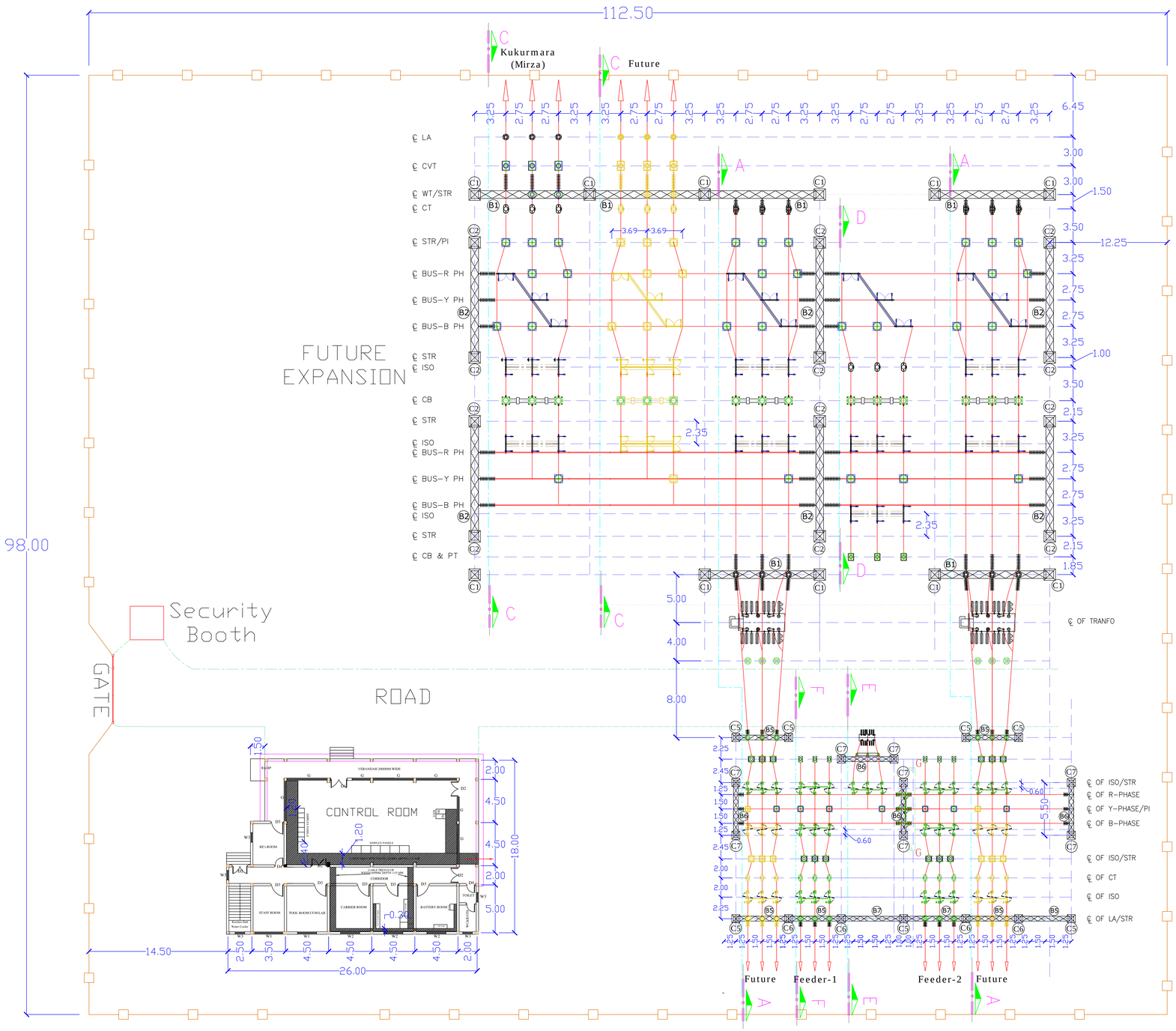

NOTES:

1– ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE SPECIFIED

2– MINIMUM CLEARANCE ARE AS PER TECHNICAL SPECIFICATIONS

	132KV	220KV
a) BETWEEN PHASES	1300MM	320MM
b) BETWEEN PHASE TO EARTH	1300MM	320MM
c) SECTONAL CLEARENCE	4000MM	2800MM
d) LIVE PART TO GROUND	4600MM	3700MM
e) VERTICAL DISTANCE BETWEEN LOWEST PART OF THE INSULATOR AND GROUND LEVEL	2500MM	2500MM

3– THE PARAMETERS FOR WHICH THE SYSTEM IS DESIGNED ARE:

	132KV	33KV
a) SYSTEM VOLTAGE (RMS)		
b) LIGHTNING IMPULSE WITHSTAND VOLTAGE : (DRY & WET)	±650kVP	±170kVP
c) POWER FREQUENCY WITHSTAND VOLTAGE : (DRY & WET)	230kV(rms)	75kV(rms)
d) NOMINAL CREEPAGE DISTANCE :	3625MM	900MM
e) MAXIMUM FAULT LEVEL :	31.5kA/1Sec.	25kA/1 Sec.

4– CONNECTION TYPES (UNLESS SPECIFIED)

	LEVEL FROM CL		CONDUCTOR TYPE	
	132KV SWYD	33KV SWYD	132KV SWYD	33KV SWYD
a) MAIN BUS	+8400MM	+5500MM	TWIN ACSR PANTHER	TWIN ACSR PANTHER
b) TRANSFER BUS	+8400MM	–	SINGLE ACSR PANTHER	–
c) LINE ENTRY	+14000MM	+7500MM	SINGLE ACSR PANTHER	SINGLE ACSR PANTHER
d) EQUIPMENT	+4600MM	+3700MM	SINGLE ACSR PANTHER	SINGLE ACSR PANTHER
e) JUMPERS	--	--	SINGLE ACSR PANTHER	SINGLE ACSR PANTHER
f) EARTH WIRE	+22000MM	--	7/3.66MM GI WIRE	--

5– PLINTH HEIGHT OF FOUNDATION WILL BE +300MM FROM THE FINISHED GROUND LEVEL (F.G.L.), GRAVEL TOP LEVEL WILL BE +150MM FROM THE F.G.L.

COLUMNS AND BEAMS:

A. COLUMNS:

C1: 14m + 8.0 m earth peak(+2.5 m spike) with provisions for 2 beams at 14 meters (11 nos.)
C2: 8.4m without earth peak and 1 beam at 8.4 meters (12 nos.)
C3: 14m high without earth peak & 2 beams at 14 m (0 no.)
C5: 7.5m + 3.5 m earth peak(+2.5m spike) with provisions for 2 beams at 7.5 (7 nos.)
C6: 7.5m high without earth peak & 2 beams at 7.5 m (4 nos.)
C7: 5.5m high without earth peak & 1 beam at 5.5 m (10 nos.)

B. BEAMS:

B1: 12m (column center to center) Beams at 14m height (6 nos)
B2: 12m (column center to center) Beams at 8.4m height (6 nos)
B5: 5.5m (column center to center) Beams at 7.5m height (6 nos)
B6: 5.5m (column center to center) Beams at 5.5m height (4 nos)
B7: 6.5m (column center to center) Beams at 5.5m height (2 nos)

EQUIPMENT LEGENDS

POWER TRANSFORMER | CIRCUIT BREAKER | ISOLATOR WITHOUT EB | ISOLATOR WITH EB | CURRENT TRANSFORMER | POTENTIAL TRANSFORMER | LIGHTNING ARRESTER | CVT | INSULATOR STRING | POST INSULATOR

REV.	REVISION	DATE		
			APPRD. BY-	
			CHECKD. BY-	
			PREP. BY-	

ASSAM ELECTRICITY GRID CORPORATION LIMITED

AZARA 132/33 KV SUBSTATION

DRAWING_TITLE
SUBSTATION LAYOUT DIAGRAM
(PLAN & SECTIONS)

DRAWING_NUMBER
AEGCL/AZARA SS/LO/02

SHEET 1 OF 2