

# **SBI INFRA MANAGEMENT SOLUTIONS PVT.LTD.**

(A Wholly Owned Subsidiary Of SBI)

SBIIMSPL, CIRCLE OFFICE, SBI, LOCAL HEAD OFFICE, THIRD FLOOR, BANDRA KURLA COMPLEX, BANDRA (E), MUMBAI- 400051

PART - A: TECHNICAL BID

**TENDER ID: MUM202009029** 

# TENDER FOR PROPOSED AIRCONDITIONING WORK AT RBO FIMM NASHIK SBIIMS EMPANELLED AIRCONDITIONING CONTRACTORS ONLY (CATEGORY 10 LAKHS AND ABOVE)

TENDER SUBM	ITTED I	<b>BY</b> :			
:				 	
ADDRESS	:				=
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GSTIN NO.		:			-
DATE	:				



# **NOTICE INVITING TENDERS**

# TENDER FOR PROPOSED AIRCONDITIONING WORK AT RBO FIMM NASHIK.

SBIIMS, Circle Office, Mumbai on behalf of SBI, Mumbai invites "online percentage rate E-tender" for captioned work from Empaneled contractor (10 Lakh and above) for the captioned work.

Details of the tenders are as under:

Sr.No	Particulars	Details		
1	Name of work	Tender for PROPOSED AIRCONDITIONING WORK A		
2	Nature of Work	AIRCONDITIONING		
3	Time allowed for completion	90 Days		
4	Cost of Tender document cum Tender Processing Fee (Non-refundable)	Rs.3000/- (Rupees Three Hundred Only)  This Non-Refundable amount to be paid only through SB Collect Payment Portal available in SBI's online Banking site i.e. <a href="https://www.onlinesbi.com">https://www.onlinesbi.com</a> After successful payment, submit a print of the receipt carrying a Reference no. along with the tender application.  For further details, refer annexure- 'A' (page no. 48)		
5	Earnest Money Deposit	Rs.21,000/- (Rupees Twenty One Thousand Only) by means of Demand Draft / Pay Order (Valid for a period of 90 Days from the last date of submission of the tender) from any scheduled Nationalized Bank drawn in favor of SBI Infra Management Solutions Pvt. Ltd. and payable in Mumbai.		
6	Initial Security Deposit (ISD)	2% of contract amount (EMD will be returned on receipt of ISD). The successful bidder(s) shall be responsible to deposit Initial security deposit @ 2% of the Contract Value by way of demand draft in favour of SBI, payable at Mumbai within 10 days from the date of receipt of "Letter of Intent" from SBIIMS. The SBIIMS/ SBI may consider accepting ISD in the form of Bank Guarantee issued by any Scheduled Bank in the format supplied/approved by the SBIIMS within its sole discretion but the same cannot be considered		



		Building SBI >
		as a right of the bidder.
7	Additional security Deposit	In case L-1 bidder quotes abnormally low rates (i.e. 10% or more, below estimated project cost), the bank may ask such bidder to deposit additional security deposit (ASD) equivalent to difference of estimated cost vis-à-vis L-1 quoted amount for due fulfillment of contract. Such ASD could be in the form of FDR / Bank's guarantee in the Bank's name as per format approved by the Bank. On successful completion of work ASD will be returned to the contractor. In case contractor fails to complete the work in time or as per tender specification or leave the job incomplete, the bank will be at liberty to recover the dues from ASD or to forfeit such ASD as the case may be within its sole discretion
8	Date of availability of tender documents on Service Provider's website	
	(a) Technical Bid	28.09.2020 to 08.10.2020 Available at M/s e-Procurement Technologies Ltd., our Service Provider's portal <a href="https://etender.sbi/">https://etender.sbi/</a>
	(b) <b>Price Bid</b> (only to those bidders who qualify in Technical Bid.)	From 09.10.2020 to 13.10.2020 Available at M/s e-Procurement Technologies Ltd., our Service Provider's portal <a href="https://etender.sbi/">https://etender.sbi/</a>
9	submission of EMD and cost	<b>08.10.2020 by 03:00 PM</b> Note: It is sole responsibility of the bidder to ensure submission of their EMD and Cost of tender document cum processing by stipulated date and time at specified address failing which they will not be allowed to participate in E-Tendering
10	Address for submission of EMD and cost of tender document cum processing fee.	SBI Infra Management Solutions Pvt. Ltd. SBI, Local Head Office,3rd floor,C-6,G-Block Synergy Building, Bandra- Kurla Complex, Bandra (East), Mumbai-400 051
11	Date and Time of opening of Online Technical Bid	08.10.2020 by 03:30 PM
12	Last date & time for submission of Online Technical bid	<b>08.10.2020 by 03:00 PM</b> at Service Provider's portal <a href="https://etender.sbi/SBI/">https://etender.sbi/SBI/</a>



