JAMIA HAMDARD

HAMDARD NAGAR, NEW DELHI - 110062

Telephone: 011-26059688-5374

TENDER DOCUMENT FOR

Design, Supply Installation Testing and Commissioning of VRV/VRF AC System alongwith Ventilation work, At

Central Animal House Facility

JAMIA HAMDARD

Submitted by:		
Name:		
Address:		
Contact No:		
Email ID:		

JAMIA HAMDARD (DEEMED TO BE UNIVERSITY) HAMDARD NAGAR, NEW DELHI-110062

NOTICE INVITING QUOTATIONS

06.01.2023

Jamia Hamdard, New Delhi invites sealed items rates Tenders in **Two bid system** from reputed contractors worked with Govt. Semi Govt. or State Govt. organization or worked/working in Jamia Hamdard for the below mentioned work. Tender Documents are attached herewith. Last date of submission of the Tender is 16.01.2023 **up to 3:00 PM.** The bidders are also advised to visit the site to satisfy themselves before submitting the Bids. Bidders not fulfilling the Eligibility Criteria will be rejected. Eligibility Criteria is mentioned at Tender clause 2.

NAME OF WORK Design Supply Installation Testing and Commissioning of VRV/VRF

AC System alongwith Ventilation work at central Animal House

Facility.

ESTIMATED COST Rs. 21 Lacs.

EARNEST MONEY Rs.42000.00 Demand Draft in favour of "Jamia Hamdard" New Delhi

TENDER COST Rs.1000/- Demand Draft in favour of "Jamia Hamdard" New Delhi

TIME PERIOD 25 Days from the 2nd day of the receipt of the work order.

The sealed quotations duly filled should be dropped in the Tender Box kept in Purchase Section, Admin. Block, on or before 16.01.2023 **up to 3.00 PM** along with demand draft of earnest money & Tender fee in sealed envelope clearly specifying the name of work. The DDs shall be in favor of "Jamia Hamdard" payable at New Delhi. The bids shall be opened on 16.01.2023 at **3.30 PM** by the tender committee in presence of available interested parties. Jamia Hamdard reserves the right to reject any or all tenders without assigning any reason. In this regard, decision of Jamia Hamdard will be the final and binding on all bidders.

Registrar

1. SCOPE OF WORK

The successful tenderer must have competence and shall be in a position to Design, Supply Installation Testing and Commissioning of VRV/VRF AC System, Electrical works alongwith Ventilation work at Central Animal House Facility as per BOQ given on Annexure 'A'. The agency must ensure warranty as per OEM.

2. ELIGIBILITY CRITERIA

- 2.1 Bidders must have worked with Govt. Semi Govt. or State Govt. organization or worked/working in Jamia Hamdard or any Govt./reputed/academic institute for such works. Bidders have to submit the related copies of the documents for justifying the eligibility criteria along with his Tender. The original will have to be produced when demanded for verification.
- 2.2 Contractors should have executed similar nature of works of at least one contract of Rs.16.8 Lakhs or two contracts of similar nature of works of Rs.12.6 Lakhs or three contacts of similar natures of works 8.4 Lakhs in the last 5 years in any institutional Buildings, Universities and produce credentials in support thereof.
- 2.3 Certified documents of having successfully completed similar works during the last 5 years as on 30.11.2022 should also be attached.
- 2.4 The Bidders must have GST, PAN/TAN, from Govt. Semi Govt. or State Govt. organization for the said work.
- 2.5 Bids without EMD & Tender fee will be rejected.
- 2.6 The bidder must have their office in New Delhi to provide an early service support.

3. SUBMISSION OF BIDS

Tenders should be submitted in **Two bids** form with sealed envelopes, super-scribing NIT &Name of work, due date for opening, bidder's name & address. The sealed tender duly filled should be dropped in the tender box kept in the Central Purchase Section. It should not be handed over to any employee of the Jamia Hamdard. No tender shall be accepted later than the time schedule specified above. Any clarifications/amendments/corrigendum etc., to NIT before last date of submission of bid will only be available on our website: www.jamiahamdard.edu. Therefore, bidders are advised to keep visiting our website.

