTION DRAWINGS
HARDWOOD DOORS SP4000543
Z" TYPE VENTS: SP4000542

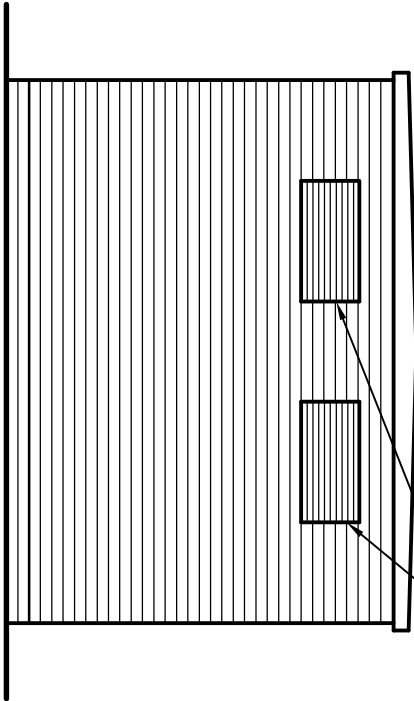
NOTE
It is essential that Energy Networks personnel can access & properly secure on egress all doors at all times. Any hardwood, metalwork or GRP construction doors that may shrink, warp, wind, distort, corrode or bind will not be acceptable