13	Date and Time of opening of Online Price Bid	13.10.2020 by 03:30 PM		
14	Date and time for submission of Online Price Bid by the bidders qualified in Technical Bid.	https://etender.sbi/SBI/		
15	Defects Liability period	One year from the date of virtual completion of work.		
16	Liquidated Damages	0.50% per week subject to max. 5% of contract amount for delay in completion of work.		
17	Validity of offer	90 days from the date of opening of Price-bid		
18	Value of Interim Certificate	No advance on materials / plant / machinery or mobilization advance shall be paid under any circumstances		
19	Submission of Technical Bid (Hard Copy)	<ol> <li>Contractors shall download the entire Technical Bid to get acquainted with the terms and conditions and shall upload compulsorily the pages numbered from 01 to 09 of the technical bid without fail in the e-tendering portal after putting the signature and seal. Failing to upload as stated above, the tender will be rejected.</li> <li>However, L1 Tenderer should submit the whole technical bid spirally bound securely and in serial order containing all pages duly signed with company seal and date to this Office within 7 days of receipt of confirmation. Failure to submit the hardcopy of Technical Bid may render the bidder disqualifies.</li> </ol>		
20	Submission of Price Bid	<ul> <li>i. In case of Percentage Rate Tenders, contractor shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in <b>Schedule of Quantities</b>; he will be willing to execute the work.</li> <li>The tender submitted shall be treated as invalid if: -</li> <li>1. The contractor does not quote percentage above/ below on the total amount of tender or any section/ sub head of the tender.</li> <li>2. The percentage above/below is not quoted in figures &amp; words both on the total amount of tender</li> </ul>		



- or any section/ sub head of the tender.
- 3. The percentage quoted above/below is different in figures & words on the total amount of tender or any section/ sub head of the tender. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected.
- ii. The intending bidders shall be asked to quote their offers in terms of "specific Percentage numerical value" (only up to two decimal places) above (+) / below (-) / at par with the Total Estimated Cost published for the project, he will be willing to execute the work.
- iii. After taking into account the Percentage Rebate/
  Addition Offered by all the bidders over the
  Estimate Cost, "Net Tender Value" of each bidder
  shall be evaluated (Mostly by the online system
  itself) and the bidder offering Lowest Tender
  Amount for projects pertaining to Procurement
  Purchase Contract and Highest Tender Amount for
  Sales Contracts shall be declared as "Successful
  Bidder".
- iv. The "Percentage Offer" shall be uniformly applicable to each and every item including all sections/ sub sections/sub heads of the Tender.
- v. In case, the Lowest Tendered Amount (i.e. Estimated cost +/- Percentage Bid quoted) of two or more contractors is same, such lowest contractors will again be asked to submit sealed /online "Revised +/- Percentage (%) offers" on the original Estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted shall, in no case, be higher than the percentage quoted during their initial offer for the project. The lowest tender shall be decided on the basis of revised offers.
- vi. The process of online re-bidding amongst Two or more contractors offering same rates shall continue till L-1 bidder is discovered.
- vii. In case, any of such contractor(s) (quoted same tender amount during initial bidding or subsequent re-bidding) refuses to submit revised offer, it shall be treated as "withdrawal of tender' by the Contractor before acceptance. The earnest money of such contractors shall be forfeited.
- viii. In case all the lowest contractors those have quoted same tendered amount, refuse to participate in



online revised bidding process for the project, the EMD of such Contractors shall be forfeited and the tenders shall be re-invited for the project.

The Contractor(s) whose earnest money is

ix. The Contractor(s), whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the retendering process for the said project.

