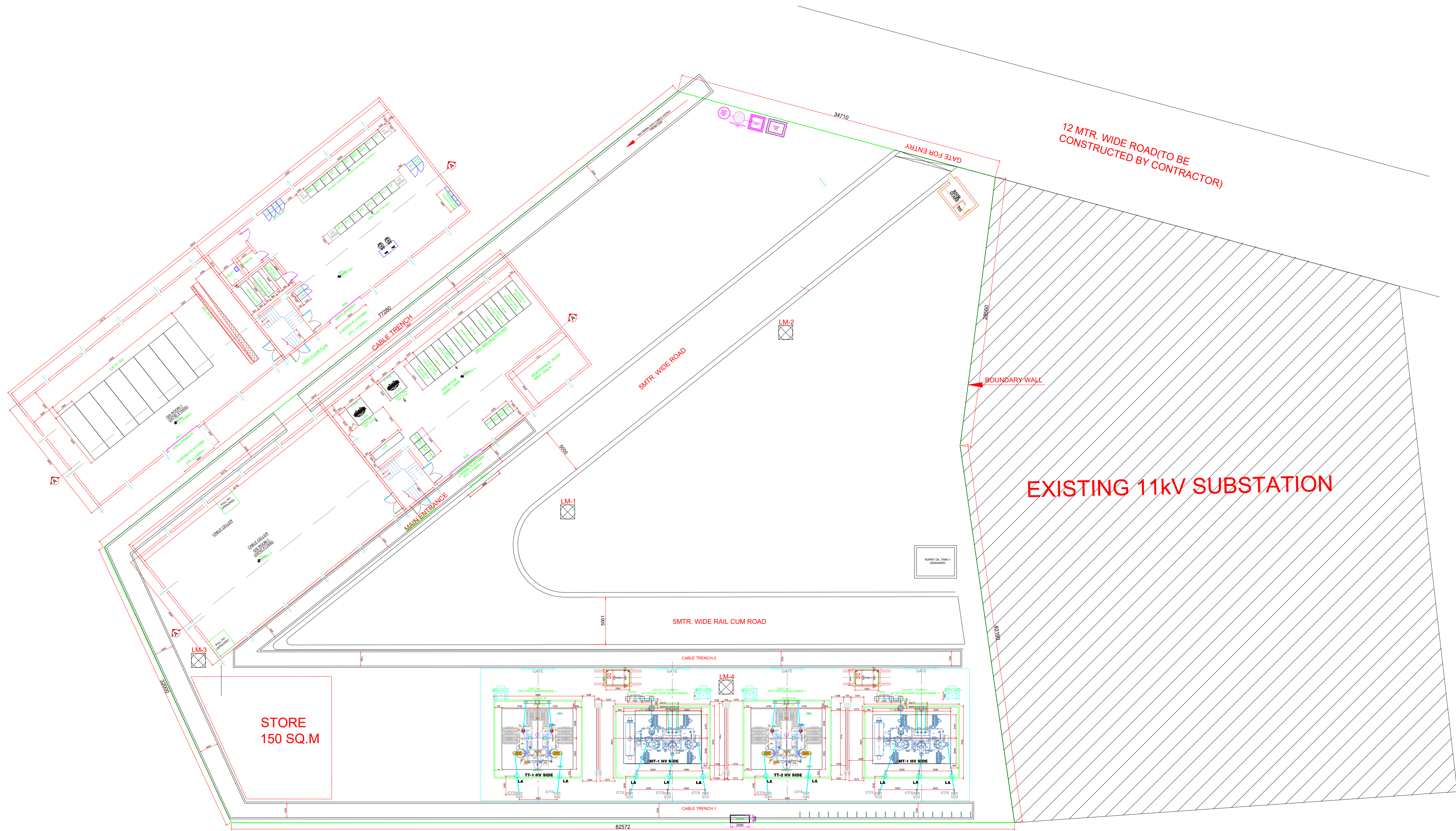




- NOTE:-
1. ALL DIMENSIONS ARE IN MM.
 2. THIS DRAWING IS INDICATIVE AND FOR TENDER PURPOSE ONLY AND CONTRACTOR SHALL DEVELOP THE DRAWING FOR CLIENT APPROVAL.
 3. THE MINIMUM CLEARANCE BETWEEN PHASES, BETWEEN PHASE TO EARTH, SECTIONAL CLEARANCE AND GROUND CLEARANCE SHALL BE MAINTAINED AS PER THE APPLICABLE STANDARDS.
 4. NOMINAL VOLTAGES - 220/33 kV and 220/25 kV.
 5. WORK-STATION AND FURNITURE SHALL BE SUPPLIED & COMMISSIONED.
 6. THE DIMENSIONS OF EQUIPMENT & LAYOUT ARE INDICATIVE. CONTRACTOR SHALL SUBMIT THE FINAL LAYOUT PLAN CONSIDERING THE ACTUAL INPUT RECEIVED FROM OEM AND ACTUAL LAND AREA RECEIVED.
 7. CONTRACTOR SHALL DESIGN THE RSS BUILDING IN COMPLIANCE WITH IE RULE, NATIONAL BUILDING CODE AND OTHER APPLICABLE LOCAL STANDARDS AND IGBC REQUIREMENTS.
 8. CONTRACTOR DURING DETAILED ENGINEERING STAGE SHALL ADHERE TO IE RULE, IS, IEC ETC. IN FINALIZING THE LAYOUT & CLEARANCES
 9. STATCOM ROOM SHALL BE PROVIDED BY THE PST CONTRACTOR AFTER STATCOM STUDY DURING EXECUTION. (Tentative rating of 4 MVAR)

MINIMUM CLEARANCE	(UNIT)	(220 kV RSS)	(33 kV AMS)	(25 kV TSS)
a) BETWEEN PHASES	MM	2100	320	-
b) BETWEEN PHASE TO EARTH	MM	2100	320	500
c) SAFETY CLEARANCE	MM	4300	2800	2000

LEGENDS / ABBREVIATION :

SYMBOL	DESCRIPTION
TT	TRACTION TRANSFORMER
AMT	AUXILIARY MAIN TRANSFORMER
STN.	STATION TRANSFORMER
LA	LIGHTING ARRESTER
