

ATTACHEMENT 08

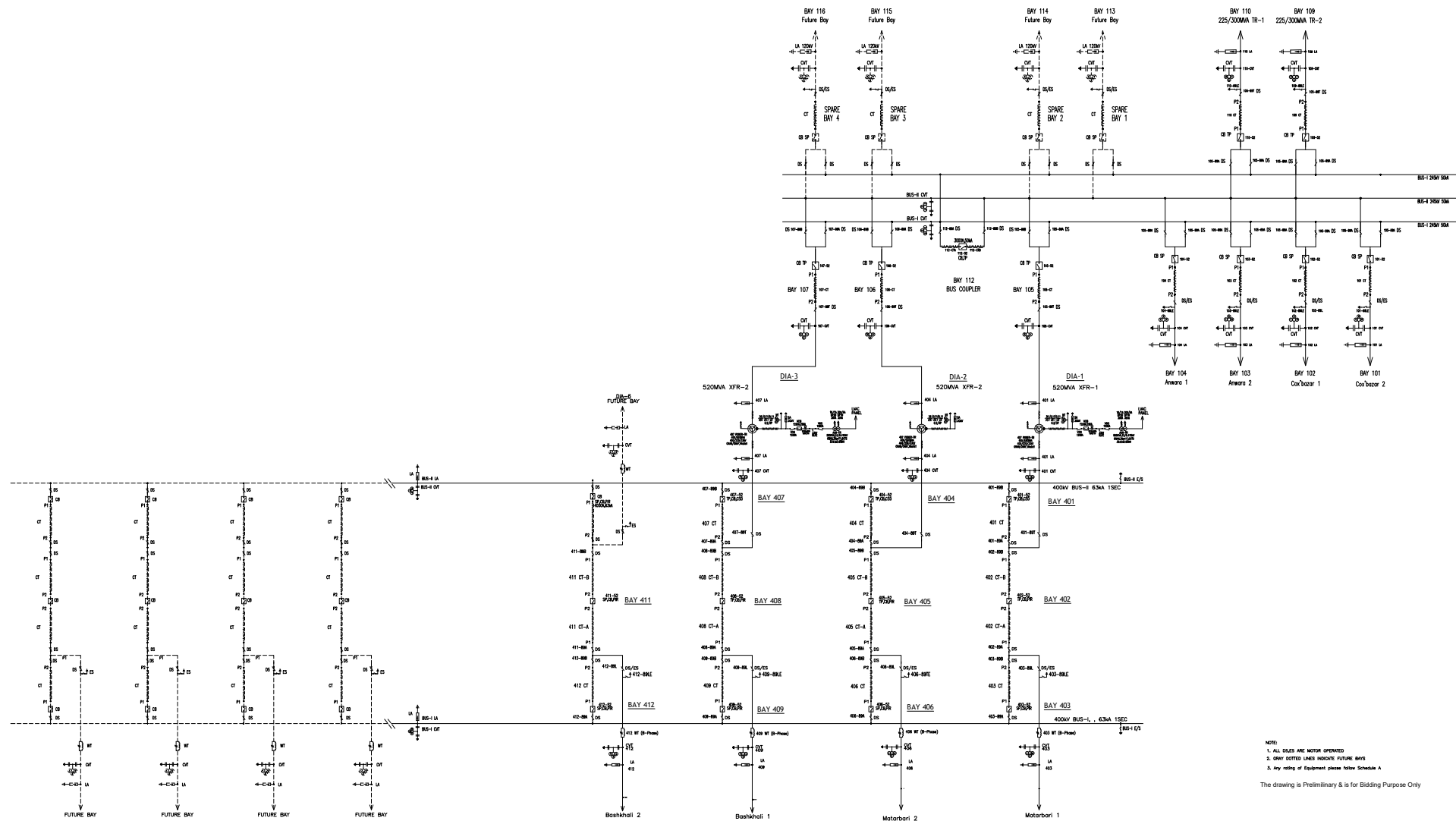
1. Drawings

The drawings provided in this section are solely for the purpose of bid information and bid preparation.

They present the typical details of the project facilities and plant requirements for the following.

List of Bid Drawings

SL	Drawing No.	Drawing Title
1.	PGCB/ADB/SLD.1	400kV & 230KV Single Line Diagram
2.	PGCB/ADB/SLD.2	132kV Single Line Diagram
3.	PGCB/ADB/SLD.3	Tertiary Single Line Diagram
4.	PGCB/ADB/LAY_all	Overall Layout
5.	PGCB/ADB/ LP_400kV	400kV Line & Bus Protection
6.	PGCB/ADB/Trans_400	400KV Tr Protection
7.	PGCB/ADB/ LP_230kV	230kV Line & Bus Protection
8.	PGCB/ADB/230kV_BC	230kV Bus Coupler Protection
9.	PGCB/ADB/Trans_230	230KV Tr Protection
10.	PGCB/ADB/ LP_132kV	132kV Line & Bus Protection
11.	PGCB/ADB/132kV_BC	132kV Bus Coupler Protection
12.	PGCB/ADB/ SR	400kV Shunt Reactor Protection (N/A)
13.	PGCB/ADB/ Aux.Tr.	Aux Tr composition scheme
14.	PGCB/ADB/SAS	Substation Automation System architecture
15.	PGCB/ADB/DC_110V	110V DC distribution scheme
16.	PGCB/ADB/DC_48V	48V DC distribution scheme
17.	PGCB/ADB/AC	LV AC distribution scheme
18.	PGCB/ADB/COM	Communication Network Design
19.	PGCB/ADB/OPT	Fibre Optic Mutiplexer equipment
20.	PGCB/ADB/MCRP	Main Control Building Plan view
21.	PGCB/ADB/MCRS	Main Control Building Plan Section
22.	PGCB/ADB/SPR_400	400kV Local Control building
23.	PGCB/ADB/SPR_132	132kV Local Control building
24.	PGCB/ADB//GH	Guard house
25.	PGCB/ADB/SSL	Switchyard Surface Level
26.	PGCB/ADB/CAR	Car Port
27.	PGCB/ADB/Fence	Fench
28.	PGCB/ADB/BW	Boundary Wall
29.	PGCB/ADB/BWRW	Boundary Wall with Retaining Wall
30.	PGCB/ADB/GATE	Gate
31.	PGCB/ADB/AR	Approach Road
32.	PGCB/ADB/PL	PL Marking
33.	PGCB/ADB/TRS	Typical Road Sections
34.	PGCB/ADB/SEP	Sentry Post
35.	PGCB/ADB/ST	Septic Tank
36.	PGCB/ADB/SW	Soak Well
37.	PGCB/ADB/SLP	Slope Protection
38.	PGCB/ADB/WW	Walk Way
39.	PGCB/ADB/AB	Ansar Barrack



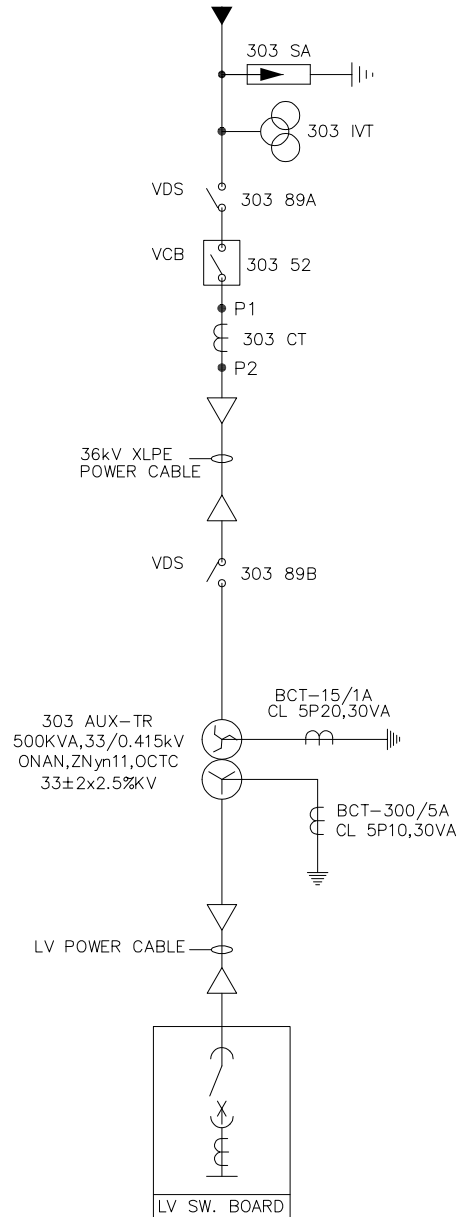
NOTE:

1. ALL DSES ARE MOTOR OPERATED
2. GRAY DOTTED LINES INDICATE FUTURE BAYS
3. Any rating of Equipment please follow Schedule A.

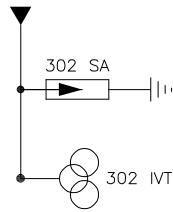
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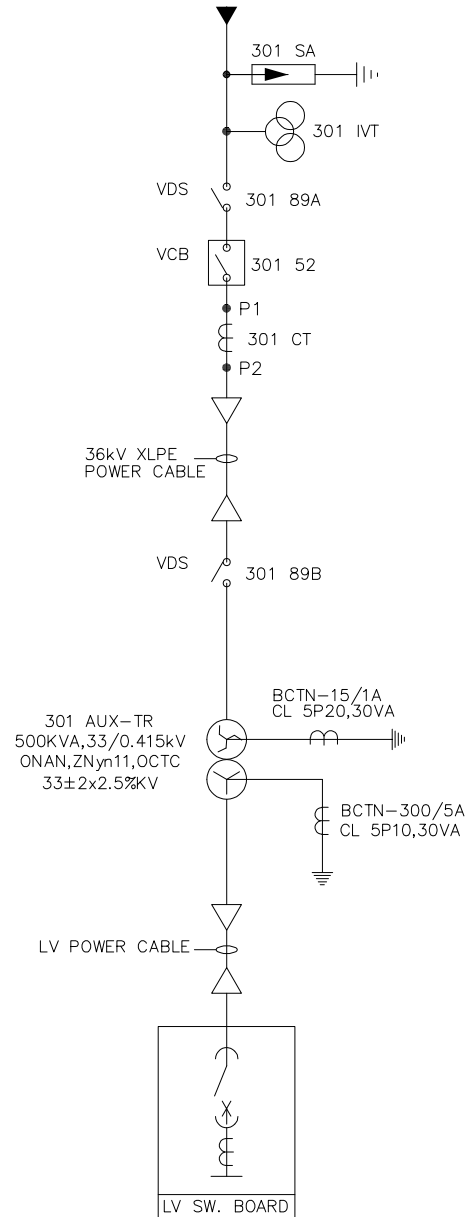
33KV INCOMER FROM
TERTIARY OF 400/230/33kV
TRANSFORMER BAY 3



33KV INCOMER FROM
TERTIARY OF 400/230/33kV
TRANSFORMER BAY 2



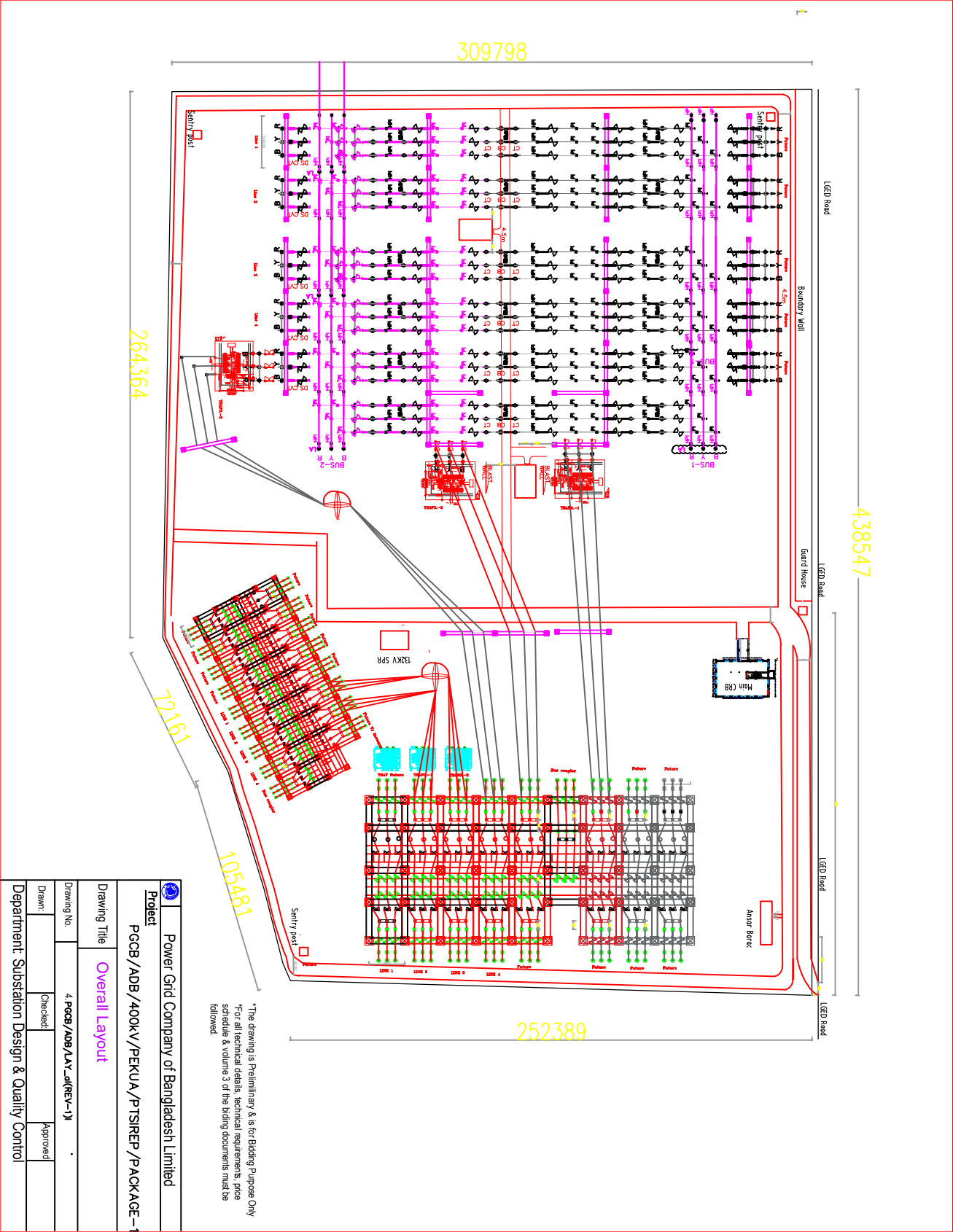
33KV INCOMER FROM
TERTIARY OF 400/230/33kV
TRANSFORMER BAY 1



