

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 INORGANIC STRATA THAT PROVIDE THE REQUIRED MINIMUM DESIGN SAFE GROUND BEARING CAPACITY.

FLOOR (CONCRETE 35Nmm² 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.
FLOORS TO BE CURED, PREPARED & PAINTED WITH 2 NO. COATS
OF NON-SLIP FLOOR PAINT ON COMPLETION.

BRICKWORK
1. BRICKWORK BELOW D.P.C. TO BE H.D. CATEGORY I MIN. 75 N/mm² MEAN COMPRESSIVE STRENGTH AND MAX. 1% I.A. AND DURABILITY DESIGNATION F2.92
2. BRICKWORK ABOVE D.P.C. TO BE H.D. CATEGORY II MIN. 75 N/mm² MEAN COMPRESSIVE STRENGTH AND MAX. 1% I.A. AND DURABILITY DESIGNATION F2.92 EXTERNAL FACING BRICKS TO BE H.D. CATEGORY I MIN. 300mm MEAN COMPRESSIVE STRENGTH AND MAX. 1% I.A. AND DURABILITY DESIGNATION F1.51 OR BETTER.
3. INTERNAL BRICKS TO BE FAIR FACED SMOOTH TEXTURED
4. ALL CONCRETE BRICKS, SLEE TO CONCRETE
5. ALL CONCRETE BRICKS, SLEE TO CONCRETE
6. STRENGTH OF NOT LESS THAN 20N/mm² CLASS III MORTAR.

ALTERNATIVE 190mm THICK SOLID DENSE FAIR FACED INTERNAL CONCRETE BLOCKS OF MIN. 17.5N/mm² COMPRESSIVE STRENGTH WOULD BE ACCEPTABLE IN PRINCIPLE; HOWEVER, THIS WOULD HAVE IMPLICATIONS WITH RESPECT TO MANUAL HANDLING.

WALLS (U' VALUE N.E. 0.45 W/m²K)
LEAVES OF 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.

WHERE ALTERNATIVE CAVITY WALL CONSTRUCTION IS PROPOSED THE CONSTRUCTOR SHALL CONFIRM BY STRUCTURAL DESIGN CALCULATION TO THE SATISFACTION OF ENERGY NETWORKS THAT THE PROPOSED CAVITY WALL PANEL CONSTRUCTION HAS EQUIVALENT LATERAL STRENGTH OR BETTER THAN THAT DETAILED ON THIS DRAWING. (E.G. STAINLESS STEEL WINDPOSTS OR OTHER STAINLESS STEEL REINFORCEMENT SYSTEM).

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

ON COMPLETION OF CABLING, TRENCH TO BE FILLED WITH DRY SAND AND SKIMMED WITH MIN. 50mm DEPTH OF SAND/CEMENT SCREED OVER A VISQUEEN MEMBRANE.

ROOF (U VALUE N.E. 0.35 W/m²K) WHERE A SUPERIMPOSED PITCHED ROOF IS PROPOSED. THE CONCRETE SUB-ROOF SHALL HAVE A WATER-PROOF 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.

FOUNDATION & FLOOR LAYOUT DETAILS INDICATED ARE TYPICAL FOR SUBSTATION BUILDINGS HOUSING H.V. SWITCHGEAR PANELS AND WOULD NOT THEREFORE BE APPLICABLE TO OTHER SUBSTATION TYPES.

SUBSTATION TYPES.

RELATED TYPICAL DEEMED TO SATISFY CONSTRUCTION DRAWINGS	
HARDWOOD DOORS	SP4000543
METER CUPBOARD	SP4078901

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'.