# 21 <u>e-Tender Service Provider Contact persons:</u>

Primary Contact Numbers: - M:- 9081000427, 9904407997

1.Jaymeet Rathod: 079-68136829, jaymeet.rathod@eptl.in

2. Vinayak Khambe: 079-68136835, vinayak.k@eptl.in

3 Nadeem Mansuri: 079-68136853, nadeem@eptl.in

4 Nandan Valera: 079-68136843, nandan.v@eptl.in

5 Hemangi Patel: 079-68136852, hemangi@eptl.in

6 Kanchan Kumari: 079-68136820, kanchan.k@eptl.in

7. Deepak Narekar: 079-68136863, deepak@eptl.in

8 Anshul Juneja: 079-68136840, anshul.juneja@eptl.in

9 Salina Motani: 079-68136831, salina.motani@eptl.in

10 Devang Patel: 079-68136859, devang@eptl.in

Alternate Contact No.: Riddhi Panchal: 079-40270506,

8460518168, riddhi.pancal@auctiontigher.net

- 22. No conditions other than mentioned in the tender will be considered, and if given they will have to be withdrawn before opening of the price-bid.
- 23. The SBIIMS reserve their rights to accept or reject any or all the tenders, either in whole or in part without assigning any reason(s) for doing so and no claim / correspondence shall be entertained in this regard.
- 24. Tenders received without EMD and Cost of Tender Documents shall be summarily rejected and such tenders shall not be allowed to participate in the online price bidding process.
- 25. In case the date of opening of tenders is declared as a holiday, the tenders will be opened on the next working day at the same time.
- 26. For any clarifications regarding E-Tendering procedure, System requirements etc. please contact M/s E-Procurement Technologies Limited, Ahmedabad, whose address is mentioned in the NIT.

Yours Faithfully,

Vice President & Circle Head, SBI Infra Management Solutions Pvt. Ltd; 3<sup>rd</sup> floor, Circle Office, State Bank of India, Synergy building, C-6, G-Block, Bandra -Kurla complex, Bandra East, Mumbai-400051.



#### **SECTION - 1**

#### **INSTRUCTIONS TO THE TENDERERS**

#### 1.0 Scope of work

Sealed Tenders are invited for and on behalf of SBIIMS, for and behalf of SBI / SBIIMSPL for **PROPOSED AIRCONDITIONING WORK AT RBO FIMM NASHIK.** 

#### 1. Site and its location

The proposed work is to be carried out at **PROPOSED AIRCONDITIONING WORK AT RBO FIMM NASHIK** for State Bank of India.

#### 2.0 Tender documents

2.1 The work has to be carried out strictly according to the conditions stipulated in the tender consisting of the following documents and the most workmen like manner.

**Instructions to tenderers** 

**General conditions of Contract** 

**Special conditions of Contract** 

**Additional specifications** 

**Drawings** 

#### Price bid A

- 2.2 The above documents shall be taken as complementary and mutually explanatory of one another but in case of ambiguities or discrepancies, shall take precedence in the order given below;
  - a) Price Bid
  - b) Technical specifications
  - c) Drawings
  - d) Special conditions of contract
  - f) General conditions of contract
  - g) Instructions to Tenderers
  - 2.3 The tender documents are not transferable.

# 3.0 Site Visit



3.1 The tenderer must obtain himself on his own responsibility and his own expenses all information and data that may be required for the purpose of filling this tender document and enter into a contract for the satisfactory performance of the work. The tenderer is requested satisfy himself regarding the availability of water, power, transport and communication facilities, the character quality and quantity of the materials, labour, the law and order situation, climatic conditions local authorities requirement, traffic regulations etc.

The tenderer will be fully responsible for considering the financial effect of any or all the factors while submitting his tender.

# 4.0 **Earnest Money**

- 4.1 The tenderers are requested to submit the Earnest Money of **Rs. 21,000/- (Rupees Twenty One Thousand Only)** by means of Demand Draft / Pay Order (Valid for a period of 90 Days from the last date of submission of the tender) from any Scheduled Nationalized Bank drawn in favour of SBI Infra Management Solutions Pvt. Ltd. and payable in Mumbai.
- 4.2 EMD in any other form other than as specified above will not be accepted. Tender not accompanied by the EMD in accordance with clause 4.1 above shall be rejected.
- 4.3 No interest will be paid on the EMD.
- 4.4 EMD of unsuccessful tenderer will be refunded within 30 days of award of Contract.
  - 4.5 EMD of successful tenderer will also be returned on receipt of Initial Security Deposit.