3. Any rating of Equipment please follow Schedule A

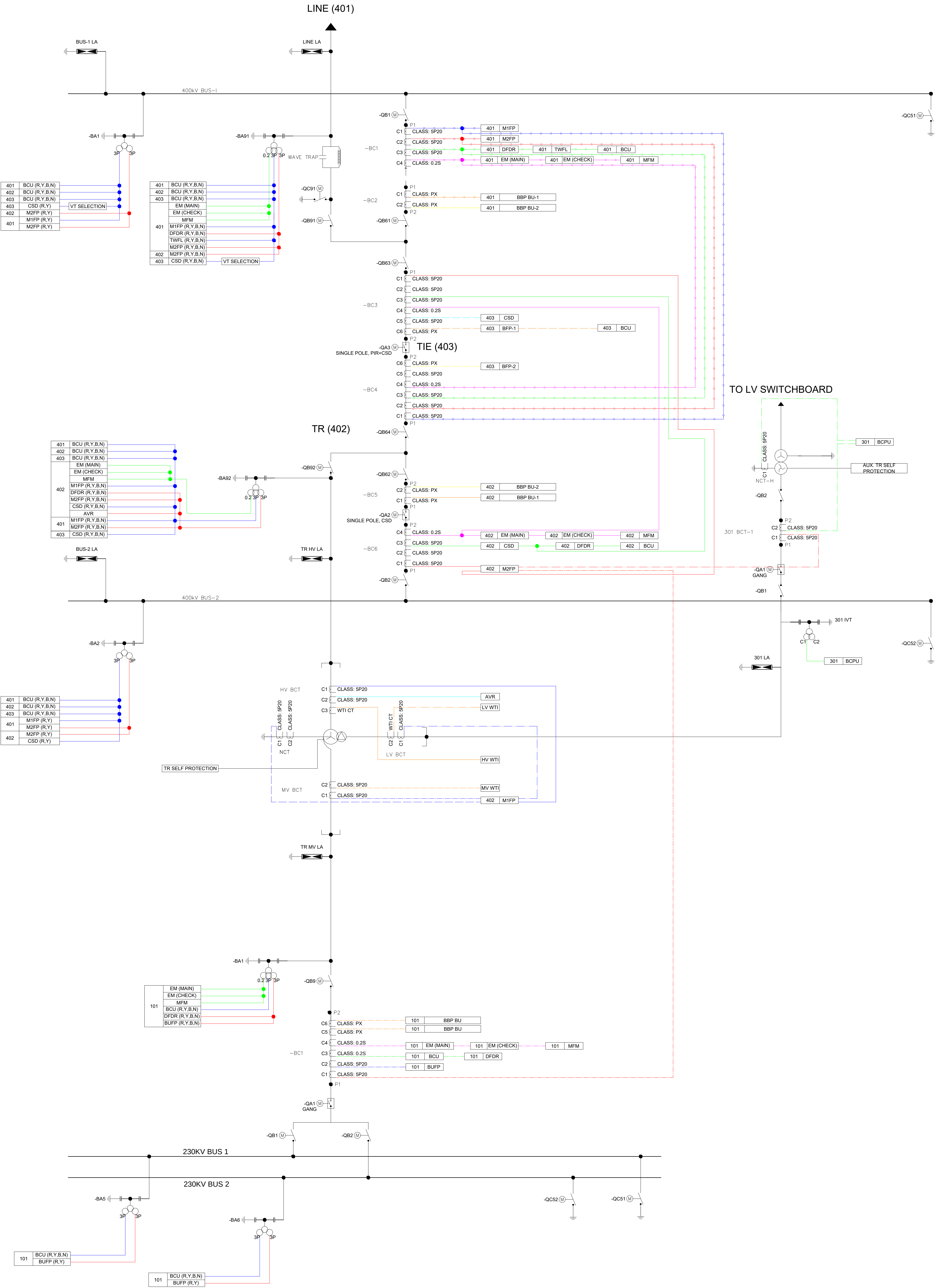
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"The drawing is Preliminary & is for Bidding Purpose Only
 For all technical details, technical requirements, price
 schedule & volume 3 of the bidding documents must be
 followed

 Power Grid Company of Bangladesh Limited			
Project PGCB / ADB / 400kV / PEKUA / PTSIREP / PACKAGE - 1			
Drawing Title Overall Layout			
Drawing No. 4. PGCB / ADB / LAY - d (REV-1)	Drawn: []	Checked: []	Approved: []
Department: Substation Design & Quality Control			



Tender Purpose Only
Tender Drawing Name: 400kV Line & Bus Protection
400kV Tr Protection
Aux Tr composition scheme
Tender Drawing No: 5.PGCB/ADB/ LP_400kV
6.PGCB/ADB/Trans_400
13.PGCB/ADB/ Aux.Tr.

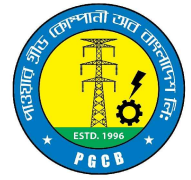
NOTES:

- All 400kV CBs should be Single Pole operated.
- 50BF functions will be activated for 2 stages: Re-trip to the same CB and Remote trip to the other sources.
- 21/85 (Communication aided distance protection) and 67N/85 (Communication aided DEF protection) should be activated as per scheme selection in the particular relay.
- 79 functions will be disabled for U/G cable feeders.
- In normal condition, 79 function of 401-M1FP will be used for QA1 and QA3. 79 function of 401-M2FP will be used in case of unhealthiness of 401-M1FP.
- Auto-Reclose command will be issued to QA1 initially; the command will be issued to QA3 after successful Auto-Reclose of QA1.
- 25 functions of 401-M2FP, 402-M2FP and 101-BUFP relays will be used for MIMIC controls of the respective CBs.
- 25 functions of BCU will be used for BCU controls of the respective CBs.
- DTT from remote end of the LINE feeder will be received by M1FP and M2FP to provide tripping to the respective CBs.
- Busbar Protections should be decentralized in principle.
- For 50BF Remote Trip of Bus CBs, tripping will be issued to all CBs connected to the respective Busbar; the trip logic will be implemented internally with BBP Central Unit.
- 403-BFP1 and 403-BFP2 can be either stand-alone or connected with BBP Central Unit.
- Both Optical Multiplexer and PLCC based communication should be established between both end substations of the LINE feeder in 400kV and above voltage levels.
- Dedicated optical fiber communications have to be established for 87L functions of Main-1 and Main-2 relays. 2 (two) communication channels should be used for each set of relays to ensure redundancy.
- Main-1 and Main-2 LINE protection relays, Transformer protection relays, BBP relays and BFP relays should preferably of different manufacturer. Alternatively, different model of the same manufacturer.
- TWFL (Traveling Wave Fault Locator) may be either single ended or double ended in terms of operating mechanism; if double ended, devices in both ends should be provided, installed and tested by the contractor.
- Class of protective core of Current Transformers will follow the specifications mentioned in the approved Overall Single Line Diagram, Layout drawing and Current Transformer GTP. The class shown here is for demonstrating the secondary connections only.
- Type of Voltage Transformers can be either CVT or IVT as mentioned in the approved Overall Single Line Diagram, Layout drawing and Voltage Transformer GTP. The type shown here is for demonstrating the secondary connections only.
- This document is for conceptualization of protection philosophy. Actual layout and arrangement of the High-voltage equipment may differ depending on the particular substation.
- Any aspect mentioned in the Standard Document may be superseded by the Tender document and Scope of Work depending on specific application.

VOLTAGE LEVEL	400kV
BUS ARRANGEMENT	ONE AND HALF
SUBSTATION TYPE	AIS
FEEDER ARRANGEMENT/TYPE	LINE (WITHOUT RX)+TR

1	17.08.2021	REVISED AS PER COMMENTS
0	27.06.2021	FIRST PREPARATION
REVISION	DATE	REMARKS

STANDARD DOCUMENT
NUMBER: 22A



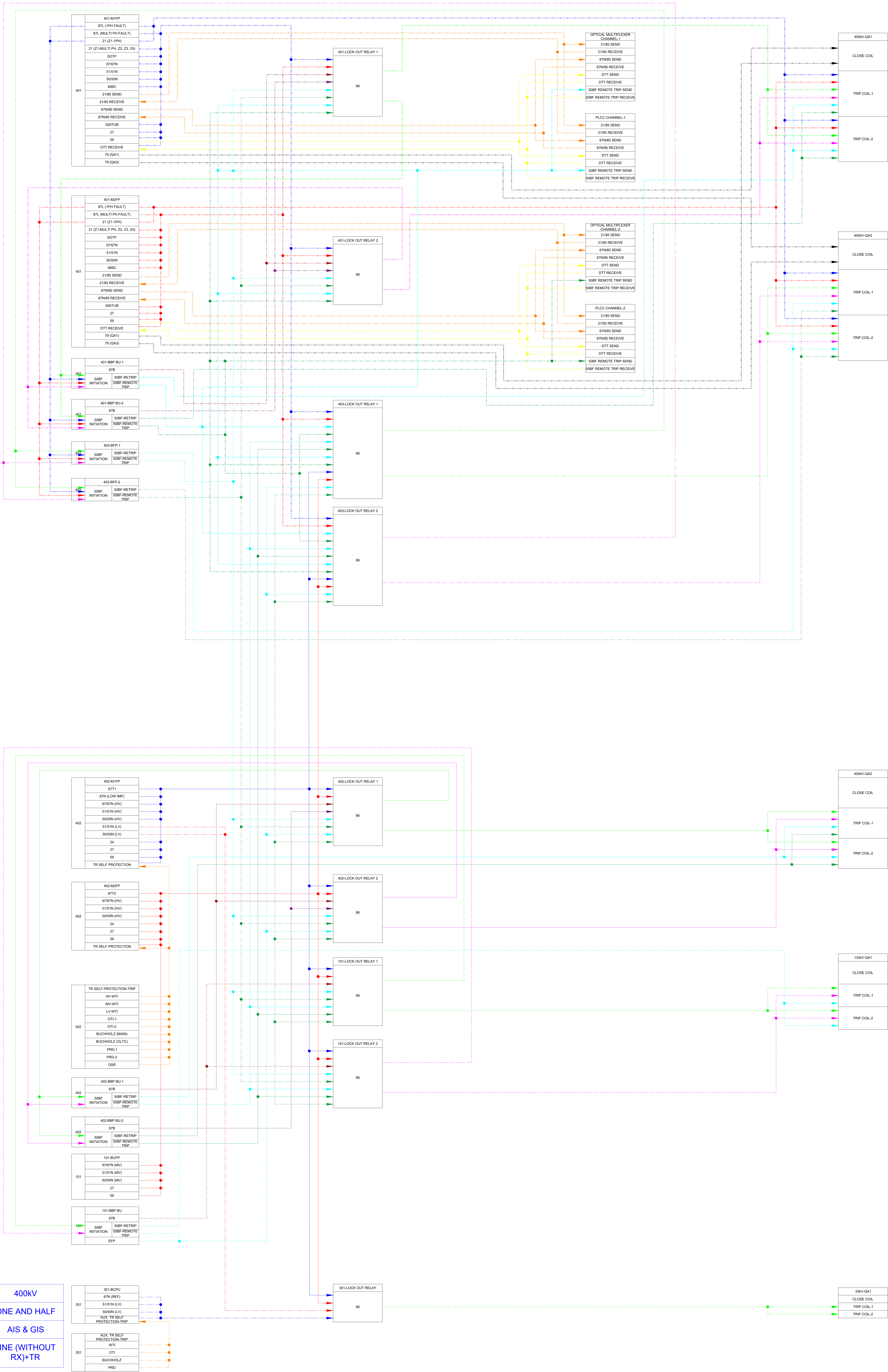
POWER GRID COMPANY OF BANGLADESH LTD.

TITLE: PROTECTION SLD & TRIP LOGIC OF 400kV SUBSTATION IN 1 AND 1/2
CB WITH LINE+TR ARRANGEMENT (LINE WITHOUT REACTOR)

SHEET 1

DOCUMENT ID: C0-OH-AG-LN/TR-PSLD (A)

