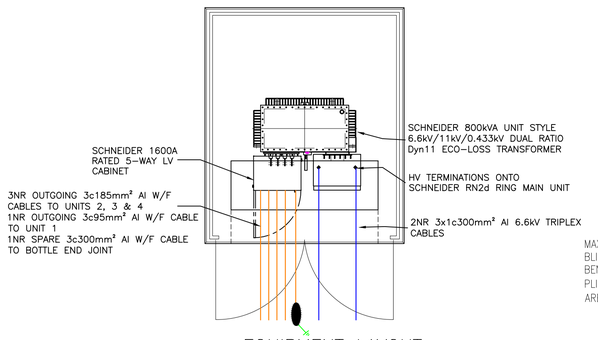
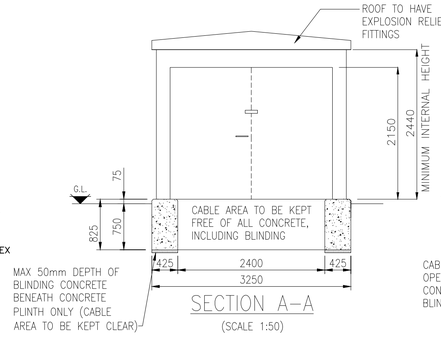
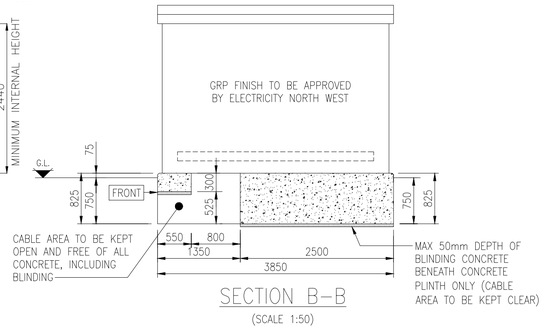


EQUIPMENT LAYOUT



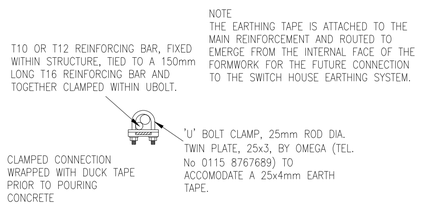
SECTION A–A

(SCALE 1:50)

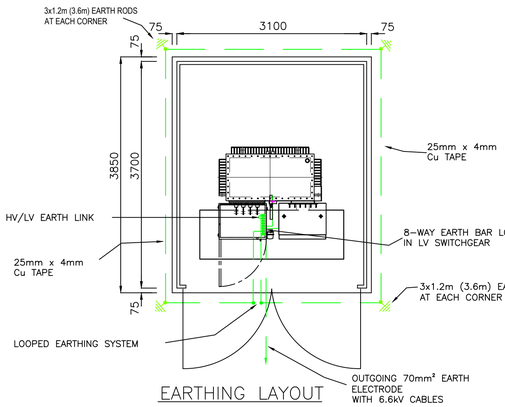


SECTION B–B

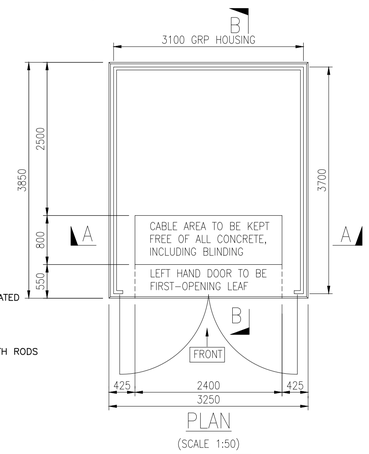
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DETAIL OF REINFORCEMENT EARTHING CLAMP

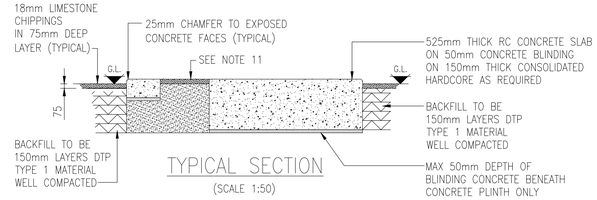


EARTHING LAYOUT



PLAN

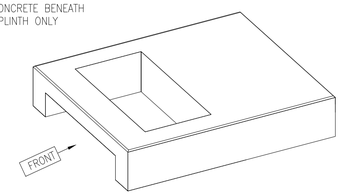
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TYPICAL SECTION

(SCALE 1:50)

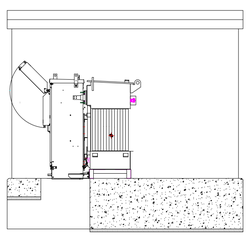
CONCRETE GENERAL ARRANGEMENT



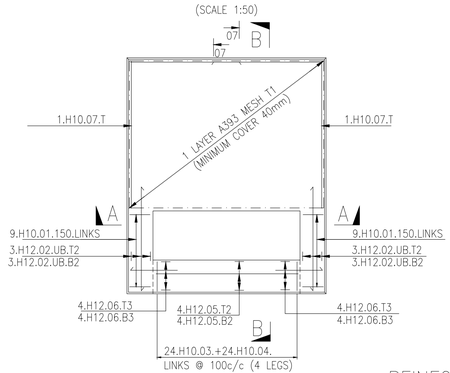
ISOMETRIC VIEW

GENERAL SPECIFICATION FOR GRP HOUSING ENCLOSURE

1. SUPPLIED/PURCHASED FROM NOMINATED SUPPLIER, UNDER FRAMEWORK AGREEMENT.
2. DETAILS INCLUDING DOOR LOCKING SPECIFICATION ALL AS IN ES 301.
3. LOWER LEVEL VENTILATION MUST BE APPROVED BY ELECTRICITY NORTH WEST LIMITED & EQUIVALENT TO TOTAL AIR FLOW OF 0.75Metres² (FOR DETAILED SPECIFICATION SEE ENGINEERING SPECIFICATION 301)



EQUIPMENT LAYOUT
SIDE ELEVATION



PLAN

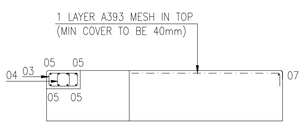
(SCALE 1:50)

REINFORCEMENT DETAILS



SECTION A–A

(SCALE 1:50)



SECTION B–B

(SCALE 1:50)

BENDING SCHEDULE TO BS 8666:2005									
Bar mark	Type & size	No. of mbrs	No. of bars in each	Total no.	Length of each bar † mm	Shape code	A * mm	B * mm	C * mm
1	H10	1	18	18	2340	51	345	745	
2	H12	1	12	24	2500	21	430	1685	430
3	H10	1	24	24	1525	51	465	215	
4	H10	1	24	24	900	51	155	215	
5	H12	1	8	8	2350	00	2350		
6	H12	1	16	16	1275	11	850	430	
7	H10	1	2	2	3150	11	1760	1900	
A393 MESH FABRIC = 7.5m2									

† Specified in multiples Of 25mm * Specified in multiples Of 5mm

GENERAL NOTES

1. DO NOT SCALE.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ELECTRICITY NORTH WEST CODE OF PRACTICE ES352
4. ALL WORK TO CARRIED OUT IN ACCORDANCE WITH CURRENT BUILDING REGULATIONS AND RELEVANT BRITISH STANDARDS AND CODES OF PRACTICE.
5. CONTRACTOR TO OBTAIN UNDERGROUND CABLE & SERVICE RECORDS PRIOR TO COMMENCEMENT OF ANY WORKS.
6. THE CONTRACTOR MUST ASSUME THAT ANY EXISTING CABLES LOCATED WITHIN THE WORKS ARE LIVE AND LIAISE WITH THE ELECTRICITY NORTH WEST ENGINEER FOR ADVICE.
7. SITE SPECIFIC RISK ASSESSMENT TO BE UNDERTAKEN PRIOR TO COMMENCEMENT OF ANY WORKS.
8. FOUNDATION DESIGN HAS BEEN BASED ON A SUITABLE BEARING PRESSURE FOR MOST GROUND CONDITIONS INCLUDING CLAYS. FORMATION LEVEL FOR FOUNDATIONS TO BE TAKEN DOWN TO GROUND THAT IS SUFFICIENTLY FIRM TO PROVIDE PHYSICAL SUPPORT TO THE STRUCTURE.
9. FOUNDATION FORMATION LEVELS TO BE INSPECTED AND APPROVED PRIOR TO FOUNDATION CONSTRUCTION.
10. THE CONTRACTOR IS TO ENSURE THAT CONCRETE AND/OR ANY SCREEDING DOES NOT ENCROACH ON THE CABLE ENTRY POINT

CABLE TRENCH

11. CABLE AREA TO BE BACK-FILLED AFTER INSTALLATION OF ALL CABLES, WITH WELL CONSOLIDATED SAND, WITH A 75mm TOP LAYER OF SINGLE SIZE 14–20mm LIMESTONE CHIPPINGS.

GRP HOUSING

12. 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

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.

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

REINFORCEMENT NOTES

1. Concrete to be strength class C32/40 to BS 8500.
2. Loose bar reinforcement to have the following minimum laps UNO: –
   - H10 = 350mm
   - H12 = 420mm
3. Standard A393 fabric mesh to have a minimum lap of 270mm.
4. 40mm cover to all reinforcement UNO.
5. Bar references shall be interpreted thus: –

   85 H12 – 27 – 125 T1
   - T1 Location
   - 125 Spacing
   - 27 Bar Mark
   - H12 Bar Diameter
   - – Type of Steel
   - 85 Number of Bars

6. Locations: –
   - T1 Denotes Top face, top layer
   - T2 Denotes Top face, second layer
   - B2 Denotes Bottom face, second layer
   - B1 Denotes Bottom face, bottom layer
7. "H" Denotes deformed Type 2 high yield steel bars to BS 4449:2005 – characteristic yield strength 500MPa.

REV	DESCRIPTION	DATE	CHK	APP
0	FOR APPROVAL	21/05/2025	BB	GB

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Project: NETWORK SPACE

Project: CITY WORKS, MANCHESTER

Title: GRP UNIT SUBSTATION AND EARTHING GENERAL ARRANGEMENT

Drawn	Checked	Approved
BB	GB	GB

Scale	Drg. No.	Rev.
1:50 @ A1	N25-069-SUB	0
Date 21/05/2025		

FOR APPROVAL