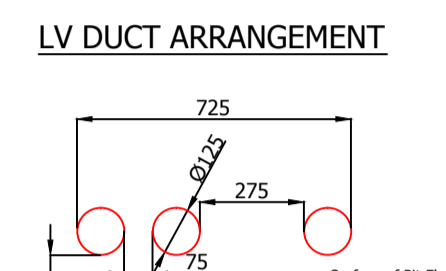
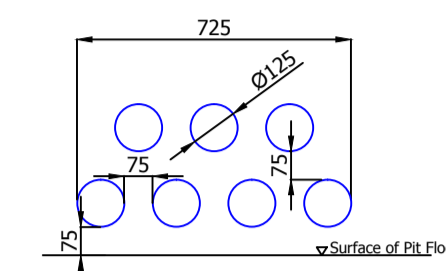
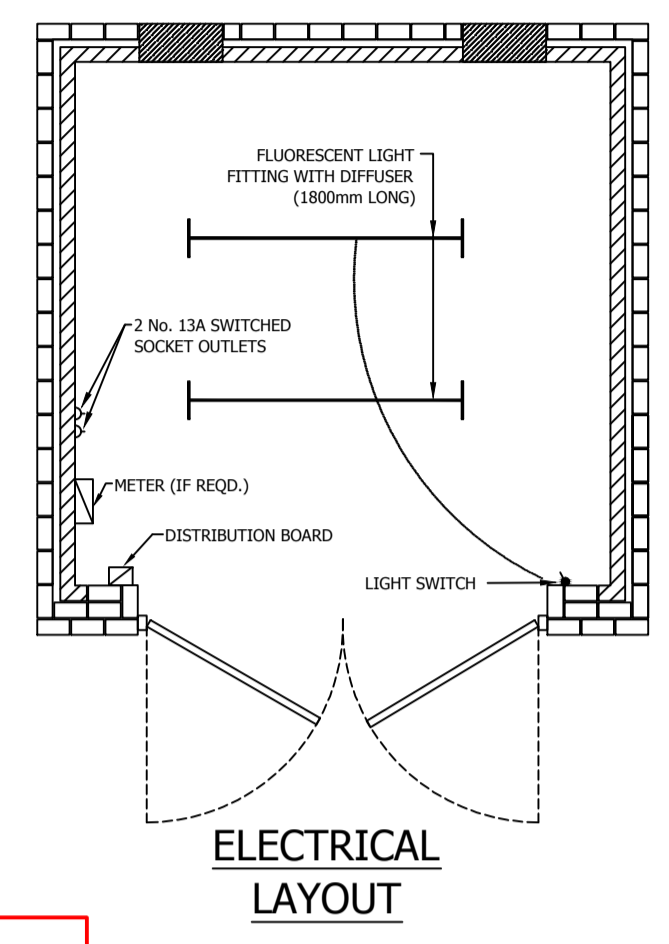