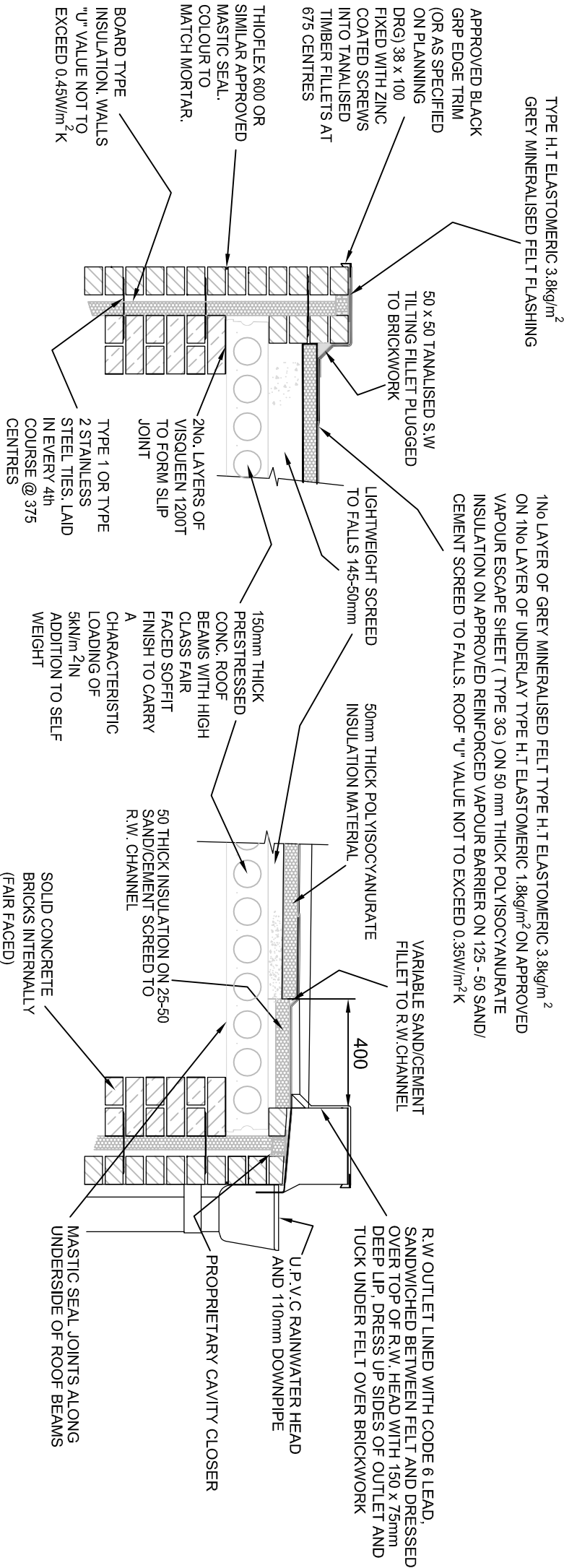
Rev.	Date	METER CUPBOARD DETAIL AMENDED.
3.0	SEPT.11	
Drawn	M.T.	
Checked	S.H.	
Approved	A.J.R.	



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TYPICAL TRADITIONAL BUILDING DETAILS FOR H.V. 3 PANEL BOARD SWITCHING STATIONS.

