

NOTES

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

FOUNDATIONS (CONCRETE 35N/mm² 28 DAY CUBE STRENGTH)
FOUNDATIONS TO BE SET ON UNDISTURBED ORGANIC STRATA THAT PROVIDE THE REQUIRED MINIMUM DESIGN SAFE GROUND BEARING CAPACITY.

FLOOR (CONCRETE 35N/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 BENEATH 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 2No. COATS OF NON-SLIP FLOOR PAINT ON COMPLETION.

BRICKWORK
ALL BRICKWORK BELOW D.P.C. TO BE HD. CATEGORY 1 MIN. 75 N/mm 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 HD CATEGORY 1 MIN. 20N/mm² MEAN COMPRESSIVE STRENGTH, MAXIMUM 12% M.A. AND DURABILITY DESIGNATION F1 S1 OR BETTER. INTERNAL BRICKS TO BE FAIR FACED SMOOTH TEXTURED SOLID CONCRETE BRICKS, SIZE TO MATCH EXTERNAL FACING BRICKS AND WITH A MEAN COMPRESSIVE STRENGTH OF NOT LESS THAN 20N/mm².

WALLS
TO BE ENGLISH GARDEN WALL BOND, ALTERNATIVELY LEAVES OF COLLAR JOINTED DOUBLE STRETCHER WALLS TO BE TIED TOGETHER BY MEANS OF 4mm MIN. DIA. STAINLESS STEEL DOUBLE-TRIANGLE TIES (OR BETTER) 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 ENERGYWORKS FOR COMMENT, BEFORE WORK COMMENCES.

CABLE TRENCH AND SLOTS
ON COMPLETION OF CABLING, CABLE TRENCH AND SLOTS TO BE FILLED WITH DRY SAND, TRENCH TOPPED WITH A MINIMUM 50mm DEPTH OF SAND/CEMENT SCREED OVER VISQUEEN MEMBRANE, (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 (ALPHATIC) 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 DECAHANE. 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.

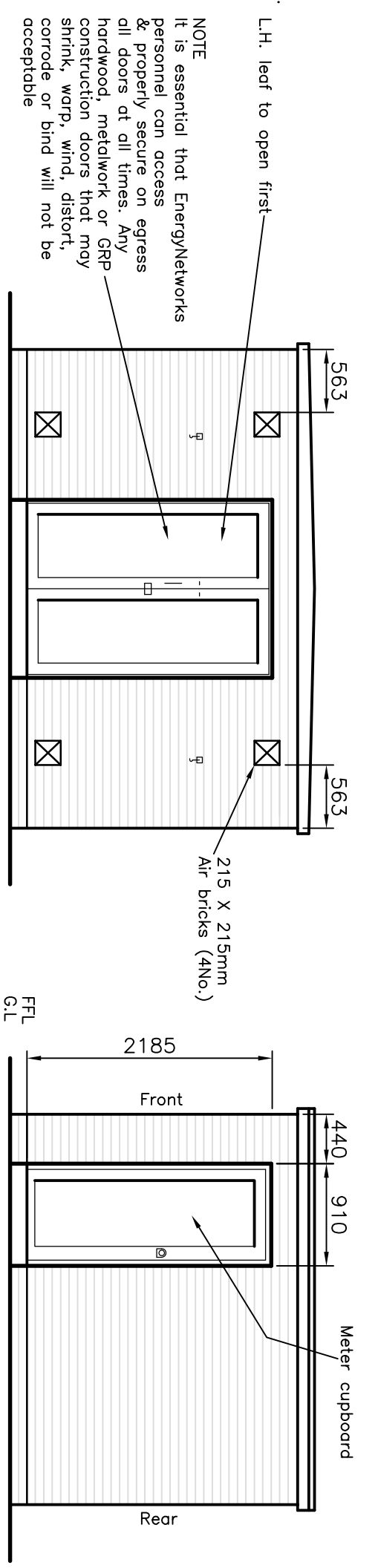
ALL PROPOSALS REGARDING CONSTRUCTION OF THE PITCHED ROOF MUST BE SUBMITTED TO ENERGYWORKS FOR COMMENT BEFORE WORK COMMENCES.

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.

