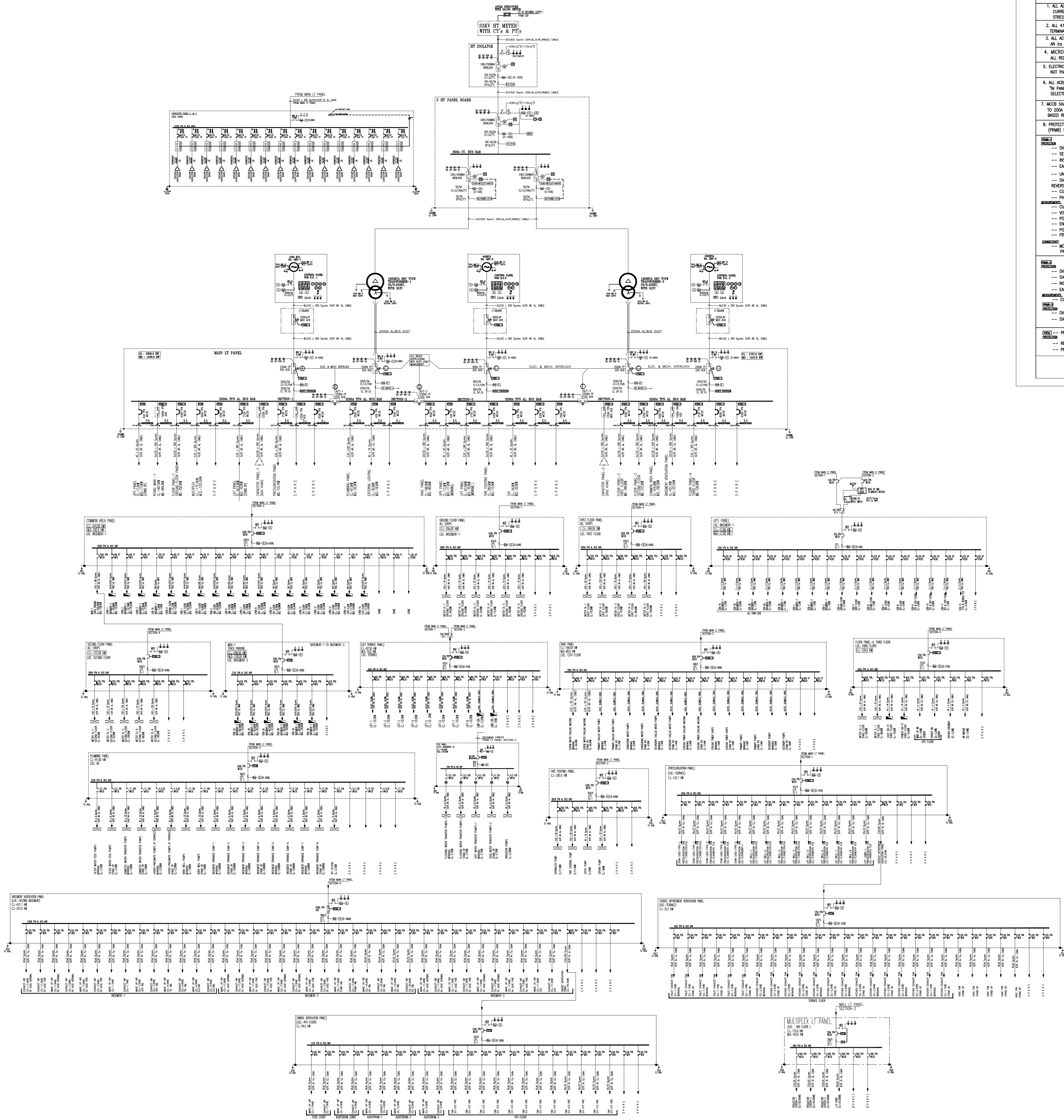




- Note
1. ALL ALUMINUM BUS BARS SHALL HAVE A SIZE OF MAXIMUM OF EITHER CURRENT DENSITY OF 1 AMP PER Sqmm OR 10 WITH STAND STRESSES OF INDICATED FAULT LEVEL. WHICHEVER IS HIGHER.
 2. ALL 415 VOLT PANELS SHALL HAVE EXTENDED BUSBARS/CONTROL WIRING TERMINAL BLOCK TO FACILITATE EXTENSION WITH OUT SHUTTING DOWN PANEL.
 3. ALL ACBS AND BUSBAR ON 415 VOLT PANELS SHALL HAVE AN IS VALUE OF 50 KA.
 4. MICROPROCESSOR RELEASES FOR ACB'S ALL RELEASES SHALL BE SITE SETTABLE WITHIN RANGE STIPULATED.
 5. ELECTRICAL INTERLOCKING TO ENSURE D.G. SUPPLY IS NOT PARALLELED WITH GRID.
 6. ALL ACB/ MCCB FEEDER RATINGS SHALL BE IN PANEL RATING & APPROPRIATE FRAME SIZE SELECTED BY MANUFACTURER.
 7. MCCB SHALL BE THERMAL MAGNETIC RELASER UP TO 200A AND ABOVE 200A SHALL BE MICROPROCESSOR BASED RELEASES.
 8. PROTECTION RELEASES MICROPROCESSOR BASED (PMB) SHALL BE AS FOLLOWS
- PROTECTION
- OVER CURRENT RANGE 100%-120% -WITH TIME SETTING
 - SELECTIVE SHORT CIRCUIT 100%-1000% -WITH TIME SETTING
 - INSTANTANEOUS SHORT CIRCUIT 200%-1000%
 - EARTH FAULT WITH ADJUSTABLE RELAY 20%-100%
 - UNDER VOLTAGE 60%-90% TIME SETTING
 - OVER VOLTAGE 105%-120% TIME SETTING
 - REVERSE POWER
 - CURRENT UNBALANCE
 - PHASE SEQUENCE
- ADDITIONAL
- CURRENT- PHASES, NEUTRAL
 - VOLTAGE -PHASES,NEUTRAL
 - POWER -ACTIVE,REACTIVE
 - ENERGY -ACTIVE,REACTIVE
 - POWER FACTOR
 - FREQUENCY
- CONNECTIVITY
- MODBUS CONNECTIVITY FOR ACB ON/OFF STATUS /PROTECTION PARAMETERS SET/FAULT TRIP SIGNALS
- PROTECTION
- OVER CURRENT 100%-120% - TIME SETTING
 - SHORT CIRCUIT 100%-1000% - TIME SETTING
 - INSTANTANEOUS SHORT CIRCUIT 200%-1000%
 - EARTH FAULT WITH ADJUSTABLE RELAY 20%-100% MEASUREMENT CURRENT
 - CURRENT- PHASES, NEUTRAL
 - OVER CURRENT 100%-120% - TIME SETTABLE
 - SHORT CIRCUIT WITH INSTANTANEOUS TRIP 150%-1200%