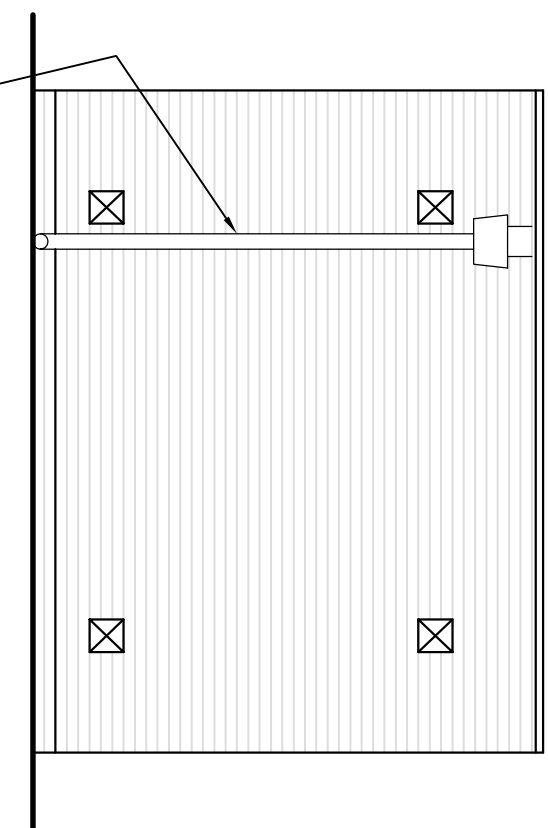
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M.T.	DEC.06	C.W.	DEC.06
Status	Date	Dwg. No.	Rev.
SP4008870		5.0	
Scale		Size	
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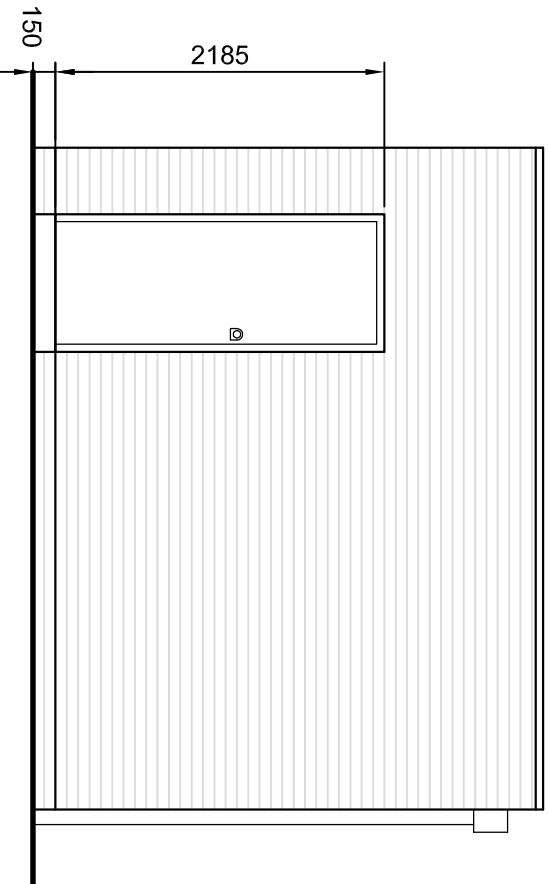
TYPICAL DETAIL AT HIGH POINT & END BEARING

TYPICAL DETAIL AT ROOF OUTLET & SIDE BEARING

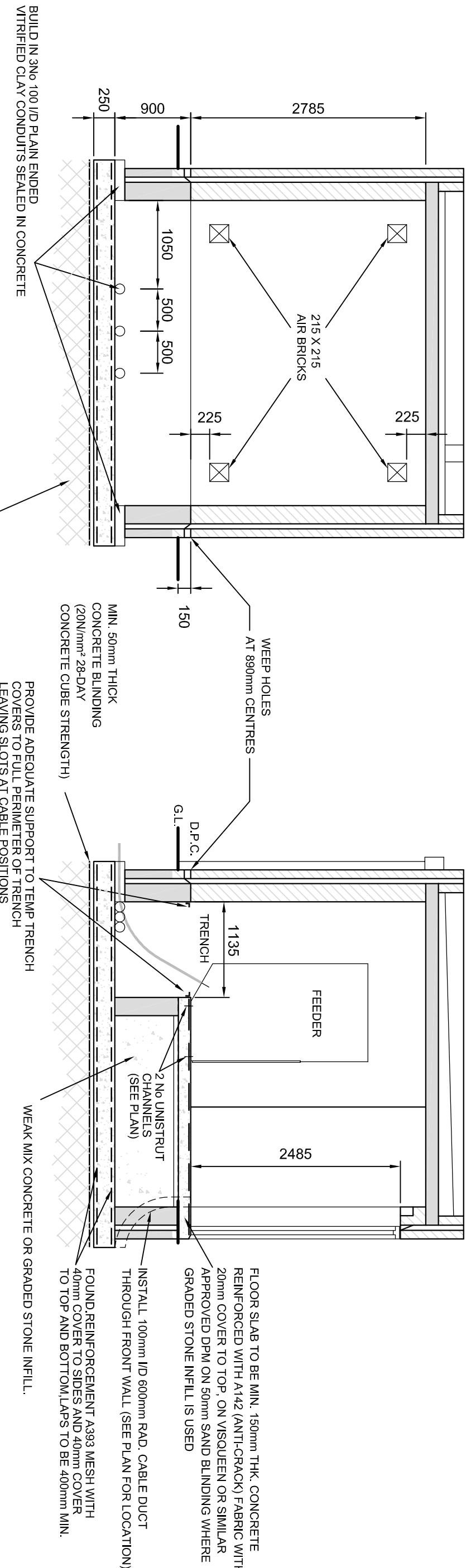
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REAR ELEVATION