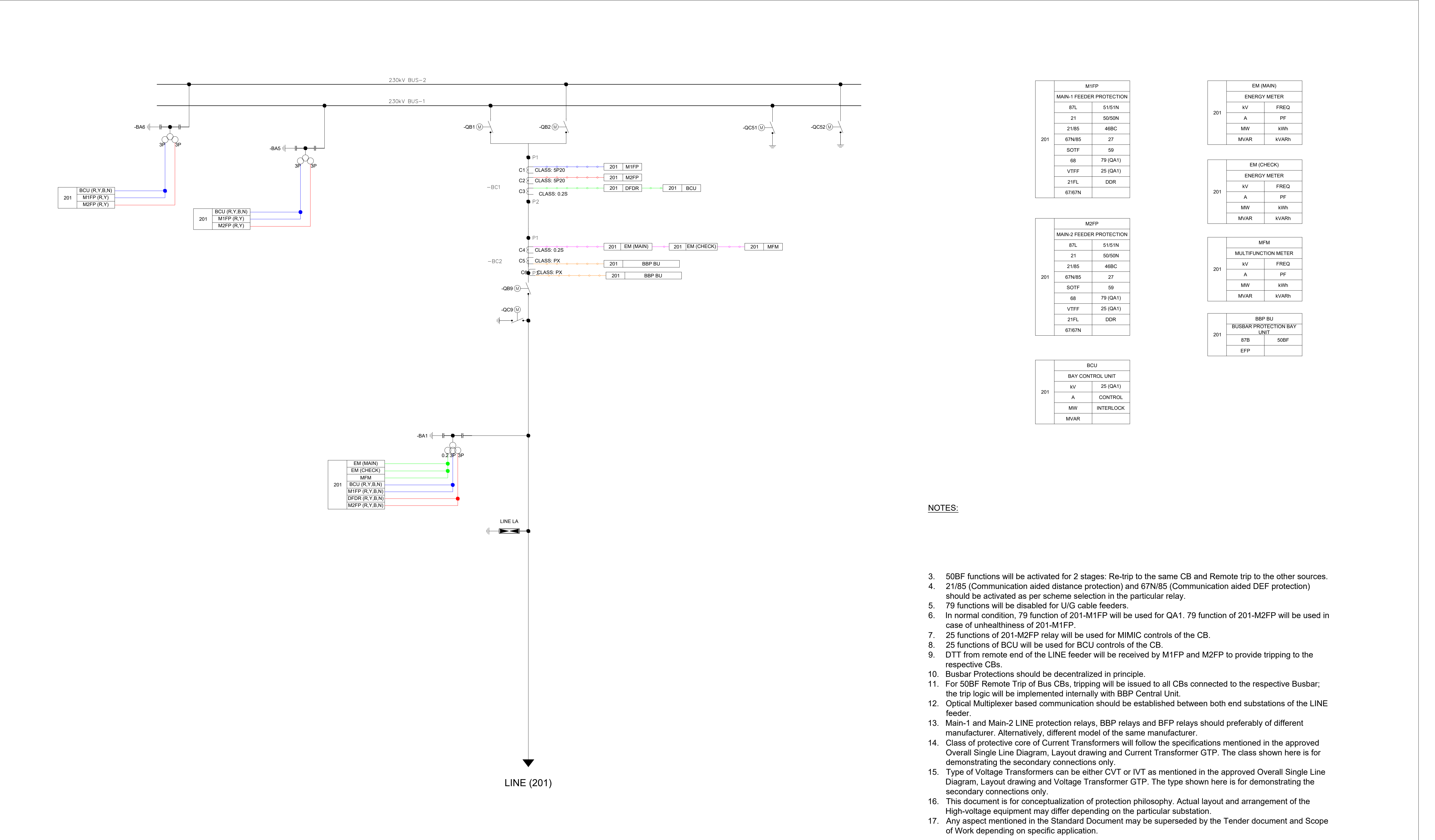
NEXT SHT 2



VOLTAGE LEVEL	400kV
BUS ARRANGEMENT	ONE AND HALF
SUBSTATION TYPE	AIS & GIS
FEEDER ARRANGEMENT/TYPE	LINE (WITHOUT RX)+TR

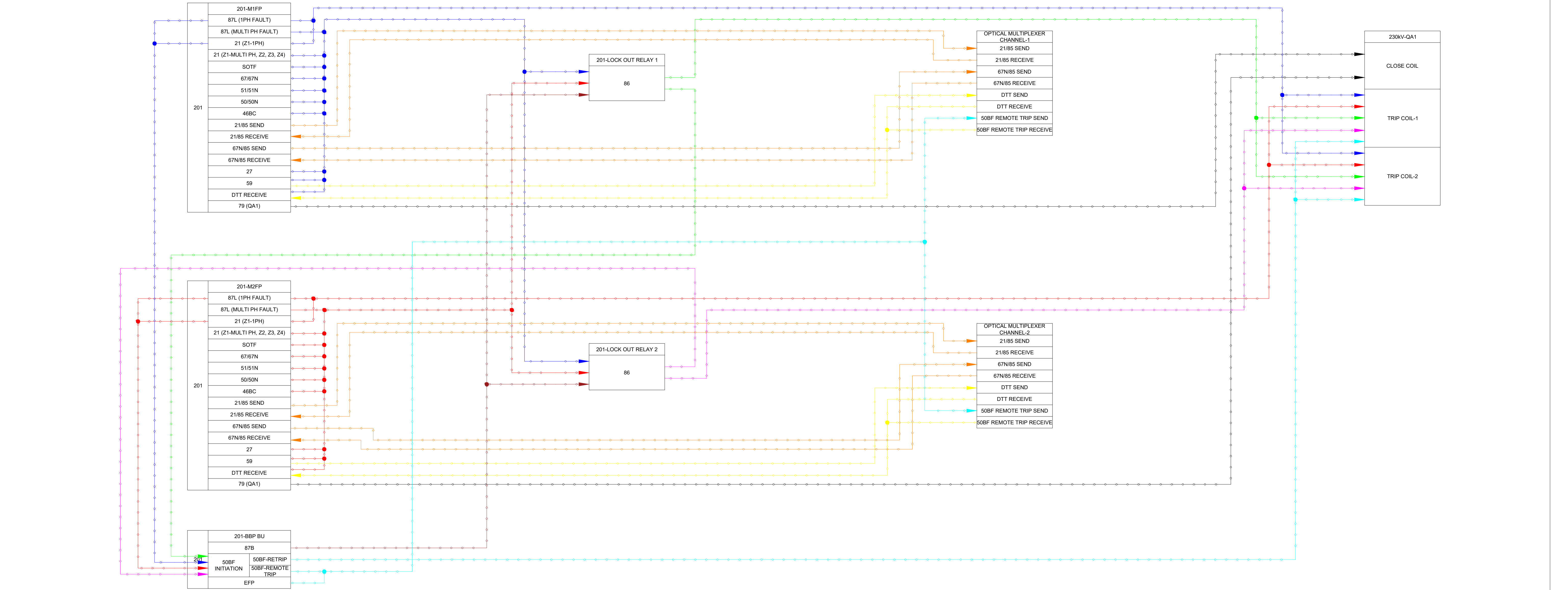
301-BCPU	87N (REF)
5151N (LV)	5050N (LV)
AUX TR SELF PROTECTION-TRIP	W1
OTI	BUCHHOLZ
PRD	

AUX TR SELF PROTECTION-TRIP	W1
OTI	BUCHHOLZ
PRD	



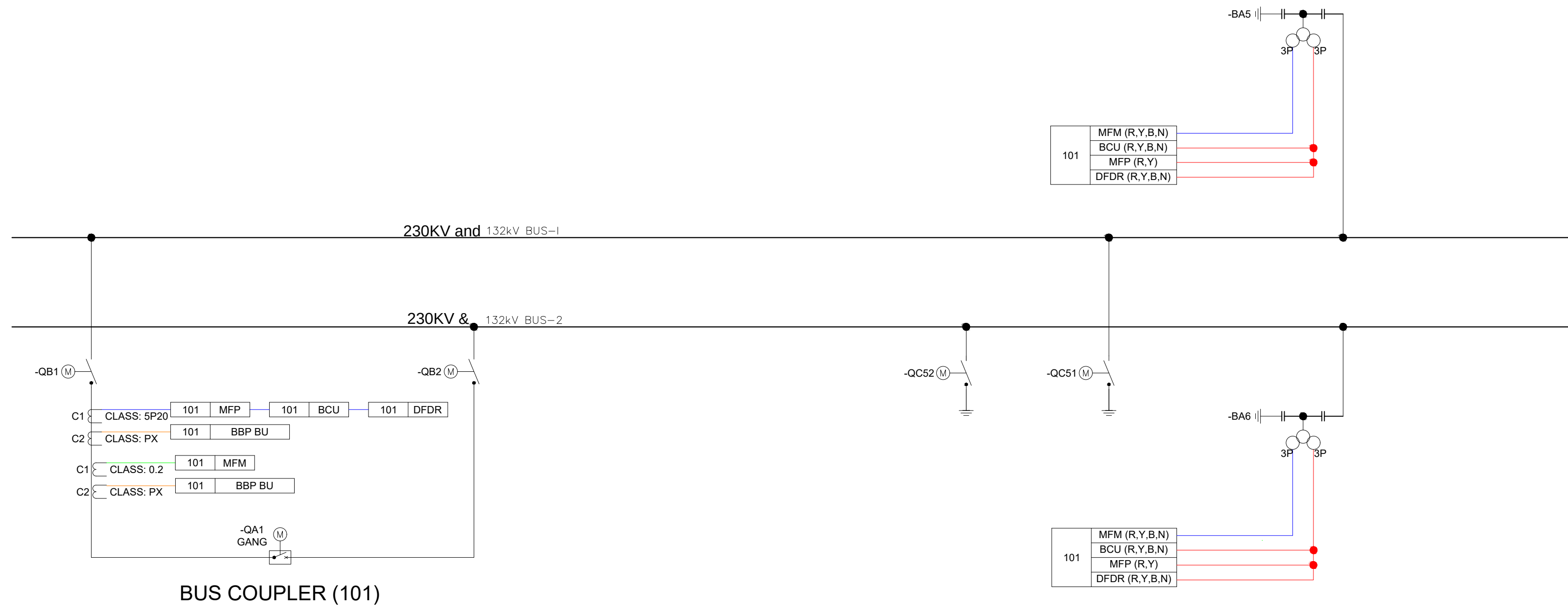
NOTES:

- 50BF functions will be activated for 2 stages: Re-trip to the same CB and Remote trip to the other sources.
- 21/85 (Communication aided distance protection) and 67N/85 (Communication aided DEF protection) should be activated as per scheme selection in the particular relay.
- 79 functions will be disabled for U/G cable feeders.
- In normal condition, 79 function of 201-M1FP will be used for QA1. 79 function of 201-M2FP will be used in case of unhealthiness of 201-M1FP.
- 25 functions of 201-M2FP relay will be used for MIMIC controls of the CB.
- 25 functions of BCU will be used for BCU controls of the CB.
- DTT from remote end of the LINE feeder will be received by M1FP and M2FP to provide tripping to the respective CBs.
- Busbar Protections should be decentralized in principle.
- For 50BF Remote Trip of Bus CBs, tripping will be issued to all CBs connected to the respective Busbar; the trip logic will be implemented internally with BBP Central Unit.
- Optical Multiplexer based communication should be established between both end substations of the LINE feeder.
- Main-1 and Main-2 LINE protection relays, BBP relays and BFP relays should preferably of different manufacturer. Alternatively, different model of the same manufacturer.
- Class of protective core of Current Transformers will follow the specifications mentioned in the approved Overall Single Line Diagram, Layout drawing and Current Transformer GTP. The class shown here is for demonstrating the secondary connections only.
- Type of Voltage Transformers can be either CVT or IVT as mentioned in the approved Overall Single Line Diagram, Layout drawing and Voltage Transformer GTP. The type shown here is for demonstrating the secondary connections only.
- This document is for conceptualization of protection philosophy. Actual layout and arrangement of the High-voltage equipment may differ depending on the particular substation.
- Any aspect mentioned in the Standard Document may be superseded by the Tender document and Scope of Work depending on specific application.



VOLTAGE LEVEL	230kV
BUS ARRANGEMENT	DOUBLE BUS
SUBSTATION TYPE	AIS
FEEDER ARRANGEMENT/TYPE	LINE

Tender purpose only
Tender Drawing Name: 7.230kV Line & Bus
Protection Tender Drawing No: PGCB/ADB/
LP_230kV



MFP			
MAIN FEEDER PROTECTION			
101	51/51N	25 (QA1)	
	50/50N	DDR	

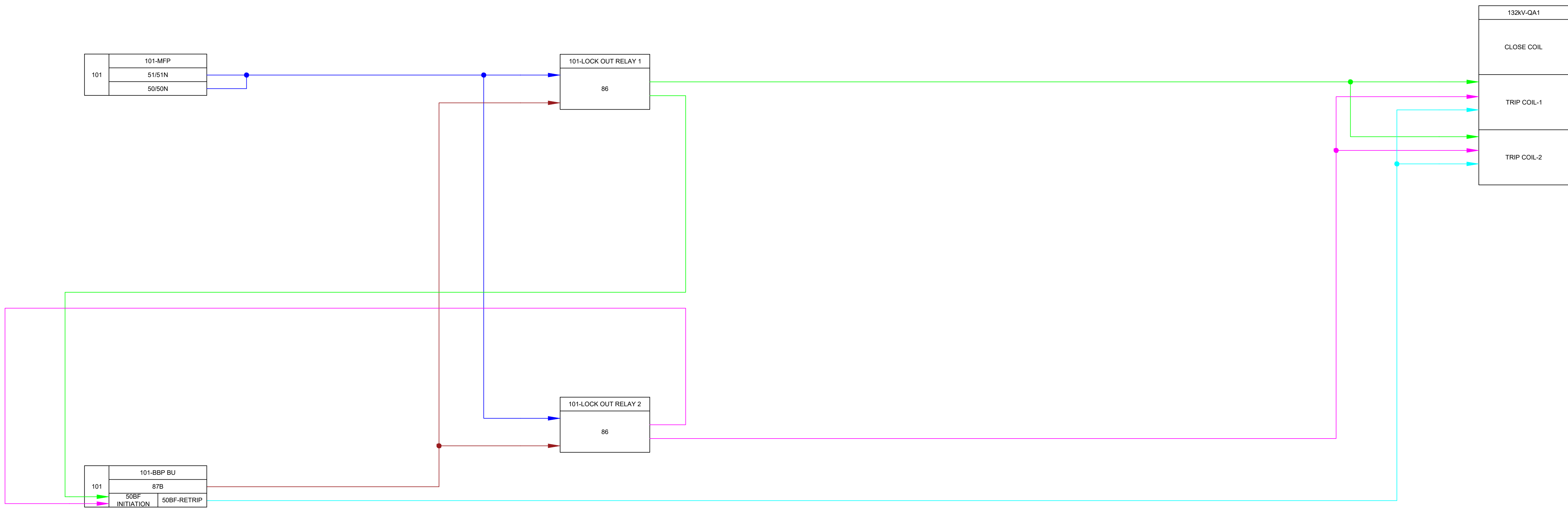
BBP BU			
BUSBAR PROTECTION BAY UNIT			
101	87B	50BF	

BCU			
BAY CONTROL UNIT			
101	KV	25 (QA1)	
	A	CONTROL	
	MW	INTERLOCK	
	MVAR		

MFM			
MULTIFUNCTION METER			
101	KV	FREQ	
	A	PF	
	MW	WWh	
	MVAR	WVarh	

NOTES:

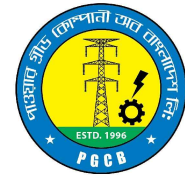
- 50BF functions will be activated for 1 stage: Re-trip to the same CB.
- 25 functions of 101-MFP relay will be used for MIMIC controls of the CB.
- 25 functions of BCU will be used for BCU controls of the CB.
- Busbar Protections should be decentralized in principle.
- For 50BF Remote Trip of Bus Coupler CB, tripping will be issued to all CBs connected to both Busbars; the trip logic will be implemented internally with BBP Central Unit.
- BBP BU-B will be used for CT measurement for the respective Busbar. Tripping will be issued from BBP BU-A for both Bus Zone Trip.
- Class of protective core of Current Transformers will follow the specifications mentioned in the approved Overall Single Line Diagram, Layout drawing and Current Transformer GTP. The class shown here is for demonstrating the secondary connections only.
- Type of Voltage Transformers can be either CVT or IVT as mentioned in the approved Overall Single Line Diagram, Layout drawing and Voltage Transformer GTP. The type shown here is for demonstrating the secondary connections only.
- This document is for conceptualization of protection philosophy. Actual layout and arrangement of the High-voltage equipment may differ depending on the particular substation.
- Any aspect mentioned in the Standard Document may be superseded by the Tender document and Scope of Work depending on specific application.