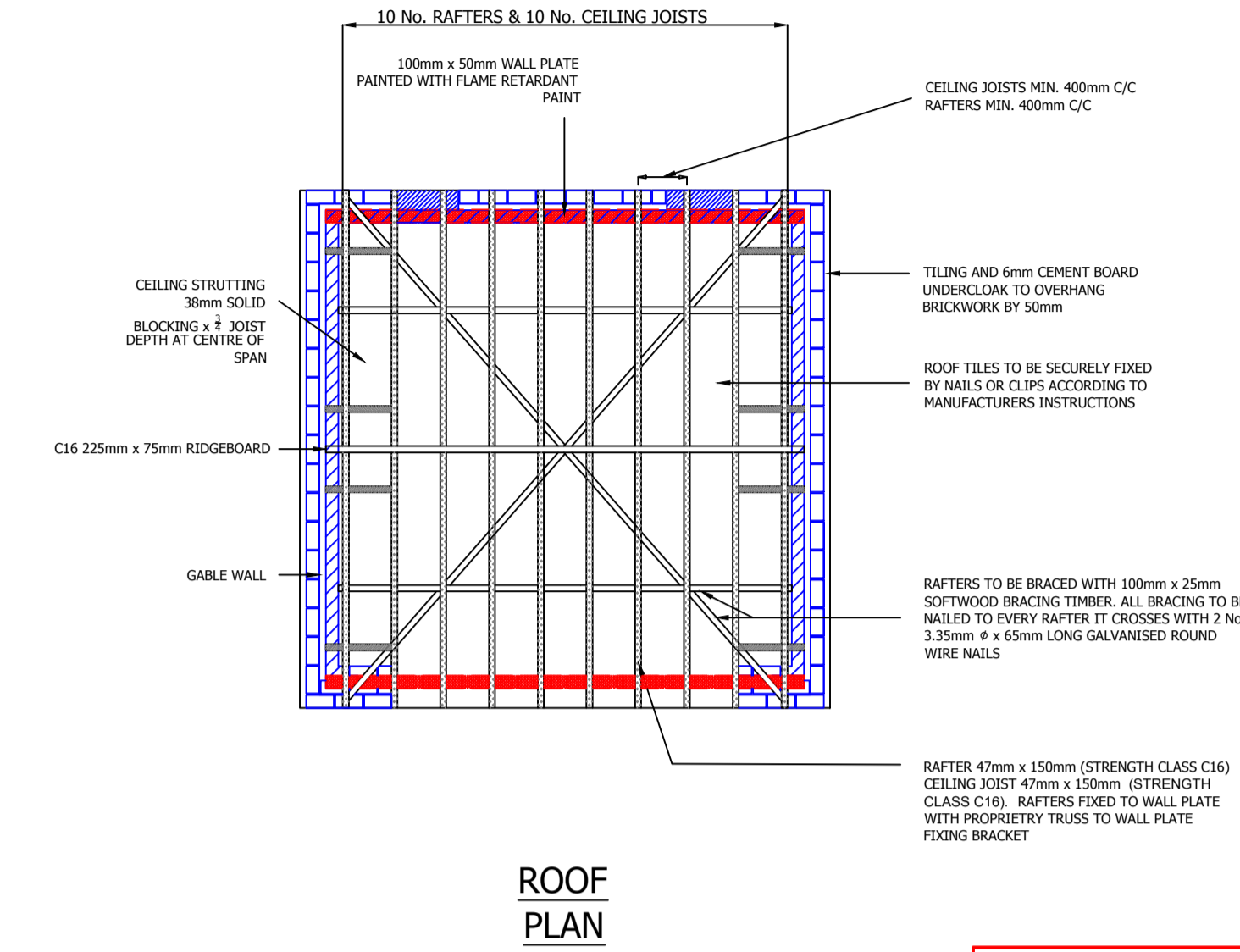
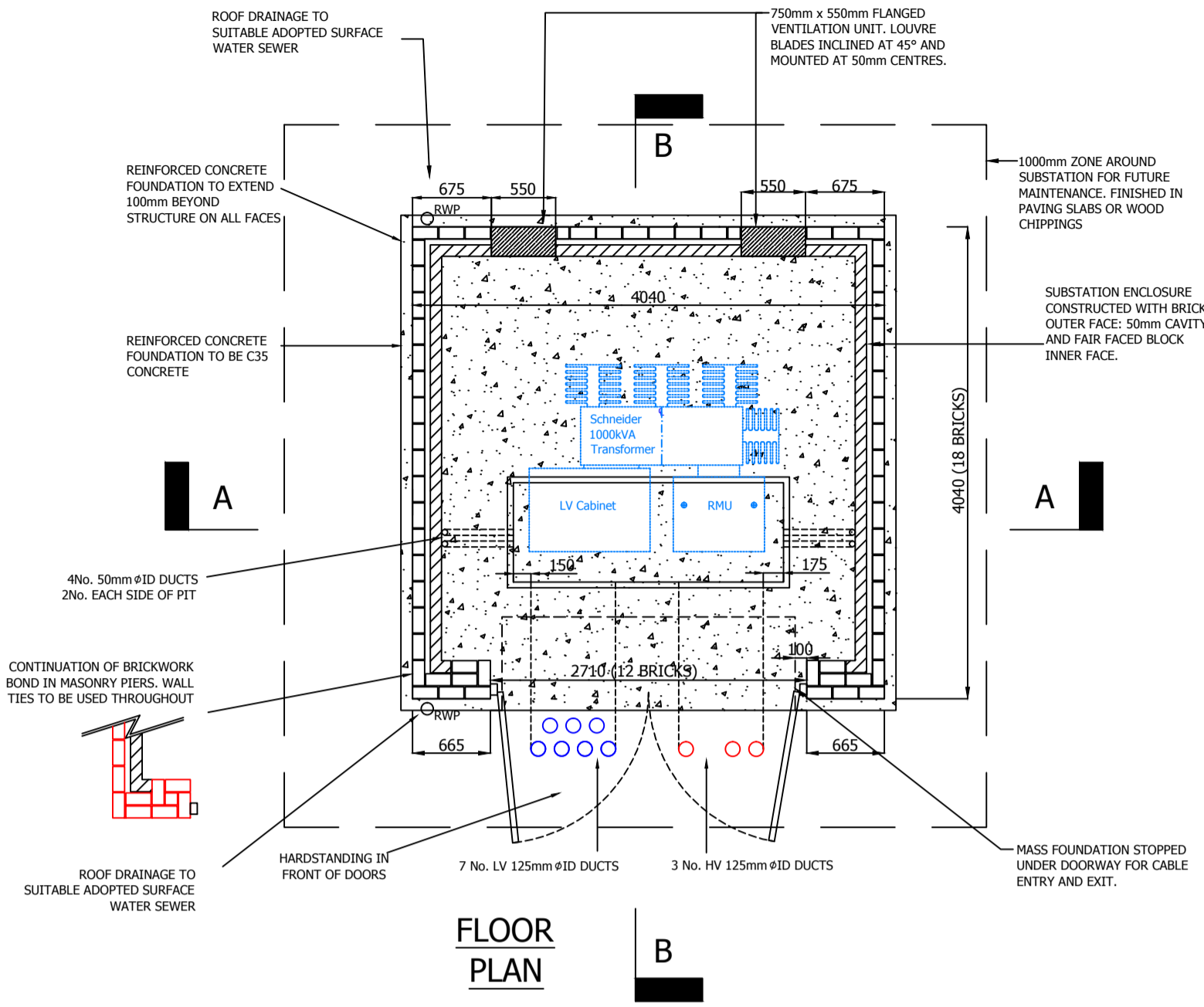


