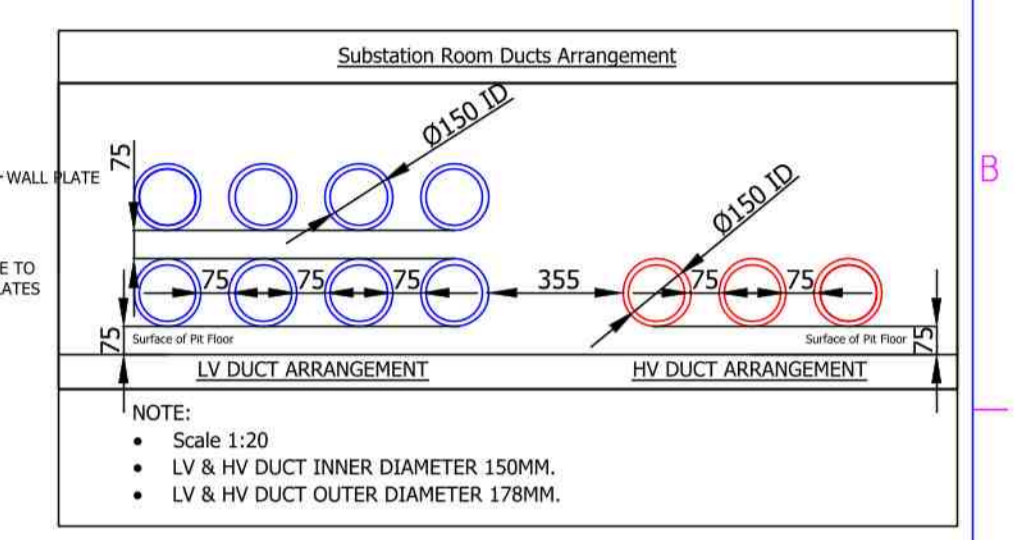
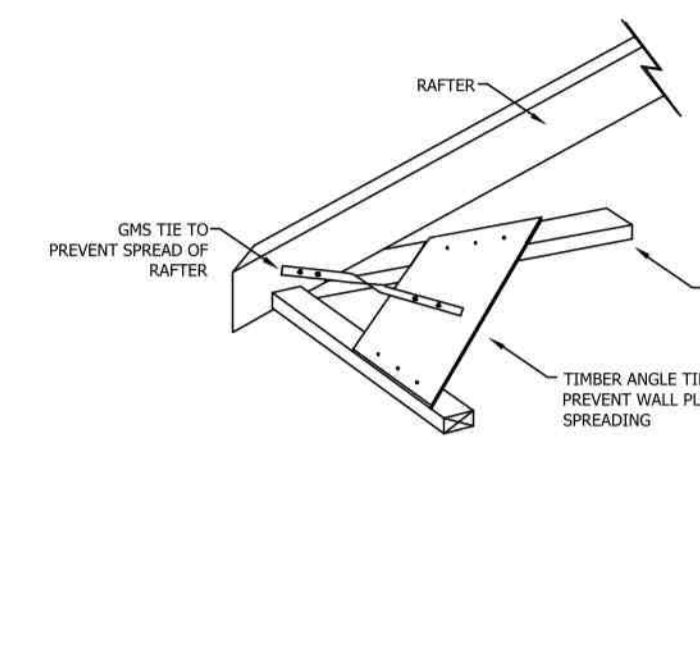
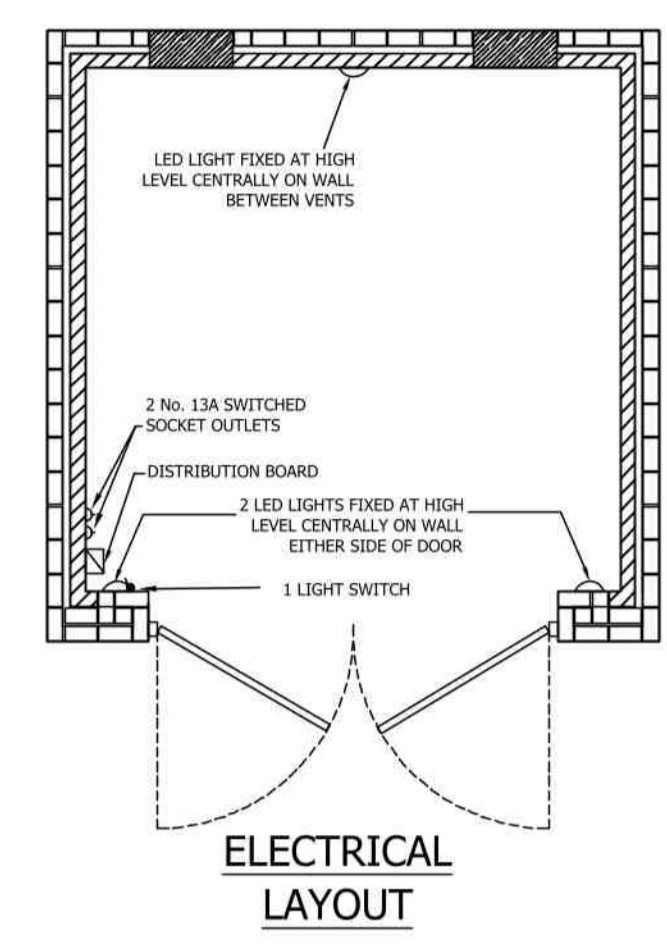
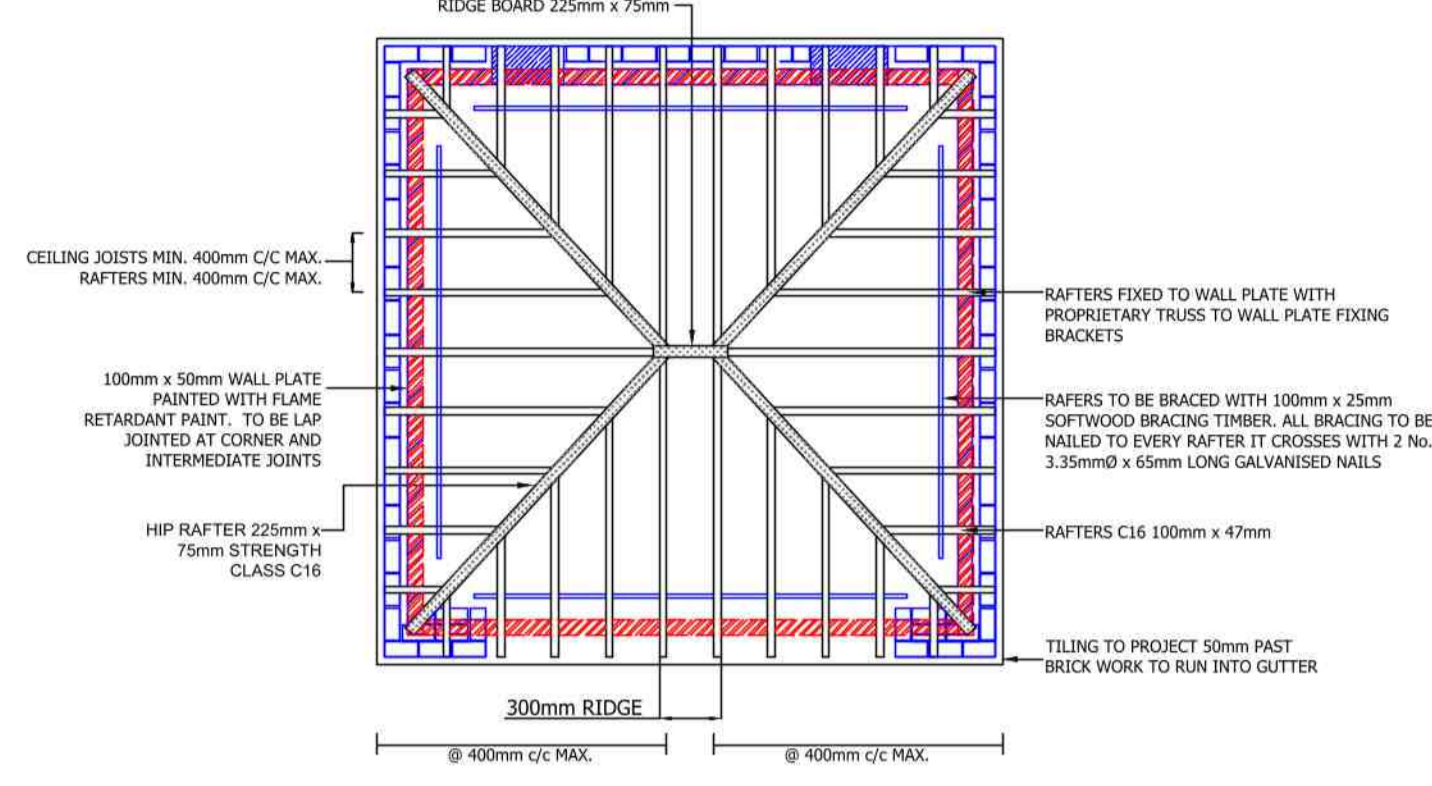
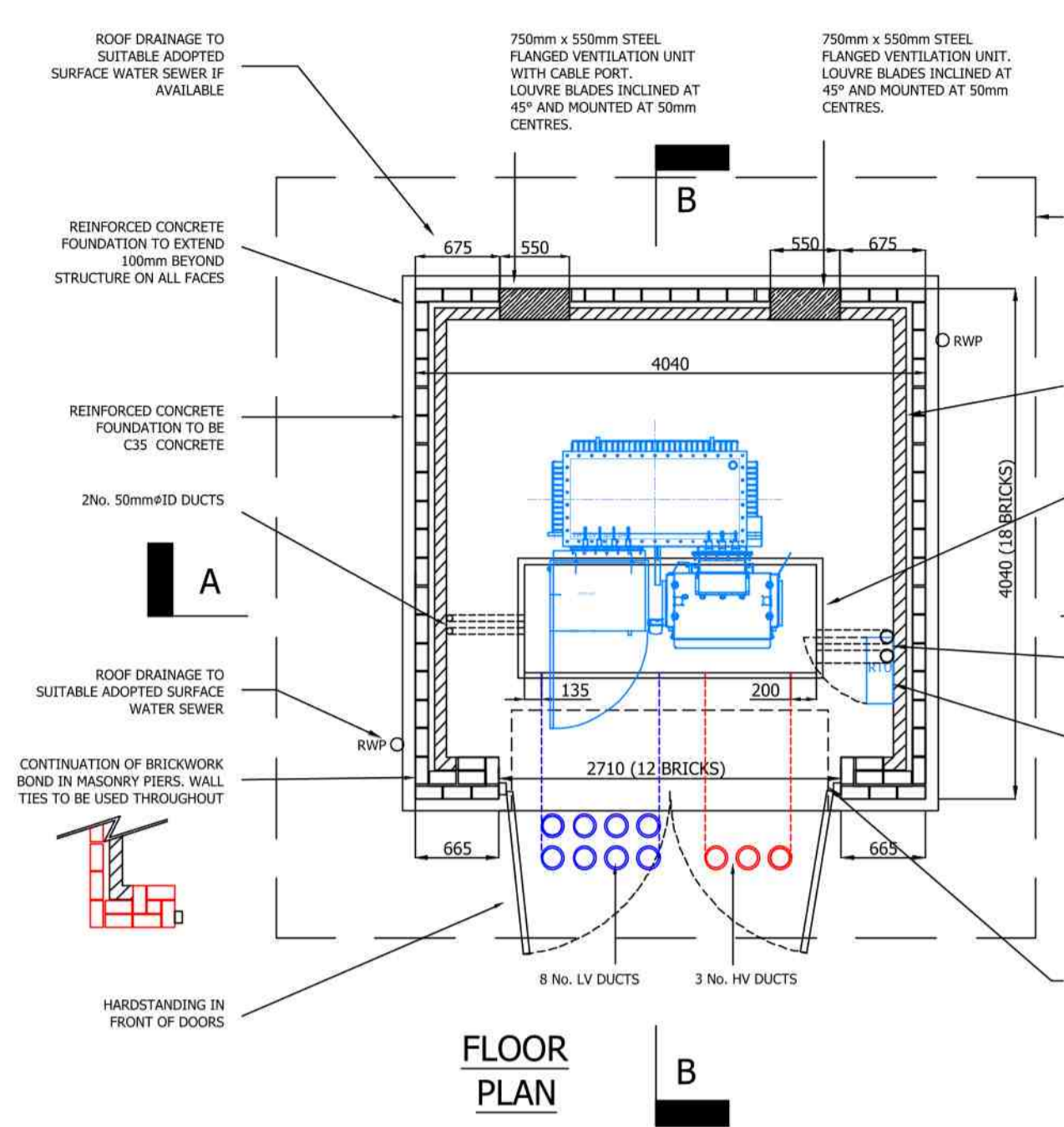
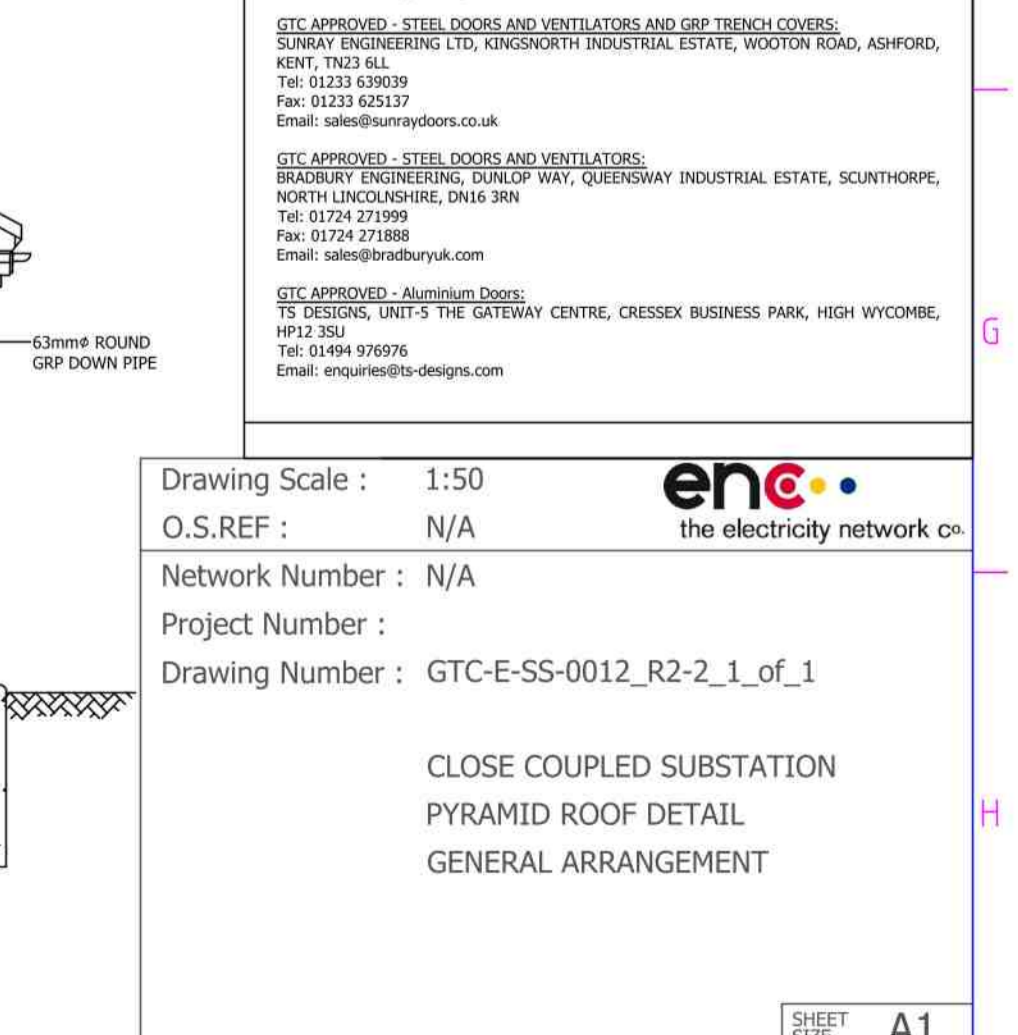
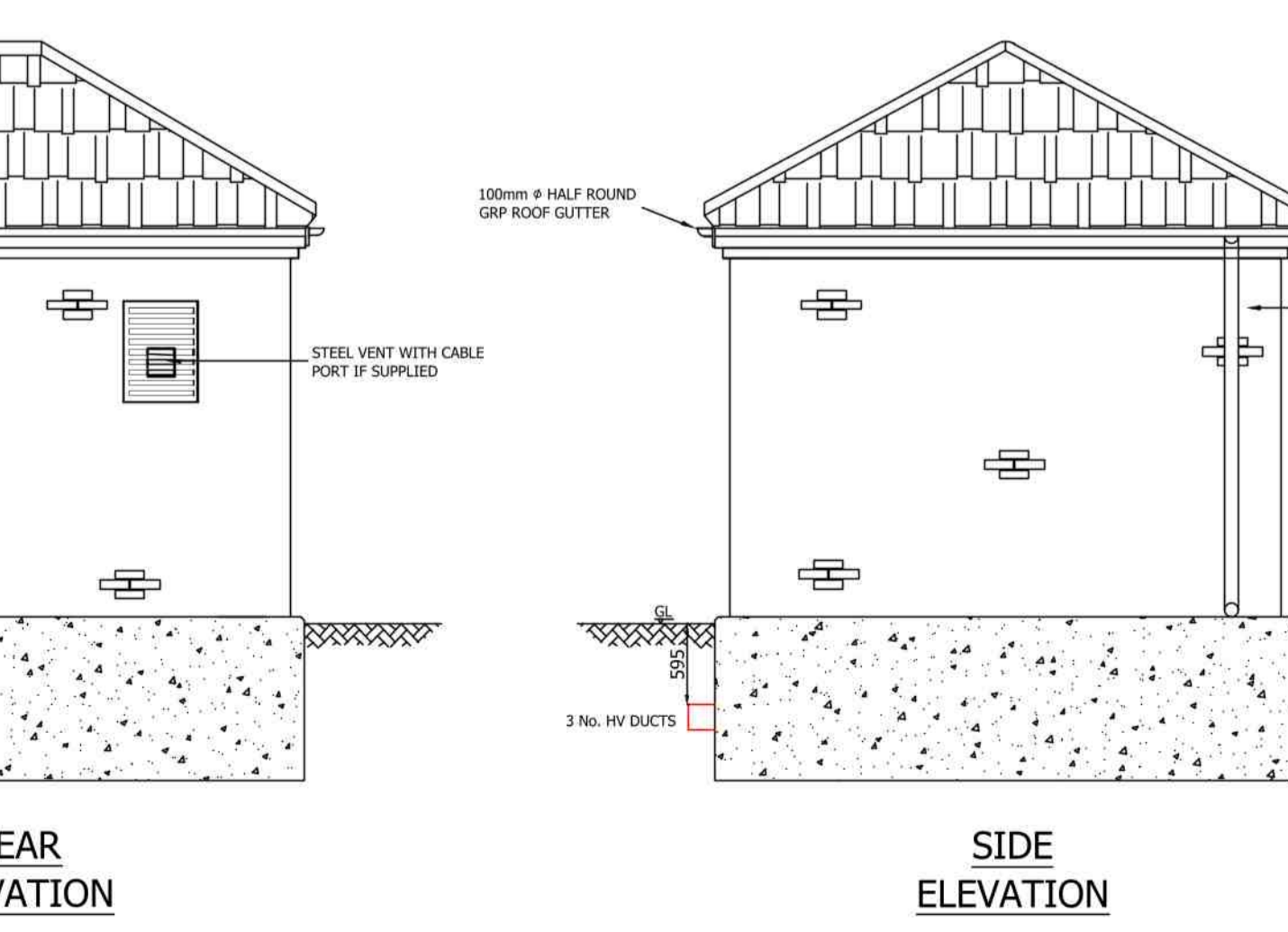
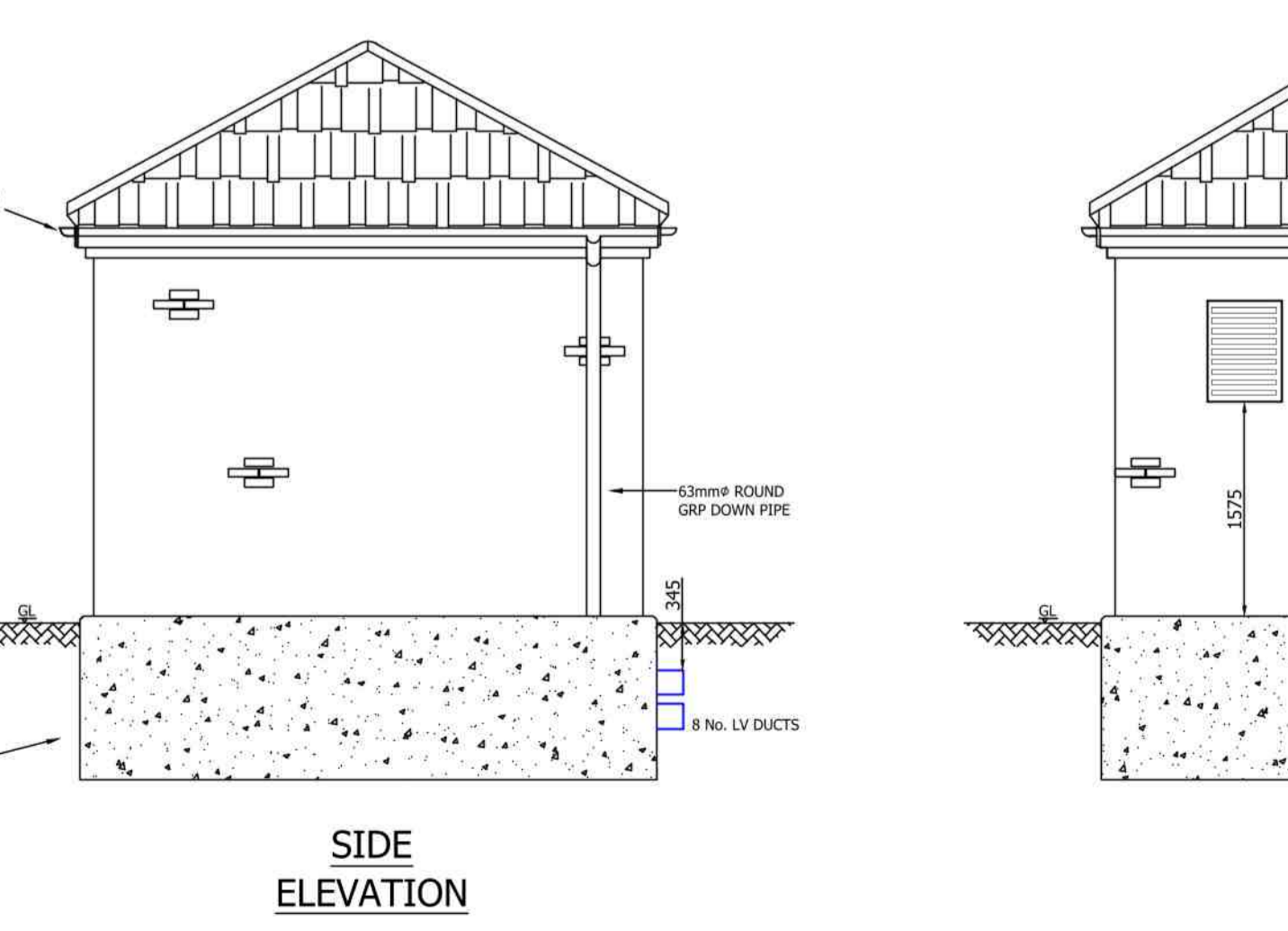
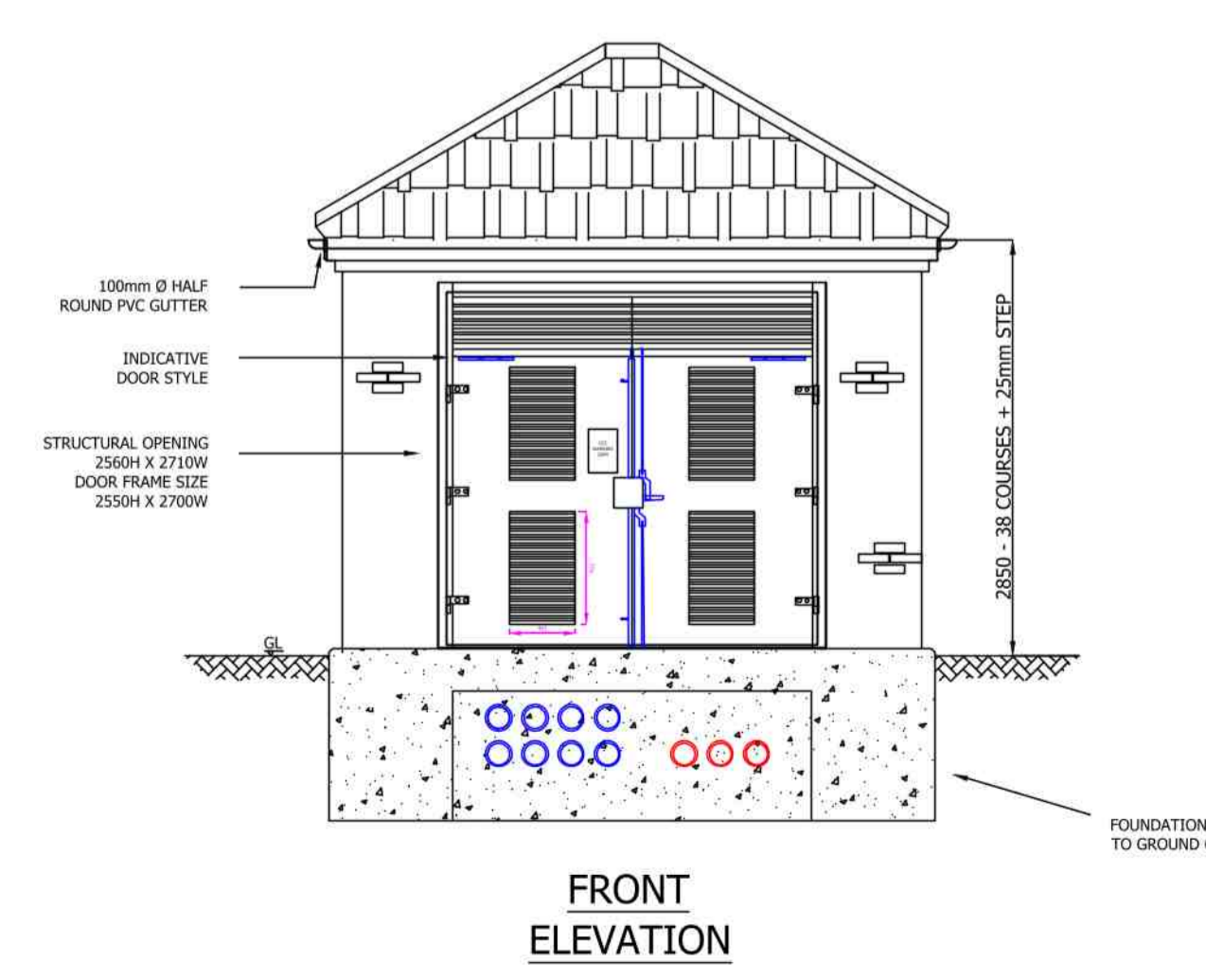
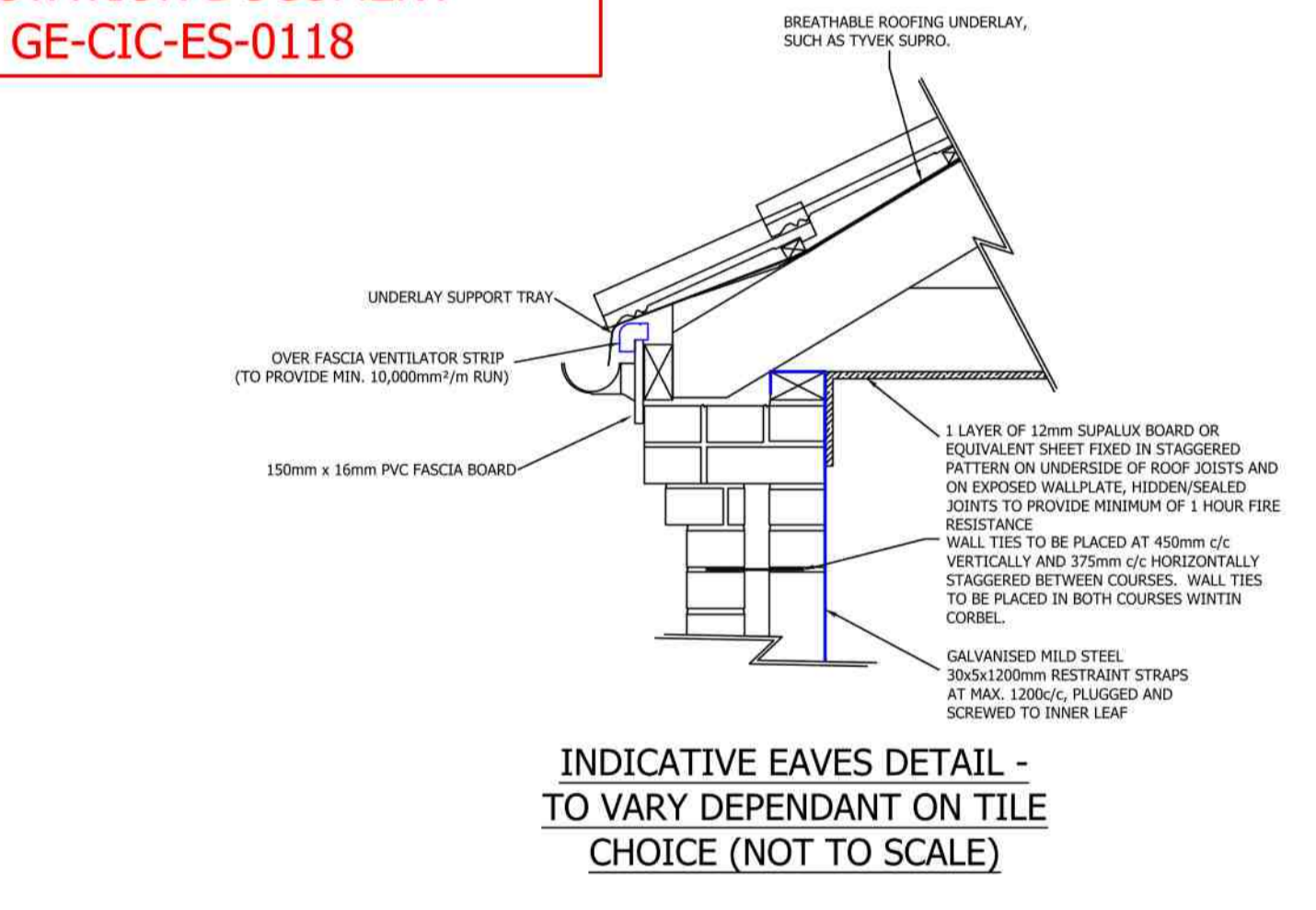