VOLTAGE LEVEL	230KV & 132KV
BUS ARRANGEMENT	DOUBLE BUS
SUBSTATION TYPE	AIS
FEEDER ARRANGEMENT/TYPE	BUS COUPLER

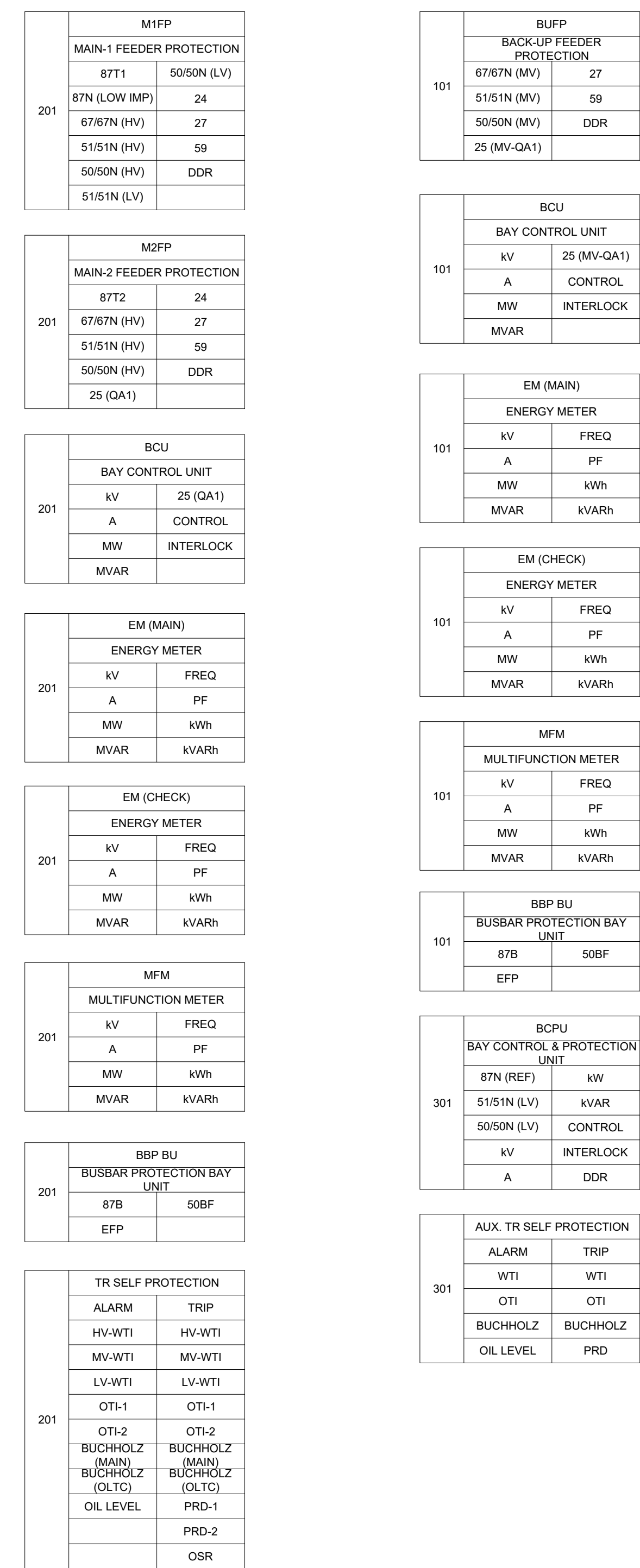
REVISION	DATE	REMARKS
1	16.08.2021	REVISED AS PER COMMENTS
0	27.06.2021	FIRST PREPARATION

STANDARD DOCUMENT NUMBER 9

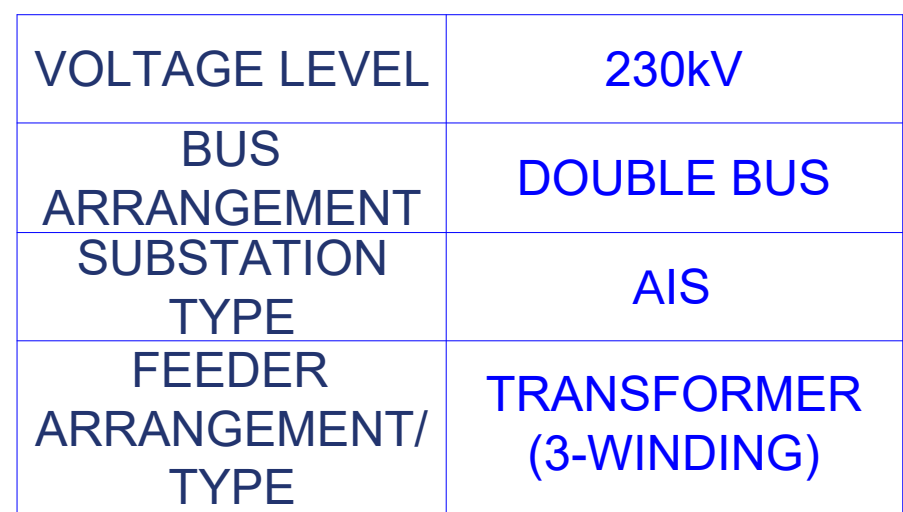


POWER GRID COMPANY OF BANGLADESH LTD.

TITLE: PROTECTION SLD & TRIP LOGIC OF 230KV & 132KV SUBSTATION WITH DOUBLE BUS ARRANGEMENT FOR BUS COUPLER FEEDER	SHEET	1
DOCUMENT ID: E0-DB-AG-BC-PSLD	NEXT SHT	N/A

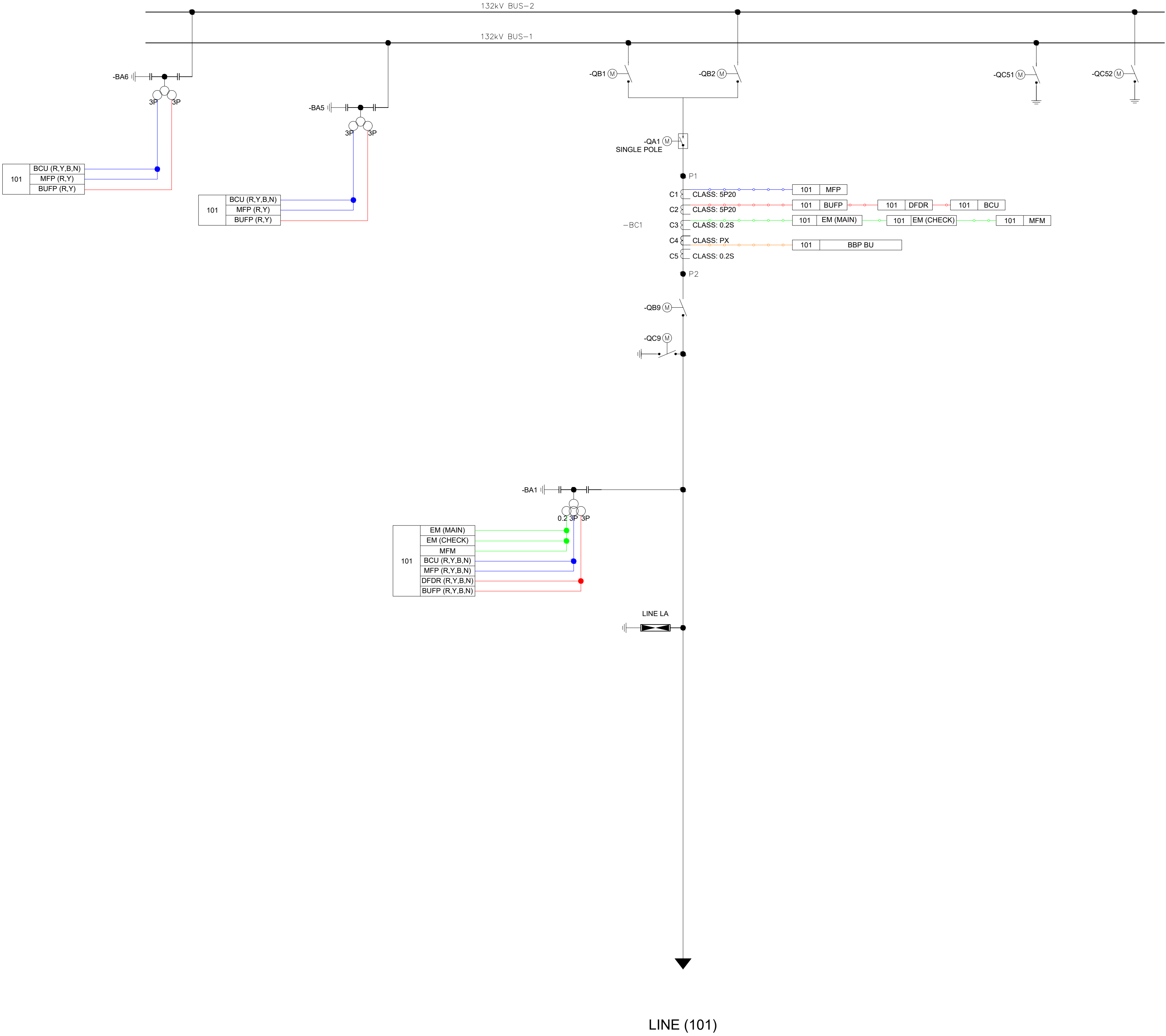


2. 50BF functions will be activated for 2 stages: Re-trip to the same CB and Remote trip to the other sources.
3. 25 function of 201-M2FP and 101-BUFP relays will be used for MIMIC controls of the respective CBs.
4. 25 functions of BCU will be used for BCU controls of the respective CBs.
5. Busbar Protections should be decentralized in principle.
6. For 50BF Remote Trip of Bus CBs, tripping will be issued to all CBs connected to the respective Busbar; the trip logic will be implemented internally with BFP Central Unit.
7. Main 1 and Main 2 busbar relays, BFP relays and BFP relays and BFP relays should preferably of different manufacturer. Alternatively, different model of the same manufacturer.
8. Class of protective core of Current Transformers will follow the specifications mentioned in the approved Overall Single Line Diagram, Layout drawing and Current Transformer GTP. The class shown here is for demonstrating the secondary connections only.
9. Type of Voltage Transformers can be either CVT or IVT as mentioned in the approved Overall Single Line Diagram, Layout drawing and Voltage Transformer GTP. The type shown here is for demonstrating the secondary connections only.
10. This document is for conceptualization of protection philosophy. Actual layout and arrangement of the High-voltage equipment may differ depending on the particular substation.
11. Any aspect mentioned in the Standard Document may be superseded by the Tender document and Scope of Work depending on specific application.



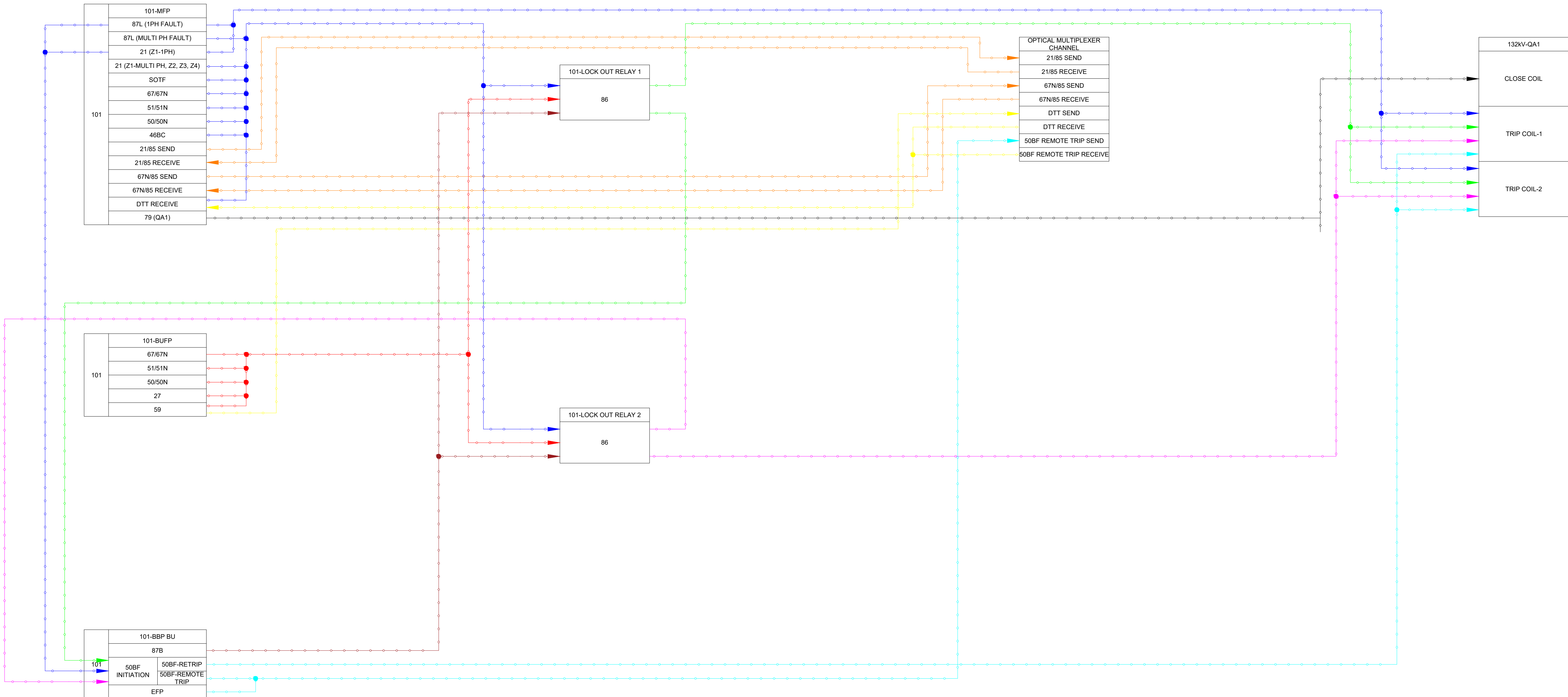
TITLE: PROTECTION SLD & TRIP LOGIC OF 230KV SUBSTATION WITH DOUBLE BUS ARRANGEMENT FOR TRANSFORMER (3W) FEEDER	SHEET	1
DOCUMENT ID: DO-DB-GO-TR-PSLD	NEXT SHT	N/A

Tender purpose Only
Tender Drawing Name: 230KV Tr Protection
Tender Drwaing No:9.PGCB/ADB/Trans_230



NOTES:

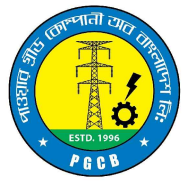
- 50BF functions will be activated for 2 stages: Re-trip to the same CB and Remote trip to the other sources.
- 21/85 (Communication aided distance protection) and 67N/85 (Communication aided DEF protection) should be activated as per scheme selection in the particular relay.
- 79 function will be disabled for U/G cable feeders.
- 25 functions of 101-BUFP relay will be used for MIMIC controls of the CB.
- 25 functions of BCU will be used for BCU controls of the CB.
- DTT from remote end of the LINE feeder will be received by MFP to provide tripping to the CB.
- Busbar Protections should be decentralized in principle.
- For 50BF Remote Trip of Bus CBs, tripping will be issued to all CBs connected to the respective Busbar; the trip logic will be implemented internally with BBP Central Unit.
- Optical Multiplexer based communication should be established between both end substations of the LINE feeder.
- Class of protective core of Current Transformers will follow the specifications mentioned in the approved Overall Single Line Diagram, Layout drawing and Current Transformer GTP. The class shown here is for demonstrating the secondary connections only.
- Type of Voltage Transformers can be either CVT or IVT as mentioned in the approved Overall Single Line Diagram, Layout drawing and Voltage Transformer GTP. The type shown here is for demonstrating the secondary connections only.
- This document is for conceptualization of protection philosophy. Actual layout and arrangement of the High-voltage equipment may differ depending on the particular substation
- Any aspect mentioned in the Standard Document may be superseded by the Tender document and Scope of Work depending on specific application.



