

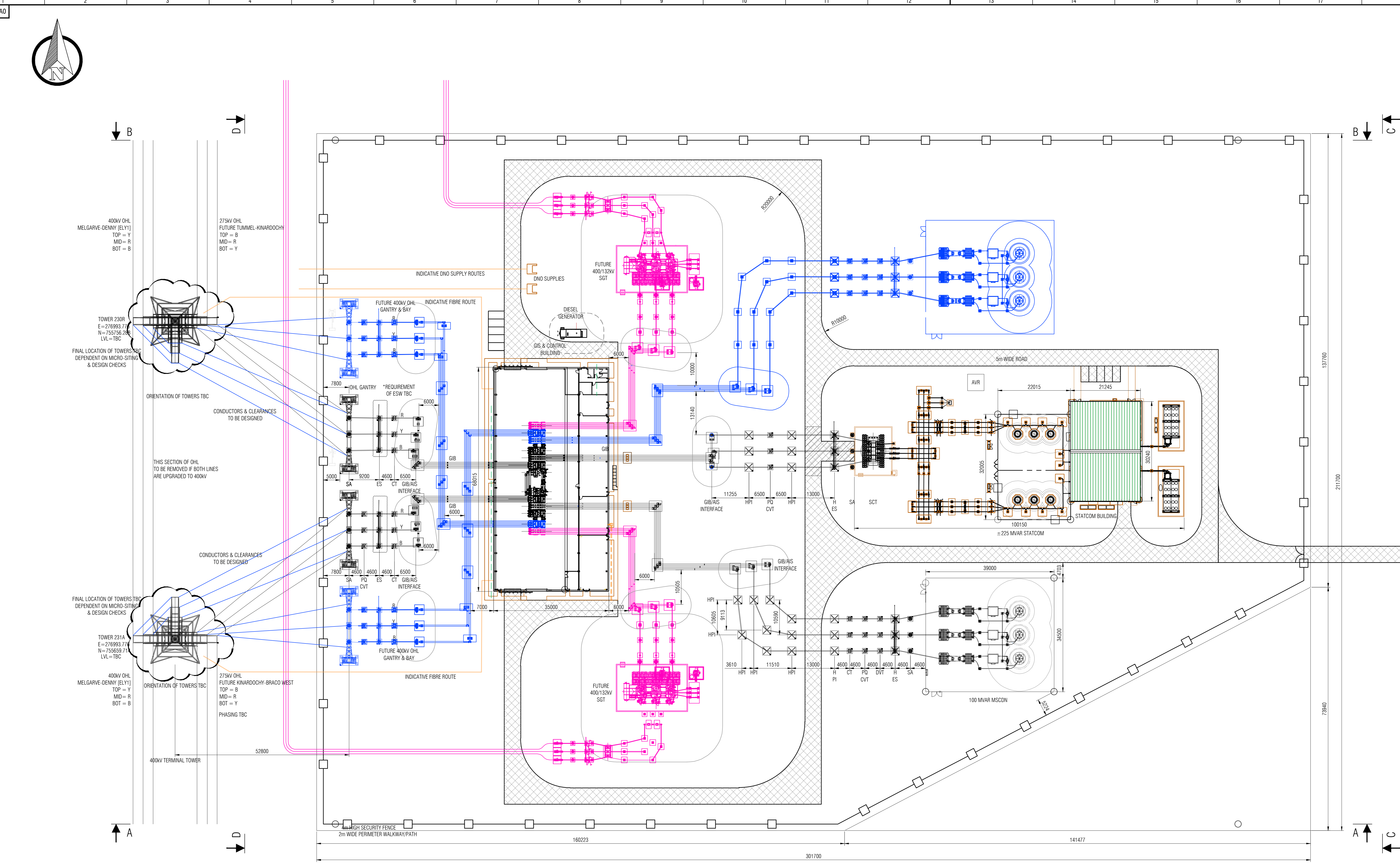
SUBSTATION MINIMUM ELECTRICAL CLEARANCES				
REQUIREMENTS TO BE IN ACCORDANCE WITH SSE SUBSTATION DESIGN SPECIFICATION DOC No. SP-NET-SST-501				
REF	CLEARANCE (mm)	NOMINAL SYSTEM VOLTAGE		
		400kV	275kV	132kV
E	PHASE TO EARTH	2800	2100	1200
Fh	PHASE TO PHASE	3600	2400	1400
S	DESIGN CLEARANCE FOR SAFETY	5500	4800	3500
SD	SAFETY DISTANCE	3100	2400	1400
Ds	WORKING & ACCESS CLEARANCE (VERTICAL)	5300	4500	3500
Dh	WORKING & ACCESS CLEARANCE (HORIZONTAL)	4600	3900	2900
HI	INSULATION HEIGHT (PEDESTRIAN ACCESS)	2400	2400	2400