CT	CURRENT TRANSFORMER
CB	CIRCUIT BREAKER
ISO	ISOLATOR
BPI	BUS POST INSULATOR
PT	POTENTIAL TRANSFORMER
BC	BATTERY CHARGER
NGR	NEUTRAL GROUNDING RESISTER
GIS	GAS INSULATED SWITCHGEAR
GSS	GRID SUB-STATION
LM	LIGHTNING MAST
RS	ROLLING SHUTTER
➡	FRONT

ELEVATION LEVELS	LEVEL
1. FLOOR GROUND LEVEL (FGL)	-
2. TOP OF GRAVEL	FGL+0.1M
3. EQUIPMENT FOUNDATION	FGL+0.3M
4. TRANSFORMER RAIL TOP	FGL+0.3M
5. ROAD FINISH LEVEL	FGL+0.3M
6. TOP OF TRENCH (WITH TRENCH COVER)	FGL+0.2M
7. AMS BUILDING FINISH FLOOR LEVEL (FFL)	FGL+0.6M
8. HIGHEST FLOOD LEVEL (HFL)	-

- NOTES:
1. ALL DIMENSIONS ARE IN METER UNLESS MENTIONED OTHERWISE.
 2. ALL DIMENSIONS ARE TO BE READ AND NOT TO BE MEASURED.
 3. ANY DISCREPANCY IN THE DRAWING MUST BE BROUGHT TO THE NOTICE OF THE DESIGNER.
 4. INTERFACE WITH OTHER DESIGN DISCIPLINE WILL BE DONE AS PER AVAILABILITY OF DETAILS.

R1	07-01-2025	Note No.9 added	KD	V.S/R.K	SK
R0	08-08-2024	FIRST SUBMISSION	K.B	V.S/R.K	SK
REV	DATE	DESCRIPTION	Originator	Checked	Approved

K RIDE

DM / ELE / KRIDE Sr. DGM / ELE / KRIDE AGM / ELE / KRIDE

Certified that this document has been designed and checked in accordance with GC Quality Assurance Plan.

egis **AECOM** wsp
EGIS-AECOM-WSP

Senior Discipline Expert Chief Discipline Expert Project Director

Certified that this document has been designed and checked in accordance with DDC Quality Assurance Plan.