VOLTAGE LEVEL	132kV
BUS ARRANGEMENT	DOUBLE BUS
SUBSTATION TYPE	AIS
FEEDER ARRANGEMENT/TYPE	LINE

REVISION	0	27.06.2021	FIRST PREPARATION
REVISION			REMARKS

STANDARD DOCUMENT
NUMBER: 01



POWER GRID COMPANY OF BANGLADESH LTD.

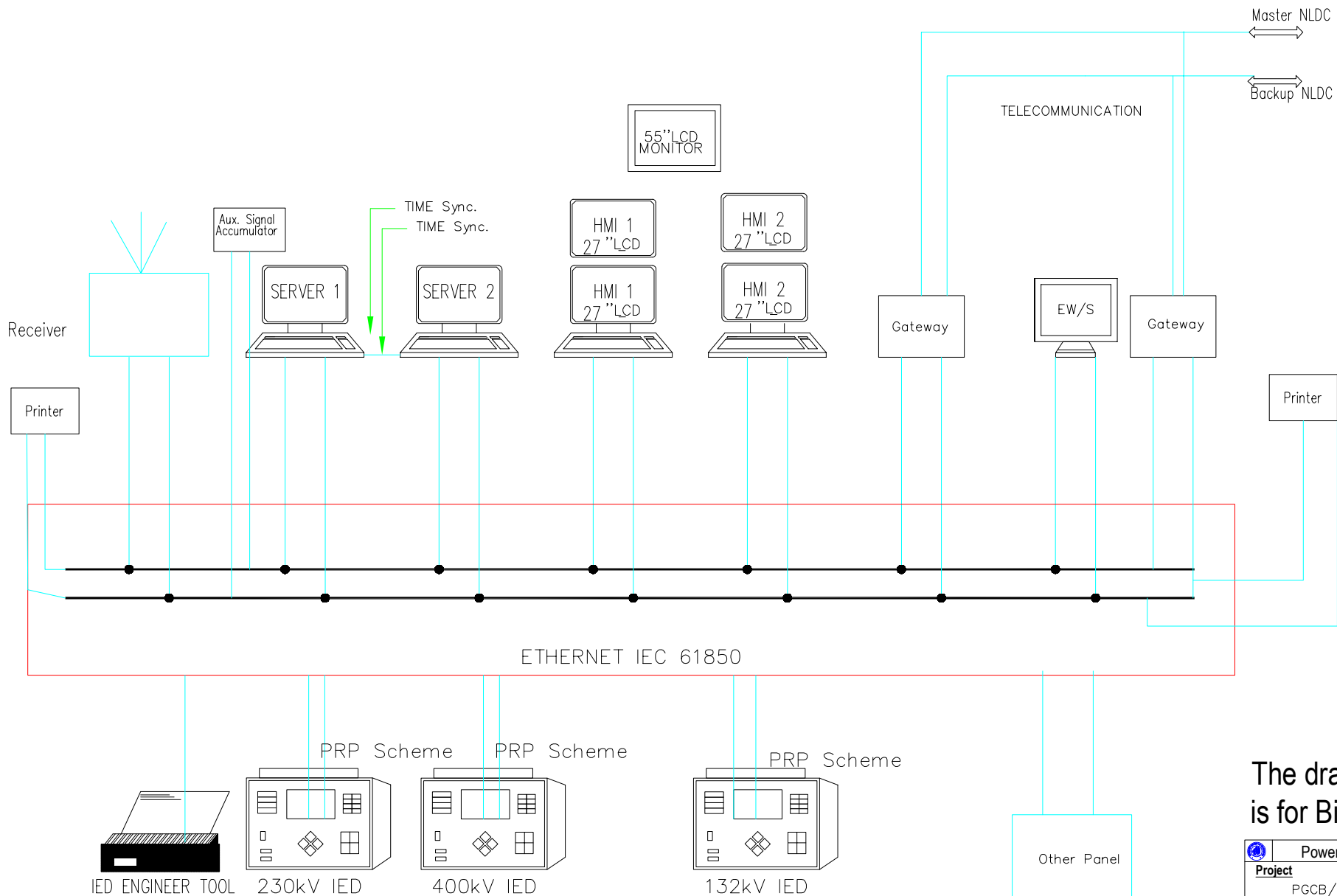
TITLE: PROTECTION SLD & TRIP LOGIC OF 132KV AIS SUBSTATION WITH
DOUBLE BUS ARRANGEMENT FOR LINE FEEDER

DOCUMENT ID: E0-DB-A0-LN-PSLD

SHEET	1
NEXT SHT	N/A

Tender Purpose only

Tender Drawing No:10.PGCB/ADB/LP_132kV
Tender Drawing Name:132kV Line & Bus
Protection

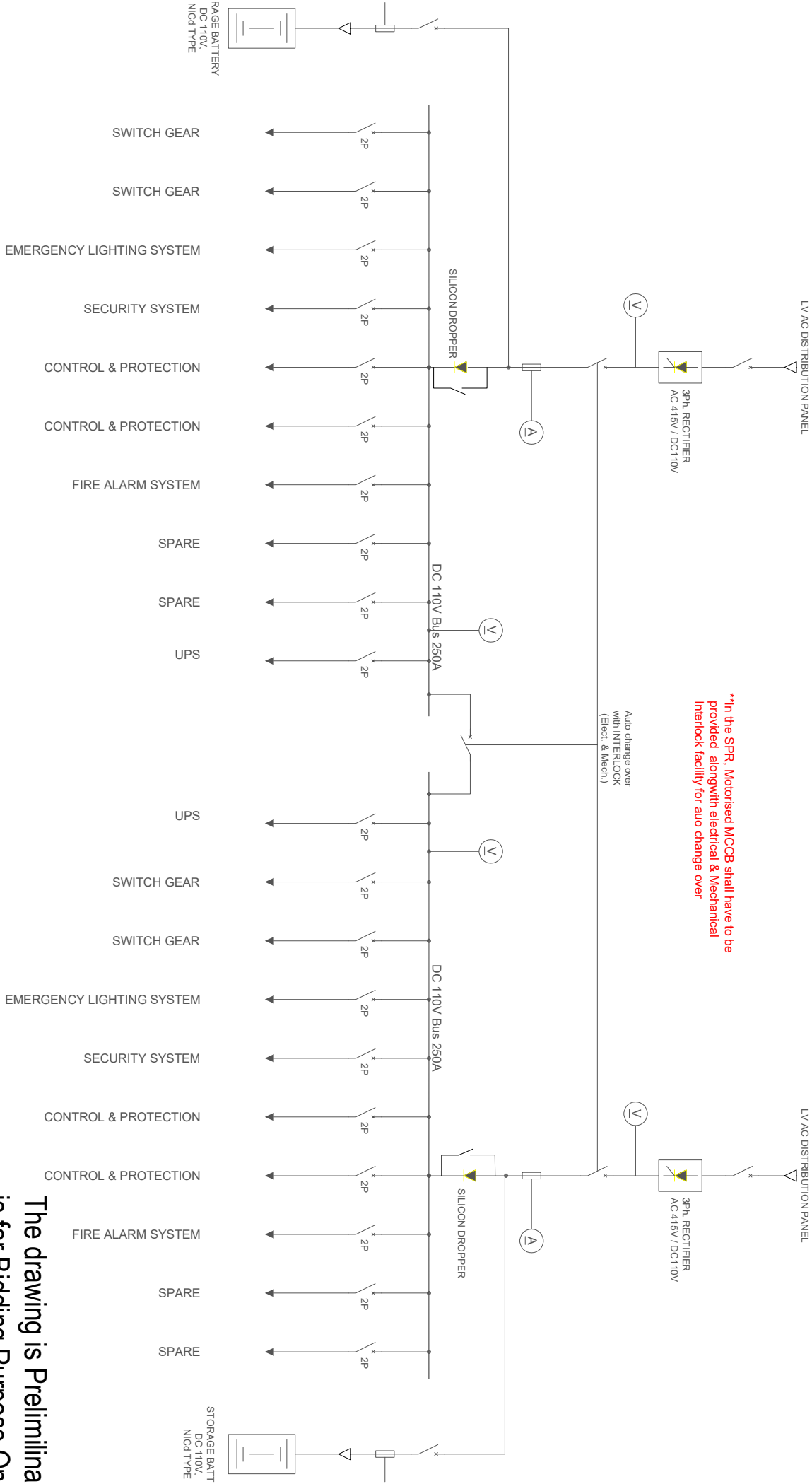


NOTE:

- SAS protocol shall be PRP
- SAS-1 & SAS-2 shall receive data from BCU/Relay through IEC61850 protocol
- SAS SERVER & ENGINEERING PC Shall be panel Mounted
- Gateway shall get data from SAS/BCU/Relay through IEC61850 protocol
- Gateway shall be in HOT & Standby Mode.
- The Tarrif Meters shall also be IEC 61850 compliant
- 02 No. Firewall shall be provided for SAS at the Data Extraction Point
- Server shall consist of CPU, monitor Keyboard etc. detail Control Room Drawings.
- No. of Ethernet Switches, IEDs shown is typical only. Actual no. shall be as per final design requirement

The drawing is Prelimina
is for Bidding Purpose On

Power Grid Company of Bangladesh Limit	
Project PGCB/ADB/400kV/PEKUA/PTSIREP/P/	
Drawing Title	Substation Automation System architecture
Drawing No.	14. PGCB/ADB/SAS
Drawn:	Checked: Approved:
Department: Substation Design & Quality Control	



****In the SPR, Motorised MCCB shall have to be provided alongwith electrical & Mechanical Interlock facility for auto change over**

The drawing is Prelimiina
is for Bidding Purpose On

 Power Grid Company of Bangladesh Limit

Project

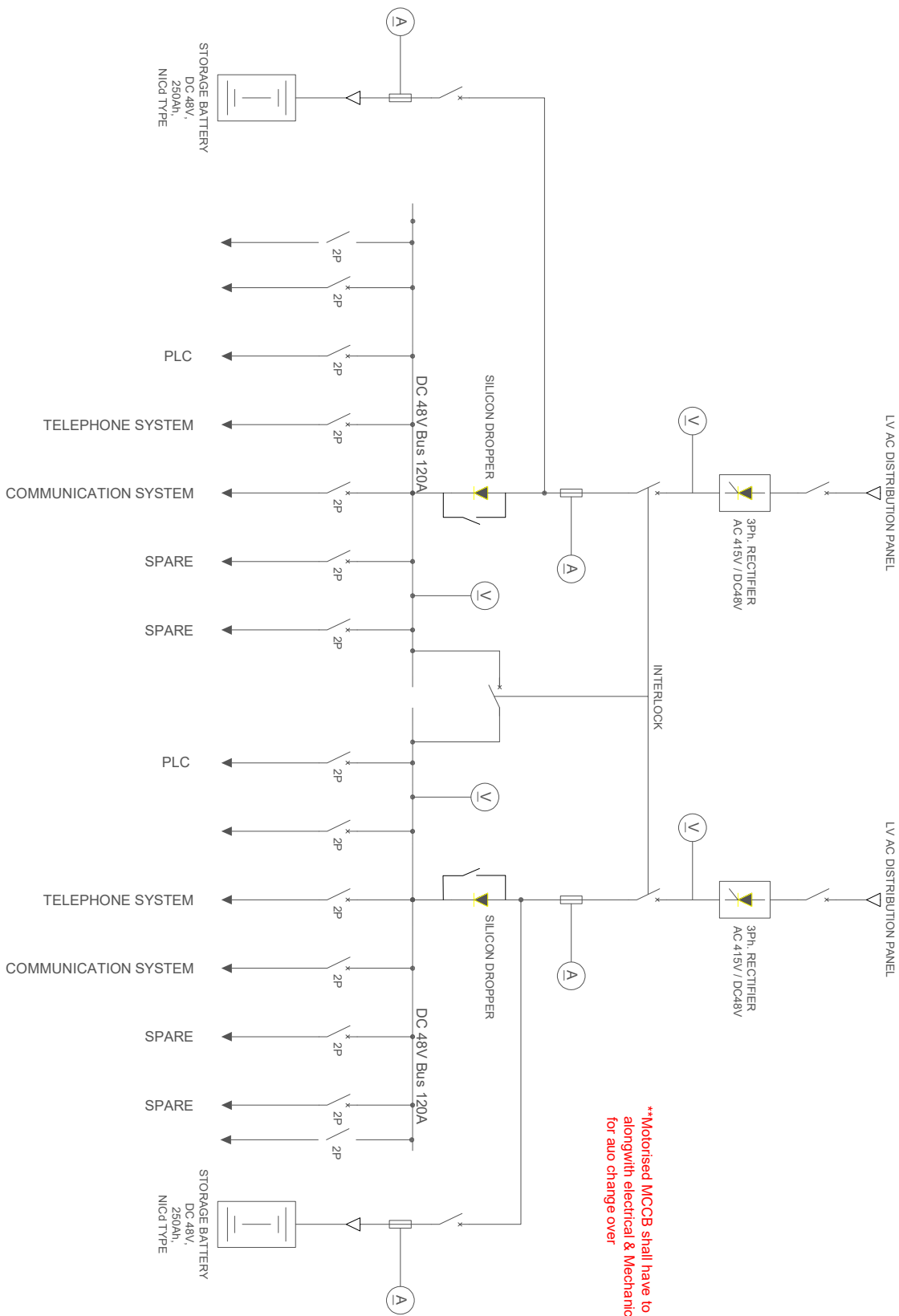
PGCB / ADB / 400kV / PEKUA / P/SIREP / PACK,

