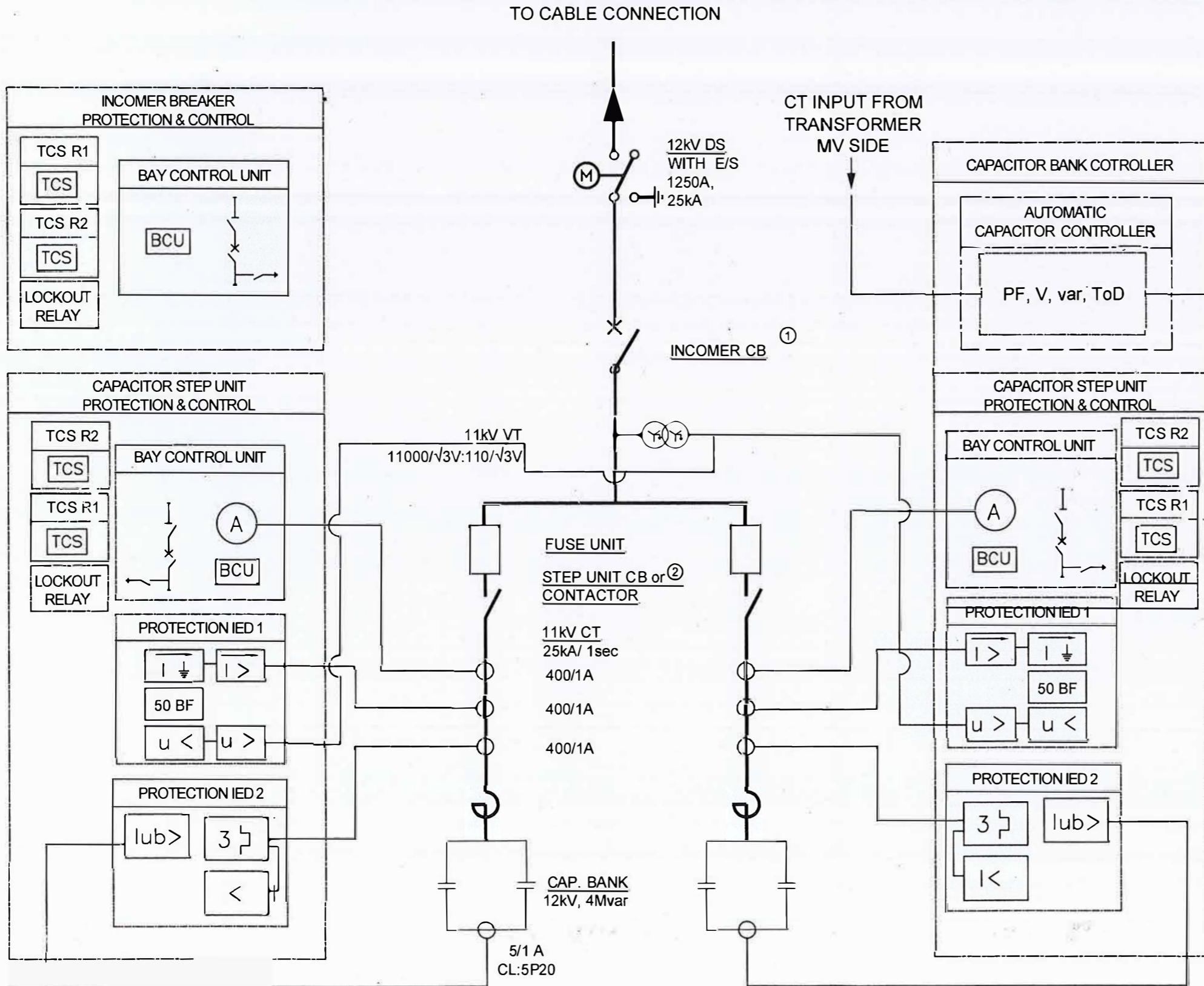


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- \* INCOMER BREAKER AND STEP SWITCHING UNIT SELECTION SHALL BE PROVIDED WITH THE CAPACITOR BANK DESIGN REPORT
- \* EXISTING GIS PROTECTION CONFIGURATION MAY BE REQUIRED TO MODIFY TO COORDINATE WITH CAPACITOR BANK PROTECTION.
- \* THE PROTECTION OF CABLE INTERCONNECTION BETWEEN GIS AND CAPACITOR BANK SHALL BE CONSIDERED FOR PROTECTION COORDINATION
- \* CAPACITOR BANK CONTROLLER IED SHALL BE IMPLEMENTED WITH REDUNDANT FUNCTIONALITY.
- \* BREAKER FAILURE PROTECTION SHALL BE AVAILABLE IN ONE OF THE PROTECTION RELAY IED 1 OR IED 2 AND SHALL SEND TRIP COMMAND TO INCOMER CB AND REMAINING STEP UNITS
