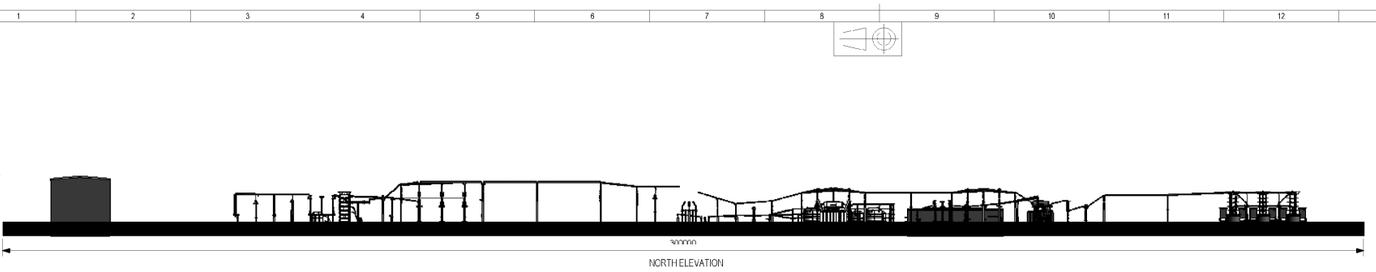
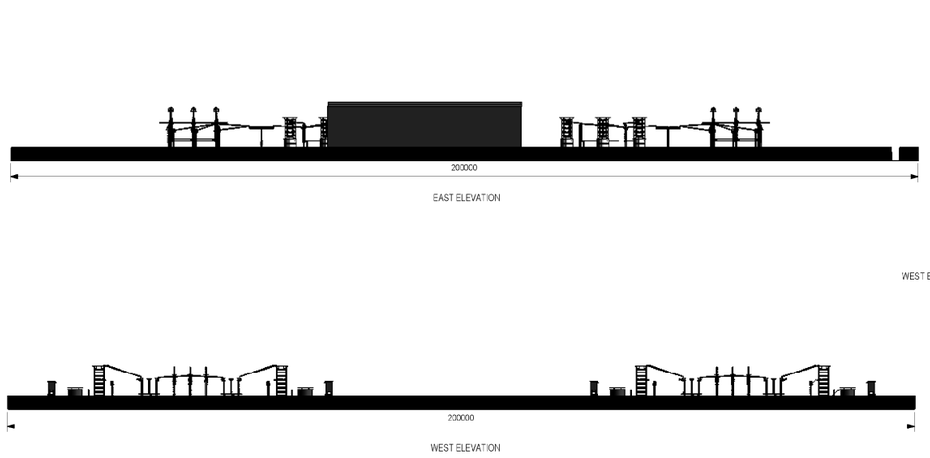
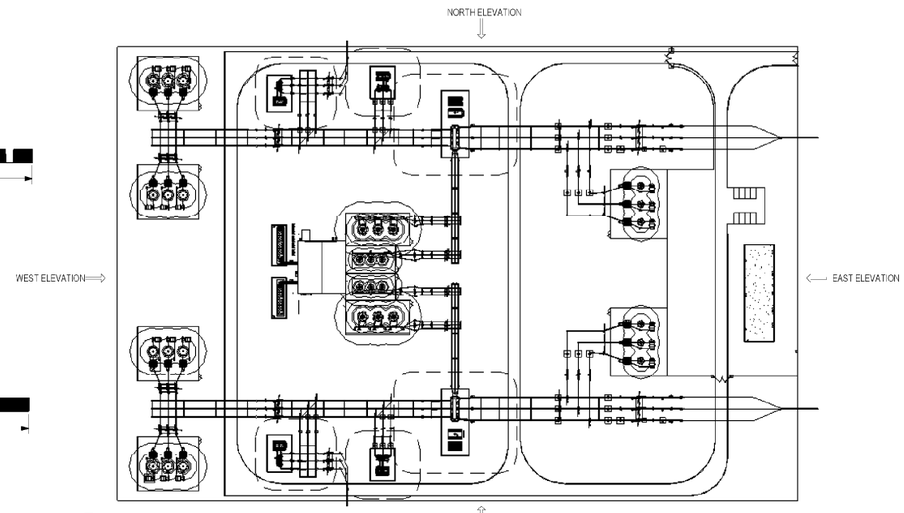
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5 V006 ELEVATION
1 : 1000

