

#### LEGEND

- PROTECTED AREA
- COPPER BARE CABLE 120 mm<sup>2</sup>
- SHIELD WIRE ALUMOWELD 7/N7
- OPGW CABLE
- FRANKLIN-TYPE AIR TERMINATION ROD 2.5m. LENGTH
- FRANKLIN-TYPE COPPER SIMPLE LIGHTNING ROD 5m. LENGTH FOR CONVERTER HALL METALLIC STRUCTURE
- FRANKLIN-TYPE COPPER SIMPLE LIGHTNING ROD 5m. LENGTH FOR CONVERTER HALL CONCRETE WALL
- FRANKLIN-TYPE COPPER SIMPLE LIGHTNING ROD 2m. LENGTH FOR CONVERTER HALL FIXED WITH GLUE ON TOP OF ROOF
- TEST JOINT
- DOWN YARD CONNECTION TO THE EARTHING GRID CONE GROUNDING ROD
- Lx LIGHTNING PROTECTION GENERAL DETAILS

#### PARTICULAR NOTES

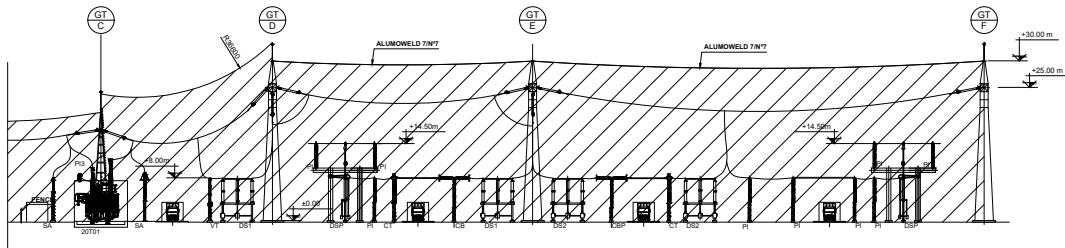
- ALL DIMENSIONS ARE IN mm.
- SHIELD WIRE OD DC ELECTRODE GANTRY IS AN OPGW CABLE.

#### REFERENCE DRAWINGS

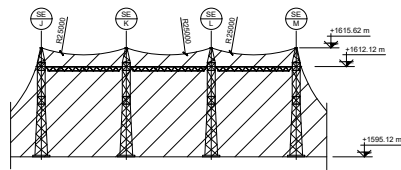
N-000063\_E\_D2\_9772\_S LIGHTNING PROTECTION - DESIGN CALCULATION  
N-000063\_E\_CS\_9772\_S LIGHTNING PROTECTION - CIVIL CONSTRUCTION DRAWING GENERAL DETAILS  
N-000063\_E\_CS\_9772\_S\_001 LIGHTNING PROTECTION - PARTS LIST

SCALE 1:500

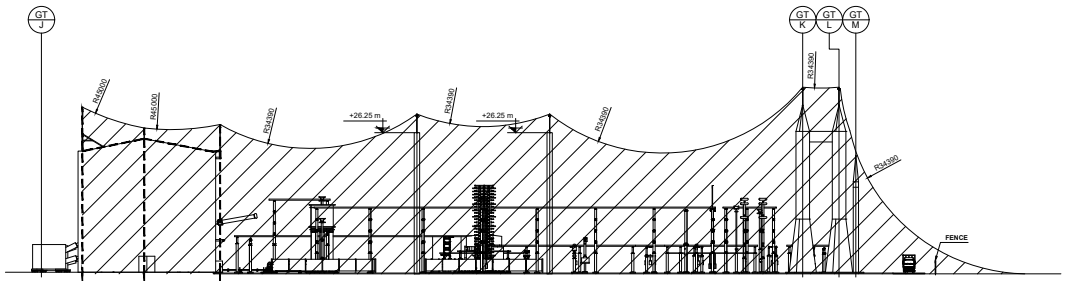
±0.00 = 1593.90 MASL		AB	[FA = Issued for approval IPM = Issued for implementation (Design Input) IPM = Issued for information IPC = Issued for construction LIN JUNTAO	ROO
R0	2020-11-30	AS BUILT		
D4	2018-07-12	ACCORDING TO COMMENTS	DHN	ACC
D3	2018-02-23	ACCORDING TO COMMENTS	MGC	ACC
Rev.	Rev. Date	Modification	Created By	Approved By
The Name (Photo)				
N-000063_E_C1_9772_S_R0		HVDC 500 BIPOLE		
Customer		2x1000 MW		
KETRACO Kenya		400kV AC, ±500kV DC		
Project				
Ethiopia - Kenya Power Systems Interconnection Project				
Location(s)		Location Designation(s)		
Suswa Converter Station				
Scale	Paper Size	Customer Document Number	Technical Classification:	
AO	A0	EXPSP_K1_L_D_00013_90	ECON: N	
Responsible Dept.	Techn. Reference	Document Type	Document Designation	
ING	LIN JUNTAO	LAYOUT AND MAJOR EQUIPMENT DRAWINGS	C1_9772_S	
Created By	Checked By	TBL Supplementary Title	Drawing Number	
LIN JUNTAO				
Siemens AG	Approved By	LIGHTNING PROTECTION		
ROO		OVERALL LAYOUT		
Rev.	Date of Issue	Language	Sheet	
R0	2020-11-30	en	2 / 3	