- \* CLOSE/OPEN (TRIP) SEQUENCE OF INCOMER CB AND GIS CB SHALL BE AS FOLLOWING.

SEQUENCE	CLOSE	OPEN/TRIP
1 <sup>st</sup>	11kV GIS CB	INCOMER CB
2 <sup>nd</sup>	INCOMER CB	11kV GIS CB

\* THE METHODOLOGY OF CAPACITOR BANK CONTROL (PF, V, Var, TOD) SHALL BE SELECTABLE IN REMOTELY

**NOTE :**

- ① CIRCUIT BREAKER SHALL BE CAPABLE OF ISOLATING THE CAPACITOR BANK FAULT
- ② CB OR CONTACTOR SHALL BE CAPABLE TO WITHSTAND THE SWITCHING TRANSIENTS & TRANSIENT RECOVERY VOLTAGE

Rev. No	Date	Description	Drawn	Checked	Approved



Project Title  
**SUPPORTING ELECTRICITY SUPPLY RELIABILITY IMPROVEMENT PROJECT**

Funding Agency  
ADB

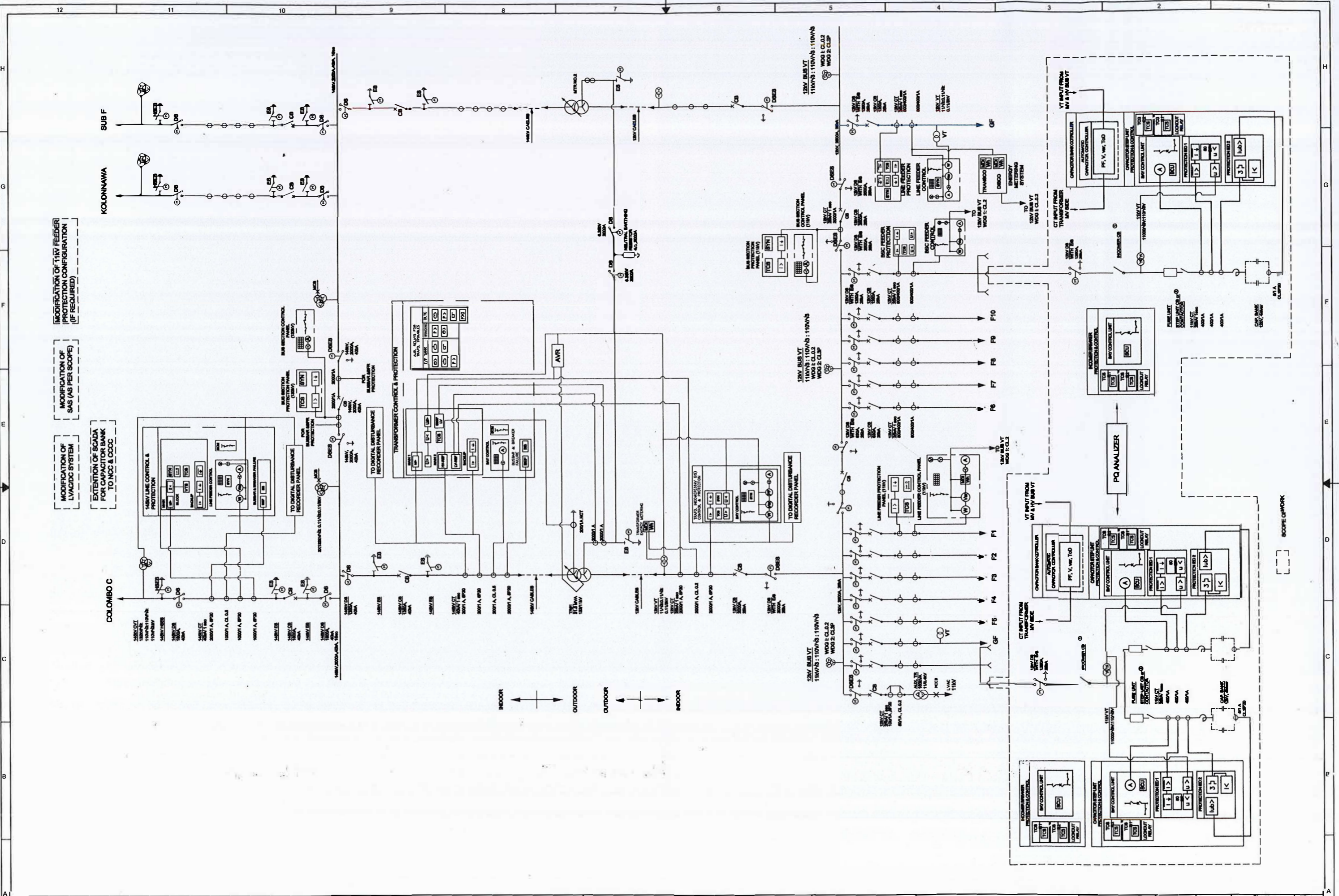
Drawing Title  
TYPICAL DIAGRAM FOR INDOOR CAPACITOR BANK