Drawing Title DC system 110V

Drawing No. 15.PGCB / ADB / DC_110V

Drawn: Checked: Approved:

Department: Substation Design & Quality Control



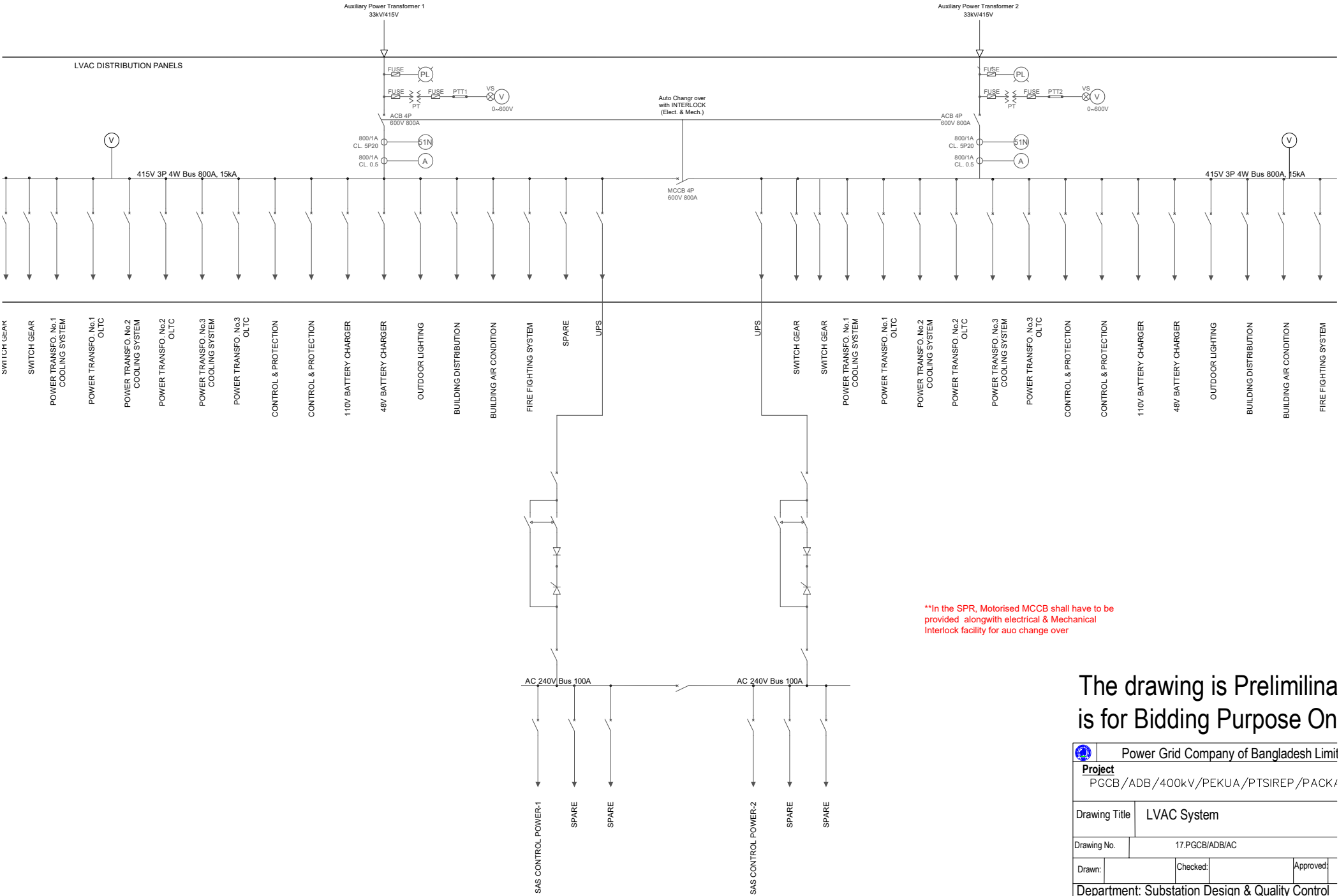
****Motorised MCCB shall have to be provided
alongwith electrical & Mechanical Interlock facility
for auto change over**

The drawing is Prelimiina
is for Bidding Purpose On

		Power Grid Company of Bangladesh Limited	
Project		PGCB / ADB / 400kV / PEKUA / PTSIREP / PACK.	
Drawing Title		DC system 48V	
Drawing No.		16.PGCB / ADB / DC_48V	
Drawn:	Checked:	Approved:	

Department: Substation Design & Quality Control

LV AC

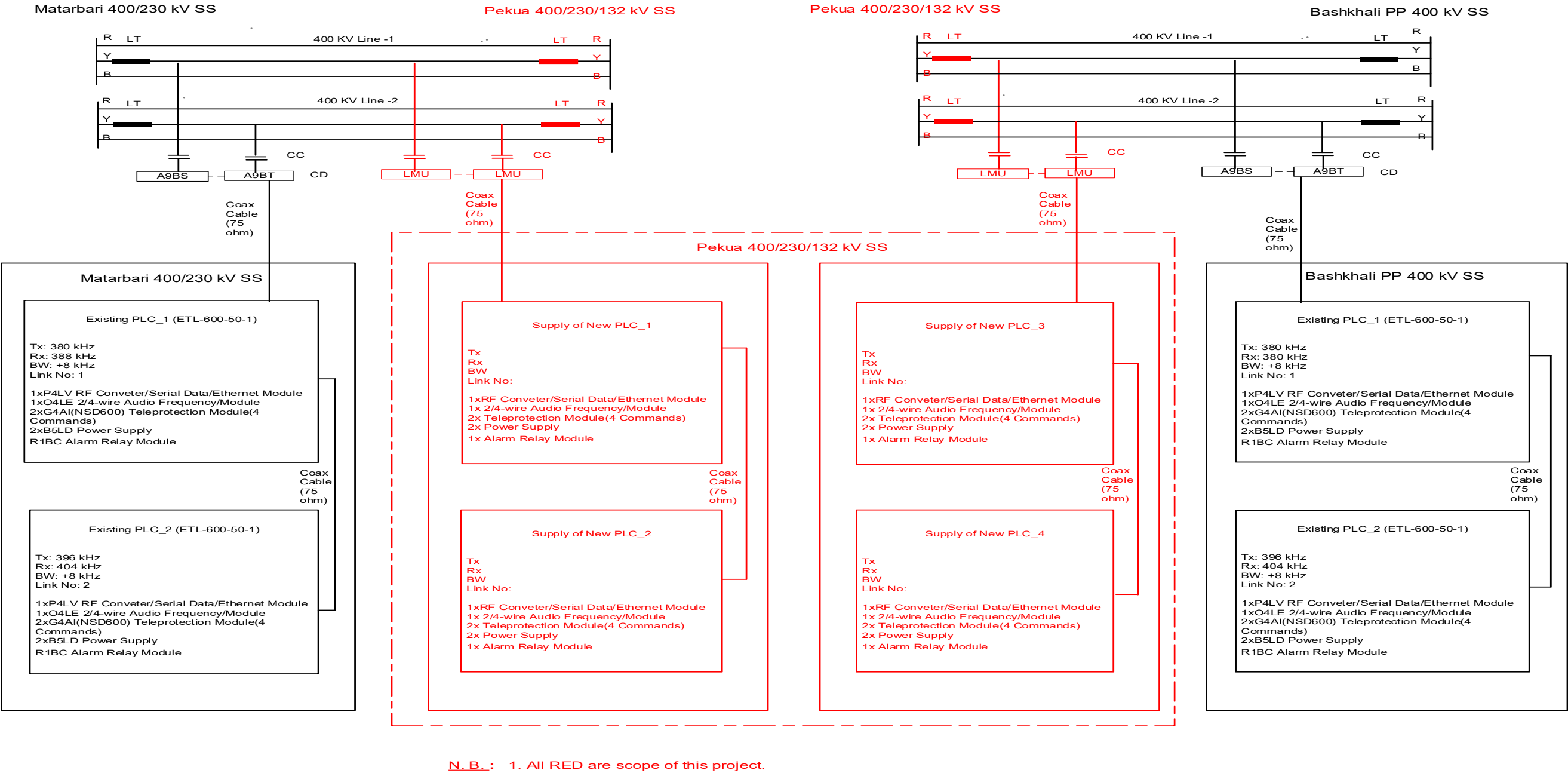


**In the SPR, Motorised MCCB shall have to be provided alongwith electrical & Mechanical Interlock facility for auto change over

The drawing is Prelimilina
is for Bidding Purpose On

	Power Grid Company of Bangladesh Limited		
Project PGCB/ADB/400kV/PEKUA/PTSIREP/PACK/			
Drawing Title		LVAC System	
Drawing No.		17.PGCB/ADB/AC	
Drawn:		Checked:	
			Approved:
Department: Substation Design & Quality Control			

Proposed Powerline Communication (PLC) Scheme for Pekua 400/230/132 KV SS



Legends:
CC= Coupling Capacitor
CD= Coupling Device
LT= Line Trap

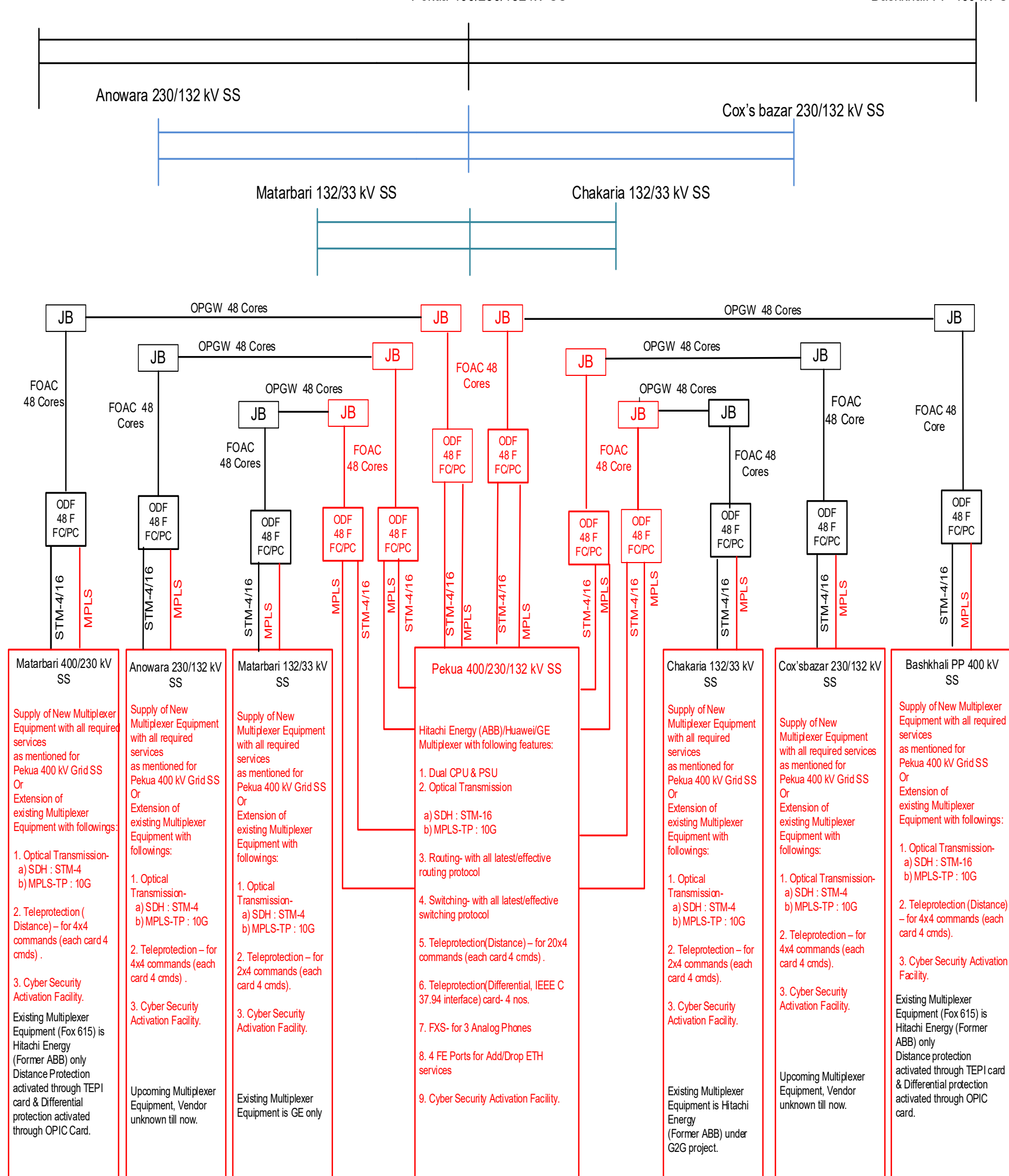
This Drawing is Preliminary & is for Bidding Purpose Only.