- DOCUMENT REFERENCE:**
- NOTES:-**
- BASED ON DESIGN REQUIREMENTS TAKEN FROM KINARDODCHY SUBSTATION (REF: L196-KIN-1117-00-0004-01).
 - LAYOUT SHOULD BE READ IN CONJUNCTION WITH SLD SSEN DRAWING NUMBER: L196-KIN-1117-00-0004-01.
 - ALL DIMENSIONS SHOWN IN MILLIMETRES (mm) UNLESS OTHERWISE STATED.
 - PROPOSED LAYOUT FOR DEVELOPMENT PURPOSES ONLY.
 - SITE DEVELOPED FOR POTENTIAL UPGRADE TO 400kV IN FUTURE THEREFORE 400kV ELECTRICAL CLEARANCES HAVE BEEN USED WHERE APPROPRIATE.
 - GIS AND CONTROL BUILDING FOOTPRINT ASSUMED SUITABLE FOR 275kV OR 400kV EQUIPMENT.
 - IT IS ASSUMED THAT MSCDN WOULD REQUIRE TO BE COMPLETELY REDESIGNED FOR UPGRADE TO 400kV.
 - STATCOM MAY BE ABLE TO BE RE-UTILISED IF SUBSTATION IS UPGRADED TO 400kV BUT WILL REQUIRE AN ADAPTIVE SCT.
 - ALL EQUIPMENT SHOWN TO BE PHASISED AND CONFIRMED BY SSEN ENGINEERING DESIGN TEAM AND UNITS DONE SO ALL ASPECTS OF THE SHOWN DESIGN ARE SUBJECT TO CHANGE.
 - AS PLANT INFORMATION TAKEN FROM STANDARD SSEN FRAMEWORK LAYOUTS.
 - STATCOM BASED ON SIMILAR UNIT INSTALLED AT MELGARVE. RATINGS TBC. FOR EXAMPLE (=225MVAR, CONNECTED TO 275kV BUSBAR RUNNING AT 20V).
 - ASSUMED STATCOM TRANSFORMER LOCATED ON WEST OF STATCOM COMPOND. BUT CONNECTION FROM GIS COULD BE MODIFIED TO ACCOMMODATE A DIFFERENT TRANSFORMER POSITION.
 - CURRENTLY NO INFORMATION ON MSCDN. REQUIRED AT THIS SITE INDICATIVE SPACE ENVELOPE ONLY.
 - BUILDING OUTLINE INDICATIVE ONLY - DESIGN TO BE CONFIRMED.
 - GIS BAYS 8, 9, 10, 11 AND 12 ARE SPACE PROVISION ONLY. GIS ENTRIES TO BE PROVIDED.
 - OVERHEAD LINE ROUTES AND POSITION OF TOWERS (TERMINAL OR OTHERWISE) TO BE CONFIRMED AND SUBJECT TO SEPARATE SECTION 37 CONSULT.
 - OHL REQUIRED TO BE MODELLED BY OTHERS TO ENSURE NO INFRASTRUCTURE OF ELECTRICAL CLEARANCES.
 - PLATFORM LEVEL TBC AT DETAIL DESIGN STAGE AFTER GROUND INVESTIGATION SURVEY AND CUT/FILL BALANCE OPTIMISED.
 - ELECTRICAL PHASING TO BE CONFIRMED.
 - ACCESS ROUTE TO SITE TBC.
 - PROPOSED PLATFORM AREA = 58,640m² / 14.49hectares.