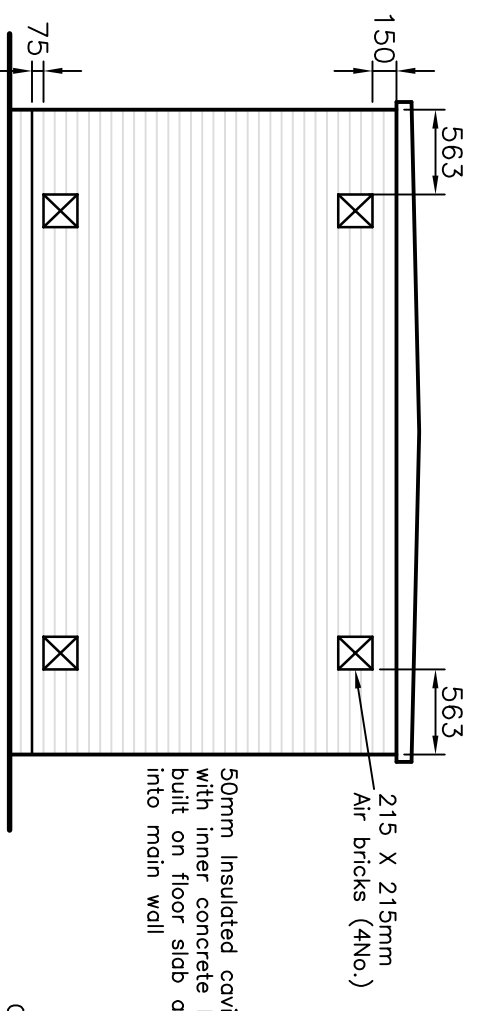
RELATED TYPICAL DRAWINGS TO SATISFY CONSTRUCTION DRAWINGS
HARDWOOD DOORS SP4000543
METERING CUPBOARD SP4090884

REQUIRED CABLE SLOT DIMENSIONS			
SCHNEIDER RN2/6e	LUCY VRN 2g/6e		
$x' = 1410\text{mm}$	$y' = 1238\text{mm}$		
$x'' = 606\text{mm}$	$y'' = 778\text{mm}$		

THIS DRAWING TO BE READ IN CONJUNCTION WITH SUB-03-017 GENERAL SPECIFICATION FOR THE CIVIL ENGINEERING AND BUILDING DESIGN AND CONSTRUCTION OF SECONDARY SUBSTATIONS.