A: The bidder shall submit the following in the **Technical bid envelope:**

- a. Covering letter on Company's Letter head
- b. Tender Fee
- c. Earnest Money Deposit.
- d. Copies of GST, PAN & other related documents.
- e. Copies of work orders for similar nature of works as per criteria for eligibility mentioned above.
- f. Entire NIT and document (without price bid) duly signed & stamped by the bidder.
- g. Completion certificate submitted should be issued / signed by an officer not below the rank of Executive Engineer/Assistant Engineer.
- **B**: The bidder should submit the following in the **financial bid envelope**.
 - h. BOQ of VRV/VRF AC work, Electrical Works and Ventilation work is cited on Annexure "A"
 - i. Bidders are required to quote his item rates in the above said attached BOQ in accordance with the scope of works, terms & conditions & technical specifications

enclosed. The rates/price quoted by contractor should be all inclusive i.e. should include all material cost, labour, drawing, design, services, plant/machinery/tools & tackles, ladders & scaffolding required for work, freight, Insurance, Octroi, Govt. duties & levies, GST, Service Tax, Sales Tax etc.), transport/cartage of materials/labour and all other expenses not specifically mentioned but reasonably implied. It is mandatory for bidder to quote all items rate as asked for in the BOQ/PRICE schedule. Failure in not filling some item rates will lead to rejection of tender. The bidders should quote unconditional rates, neatly written/typed without any overwriting and all pages should be duly signed & stamped.

1. Bidder not complying the bid & eligibility criteria is liable to be rejected.

4. GENERAL TERMS & CONDITIONS

- I. **Earnest Money**: An earnest money of Rs. 42,000.00 for the above works has to be enclosed along with the Tender. The Tender Fees and EMD shall only be in the form of Demand Draft in favour of "Jamia Hamdard" payable at "New Delhi". No Cash/Cheque shall be accepted as EMD. The EMD of the successful lowest bidder (L-1) shall be held back and will be released after completion of the works and site clearance.
- II. **Validity of Tender:** Tender shall be valid for our acceptance without any change in rates and NIT conditions for a period of 90 days from the date of opening of price bid.
- III. **Escalation**: No escalation over and above items rates quoted by the bidder shall be paid during the execution of contract.
- IV. Completion time: The time shall be the essence of this contract and entire work as titled above is to be completed in all respects within a period of 25 days from the 2nd day of the receipt of the work order. Any delay in completing of work for the reasons attributable to the Contractor is liable for liquidated damages as per clause 4, "XII" Terms Conditions. Under the force-majeure conditions or delay due to reasons beyond control of the contractor, Jamia Hamdard may grant suitable time extension without penalty for which the contractor has to request along with the justification/ reasons well in advance to Jamia Hamdard for approval without any prejudice to price escalation. No time extension request shall be considered after the expiry of completion period/contract. The decision of the Executive Engineer regarding Time extension will be final and binding on the contractor.
- V. The rates shall be inclusive of all taxes (Service Tax, GST etc.) duties and cartage etc. All applicable taxes will be deducted as per prevailing Govt. norms and Jamia Hamdard Employee Relief Fund (JHERF) will be deducted @ 0.25% of the amount of total bill claimed.
- VI. **Deviations**: No deviation from the stipulated terms and conditions will be allowed. Tender will be unconditional.
- VII. **Site Conditions**: Contractor shall acquaint himself fully with the site conditions and the working environment of Jamia Hamdard before quoting his rates. No Compensation on account of any site difficulties will be entertained, at a later date, after award of the work.
 - Before tendering, the Contractor shall visit and examine the site and satisfy himself as to the site conditions, the correct dimensions of the work and facilities. In case of any doubt, it may be clarified from the office of the Assistant Engineer (Electrical).
- VIII. **Correspondence**: All the correspondence in respect of tender/award of work shall be made to Executive Engineer.

