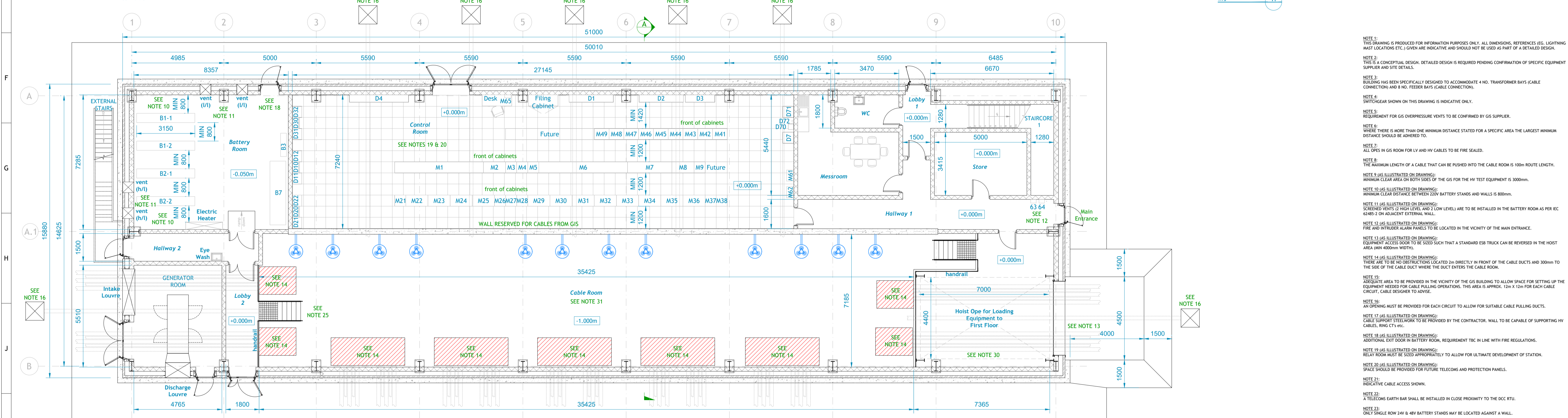


PLAN - FIRST FLOOR  
SCALE: NTS



SECTION  
NTS



PLAN - GROUND FLOOR  
SCALE: NTS

- NOTE 1: THIS DRAWING IS PRODUCED FOR INFORMATION PURPOSES ONLY. ALL DIMENSIONS, REFERENCES (E.G. LIGHTNING MAST LOCATIONS ETC.) GIVEN ARE INDICATIVE AND SHOULD NOT BE USED AS PART OF A DETAILED DESIGN.
- NOTE 2: THIS IS A CONCEPTUAL DESIGN. DETAILED DESIGN IS REQUIRED PENDING CONFIRMATION OF SPECIFIC EQUIPMENT SUPPLIER AND SITE DETAILS.
- NOTE 3: BUILDING HAS BEEN SPECIFICALLY DESIGNED TO ACCOMMODATE 4 NO. TRANSFORMER BAYS (CABLE CONNECTION) AND 8 NO. FEEDER BAYS (CABLE CONNECTION).
- NOTE 4: SWITCHGEAR SHOWN ON THIS DRAWING IS INDICATIVE ONLY.
- NOTE 5: REQUIREMENT FOR GIS OVERPRESSURE VENTS TO BE CONFIRMED BY GIS SUPPLIER.
- NOTE 6: WHERE THERE IS MORE THAN ONE MINIMUM DISTANCE STATED FOR A SPECIFIC AREA THE LARGEST MINIMUM DISTANCE SHOULD BE ADHERED TO.
- NOTE 7: ALL OPENS IN GIS ROOM FOR LV AND HV CABLES TO BE FIRE SEALED.
- NOTE 8: THE MAXIMUM LENGTH OF A CABLE THAT CAN BE PUSHED INTO THE CABLE ROOM IS 100m ROUTE LENGTH.
- NOTE 9: MINIMUM CLEAR AREA ON BOTH SIDES OF THE GIS FOR THE HV TEST EQUIPMENT IS 3000mm.
- NOTE 10: MINIMUM CLEAR DISTANCE BETWEEN 220V BATTERY STANDS AND WALLS IS 800mm.
- NOTE 11: SCREENED VENTS (15 HIGH LEVEL AND 2 LOW LEVEL) ARE TO BE INSTALLED IN THE BATTERY ROOM AS PER EC 63485-2 ON ADJACENT EXTERNAL WALL.
- NOTE 12: FIRE AND INTRUDER ALARM PANELS TO BE LOCATED IN THE VICINITY OF THE MAIN ENTRANCE.
- NOTE 13: EQUIPMENT ACCESS DOOR TO BE SIZED SUCH THAT A STANDARD ESB TRUCK CAN BE REVERSED IN THE HOIST AREA (MIN 4000mm WIDTH).
- NOTE 14: THERE ARE TO BE NO OBSTRUCTIONS LOCATED 2m DIRECTLY IN FRONT OF THE CABLE DUCTS AND 300mm TO THE SIDE OF THE CABLE DUCT WHERE THE DUCT ENTERS THE CABLE ROOM.