- PROTECTION
- PROTECTION RELEASES THERMAL MAGNETIC BASED
 - RELEASE (THERMAL-MAGNETIC BASED)
 - PRISM-UP TO 200A MCCB

LEGEND:	
	MINIATURE CIRCUIT BREAKER
	MOULDED CASE CIRCUIT BREAKER
	RESIDUAL CURRENT CIRCUIT BREAKER WITH OVER LOAD
	4POLE STRUCTURE WITH G0/DO SWITCH
	MOTORISED MOULDED CASE CIRCUIT BREAKER
	AIR CIRCUIT BREAKER (D.O.)
	MOTORISED AIR CIRCUIT BREAKER (D.O.)
	VACUUM CIRCUIT BREAKER (D.O.)
	FUSE
	POTENTIAL TRANSFORMER
	CURRENT TRANSFORMER
	AMMETER
	VOLTMETER
	AMMETER SELECTOR SWITCH
	VOLTMETER SELECTOR SWITCH
	POWER FACTOR METER
	ENERGY METER
	INDICATING LAMP
	ON OFF TRIP SC
	FREQUENCY METER
	G/C & EARTH FAULT RELAY
	OVER CURRENT & E/F RELAY
	UNDER VOLTAGE RELAY
	OVER VOLTAGE RELAY
	LOCK OUT RELAY
	AUXILIARY RELAY
	WINDING TEMP. ALARM/TRIP
	TRIP CIRCUIT SUPERVISION RELAY
	ACTIVE & REACTIVE ENERGY METER
	MULTI-FUNCTION METER
	DC VOLT METER
	DC AMMETER METER
	ON/OFF REMOTE SWITCH
	STAR DELTA/DIRECT ON LINE STARTER
	EMERGENCY STOP (PUSH BUTTON)
	TEST (PUSH BUTTON)
	ACCEPT (PUSH BUTTON)
	PROTECTION RELEASER MICROPROCESSOR BASED

NO. OF PRINTS	ISSUED TO	DATE
R-02		
R-01	15.05.18	
S.N.	DATE	DETAILS
REVISIONS		
PROJECT TITLE:		
70 GRANDWALK		
COMMERCIAL PROJECT AT BADSHAPUR		
SECTOR - 70, GURGAON		
HARYANA		
ARCHITECTS:		
ISO 9001:2008 Architecture Management Planning		
ACPL Design Ltd. -133 South Extension -1 T: +91 11 24622995 New Delhi 110048, India F: +91 11 24646709 www.acplonline.com E: contact@acplonline.com		
MEP CONSULTANTS:		
C TO C Services Consultants Pvt. Ltd. F-67, (Basement) Green Park Main, New Delhi-110016 (INDIA) Tel: 41618898, 41618866 E-mail: crocinfo@croconsultants.com		
STAGE:		
TENDER DRAWING		
DRAWING TITLE:		
SINGLE LINE DIAGRAM		
Drawn	Checked	Approved
THOMAS	V.S	V.S
Scale	Date	Rev. No.
NTS.@A1	23.07.2018	R0
Drawing No.	ORIENTATION:	
CTOC.SBPL.15103.EL-SLD-01		