# 5.0 Initial/ Security Deposit

The successful tenderer will have to submit a sum equivalent to 2% of accepted tender value in favour of SBI within a period of 15 days of acceptance of tender. EMD will be returned on receipt of Initial security Deposit.

#### 6.0 **Security Deposit**

6.1 Total security deposit shall be 5% of contract value. Out of this 2% of contract value is in the form of Initial Security Deposit (ISD) which includes the EMD. Balance 3% shall be deducted from the running account bill of the work at the rate of 10% of the respective running account bill i.e., deduction from each running bill account will be @10% till Total Security Deposit (TSD) including ISD reaches to 5% of contract value. The 50% of the Total Security Deposit shall be paid to the contract on the basis of Architect's certifying the virtual completion. The balance 50% would be paid to the contractors after the defects liability period as specified in the contract.

#### 6.2 Additional Security Deposit

In case L-1 bidder quotes abnormally low rates (i.e. 10% or more, below estimated project cost), the bank may ask such bidder to deposit additional security deposit (ASD) equivalent to difference of estimated cost vis-à-vis L-1 quoted amount for due fulfillment of contract. Such ASD could be in the form of FDR / Bank's guarantee in the



Bank's name as per format approved by the Bank. On successful completion of work ASD will be returned to the contractor. In case contractor fails to complete the work in time or as per tender specification or leave the job incomplete, the bank will be at liberty to recover the dues from ASD or to forfeit such ASD as the case may be within its sole discretion.

6.3 No interest shall be paid to the amount retained by the Bank as Security Deposit & Additional Security Deposit.

#### 7.0 **Signing of contract Documents**

The successful tenderer shall be bound to implement the contract by signing an agreement and conditions of contract attached herewith within 30 days from the receipt of intimation of acceptance of the tender by the Bank. However, the written acceptance of the tenders by the Bank will constitute a binding agreement between the Bank and successful tenderer whether such formal agreement is subsequently entered into or not.

# 8.0 **Completion Period**

Time is essence of the contract. The work should be completed in all respect accordance with the terms of contract within a period of **90 days** from the date of award of work.

#### 9.0 Validity of tender

Tenders shall remain valid and open for acceptance for a period of 90 days from the date of opening price bid. If the tenderer withdraws his/her offer during the value period or makes modifications in his/her original offer which are not acceptable to Bank without prejudice to any other right or remedy the Bank shall be at liberty forfeit the EMD.

# 10.0 Liquidated Damages

The liquidated damages shall be 0.50% per week subject to a maximum of 5% of contract value.

#### 11.0 Rate and prices:

#### 11.1 In case of percentage rate tender

- 11.1.1 The tenderers shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in **Schedule of Quantities**; he will be willing to execute the work.
  - 11.1.2 The tender submitted shall be treated as invalid if:
    - a. The contractor does not quote percentage above/ below on the total amount of tender or any section/ sub head of the tender.
    - b. The percentage above/below is not quoted in figures & words both on the total amount of tender or any section/ sub head of the tender.
    - c. The percentage quoted above/below is different in figures & words on the total amount of tender or any section/ sub head of the tender.