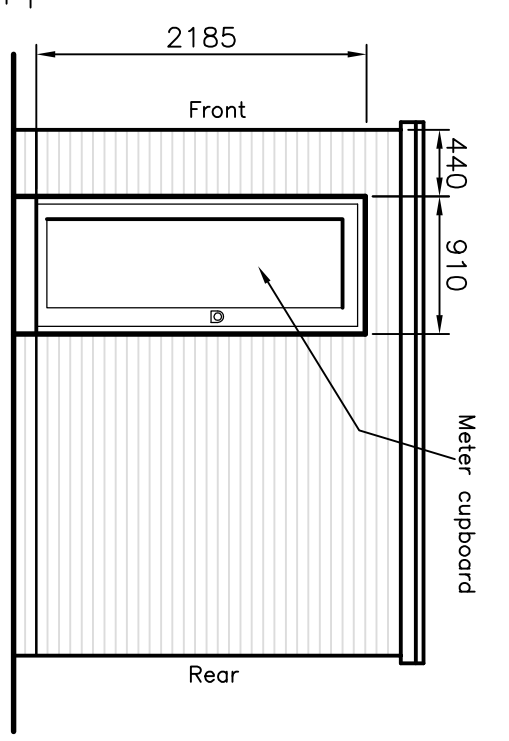


FRONT ELEVATION

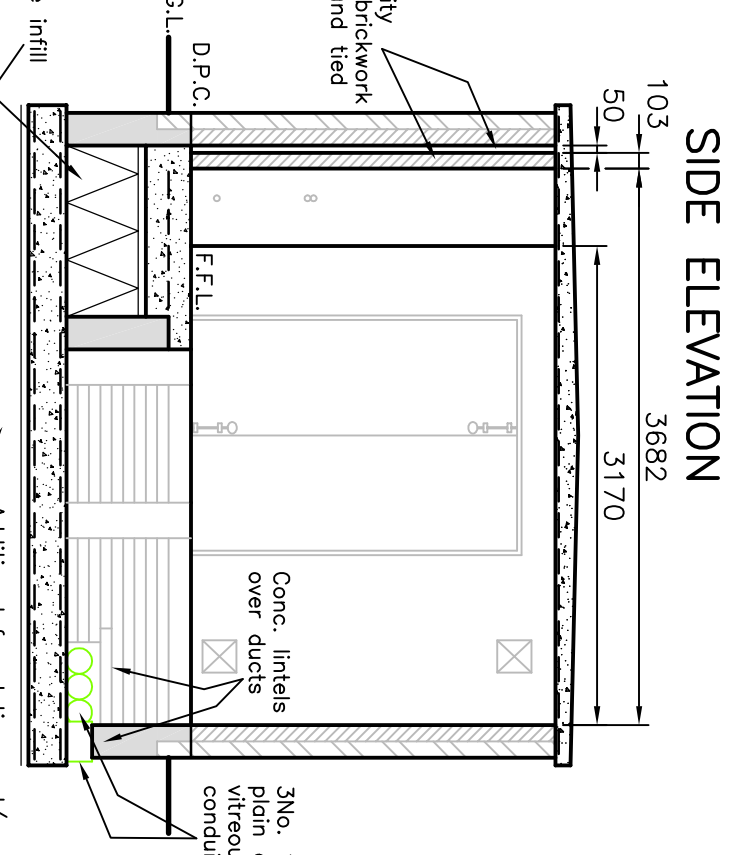


REAR ELEVATION

D.T.P. Type 1 graded stone (class A) infill, 75mm to dust, or weck-mix mass concrete infill.

