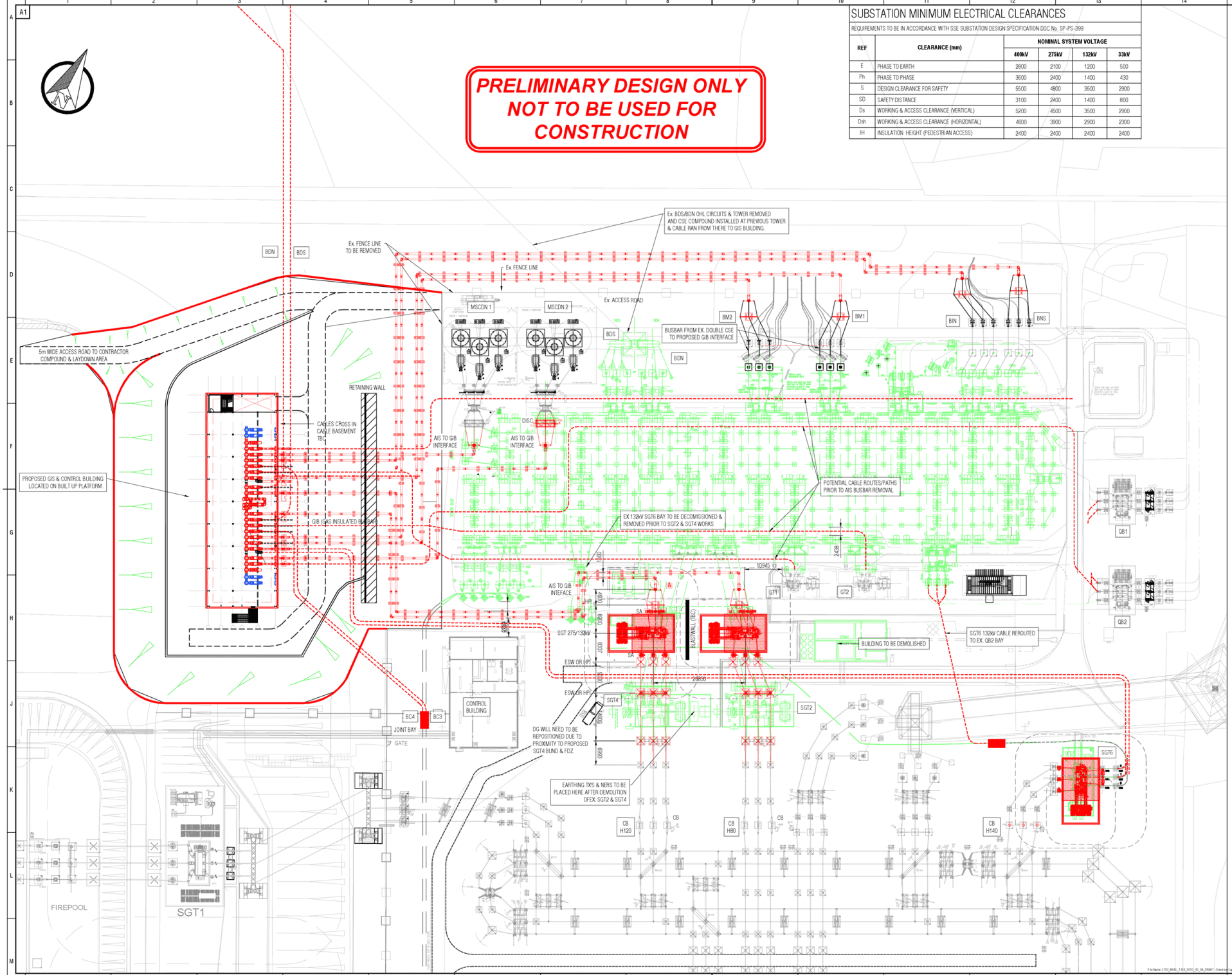

SUBSTATION MINIMUM ELECTRICAL CLEARANCES

REQUIREMENTS TO BE IN ACCORDANCE WITH SSE SUBSTATION DESIGN SPECIFICATION DOC No. SP-PS-399

REF	CLEARANCE (mm)	NOMINAL SYSTEM VOLTAGE			
		400kV	275kV	132kV	33kV
E	PHASE TO EARTH	2800	2100	1200	500
Ph	PHASE TO PHASE	3600	2400	1400	430
S	DESIGN CLEARANCE FOR SAFETY	5500	4800	3500	2900
SD	SAFETY DISTANCE	3100	2400	1400	800
Ds	WORKING & ACCESS CLEARANCE (VERTICAL)	5200	4500	3500	2900
Dsh	WORKING & ACCESS CLEARANCE (HORIZONTAL)	4600	3900	2900	2300
IH	INSULATION HEIGHT (PEDESTRIAN ACCESS)	2400	2400	2400	2400