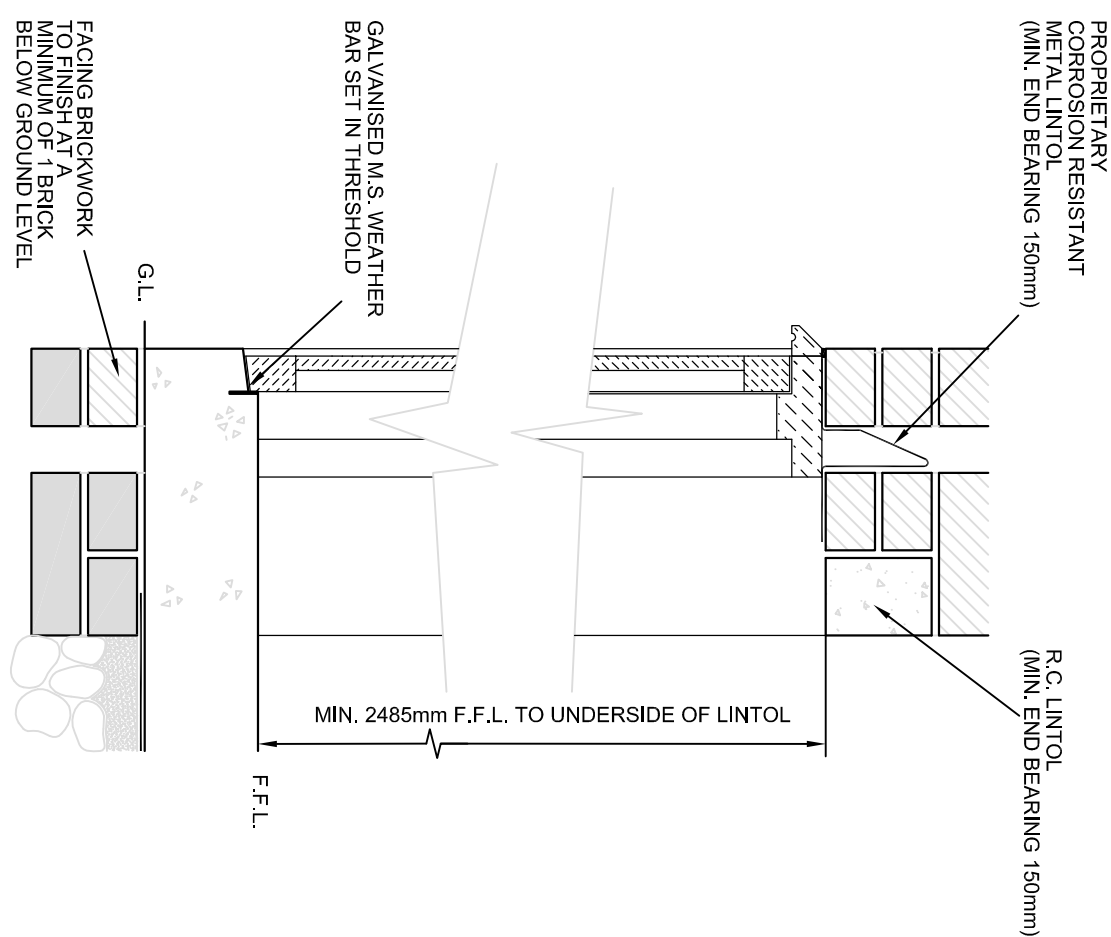


SIDE ELEVATION

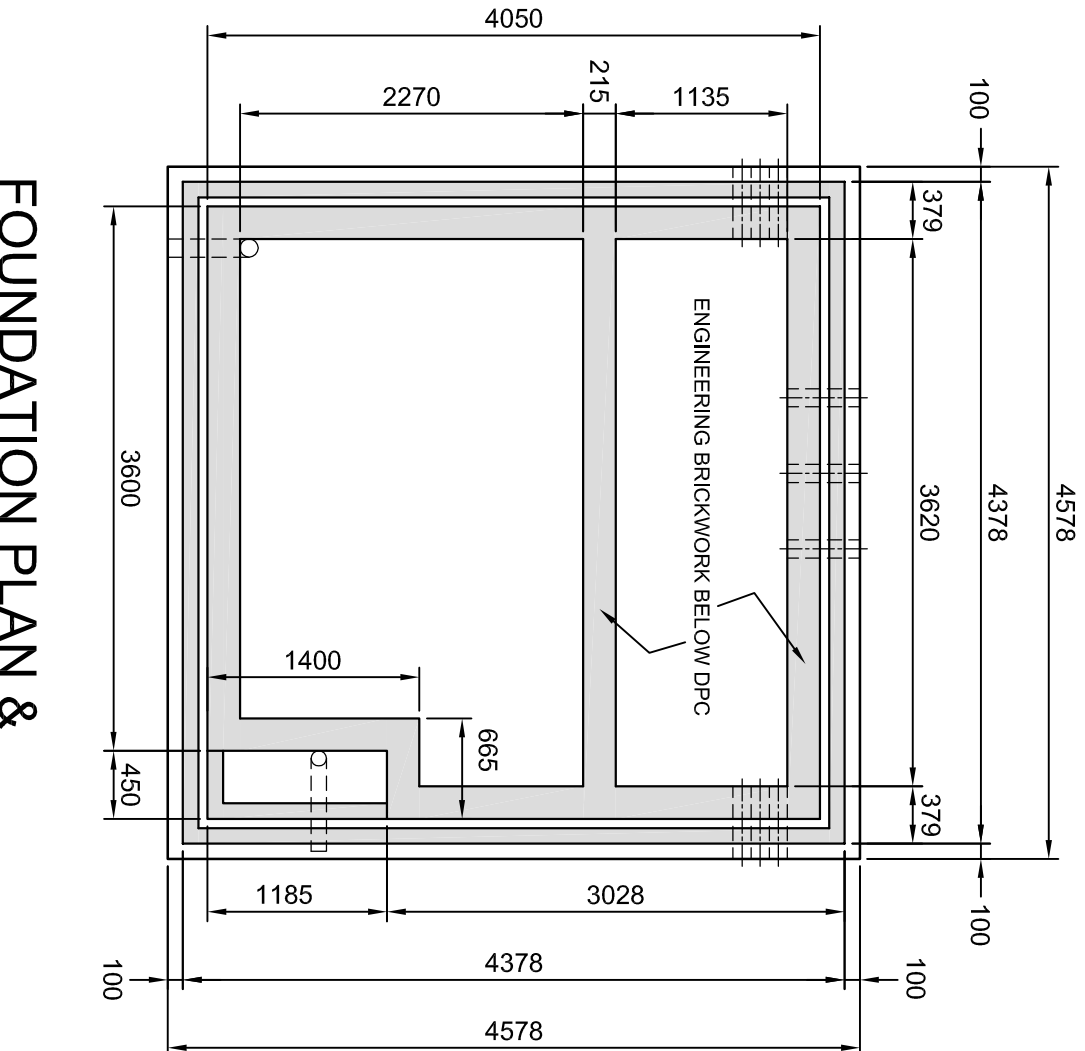