Detailed Design Consultant for design of Traction & Auxiliary Power Supply and Distribution for BSRP

SYSTRA

SYSTRA MVA CONSULTING (INDIA) PVT. LTD.
10th and 11th Floor, Tower-B, 12/3, Vatika
Mindscapes, Mathura Road, NH2, Sector 27D,
Faridabad, Haryana 121015

Drawn: K. Bisht Checked: V. Singh, R. Kannan Approved: S. Kumar

Drawing no.: KRDD01-TDR-GEN-GEN-TPS-DWG-00016

Client:



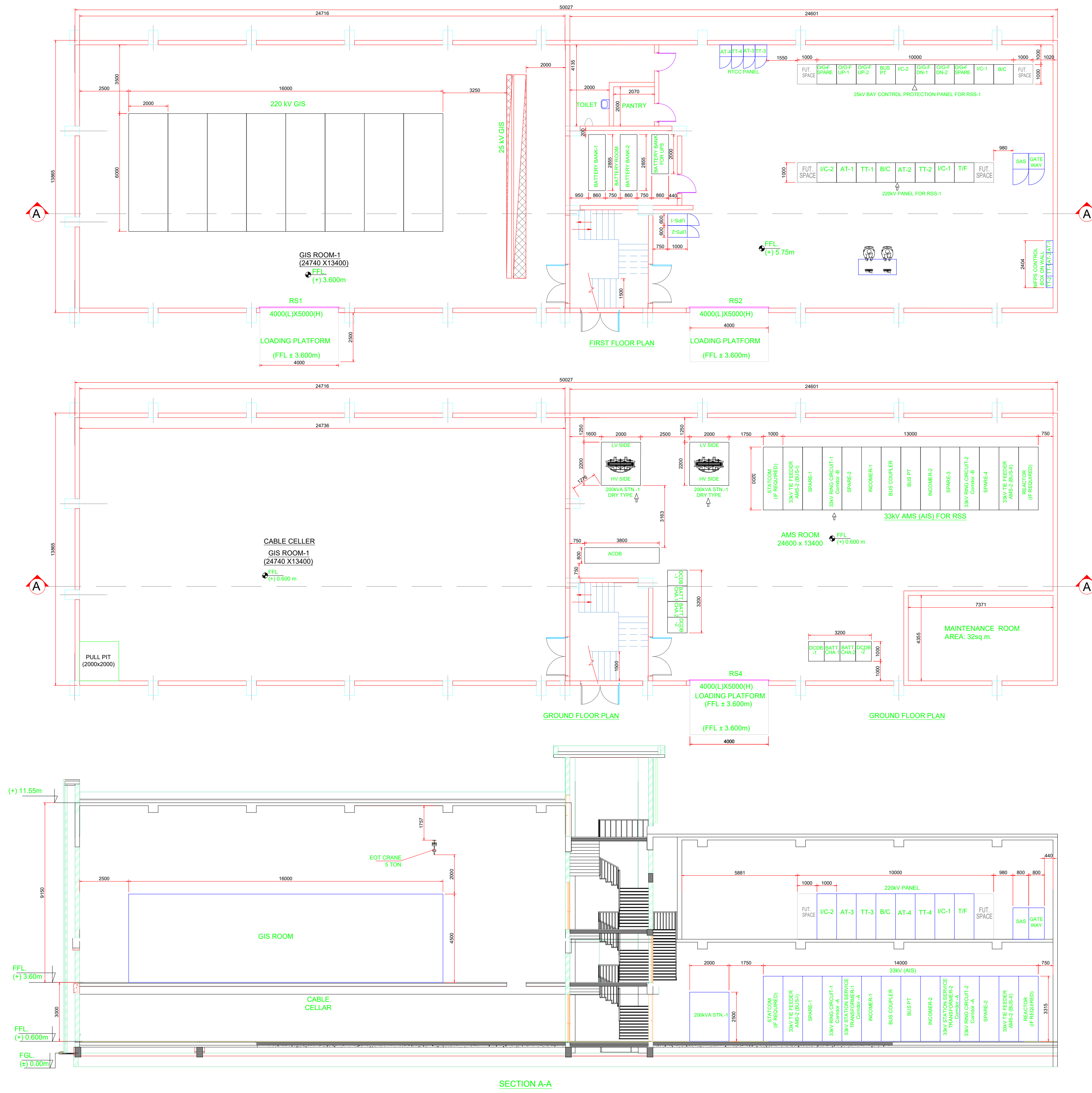
**RAIL INFRASTRUCTURE
DEVELOPMENT COMPANY
(KARNATAKA) LIMITED**

Project Title: Bengaluru Suburban Rail Project (BSRP)
(Detailed Design Consultant for design of Traction & Auxiliary Power Supply and Distribution for BSRP)
Corridor-2 (Benniganahalli - Chikkabanavara)

Drawing Title: Site Plan & Overall General Arrangement/Electrical Equipment Layout (Plan) - Mathikere 220/33/27.5 kV GIS Substation (Sh. 1 of 2)
Project Stage: Tender Drawing

