



## **BHARAT HEAVY ELECTRICALS LTD. NEW DELHI**

Ph.: +91-011-26492688, Fax: 011-26493760 Email: [vk Singh@bhel.co.in](mailto:vk Singh@bhel.co.in)

HUMAN RESOURCE DIVISION: CORPORATE OFFICE

(ADMINISTRATION DEPARTMENT)

### **TENDER NOTICE NO. AA : CORP : ADMN : CIT : 3<sup>rd</sup> Floor : 2007**

Sealed quotations are invited in **Two Part Bid System (Techno- commercial Bid-Part: 1 & Price Bid-Part: 2, separately)** for civil and electrical work involving renovation and modification work for Server room, Switch and UPS room at 3<sup>rd</sup> Floor of BHEL House, Siri Fort, New Delhi. Tender document can be purchased from Executive (HR-GAX), 2<sup>nd</sup> floor, Corporate office, BHEL House, Siri Fort, New Delhi till 27.04.2007 (1:00 PM) against payment of tender fee of Rs.500/- (non refundable) by DD / Bankers Cheque / Cash in favour of BHEL, New Delhi alternatively tender document can also be download from BHEL website [www.bhel.com](http://www.bhel.com) , however tender fees of Rs.500/- by Demand Draft / Bankers Cheque should be submitted along with the **Techno-commercial Bid-Part : 1**. Sealed tender should be submitted in **Two Part Bid System only** on or before 02:30 PM on 27.04.2007. Part 1 of tenders shall be opened on the same day at 03:30 PM.

Manager (HR-GAX)  
Corporate Office



Corporate Office, BHEL House, Sirifort, Asiad, New Delhi  
Tele No. 011- 26492688 (Phone), 26493760 (Fax)

AA: CORP: ADMN. : CIT: 3<sup>rd</sup> Floor: 2007  
Dt. 26. 03. 2007

Submission of tender on 27.04.07 by 02.30 PM  
Due date for opening on 27.04.07 at 03.30 PM

**SUB: Renovation and modification work for Server room, Switch and UPS room at 3<sup>rd</sup> Floor of BHEL House, Siri Fort, New Delhi.**

Dear Sirs,

We are pleased to invite your offers, in sealed covers for the subject work. The terms & conditions of the enquiry are mentioned below:-

**1.0 TERMS & CONDITIONS OF CONTRACT:**

- 1.1 Enquiry No. & due date must be legible superscribed on the envelope.
- 1.2 Tenders shall be received up to 02.30 PM and will be opened at 03.30 PM on the same day in the presence of bidders or their authorized representatives who may like to be present.
- 1.3 Tenders shall be strictly in accordance with the tender specifications. Any deviations shall be listed out separately.
- 1.4 Prices shall remain valid for 60 days from the due date.
- 1.5 The BHEL shall be under no obligation to accept the lowest or any other tender and shall be entitled to accept or reject any tender in part or full without assigning any reason whatsoever.
- 1.6 Delay tenders are liable to be rejected.
- 1.7 The BHEL reserves the right to increase or decrease the quantity plus minus 30% of contract value at the same rates and terms and conditions of this contract.
- 1.8 Each tenderer have to deposit EMD of Rs.1,00,000/- (One lacs only) for the above job and the same will be in the form of Pay Order or Demand Draft only in favour of BHEL, payable at New Delhi. EMD submitted by tenderer will be forfeited if tenderer revokes his tender within validity period or increases his rates.

- 1.9 Each tender shall be accompanied by separate envelop carrying EMD as mentioned above failing which the tender will be rejected.
- 1.10 Upon acceptance of tender, the Contractor within the time specified in the Letter of Intent / Work Order must deposit 50% of the Security Deposit mentioned below before start of work. The balance amount will be deducted from the monthly running bill of the contractor @ 10% of the value of each running bill till the total amount is fully recovered. The Security deposit shall remain valid till the expiry of the maintenance period (i.e. up to 6 month from the date of completion of the work) without carrying any interest. The total amount of Security Deposit shall be calculated as Rs. 1 lakhs + 7.5% of the amount exceeding Rs. 10 lakhs.

If the value of the work done at any time exceeds the accepted agreement value, the Security Deposit shall be correspondingly enhanced and the extra amount of Security Deposit shall be immediately Deposit by the Contractor or recovered from payment due to him in the above manner.

BHEL reserves the right of forfeiture of Security Deposit in addition to other claims and penalties in the contractual obligations or in the event of termination of contract as per terms and conditions of contract. It may be noted that in no case the Security Deposit shall be refunded/released prior to passing of final bill.