Scale	Rev. Date	Drawn	Signature	Date
NTS	06.07.2020	Anusha		06.07.2020
A3		Kushan		
01 of 01		Checked		
		Approved		
TD/CE/11/186/D/00/00 - A		Tendering		
		Construction		









MODIFICATION OF 11kV FEEDER PROTECTION CONFIGURATION (IF REQUIRED)

MODIFICATION OF SAS (AS PER SCOPE)

EXTENSION OF SCADA FOR CAPACITOR BANK TO NCC & CCCC

MODIFICATION OF LV/DCDC SYSTEM

MODIFICATION OF 11kV FEEDER PROTECTION CONFIGURATION (IF REQUIRED)

Rev. No	Date	Description	Drawn	Checked	Approved
12					
11					
10					

	Project Title	Funding Agency	Drawing Title	Scale - NTS	Rev. Date	Drawn	Signature	Date
	SUPPORTING ELECTRICITY SUPPLY RELIABILITY IMPROVEMENT PROJECT	ADB	SINGLE LINE DIAGRAM FOR SUBSTATION B WITH PROPOSED CAPACITOR BANK	A3	01.05.2019	Anusha		01.05.2019
				Sheet of Rev.		Checked		
				Dwg. No. TD/CE/11/186/D/00/02		no ed		
						Tendering		
						Construction		



