

**CORRIGENDUM No. 1****Sub: Modernisation of Mazdock House facade at North Yard, MDL, Mumbai.****Ref: Tender No. 180000031 dated 30 Jan' 17**

The following points shall be considered by the bidder(s) before submission of final offer for the subject tender.

A. Specification, Bidders Query and Clarification for Precision AC:

Sl. No	Clause No. & Page no	Specification & Query	Clarification
1.	Vol-IV, pg 335	Specification of precision air conditioning system: Basis of Design 2) Discharge type: Bottom discharge front suction. Query: Standard type is Bottom discharge top suction, please clarify it.	Discharge type: Bottom discharge & Top Suction.
2	Vol-IV, pg 336	Refrigeration Circuit: The refrigeration system shall be of the Single circuit direct expansion type and incorporate hermetic scroll Fixed speed compressors, complete with crankcase heaters. Query: In BOQ it's written as Inverter compressors and in refrigeration circuit it's written as fixed speed compressors. Its look like contradictory, please confirm.	Inverter type compressor is required
3	Vol-IV, pg 337	Air cooled condenser: Condenser shall be air-cooled type, suitable for outdoor installation and shall be suitable for operating at high ambient of 45 deg C db and at low ambient of upto -5 deg C db temperatures. Condenser shall be in copper tube & aluminum fins construction. The condenser fan/s shall be of propeller type with max 1000 RPM variable voltage electric motor complete with IP-65 protection. Motor shall be speed controlled to ensure a stable operation for varying ambient; by a factory fitted direct acting head pressure activated step-less variable speed drive. The condenser shall be complete with provisions for refrigerant piping connections, shut off valves and any other standard accessories necessary with the equipment supplied. Each Circuit to have its independent set of condenser coil and Fans is separate casing. Query: To control fan speed two options we can suggest: please confirm Option 1 <u>EC Fan Motor:</u> It's a step less variable speed fan motor, current consumption will vary according to the speed of the fan. High energy efficient and higher initial cost compared to variable speed drive. Option 2 <u>Fan Speed controller:</u> It's a variable speed drive, it controls the speed of the fan but the current consumption of the motor will remain the same.	Air Cooled Condenser Fan will have EC Fan motor.
4	Vol-IV, pg 334	Query: Please confirm the given capacity is nominal capacity or sensible capacity or net sensible capacity.	10 TR (35 Kw) is total capacity, sensible capacity is 32 KW