- IX. **Terms of Payment**: The payment shall be made on submission of the bills in proper format by the contractor after due certification by the Engineer responsible for supervision of the work. Full and final payment will be made after completion of work for claiming payment based on actual quantities of items of work executed as per BOQ and Engineer's instructions. 5% amount will be withheld towards the security deposit from the bill. The security deposit shall only be refunded after expiry of the defect & liability period which will be one year after satisfactory completion of all works
- X. **Labour Laws**: The contractor will abide by all the rules and regulations related to labour laws, accident, workmen compensation act, workmen insurance etc. This will be the sole responsibility of the contractor. Jamia Hamdard will not be a party at any stage in any of the disputes relating to the above. In case, Jamia Hamdard has to bear any expenditure due to non-conformance of the above provisions by the contractor, the same will be recovered from contractor's bills.
- XI. Rules governing the Contractor's employees working in the Jamia Hamdard Premises: The contractor's employees working inside the Jamia Hamdard campus will abide by the Centre's rules & regulations for works inside the campus. Any damage to the Jamia Hamdard property due to mishandling, carelessness on the contractor's or his workmen's part will be recoverable from the contractor's bills.
- XII. Liquidated damages: In case the work is delayed beyond the specified completion period for reasons attributable to the contractor and without any genuine reason, deductions on account of Liquidated damages @1 % of the contract value per day will be deducted subject to a maximum of 10% of the contract value. However, during the delayed period, Jamia Hamdard also reserves the right to get some portion of work done by any other contractor at the risk and cost of the existing contractor and amount to that effect along with 10% overhead charges will be deductable from his bills/dues.
- XIII. **Extra or substituted item**: If any extra or substituted item appears in the work, contractor shall submit its rate analysis supported with documents which shall be approved by concerned Engineering Department. Analysis of rates will be based on DSR-2018 document of CPWD or based on market rates for determining item rate and pay to contractor accordingly.
- XIV. **TYPE OF CONTRACT:** The Contract shall be an item rate contract. The Contractor shall be paid at the contract rates, for the actual quantity of work carried out by him in accordance with the Contract documents as measured.
- XV. **Defect Liability period**: Defect liability period shall be one year from the actual date of completion of work. Any defect arising in this period due to contractor's fault will be rectified by him at his own cost. Failure to do so, shall lead to forfeiture of security deposit.
- XVI. **Security Deposit**: A security deposit equal to 05% of the value of work will be deducted from Contractor's bill and shall be refunded after the completion of defect liability period of six months after ensuring successful performance of the system executed by the contractor.
- XVII. Contractor should depute a qualified supervisor dedicated for this work, who will monitor and coordinate the works from contractor's side and interact with the Jamia Hamdard Engineers, responsible for supervision of work, on regular basis.
- XVIII. Contractor will take due permission for entry of all his workmen in Jamia Hamdard. No unauthorized person will be allowed to work inside.
 - XIX. The contractor will arrange all necessary materials, tools, equipment, access ladders & scaffolding, measuring instruments and working consumables etc. needed for execution of the

works. Safe custody of all such material will be contractor's sole responsibility. No extra charges will be paid for the same. Watch and ward of all material till the system is taken over by Jamia Hamdard shall be the sole responsibility of the contractor and pilferage etc. shall be entirely to his account.

- XX. During execution of work, Engineer can make minor changes in the scope of work as per site conditions or other reasons. Contractor will have no extra claim in his rates for the same.
- XXI. If during the execution of works, any damage is caused to Jamia Hamdard property by contractor's/contractors' workers, contractor will duly make good the loss. Jamia Hamdard has the right to make suitable deduction from contractor's bills along with penalty, if contractor fails to make good the loss.
- XXII. During execution of work, the contractor should follow all the standard norms of safety measures/precautions as per relevant IS codes and CPWD specifications to avoid accidents/damages to man, machines and buildings, at his own cost. Contractor will have his own arrangement to escort the labour to the nearest hospital for treatment in case any injury happens to any worker during execution of work.
- XXIII. Manpower deployed by the contractor at our site for carrying out contract works is strictly prohibited being associated with any other works on the campus.
- XXIV. During execution of the work, contractor should dispose off waste material on regular basis and should keep the area of work properly cordoned off and neat and clean as far as possible. After completion of work, contractor should clear the site completely of all unwanted and junk material before submitting his final bill.
- XXV. Jamia Hamdard will provide electricity, if needed. The electrical energy meter will be provided by the contractor and necessary deduction will be made as per the actual consumption of electricity (at the rates paid by JH to BSES) during execution of work. The contractor has to make his own arrangements for water.
- XXVI. Tender once submitted will remain with the Jamia Hamdard and will not be returned to the bidders.
- XXVII. **Termination of Contract**: The Jamia Hamdard reserve the right to terminate the contract on account of poor workmanship, failure to mobilize site within 15 days, non-compliance of specifications for the works, abnormal delay in progress of work, violation of any contract provisions by the contractor. In such case, contractor's EMD and security deposit deducted so far will be forfeited.
- XXVIII. The contract can also be terminated on the request of contractor. In such cases the contractor is liable to pay Liquidated damages @ 5% of tendered value besides forfeiture of EMD & security deposit recovered so far.
 - XXIX. Any dispute arising out of this contract will be subjected to jurisdiction of New Delhi/Delhi.
 - XXX. Tenders not complying with any of the provisions stated in this tender document are liable to be rejected. Jamia Hamdard also reserves the right to accept or reject any or all the tenders without assigning any reason and does not bind himself to accept the lowest tender or split the work in two or three parts.
 - XXXI. That in the event of any difference, or dispute arising between the parties to this Agreement for any reasons whatsoever relating to the contract, whether during the substance of this Agreement