- 11.1.3 Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected.
- 11.1.4 The intending bidders shall be asked to quote their offers in terms of "specific Percentage numerical value" (only up to two decimal places) above (+) / below (-) / at par with the Total Estimated Cost published for the project, he will be willing to execute the work.
  - 11.1.5 After taking into account the Percentage Rebate/ Addition Offered by all the bidders over the Estimate Cost, "Net Tender Value" of each bidder shall be evaluated (Mostly by the online system itself) and the bidder offering Lowest Tender Amount for projects pertaining to Procurement Purchase Contract and Highest Tender Amount for Sales Contracts shall be declared as "Successful Bidder".
- 11.1.6 The "Percentage Offer" shall be uniformly applicable to each and every item including all sections/ sub sections/sub heads of the Tender.
- 11.1.7 In case, the Lowest Tendered Amount (i.e. Estimated cost +/- Percentage Bid quoted) of two or more contractors is same, such lowest contractors will again be asked to submit sealed /online "Revised +/- Percentage (%) offers" on the original Estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted shall, in no case, be higher than the percentage quoted during their initial offer for the project. The lowest tender shall be decided on the basis of revised offers.
- 11.1.8 The process of online re-bidding amongst Two or more contractors offering same rates shall continue till L-1 bidder is discovered.
- 11.1.9 In case, any of such contractor(s) (quoted same tender amount during initial bidding or subsequent re-bidding) refuses to submit revised offer, it shall be treated as "withdrawal of tender' by the Contractor before acceptance. The earnest money of such contractors shall be forfeited.
- 11.1.10 In case all the lowest contractors those have quoted same tendered amount, refuse to participate in online revised bidding process for the project, the EMD of such Contractors shall be forfeited and the tenders shall be re-invited for the project.
- 11.1.11 The Contractor(s), whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process for the said project.
- 11.1.12 The rate quoted shall be firm and shall include all costs, allowances etc. except G.S.T, which shall be payable / reimbursed at actuals.
- 11.1.13 The SBIIMS reserve their rights to accept any tenders, either in whole or in part or may entrust the work in phases or may drop the part scope of work at any stage of the project or get the works done through another contractor at the cost of the accepted tenderer within its sole discretion without assigning any reason(s) for doing so and no claim / correspondence shall be entertained in this regard.



11.1.14 In case it is decided by the SBIIMS to reduce the scope of work at any stage of the project, the contractor shall not be entitled to raise any claim / compensation on account of reduction in scope of work. Also, the SBIIMS may consider for increase in scope of similar work in other buildings in phases but within a reasonable time interval and the contractor shall be bound to execute the same within the stipulated time period and as per rates quoted by them in this tender without any claim for price escalation.



#### **LETTER OF UNDERTAKING**

To, The V.P. & Circle Head, SBIIMSPL, Circle Office State Bank of India, Local Head Office, Bandra Kurla Complex, Bandra(E), Mumbai-400051.

#### Dear Sir,

Having examined the drawings, specification, design and schedule of quantities relating to the works specified in the memorandum hereinafter set out and having visited and examined the site of the works specified in the said memorandum and having acquired the requisite information relating thereto as affecting the tender, I/We hereby offer to execute the works specified in the said memorandum at the rates mentioned in the attached Schedule of Quantities and in accordance in all respects with the specifications, design, drawings and instructions in writing referred to in conditions of tender, the Articles of Agreement, Special Conditions, Schedule of Quantities and Conditions of Contract and with such materials as are provided for by, and in all other respects in accordance with such conditions so far as they may be applicable.

#### **MEMORANDUM**

	FILITOTANDON				
(a)	Description of work	Tender for PROPOSED AIRCONDITIONING WORK AT RBO FIMM NASHIK			
(b)	Earnest Money	<b>Rs.21,000/- (Rupees Twenty One Thousand Only)</b> by means of Demand Draft / Pay Order (Valid for a period of 90 Days from the last date of submission of the tender) from any scheduled Nationalized Bank drawn in favour of SBI Infra Management Solutions Pvt. Ltd. and payable in Mumbai.			
(c)	Time allowed for completion of the Works from Seven day after the date of written Order or date of handing over of the site (Whichever is later) to commence the work	90 Days			

- 1. Should this tender be accepted, I/we hereby agree to abide by and fulfill the terms and provisions of the said conditions of contract annexed hereto so far as may be applicable or in default thereof to forfeit and pay to SBIIM, the amount mentioned in the said contract.
- 2.I / We have deposited a sum of **Rs.21,000/- (Rupees Twenty One Thousand Only)** of the total tender amount as Earnest Money with the SBI Infra Management Solutions Pvt. Ltd. on behalf of SBI which amount is not to bear any interest. Should I / We fail to execute the Contract when called upon to do so I / We do hereby agree that



this sum shall be forfeited by me/us to SBI Infra Management Solutions Pvt. Ltd. on behalf of SBI.

3.I/ We have read and understood various clauses of this tender and hereby submit our specific undertaking and concurrence in terms clause 6.2 of "Instruction to tenderer" to deposit *Additional Security Deposit (ASD)* of required amount as provided for in this tender and within the stipulated period, in case, my/our tender is found too low (i.e. beyond 10% of the estimated cost), as a performance guarantee for due fulfilment of our contractual obligation for the project.

