



CEYLON ELECTRICITY BOARD SRI LANKA

GREEN POWER DEVELOPMENT AND ENERGY EFFICIENCY IMPROVEMENT INVESTMENT PROGRAM (TRANCHE 2) (ADB LOAN NO: 3483/3484)

PACKAGE 8 - LOT A

Procurement of Plant

Design, Supply, and Installation

Single-Stage: Two-Envelope
Bidding Procedure

BIDDING DOCUMENT
for
Procurement
of

Augmentation of:

Aniyakanda 132/33kV Grid Substation

Chunnakam 132/33kV Grid Substation

Nadukuda 220/33kV Grid Substation

VOLUME 6 of 8

Part II- REQUIREMENTS

Section 6 - Employer's Requirements: Part C-Drawings

Issued on: 25 June 2020

Invitation for Bids No.: CEB/AGM/PRO/2019/IFB/GPDEEIP-T2-P8-LOT A

ICB No.: CEB/AGM/PRO/2019/ICB/GPDEEIP-T2-P8-LOT A

Employer: Ceylon Electricity Board

Country: Sri Lanka

Projects Division

Ceylon Electricity Board,

P.O. Box 540, Colombo 02

Sri Lanka

Document – Revision 1

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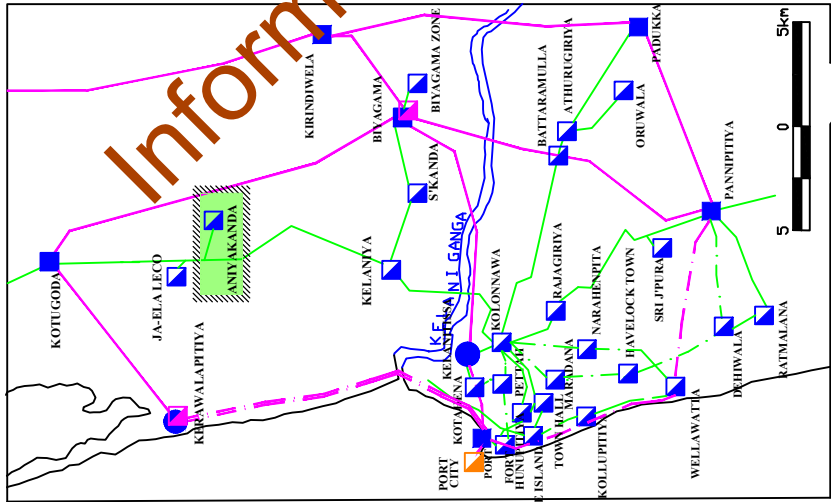
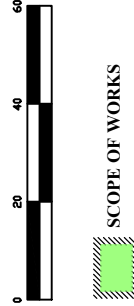
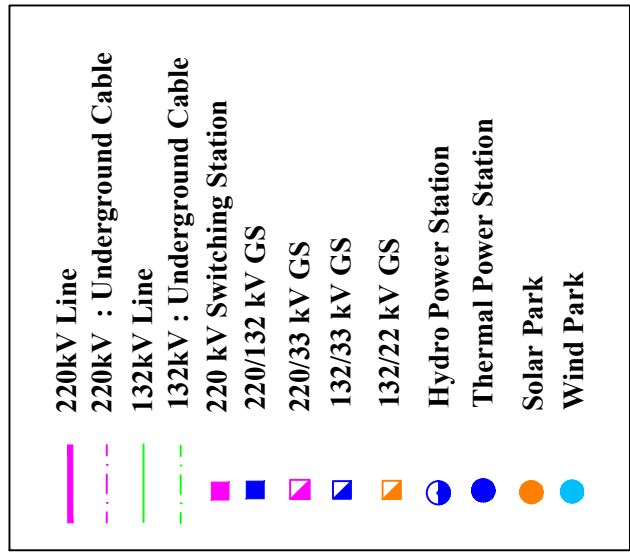
Chunnakam GSS

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The Map of Sri Lanka Transmission System in Year 2027



Information Copy Not for Bidding

Rev. No.	Date	Description	Drawn	Checked	Approved



CEYLON ELECTRICITY BOARD
TRANSMISSION DESIGN

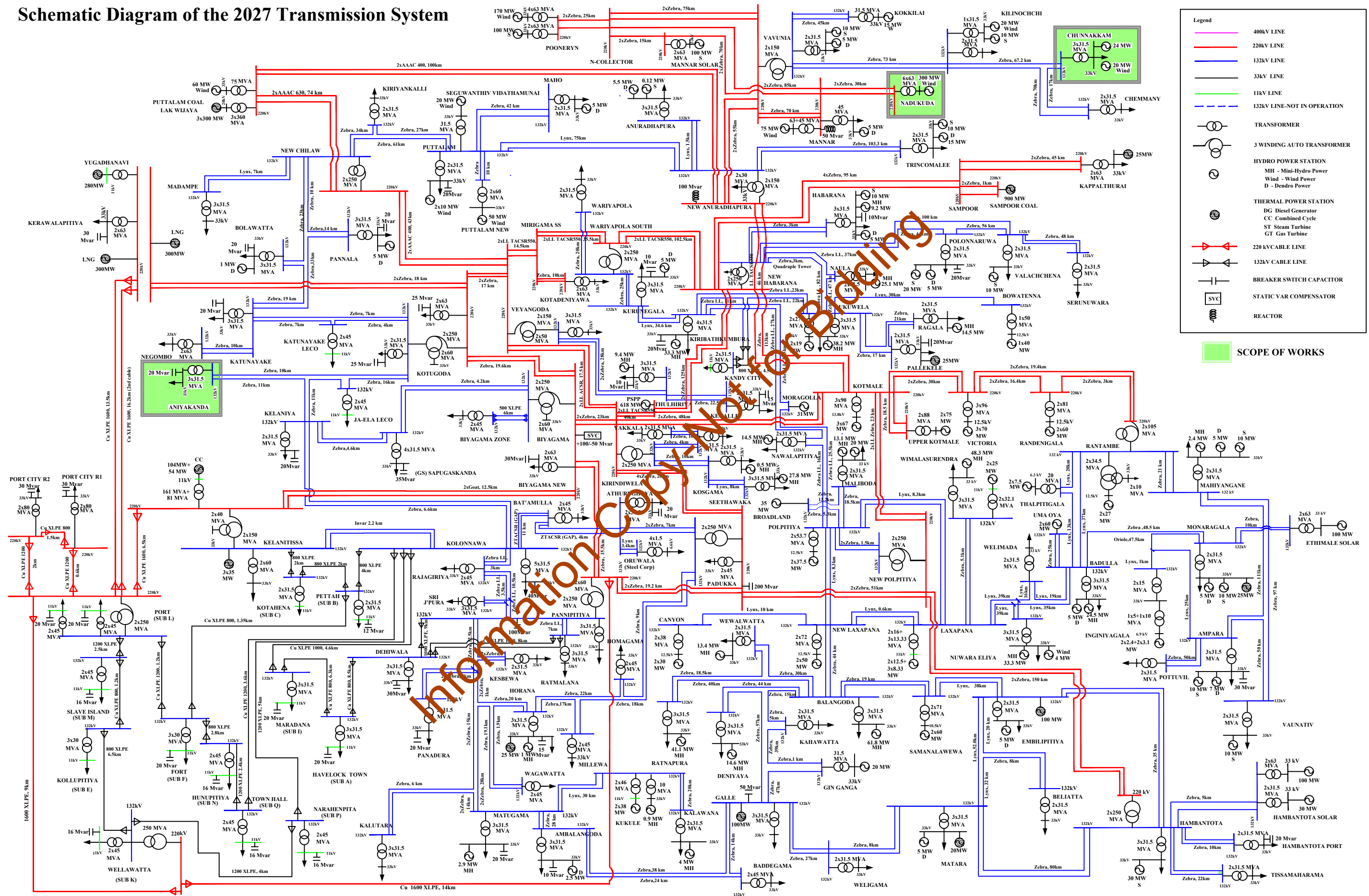
Project Title
**GREEN POWER DEVELOPMENT AND ENERGY EFFICIENCY
IMPROVEMENT INVESTMENT PROGRAM - (TRANCHE 2)**
PACKAGE 8 - LOT A