or their after, it has specifically been agreed that the party will endeavor to amicably resolve the difference, but in case if dispute or differences still remain unresolved, the same shall be referred to the sole Arbitrator appointed by the Vice Chancellor of Jamia Hamdard and the Arbitrator decision shall be final and binding upon the parties concerned.

5. Special terms & conditions

- 5.1 DRAWINGS. The layout plan of area to be air-conditioned is enclosed. No other drawings shall be made available. The contractor / vendor shall visit the site and discuss with the Engineer-in-charge for any other details that he may need before submitting the offer. Provisional General Arrangement drawings has to be prepared, showing the area to be air-conditioned & space need for installation of new equipment shall be checked visiting the site before offer is submitted. These are not working drawings. The vendor shall prepare detailed working drawings & execute the work as per working drawings approved by the Engineer-in-charge.
- 5.2 The bidder is advised to visit the site and access the requirement of materials for installation of ACs and must visit site before quoting and fully satisfy himself of the site conditions. All expenses towards fabrication work, civil work etc. for the installation complete in all respects shall be provided by the bidder.
- 5.3 The bidder will be required to ensure trouble free operations of the air conditioning systems at the rated performance with minimum break down during warranty period of one year.
- 5.4 In addition to break down maintenance the bidder will be required to provide four complete services in a year during the warranty period or any other problem faced by us from time to time.
- 5.5 In case of compressor failure no repairs of compressor shall be allowed. The bidder has to provide replacement of compressor from the company. The compressors shall be guaranteed for replacement as per OEM free of cost.
- 5.6 The works shall be carried out as per the relevant CPWD / BIS Standards and attached Terms and conditions, Specifications, BOQ etc.

Accepted Signature of the Tenderer's with stamp

6. CHECK LIST

TO BE SUBMITTED ALONG WITH BID

The tenderer are requested to ensure the submission of the essential documents to avoid disqualification of the bid. However, the check list is not exhaustive and the bidders are requested to go through the NIT & related documents carefully and completely for fulfillments of tenderer requirement.

S. No.	Enclosures	Submitted
1.	Cost of tender document	
2.	EMD	
3.	Similar works order and other documents asked	
4.	Signature with stamp in all pages of tender documents.	
5.	Bank account detail	
6.	E-mail address	
7.	Address for communication	
8.	Phone no, Mobile no, Landline no.	

Signature of the Tenderer's with stamp

Annexure –A Price Bid for VRV/VRF AC System Works, Electrical work, Ventilation/Fresh Air work

S. No.	Item Description	Unit	Qty	Rate (Rs.)	Amount (Rs.)
A	Outdoor Unit				
	Design, Supply, Installation, testing & commissioning of Variable refrigerant flow modular type air-conditioning system suitable to operate from 410+10% volt, 50 Hz,3 phase AC power supply for cooling & heating by using inverter driven capacity control compressors (Twin Rotary / Hermetically sealed scroll type) complete with individual controller and fittings with necessary wiring, connection & termination, painted MS frame for outdoor unit etc. as per quantity given below including full charging of R-410A refrigerant gas complete as per specifications. Outdoors units of the VRF system shall be compact air cooled type				
	Each module of outdoor unit must have at least 50 % of Variable compressor which can work on Part load Suitable to operate at heat load proportional to indoor requirement.				
	The outdoor units must be suitable for up to 225m refrigerant piping between outdoor unit & the farthest indoor units. Allowable level difference between outdoor unit & indoor units shall be 40 m in case of outdoor unit on top & 50 m in case of outdoor unit at bottom.				
1	Allowable level difference between various indoor units connected to one out door unit shall be up to 15 m.				
	The outdoor units shall be suitable to operate within an ambient temperature range of "5 Deg C to 48 Deg C" in cooling mode; & "0 Deg C to 15 Deg C" in heating mode.				
	The entire operation of outdoor units shall be through independent remotes of indoor units. No separate Start/ Stop function shall be Required.				
	Starter for the Outdoor Unit compressor shall be —Direct on Line type. Inverter compressor of the unit shall start first & at the minimum frequency, to reduce the inrush current during starting				
	Complete refrigerant circuit, oil balancing/ equalizing circuit shall be factory assembled & tested.				
	Outdoor unit shall have function of automatic refrigerant amount check periodically to confirm leakages.				
	Outdoor unit shall have function of controlling evaporative refrigerant temperature to avoid cold draft, excessive cooling & for better energy efficiency.				
	Minimum COP of ODU shall not less than 3.5 @ 100% load and 6.0 @ 50% load.				