- NOTE 15: ADEQUATE AREA TO BE PROVIDED IN THE VICINITY OF THE GIS BUILDING TO ALLOW SPACE FOR SETTING UP THE EQUIPMENT NEEDED FOR CABLE PULLING OPERATIONS. THIS AREA IS APPROX. 12m X 12m FOR EACH CABLE CIRCUIT. CABLE DESIGNER TO ADVISE.
- NOTE 16: AN OPENING MUST BE PROVIDED FOR EACH CIRCUIT TO ALLOW FOR SUITABLE CABLE PULLING DUCTS.
- NOTE 17: CABLE SUPPORT STEELWORK TO BE PROVIDED BY THE CONTRACTOR. WALL TO BE CAPABLE OF SUPPORTING HV CABLES, RING CT'S ETC.
- NOTE 18: ADDITIONAL EXIT DOOR IN BATTERY ROOM. REQUIREMENT TBC IN LINE WITH FIRE REGULATIONS.
- NOTE 19: RELAY ROOM MUST BE SIZED APPROPRIATELY TO ALLOW FOR ULTIMATE DEVELOPMENT OF STATION.
- NOTE 20: SPACE SHOULD BE PROVIDED FOR FUTURE TELECOMS AND PROTECTION PANELS.
- NOTE 21: INDICATIVE CABLE ACCESS SHOWN.
- NOTE 22: A TELECOMS EARTH BAR SHALL BE INSTALLED IN CLOSE PROXIMITY TO THE DCC RTU.
- NOTE 23: ONLY SINGLE ROW 24V & 48V BATTERY STANDS MAY BE LOCATED AGAINST A WALL.
- NOTE 24: NO ELECTRICAL EQUIPMENT (INCL. BATTERIES) SHALL BE INSTALLED DIRECTLY IN FRONT OF VENTS.
- NOTE 25: AN OPENING SHALL BE PROVIDED UNDER THE STAIRS FOR CABLE PULLING.
- NOTE 26: SUITABLE ANCHOR POINTS SHALL BE INSTALLED FOR CABLE PULLING AS REQUIRED.
- NOTE 27: FIRE AND ATEX ZONES NOT SHOWN. THIS SHOULD BE CONSIDERED DURING DETAILED CUSTOMER DESIGN.
- NOTE 28: MINIMUM DIMENSIONS, ADDITIONAL SPACE FOR MAINTENANCE AND OPERATIONS MAY BE REQUIRED BASED ON ESB & O&M REQUIREMENTS.
- NOTE 29: ADDITIONAL WIDTH REQUIRED IF GROUND MOUNTED LCC'S ARE INSTALLED.
- NOTE 30: HOIST OPE TO BE SIZED APPROPRIATELY TO FACILITATE LIFTING OF SWITCHGEAR ASSEMBLIES.
- NOTE 31: BUILDING DESIGN TO BE OPTIMISED WHEN SWITCHGEAR TYPE IS KNOWN.