SECTION A-A

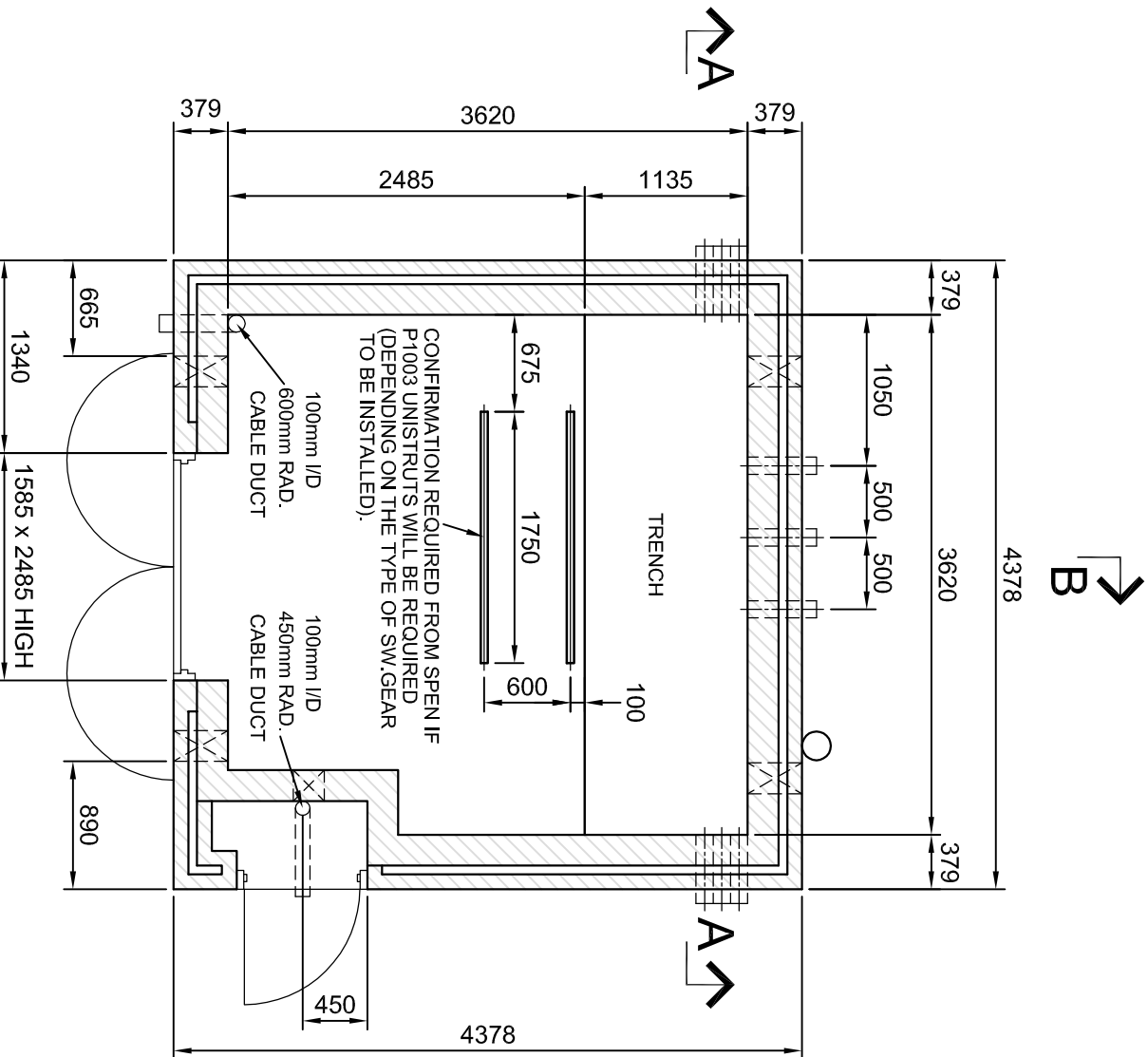
SECTION B-B