Funding Agency
ADB

Drawing Title
MAP SHOWING THE
LOCATION OF SITES

Scale - NTS	Rev. Date	Drawn	Signature	Date
Size - A3	16.06.2020	Designed	Sandamali	26.04.2019
Sheet of	Rev.	Checked	Bhasura	
Dwg. No.		Approved		
TD/CE/1/184/D/09/00		Released for	Tendering	
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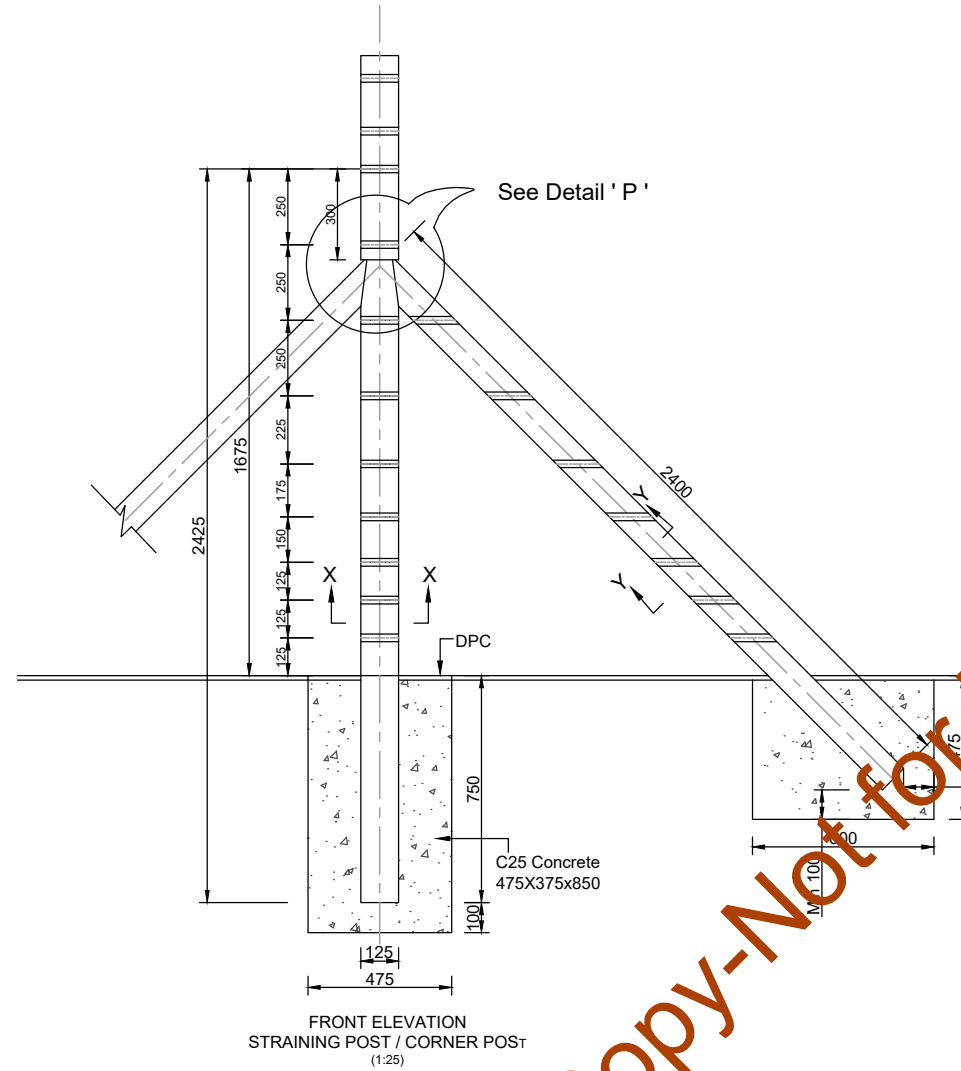
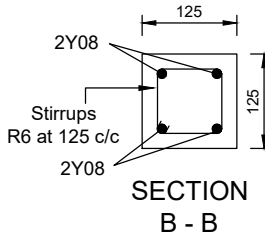
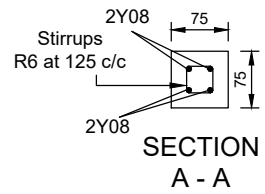
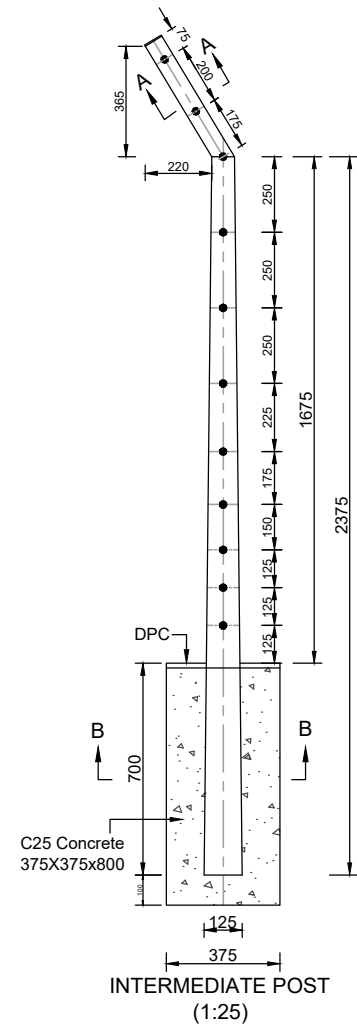
Schematic Diagram of the 2027 Transmission System



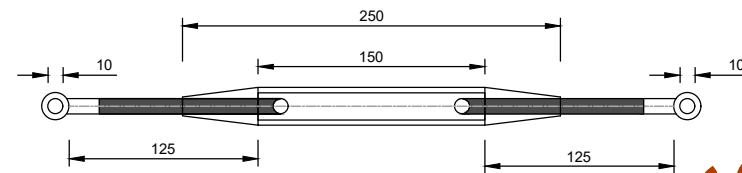
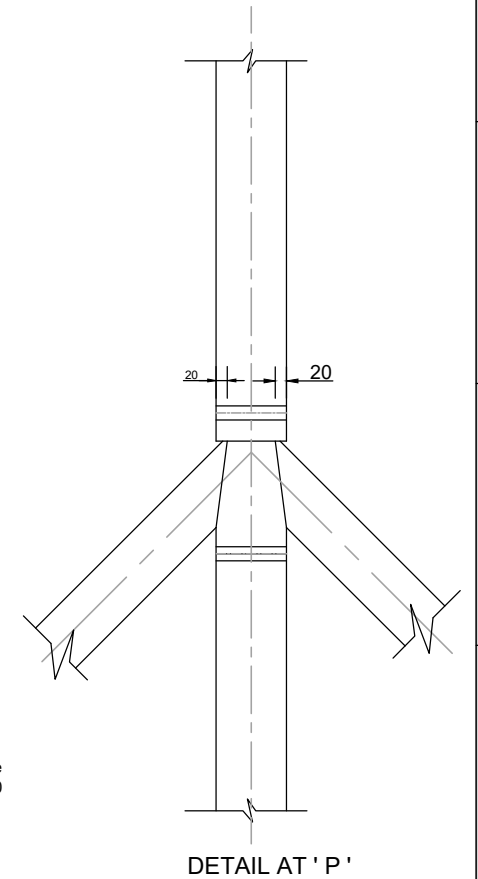
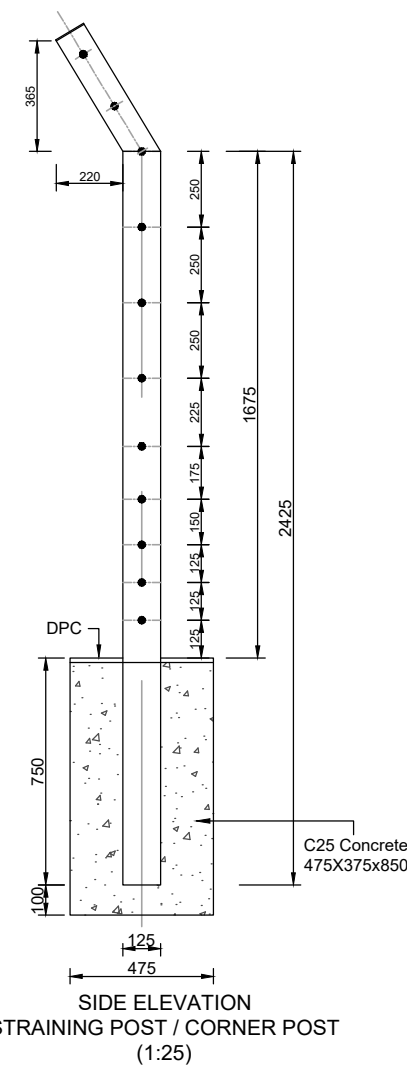
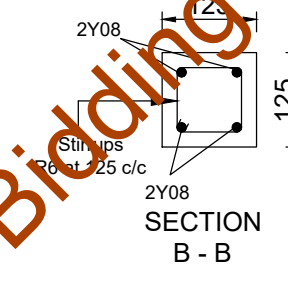
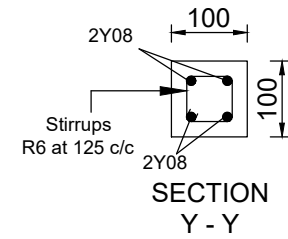
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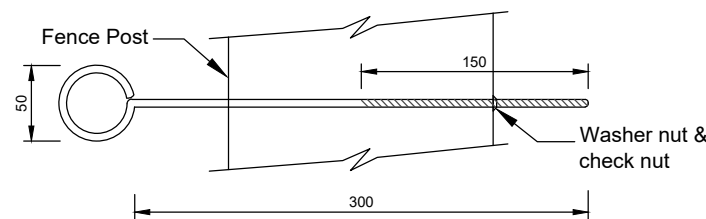
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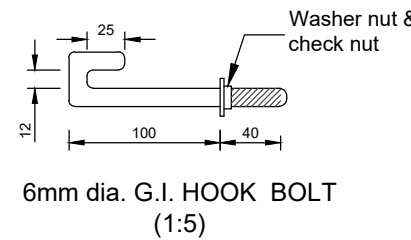
See Detail 'P'



TURN BUCKLE FOR STRAINING
(1:5)



50mm dia. STRAINING BOLT
(1:5)



6mm dia. G.I. HOOK BOLT
(1:5)

NOTES :-

1. All demensions are in Millimeters.
2. Grade 25 Concrete for Foundation.
3. Minimum cover for main Reinforcement - 20mm
4. Straining Post to be provided at every 06th fence post & at all bends.

Rev. No.	Date	Description	Drawn	Checked	Approved



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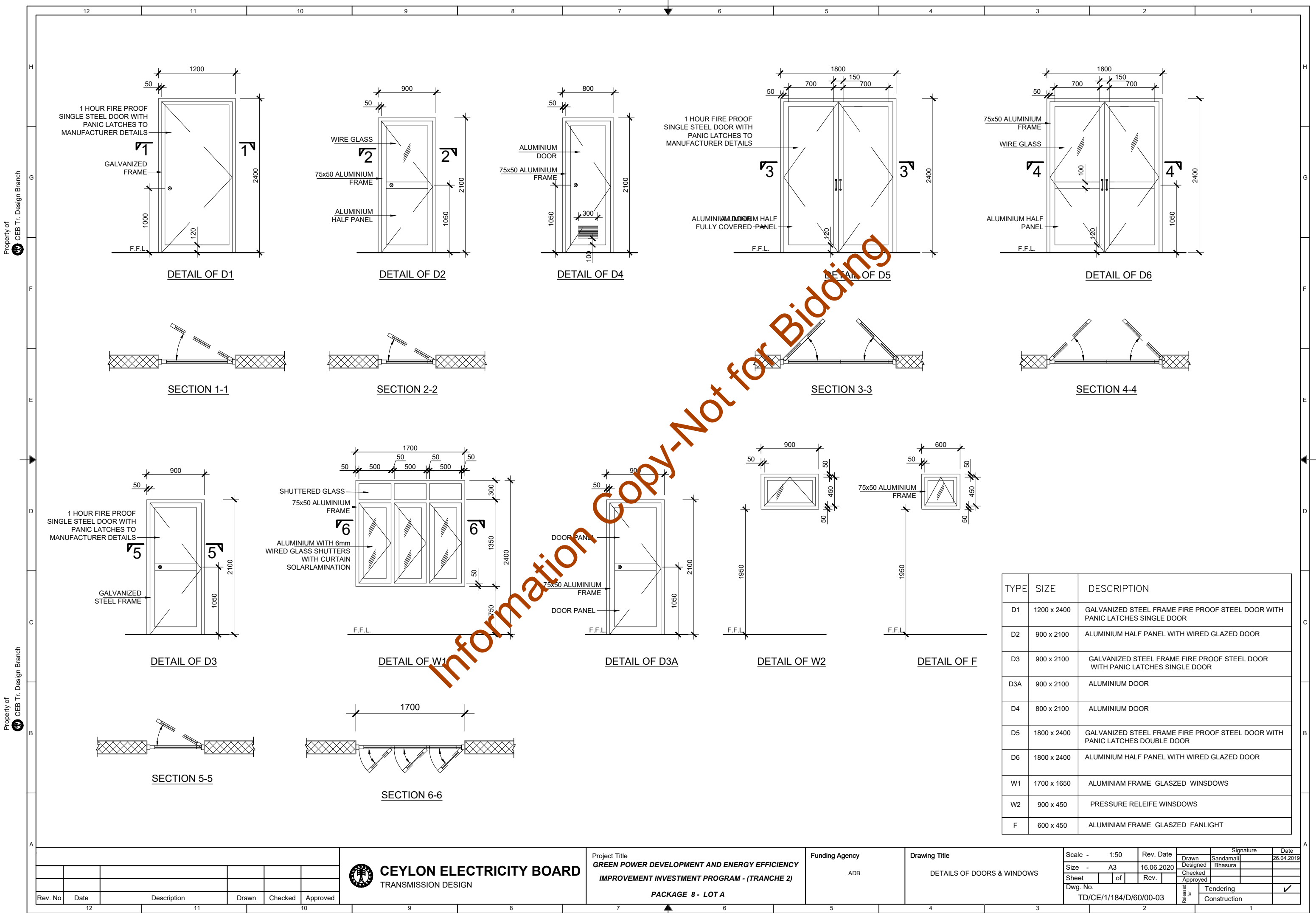
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GREEN POWER DEVELOPMENT AND ENERGY EFFICIENCY
IMPROVEMENT INVESTMENT PROGRAM - (TRANCHE 2)
PACKAGE 8 - LOT A