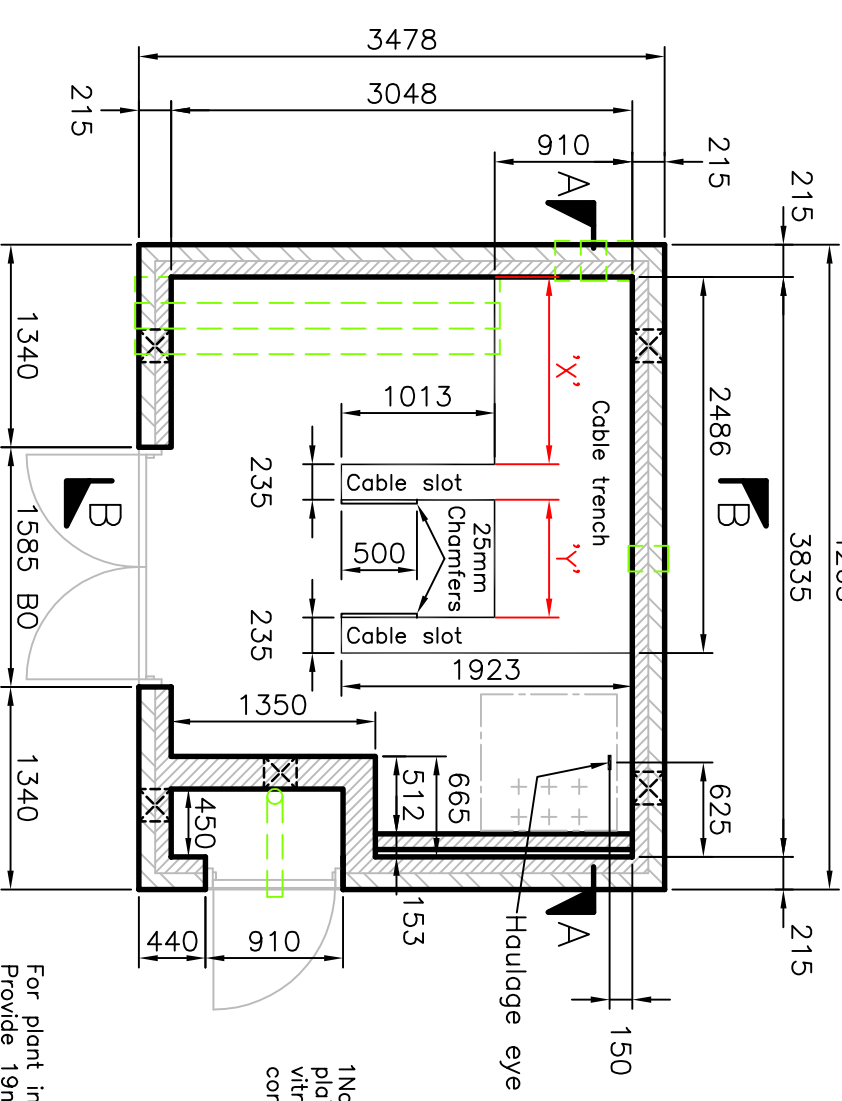


SIDE ELEVATION



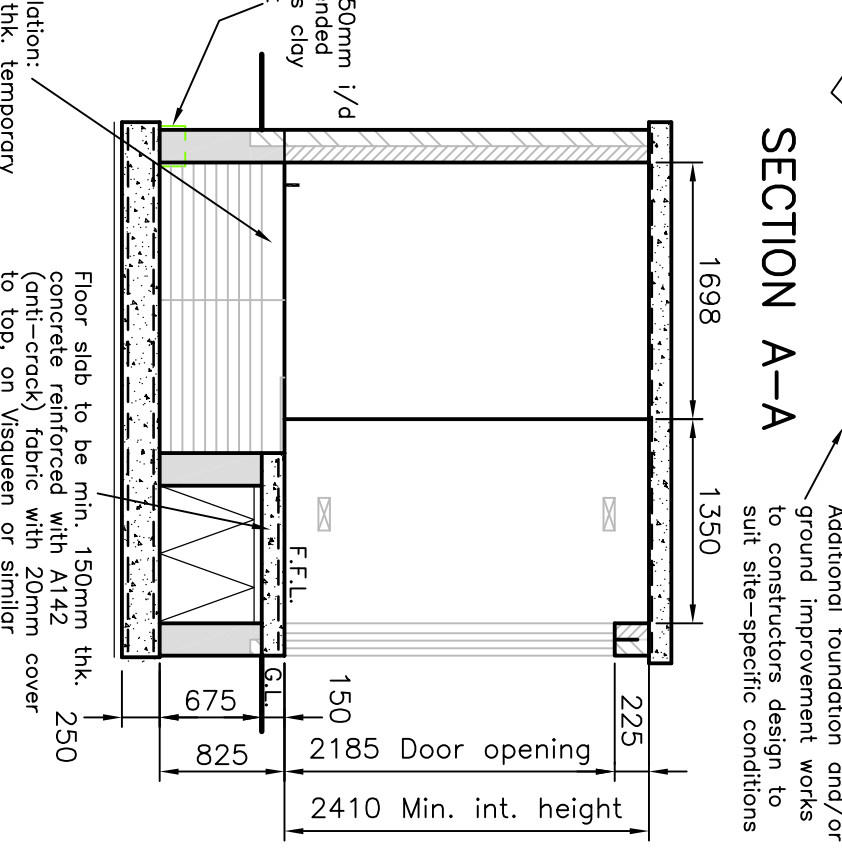
SECTION A-A

Additional foundation and/or ground improvement works to constructors design to suit site-specific conditions