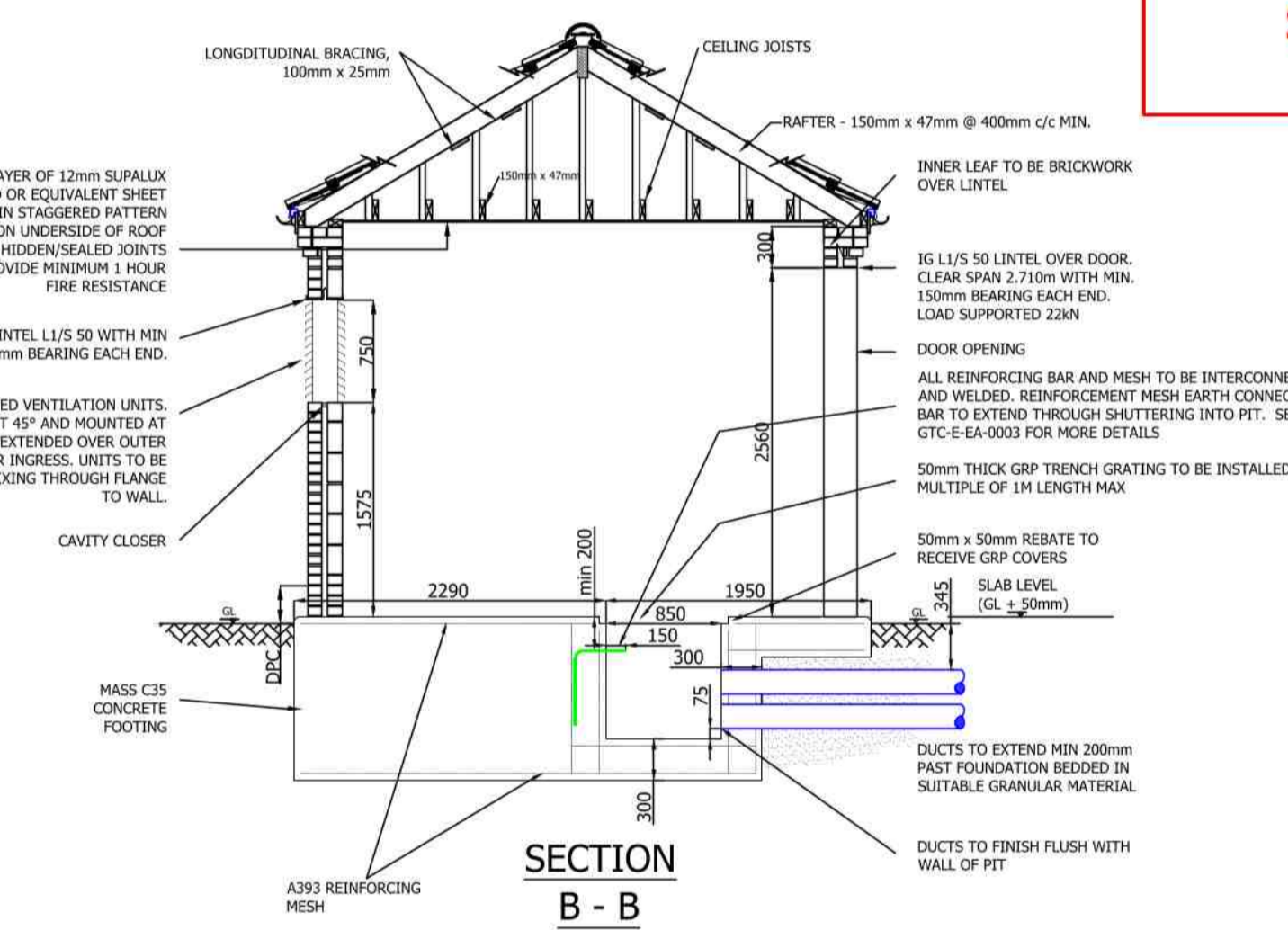
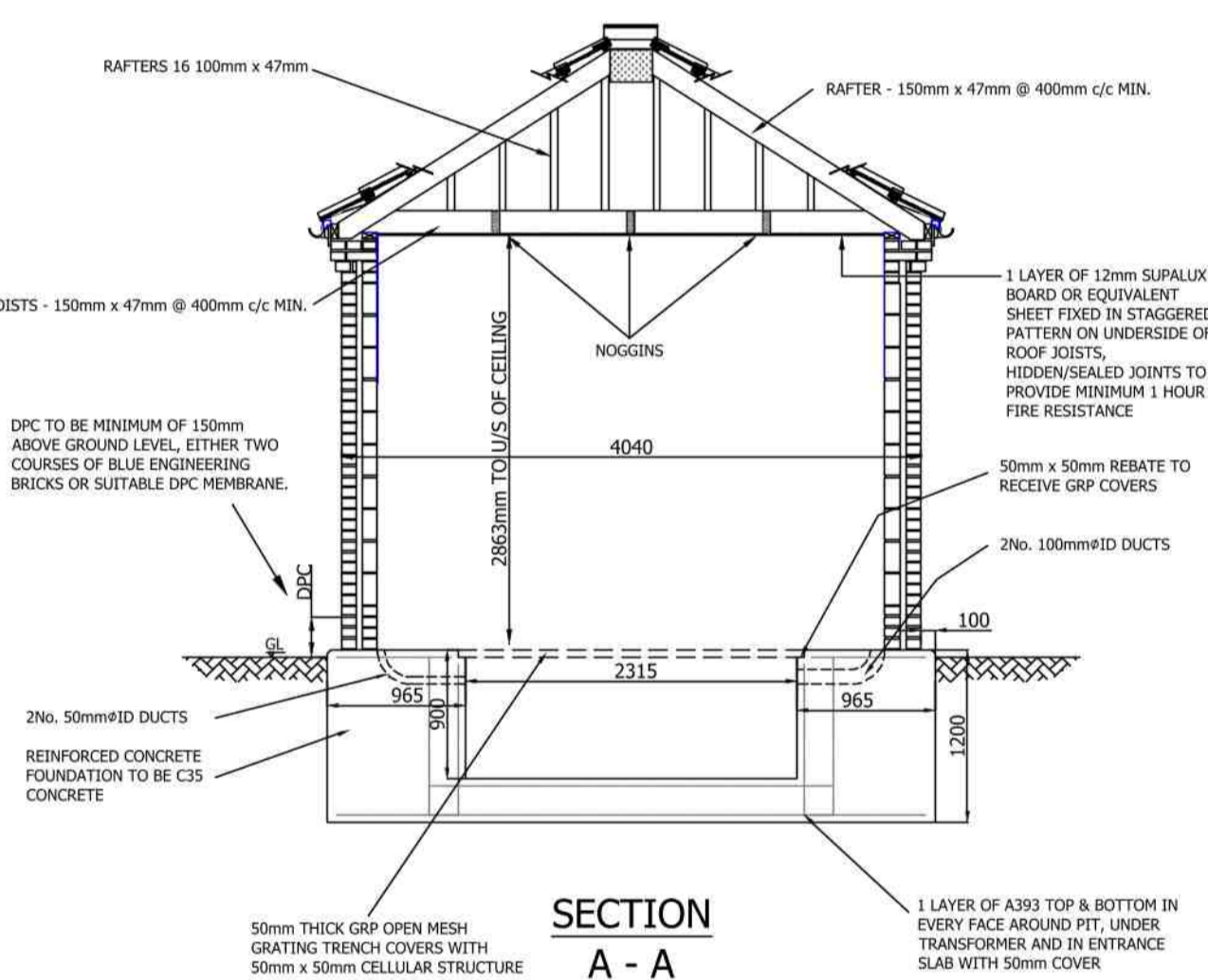


**APPROVED FOR CONSTRUCTION**

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
2-2	Additional Duct added, duct size amended and and rearranged, LED replaced Fluorescent lights, Manufacturer for Aluminum door added.	04/10/22	KF/SK	JN



**FOR MORE FOUNDATION DETAIL PLEASE REFER TO GTC SUBSTATION DRAWING GTC-E-EA-0003 AND SUBSTATION