Paper Size: A1 Discipline: Date: 08/08/2024 Scale: TS/NTS Revision: R1

FOR TENDER PURPOSE ONLY



- NOTE:-
1. ALL DIMENSIONS ARE IN MM.
 2. THIS DRAWING IS INDICATIVE AND FOR TENDER PURPOSE ONLY AND CONTRACTOR SHALL DEVELOP THE DRAWING FOR CLIENT APPROVAL.
 3. THE MINIMUM CLEARANCE BETWEEN PHASES, BETWEEN PHASE TO EARTH, SECTIONAL CLEARANCE AND GROUND CLEARANCE SHALL BE MAINTAINED AS PER THE APPLICABLE STANDARDS.
 4. NOMINAL VOLTAGES - 220/33 kV and 220/25 kV.
 5. WORK-STATION AND FURNITURE SHALL BE SUPPLIED & COMMISSIONED.
 6. THE DIMENSIONS OF EQUIPMENT & LAYOUT ARE INDICATIVE. CONTRACTOR SHALL SUBMIT THE FINAL LAYOUT PLAN CONSIDERING THE ACTUAL INPUT RECEIVED FROM OEM AND ACTUAL LAND AREA RECEIVED.
 7. CONTRACTOR SHALL DESIGN THE RSS BUILDING IN COMPLIANCE WITH IE RULE, NATIONAL BUILDING CODE AND OTHER APPLICABLE LOCAL STANDARDS AND IGBC REQUIREMENTS.
 8. CONTRACTOR DURING DETAILED ENGINEERING STAGE SHALL ADHERE TO IE RULE, IS, IEC ETC. IN FINALIZING THE LAYOUT & CLEARANCES
 9. STATCOM ROOM SHALL BE PROVIDED BY THE PST CONTRACTOR AFTER STATCOM STUDY DURING EXECUTION. (Tentative rating of 4 MVAR)

MINIMUM CLEARANCE	(UNIT)	(220 kV RSS)	(33 kV AMS)	(25 kV TSS)
a) BETWEEN PHASES	MM	2100	320	-
b) BETWEEN PHASE TO EARTH	MM	2100	320	500
c) SAFETY CLEARANCE	MM	4300	2800	2000

- NOTES:
1. ALL DIMENSIONS ARE IN METER UNLESS MENTIONED OTHERWISE.
 2. ALL DIMENSIONS ARE TO BE READ AND NOT TO BE MEASURED.
 3. ANY DISCREPANCY IN THE DRAWING MUST BE BROUGHT TO THE NOTICE OF THE DESIGNER.
 4. INTERFACE WITH OTHER DESIGN DISCIPLINE WILL BE DONE AS PER AVAILABILITY OF DETAILS.

REV	DATE	DESCRIPTION	Originator	Checked	Approved
R1	07-01-2025	Note No.9 added	KD	V.S/R.K	SK
R0	08-08-2024	FIRST SUBMISSION	K.B	V.S/R.K	SK

K RIDE

DM / ELE / KRIDE Sr. DGM / ELE / KRIDE AGM / ELE / KRIDE

Certified that this document has been designed and checked in accordance with GC Quality Assurance Plan.

egis **AECOM** WSP
EGIS-AECOM-WSP

Senior Discipline Expert Chief Discipline Expert Project Director

Certified that this document has been designed and checked in accordance with DDC Quality Assurance Plan. Detailed Design Consultant for design of Traction & Auxiliary Power Supply and Distribution for BSRP

SYSTRA SYSTRA MVA CONSULTING (INDIA) PVT. LTD.
10th and 11th Floor, Tower-B, 12/3, Vatika
Mindscapes, Mathura Road, NH2, Sector 27D,
Faridabad, Haryana 121015

Drawn: K. Bhaht Checked: V. Singh, R. Kannan Approved: S. Kumar

FOR TENDER PURPOSE ONLY

Client: **K RIDE** RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LIMITED

Project Title: Bengaluru Suburban Rail Project (BSRP)
(Detailed Design Consultant for design of Traction & Auxiliary Power Supply and Distribution for BSRP)

Corridor-2 (Benniganahalli - Chikkabanavara)

Drawing Title: Site Plan & Overall General Arrangement/Electrical Equipment Layout (Sectional View) - Mathikere 220/33/27.5 kV GIS Substation (Sh.2 of 2)

Project Stage: Tender Drawing

Paper Size: A1 Discipline: Date: 08/08/2024 Scale: TS/NTS Revision: R1

Drawing no.: KRDD01-TDR-GEN-GEN-TPS-DWG-00016