**B. Corrections in BOQ description for Item no: 194 to 203:**

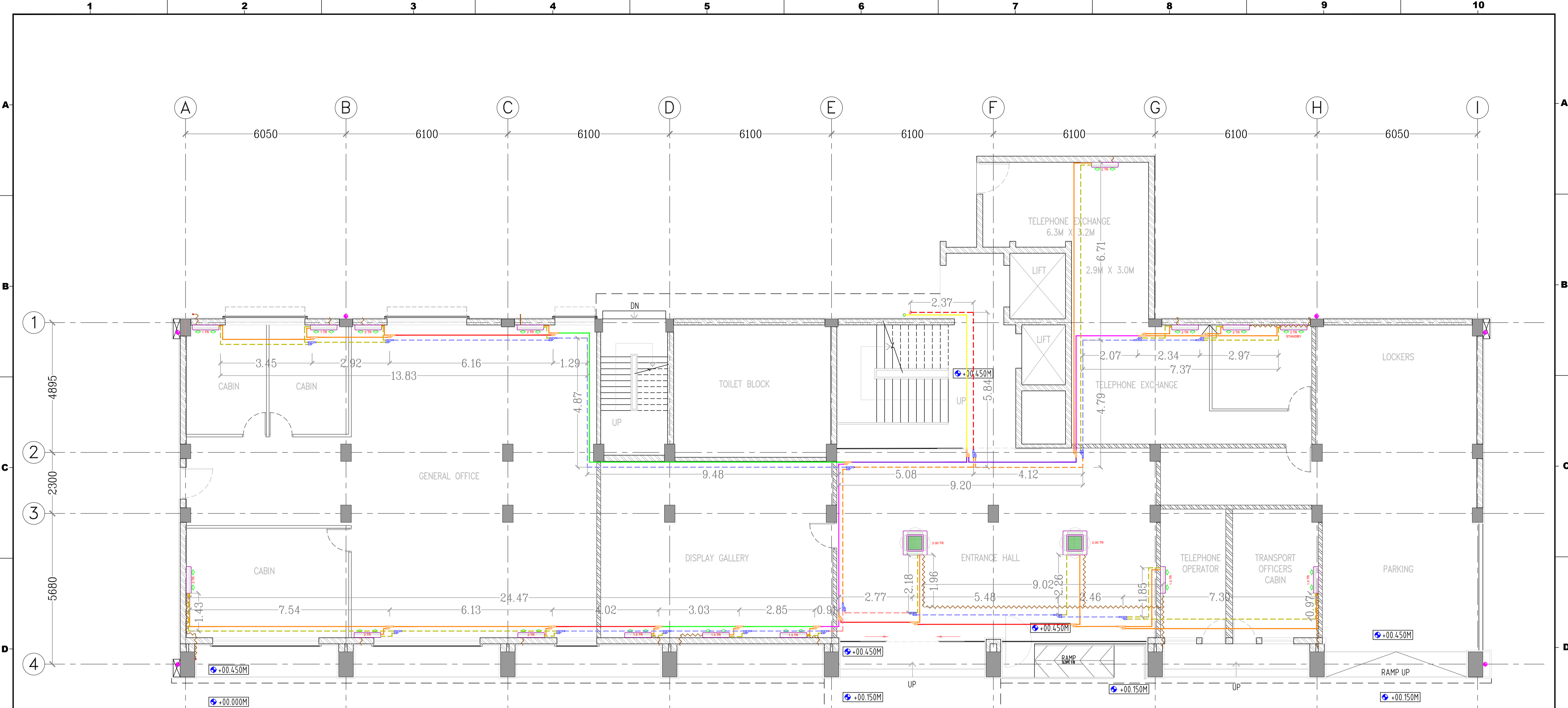
Clause No	Item No	Present Description	Corrected Description
Vol-III, pg no: 41	194	F 38.10 mm (Refer Note above)	Diameter 38.10 mm (Refer Note above)
	195	F 31.75 mm (Refer Note above)	Diameter 31.75 mm (Refer Note above)
	196	F 28.6 mm (Refer Note above)	Diameter 28.6 mm (Refer Note above)
	197	F 25.4 mm (Refer Note above)	Diameter 25.4 mm (Refer Note above)
	198	F 22.2 mm (Refer Note above)	Diameter 22.2 mm (Refer Note above)
	199	F 19.05 mm (Refer Note above)	Diameter 19.05 mm (Refer Note above)
	200	F 15.9 mm (Refer Note above)	Diameter 15.9 mm (Refer Note above)
	201	F 12.7 mm (Refer Note above)	Diameter 12.7 mm (Refer Note above)
	202	F 9.52 mm (Refer Note above)	Diameter 9.52 mm (Refer Note above)
	203	F 6.35 mm (Refer Note above)	Diameter 6.35 mm (Refer Note above)

2. The following drawings are newly uploaded:
 - 2.1. Drawing no: MDL-TD-301 HVAC Layout-Ground floor.
 - 2.2. Drawing no: MDL-TD-309: Existing 4th Floor Server Room Layout.
3. Electrical approved make list is uploaded. (refer attached '**Appendix A**')
4. All other terms & conditions remain unaltered.
5. The Corrigendum-1 as above, duly signed & stamped, shall be scanned and submitted along with Techno-commercial Bid (PART-I) of the offer.