Proposed Optical Communication Scheme for Pekua 400/230/132 KV SS

Matarbari 400/230 kV SS

Pekua 400/230/132 kV SS

Bashkhali PP 400 kV SS



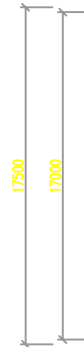
Pekua 400/230/132 kV SS

- 3 nos x IP Phones (Cisco 88** Series)
- 3 nos x SIP based Phones
- 2 nos x 48V, 250AH Ni-Cad Battery sets
- 2 nos x 75 A Battery Chargers (European/European Standard)

N. B. :

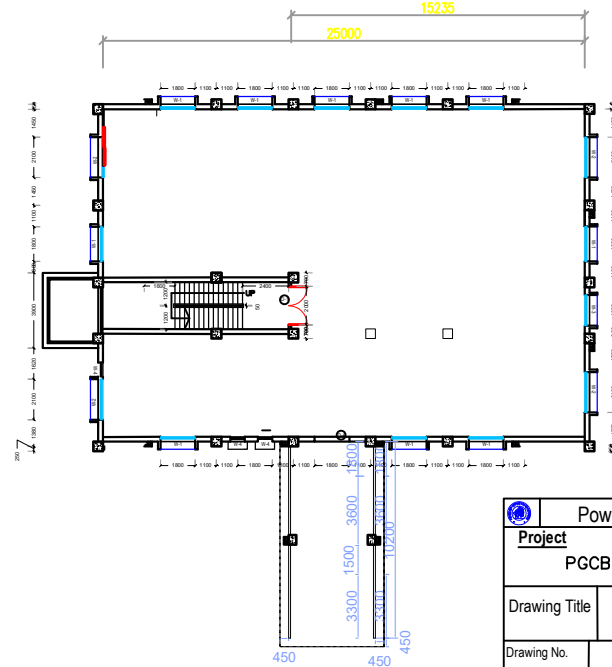
1. All RED are scope of this project.
2. OPGW of LILO portion/portions (not shown in drawing) is/are also scope of this project.
3. If different multiplexer equipment rather than existing is proposed in the remote stations having power consumption more than 10 amps then additional 48 volt battery chargers & battery sets shall be provided within the project scope.

This Drawing is Preliminary &
is for Bidding Purpose Only.



This is a detailed architectural floor plan of a building, oriented with North (N) at the top. The plan shows a large rectangular main floor with a central staircase and several rooms. The dimensions are as follows:

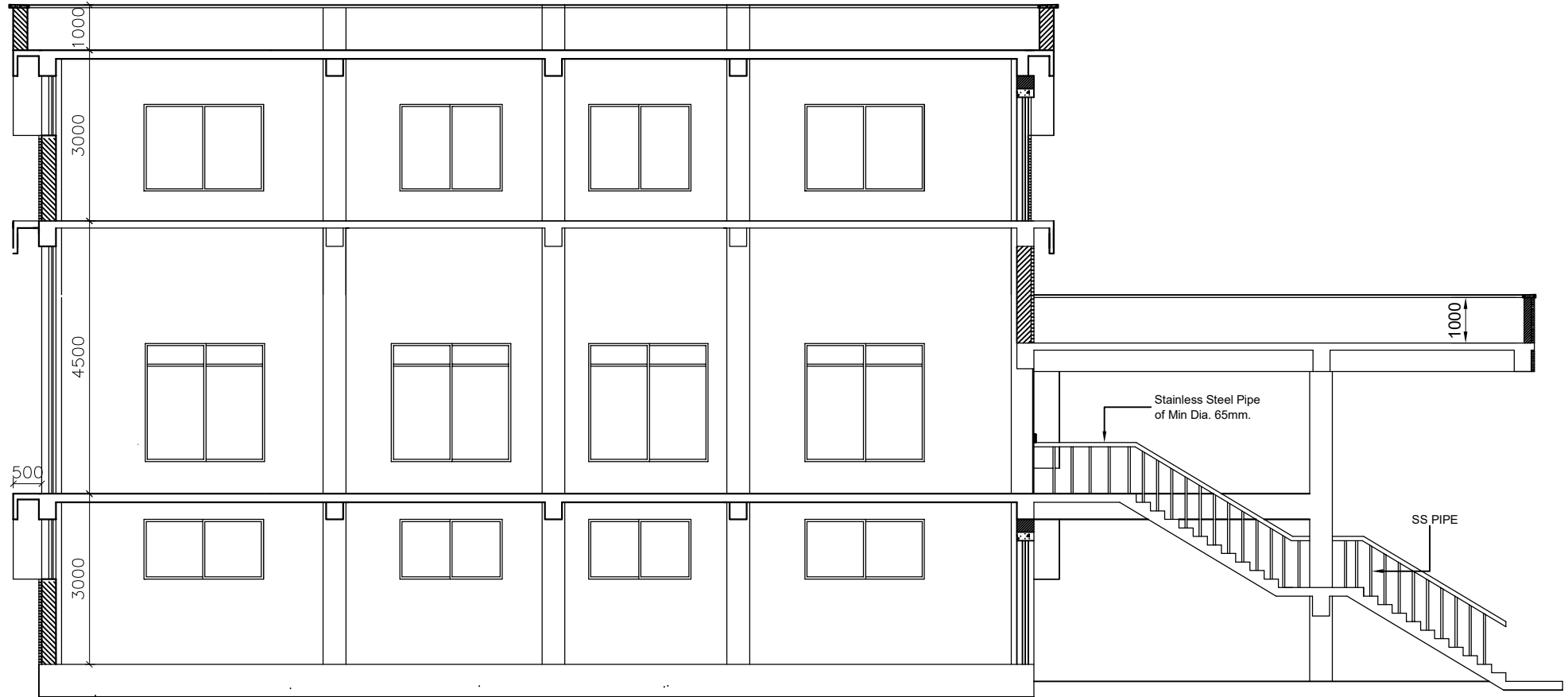
- Overall Dimensions:** The building is 10,200 units wide and 15,000 units deep.
- Rooms and Features:**
 - Top Left:** A room with a red outline, labeled '10' and '11'.
 - Top Center:** A room with a red outline, labeled '12' and '13'.
 - Top Right:** A room with a red outline, labeled '14' and '15'.
 - Center:** A large open area with a staircase labeled '16' and '17'.
 - Bottom Left:** A room with a red outline, labeled '18' and '19'.
 - Bottom Center:** A room with a red outline, labeled '20' and '21'.
 - Bottom Right:** A room with a red outline, labeled '22' and '23'.
 - Staircase:** A large staircase labeled '24' and '25'.
 - Entrance:** A large entrance labeled '26' and '27'.
 - Other Rooms:** Several smaller rooms labeled '28' through '35'.
- Dimensions:**
 - Top: 10,200 (total), 1,200 (left), 1,200 (right), 1,200 (center).
 - Left: 1,200 (top), 1,200 (center), 1,200 (bottom).
 - Right: 1,200 (top), 1,200 (center), 1,200 (bottom).
 - Bottom: 1,200 (left), 1,200 (center), 1,200 (right).
 - Staircase: 1,200 (width), 1,200 (depth).
 - Entrance: 1,200 (width), 1,200 (depth).



The drawing is Preliminary & is for Bidding Purpose Only

- 1) Ground floor clear height:3m
- 2) Control room clear height:4.5m
- 3) Dormitory clear height:3m

	Power Grid Company of Bangladesh Limited		
Project			
PGCB/ADB/400kV/PEKUA/PTSIREP/PACKAGE-1			
Drawing Title		Main Control Building Plan view	
Drawing No.		20. PGCB/ADB/MCRP	
Drawn:		Checked:	Approved:
Department: Substation Design & Quality Control			

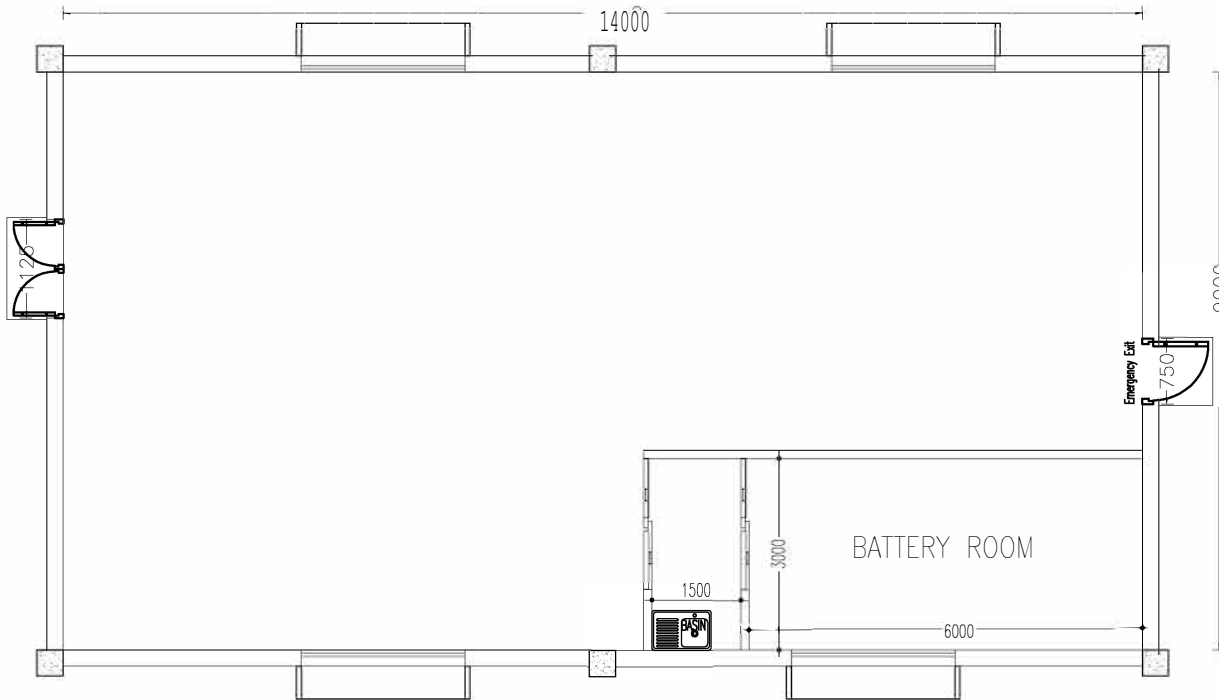


SECTION VIEW

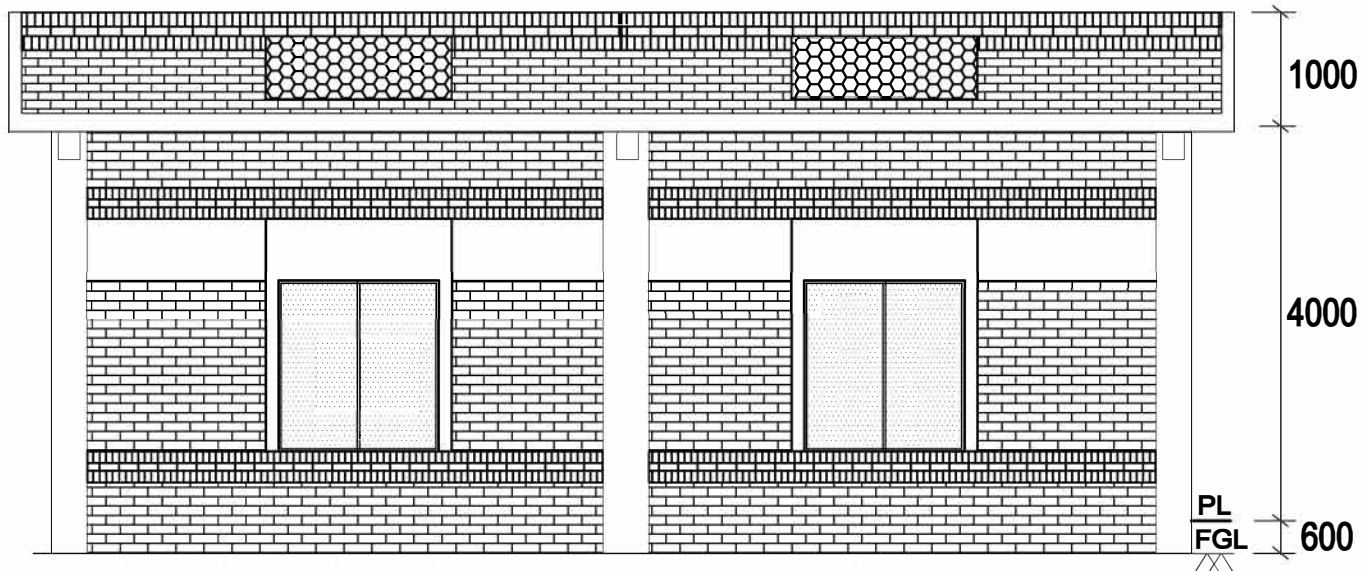
Tender Drawing

 Power Grid Company of Bangladesh Limited			
Project Design, Supply, Installation, Testing & Commissioning of 400/230/132kV AIS Substation at Pelua and associated single/double circuit 400kV/230kV/132kV LLO Lines on turnkey basis (Package-1)			
Drawing Title	Main Control building SECTION		
Drawing No.	21.PGCB/ADB/MCRS		
Drawn:		Checked:	Approved

All dimensions are in mm.