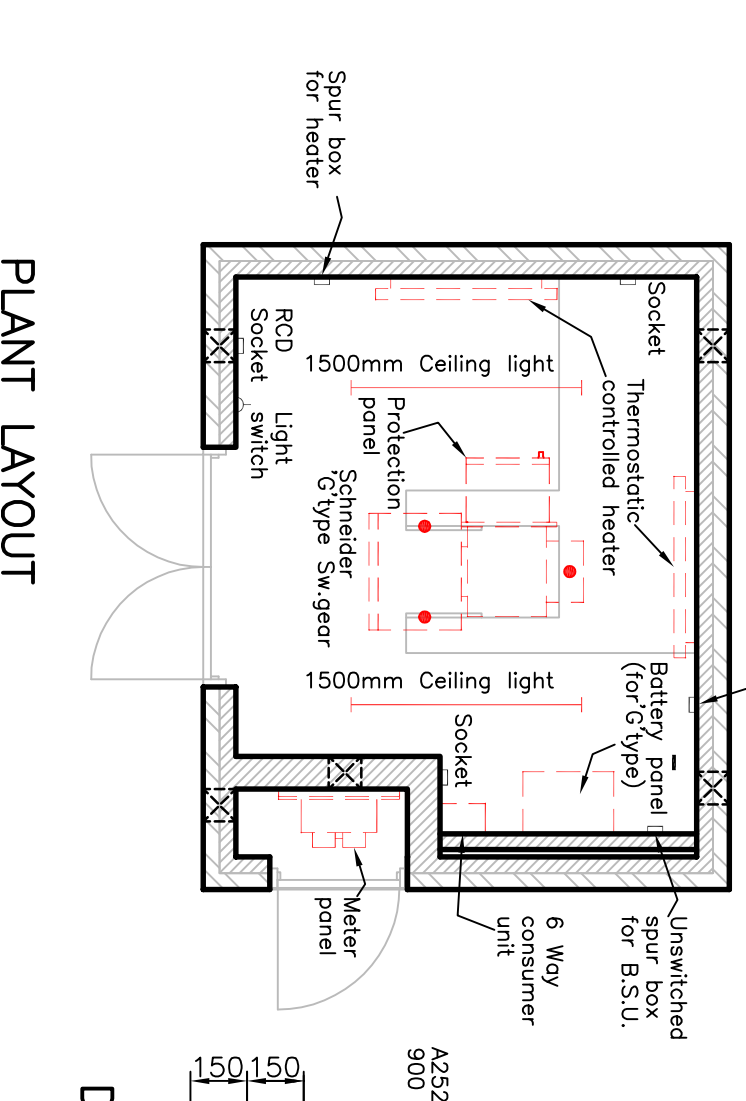
PLAN

For plant installation: Provide 19mm thk. temporary plywood covers (with boltless fitted to u/s to prevent movement) over open trench area