Signature of Contractor

Seal

Date

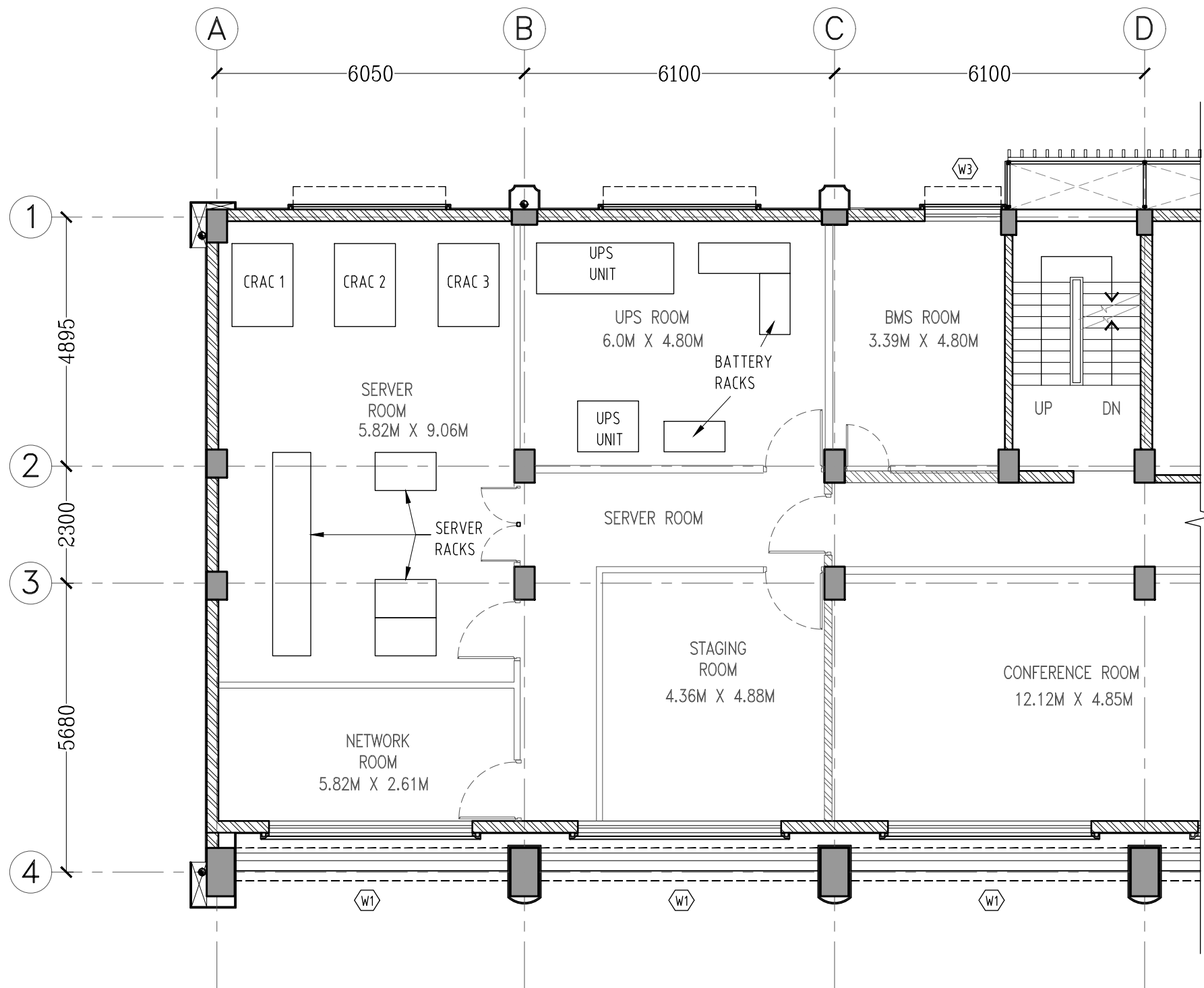


1 GROUND FLOOR PLAN
Scale: 1:100

SYMBOL	DESCRIPTION	QTY.	1.0 TR	1.5 TR	2.0 TR
	CASSETTE TYPE INDOOR VRV UNIT				02
	HIGH WALL SPLIT TYPE INDOOR VRV UNIT		04	03	09
	TOTAL TR	30.5	04	4.5	22

SYMBOL	DESCRIPTION	QTY.	REFRIGERANT PIPE DIA.	REFRIGERANT GAS LINE PIPE SYMBOL	REFRIGERANT PIPE DIA.	REFRIGERANT LIQUID LINE PIPE SYMBOL
	CASSETTE TYPE INDOOR VRV UNIT	02	Ø 15.90 mm		Ø 6.35 mm	
	HIGH WALL SPLIT TYPE INDOOR VRV UNIT	16	Ø 19.05 mm		Ø 9.52 mm	
	REFNET JOINTS	34	Ø 22.20 mm		Ø 12.7 mm	
			Ø 25.40 mm		Ø 15.90 mm	
			Ø 28.58 mm		Ø 19.05 mm	
			Ø 31.75 mm		Ø 20.0 mm	
			Ø 38.10 mm		Ø 25.0 mm	