LIST OF ALL RELEVANT DRAWINGS OR DOCUMENTS THAT DIRECTLY RELATE TO THE CURRENT REVISION OF THE DRAWING

DOCUMENT REFERENCE:

NOTES:-

1. ALL DIMENSIONS GIVEN IN MILLIMETRES (mm) U.N.O.
2. ALL CABLE/GIB ROUTES ARE INDICATIVE ONLY.
3. CABLE ROUTES SHOWN DO NOT INDICATE IF IN TREFOIL OR FLAT FORMATION.
4. CABLE DESIGN REQUIRED TO CONFIRM IF CABLE ROUTE WILL ALLOWABLE AS DIRECT BURIED, IN TROUGHS, IN DUCTS OR IN CONCRETE. FINAL SPECIFICATION TO BE CONFIRMED.
5. CABLE SEALING ENDS ARE INDICATIVE ONLY.
6. 132kV GIS & CONTROL BUILDING INDICATIVE ONLY - DESIGN TO BE CONFIRMED.
7. 132kV GIS BUILDING REFERS TO SSEN DRAWING NUMBER: LT93_BEAU_0805_0007 AND LT93_BEAU_0805_0008. DESIGN TO BE CONFIRMED.
8. EXISTING DRAWING INFORMATION TAKEN FROM SSEN DRAWING NUMBER 228_1104_1165_00_03 AND ASH DRAWING 114013-02 - REVISED PLANTING PROPOSAL IN RESPONSE TO RELOCATION OF WESTERN PALISADE FENCE_REV.D.
9. SUBSTATION LAYOUTS ARE INDICATIVE ONLY AND EXIST ONLY TO GIVE AN APPROXIMATE FOOTPRINT OF LAND TAKE FOR DISCUSSION PURPOSES ONLY. FOOTPRINT AND ORIENTATION MAY DIFFER AS THE DESIGN PROGRESSES.
10. ALL REDUNDANT 132kV AIS EQUIPMENT SHALL BE REMOVED.
11. PROPOSED SGT TAKEN FROM SSE STANDARD TRANSFORMER LIBRARY: 275/132kV 240MVA PAUWELS SGT (OFF TANK RADIATOR) TRA-2-0036.
12. FIRE DAMAGE ZONE CALCULATED AS PER NGTS 3.1.3. ISSUE 2, JANUARY 2013.
13. CABLE CROSSINGS PROPOSED TO TAKE PLACE WITHIN CABLE BASEMENT. BASEMENT CABLE LAYOUT REQUIRED TO BE DESIGNED TO ENSURE THIS IS ACHIEVABLE.
14. GIB TO BE AT LOW LEVEL UNLESS FOR CROSSING ROAD OR OTHER GIB THEN IT REQUIRES TO BE AT THE HIGH LEVEL.

LEGEND:-

SGT	SUPER GRID TRANSFORMER
GT	GRID TRANSFORMER
ET	EARTHING TRANSFORMER
NER	NEUTRAL EARTHING RESISTOR
ES	EARTH SWITCH
DISC	DISCONNECTOR (RCP)
CB	CIRCUIT BREAKER
CT	CURRENT TRANSFORMER
CVT	CAPACITIVE VOLTAGE TRANSFORMER
SA	SURGE ARRESTER
CSE	CABLE SEALING END
MK	MARSHALLING KIOSK
PI	POST INSULATOR
HPI	HIGH LEVEL POST INSULATOR
GIS	GAS INSULATED SWITCHGEAR
GIB	GAS INSULATED BUSBAR

PROPOSED EQUIPMENT
EXISTING EQUIPMENT
FOR DECOMMISSIONING AND DEMOLITION
CABLE
BUSBAR
GIB

DRAFT

Rev.	Drawn:	Approved:	Description:
0C	PMR		FOR INTERNAL COMMENT ONLY. BUILDING, PLATFORM & CABLE ROUTES UPDATED.
	Checked:	Date: 24.09.20	

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Project: BEAULY 132kV REDEVELOPMENT

Project Number: LT000093 **Location:** BEAULY

Title: BEAULY 132kV REDEVELOPMENT
ELECTRICAL LAYOUT
PROPOSED CABLE AND GIB OPTION

Drawing Status: FOR INFORMATION	**Drawn:** PMR
Scale: 1:500 @ A1	**Checked:**
Date: 19.08.2020	**Approved:**
Drawing Number: LT93_BEAU_1104_0010	**Sheet No:** 00 **Revision No:** 0C

Date Plotted: 24.09.2020
File Name: LT93_BEAU_1104_0010_00_SA_DRAFT - Electrical Layout - Proposed Works.dwg