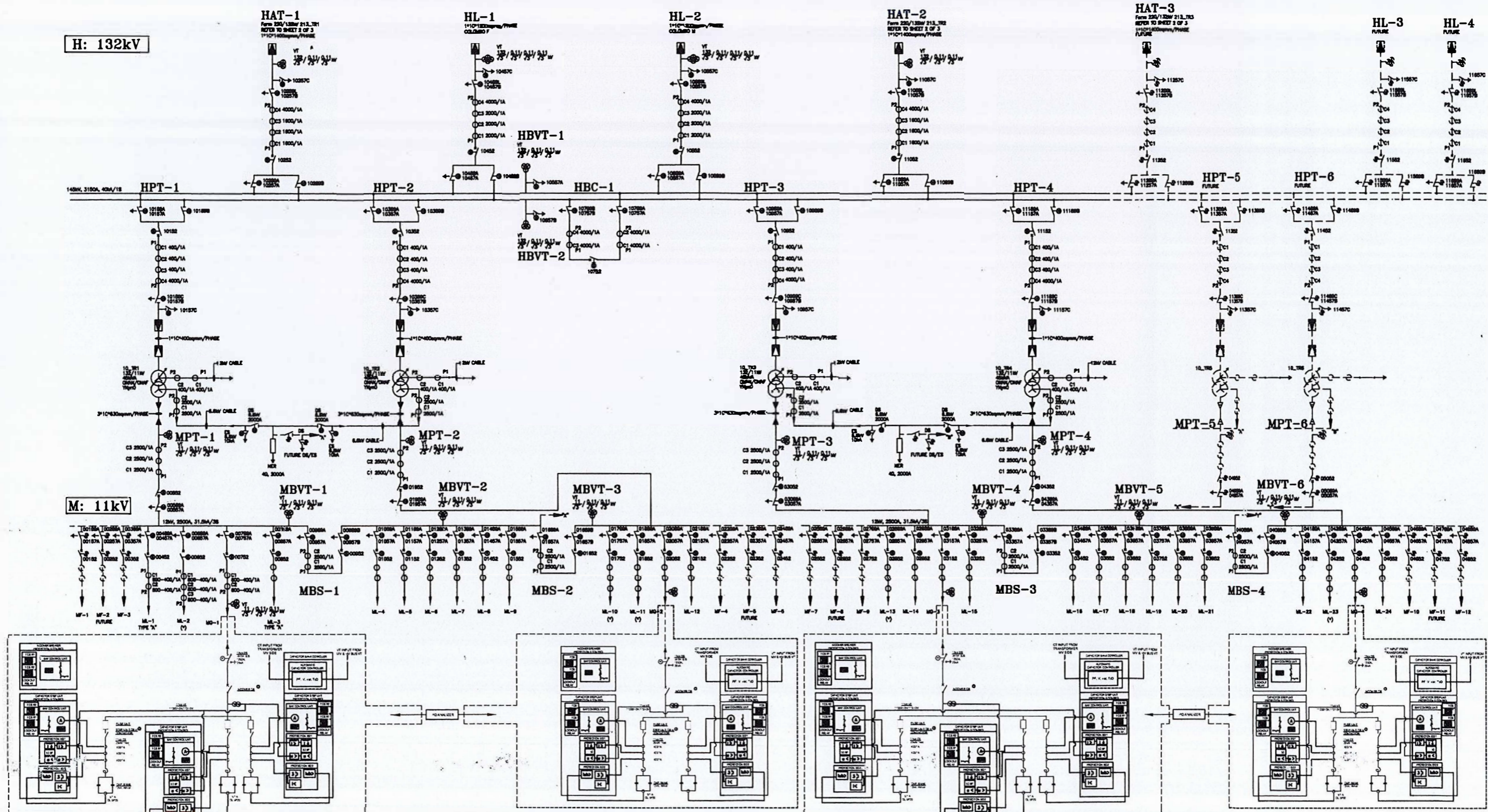




MODIFICATION OF LV/DC SYSTEM  
 MODIFICATION OF SAS (AS PER SCOPE)  
 MODIFICATION OF 11kV FEEDER PROTECTION CONFIGURATION (IF REQUIRED)  
 EXTENSION OF SCADA FOR CAPACITOR BANK TO NCC & COCC