DOCUMENT GE-CIC-ES-0118**



- 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 BUNDLED 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 30kV PVC CABLE TO SUPPLY A SINGLE PHASE 230V STREET LIGHTING OUT OUT MOUNTED BELOW THE POWER AND LIGHTING FUSE BOARD. THIS WILL FEED A 100A CONSUMER UNIT WITH A MINIMUM OF 4 RCD CONTROLLED WAYS (2x 16A FOR POWER AND 2x 16A FOR LIGHTING WITH A SPARE 16A 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 30mm 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.
- THREE 17W LED BULKHEAD LIGHTS TO AT LEAST IP56 SPECIFICATION WILL BE FITTED TO THE WALLS (ONE EITHER SIDE OF DOOR AND ONE CENTRE REAR WALL) AND CONTROLLED BY A NON METALLIC FULLY INSULATED LIGHTING SWITCH FITTED 1500mm ABOVE FINISHED FLOOR LEVEL ON THE WALL ADJACENT TO LIGHTING DOOR.
- THE SOCKETETS 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 - SEE 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. ISOLATION TRANSFORMER TO BE USED FOR LIGHTING AND RTU POWER SUPPLY.
- AT HOT SITES ALL FITTINGS, SWITCHES AND CONDUIT MUST BE NON-METALLIC AND FULLY INSULATED TO THE SPECIFICATION ABOVE.
- ALL 13A SOCKETS MUST BE DISCONNECTED OR REMOVED. SOCKET OUTLETS IN THE TRANSFORMER ISOLATED FUSE CABINET MUST BE LABELED WITH WARNING SIGN 'DO NOT USE, HOT SITE'.