- 1.11 EMD of successful bidders will be converted in to security deposit and balance amount of security deposit will be recovered in the above manner as per clause No. 1.10.
- 1.12 Prices quoted by the parties will be firm and no escalation on account of labour or material or taxes or any reason what so ever will be paid to contractor for execution of the above job.
- 1.13 Prices quoted by the party should be inclusive of all taxes etc. as prevailing on Works Contract and will be firm for the contract period or extended period of contract.
- 1.14 Entire work has to be completed within two and half months from the date of award of work failing which liquidity damages will be imposed @ 1/2 % of the GV of per week of delay subject to maximum 10% of the GV.
- 1.15 Parties are requested to visit the site before submitting the tender and clarify all doubt regarding above job. Engineer-in-charge's decision will be full and final in the event of any doubt.

- 1.16 Tender should be submitted along with covering letter of the party with duly signed on each & every pages of the tender document, technical specification and price bid.
- 1.17 The successful tenderer must comply all statutory labour law regulations applicable on this contract i.e. like minimum wages act, timely payment of wages etc. including taking of insurance cover etc. for workers employed for this contract. Any obligation on account of the above will be the liability of the Contractor.
- 1.18 Tender should be submitted along with covering letter of the party duly signed / accepted on each & every pages of the tender as per the instructions given for quoting the Technical & Price bid.
- 1.19 The tenderer will be responsible for the quality of the work and it will be guaranteed for a period of six months from the date of completion of job.
- 1.20 Period of maintenance shall mean the period of six months which will be calculated from the date of completion of the works certified by the Engineer in accordance with conditions of the contract. The period of maintenance shall always be reckoned from the date of completion of the whole of the works as accepted / taken over by Engineer in charge.
- 1.21 The Tenderers are required to quote for the complete scope of work with rates for all the items & no column should be left blank. Tenders for part of the work or incomplete in any respect are liable to be rejected. Tenders shall certify in the Techno- commercial bid that rates for all the items have been quoted.
- 1.22 Order will be placed on a single bidder for the complete scope of work.
- 1.23 Penalty will be levied by BHEL as per relevant clauses of the Tender on account of delay, violation of contract conditions and non-performance of the Contractor.
- 1.24 All documents submitted by the Tenderer in his offer shall be accompanied with a covering letter giving index interlinking all the documents.
- 1.25 BHEL reserves the right to accept or reject any of the bid / all bids with or without deviation or cancel / withdraw the invitation for bid without assigning any reason whatsoever and in such case no bidder shall have any claim arising out of such action by BHEL.
- 1.26 BHEL reserves the right to reject the tender from any bidder on the basis of unsatisfactory performance of the bidder in any ongoing job or any similar

job of BHEL in last five years, or if the bidder has been kept under hold/blacklisted by BHEL.

## **2.0 QUALIFICATION REQUIREMENTS:**

2.1 The Tenderer should have, in the last seven years ending on 31-03-06, successfully completed the civil construction / renovation / modification works of server rooms and datacenter of reputed company. Values of such work done should be as under:

a) One job of value of Rs 28 Lakhs or above,

**OR**

b) Two jobs of value of Rs 21 Lakhs or above each,

**OR**

c) Three jobs of value of Rs 14 Lakhs or above each.

2.2 The Tenderer shall be financially sound and should have achieved an average annual financial turnover of minimum Rs. 35 Lakhs per year over three consecutive financial years ending on 31.03.2006.

## **3.0 DOCUMENTS REQUIRED:**

3.1 The Tenderer shall submit documents in respect of possessing Qualifying requirements as under duly certified and stamped by his authorized signatory:

a) List of Jobs undertaken with details and value meeting the above conditions.

b) Copies of work orders issued by customers.

c) Copies of completion certificates issued by customers.

d) Each Tenderer has to enclose the copies of following Registration Certificates of Sales Tax No., Works Tax No., PAN No. and latest ITCC.

## **4.0 PROCEDURE FOR SUBMISSION OF SEALED TENDERS:**

4.1 The offer is to be submitted as required in two parts in separate sealed covers prominently superscribed as Part-1 "Technical Bid" & Part-2 "Price Bid" and also indicating on each of the covers the tender specification number and due date and time as mentioned in the tender enquiry. The third sealed cover shall contain EMD along with tender cost if downloaded from website and shall be super scribed as EMD / Tender cost. These three separate covers 1, 2 and 3 shall together be enclosed in fourth envelope and this sealed cover shall be superscribed with tender specification

number and due date. Tenders submitted without EMD and tender cost if applicable will be rejected.