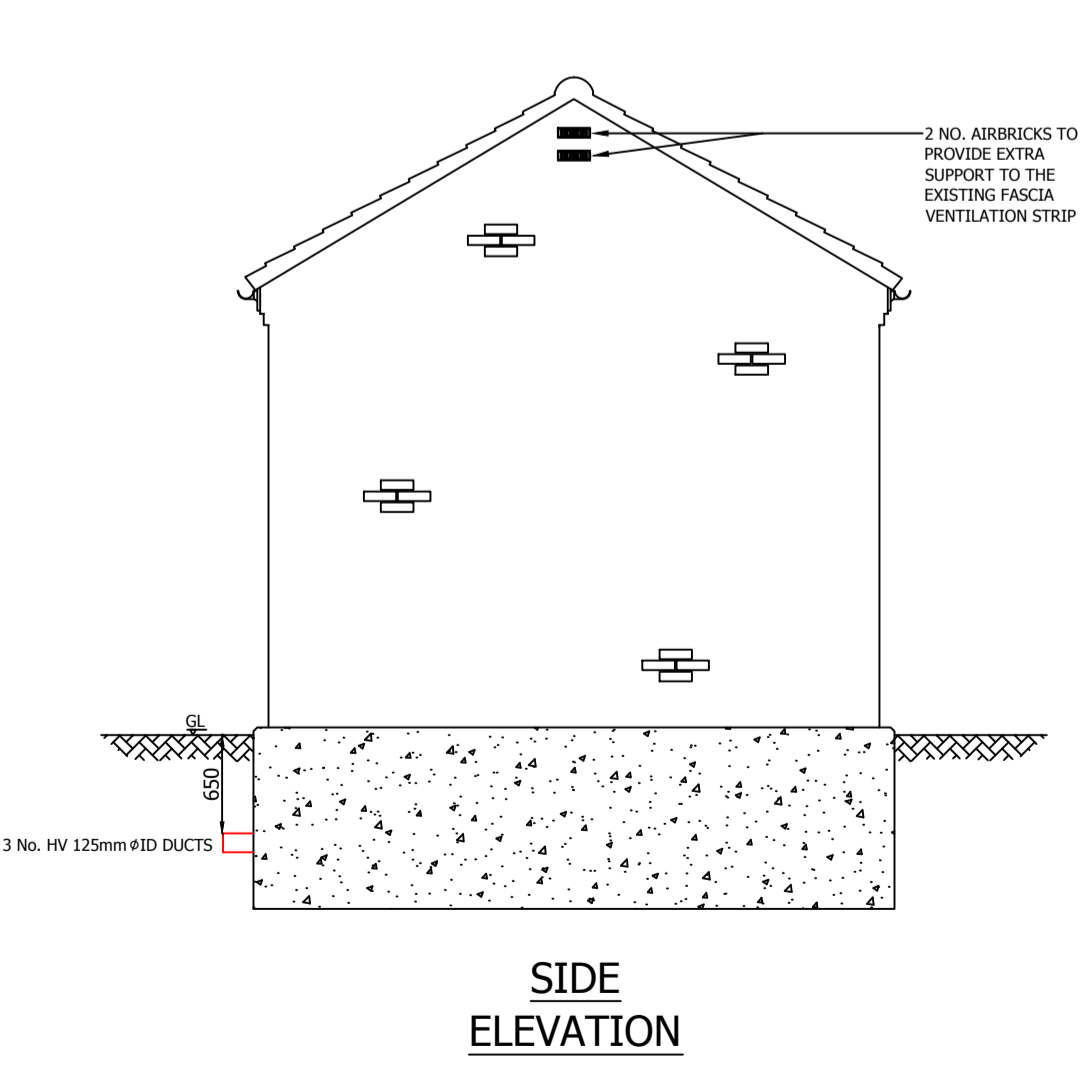
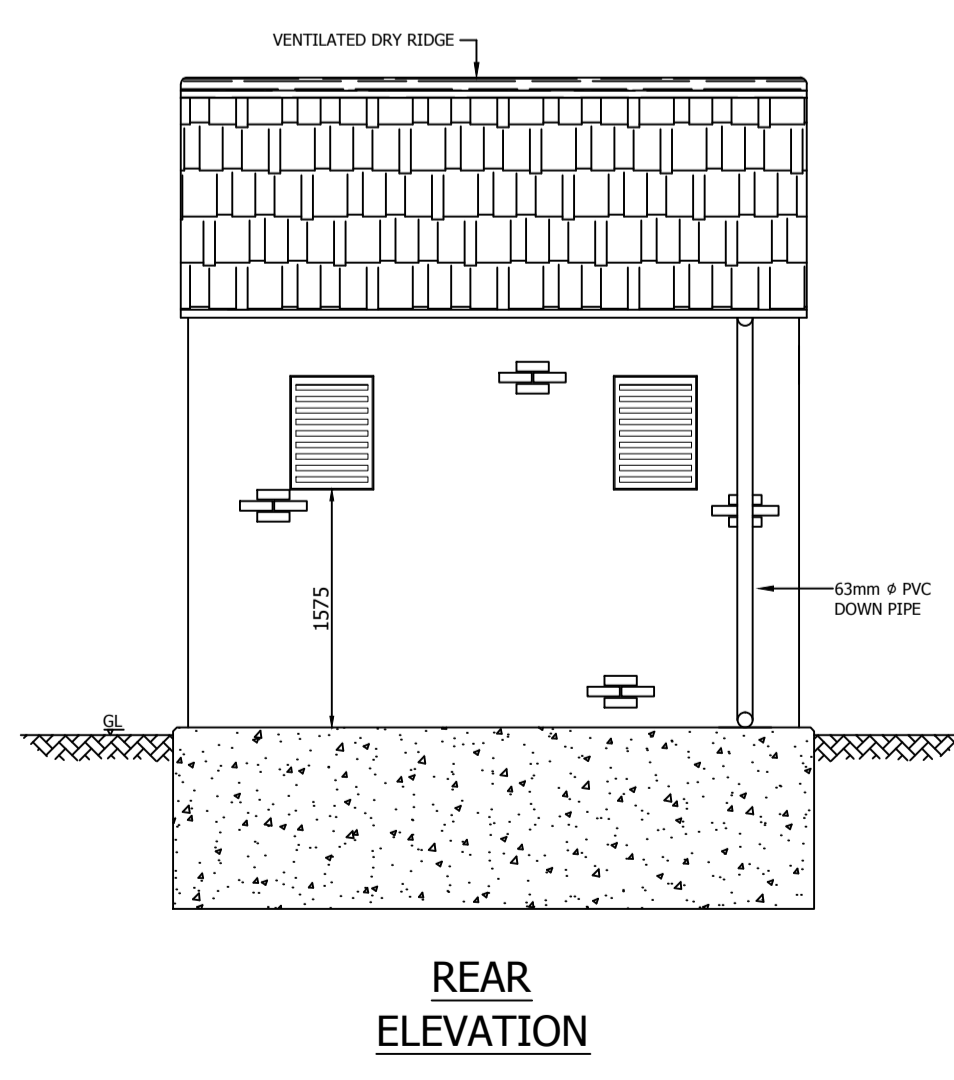
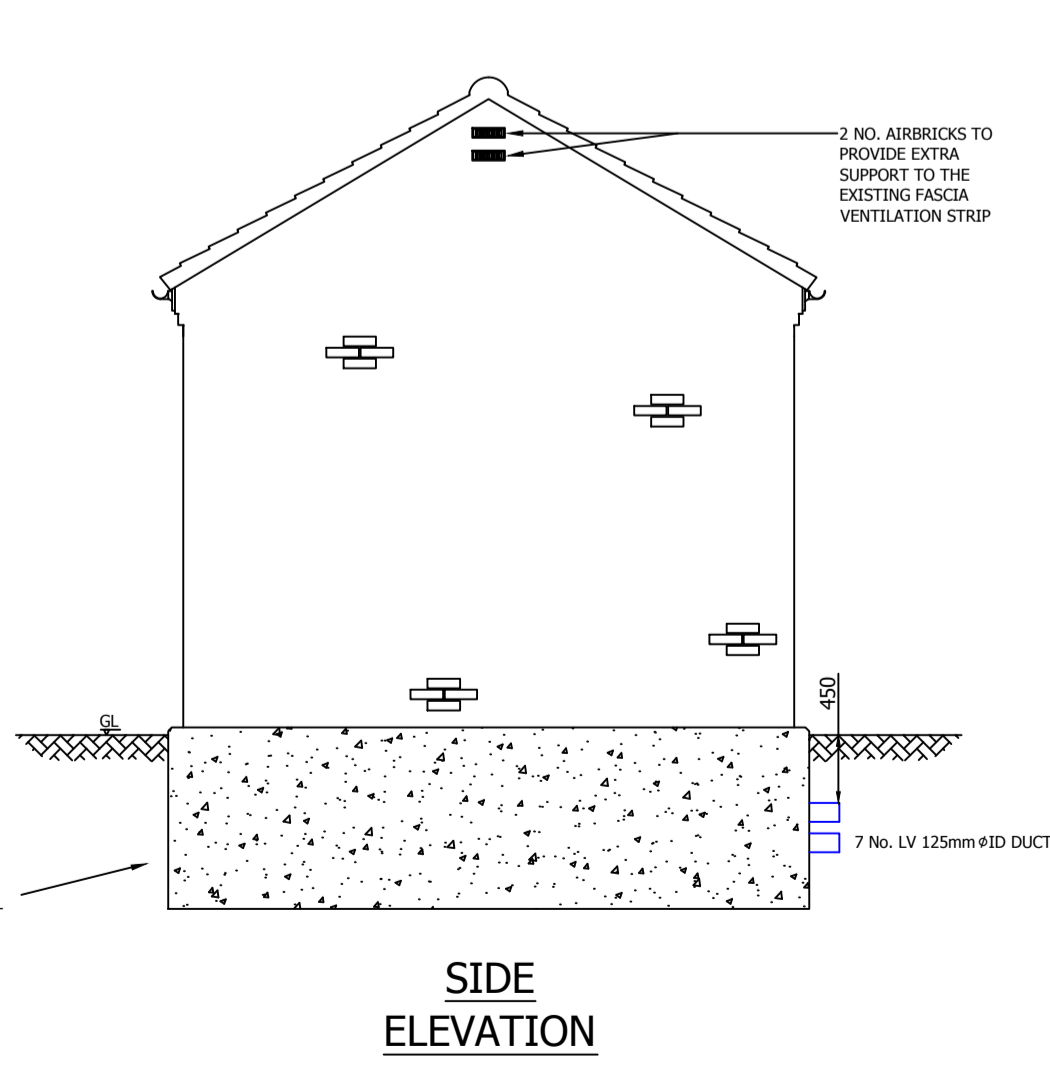
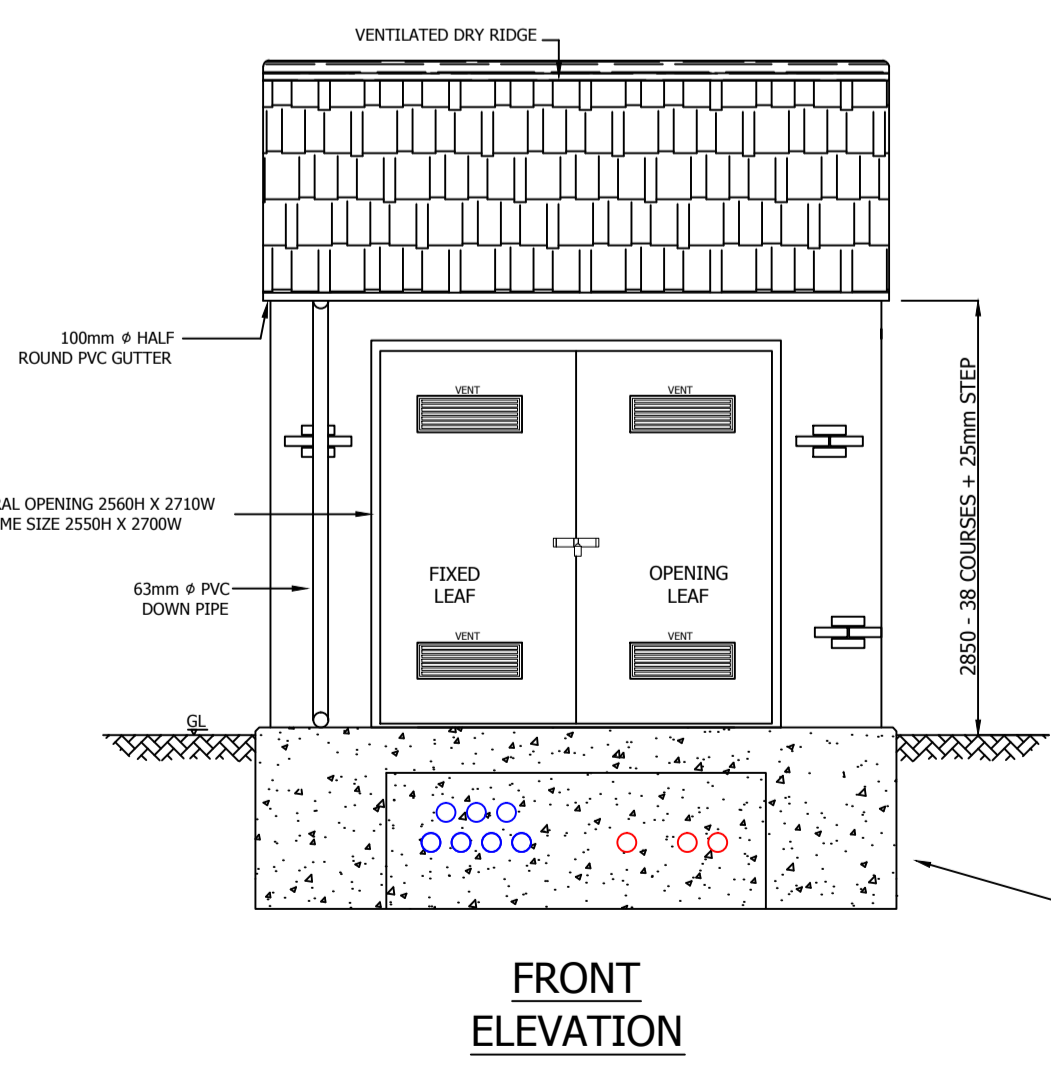
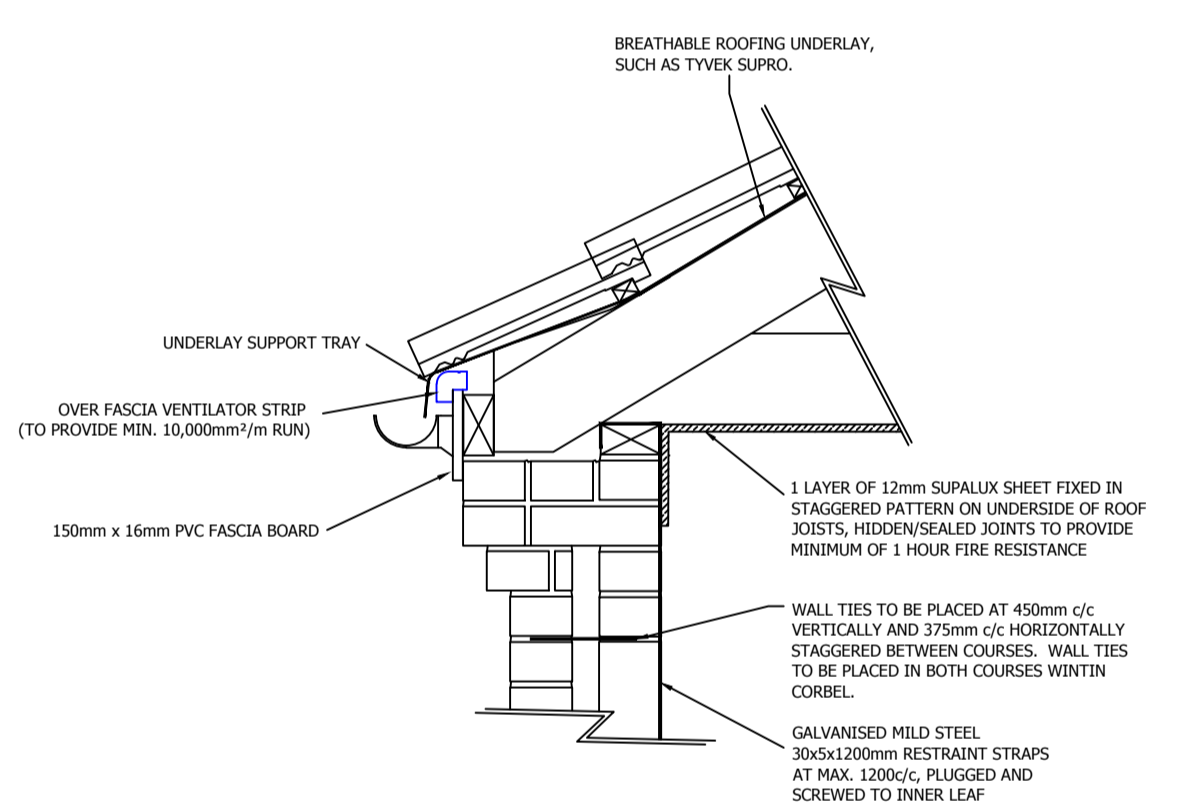
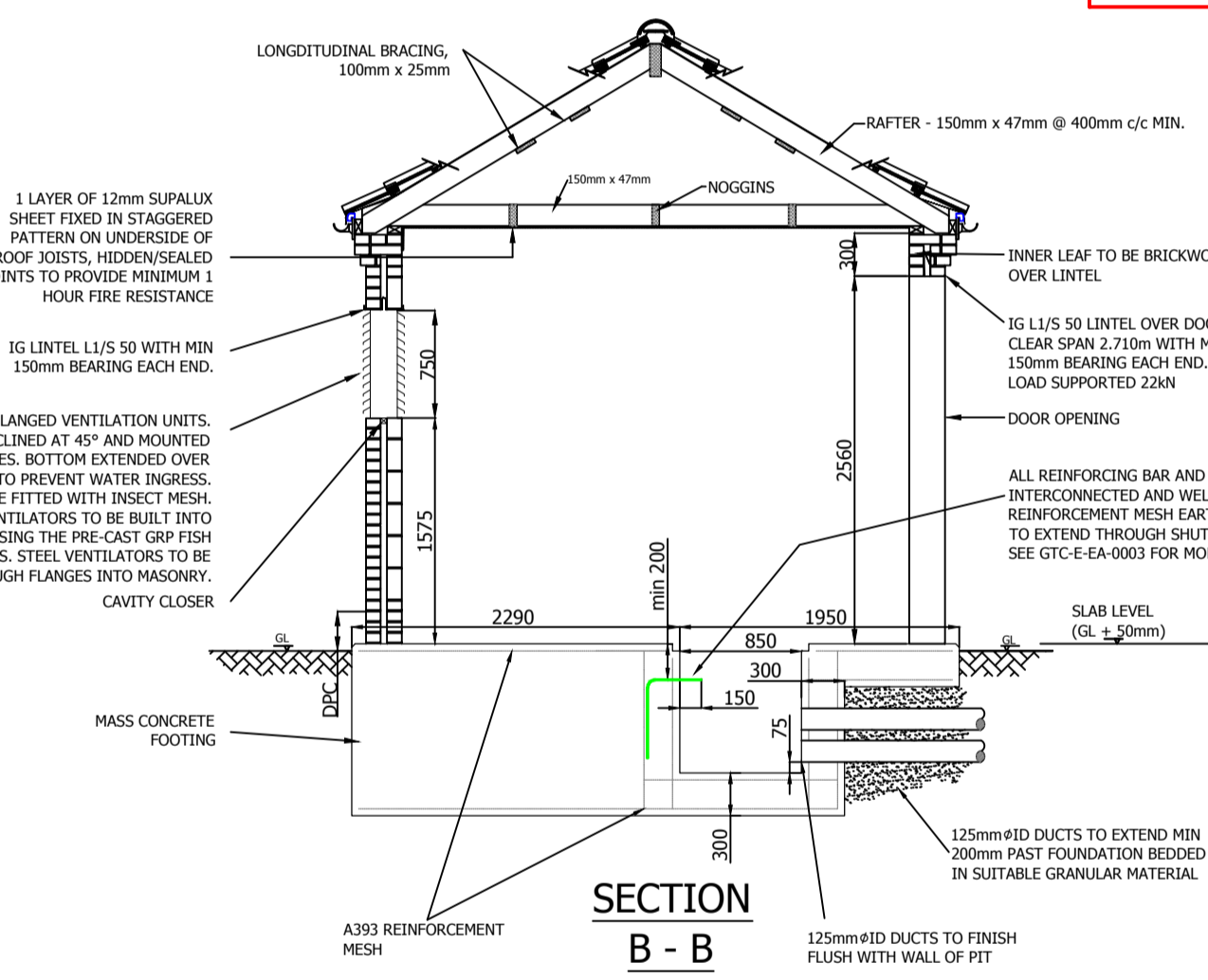
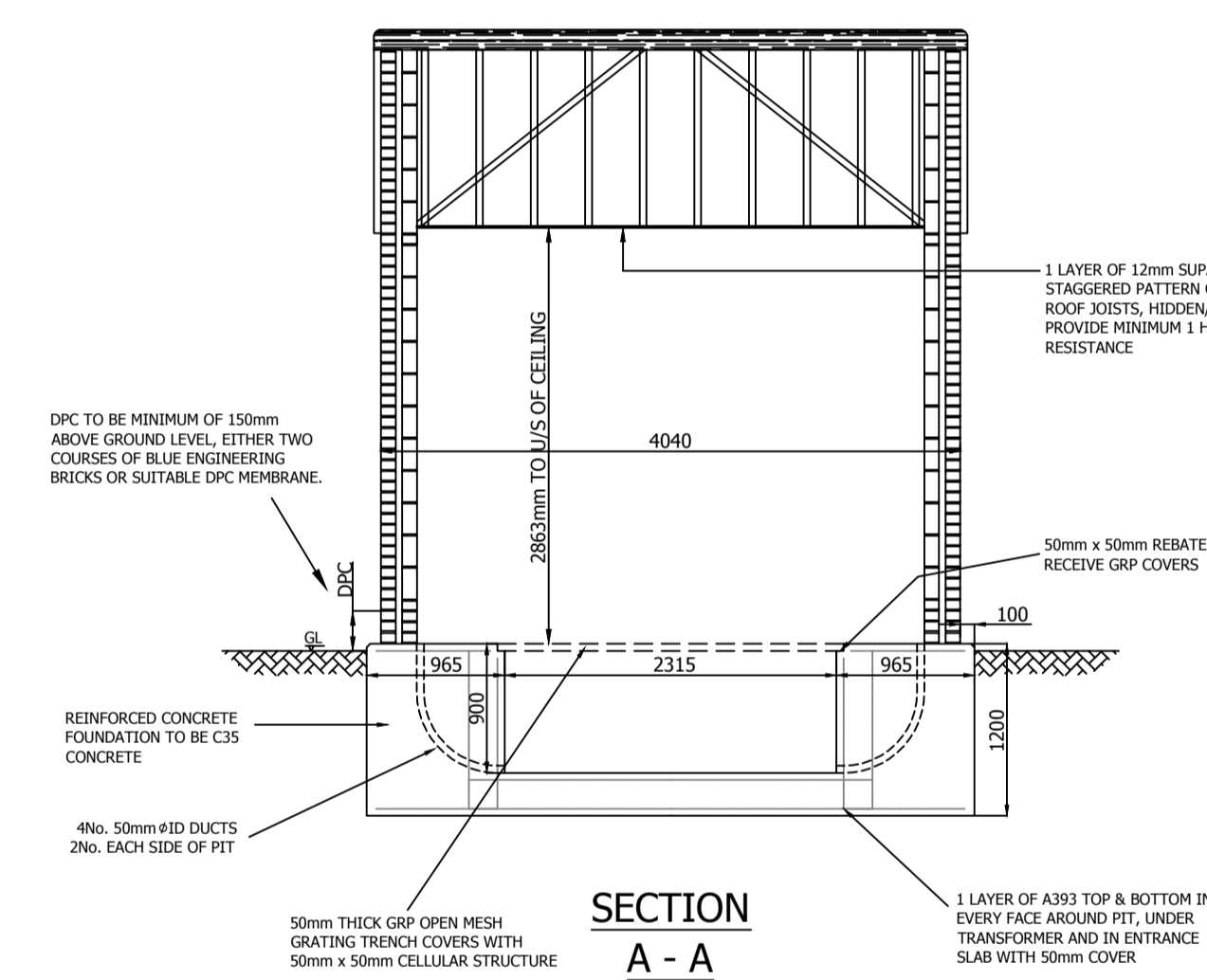
Rev	Revision Note	Date	Drawn by	Approved
1	First Issue	22/02/10	DS	MS
1-1	Section A - A Dimensions Amended	06/04/10	JS	DO
1-2	Door Structural opening height altered	15/06/10	NN	MS
1-3	Soldier course, door and guttering detail amended	19/08/10	DS	KB
1-4	Various general amendments plus changes to electrical notes.	13/01/11	AS	KB
1-5	Bundled foundation added	18/02/11	AS	MS
1-6	Dimension and Earthing Amendments	10/06/11	AS	MS
1-7	Door and Eaves details amended, ducts added	29/03/12	AS	MS

**APPROVED FOR CONSTRUCTION**



- NB:**
- ALL DUCT SIZES REFER TO INTERNAL DIAMETER
  - DUCTS SHOWN AS VIEWED FROM INSIDE PIT
  - SCALE : 1:20

**FOR MORE FOUNDATION DETAIL PLEASE REFER TO GTC SUBSTATION DRAWING GTC-E-EA-0003 AND SUBSTATION DOCUMENT EIN0012**



**GENERAL NOTES**

- IF IN DOUBT - ASK !!! DO NOT SCALE
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER ENGINEERING DRAWINGS IN THIS SERIES AND THE GTC SUBSTATION SPECIFICATION.
- 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.

**ELECTRICAL NOTES**

THE SUPPLY FOR THE SUBSTATION POWER AND LIGHTING WILL BE TAKEN FROM THE TRANSFORMER MOUNTED FUSE CABINET AUXILIARY FUSE WAY USING 6mm² COPPER SWA PVC CABLE TO SUPPLY A SINGLE PHASE 13A SWITCHED LIGHTING OUTLET MOUNTED BELOW THE POWER AND LIGHTING FUSE BOARDS. THIS WILL FEED A 100A CONSUMER UNIT WITH A MAINSWAY OF 4 MCB CONTROLLED WAYS (2No 16A FOR POWER AND 2No 6A FOR LIGHTING WITH A SPARE 16A WAY FOR SPECIAL REQUIREMENTS SUCH AS SCADA OR REMOTE ACTUATOR UNITS. EACH OUTGOING WAY WILL BE LABELLED TO IDENTIFY CIRCUITS.

ALL INTERNAL WIRING TO BE CONTAINED IN 20mm HIGH IMPACT BLACK PVC CONDUIT AND ALL ACCESSORIES WILL BE NON METALLIC HIGH IMPACT AND FULLY INSULATED AND WEATHERPROOF AND SOURCE FROM A QUALITY MANUFACTURER (e.g. MEM OR MK).

TWO 13A SWITCHED SOCKET OUTLETS WITH 30mA RCD PROTECTION WILL BE PROVIDED IN A CONVENIENT LOCATION ON THE LEFT HAND SIDE OF THE SUBSTATION.

TWO 1800mm FLUORESCENT LAMP UNITS WITH POLYCARBONATE COVERS TO AT LEAST IP56 SPECIFICATION WILL BE FITTED TO THE CEILING AND CONTROLLED BY A NON METALLIC FULLY INSULATED LIGHTING SWITCH FITTED 1350mm ABOVE FINISHED FLOOR LEVEL ADJACENT TO THE FIRST LEAF OPENING DOOR. FOR GRP ROOFED SUBSTATIONS WALL MOUNTED BULKHEAD LIGHTS WILL BE FITTED.

THE SOCKETS ARE TO BE WIRED IN 2.5mm² COPPER CABLE AND THE LIGHTING WIRED IN 1.5mm² COPPER CABLE.

THE ELECTRICAL INSTALLATION IS TO BE IN ACCORDANCE WITH THE CURRENT EDITION OF BS7671 - IEE WIRING REGULATIONS

**FOR SUBSTATIONS WITH SEPARATE HV AND LV EARTHING (HOT EARTHING)**

CARE MUST BE TAKEN WITH LIGHTING AND SOCKET SUPPLIES TO AVOID THE POSSIBILITY OF MAKING CONTACT BETWEEN DIFFERENT EARTHING SYSTEMS.

AT HOT SITES ALL FITTINGS, SWITCHES AND CONDUIT MUST BE NON METALLIC AND FULLY INSULATED TO THE SPECIFICATION ABOVE.

ALL 13A SOCKETS (INCLUDING SOCKET OUTLETS IN THE TRANSFORMER MOUNTED FUSE CABINET) MUST BE PROTECTED BY A 30mA RCD WITH THE EARTH TERMINAL CONNECTED TO THE HV STEELWORK.

LIGHT SWITCH  
 13A SWITCHED SOCKET OUTLET  
 DISTRIBUTION BOARD  
 FLUORESCENT LIGHT (1800mm LONG) INCLUDING DIFFUSER

**APPROVED SUPPLIERS**

STANDARD GRP SUBSTATION DOORS, VENTILATORS AND GRP TRENCH COVERS:  
 ENVIRO MANUFACTURING, OBTAINED FROM:  
 UTILITY POWER SYSTEMS, CARWOOD ROAD, CHESTERFIELD TRADING ESTATE,  
 CHESTERFIELD S41 9QB  
 Tel: 01246 202660  
 Fax: 01246 455915  
 Contact: JON TAYLOR

STEEL DOORS AND VENTILATORS AND GRP TRENCH COVERS:  
 SUNRAY ENGINEERING LTD, KINGSNORTH INDUSTRIAL ESTATE, WOOTTON ROAD,  
 ASHFORD, KENT TN23 6LL  
 Tel: 01223 639039  
 Fax: 01223 625137  
 Email: SALES@SUNRAYDOORS.CO.UK

CADWELDING SYSTEM  
 ERICO, 52 MIL FORD ROAD, READING, BERKSHIRE, R1 8J  
 Tel: 01189 588386

Drawing Scale : 1:50  
 O.S.REF : N/A  
 Network Number : N/A  
 Drawing Number : GTC-E-SS-0010\_R1-7\_1\_of\_1  
 Substation Type: CLOSE COUPLED SUBSTATION  
 SIDE GABLED ROOF DETAIL  
 GENERAL ARRANGEMENT