REVISION R0 31/05/2016 FIRST ISSUED R1 13/07/2016 REVISED R2 17/10/2016 REVISED R3 17/10/2016 REVISED R4 07/11/2016 REVISED 5TH FLOOR BOARD ROOM 1 STR TO 2.0 TR		DESIGN CHECKED: [] APPROVED: []		BACKWARD REFERENCE DRAWING DRAWING NUMBER: [] DESCRIPTION: []		FORWARD REFERENCE DRAWING DRAWING NUMBER: [] DESCRIPTION: []		NOTES 1. DRAWING NOT TO BE SCALED. 2. ALL DIMENSIONS ARE IN MM. 3. ALL LEVELS ARE IN METERS.		CLIENT MAZAGON DOCK SHIPBUILDERS LIMITED (A Govt. of India Undertaking) Dockyard Road, Mumbai 400 010		CONSULTANTS CHECKED: [] APPROVED: [] DATE: [] DATE: [] CHECKED: [] APPROVED: [] DATE: [] DATE: []		SIGNATURE DATE: [] SIGNING AUTHORITY: []		MAZDOCK HOUSE BUILDING MAZAGON DOCK SHIPBUILDERS LIMITED IMPROVEMENT OF FACADES OF MAZDOCK HOUSE BUILDING GROUND FLOOR HVAC LAYOUT RATAN J. BATLIBOI - ARCHITECTS PRIVATE LIMITED DRAWING NUMBER: MDL - TD - 301 REVISION: R4 SCALE: 1:100		SERVICES TENDER	
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1 4TH FLOOR SERVER ROOM LAYOUT
Scale: 1:100

REVISION	DATE	REVISION DESCRIPTION	DESIGN	BACKWARD REFERENCE DRAWING	FORWARD REFERENCE DRAWING	NOTES
NO.			CHECKED	DRAWING NUMBER	DRAWING NUMBER	
01	06/10/2016	FIRST ISSUED				

NOTES
 1. DRAWING NOT TO BE SCALED.
 2. ALL DIMENSIONS ARE IN MM.
 3. ALL LEVELS ARE IN METERS.

CLIENT
MAZAGON DOCK SHIPBUILDERS LIMITED
 (A Govt. of India Undertaking)
 Dockyard Road, Mumbai 400 010
 Website - www.mazagondock.gov.in

ARCHITECTS
RATAN J. BATLIBOI ARCHITECTS
 233 D, Bharat Rice Mills, Dr. S.S. Rao Road, Lalbaug, Mumbai 400 012
 TELE: 91-22-40640000, 40649740 FAX: 91-22-40640099

SIGNATURE
 DATE: _____
 SIGNING AUTHORITY: _____
 SANDHYA SHUKLABAIDYA

SCALE:	1:100
JOB:	JR 15 - 109
DATE:	06/10/2016
DRAWN BY:	ADITYA
CHECKED:	SANDHYA
APPROVED:	RATAN J. BATLIBOI

MAZAGON DOCK SHIPBUILDERS LIMITED
MAZAGON DOCK RECREATIONAL CLUB HOUSE
EXISTING 4TH FLOOR SERVER ROOM LAYOUT
RATAN J. BATLIBOI - CONSULTANTS PVT.LTD.
DRAWING NUMBER: MDL . TD . 309
REVISION: R0

STATUS: TENDER

THIS DRAWING IS THE PROPERTY OF RJB-CPL AND SHALL BE USED ONLY FOR THE JOB MENTIONED IN THIS DRAWING. IT SHALL NOT BE PUBLISHED, LENT, COPIED OR USED DIRECTLY OR INDIRECTLY, AND FULLY OR PARTLY FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION OF FROM RJB-CPL.