- 4.2 Part I of the bid will be opened first and scrutinized. Successful bidders in Technical Bid Part – I will only be considered for opening of Price Schedule i.e. Part – II. Date of opening of Price Bid will be intimated separately to the Tenderers who qualify in the Techno-Commercial bid.
- 4.3 Offers should be strictly in accordance with the tender specifications & General Instructions to the Tenderer enclosed herewith.
- 4.4 Only Tenderers who have previous experience in the work of the nature and description detailed in this tender specification are expected to quote for this work. Offer from Tenderer who do not have proven and established experience in the field as per NIT will not be considered.
- 4.5 Tenderers are advised to go through the scope of work, site location etc and get them fully acquainted with the work place and prevailing working conditions before submitting the Offer.
- 4.6 The Tenderer should accept all terms & conditions of the tender unconditionally. In case the Tenderer wants to deviate from the tender conditions, such deviations shall be clearly specified in the offer. If no deviations are given in the offer, it will be assumed that the Tenderer accepts all terms and conditions of the tender.
- 4.7 Offers with deviations from terms and conditions of this tender are likely to be rejected.
- 4.8 Clarifications, if any, of Technical / Commercial nature, can be obtained from the officer to whom the tender is to be submitted or from New Delhi office at the following address up to one week before the tender due date.

**5.0 SCOPE OF WORK:**

Sl. No.	Description of work	Unit	Qty	Rate (Rs.)	Amount (Rs.)
5.1	As per Bill of Quantity enclosed at Annexure-I				

Please submit your lowest quotation / offers for the above requirement subject to our terms and conditions given below so as to reach us on before the due date i.e. on 27.04.07 by 02.30 PM and part - I of bid will be opened on 27.04.07 at 03.30 PM at the address given below.

**To,**

**V. K. Singh, Manager (HR-GAX)  
Corporate Office, BHEL House,  
Siri Fort, New Delhi – 110049.**

Phone no. : 011-26492688(Direct),  
011-26001010 Extn. - 2305,  
Fax no. : 011-26493760  
E-mail: vksingh@bhel.co.in

In case you are not making an offer against this enquiry, we request you to post a regret letter.

Thanking you,

Yours faithfully,  
For & on behalf of BHEL

(V. K. Singh)  
Manager (HR-GAX)

**Technical Acceptance of Specifications**

**BILL OF QUANTITY FOR RENOVATION & MODIFICATION OF AREA ALLOTTED TO CIT FOR SERVER ROOM, SWITCH ROOM & UPS ROOM IN ADMINISTRATIVE BLOCK 3RD FLOOR AT BHEL HOUSE, ASIAD, NEW DELHI.**

Sl. No.	ITEM DESCRIPTION	UNIT	QTY.	Vendor Compliance (Yes)	Vendor Remark or Deviation (If the Vendor compliance is No)
1	Dismantling of existing work station, partition, panneling, false ceiling, AC ducting, 1 no. AHU, MS windows & door frame etc. complete for AC ducting, 1 no. AHU, MS windows & door frames etc. complete for making the site ready for work in the proposed portion of server room cum staging area, switch room area, UPS room area and adjoining affected portions & clearing of site, stacking of malba & unseviceable materials outside the building witin 50 meter lead and making good the surface by proper repairing for final start of work including repairing and making good the adjoining outer surface as approved by Engineer-in-Charge.	LS	1	Yes	
2	Providing & fixing at all height false ceiling system with 600 x 600mm Aluminium Perforated tile of 0.5 mm thick having powder coating of minimum 50 micron (with soundtex paper) including providing and fixing of frame work as per manufacturers specification ( contactor has to provide the manufacturers specification and test report for the material of work above) including making openings for light fitting, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed all complete with Armstrong / Comceil / Hunter Douglass / Harisson make etc. complete as per drawings and specification and direction of the Engineer-in-Charge.	sqft.	2500	Yes	
3.a	Providing & fixing of fixture of Philips make complete set of size 600 x 600mm mirror optics of 3x36 W CFL tubes alongwith 1.5 sqmm copper wiring, switch boxes, plates, switches for every three fitting & dropping connecting copper wiring, switch boxes, plates, switches for every three fitting & dropping connecting wiring of 2.5 sqmm copper wire to distribution board etc. complete & as per approved drawings, specification and direction of the Engineer-in-Charge.	Nos.	60	Yes	
3.b	Supply, installation, testing and commissioning of power points with wiring junction box, clamps, supports, flex, Conduit, bend, hardware, switches with switch plates, sockets, concealed boxes etc. as per approved drawings, including earthing etc. complete all as per drawing with electrical wiring and face plate, switch and fitting. The final cable will be dropped to Power distribution Board in each room.	Nos.	25	Yes	
4	Providing & fixing false flooring upto 450mm height made of Metallic Cementious tile with anti static high pressure laminate on top of size 600 x 600 x 33 mm with supporting systems as per manufacturers specification (contactor has to provide manufacturers specification & test report for the material of work above) for UDL 1350 Kg and point load of 450 kg. alongwith suitable ramp to connect false floor with normal floor with M-floor / Kebao make as approved by Engineer-in-Charge( contactor has to provide one no. double cup panel lifter for future maintenance)	sqft.	1800	Yes	



