

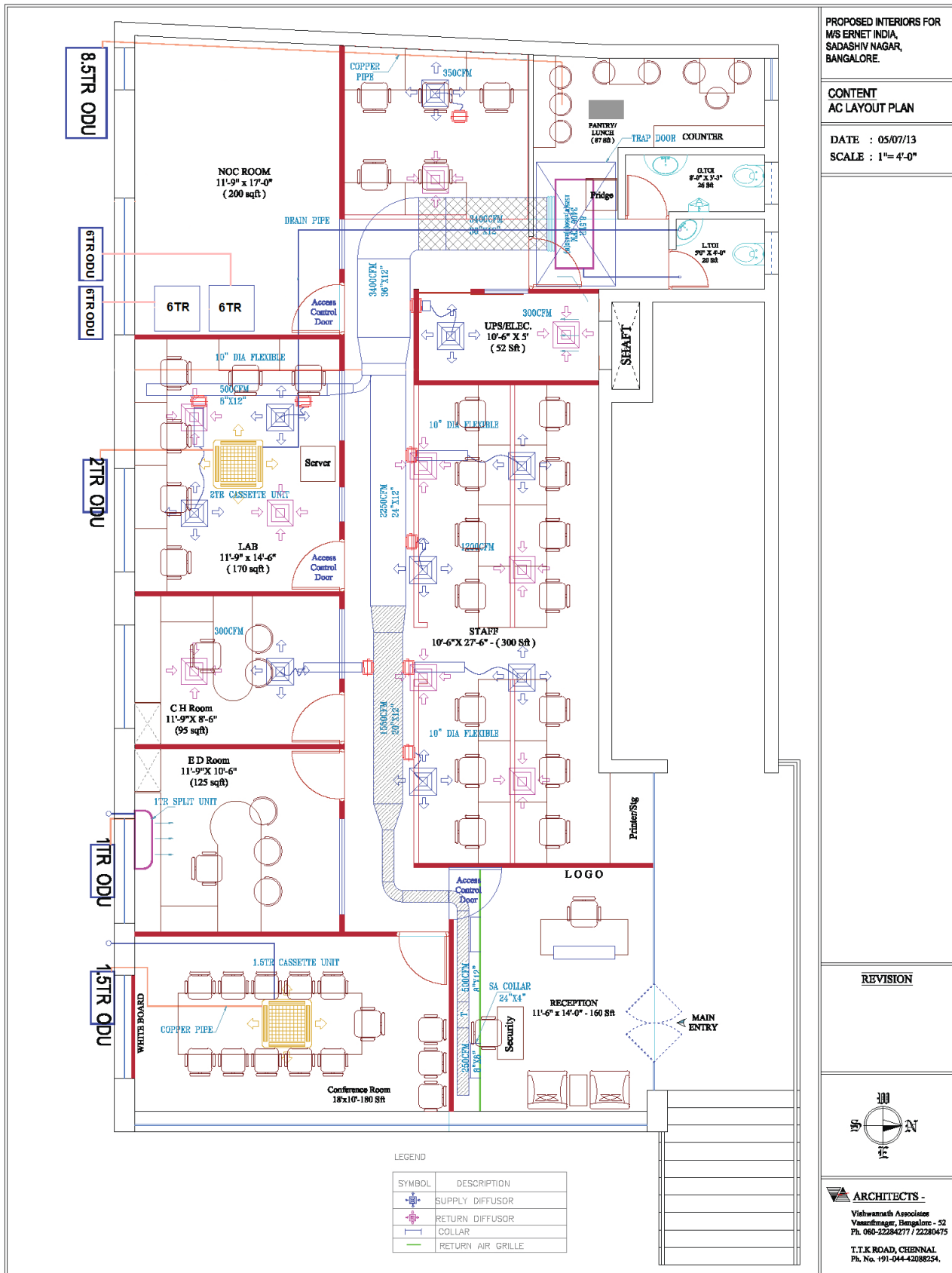
**Queries/Responses**

**Tender No:** EI-B/GA/14/0011/2013-EBC **Dated:** 11/02/2014

**Subject:** Supply, Installation, Commissioning and Testing of Air-conditioning including all associated accessories and allied works & Fire Suppression Work at ERNET India, Bangalore