H: 132kV

M: 11kV



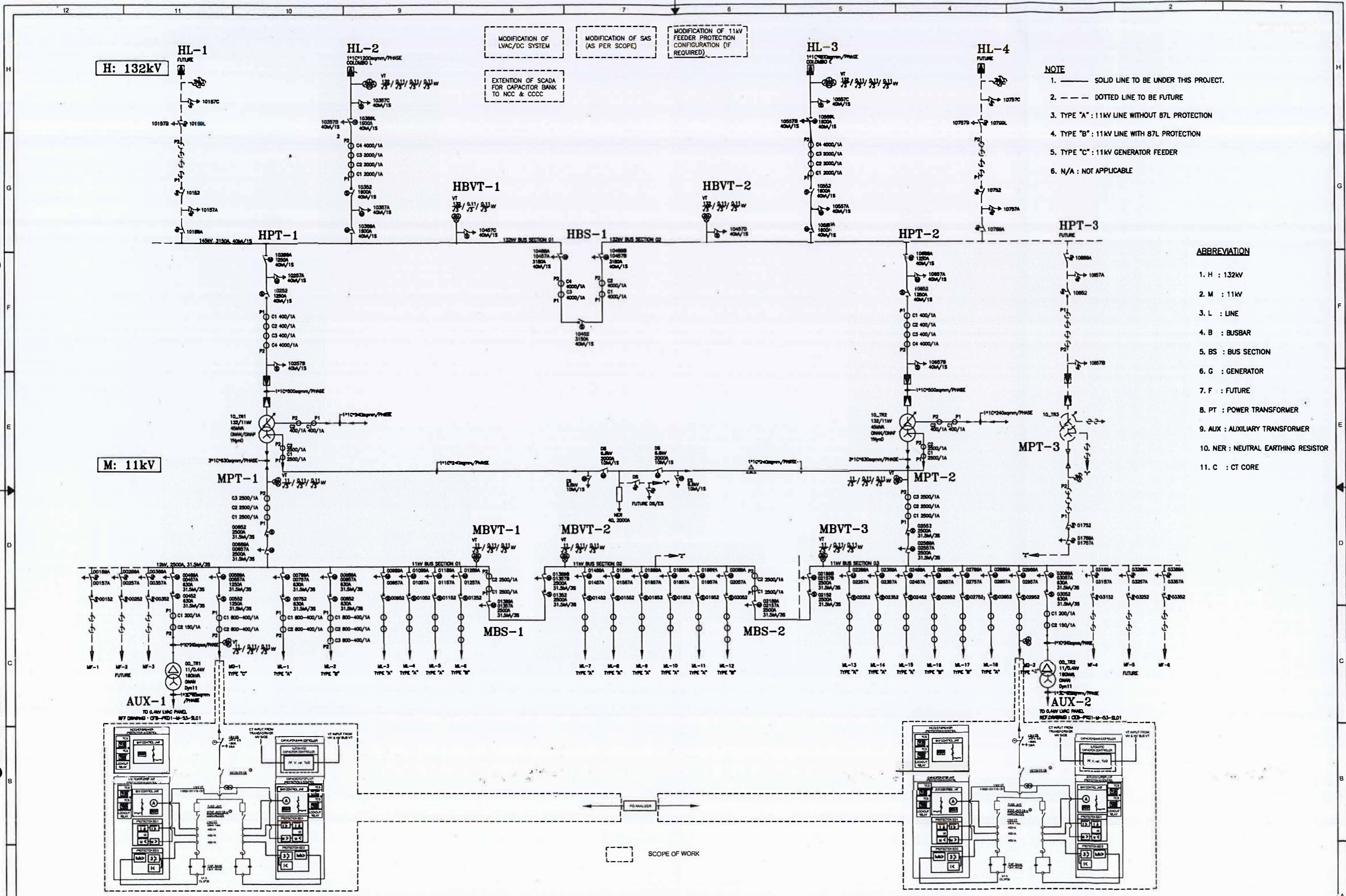
- NOTE**
- SOLID LINE TO BE UNDER THIS PROJECT.
  - DOTTED LINE TO BE FUTURE.
  - TYPE "A" : 11kV LINE WITHOUT 67L PROTECTION
  - TYPE "B", (\*) : 11kV LINE WITH 67L PROTECTION
  - T.B.D : TO BE DETERMINED

Project Title <b>SUPPORTING ELECTRICITY SUPPLY RELIABILITY IMPROVEMENT PROJECT</b>		Funding Agency ADB	Drawing Title SINGLE LINE DIAGRAM FOR SUBSTATION L WITH CAPACITOR BANK	Scale - NTS Size - A3 Sheet 01 of 01 Dwg. No TD/CE/1186/D/00/05	Rev. Date 01.05.2019	Signature Anusha Kushan	Date 01.05.2019												
<table border="1"> <thead> <tr> <th>Rev. No</th> <th>Date</th> <th>Description</th> <th>Drawn</th> <th>Checked</th> <th>Approved</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		Rev. No	Date	Description	Drawn	Checked	Approved							CEYLON ELECTRICITY BOARD		Drawn: Anusha Checked: Kushan Approved: Tendering Released for: Construction			
Rev. No	Date	Description	Drawn	Checked	Approved														