5	Providing & fixing perforated false flooring Panel of size 600 x 600mm with volume control damper with matching antistatic high pressure laminate on top with supporting systems suitable for UDL 1350 Kg and point load of 450 kg. with M-floor/Kebaumake as approved by Engineer-in-Charge.	Nos.	20	Yes	
6	Providing & fixing 9mm thick flexible, closed cell, elastomeric, class 'O' insulation of Nitrile rubber flooring of make Superlon/ Eurobatex in the server room including side wall of the false floor with recommended adhesive for fixing as per manufacturer specifications and as approved by Engineer-in-Charge.	sqft.	800	Yes	
7	Providing and fixing 2mm thick antistatic flooring of Polyfloor / Armstrong make conforming to IS-3462(1986) for elastic product value, flexibility, sound reduction factor, inflammability, heat aging exudation and BS 2050-1978 for electric resistant flooring of approved make with fibre base using rubber base adhesive including rolling with light wooder roller complete.	sqft.	700	Yes	
8.a	Providing and fixing anodised aluminum work for doors, windows, ventilators & partitions with extruded built up standard tubular & other sections of approv. make conforming to IS:733 & IS:1285 anodised transparent or dyed to required shade according to IS:1868 (Minimum anodic coating of grade AC 15 ), fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. aluminum sections shall be smooth, rust free, straight, mitred & jointed mechanically wherever required including providing and fixing of hinges / pivots cleat angle, aluminum snap beading for glazing / panelling, PVC / neoprene gasket as required, C.P. brass / stainless steel screws, handles, tower bolts and locking system alongwith provision in door frames which shall include provisions for all necessary attachments for access control locking devices as per etc. all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing and panelling to be paid for separately.)	Kg	1200	Yes	
8.b	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS:6315 marked, Hardwyn make (model 3000) or equivalent for doors including cost of cutting floors as require, embedding in floors and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge. The cover plate should be made of Stainless Steel.	nos.	10	Yes	
8.c	Providing and fixing glazing in aluminium windows, ventilator, shutters and partition etc, with PVC/neoprene gasket etc. complete as per architectural drawings and the directions of engineer-in-charge with glass panes of 5.5 mm thickness and Modiguard / Asahi, Saintgobain brand (weight not less than 12.75 kg/sqm)	Sqft.	230	Yes	
8.d	Providing & fixing of glazing of 8mm toughened glass of Modiguard / Asahi, Saintgobain brand in aluminium doors etc. with PVC neoprene gasket etc. complete as per drawings and the directions Engineer -in-charge.	Sqft.	310	Yes	
9	Providing and fixing of 75mm GYP board partition made of 12mm fireline (one hr fire rated) Gypboard panel ( of India Gypsum ) with glasswool (UP Twiga) inside with India Gypsum make supporting grid/frame work as per manufacturers specification ( contractor has to provide the manufacturers test report for the material of work above) as approved by Engineer-in-Charge	sqft.	3150	Yes	