Funding Agency
ADB

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BENT TYPE BARBED WIRE FENCE POST

Scale - As Shown
Size - A3
Sheet of
Dwg. No. TD/CE/1/184/D/60/00-02

Rev. Date 16.06.2020
Rev.
Signature
Sandamali
Bhasura
Tendering
Construction



CEYLON ELECTRICITY BOARD
TRANSMISSION DESIGN

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**GREEN POWER DEVELOPMENT AND ENERGY EFFICIENCY
IMPROVEMENT INVESTMENT PROGRAM - (TRANCHE 2)**
PACKAGE 8 - LOT A

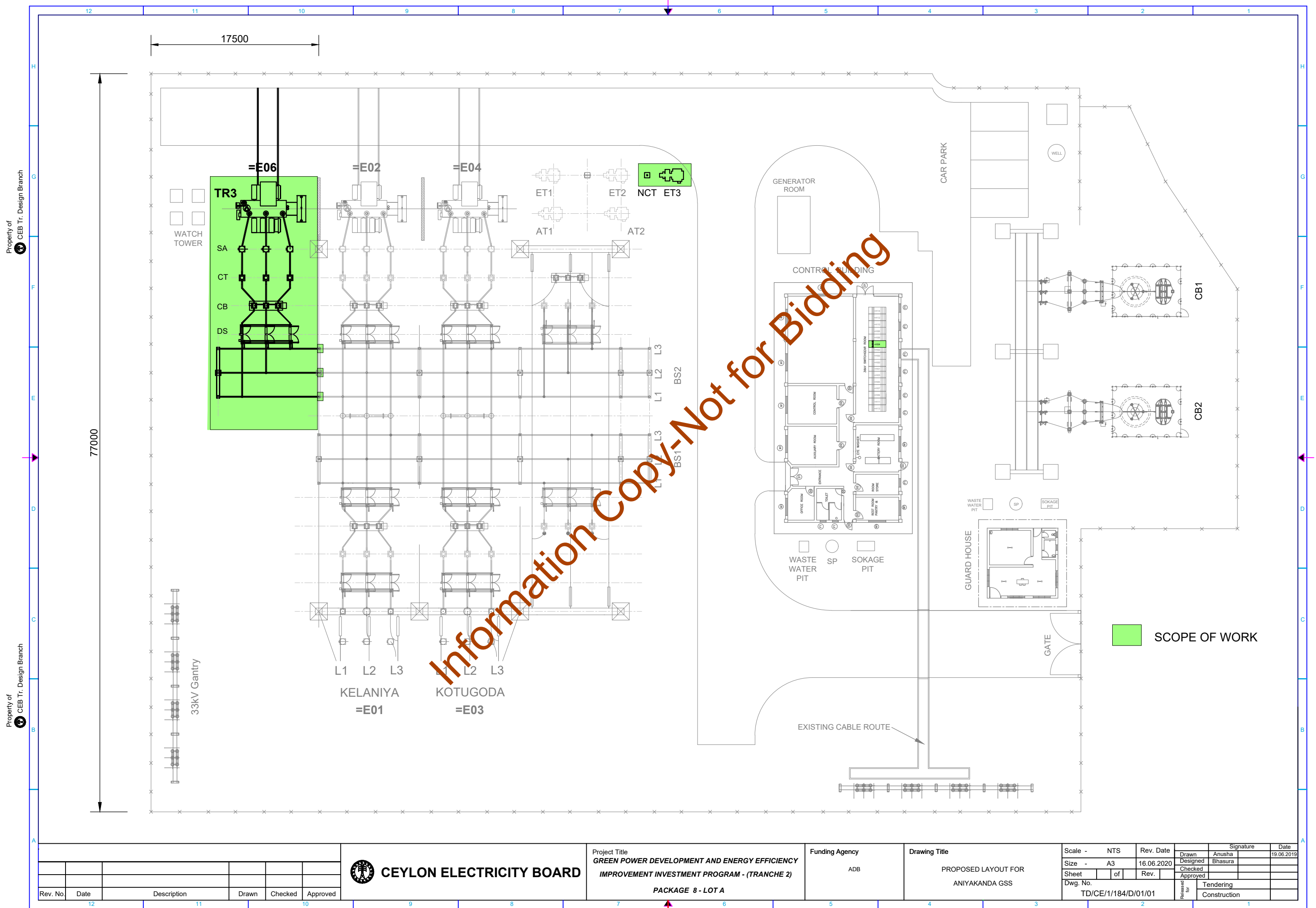
Funding Agency
ADB

Drawing Title
DETAILS OF DOORS & WINDOWS

Scale - 1:50
Size - A3
Sheet of
Dwg. No. TD/CE/1/184/D/60/00-03

Rev. Date
16.06.2020
Rev.

Signature		Date
Drawn	Sandamali	26.04.2019
Designed	Bhasura	
Checked		
Approved		
Released for	Tendering	✓
	Construction	



Information Copy-Not for Bidding

SCOPE OF WORK

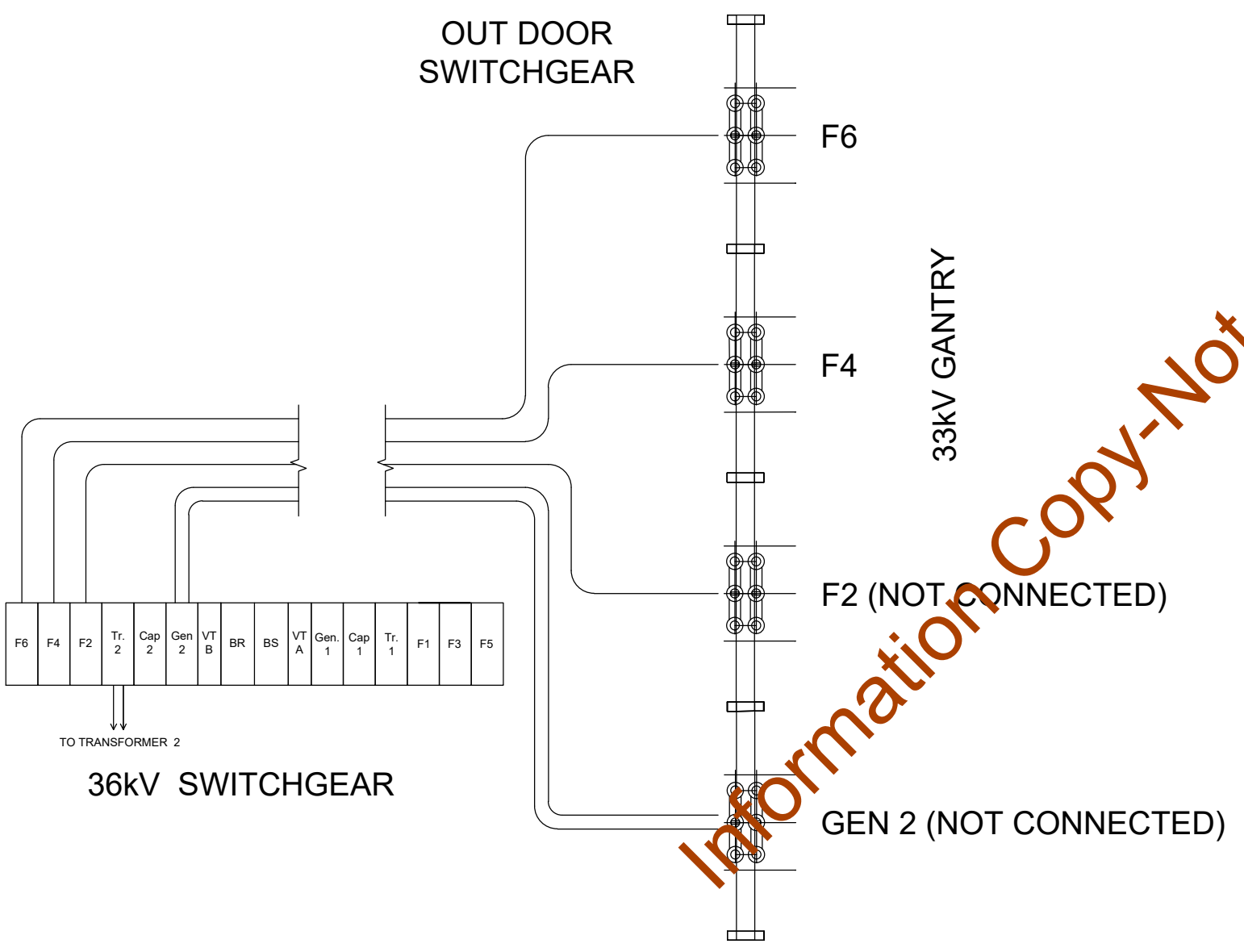
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Rev. No.	Date	Description	Drawn	Checked	Approved	Released for		Tendering		Construction			