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MODIFICATION OF LVAC/DC SYSTEM

MODIFICATION OF SAS (AS PER SCOPE)

MODIFICATION OF 11kV FEEDER PROTECTION CONFIGURATION (IF REQUIRED)

EXTENSION OF SCADA FOR CAPACITOR BANK TO NCC & CCCC

- NOTE**
- SOLID LINE TO BE UNDER THIS PROJECT.
  - DOTTED LINE TO BE FUTURE
  - TYPE "A": 11kV LINE WITHOUT 87L PROTECTION
  - TYPE "B": 11kV LINE WITH 87L PROTECTION
  - TYPE "C": 11kV GENERATOR FEEDER
  - N/A: NOT APPLICABLE

- ABBREVIATION**
- H : 132kV
  - M : 11kV
  - L : LINE
  - B : BUSBAR
  - BS : BUS SECTION
  - G : GENERATOR
  - F : FUTURE
  - PT : POWER TRANSFORMER
  - AUX : AUXILIARY TRANSFORMER
  - NER : NEUTRAL EARTHING RESISTOR
  - C : CT CORE

Rev. No	Date	Description	Drawn	Checked	Approved

**CEYLON ELECTRICITY BOARD**

Project Title  
**SUPPORTING ELECTRICITY SUPPLY RELIABILITY IMPROVEMENT PROJECT**

Funding Agency  
**ADB**

Drawing Title  
**PROPOSED SINGLE LINE DIAGRAM FOR SUBSTATION M**

Scale - NTS  
Rev. Date  
01.05.2019

Sheet 01 of 01  
Rev. Approved

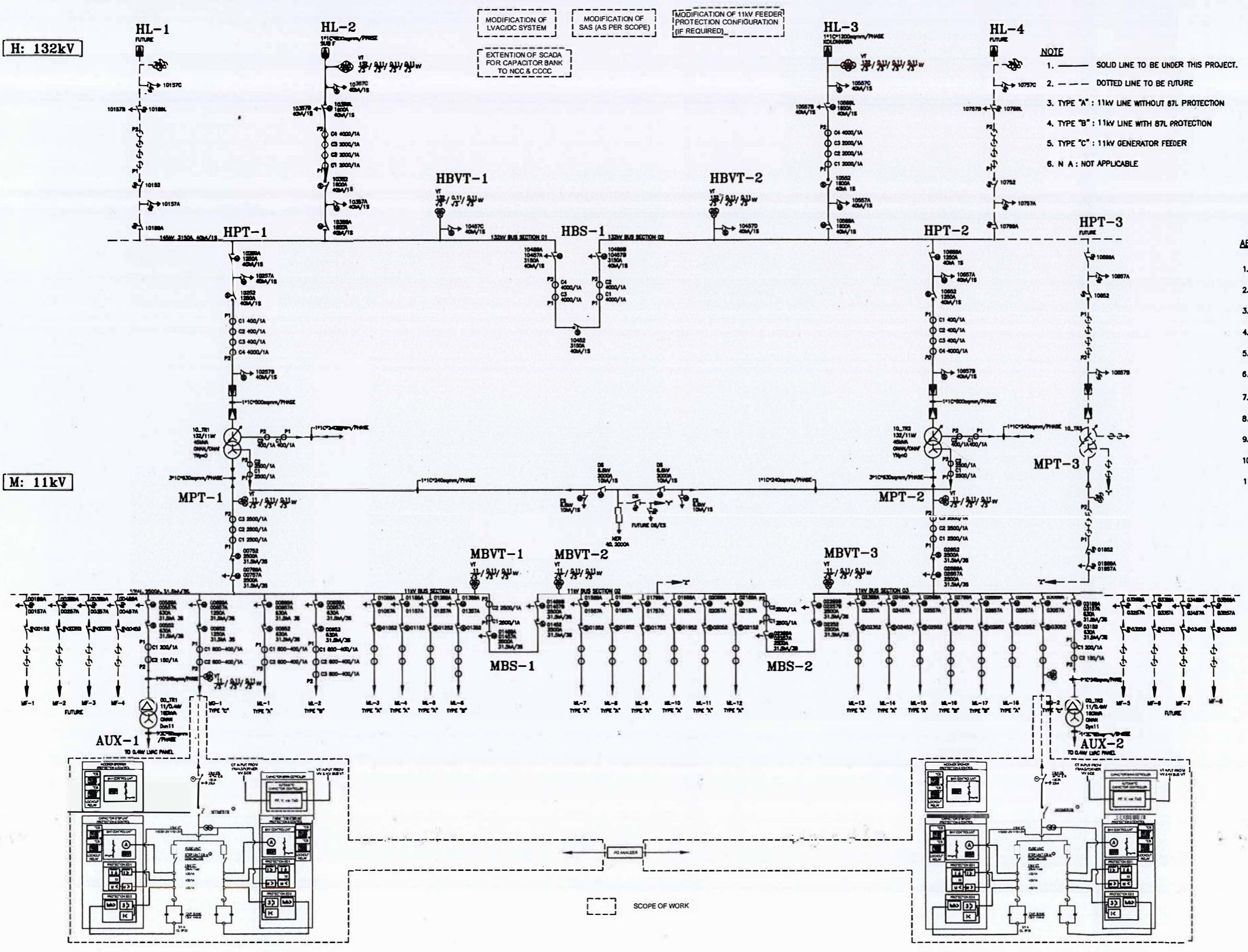
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Signature  
Anusha  
Date  
01.05.2019