<b>10</b>	Fire retardent paint inside the server, switch, ups room and adjoining area in server/ups room to matching finish as approved by Engineer-in-Charge. Before paint the Gypsum board wall and the existing interior wall in the adjoining area has to be smoothen with putty etc.	sqft.	4500	Yes	
<b>11</b>	Wall mountable electronic ultrasound based anti rodent repellent system having sound output of 80 db to 110 db at 1 meter and operating frequency above 20 KHz(Variable). The equipment should be having master console.			Yes	
<b>11.a</b>	For false ceiling Master unit with transducer. Master and transducers has to be installed with complete wiring, bracket, accessories and electrical connection in the server, staging, ups and switch room.	Nos.	24	Yes	
<b>11.b</b>	For false floor Master unit with transducer. Master and transducers has to be installed with complete wiring, bracket and accessories with electrical connection in the server, staging, ups and switch room.	Nos.	24	Yes	
<b>12</b>	Providing & fixing fire detection & alarm system in UPS room and Switch room of 450 Sqft. each and adjoining area with addressable heat and smoke detector of Edwards / Honeywell/ Tyco make with complete wiring alongwith its integration to the existing system as approved by Engineer-in-Charge.			Yes	
<b>12.a</b>	Addressable Heat detector	nos.	30	Yes	
<b>12.b</b>	Addressable Smoke detector	nos.	30	Yes	
<b>12.c</b>	Hooter	nos.	3	Yes	
<b>12.d</b>	Indicator	nos.	4	Yes	
<b>12.e</b>	Manual call point	nos.	3	Yes	
<b>12.f</b>	Wiring with copper flexible wire of suitable guage Wires has to be fire resistant and should be laid in M.S conduit.	Mtrs	400	Yes	
<b>12.g</b>	Two Zone micorprocessor based Fire detection and Alarm panel ( Agni / Vijay make )	Nos.	1	Yes	
<b>12.h</b>	Fire fighting system based on CO2 gas cylinder weighing minimum 4.5 KG capacity Gas. Gas cylinder should be of Ceasefire make.	Nos.	10	Yes	

**Price Bid****BILL OF QUANTITY FOR RENOVATION & MODIFICATION OF AREA ALLOTTED TO CIT FOR SERVER ROOM, SWITCH ROOM & UPS ROOM IN ADMINISTRATIVE BLOCK 3RD FLOOR AT BHEL HOUSE, ASIAD, NEW DELHI**

Sl. No.	ITEM DESCRIPTION	UNIT	QTY.	RATE (Rs.)	AMOUNT (Rs.)
1	Dismantling of existing work station, partition, panneling, false ceiling, AC ducting, 1 no. AHU, MS windows & door frame etc. complete for AC ducting, 1 no. AHU, MS windows & door frames etc. complete for making the site ready for work in the proposed portion of server room cum staging area, switch room area, UPS room area and adjoining affected portions & clearing of site, stacking of malba & unseviceable materials outside the building witin 50 meter lead and making good the surface by proper repairing for final start of work including repairing and making good the adjoining outer surface as approved by Engineer-in-Charge.	LS	1		
2	Providing & fixing at all height false ceiling system with 600 x 600mm Aluminium Perforated tile of 0.5 mm thick having powder coating of minimum 50 micron (with soundtex paper) including providing and fixing of frame work as per manufacturers specification ( contactor has to provide the manufacturers specification and test report for the material of work above) including making openings for light fitting, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed all complete with Armstrong / Comceil / Hunter Dougulus / Harisson make etc. complete as per drawings and specification and direction of the Engineer-in-Charge.	sqft.	2500		
3.a	Providing & fixing of fixture of Philips make complete set of size 600 x 600mm mirror optics of 3x36 W CFL tubes alongwith 1.5 sqmm copper wiring, switch boxes, plates, switches for every three fitting & dropping connecting copper wiring, switch boxes, plates, switches for every three fitting & dropping connecting wiring of 2.5 sqmm copper wire to distribution board etc. complete & as per approved drawings, specification and direction of the Engineer-in-Charge.	Nos.	60		
3.b	Supply, installation, testing and commissioning of power points with wiring junction box, clamps, supports, flex, Conduit, bend, hardware, switches with switch plates, sockets, concealed boxes etc. as per approved drawings, including earthing etc. complete all as per drawing with electrical wiring and face plate, switch and fitting. The final cable will be dropped to Power distribution Board in each room.	Nos.	25		
4	Providing & fixing false flooring upto 450mm height made of Metallic Cementious tile with anti static high pressure laminate on top of size 600 x 600 x 33 mm with supporting systems as per manufacturers specification (contractor has to provide manufacturers specification & test report for the material of work above) for UDL 1350 Kg and point load of 450 kg. alongwith suitable ramp to connect false floor with normal floor with M-floor / Kebao make as approved by Engineer-in-Charge ( contactor has to provide one no. double cup panel lifter for future maintenance)	sqft.	1800		