Property of
CEB Tr. Design Branch

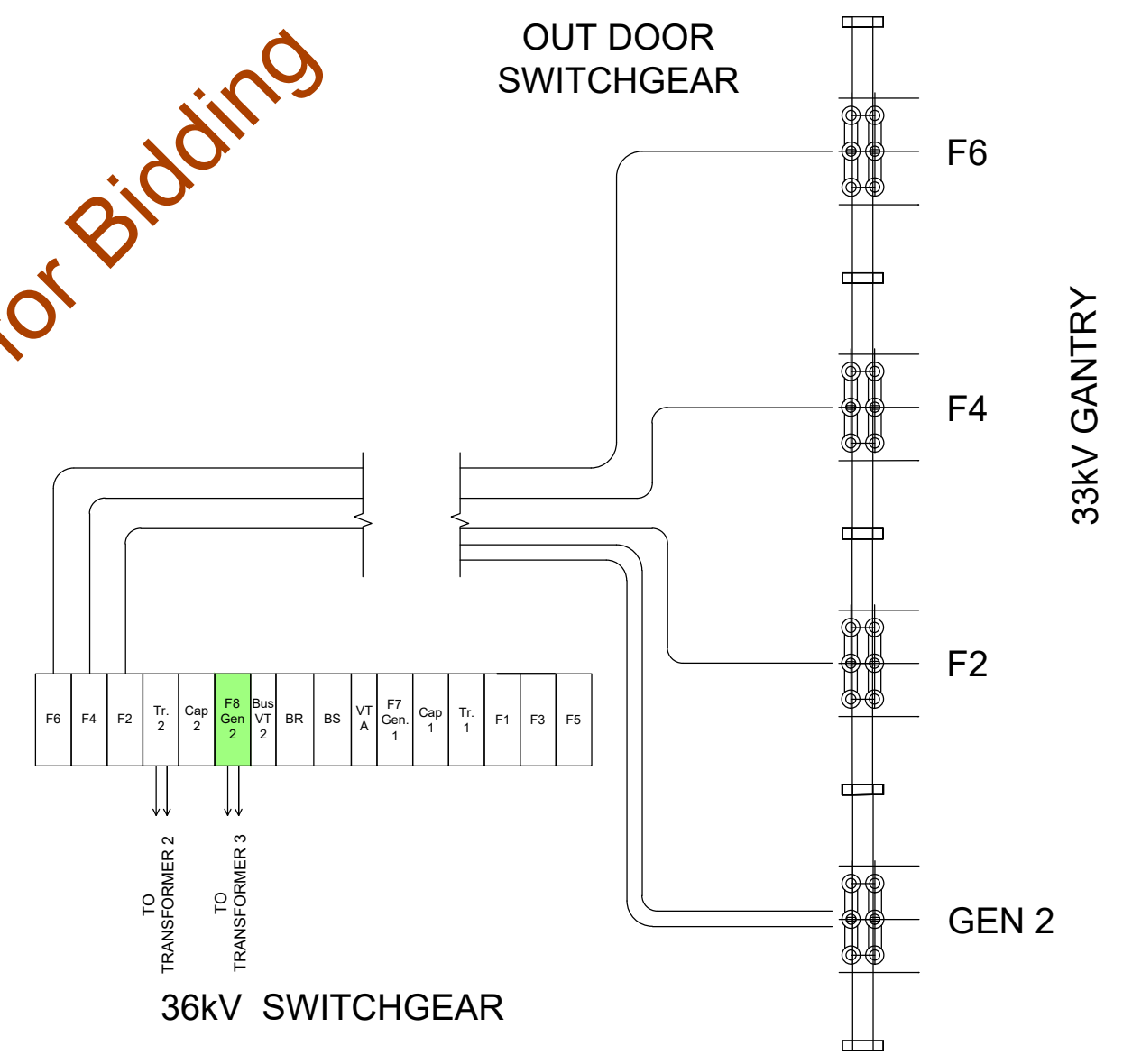
Property of
CEB Tr. Design Branch

H
G
F
E
D
C
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A

EXISTING 33kV CABLE ARRANGEMENT FOR OUTDOOR GANTRY



PROPOSED 33kV CABLE ARRANGEMENT FOR OUTDOOR GANTRY



Rev. No.	Date	Description	Drawn	Checked	Approved

**CEYLON ELECTRICITY BOARD**

Project Title
**GREEN POWER DEVELOPMENT AND ENERGY EFFICIENCY
IMPROVEMENT INVESTMENT PROGRAM - (TRANCHE 2)**

PACKAGE 8 - LOT A

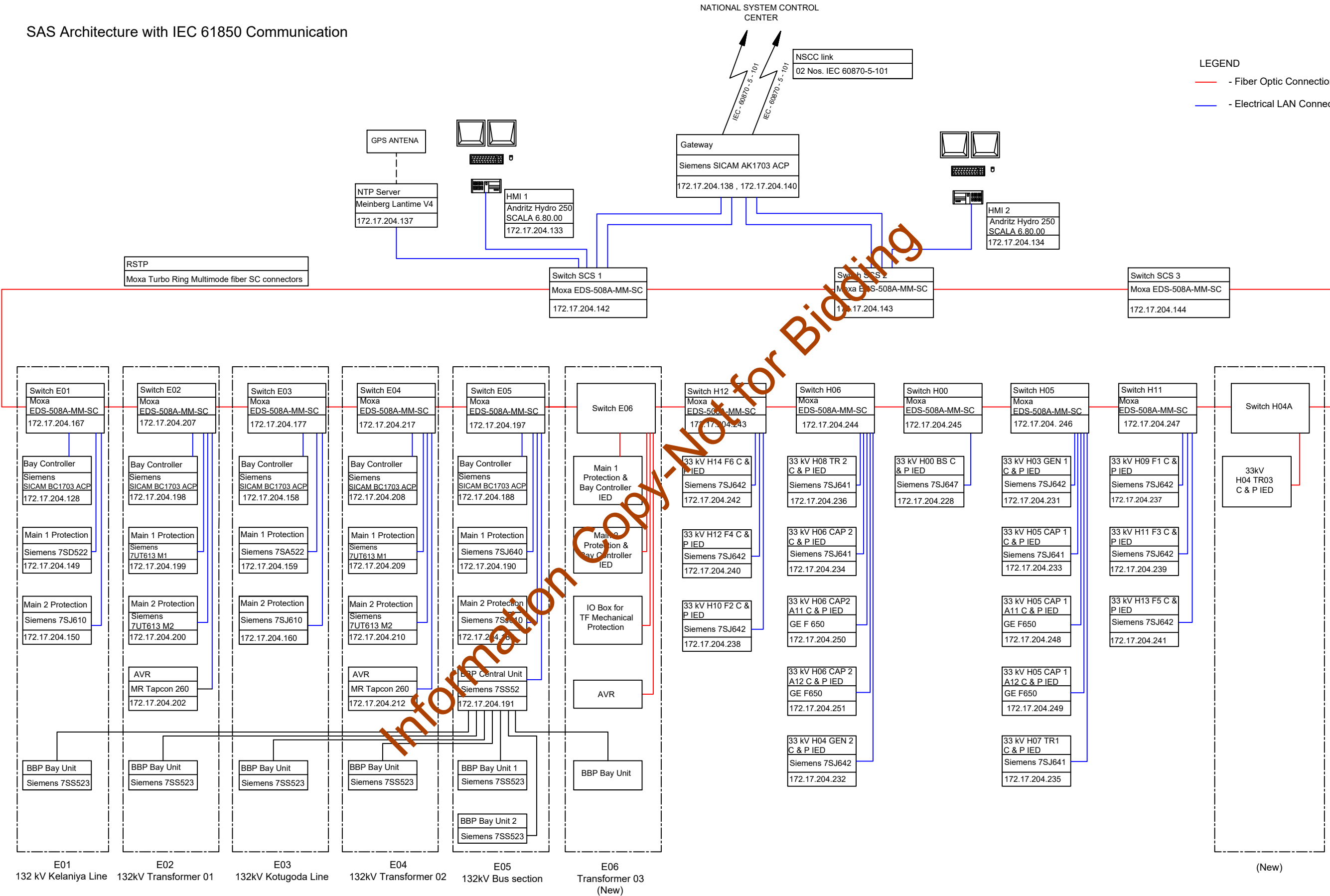
Funding Agency
ADB

Drawing Title
33kV CABLE ARRANGEMENT
FOR OUTDOOR GANTRY

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Sheet of	Rev.	Checked	Approved
Dwg. No.	TD/CE/1/184/D/01/01-A	Released for	Tendering Construction

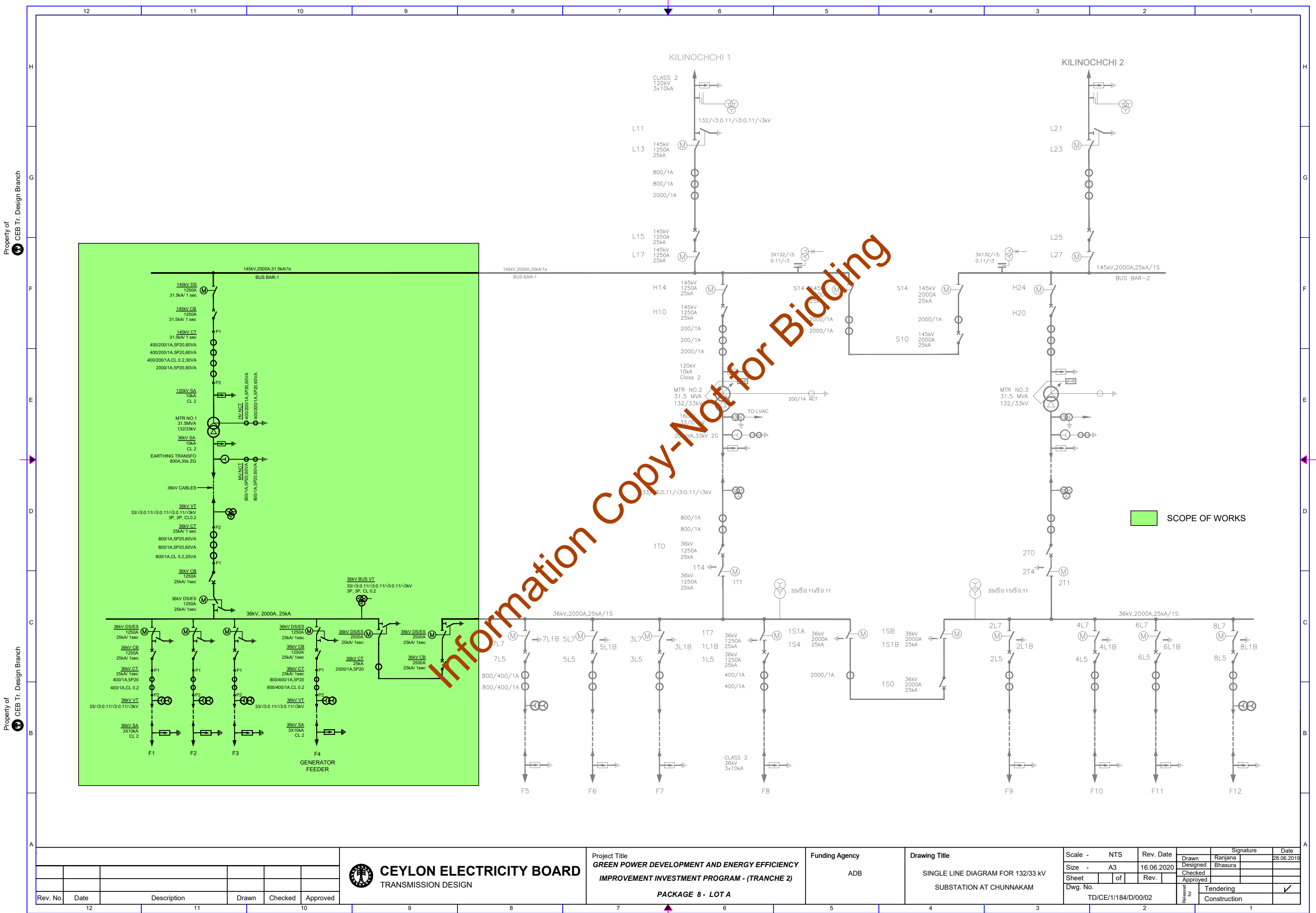
SAS Architecture with IEC 61850 Communication