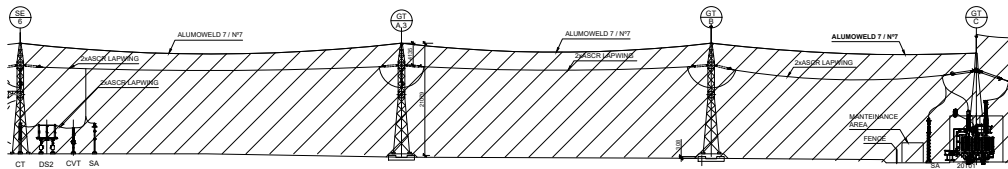
SECTION G-G  
SCALE 1:500



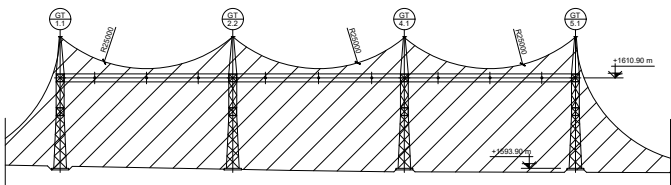
SECTION K-K  
SCALE 1:500



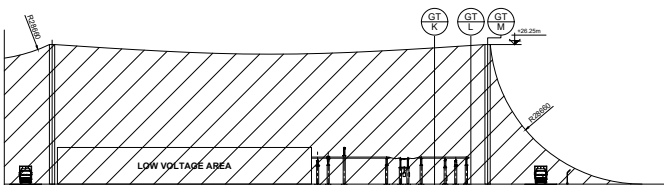
SECTION H-H  
SCALE 1:500



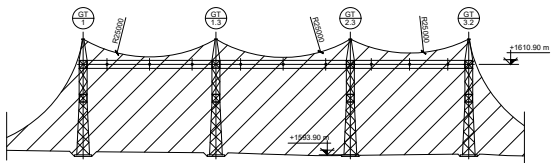
SECTION L-L  
SCALE 1:500



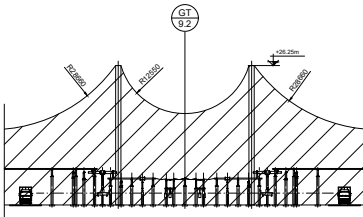
SECTION I-I  
SCALE 1:500



SECTION M-M  
SCALE 1:500



SECTION J-J  
SCALE 1:500



SECTION N-N  
SCALE 1:500

#### LEGEND

- PROTECTED AREA
- COPPER BARE CABLE 120 mm<sup>2</sup>
- SHIELD WIRE ALUMOWELD 7/N7
- OPGW CABLE
- FRANKLIN-TYPE AIR TERMINATION ROD 2.5m. LENGTH
- FRANKLIN-TYPE COPPER SIMPLE LIGHTNING ROD 5m. LENGTH FOR CONVERTER HALL METALLIC STRUCTURE
- FRANKLIN-TYPE COPPER SIMPLE LIGHTNING ROD 5m. LENGTH FOR CONVERTER HALL CONCRETE WALL
- FRANKLIN-TYPE COPPER SIMPLE LIGHTNING ROD 2m. LENGTH FOR CONVERTER HALL FIXED WITH GLUE ON TOP OF ROOF
- TEST JOINT
- DOWN YARD CONNECTION TO THE EARTHING GRID CONE GROUNDING ROD
- LIGHTNING PROTECTION GENERAL DETAILS

#### PARTICULAR NOTES

- ALL DIMENSIONS ARE IN mm.
- SHIELD WIRE OD DC ELECTRODE GANTRY IS AN OPGW CABLE.

#### REFERENCE DRAWINGS

- N-000063\_E\_D2\_9772\_S LIGHTNING PROTECTION - DESIGN CALCULATION  
N-000063\_E\_CS\_9772\_S LIGHTNING PROTECTION - CIVIL CONSTRUCTION DRAWING GENERAL DETAILS  
N-000063\_E\_CS\_9772\_S\_001 LIGHTNING PROTECTION - PARTS LIST

SCALE 1:500

±0.00 = 1593.90 MASL		AB	IFA - Issued for approval IFM - Issued for implementation (Design Input)
R0		2020-11-30	AS BUILT
D4		2018-07-12	ACCORDING TO COMMENTS
D3		2018-02-23	ACCORDING TO COMMENTS
Rev.	Rev. Date	Modification	Created By
N-000063_E_C1_9772_S_R0		HVDC 500 BIPOLE	
Customer		2x1000 MW	
KETRACO Kenya		400kV AC, ±500kV DC	
Project		Ethiopia - Kenya Power Systems Interconnection Project	
Location(s)		Suswa Converter Station	
Scale	Paper Size	Customer Document Number	Technical Classification:
AO	A0	EXPSP_K1_I_D_00013_90	ECON: N
Responsible Dept.	Techn. Reference	Document Type	Document Designation
ING	LIN JUNTAO	LAYOUT AND MAJOR EQUIPMENT DRAWINGS	C1_9772_S
Created By	Checked By	Drawn By	Drawing Number
LIN JUNTAO	LIN JUNTAO	CECC	
Approved By	Reviewed By	Lightning Protection	
Siemens AG	ROO	OVERALL LAYOUT	
Rev.	Date of Issue	Language	Sheet
R0	2020-11-30	en	3 / 3