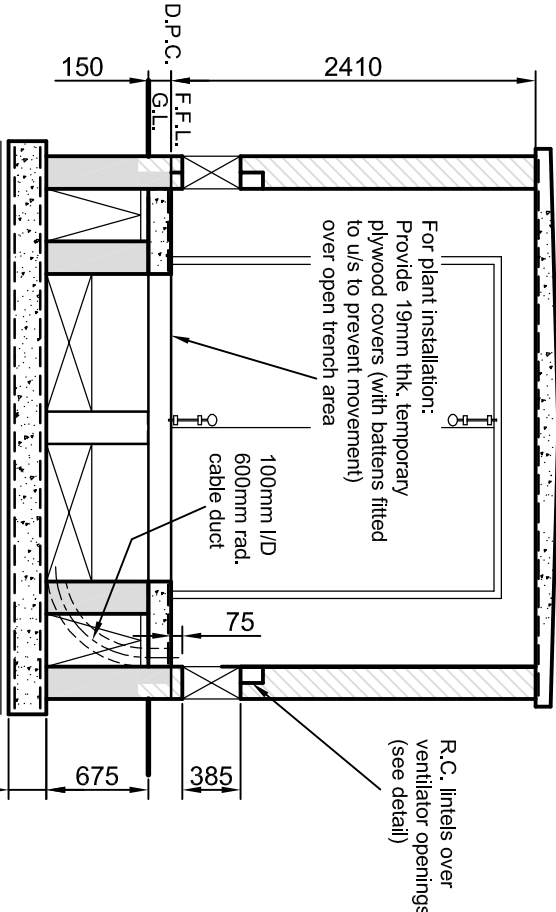
FRONT ELEVATION



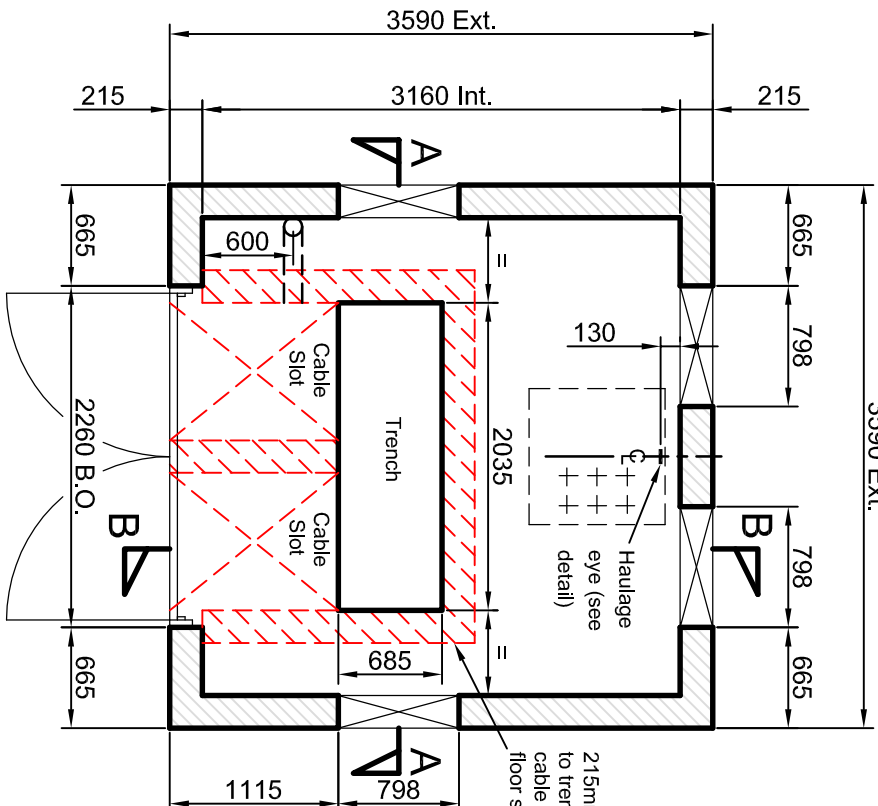
SIDE ELEVATION



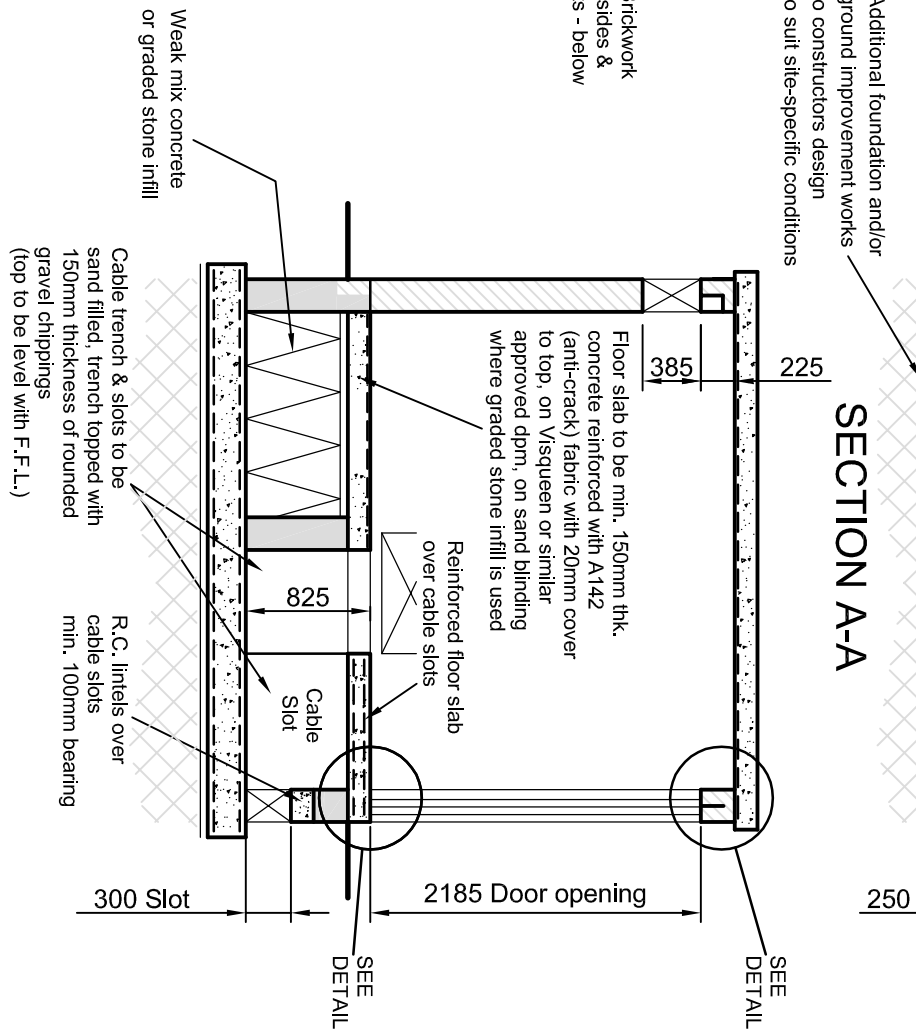
REAR ELEVATION



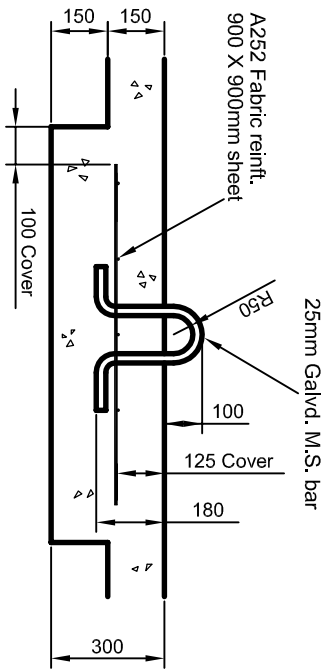
SECTION A-A



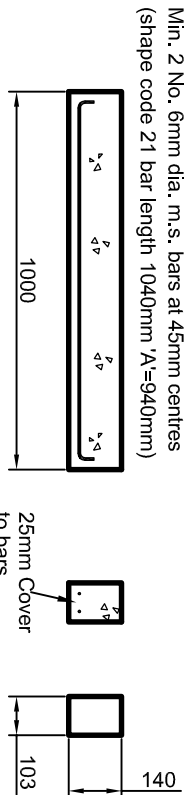
PLAN



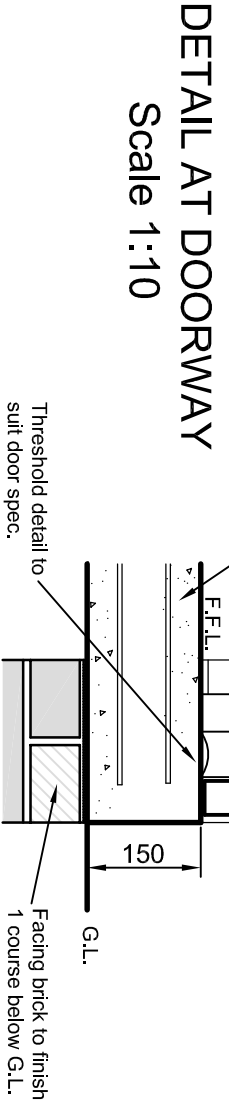
SECTION B-B