Further, under any circumstances, whatsoever, if I/We fail to comply the same including compliance of any such other conditions of tender within the stipulated time. I /We hereby, authorized SBIIMS to cancel my/Our tender, to forfeit my EMD/ISD/ASD and to take further necessary action as deemed fit including debarring our firm from participating in SBIIMS/ SBI future tenders/de-paneling etc.

4.I/ We understand that as per terms of this tender, the SBIIMS may consider accepting our tender in part or whole or may entrust the various work proposed in phases. We, therefore, undertake that we shall not raise any claim/ compensation in the eventuality of Bank/SBIIMS deciding to drop any of the work from the scope of work of this tender at any stage during the contract period. Further, we also undertake to execute the work entrusted to us in phases on our approved rates and within stipulated time limit without any extra claim for price escalation as also provided for in the clause 11.1.14 "Instructions to Tenderers" of this tender.

5.I/ We, hereby, also undertake that, we will not raise any claim for any escalation in the prices of any of the material during the currency of contract/execution/completion period including authorized extended contract period, if any.

#### Our Bankers are:

I)

ii)

The names of partners of our firm are:

i)

ii)

Name of the partner of the firm Authorised to sign Or (Name of person having Power of Attorney to sign the Contract. (Certified true copy of the Power of Attorney should be attached)

Yours faithfully,



Signature of Contractors.

Signature and addresses of Witnesses

i)

ii)

# (A)Contact Information

E-Procurement Technologies Ltd.	State Bank of India
B-704, Wall Street - II, Opp. Orient Club, Nr. Gujarat College, Ahmedabad - 380 006. Gujarat State, India Tel.: +91 79 61200 579   580   567   569   566	The Dy. Manager (Electrical), SBI Infra Management Solutions Pvt. Ltd. SBI, Local Head Office,3rd floor,C-6,G-Block Synergy Building, Bandra- Kurla Complex, Bandra (East), Mumbai-400 051.
Mr.Samjad Khan E-mail: samjad@auctiontiger.net Contact No: 9879996111 / 9265871720	Officer Name :R.K Sinha Department :SBIIMSPL Contact No :022 26445665 E-mail : sbiims.mum@gmail.com

# (B)SAMPLE BUISNESS RULE DOCUMENT

# ONLINE E-TENDERING FOR PROPOSED AIRCONDITIONING WORK AT RBO FIMM NASHIK.

# (A) Business rules for E-tendering:

- 1. Only empaneled contractors with SBIIMS under appropriate category who are invited by the project Architect/SBIIMS shall only be eligible to participate.
- 2. SBIIMS PVT.LTD. will engage the services of an E-tendering service provider who will provide necessary training and assistance before commencement of online bidding on Internet.



- 3. In case of e-tendering, SBIIMS will inform the vendor in writing, the details of service provider to enable them to contact and get trained.
- 4. Business rules like event date, closing and opening time etc. also will be communicated through service provider for compliance.
- 5. Contractors have to send by email, the compliance form in the prescribed format (provided by service provider), before start of E-tendering. Without this the vendor will not be eligible to participate in the event.
- 6. The Contractors will be required to submit the various documents in sealed Envelope to the office of SBI Infra Solutions Pvt Ltd.at the address mentioned hereinbefore by the stipulated date i.e. (1) Hard Copy of Technical Bid duly signed and stamped on each page (2) Demand Draft of specified amount of EMD (3) Copy of Receipt/Challan of Cost of Tender documents. Contractors not submitting any one or more documents shall not be eligible to participate in the on-line price bidding.
- 7. E-tendering will be conducted on schedule date & time.

# 8. The e-tendering will be treated as closed only when the bidding process gets closed in all respects for the item listed in the tender.

#### (B) Terms & conditions of E-tendering:

SBIIMS shall finalize the Tender through e-tendering mode for which M/s. E-Procurement Technologies Ltd. has been engaged by SBIIMS an authorized service provider. Please go through the guidelines given below and submit your acceptance to the same along with your Commercial Bid.