5	Providing & fixing perforated false flooring Panel of size 600 x 600mm with volume control damper with matching antistatic high pressure laminate on top with supporting systems suitable for UDL 1350 Kg and point load of 450 kg. with M-floor/Kebao make as approved by Engineer-in-Charge.	Nos.	20		
6	Providing & fixing 9mm thick flexible, closed cell, elastomeric, class 'O' insulation of Nitrile rubber flooring of make Superlon / Eurobatex in the server room including side wall of the false floor with recommended adhesive for fixing as per manufacturer specifications and as approved by Engineer-in-Charge.	sqft.	800		
7	Providing and fixing 2mm thick antistatic flooring of Polyfloor / Armstrong make conforming to IS-3462(1986) for elastic product value, flexibility, sound reduction factor, inflammability, heat aging exudation and BS 2050-1978 for electric resistant flooring of approved make with fibre base using rubber base adhesive including rolling with light wooder roller complete.	sqft.	700		
8.a	Providing and fixing anodised aluminum work for doors, windows, ventilators & partitions with extruded built up standard tubular & other sections of approved make conforming to IS:733 & IS:1285 anodised transparent or dyed to required shade according to IS:1868 (Minimum anodic coating of grade AC 15), fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. aluminum sections shall be smooth, rust free, straight, mitred & jointed mechanically wherever required including providing and fixing of hinges / pivots cleat angle, aluminum snap beading for glazing / panelling, PVC / neoprene gasket as required, C.P. brass / stainless steel screws, handles, tower bolts and locking system along with provision in door frames which shall include provisions for all necessary attachments for access control locking devices as per etc. all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing and panelling to be paid for separately.)	Kg	1200		
8.b	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS:6315 marked, Hardwyn make (model 3000) or equivalent for doors including cost of cutting floors as required, embedding in floors and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge. The cover plate should be made of Stainless Steel.	nos.	10		
8.c	Providing and fixing glazing in aluminium windows, ventilator, shutters and partition etc, with PVC/neoprene gasket etc. complete as per architectural drawings and the directions of engineer-in-charge with glass panes of 5.5 mm thickness and Modiguard / Asahi, Saintgobain brand (weight not less than 12.75 kg/sqm)	Sqft.	230		
8.d	Providing & fixing of glazing of 8mm toughened glass of Modiguard / Asahi, Saintgobain brand in aluminium doors etc. with PVC neoprene gasket etc. complete as per drawings and the directions Engineer -in-charge.	Sqft.	310		
9	Providing and fixing of 75mm GYP board partition made of 12mm fireline (one hr fire rated) Gypboard panel ( of India Gypsum) with glasswool (UP Twiga) inside with India Gypsum make supporting grid/frame work as per manufacturers specification ( contractor has to provide the manufacturers test report for the material of work above) as approved by Engineer-in-Charge	sqft.	3150		

10	Fire retardent paint inside the server, switch, ups room and adjoining area in server/ups room to matching finish as approved by Engineer-in-Charge. Before paint the Gypsum board wall and the existing interior wall in the adjoining area has to be smoothen with putty etc.	sqft.	4500		
11	Wall mountable electronic ultrasound based anti rodent repellent system having sound output of 80 db to 110 db at 1 meter and operating frequency above 20 KHz(Variable). The equipment should be having master console.				
11.a	For false ceiling Master unit with transducer. Master and transducers has to be installed with complete wiring, bracket, accessories and electrical connection in the server, staging, ups and switch room.	Nos.	24		
11.b	For false floor Master unit with transducer. Master and transducers has to be installed with complete wiring, bracket and accessories with electrical connection in the server, staging, ups and switch room.	Nos.	24		
12	Providing & fixing fire detection & alarm system in UPS room and Switch room of 450 Sqft. each and adjoining area with addressable heat and smoke detector of Edwards / Honeywell / Tyco make with complete wiring alongwith its integration to the existing system as approved by Engineer-in-Charge.				
12.a	Addressable Heat detector	nos.	30		
12.b	Addressable Smoke detector	nos.	30		
12.c	Hooter	nos.	3		
12.d	Indicator	nos.	4		
12.e	Manual call point	nos.	3		
12.f	Wiring with copper flexible wire of suitable gauge Wires has to be fire resistant and should be laid in M.S conduit.	Mtrs	400		
12.g	Two Zone micorprocessor based Fire detection and Alarm panel ( Agni / Vijay make )	Nos.	1		
12.h	Fire fighting system based on CO2 gas cylinder weighing minimum 4.5 KG capacity Gas. Gas cylinder should be of Ceasefire make.	Nos.	10		
<b>Total Amount( Rs.)</b>					