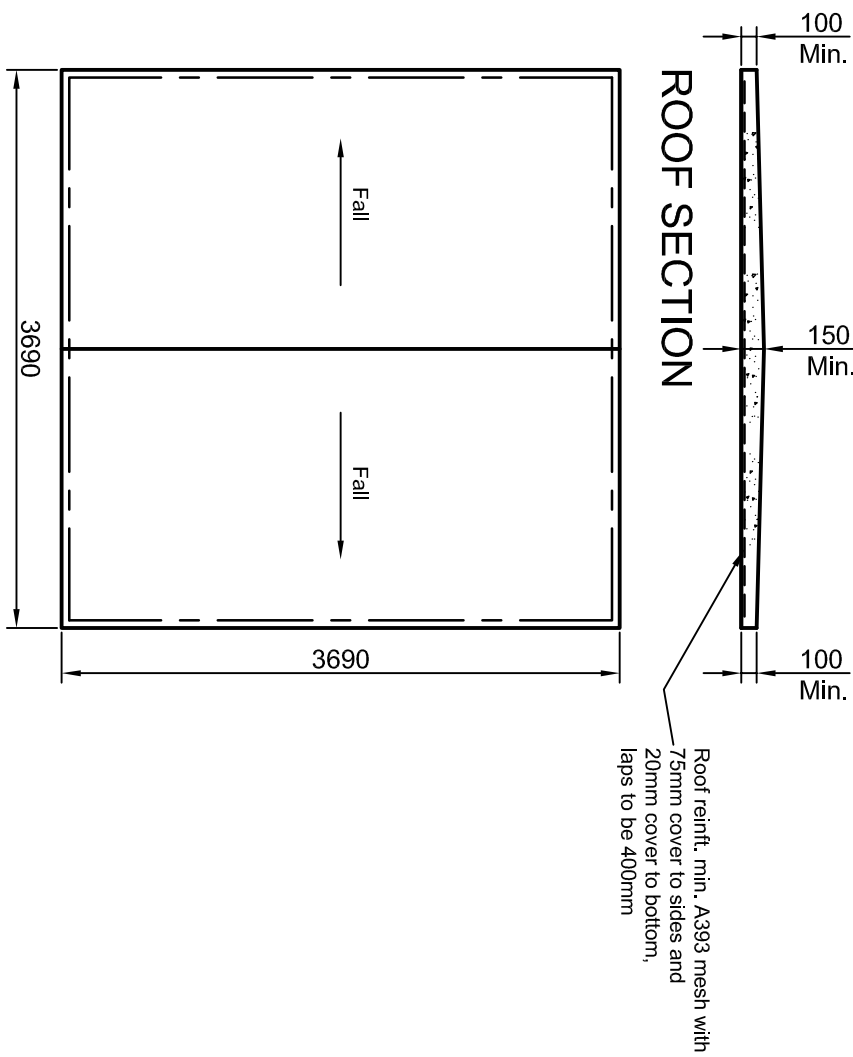
HAULGE EYE DETAIL Scale 1:20



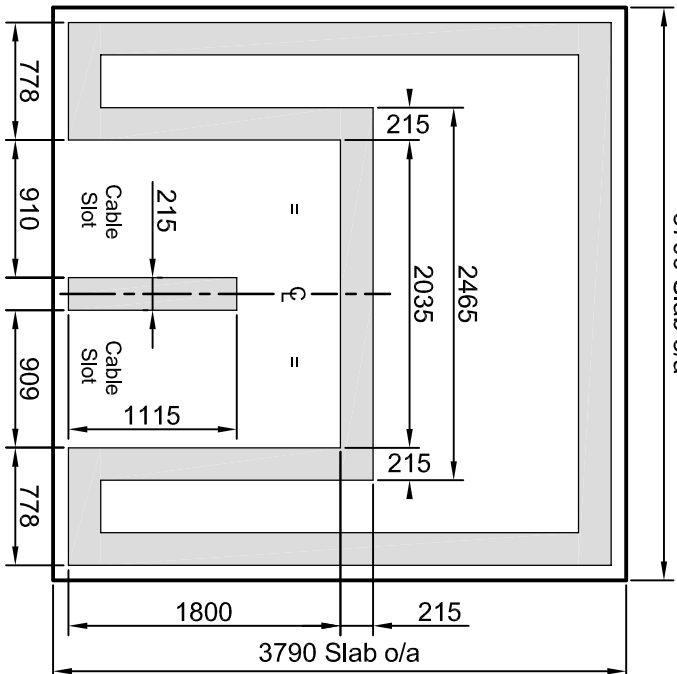
LINTOL TO VENT OPENING SCALE 1:20



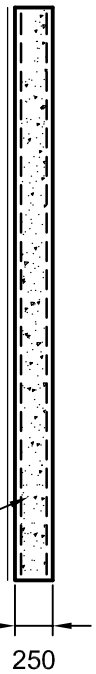
DETAIL AT DOORWAY Scale 1:10



ROOF SECTION



ROOF PLAN



FOUNDATION SECTION

PLAN OF BRICKWORK BELOW FLOOR SLAB

Rev'd	Date	UPDATED.
8.0	09/2011	
Drawn	M.T.	
Checked	C.W.	
Approved	A.J.F.	

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TYPICAL TRADITIONAL BUILDING DETAILS
FOR 11kV UNIT SUBSTATION.



Location TYPICAL						
Drawn	Date	Checked	Date	Approved	Date	
M.T.	JAN.07	C.W.	JAN.07	A.J.R.	JAN.07	
Status				Dwg. No.		Rev.
FOR ISSUE					SP3020357	5.0
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					1:50	A2