1.1 16 HP (WORKING+STANDBY) Nos. 2	
B Indoor VRF Units (Nominal Capacity) - Wall mounted type Unit	
Design, Supply, Installation, testing & commissioning of Wall mounted type Unit of suitable capacity suitable to operate from 230+10% volt, 50 HZ, 1 phase power supply with cordless remote control, fittings & required cable to connect indoor unit to socket. Refrigerant Pipe size and gas quantity should suit to the copper pipe length at actual. The capacity guarantee should be ensured by the contractor/manufacturer. Each unit shall have high lift drain pump, and Low gas detection system etc complete in all respect.	
2.1 2.0 TR Nos. 12	
2.2 Supply of Cordless remote controls for the above indoor units. Nos. 12	
C Refrigerant Piping for VRV/VRF system	
Design, Supply & Installation of interconnecting suitable sizes of one end expanded refrigerant copper pipe work, insulated with 13mm thick (pipe size up to 19.1mm dia) & 19mm thick (pipe size above 19.1mm dia) closed cell electrometric nitrile rubber tubular insulation between each set of indoor & outdoor units with outer mechanical protection of aluminum cladding for all exposed pipes as per specification. All piping inside the room shall be properly fixed/supported with suitable size of clamp/ M.S. hanger and all external piping shall run in M.S. painted cable tray etc. as reqd.	
3.1 41.3 mm dia with 19mm thick nitrile rubber insulation Rmt. 20	
3.2 38.0 mm dia with 19mm thick nitrile rubber insulation Rmt. 10	
3.3 34.9 mm dia with 19mm thick nitrile rubber insulation Rmt. 15	
3.4 31.1 mm dia with 19mm thick nitrile rubber insulation Rmt. 15	
3.5 28.6 mm dia with 19mm thick nitrile rubber insulation Rmt. 30	
3.6 22.2 mm dia with 19mm thick nitrile rubber insulation Rmt. 20	
3.7 19.1 mm dia with 13mm thick nitrile rubber insulation Rmt. 20	
3.8 15.9 mm dia with 13mm thick nitrile rubber insulation Rmt. 45	
3.9 12.7 mm dia with 13mm thick nitrile rubber insulation Rmt. 50	
3.10 9.5 mm dia with 13mm thick nitrile rubber insulation Rmt. 55	
3.11 6.4 mm dia with 13mm thick nitrile rubber insulation Rmt. 65	
D Drain Piping for VRV/VRF system	
Design, Supply, Installation of heavy duty PVC Pipe complete with fittings, supports as per specifications and duly insulated with 6 mm thickness of closed cell tubular nitrile rubber as required & as per specifications.	
41 40 1: 110 4:11 1:	
4.1 40 mm dia with 9 mm thick insulation Rmt. 10	