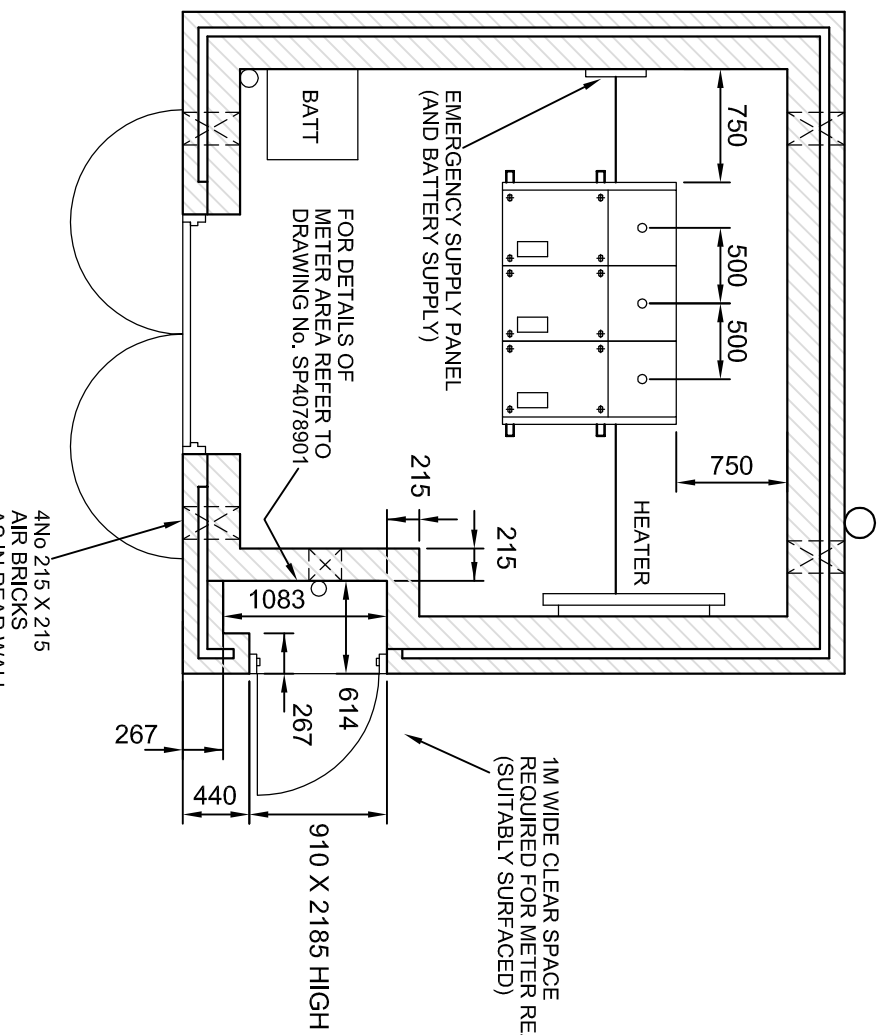
DOUBLE DOORWAY SECTION
Scale 1:10



FOUNDATION PLAN &
BRICKWORK BELOW F.F.L.



PLAN



PLAN OF PLANT

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