GROUND FLOOR PLAN of 400KV SPR WITH BATTERY ROOM



Side View

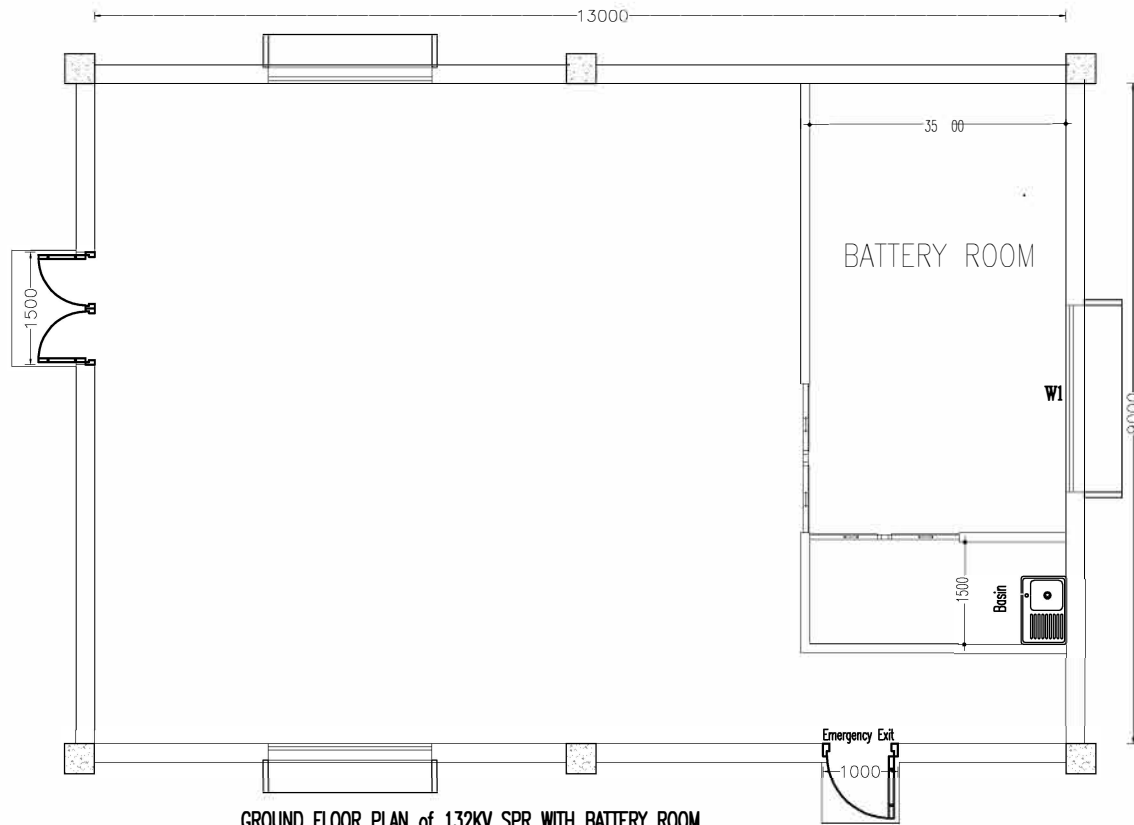
Note:

- 1) Floor area and height of the building provided here are minimum required size. If larger size is required due to bidder's specifications (including future); the bidder may increase size of the building within the quoted price. No additional payment shall be made in this regard.
- 2) Position and size of panels, equipments, ducts, columns, doors, windows, emergency exit etc. will be finalized during detail design.

Tender Drawing

		EMPLOYER POWER GRID COMPANY OF BANGLADESH LTD.	
PROJECT: DESIGN, SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF 400/230/132KV AIS SUBSTATION AT PEKUA AND ASSOCIATED SINGLE/DOUBLE CIRCUIT 400KV/230KV/132KV LILO LINES ON TURNKEY BASIS (PACKAGE-1).			
CONTRACT NO:		PCCB/ADB/400KV/PEKUA/PTSIREP/PACKAGE-1]	
Prepared		TITLE: SPR WITH BATTERY ROOM FOR 400KV - PLAN & SIDE VIEW	Paper size
Checked			Scale NTS
Approved			DOCUMENT ID: 22.PCCB/ADB/SPR_400
			Page 01

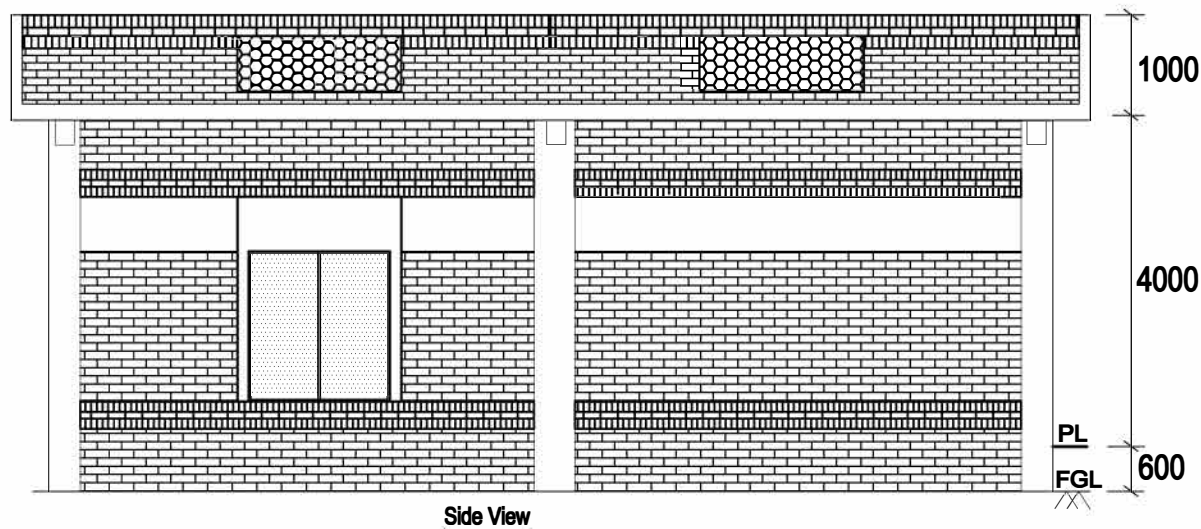
All dimensions are in mm.



Note:

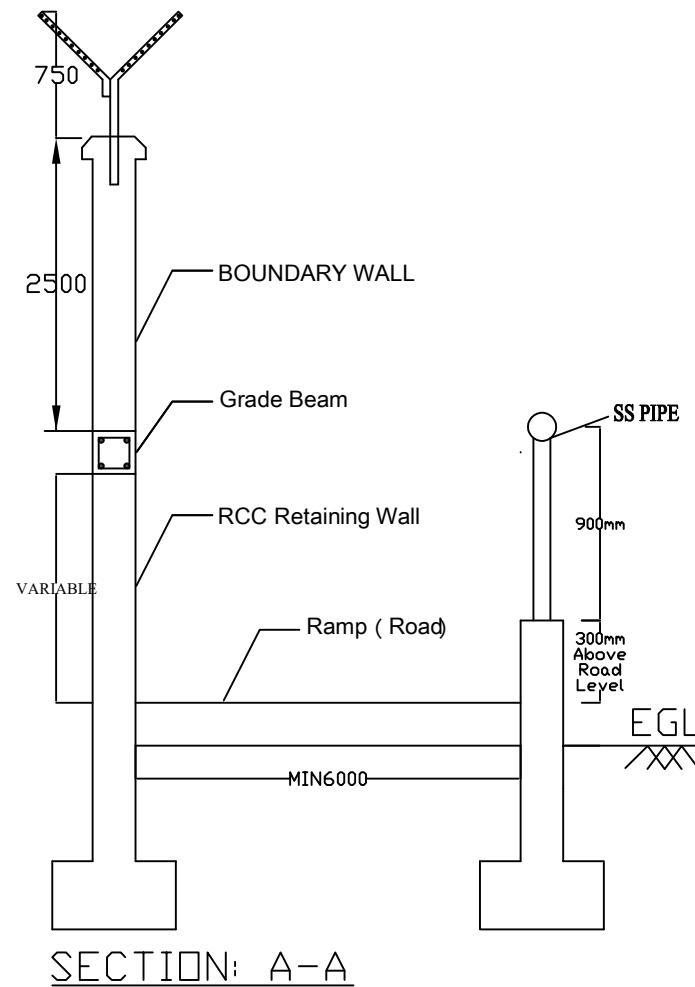
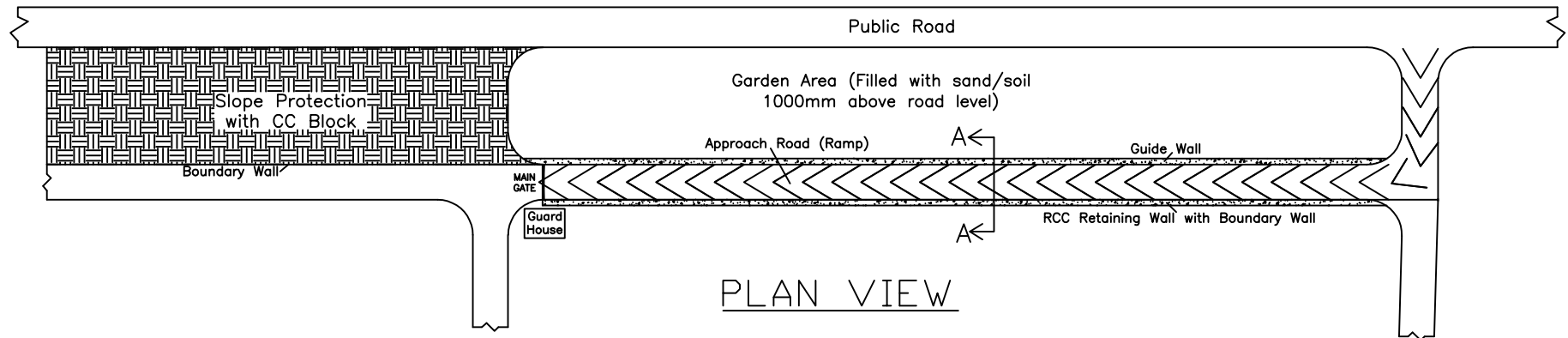
1) Floor area and height of the building provided here are minimum required size. If larger size is required due to bidder's specifications (including future); the bidder may increase size of the building within the quoted price. No additional payment shall be made in this regard.

2) Position and size of panels, equipments, ducts, columns, doors, windows, emergency exit etc. will be finalized during detail design.



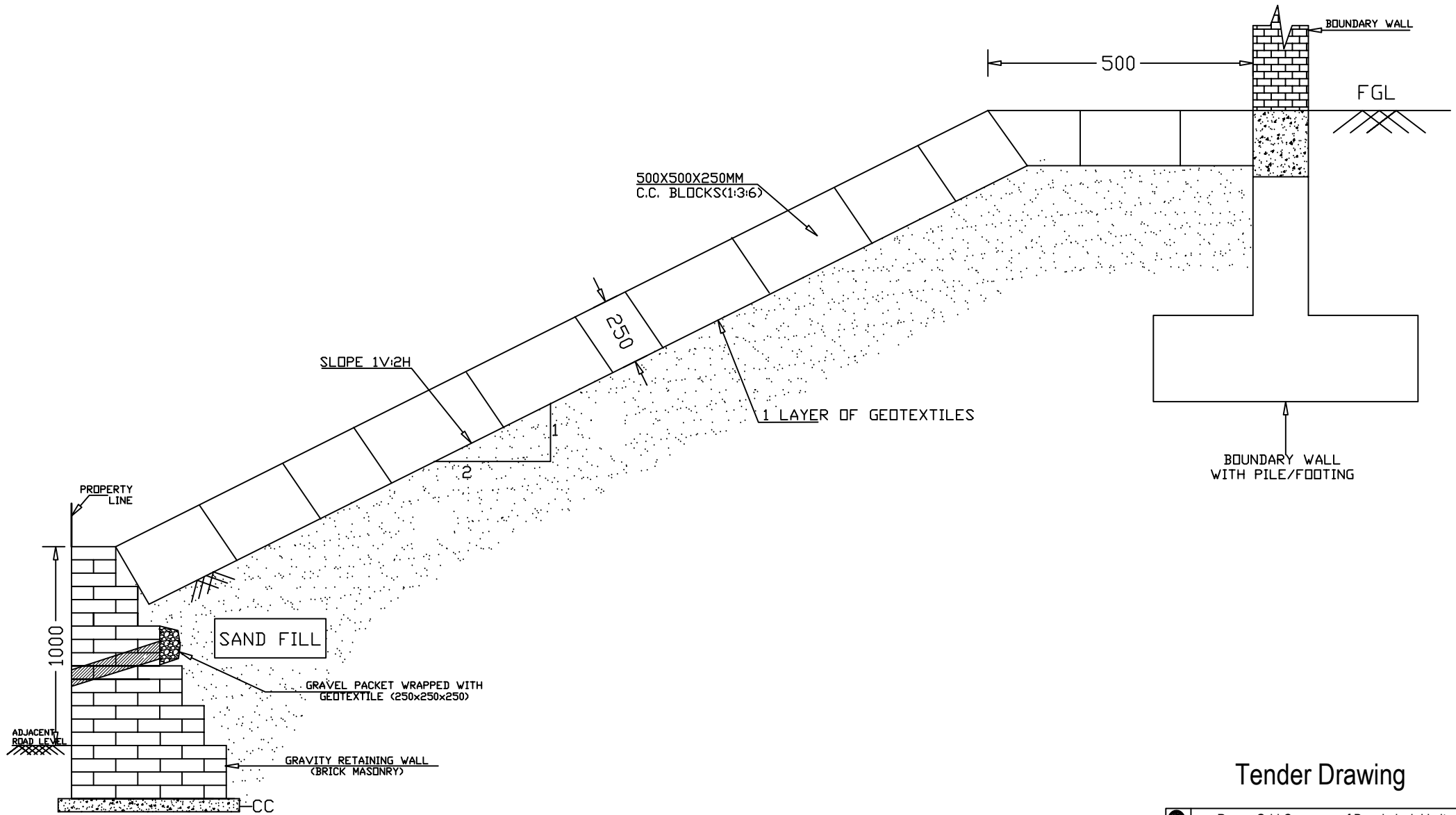
Tender Drawing

		POWER GRID COMPANY OF BANGLADESH LTD.	
PROJECT: DESIGN, SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF 400/230/132KV AIS SUBSTATION AT PEKUA AND ASSOCIATED SINGLE/DOUBLE CIRCUIT 400KV/230KV/132KV LILO LINES ON TURNKEY BASIS (PACKAGE-1).			
CONTRACT NO:		PGCB/ADB/400KV/PEKUA/PTSREP/PACKAGE-1]	
Prepared		TITLE: SPR WITH BATTERY ROOM FOR 132KV - PLAN & SIDE VIEW	Paper size NTS
Checked			Scale NTS
Approved		DOCUMENT ID: 23.PGCB/ADB/SPR_132	Page 01



Tender Drawing

 Power Grid Company of Bangladesh Limited			
Project			
Design, Supply, Installation, Testing & Commissioning of 400/230/132kV AIS Substation at Pekua and associated single/double circuit 400kV/230kV/132kV LIL O Lines on turnkey basis (Package-1)			
Drawing Title		Approach Road	
Drawing No.		31.PGCB/ADB/AR/(rev-1)	
Drawn:		Checked:	
		Approved:	



SLOPE PROTECTION WITH CC BLOCK & GRAVITY RETAINING WALL

Tender Drawing

Power Grid Company of Bangladesh Limited	
Project Design, Supply, Installation, Testing & Commissioning of 400/230/132kV AIS Substation at Pekua and associated single/double circuit 400kV/230kV/132kV LILS on turnkey basis (Package-1)	
Drawing Title	Slope (1V:2H) protection with CC blocks & gravity retaining wall
Drawing No.	37.PGCB/ADB/SLP(rev-1)
Drawn:	Checked: Approved: