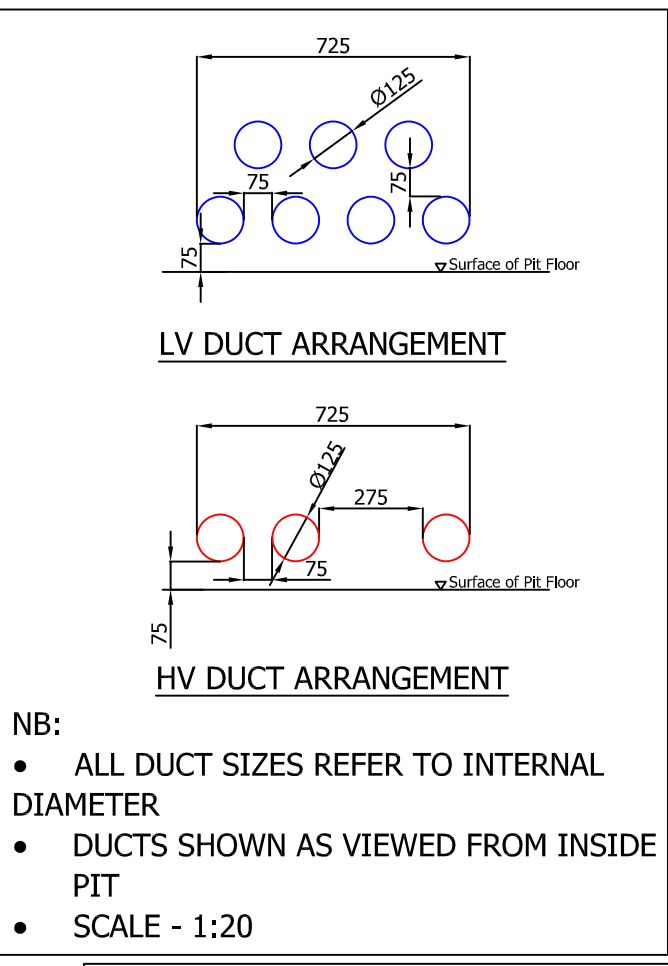
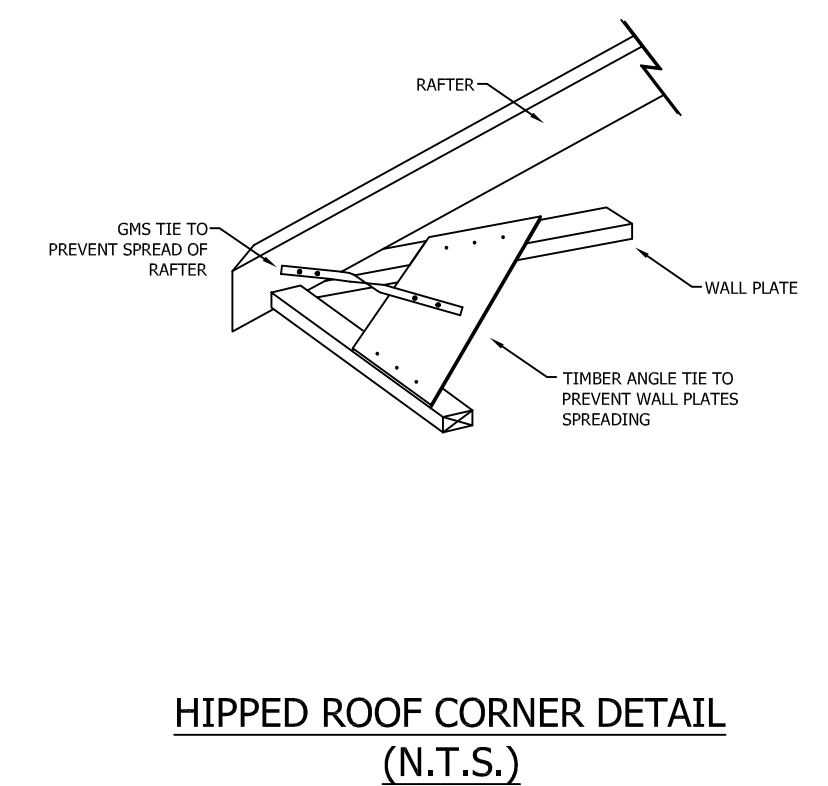
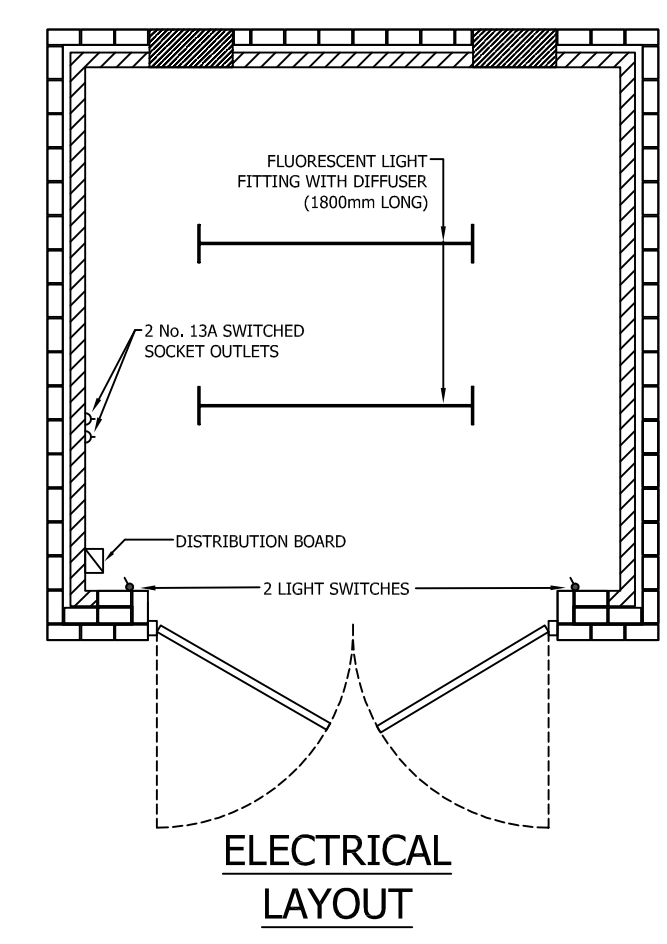
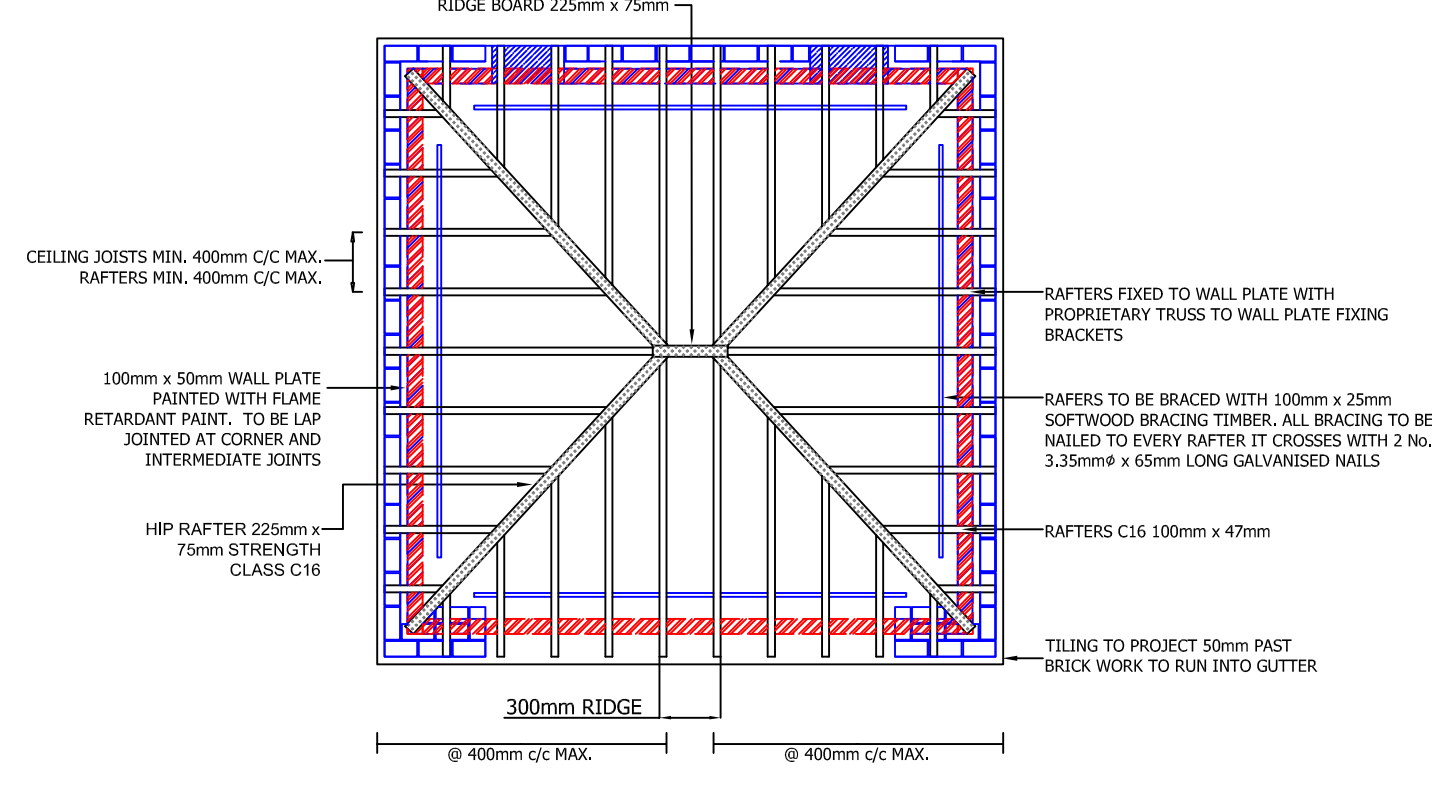
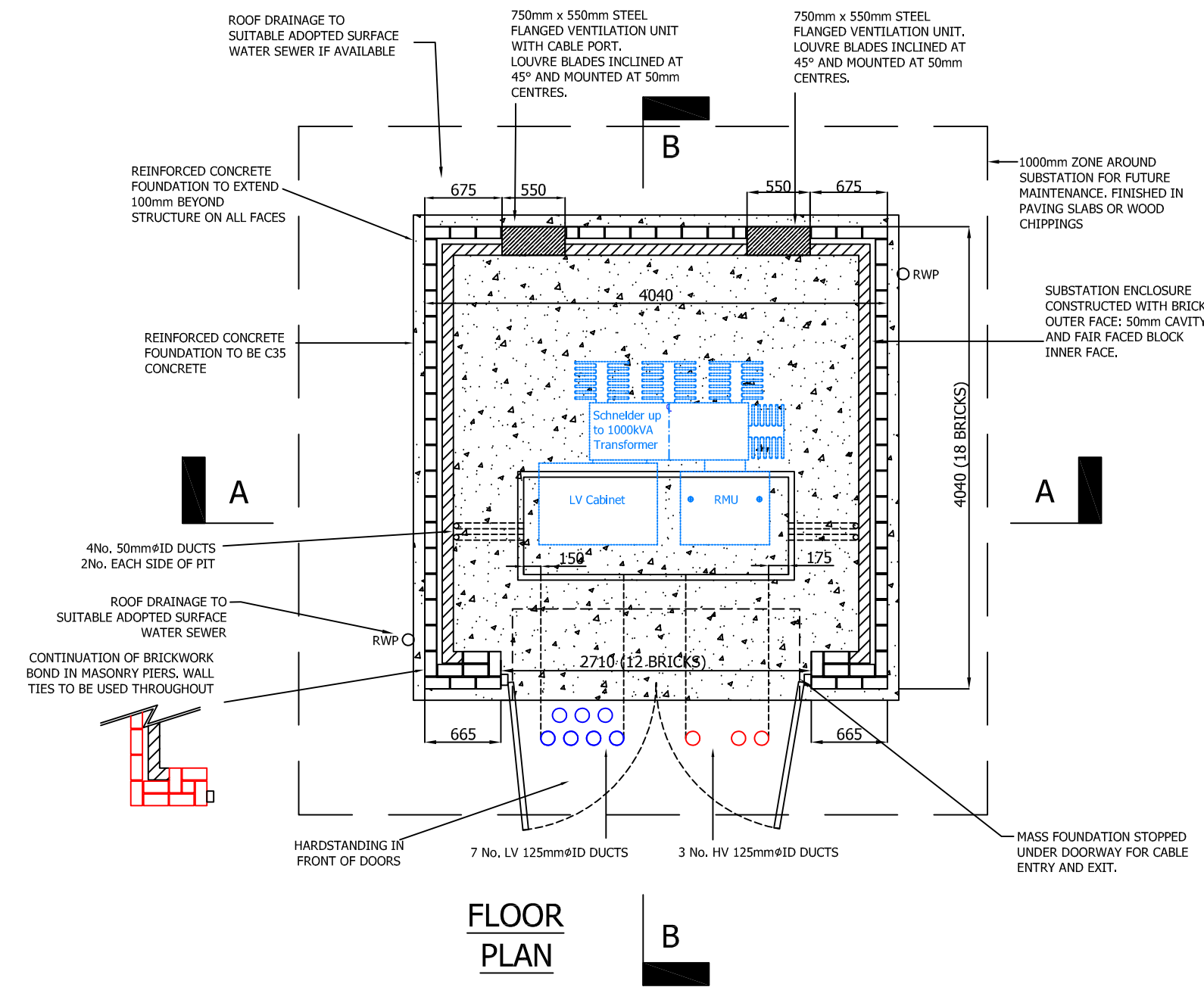
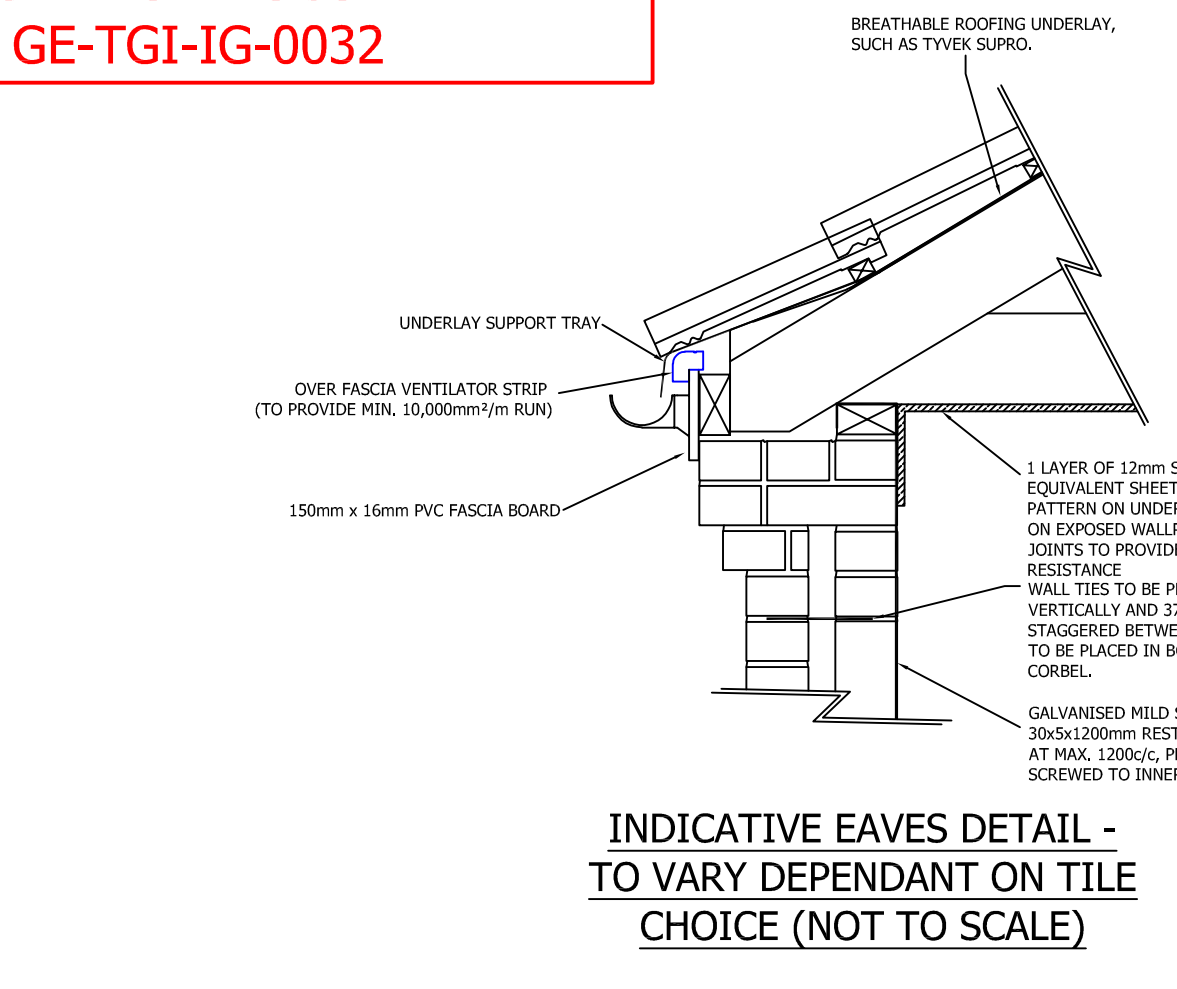
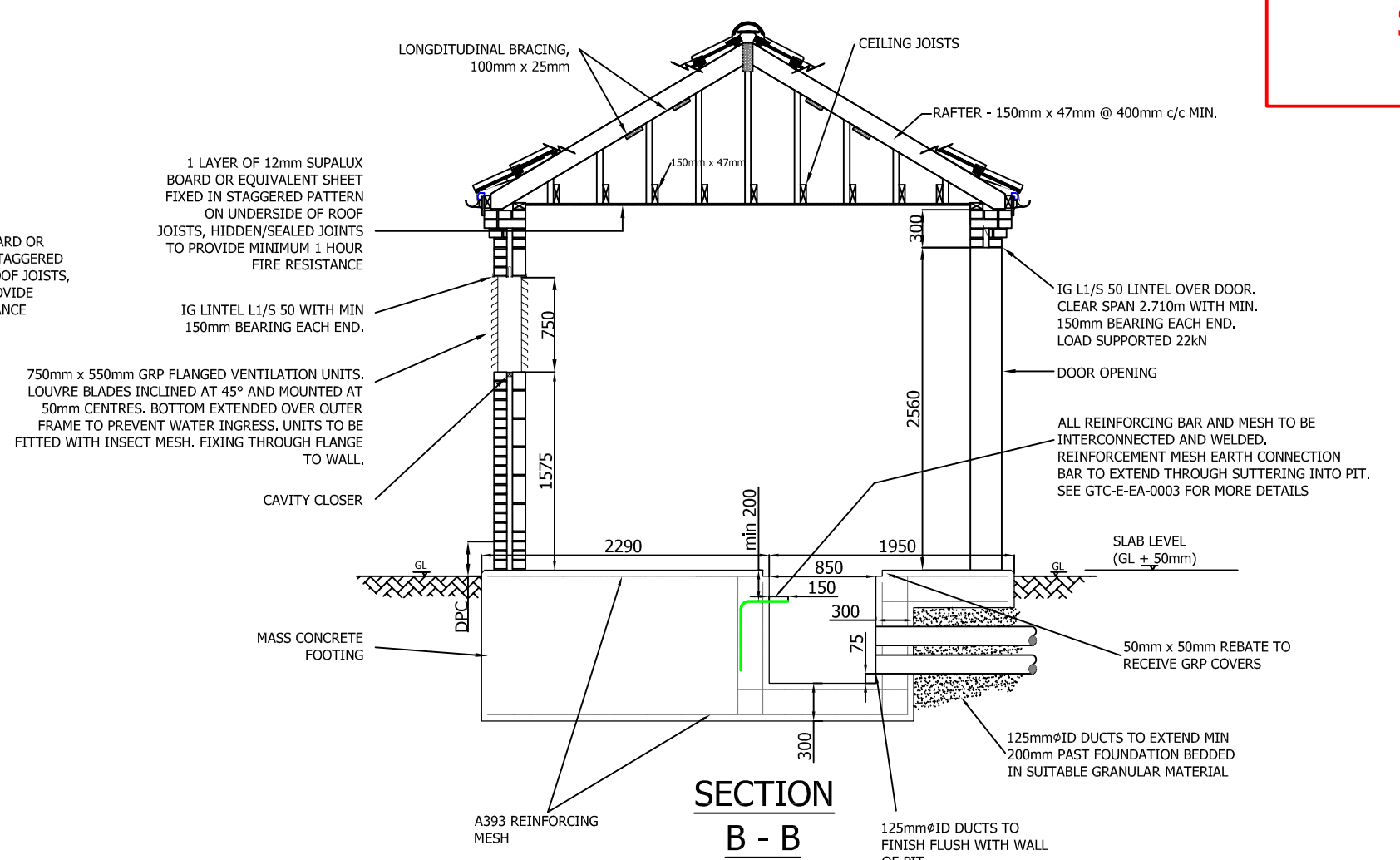
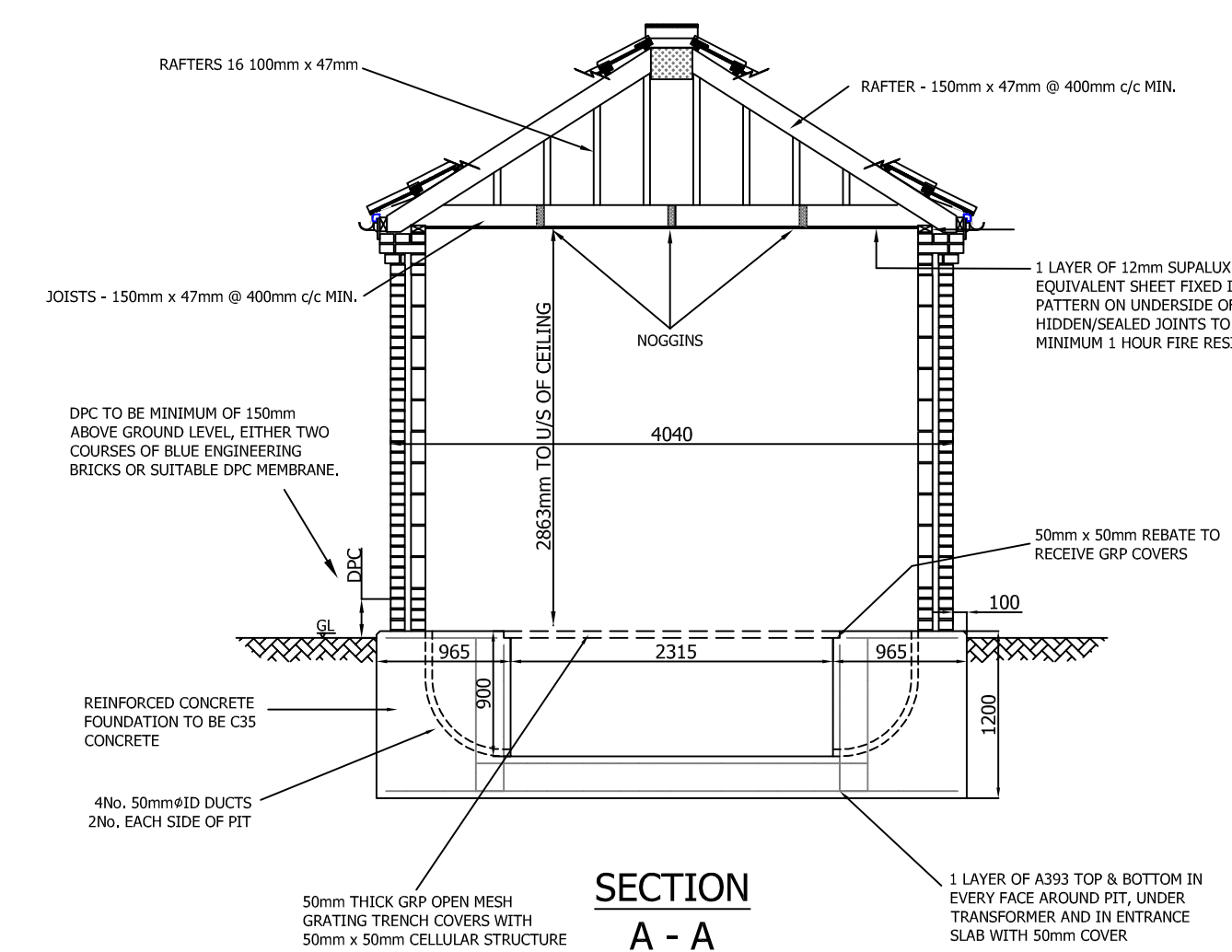


**APPROVED FOR CONSTRUCTION**

Rev	Revision Note	Date	Drawn by	Approved
1-5	Bundled foundation and various general amendments 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
1-8	Wording of sub station stamp amended	10/09/14	SW	MS
1-9	Full review of materials and fittings, subsequent updates and amendments made	10/04/18	MCU	MS
2-0	All instances of 'fire board' changed to 'supalux board or equivalent'	25/04/18	MS	MS
2-1	General notes updated	14/06/18	MS	MS

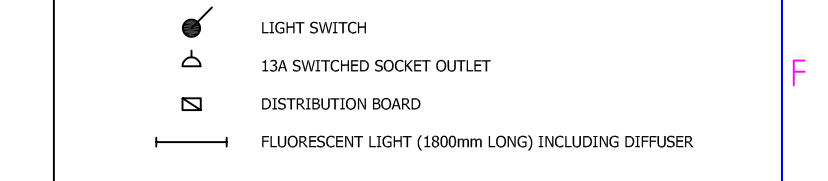


**FOR MORE FOUNDATION DETAIL PLEASE REFER TO GTC SUBSTATION DRAWING GTC-E-EA-0003 AND SUBSTATION DOCUMENT GE-TGI-IG-0032**

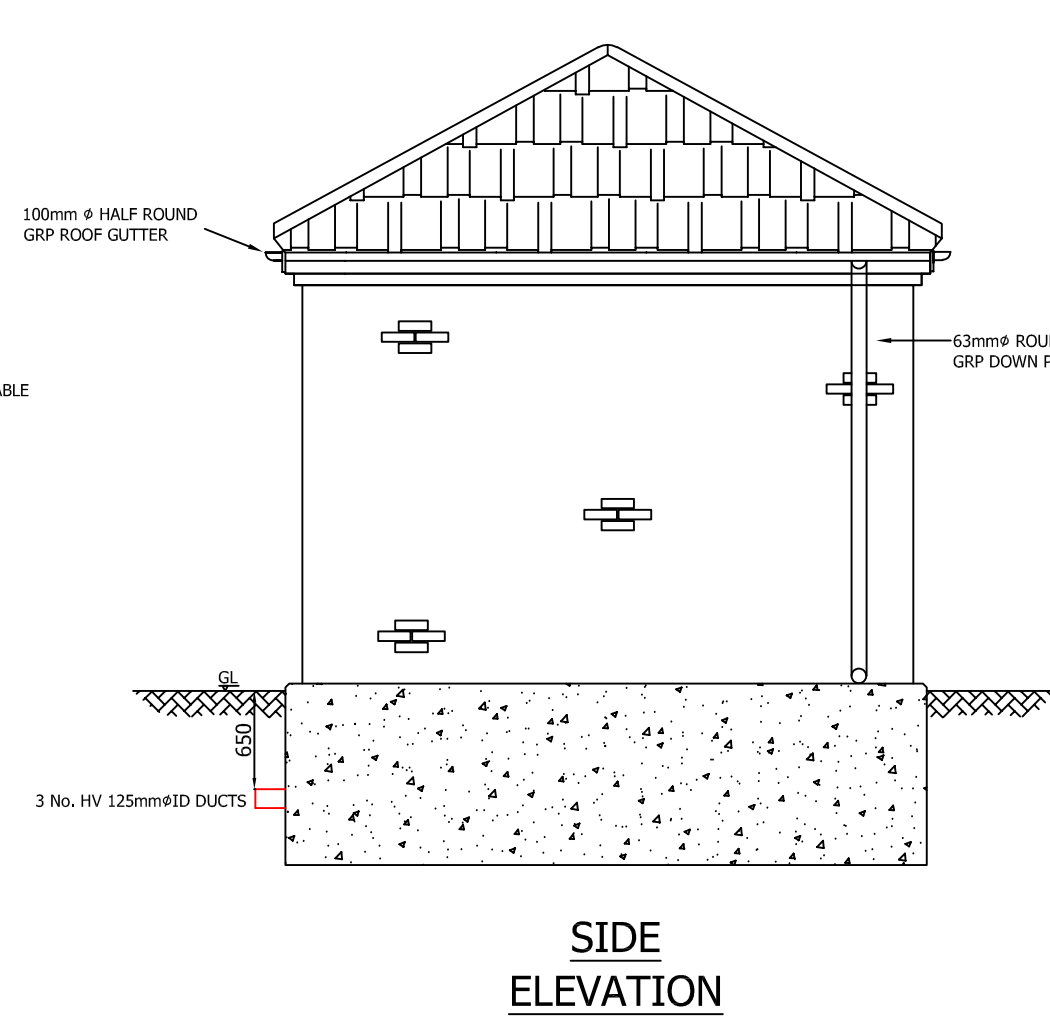
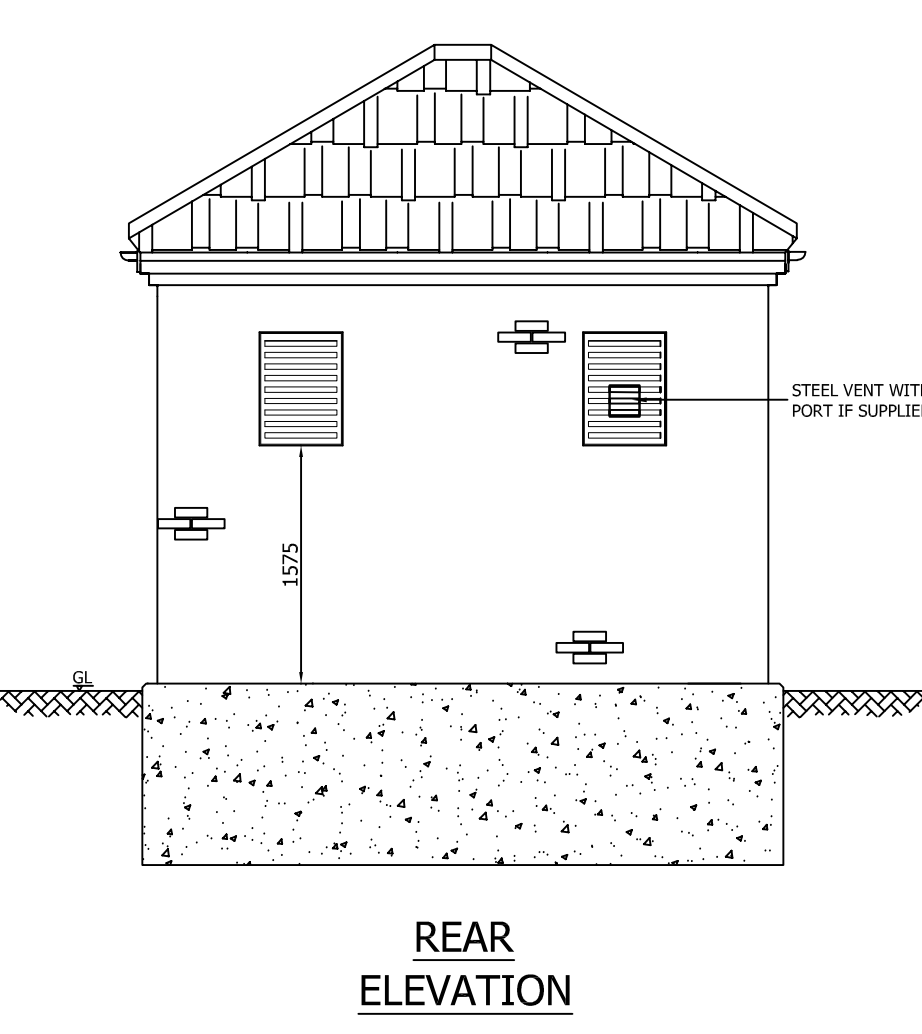
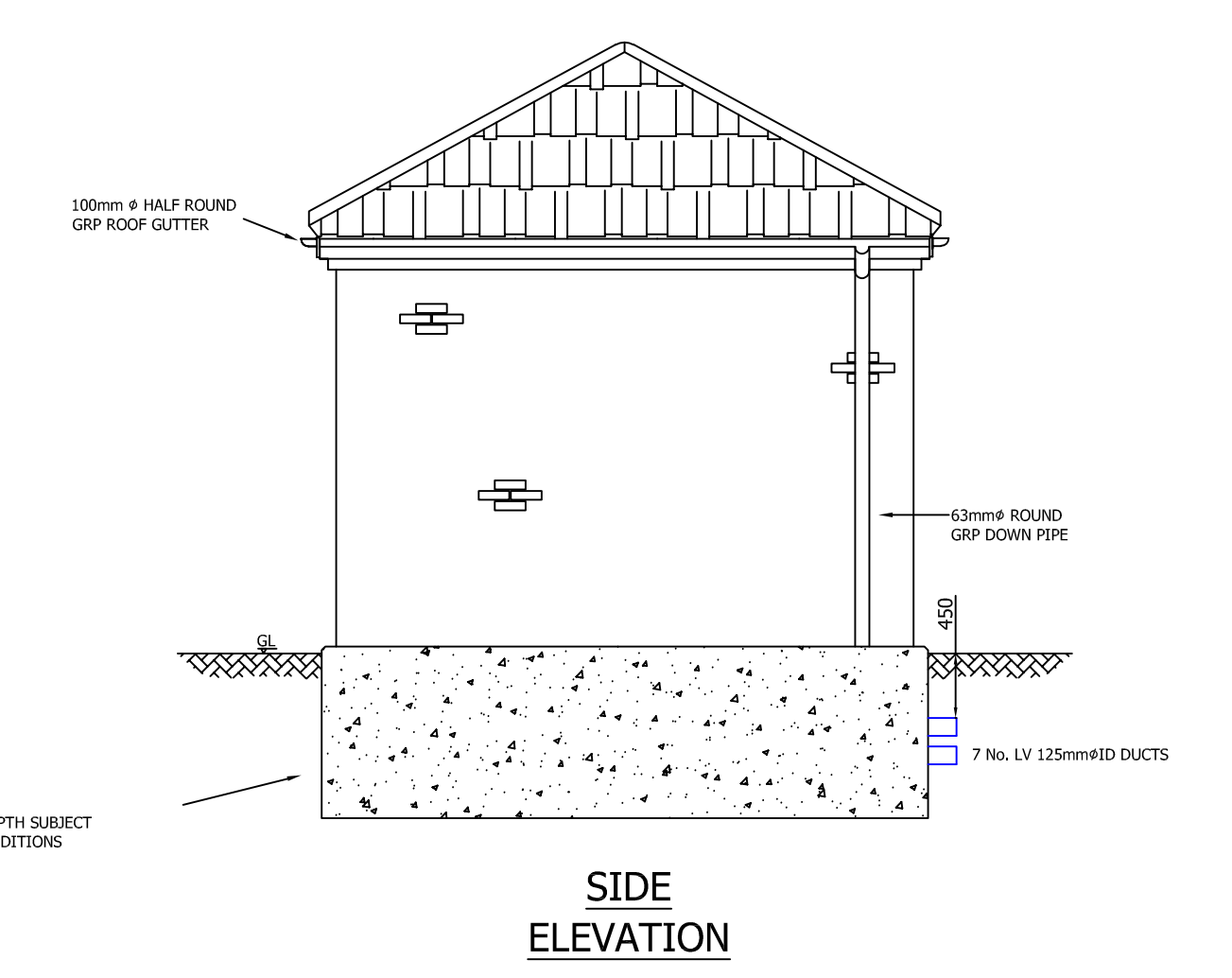
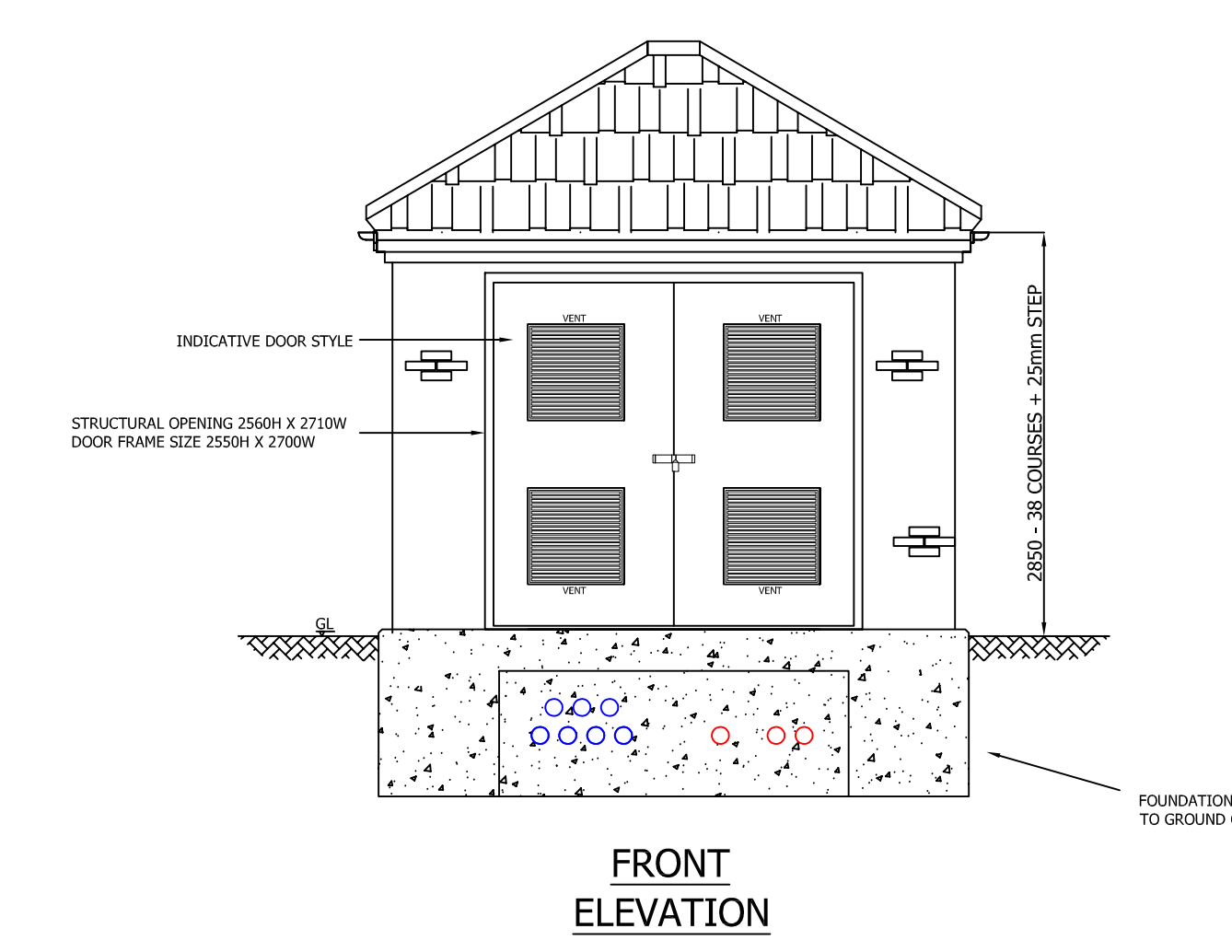


- GENERAL NOTES**
- IF IN DOUBT - ASK !!! DO NOT SCALE
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER ENGINEERING DRAWINGS IN THIS SERIES AND THE GTC SUBSTATION SPECIFICATION.
  - ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT BRITISH STANDARDS, CODES OF PRACTICE AND BUILDING 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.
  - IF REQUIRED, WATER CAPTURE RECESS OF DIMENSIONS 150mm X 150mm X 25mm TO BE CREATED IN CABLE PIT. MAXIMUM PERMISSIBLE DEPTH IS 25mm TO AVOID INTERFERENCE WITH REINFORCEMENT AND TO MAINTAIN FULLY BONDED PIT.

- ELECTRICAL NOTES**
- THE SUPPLY FOR THE SUBSTATION POWER AND LIGHTING WILL BE TAKEN FROM THE TRANSFORMER MOUNTED FUSE CABINET AUXILIARY FUSE WAY USING 6mm<sup>2</sup> COPPER SWA PVC CABLE TO SUPPLY A SINGLE PHASE 240V LIGHTING CIRCUIT MOUNTED BELOW THE POWER AND LIGHTING FUSE BOARD. THIS WILL FEED A 100A CONSUMER UNIT WITH A MINIMUM OF 4 MCB CONTROLLED WAYS (ONE 16A FOR POWER AND 3x 6A FOR LIGHTING WITH A SPARE IGA WAY FOR SPECIAL REQUIREMENTS SUCH AS SCADA OR REMOTE ACTUATOR UNITS. EACH OUTGOING WAY WILL BE LABELED 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. HEN OR N/A).
- 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 TWO-WAY NON METALLIC FULLY INSULATED LIGHTING SWITCH FITTED 150mm ABOVE FINISHED FLOOR LEVEL ON THE WALL ADJACENT TO EACH DOOR.
- THE SOCKETS ARE TO BE WIRED IN 2.5mm<sup>2</sup> COPPER CABLE AND THE LIGHTING WIRED IN 1.5mm<sup>2</sup> 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



- APPROVED SUPPLIERS**
- GTC APPROVED - GRP SUBSTATION DOORS, STEEL VENTILATORS AND GRP TRENCH COVERS  
WOLSELEY (FORMALLY UTILITY POWER SYSTEMS), CARWOOD ROAD, CHESTERFIELD TRADING ESTATE, CHESTERFIELD, DERBYSHIRE, S41 9QB  
Tel: 01246 251166  
Fax: 01246 459915  
Email: sales@utpsystems.co.uk
- GTC APPROVED - STEEL DOORS AND VENTILATORS AND GRP TRENCH COVERS  
SUNRAY ENGINEERING LTD, KINGSNORTH INDUSTRIAL ESTATE, WOOTTON ROAD, ASHFORD, KENT, TN23 4LL  
Tel: 01233 630039  
Fax: 01233 625137  
Email: sales@sunraydoors.co.uk
- GTC APPROVED - STEEL DOORS AND VENTILATORS  
BRADBURY ENGINEERING, DUNLOP WAY, QUEENSWAY INDUSTRIAL ESTATE, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 3RN  
Tel: 01724 271999  
Fax: 01724 271888  
Email: sales@bradbury.com



Drawing Scale : 1:50  
O.S.REF : N/A  
Network Number : N/A  
Project Number :  
Drawing Number : GTC-E-SS-0012\_R2-1\_1\_of\_1

**enc**  
the electricity network co.

CLOSE COUPLED SUBSTATION  
PYRAMID ROOF DETAIL  
GENERAL ARRANGEMENT

SHEET SIZE **A1**