- LEGEND
- Fiber Optic Connection
 - Electrical LAN Connection



Information Copy - Not for Bidding

Revision Record						 CEYLON ELECTRICITY BOARD TRANSMISSION DESIGN	Project Title GREEN POWER DEVELOPMENT AND ENERGY EFFICIENCY IMPROVEMENT INVESTMENT PROGRAM - (TRANCHE 2) PACKAGE 8 - LOT A	Funding Agency ADB	Drawing Title ARCHITECTURE FOR THE SUBSTATION AUTOMATION SYSTEM FOR ANIYAKANDA GSS	Scale - NTS	Rev. Date	Signature		Date
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Rev. No.	Date	Description	Drawn	Checked	Approved					Dwg. No.		Released for	Tendering	
12										TD/CE/1/184/D/07/01			Construction	
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Rev. No.	Date	Description	Drawn	Checked	Approved



CEYLON ELECTRICITY BOARD
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Project Title
**GREEN POWER DEVELOPMENT AND ENERGY EFFICIENCY
IMPROVEMENT INVESTMENT PROGRAM - (TRANCHE 2)**

Funding Agency
ADB

Drawing Title
**SINGLE LINE DIAGRAM FOR 132/33 kV
SUBSTATION AT CHUNNAKAM**

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Dwg. No. TD/CE/1/184/D/00/02

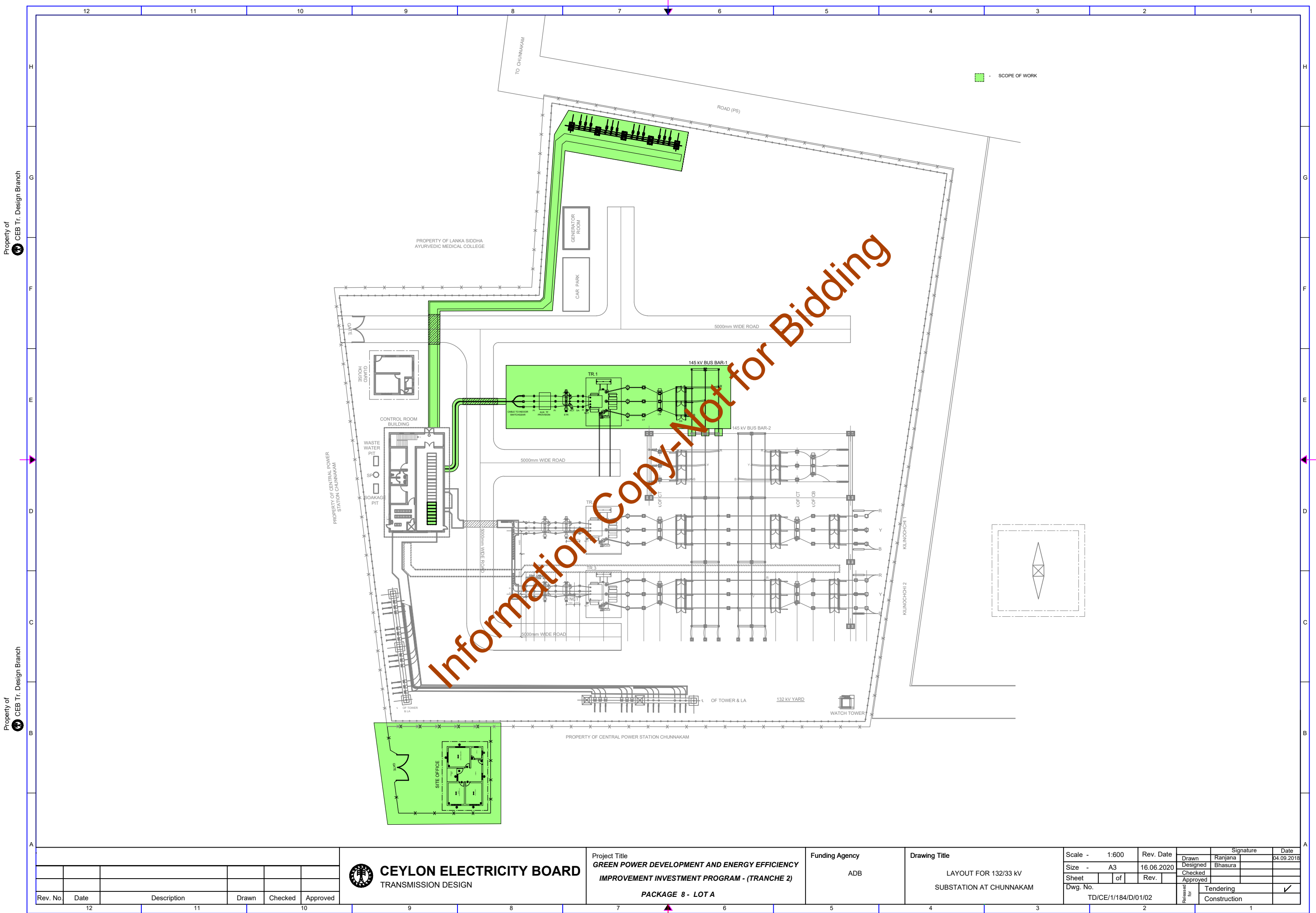
Rev. Date
16.06.2020

Signature
Ranjana Bhasura

Date
28.06.2019

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Tendering
Construction

Package 8 - LOT A



Rev. No.	Date	Description	Drawn	Checked	Approved
12					
11					
10					

**CEYLON ELECTRICITY BOARD**
TRANSMISSION DESIGN

Project Title
**GREEN POWER DEVELOPMENT AND ENERGY EFFICIENCY
IMPROVEMENT INVESTMENT PROGRAM - (TRANCHE 2)**
PACKAGE 8 - LOT A

Funding Agency

ADB

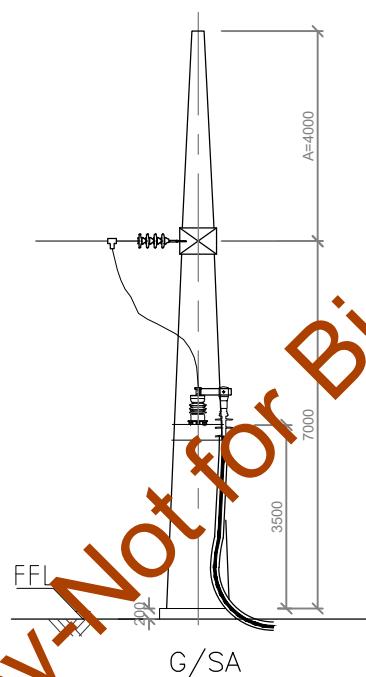
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LAYOUT FOR 132/33 kV
SUBSTATION AT CHUNNAKAM

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Size - A3
Sheet of Rev.
Dwg. No. TD/CE/1/184/D/01/02

Rev. Date 16.06.2020
Rev.
Released for
Tendering
Construction

Signature
Ranjana Bhasura
Date 04.09.2018
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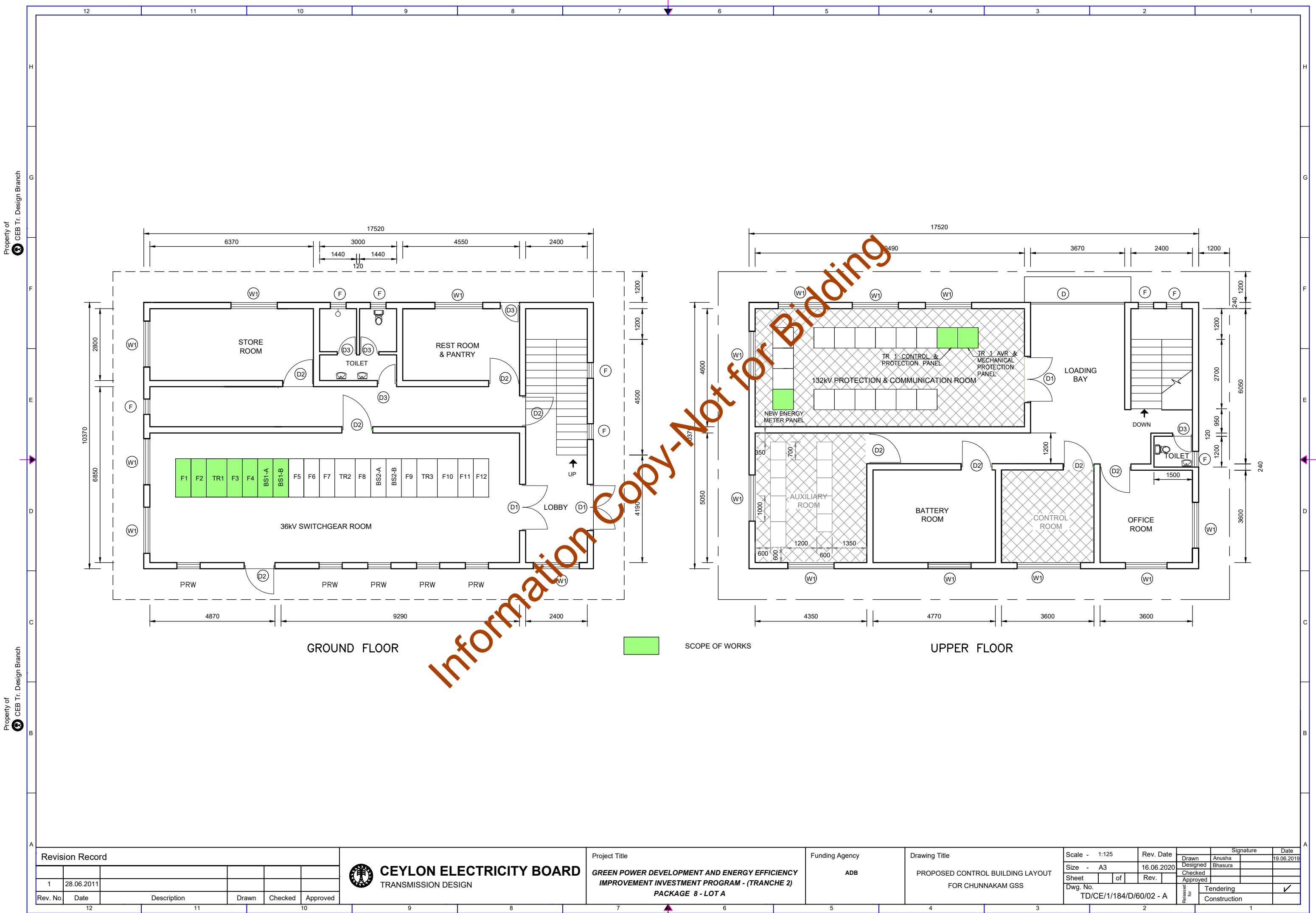
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G	GANTRY	
SA	SURGE ARRESTER	

