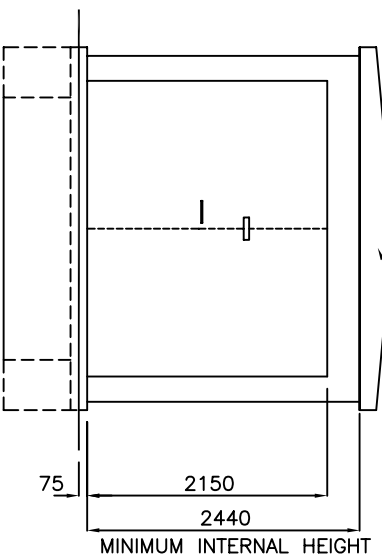
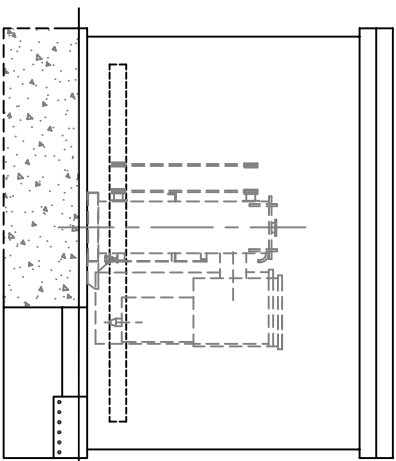


ROOF TO HAVE EXPLOSION  
RELIEF FITTINGS.



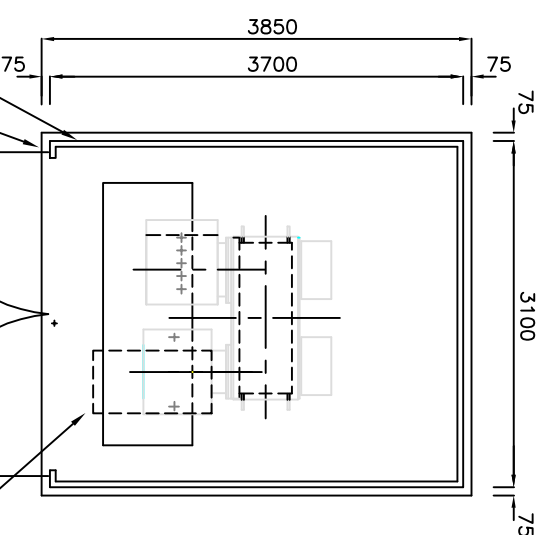
FRONT ELEVATION

FINISH TO G.R.P. HOUSING  
TO BE APPROVED BY  
ELECTRICITY NORTH WEST



SIDE ELEVATION

OUTLINE OF G.R.P. HOUSING.  
OUTLINE OF CONCRETE BASE.



PLAN

**GENERAL SPECIFICATION FOR GRP HOUSING ENCLOSURE**

- SUPPLIED/PURCHASED FROM NOMINATED SUPPLIER, UNDER FRAMEWORK AGREEMENT AND COMPLY WITH ES 301.
- DETAILS INCLUDING DOOR LOCKING SPECIFICATION ALL AS IN ES 301.
- LOWER LEVEL VENTILATION MUST BE APPROVED BY ELECTRICITY NORTH WEST & EQUIVALENT TO TOTAL AIR FLOW OF 0.75metres<sup>3</sup> (FOR DETAILED SPECIFICATION SEE ENGINEERING SPECIFICATION 301)

THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ELECTRICITY NORTH WEST ES 301 & ES 352 AND ALL ASSOCIATED WORKS MUST COMPLY WITH THIS INFORMATION AND DETAIL IN FULL

THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ELECTRICITY NORTH WEST ELECTRICAL SPECIFICATION REF. 400 D 5 AND ALL ASSOCIATED WORKS MUST COMPLY WITH THIS INFORMATION AND DETAIL IN FULL.

LUCY 'SABRE'  
(SHOWN DOTTED)

**NOTES:**

CONCRETE FOR PLINTH TO BE 1:2:4 MIX OF ORDINARY PORTLAND CEMENT CONCRETE 35N/mm<sup>2</sup> (28 DAY STRENGTH). 20mm AGGREGATE SHALL BE PLACED & COMPACTED WITHIN ADEQUATE FORMWORK TO ENSURE THAT THE TOP SURFACES ARE TRUE TO PLANE WITH FLOOR TO HAVE STEEL FLOAT FINISH TO CLOSE TOLERANCE OF +/-3mm IN 3m. NO DRILLING TO TAKE PLACE WITHIN 28 DAYS OF CASTING. NO PERCUSSION DRILLS TO BE USED ONLY ROTARY DRILLS. DO NOT OVER-TIGHTEN BOLTS. TYPICAL MAX WEIGHT OF PLANT = 6000kg. PLINTH SHALL HAVE TYPICAL MIN DEPTH OF 750mm. HOWEVER, THE PLINTH MUST BE SUITABLE WITH RESPECT TO GROUND CONDITIONS AND LOADING, AND MUST BE APPROVED BY ON-SITE STRUCTURAL ENGINEER.

FOUNDATIONS TO BE TAKEN DOWN TO GROUND THAT IS SUFFICIENTLY FIRM TO PROVIDE PHYSICAL SUPPORT TO THE STRUCTURE. SITE PHOTOS, TO BE TAKEN, INDICATING EVIDENCE OF FOUNDATION DEPTH WHERE INCREASED DIG IS GREATER THAN 400MM. THESE WILL BE PROVIDED FOR PAYMENT AND AUDIT PURPOSES.

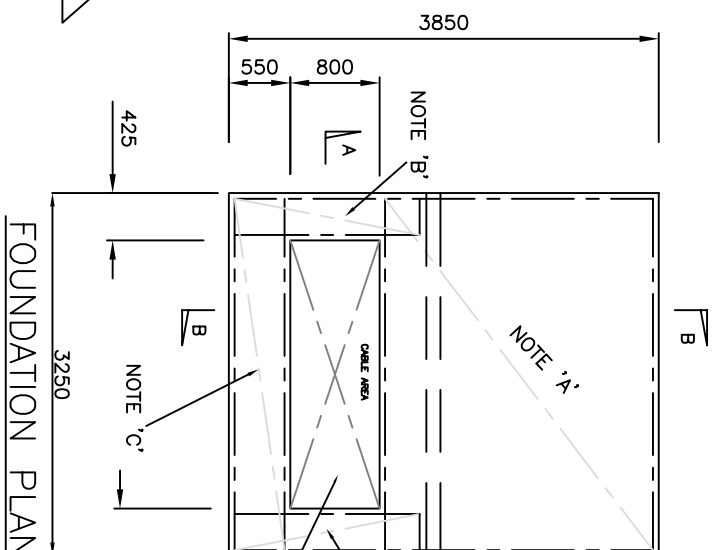
CABLE TRENCH TO BE 800mm WIDE AND TO BE BACK-FILLED AFTER INSTALLATION OF CABLES WITH SAND AND 75mm TOP LAYER OF 14-20mm LIMESTONE CHIPPINGS.

GRP HOUSING TO BE FROM ELECTRICITY NORTH WEST APPROVED SUPPLIER, DOORS TO HAVE HASP & STAPLE TO ACCEPT ELECTRICITY NORTH WEST PADLOCKS. LEFT HAND DOOR TO BE FIRST OPENING LEAF AND COMPLY WITH ES 301

**NOTE - MESH REINFORCEMENT**

'A' - A 193 1T 1B - 40mm COVER TOP EDGES, 50mm COVER BOTTOM EDGES.  
'B' - A193 MESH - 40mm COVER TO TOP EDGES (2 SHEETS )  
'C' - A193 MESH - 40mm COVER TO TOP EDGES

CABLE AREA TO BE BACKFILLED WITH SAND, WELL CONSOLIDATED WITH 75mm. LAYER OF SINGLE SIZE 14-20mm. LIMESTONE CHIPPINGS. ALL TO BE COMPLETED BY ELECTRICITY NORTH WEST AFTER INSTALLATION OF ALL CABLES.



FOUNDATION PLAN

CONCRETE SLAB REINFORCED WITH A193 STEEL MESH TO BS4483 LAID AS SHOWN WITH 50mm MINIMUM COVER.

150 THICK CONSOLIDATED HARDCORE AS REQUIRED WITH SAND BLINDING.  
REAR SUPPORTING CONCRETE SLAB MAY BE SUBSTITUTED WITH MASS POURED, FULL DEPTH CONCRETE 750mm DEEP.

SECTION A-A

SECTION B-B

approved G.H.SMITH date 23/09/03

**electricity north west**

- revisions
- A) MINOR MODS
- B) MINOR MODS
- C) LUCY 'SABRE' OUTLINE SHOWN - OVERALL DIMENSIONS INCREASED TO SUIT ABOVE.
- D) DRAWING APPD 23/09/03
- E) TITLE MODIFIED
- F) ISSUED FOR CIRCULATION
- G) CONCRETE SPEC ADDED, TRENCH WIDENED COMPACTED STONE REPLACED WITH MASS CONCRETE 16-01-06
- H) REVISED 28/12/06
- I) REVISED 10/06/09
- J) REVISED AS REF. ES 301 & ES 352 28/04/10

**CONSTRUCTION DETAILS FOR STANDARD G.R.P. UNIT SUBSTATION WITH SCHNEIDER RN2 SW/GR**  
(Will also accommodate Lucy Sabre sw/gr)

site -----  
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scale DO NOT SCALE  
scheme number

drawing number sheet  
ES352-A2-016/02J