LIST OF CABINETS					
CABINET DESIGNATION	DESCRIPTION	DIMENSIONS	CABINET DESIGNATION	DESCRIPTION	DIMENSIONS
B1-1	220V DC BATTERY 1, STAND 1	3150x550	D12	220V BATTERY No.2: CHARGER 2 & BATTERY SUPERVISION	600x600
B1-2	220V DC BATTERY 1, STAND 2	3150x550	D10	24V 48V BATTERY: CHARGER CHANGEOVER SWITCH & FUSE BOX	600x300
B2-1	220V DC BATTERY 2, STAND 1	3150x550	D11	24V 48V BATTERY: CHARGER 1 & BATTERY SUPERVISION	600x600
B2-2	220V DC BATTERY 2, STAND 2	3150x550	D13	24V 48V BATTERY: CHARGER 2 & BATTERY SUPERVISION	600x600
B3	24V DC STATION BATTERY	1260x320	D10	48V TELECOMS CONNECTION/FUSE BOX	600x600
B7	48V DC TELECOMS BATTERY	3450x860	D11	48V SWPS (TELECOMS)	600x600
D1	220V DC DISTRIBUTION BOARD 1	2400x400	D12	TELECOMS ISOLATION SWITCH	1000x100
D2	220V DC DISTRIBUTION BOARD 2	2400x400	M1	MIMIC	4800x600
D3	24V 48V DC DISTRIBUTION BOARD	1600x400	M2	SYNCHRONISING PANEL	1200x600
D4	AC DISTRIBUTION BOARD	3200x400	M3	EVENT RECORDER/AAP	600x600
D7	48V (TELECOMS) DISTRIBUTION	600x600	M4	BACKUP AAP	600x600
D10	220V BATTERY No.1: CHARGER CHANGEOVER SWITCH & FUSE BOX	600x300	M5	BATTERY SUPERVISION	600x600
D11	220V BATTERY No.1: CHARGER 1 & BATTERY SUPERVISION	600x600	M6	SIGNAL INTERPOSING	4800x600
D12	220V BATTERY No.2: CHARGER 2 & BATTERY SUPERVISION	600x600	M7	CUSTOMER INTERFACE	2400x600
D20	220V BATTERY No.2: CHARGER CHANGEOVER SWITCH & FUSE BOX	600x300	M8	BUSBAR PROTECTION	1200x600
D21	220V BATTERY No.2: CHARGER 1 & BATTERY SUPERVISION	600x600	M9	REMOTE INTERROGATION/DISTURBANCE RECORDER	600x600
M21	H19 COUPLER PROTECTION	600x600	M27	H9B SECTIONALISER PROTECTION	600x600
M22	H17 BAY PROTECTION	1200x600	M28	H9A SECTIONALISER PROTECTION	600x600
M23	H15 BAY PROTECTION	1200x600	M29	H8 BAY PROTECTION	1200x600
M24	H13 BAY PROTECTION	1200x600	M30	H7 BAY PROTECTION	1200x600
M25	H11 BAY PROTECTION	1200x600	M31	H6 BAY PROTECTION	1200x600
M26	H10 COUPLER PROTECTION	600x600	M32	H5 BAY PROTECTION	1200x600
M27	H9B SECTIONALISER PROTECTION	600x600	M33	H4 BAY PROTECTION	1200x600
M28	H9A SECTIONALISER PROTECTION	600x600	M34	H3 BAY PROTECTION	1200x600
M29	H8 BAY PROTECTION	1200x600	M35	H2 BAY PROTECTION	1200x600
M30	H7 BAY PROTECTION	1200x600	M36	H1 BAY PROTECTION	1200x600
M31	H6 BAY PROTECTION	1200x600	M37	H0B SECTIONALISER PROTECTION	600x600
M32	H5 BAY PROTECTION	1200x600	M38	H0A SECTIONALISER PROTECTION	600x600
M33	H4 BAY PROTECTION	1200x600	M41	OPMUX 1	800x600
M34	H3 BAY PROTECTION	1200x600	M42	OPMUX 2	800x600
M35	H2 BAY PROTECTION	1200x600	M43	OPMUX 3	800x600
M36	H1 BAY PROTECTION	1200x600	M44	ODF	800x600
M37	H0B SECTIONALISER PROTECTION	600x600	M45	IP SERVICES	800x600
M38	H0A SECTIONALISER PROTECTION	600x600	M46	MAIN DISTRIBUTION FRAME	800x600
M41	OPMUX 1	800x600	M47	NCC RTU (INCL. GPS CLOCK)	800x600
M42	OPMUX 2	800x600	M48	TELEMETERING	800x600
M43	OPMUX 3	800x600	M49	EIRGRID ENERGY METERING	800x600
M44	ODF	800x600	M51	DCC RTU	600x400
M45	IP SERVICES	800x600	M52	ETIE	600x400
M46	MAIN DISTRIBUTION FRAME	800x600	M53	INTRUDER ALARM PANEL	600x400
M47	NCC RTU (INCL. GPS CLOCK)	800x600	M54	FIRE ALARM PANEL	600x400
M48	TELEMETERING	800x600	M55	TELEPHONE POINTS (2%.)	600x400
M49	EIRGRID ENERGY METERING	800x600			
M51	DCC RTU	600x400			
M52	ETIE	600x400			
M53	INTRUDER ALARM PANEL	600x400			
M54	FIRE ALARM PANEL	600x400			
M55	TELEPHONE POINTS (2%.)	600x400			

01	BUILDING REDRAWN TO SUIT SF6 FREE SWITCHGEAR	CHC / Mott MacDonald	ESB DD / EirGrid EgAM	NC	10/04/2025
00	FIRST ISSUE	CHC	NK	CF	18/10/2019
REV	DESC	DRAWN	CHKD	APPR	DATE

**EirGrid plc**  
The Oval, 160 Shelbourne Road,  
Ballsbridge, Dublin 4, Ireland

Telephone: +353 1 677 1700  
Fax: +353 1 661 5375  
Email: info@eirgrid.com  
Web: www.eirgrid.com

PROJECT: **GENERIC DESIGN STANDARD 110kV GIS STATION**

DRAWING NUMBER: **110kV SF6 FREE GIS BUILDING 12 BAY STATION BUILDING LAYOUT**

No of Sits: **1** SIZE: **A1** SCALE: **N/A**

DRAWING NUMBER: **XDN-LAY-ELV-STND-H-010** SHEET: **001** REV: **01**

Copyright © EirGrid plc. All rights reserved. No part of this work may be modified or reproduced or copied in any form or by any means - graphic, electronic or mechanical, including photocopying, recording, taping or information and retrieval systems, or used for any purpose other than its designated purpose, without the written permission of EirGrid plc.