4.3	25 mm dia with 9 mm thick insulation	Rmt.	30	
4.4	20 mm dia with 9 mm thick insulation	Rmt.	10	
E	Miscellaneous Other VRV/VRF works			
5	Supply and Fixing of control cable of 2 Core x 1.5 sqmm. shielded cable in Heavy duty PVC conduit (20mm dia.) complete in all respect & as required.		300	
6	Supply, Installation, testing and commissioning of necessary fittings, Y-joints and headers etc.	Nos.	10	
7	Out Door Stand (Chowki)	No.	8	
8	Gas Charging of completes VRF System comprising Outdoor unit of indoor unit including pressure testing.	Lot	1	
F	Electrical work			
9	Supply and Laying of 4C x 25 Sq.mm XLPE Insulated, cores laid up, tape PVC inner sheathed, round armored aluminum conductor power cable of 1.1kV grade as per IS - 7098 (part-I)-1988, from existing panel to outdoor unit.	Rmt.	60	
10	Supply and making of end termination with brass compression gland and aluminum lugs for 4 X 25 sq. mm (28mm) size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 kV grade as required.	Each	8	
11	Supply and installation of 100 mm width X 50 mm depth X 1.6 mm thickness size of perforated Hot Dipped Galvanized Iron cable tray with convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders / laying on wall including G.I. bolts & nuts, etc. as required.	Rmt.	100	
12	Supply and installation of 100 mm width X 50 mm depth X 1.6 mm thickness size of perforated Hot Dipped Galvanized Iron cable tray "bends" with convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.	Each	8	
13	Supply Installation testing & commissioning of 63A 4 Pole TPN, MCCB/RCCB/ELCB with Box and with IP-69 protection with spreaders links etc. complete in all respect	Nos.	4	
14	Supplying, installing on wall, testing and commissioning of 200 amp capacity TPN bus bar with powder coated painted box complete, fully PVC insulated 4 Nos. copper bus bars having current density of 130 A/ sq cm at nominal current rating in convenient sections and suitable for 415 volts, 3 phase, 4 wire, 50 Hz, A.C. supply	1	Nos.	
15	Providing and fixing 100 A, 25 KA,TPN MCCB with thermo magnetic release and terminal spreaders with suitable size MCCB Box including drilling hole in cubicle panel, making connections, etc. as required.	Nos.	2	
G	Ventilation/Fresh Air work			

16	Design, Supply Installation and Commissioning of Fresh Air and Ventilation System comprising of following items: a.PVC Pipe Size – 150mm, with all fitting as, Elbows, Socket, Tee, b. Pesting and Hacking support – 8mm full thread rods and c. Channel, Anchor Fasteners – 8mm, Nuts bolts d. Supply and Return Air Branch fixing by 100mm Flexible duct etc. complete in all respect.	12	Poin t		
17	Supplying, installation, testing & commissioning of 300 CFM inline fans with motor, supporting frame with bird screen, access panel complete as per specifications and drawings. In-line fan – 300mm,	02	Nos.		
		-	ΓΟΤΑL	(including All)	

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(Signature of Proprietor/Partner/Chief Executive) (With Seal)

Annexure-B

LIST OF APPROVED MAKES OF MATERIALS

S.No.	Make	APPROVED MAKE
1	VRF / VRV Systems	Mitsubishi // Daikin / Blue star
2	Indoors High wall units	Mitsubishi // Daikin / Blue star
3	Vibration pads	Resistroflex /Dunlop
4	Vibration isolation	Dunlop / Cushy Foot /Resistroflex
5	Refrigerant Pipes	Mandev / Parasmani /Jugal
6	Nitrile Rubber insulation	Hylam / Superlon / Armaflex /Trocellen
7	Power Cables	Havlles/ Polycab / Finolox/RR Kable
8	Control Cables	Havells/Polycab / Finolex / Torrent / RR Kabel / LAPP
9	Panel builder	Load controls / Lotus power gear / Ellins switch board / ENCONPASS / Switchgear & control technique
10	Cable gland	Comex / Comet / Jainson
11	Lugs / sockets	3D / Dawells / Jainson
12	PVC pipe	Supreme / Finolex.
13	MCCB/ELCB/RCCB	ABB/ Hager / Havells
14	Inline fans	Caryaire/GE/Osram/Havells

(Signature of Proprietor/Partner/Chief Executive) (With Seal)

General Layout plan of the Location.

m		1					
EXPERIMENTAL ROOM No. 9	16×8×10'	ExPERIMENTAL ROOM NO-10	16×11×14		ROOM NO. II		
		700	ę				
Layout P	•	700m No 3, 4, 5,	RO WATERSOM	700320	MICE ROOM	17×11×10	
Layout Plan Central Animal	۸	3, 4, 5, 7, 10 and 9 to be		700m Zo - 1	BREEDING	23'11.5'	60 PRC
1		cdr.		NGOM ZO-L	RAT STOCK	23'×11.5'	PROPOSED FOR OUTDOOR UNIT
House Facility, JH		pped with VRFIVRV	E- 98 Wood	VENTILATED CAGE SYSTEM (IVC)	4	23'411.51	DOOR UNIT