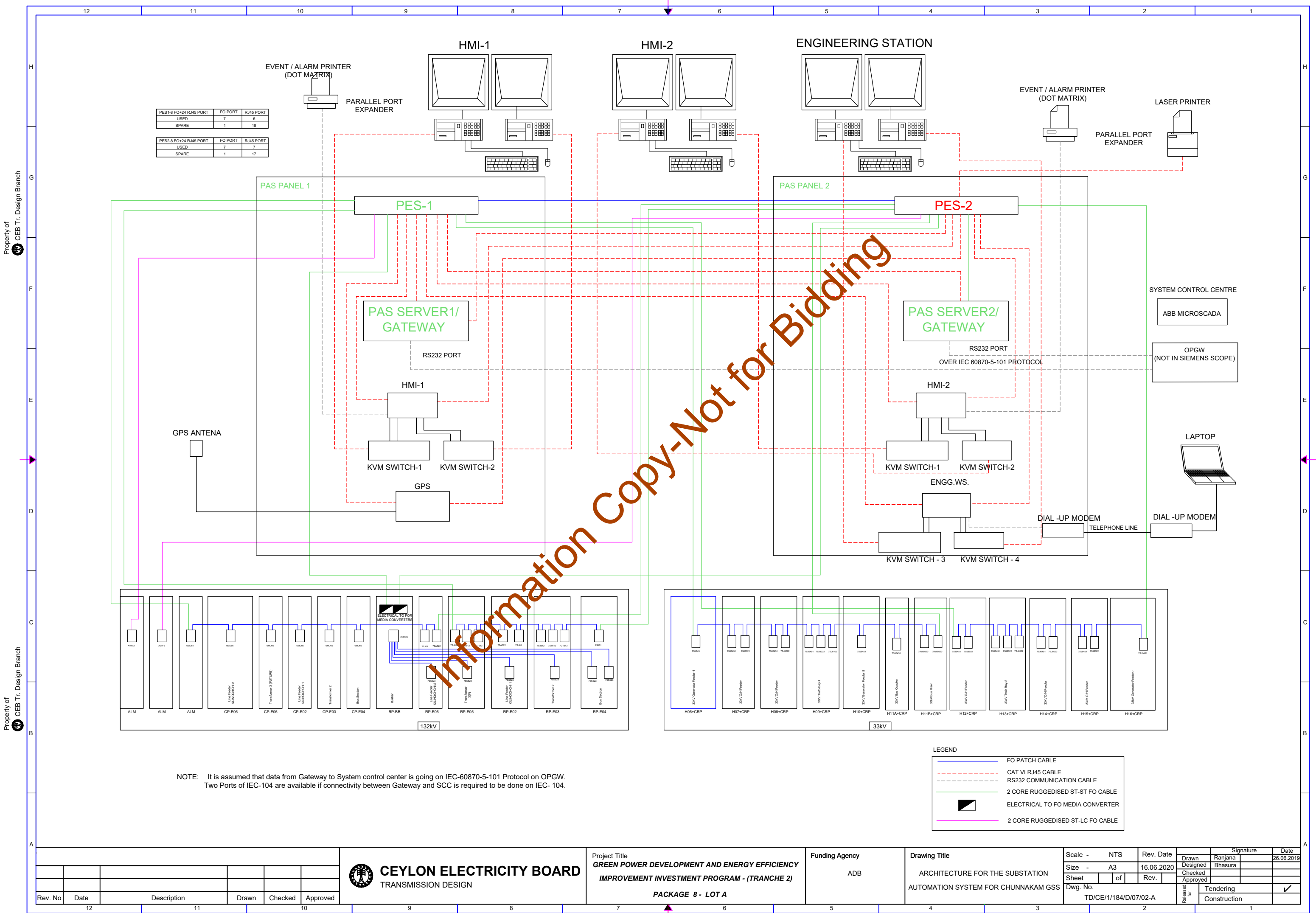
SYMBOL	MIN CLEARANCE TO CEB SPEC.	33kV
PC	PHASE TO PHASE	325mm
PE	PHASE TO EARTH	325mm
GC	GROUND CLEARANCE	2300mm
SC	SECTION CLEARANCE	2625mm

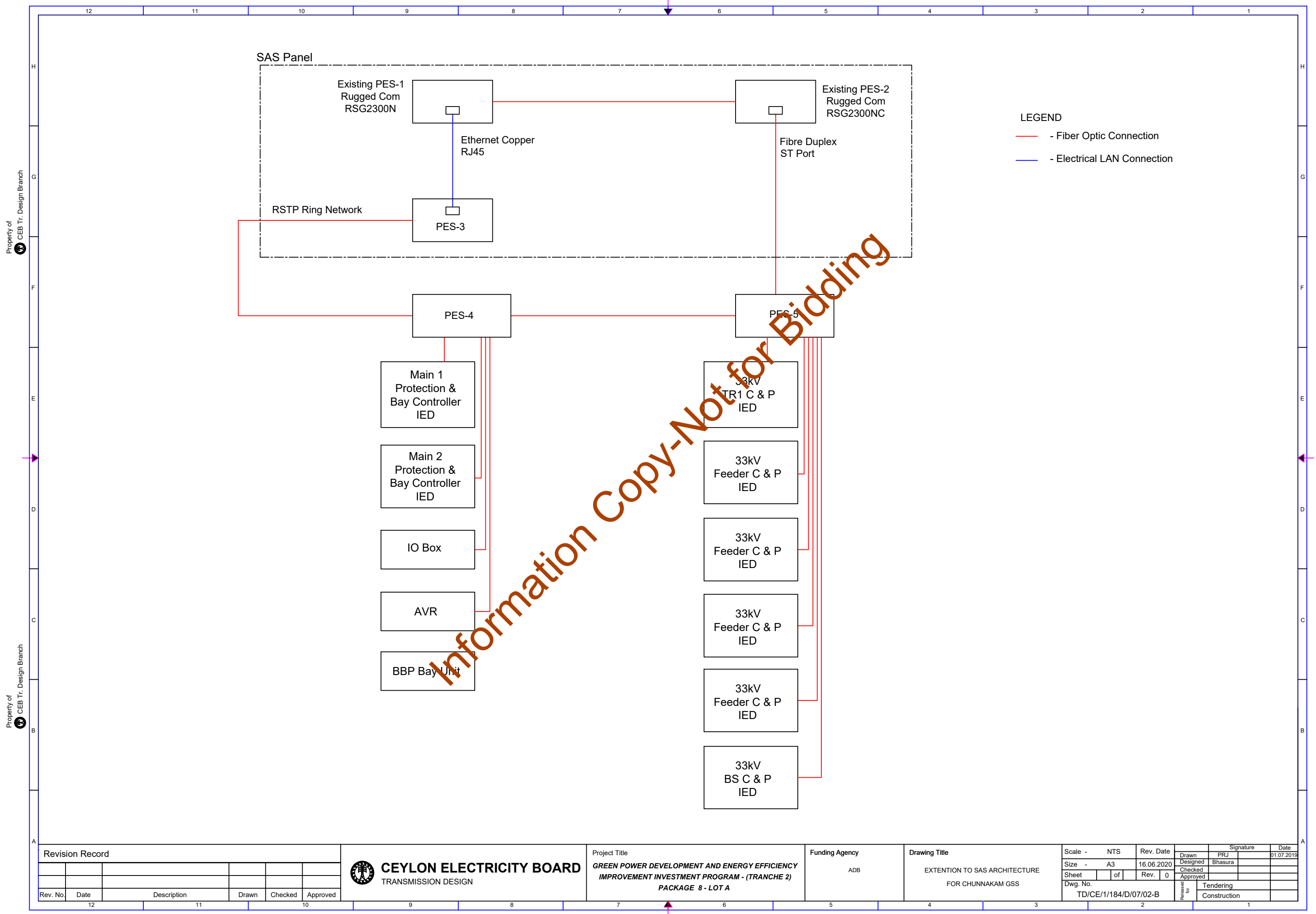
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2. A=HEIGHT SHALL BE INCREASED IF REQUIRED BY DSLP CALCULATION

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Rev. No.		Date		Description		Drawn		Checked		Approved							
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Revision Record					
Rev. No.	Date	Description	Drawn	Checked	Approved