H: 132kV

M: 11kV



MODIFICATION OF LVAC/DC SYSTEM

MODIFICATION OF SAS (AS PER SCOPE)

MODIFICATION OF 11kV FEEDER PROTECTION CONFIGURATION (IF REQUIRED)

EXTENSION OF SCADA FOR CAPACITOR BANK TO NCC & CCCC

- NOTE**
- SOLID LINE TO BE UNDER THIS PROJECT.
  - DOTTED LINE TO BE FUTURE
  - TYPE "A" : 11kV LINE WITHOUT 87L PROTECTION
  - TYPE "B" : 11kV LINE WITH 87L PROTECTION
  - TYPE "C" : 11kV GENERATOR FEEDER
  - N A : NOT APPLICABLE

- ABBREVIATION**
- H : 132kV
  - M : 11kV
  - L : LINE
  - B : BUSBAR
  - BS : BUS SECTION
  - G : GENERATOR
  - F : FUTURE
  - PT : POWER TRANSFORMER
  - AUX : AUXILIARY TRANSFORMER
  - NER : NEUTRAL EARTHING RESISTOR
  - C : CT CORE

SCOPE OF WORK

SCOPE OF WORK

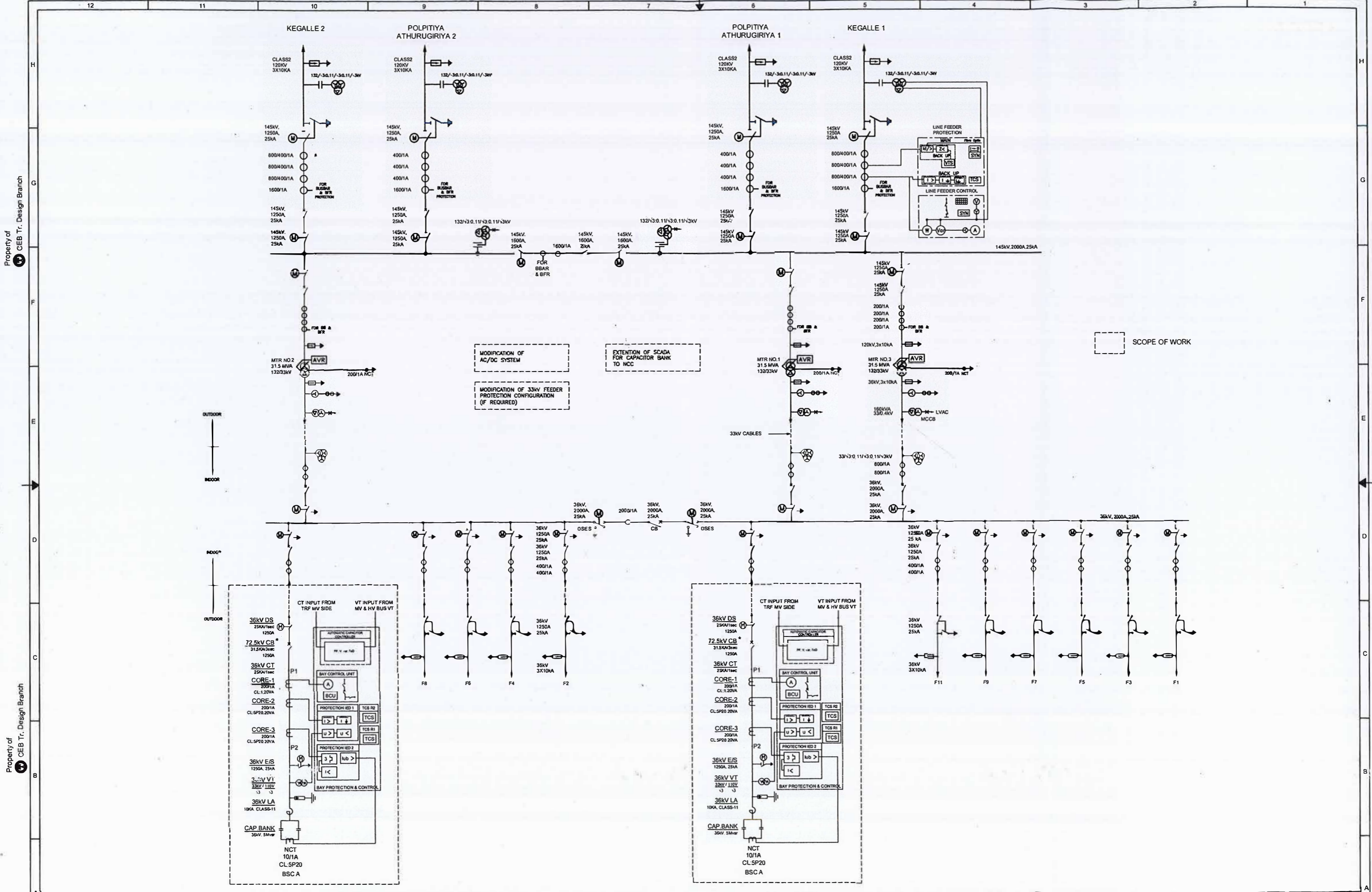
Rev. No	Date	Description	Drawn	Checked	Approved

**CEYLON ELECTRICITY BOARD**  
 Project Title: **SUPPORTING ELECTRICITY SUPPLY RELIABILITY IMPROVEMENT PROJECT**  
 Funding Agency: **ADB**  
 Drawing Title: **SINGLE LINE DIAGRAM FOR SUBSTATION N WITH PROPOSED CAPACITOR BANK**

Scale - NTS	Rev. Date 01.05.2019	Drawn Anusha	Checked Kushan	Approved	Signature	Date 01.05.2019
Size - A3	Sheet 01 of 01	Tendering				
Dwg. No. TD/CE/11/186/D/00/07		Construction				

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Rev. No	Date	Description	Drawn	Checked	Approved



Project Title: **SUPPORTING ELECTRICITY SUPPLY RELIABILITY IMPROVEMENT PROJECT**

Funding Agency: **ADB**

Drawing Title: **SINGLE LINE DIAGRAM FOR THULHIRIYA GSS WITH PROPOSED CAPACITOR BANK**

Scale - **NTS**  
Size - **A3**  
Sheet  of   
Dwg. No. **TD/CE/1/186/D/00/08**

Rev. Date	Signature	Date
02.05.2019	Kushan	2019