MINIMUM CLEARANCE IN THE AIR:

400kV SYSTEM (BIL/SIL = 1425kVp/1050kVp)
IN ACCORDANCE WITH NG TS 2.1

- PHASE TO EARTH (PE)	2.6m
- PHASE TO PHASE (PP)	3.6m
- MINIMUM INSULATION HEIGHT	2.4m
- MINIMUM SAFETY DISTANCE (SD)	3.1m
- DESIGN CLEARANCE OF SAFETY (HORIZANTAL) HSC	4.6m
- DESIGN CLEARANCE OF SAFETY (VERTICAL) VSC	5.5m

220kV SYSTEM (BIL = 1050kVp)
IN ACCORDANCE WITH IEC 61936-1

- PHASE TO EARTH (PE)	2.1m
- PHASE TO PHASE (PP)	2.1m
- MINIMUM INSULATION HEIGHT*	2.4m
- MINIMUM SAFETY DISTANCE (SD)*	2.4m
- DESIGN CLEARANCE OF SAFETY* (HORIZANTAL) HSC	3.9m
- DESIGN CLEARANCE OF SAFETY* (VERTICAL) VSC	4.8m

33kV SYSTEM (BIL = 250kVp)
IN ACCORDANCE WITH IEC 61936-1

- PHASE TO EARTH (PE)	0.48m
- PHASE TO PHASE (PP)	0.48m
- MINIMUM INSULATION HEIGHT*	2.4m
- MINIMUM SAFETY DISTANCE (SD)*	0.78m
- DESIGN CLEARANCE OF SAFETY* (HORIZANTAL) HSC	2.28m
- DESIGN CLEARANCE OF SAFETY* (VERTICAL) VSC	3.18m

1. CLEARANCES MARKED WITH "*" ARE BASED ON PHILOSOPHY ADOPTED FOR NATIONAL GRID STANDARD VOLTAGE LEVELS.

REFERENCE DRAWINGS:

G85221-MFW-D0-V001 - PLANT LAYOUT

REVISION:	A			B		
DRAWN:	N.Ward	12.09.17	CONTRACT No.	N.Ward	16.10.17	CONTROL BUILDING HEIGHT CHANGED TO 13m
CHECKED:	M.Takar	12.09.17	FIRST ISSUE	M.Takar	16.10.17	
APPROVED:	G.Grizelj	12.09.17		G.Grizelj	16.10.17	

NOT FOR CONSTRUCTION

Customer: MF OFFSHORE RENEWABLES LTD	Site: Moray Firth West Offshore Windfarm
Contractor: SIEMENS Transmission and Distribution Ltd.	Title: ELEVATIONS ONSHORE SUBSTATION MORAY FIRTH WEST 400/220/33kV ONSHORE SUBSTATION
	Drawing No.: G85221-MFW-D0-V002
	Contractor Drawing No.:
	Customer Drawing No.:

Designed	Drawn	Checked	Approved	Date	Scale	Size	Sheet	Revision
M.Takar	N.Ward	M.Takar	G.Grizelj	12.09.17	1:500	A1	1 of 1	B

MORAY WEST
OFFSHORE WINDFARM

A3 Chart

N

Geodetic Parameters:	N/A
Produced: RC Reviewed: GB Approved: FG	
Date: 25/06/2018	Revision: A
REF: 8460005-PPW0190-MWW-GOE-037	

Figure 2.4.3: Typical Elevation of a Substation

Moray Offshore Windfarm (West) Ltd