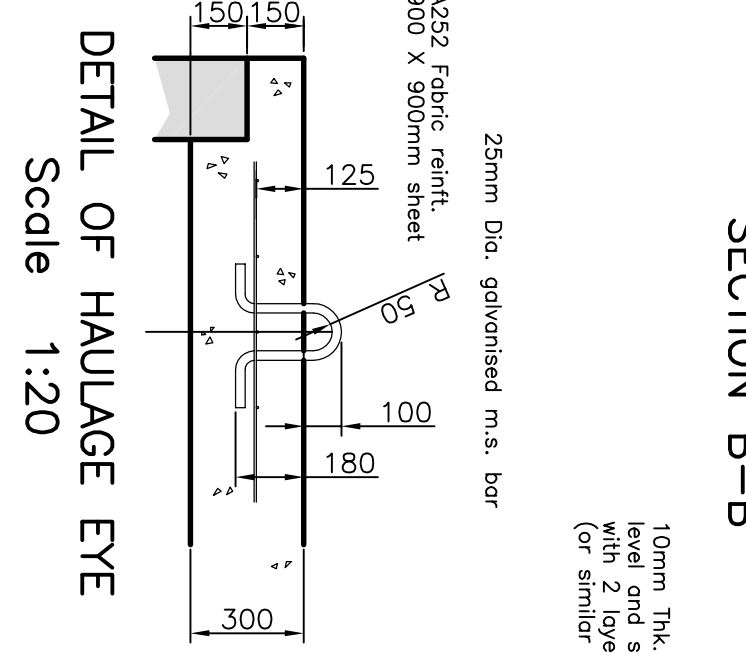


SECTION B-B

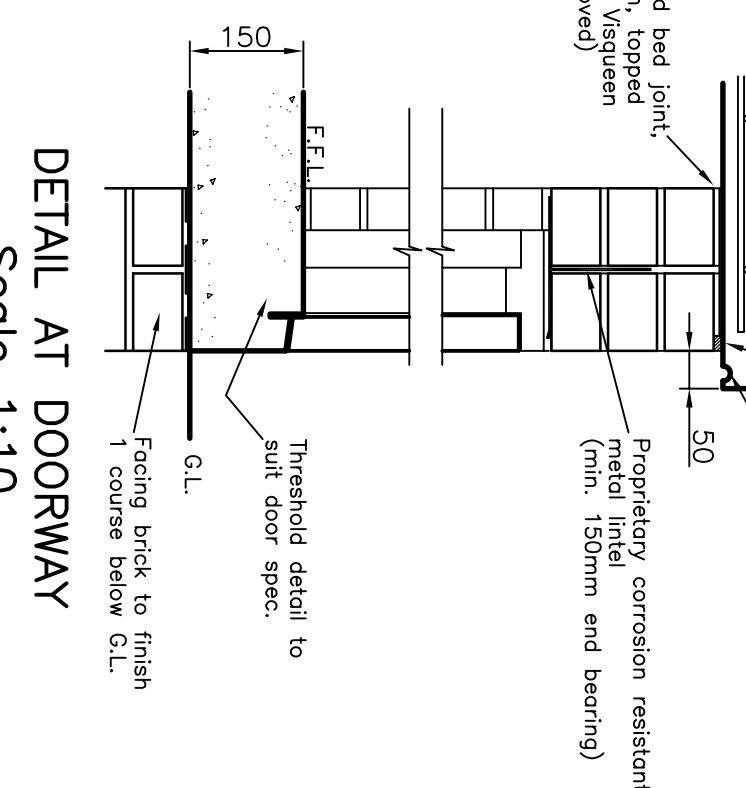
Additional foundation and/or ground improvement works to constructors design to suit site-specific conditions