ELECTRICAL – APPROVED MAKE LIST			
Sr	ITEMS	MAKES	Makes offered by Vendor
1	Low Tension, XLPE/PVC, Armoured/Unarmoured, 1.1 KV grade, Aluminium/ Copper conductor cables type A2XFY/YFY.	FINOLEX / POLYCAB/ KEI /	
2	Low Tension, TPN SFU with HRC fuses, 415 Volts, AC, 3 Phase, 50 Hz.	SCHNEIDER/ ABB/ L & T	
3	Low Tension, TP, Moulded Case Circuit Breaker, 415 Volts AC, 3 Phase 50 Hz., 36 KA-STR. Microprocessor/Thermal Release	SCHNEIDER/ABB/SEIMENS /L & T	
4	Low Tension, Dry Type Capacitors 440 Volts, 50 Hz., 3 Phase with APFC Panel	POWER MATRIX/ VISA POWERTECH/EPCOS	

ELECTRICAL – APPROVED MAKE LIST			
Sr	ITEMS	MAKES	Makes offered by Vendor
5	Indicating Lamps Holders with LED type lamps.	ALTOS/MIMIC/TECHNIK/ SCHNEIDER	
6	Selector Switches for Ammeter/Voltmeter.	SALZER/ KAYCEE	
7	Load Managers, Digital type Ammeters, Voltmeters, PF meters, Frequency Meters.	SCHNEIDER CONZERV / TRINITY / SOCOMEK	
8	Micro Processor/ Electromechanical Relays.	SCHNEIDER / ABB/ AREVA/ALSTOM	
9	Panel wires, Gray/Black/R/G/B colour in 660/1100 Volts. grade (FR).	FINOLEX / POLYCAB/ KEI	
10	Cable Glands – Siemens Single Compression type.	COMET/ BRACO/DOWELLS	
11	Lugs, Crimping type, tinned	DOWELL'S/COMET/BRACO	

ELECTRICAL – APPROVED MAKE LIST			
Sr	ITEMS	MAKES	Makes offered by Vendor
	copper heavy duty only.		
12	HRC Control fuses with bakelite/type moulded fuse holders.	L&T/ABB/SCHNEIDER	
13	Push Button Stations type, in different colour codes.	SCHNEIDER /TECHNIK/ L&T	
14	Terminal Blocks, Push On type.	WAGO/ ELEMEX / SCHNEIDER	
15	Starters/Contacto r/ Timers.	SCHNEIDER/ ABB / L&T	
16	Miniature Circuit Breakers of 10 kA, RCCB, RCBO, ELCB Breaking Capacity and Distribution Boards.	LEGRAND / HAVELL'S/ SCHNEIDER	
17	CTs 1100 Volts grade Cast Resin Only	AUTOMATIC ELECTRIC/ KAPPA/RECO	

ELECTRICAL – APPROVED MAKE LIST			
Sr	ITEMS	MAKES	Makes offered by Vendor
18	All Light Fittings & Fixtures	PHILIPS / HAVELLS/ BAJAJ	
19	FRLS Wires in 660/1100 Volts grade for point wiring.	FINOLEX / POLYCAB/ KEI	
20	Single Pole Switches and Sockets 6/16 Amps. Modular Type.	LEGRAND - ARTEOR/ ANCHOR - WOODS	
21	Exhaust Fan.	CROMPTON / GEC / BAJAJ	
22	Electronic Ballast for Light Fittings as per Technical Specifications	PHILIPS/ATCO/OSRAM	
23	Inter Lock Switch Sockets/Industrial Plugs & Sockets	SCAME/LEGRAND/PCE	
24	CRCA Sheets for Panels/Bus Duct/Rising Mains 10 SWG/14 SWG/16 SWG	JINDAL/TATA/ RAYMOND	
25	MS Welding Rods	ADVANI OERLICON	

ELECTRICAL – APPROVED MAKE LIST			
Sr	ITEMS	MAKES	Makes offered by Vendor
26	All type of Fasteners	HILTI/FISHER	
27	Paints & Primers	ASIAN/DUCO	
28	Mild Steel	TATA/JINDAL	
29	GI Bolted/LADDER Cable Trays & SS Basket Trays	PROFAB/ LEGRAND / ASIAN ANCILLARY Corporation	
30	Rigid PVC/GI Pipes 2.0 mm Wall Thickness And Accessories	PRECISION/ZENITH /Diamond	
31	LV PANELS	ANY CPRI APPROVED MANUFACTURER UPTO 50 KA	
32	Any other Item	SAMPLE FOR APPROVAL OF THE CONSULTANT.	