Sr. No.	Section	Applicable Item	Clarification/ Suggestion	ERNET's Response	Revision/Comments
1	BOQ	Precision AC	<b><u>Suggestion:</u></b> As per the server room inspection, the False flooring & false sealing work is already completed. The False flooring height is only 15cm, where we require a minimum of 30-45cm height for proper airflow, if we supply Bottom Discharge PAC units with top suction. Now as per tender existing server room setup, we can supply TOP discharge PAC units with Front suction. The cold air can be supplied to the rack through plenum & ducts.	No	NOC Room, available space between the Rack (top) and false sealing is 19cm, so false flooring height can be increased from 15cm to 30cm.
2	BOQ	Precision AC	<b><u>Suggestion:</u></b> As per server room inspection, PAC units required with one working and another standby (6TR-2nos). This both units kept alongside of the wall/partition.	Yes	<ul style="list-style-type: none"> <li>• Considering the available space and proposed load in the NOC, Quantity of the units will be reduced.</li> <li>• Revised BOQ for precision AC is enclosed in Annexure-I, other items are same as per the tender.</li> </ul>
3	BOQ	General Air-conditioning	<b><u>Clarification:</u></b> As per the layout drawing Precision AC is being mentioned as 3TR, but your requirement according to the Tender is 6TR	Yes	ERNET requirement is 6TR-2no's, please see the revised layout drawing in the Annexure - II
4	BOQ	General Air-conditioning	<b><u>Clarification:</u></b> Ducting work for centralised AC has already been completed; vendor will quote for rest of the work.	Yes	Centralised AC ducting (8TR) work has already been done; vendor will quote for indoor/Outdoor unit with suitable copper piping.

1. PRECISION AIRCONDITIONING FOR NOC					
Bill of quantities : General Airconditioning works					
A. High side works for Precision Air conditioners - (I)					
S.N	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
23	Supply of Uniflair make or Equivalent Bottom Discharge PAC units of 6 TR Nominal capacity with <b>5 star rating</b> . DX-Air cooled PACs complete with <b>direct drive EC motor and Fan with backward curved blades, Electronic Expansion Valve, Scroll compressor for POWER SAVINGS hydrophilic fins for IDU, fan speed controller for ODU, Heater, and Humidifier</b> , Water leak detector, EU4 filter, Clock card and Sequencing card supplied with the system. Unit offered will be suitable for eco-friendly R407 C; Dirty filter alarm, heater, humidifier are part of the system. The PAC Units are BMS compatible (Modbus Protocol) PAC will be pre-charged with N2. Drain pump will be supplied as optional accessory. Cost to include Unloading and Handling of the precision AC Units.				
24	6TR PAC units as per above specs. Nominal CFM @ 3400 / unit <b>(PAC Units with Heater &amp; Humidifier, 1W+1S)</b>	2	Nos		
25	Drain pump for the PAC	2	Nos		
26	RS485 Card for BMS connectivity	RO	Nos		
<b>Sub- total Cost for items ( 23-26) (C)</b>					
B. Low Side Works for High Precision AC Units (II)					
S.N	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
27	Supply of MS stand suitable for raised floor of 300mm clear height.	2	Nos		
28	Supply & Installation of Floor Insulation using 9 mm thick Nitrile rubber.	RO	SqFt		
29	Supply Air grills 600 x 600 mm with Volume Control Dampers	4	Nos		
30	Leak testing and Refrigerant filling with R 407 C	8	Kg		
31	Power cabling from indoor to outdoor units considering 15RMt per unit.	8	RMt		
32	Cables for Sequencing of units,	8	RMt		
33	Humidifier line	5	RMt		
34	Drain line with insulation	8	RMt		
35	Cu piping interconnecting indoor and outdoor	9	RMt		
36	Supply and installation of condenser stand (Outdoor)	2	Nos		
37	Supply of Cowl for underfloor supply air distribution.	RO	Nos		
38	Incoming Electrical Cable from DB /Isolator to PAC	8	RMT		
<b>Sub- total Cost for items ( 27-38) (D)</b>					
<b>GRAND TOTAL (A+B+C+D)</b>					



**ARCHITECTS -**  
 Viharambala Associates  
 Vastu Engineer, Bangalore - 52  
 Ph. 080-22284277 / 22280475  
 T.T.K. ROAD, CHENNAI.  
 Ph. No. +91-044-4208254.