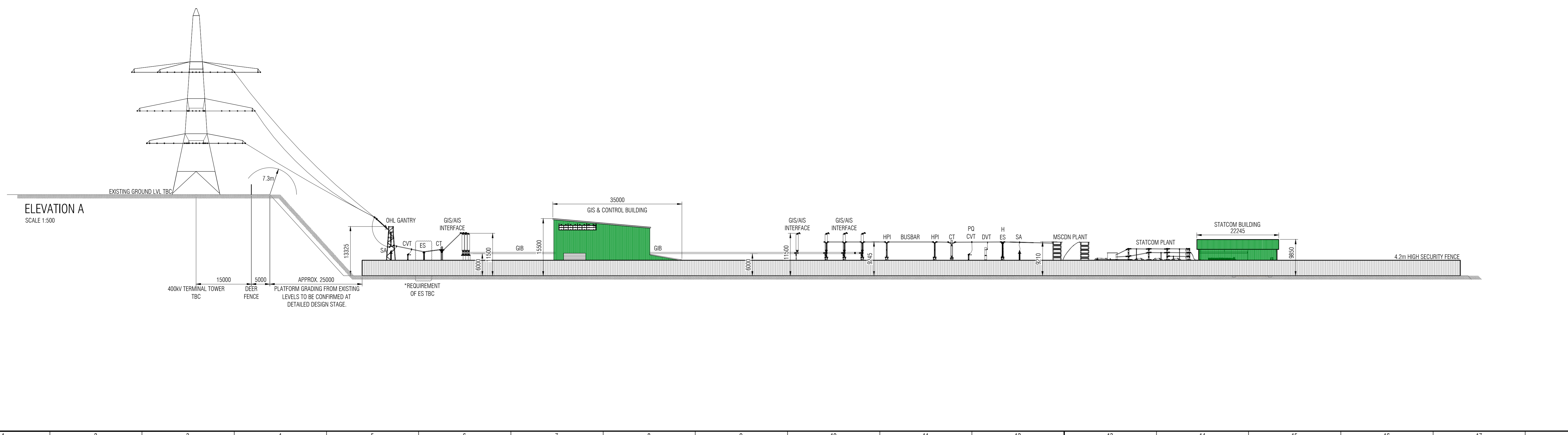
- ASSOCIATED DRAWINGS:-**
- L196_KIN_1104_00_0045 SITE ELEVATIONS
 - L196_KIN_1104_00_0046 ELECTRICAL SECTIONS THROUGH MAIN BAYS
 - L196_KIN_1117_00_0004 SINGLE LINE DIAGRAM

!!! TO BE PRINTED IN COLOUR !!!

- LEGEND:-**
- SCT STATIC COMPENSATION TRANSFORMER
 - SGT SUPER GRID TRANSFORMER
 - ET EARTHING TRANSFORMER
 - NER NEUTRAL EARTHING RESISTOR
 - ES EARTH SWITCH
 - DISC DISCONNECTOR (RCP)
 - DISC DISCHARGE VOLTAGE TRANSFORMER
 - DG DIESEL GENERATOR
 - CB CIRCUIT BREAKER
 - CSE CABLE SEALING END
 - CVT CAPACITIVE VOLTAGE TRANSFORMER
 - SA SURGE ARRESTER
 - PI POST INSULATOR
 - GIS GAS INSULATED BUSBAR
 - HI HIGH LEVEL (POST INSULATOR)
- PLANT PROPOSED
— CONFIRMED FUTURE WORKS REQUIREMENTS
— FUTURE WORKS REQUIREMENTS TO BE CONFIRMED



**PRELIMINARY DESIGN ONLY
NOT TO BE USED FOR
CONSTRUCTION**



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	SM	07.05.20	

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Project: KINARDODCHY 275kV REACTIVE COMPENSATION SUBSTATION

Project Number: L7000096 **Location:** TUMMEL

Title: KINARDODCHY 275kV REACTIVE COMPENSATION SUBSTATION PROPOSED SUBSTATION LAYOUT & ELEVATION AT SITE 4

Drawing Status: FOR INFORMATION **Drawn:** SMR

Scale: 1:500 (G) AD **Checked:** SM

Date: OF FIRST ISSUE: 07.05.2020 **Approved:** DP

Drawing Number: L196_KIN_1104_0041 **Sheet No:** 00 **Revision No:** 00