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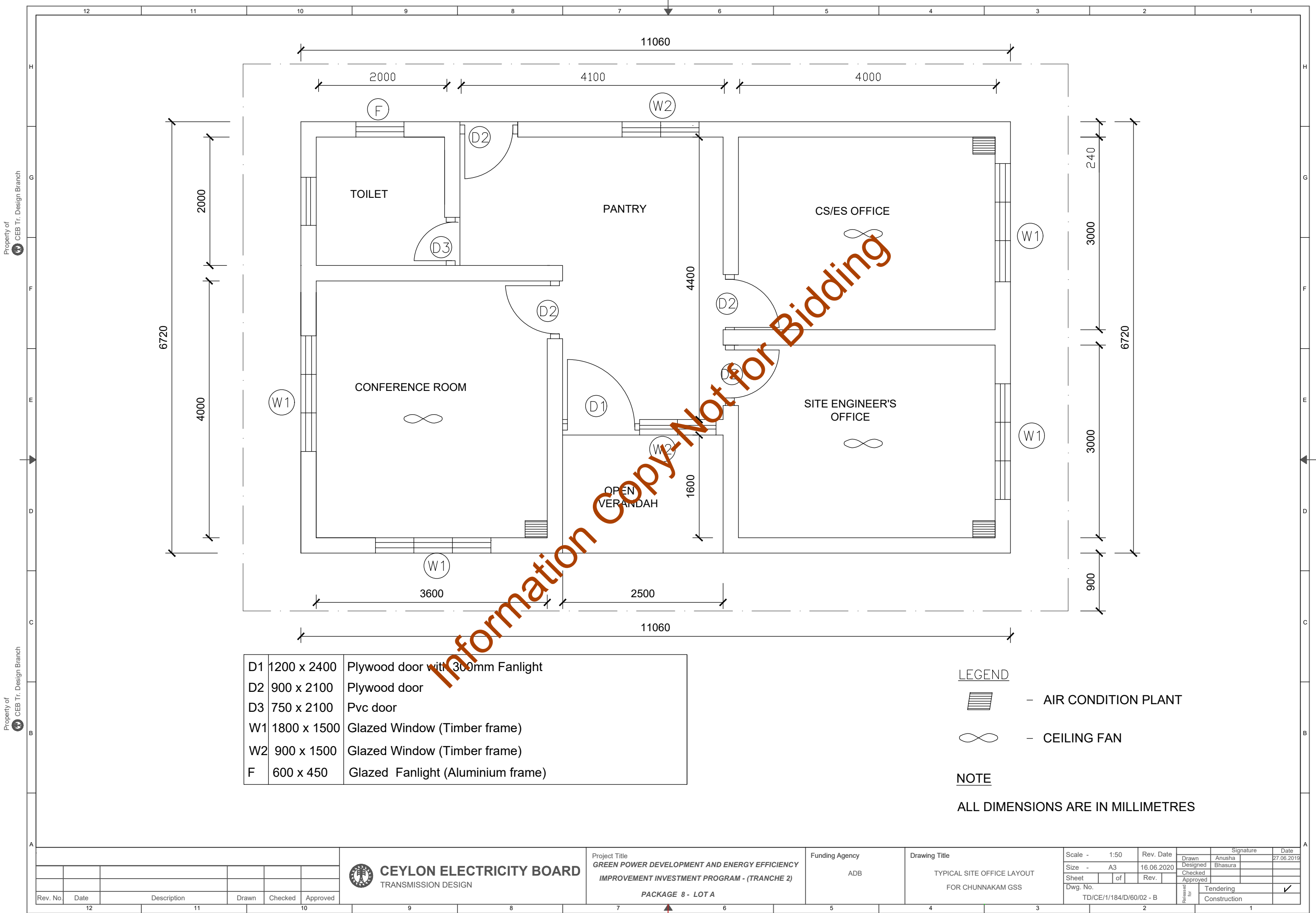
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IMPROVEMENT INVESTMENT PROGRAM - (TRANCHE 2)
PACKAGE 8 - LOT A**

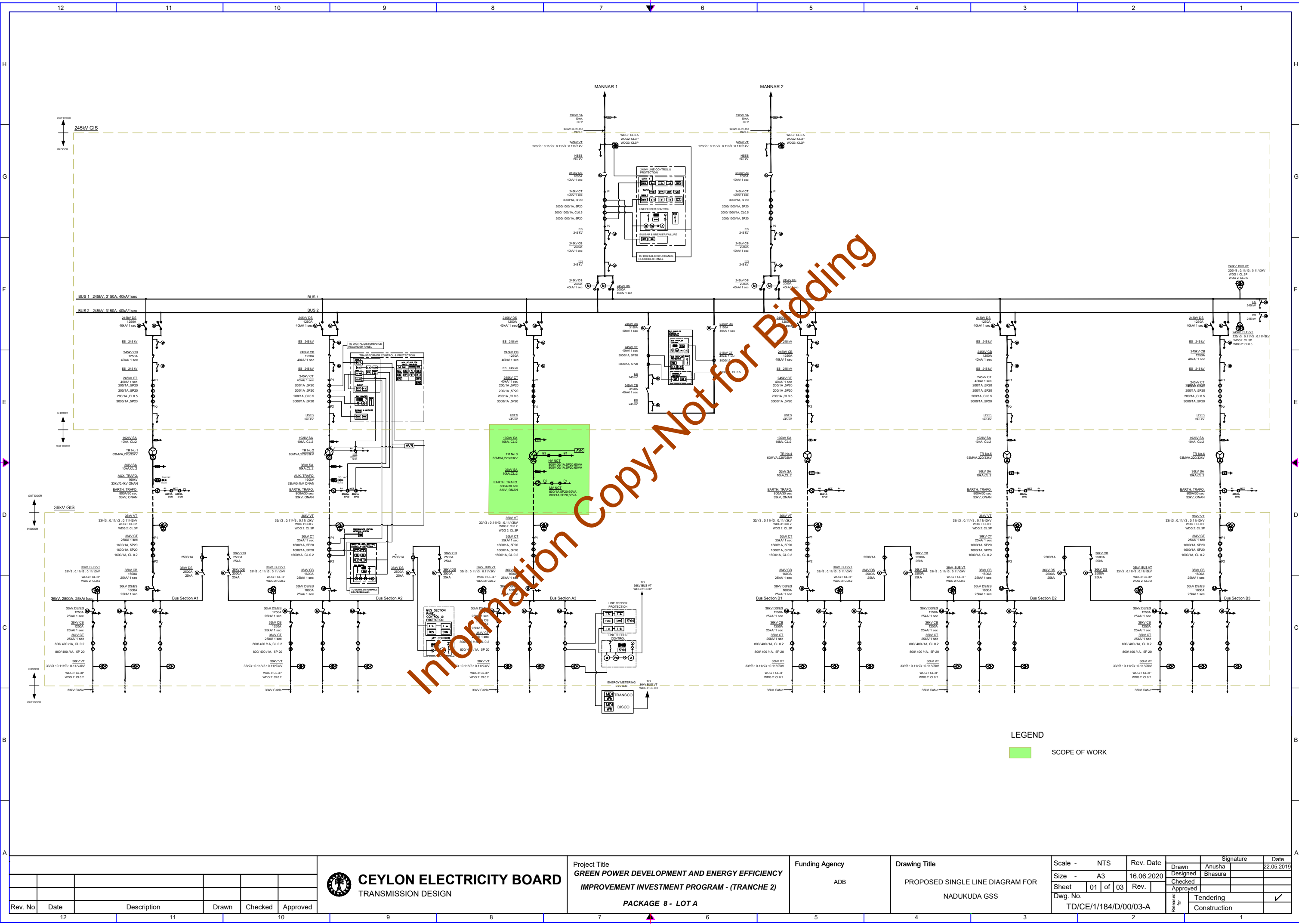
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EXTENTION TO SAS ARCHITECTURE
FOR CHUNNAKAM GSS

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Dwg. No. TD/CE/1/184/D/07/02-B

Signature		Date
Drawn	PRJ	01.07.2019
Designed	Bhasura	
Checked		
Approved		
Released for	Tendering	
	Construction	





Rev. No.	Date	Description	Drawn	Checked	Approved
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11					
10					



CEYLON ELECTRICITY BOARD
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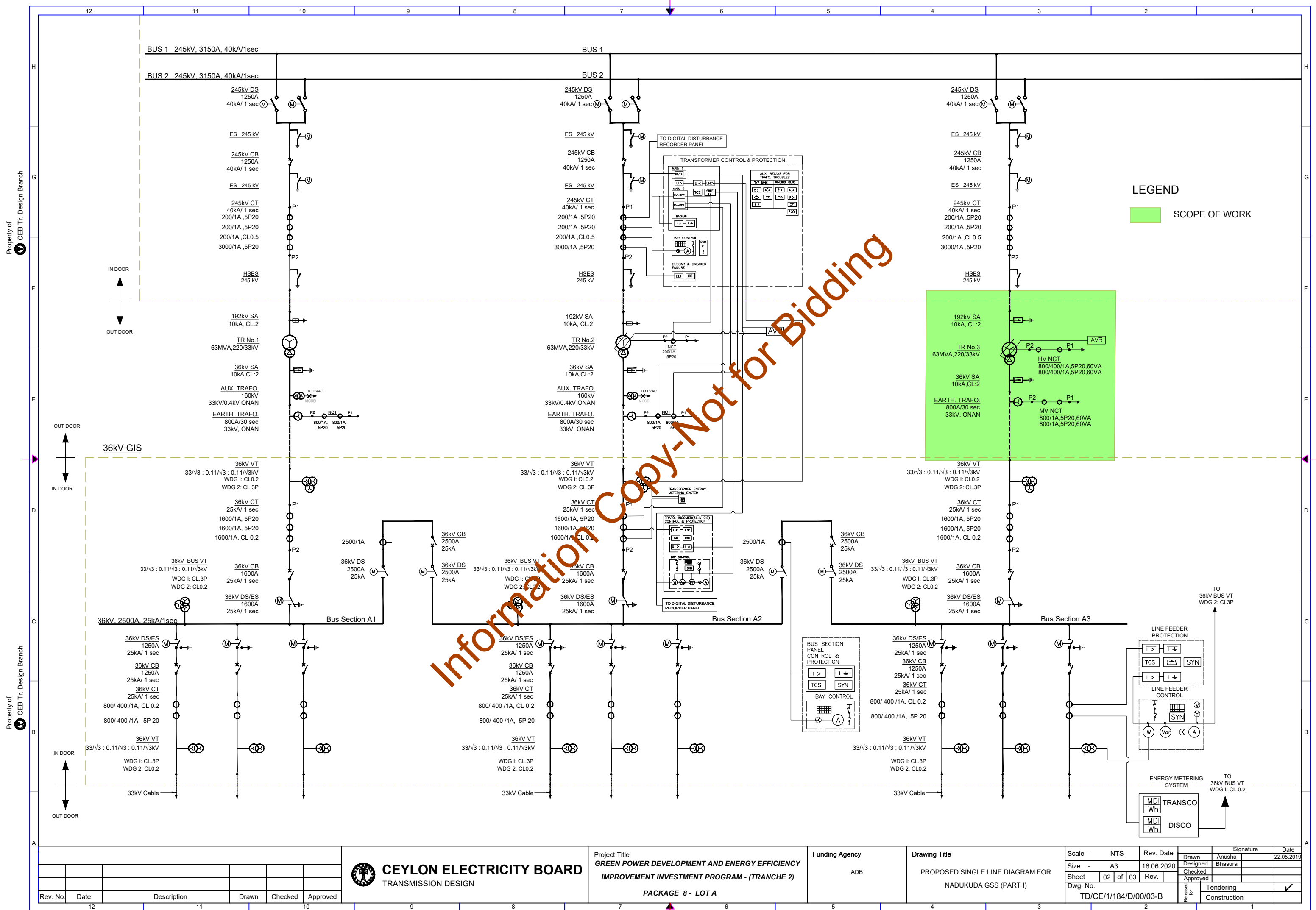
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**GREEN POWER DEVELOPMENT AND ENERGY EFFICIENCY
IMPROVEMENT INVESTMENT PROGRAM - (TRANCHE 2)**
PACKAGE 8 - LOT A