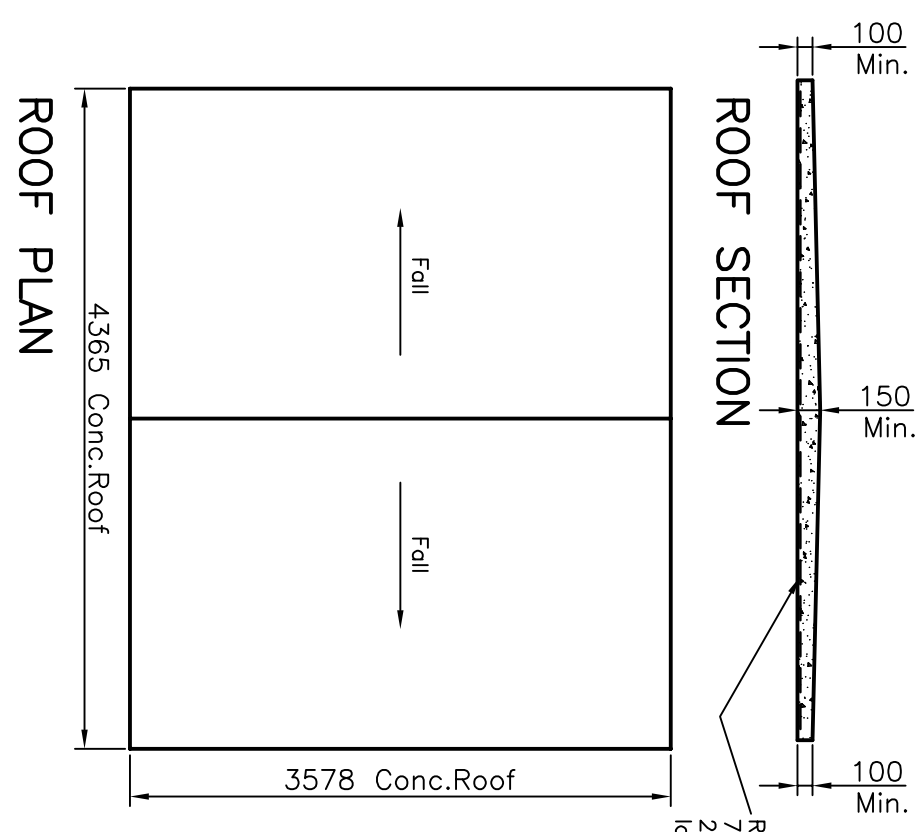
PLANT LAYOUT



DETAIL OF HAULAGE EYE
Scale 1:20

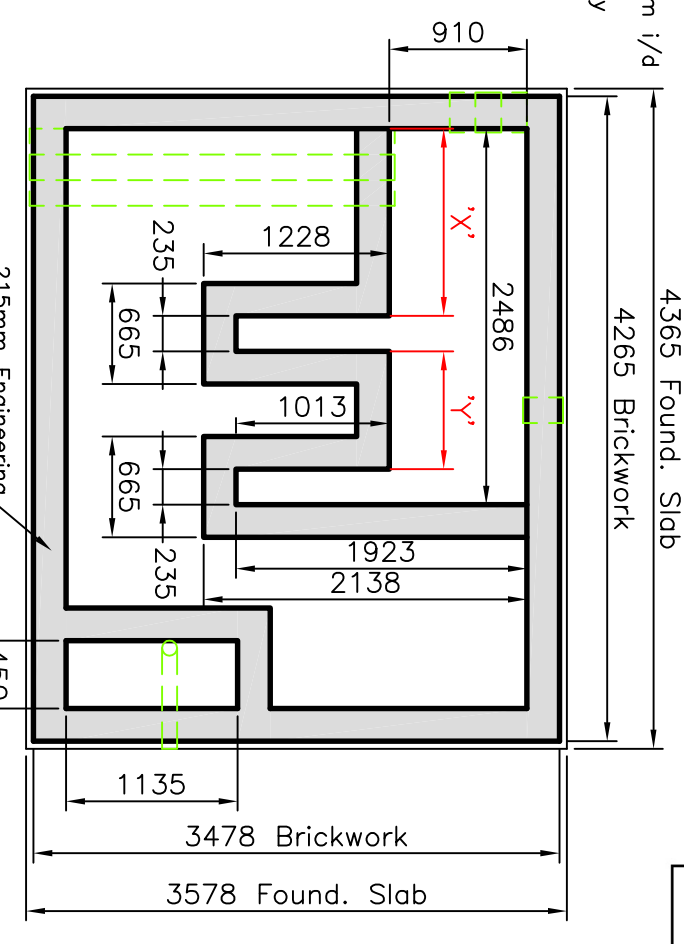


DETAIL AT DOORWAY
Scale 1:10

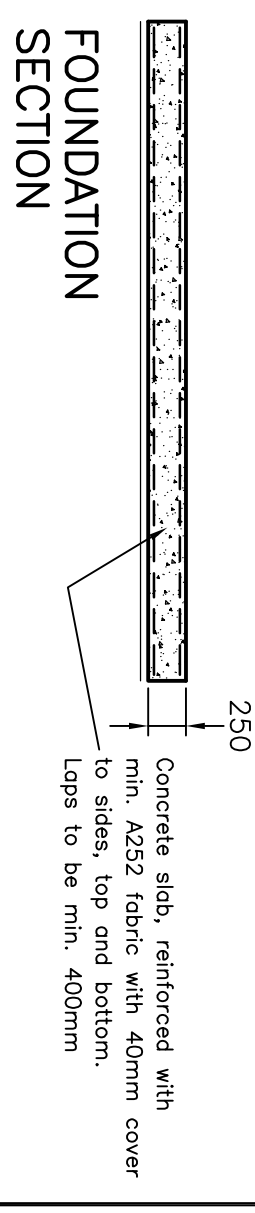


ROOF SECTION

ROOF PLAN



PLAN OF BRICKWORK BELOW FLOOR SLAB



FOUNDATION SECTION

THE VALE OF GLAMORGAN COUNCIL
TOWN AND COUNTRY PLANNING ACT 1990
APPROVED
SUBJECT TO COMPLIANCE WITH CONDITIONS (IF ANY)

Rev	Date	Updated
01	Sept 14	
02	M.T.	
03	A.L.R.	
04	C.W.	

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System Design, Drawing Office, Gateway House,
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Telephone 0141 614 7143.



PROPOSED BRICK ENCLOSURE FOR COMBINED R.M.U. AND METERING UNIT
'D' TYPE OR 'G' TYPE (WITH PROTECTION PANEL).

11kV SUBSTATIONS			
Drawn	Date	Checked	Date
MT	OCT 08	C.O.B	OCT 08
Status	Date	Approved	Date
FOR ISSUE	OCT 08	C.W	OCT 08
Dwg. No.	Scale	Rev.	Size
SP4049060	1:50	6.0	A2