- APPROVED SUPPLIERS**
- GTC APPROVED - GRP SUBSTATION DOORS, STEEL VENTILATORS AND GRP TRENCH COVERS**  
 WOLSELEY (FORMERLY UTILITY POWER SYSTEMS), CARWOOD ROAD, CHESTERFIELD TRADING ESTATE, CHESTERFIELD, DERBYSHIRE, S41 9QB  
 Tel: 01474 231166  
 Fax: 01474 852913  
 Email: sales@utilitypowersystems.co.uk
- GTC APPROVED - STEEL DOORS AND VENTILATORS**  
 SUNRAY ENGINEERING LTD, KINGSDOWN INDUSTRIAL ESTATE, WOOTTON ROAD, ASHFORD, KENT, TN21 6LL  
 Tel: 01233 638009  
 Fax: 01233 625137  
 Email: sales@sunraydoors.co.uk
- GTC APPROVED - STEEL DOORS AND VENTILATORS**  
 BRADBURY ENGINEERING, BRADLEY WAY, QUEENSWORTH INDUSTRIAL ESTATE, SCUNTHORPE, NORTH LINCOLNSHIRE, DN16 3RN  
 Tel: 01724 271999  
 Fax: 01724 271888  
 Email: sales@bradburyuk.com
- GTC APPROVED - Aluminium Doors**  
 TS DESIGN, UNIT 5 THE GATEWAY CENTRE, CRESSK BUSINESS PARK, HIGH WYCOMBE, HP12 3SU  
 Tel: 01494 976076  
 Email: enquiries@ts-designs.com

Drawing Scale : 1:50  
 O.S.REF : N/A  
 Network Number : N/A  
 Project Number :  
 Drawing Number : GTC-E-SS-0012\_R2-2\_1\_of\_1

**enc**  
 the electricity network co

CLOSE COUPLED SUBSTATION  
 PYRAMID ROOF DETAIL  
 GENERAL ARRANGEMENT

SHEET SIZE **A1**