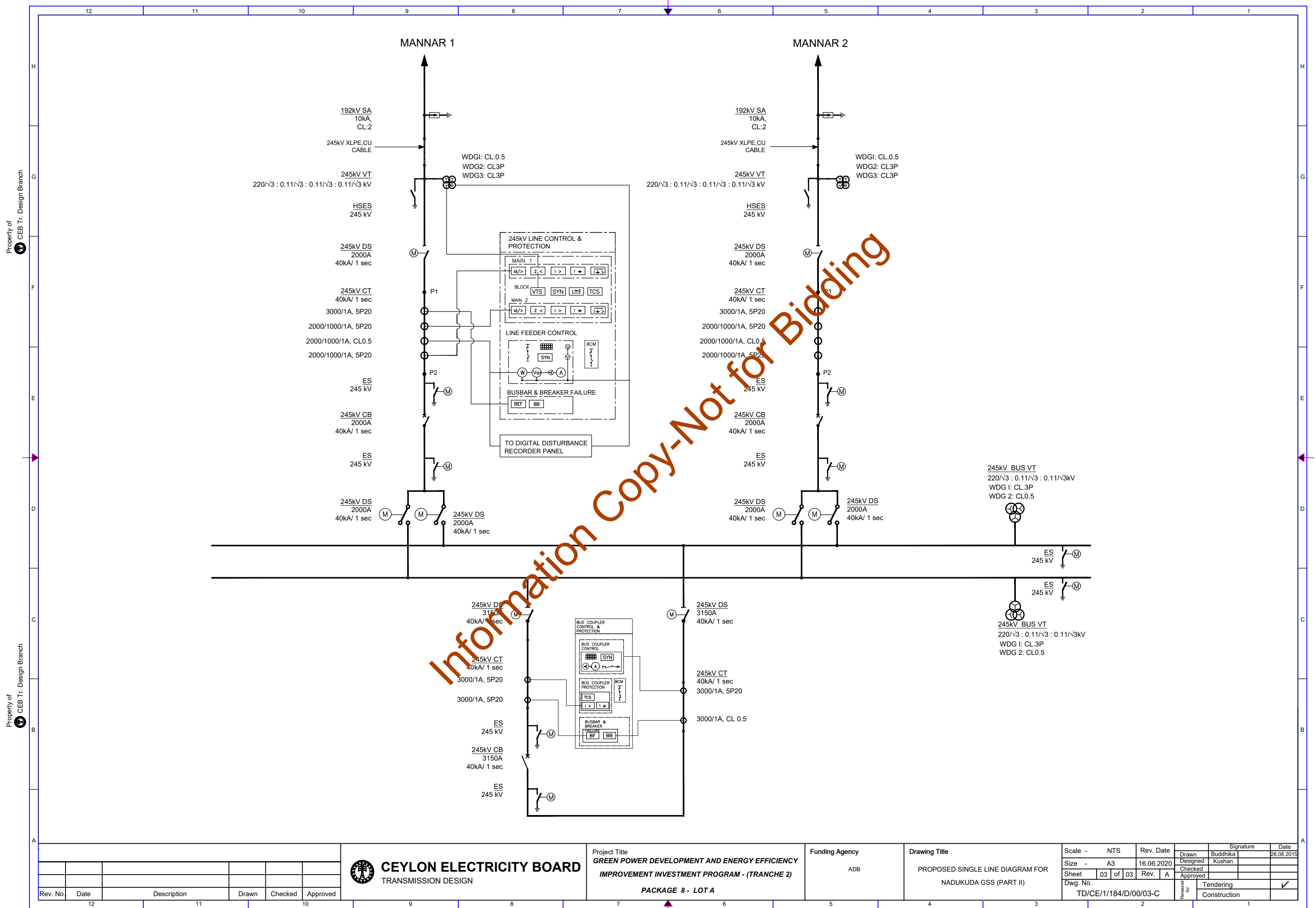
Funding Agency
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PROPOSED SINGLE LINE DIAGRAM FOR
NADUKUDA GSS

Scale - NTS
Size - A3
Sheet 01 of 03
Dwg. No. TD/CE/11/184/D/00/03-A

Rev. Date	16.06.2020	Rev.	
Drawn	Anusha	Checked	Bhasura
Approved		Released for	
Signature		Tendering	Construction
Date	22.05.2019		





Rev. No.	Date	Description	Drawn	Checked	Approved



CEYLON ELECTRICITY BOARD
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Project Title
**GREEN POWER DEVELOPMENT AND ENERGY EFFICIENCY
IMPROVEMENT INVESTMENT PROGRAM - (TRANCHE 2)**

PACKAGE 8 - LOT A

Funding Agency
ADB

Drawing Title
PROPOSED SINGLE LINE DIAGRAM FOR
NADUKUDA GSS (PART II)

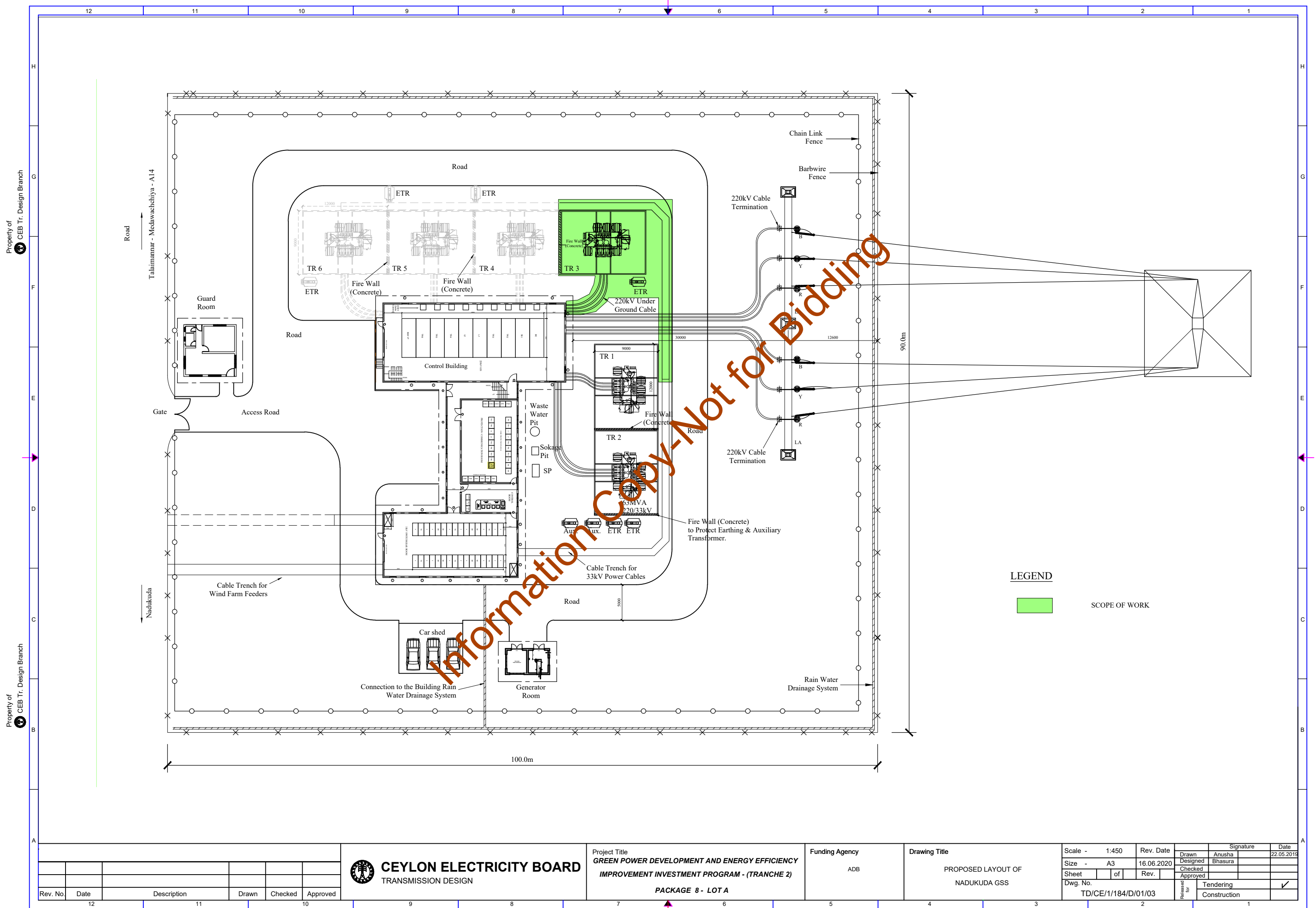
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Dwg. No. TD/CE/1/184/D/00/03-C

Rev. Date
16.06.2020
Rev. A

Drawn	Buddhika	Date	28.08.2015
Designed	Kushan		
Checked			
Approved			

Released for

Tendering
Construction



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**CEYLON ELECTRICITY BOARD**
TRANSMISSION DESIGN

Project Title
**GREEN POWER DEVELOPMENT AND ENERGY EFFICIENCY
IMPROVEMENT INVESTMENT PROGRAM - (TRANCHE 2)**
PACKAGE 8 - LOT A

Funding Agency
ADB

Drawing Title
**PROPOSED LAYOUT OF
NADUKUDA GSS**

Scale - 1:450
Size - A3
Sheet 1 of 1
Dwg. No. TD/CE/1/184/D/01/03

Rev. Date 16.06.2020
Rev.

Signature
Anusha Bhasura
Tendering Construction
Date 22.05.2019