- 1. E-tendering shall be conducted by SBIIMS through M/s. E-Procurement Technologies Ltd., on pre-specified date. While the Contractors shall be quoting from their own offices/ place of their choice, Internet connectivity and other paraphernalia requirements shall have to be ensured by Contractors themselves. In the event of failure of their Internet connectivity, (due to any reason whatsoever it may be) it is the bidders' responsibility. In order to ward-off such contingent situation bidders are requested to make all the necessary arrangements/ alternatives such as back—up power supply whatever required so that they are able to circumvent such situation and still be able to participate in the E-tendering successfully. Failure of power at the premises of Contractors during the E-tendering cannot be the cause for not participating in the E-tendering. On account of this the time for the E-tendering cannot be extended and SBIIMS is not responsible for such eventualities.
- 2. M/s. E-Procurement Technologies Ltd.., shall arrange to train your nominated person(s), without any cost to you. They shall also explain you all the Rules related to the E-tendering. You are required to give your compliance on it before start of bid process.
- 3. BIDDING CURRENCY AND UNIT OF MEASUREMENT: Bidding will be conducted in Indian currency & Unit of Measurement will be displayed in Online E-tendering.



- 4. BID PRICE: The Bidder has to quote the rate as per the Tender Document provided by SBIIMS their appointed Architects.
- 5. VALIDITY OF BIDS: The Bid price shall be firm for a period specified in the tender document and shall not be subjected to any change whatsoever.
- **6.** Procedure of E-tendering:

#### Online E-tendering:

- (a) The NIT &Technical bid available on the Bank's website during the period specified in the NIT.
- (b) Online e-tendering is open to the empaneled bidders who receive NIT from the Architect and qualified for participating in the price bidding as provisions mentioned herein above through SBIIMS approved Service Provider.
- (c) The Price-Bid shall be made available online by the Service Provider wherein the contractors will be required to fill-in their percentage above/below the estimated cost.
- (d) The Contractors are advised not to wait till the last minute to submit their online item-wise quote in the price bid to avoid complications related with internet connectivity, network problems, system crash down, power failure, etc.
- (e) It is mandatory to all the bidders participating in the price bid to quote their rates for each and every item.
- (f) In case, contractor fails to quote their rates for any one or more tender items, their tender shall be treated as "*Incomplete Tender*" and shall be liable for rejection.
- 7. LOG IN NAME & PASSWORD: Each Bidder is assigned a Unique User Name & Password by M/s. E-Procurement Technologies Ltd. The Bidders are requested to change the Password after the receipt of initial Password from M/s. E-Procurement Technologies Ltd. All bids made from the Login ID given to the bidder will be deemed to have been made by the bidder.
- 8. BIDS PLACED BY BIDDER: Bids will be taken as an offer to execute the work as specified. Bids once made, cannot be cancelled / withdrawn and the Bidder shall be bound to execute the work at the quoted bid price. In case the L-1 Bidder backs out or fail to complete the work as per the rates quoted, SBIIMS shall at liberty to take action as deemed necessary including de-paneling such contractors and forfeiting their EMD.
- 9. At the end of the E-tendering, SBIIMS will decide upon the winner. SBIIMS decision on award of Contract shall be final and binding on all the Bidders.
- 10. SBIIMS shall be at liberty to cancel the E-tendering process / tender at any time, before ordering, without assigning any reason.
- 11. SBIIMS shall not have any liability to bidders for any interruption or delay in access to the site irrespective of the cause.
- 12. Other terms and conditions shall be as per your techno-commercial offers and other correspondences till date.
- 13. OTHER TERMS & CONDITIONS:



- The Bidder shall not involve himself or any of his representatives in Price manipulation of any kind directly or indirectly by communicating with other suppliers / bidders.
- The Bidder shall not divulge either his Bids or any other exclusive details of SBIIMS to any other party.
- SBIIMS decision on award of Contract shall be final and binding on all the Bidders.
- SBIIMS reserve their rights to extend, reschedule or cancel any E-tendering within its sole discretion.
- SBIIMS or its authorized service provider M/s. E-Procurement Technologies Ltd. shall not have any liability to Bidders for any interruption or delay in access to the site irrespective of the cause.
- SBIIMS or its authorized service provider/s. E-Procurement Technologies Ltd. is not responsible for any damages, including damages that result from, but are not limited to negligence.
- SBIIMS or its authorized service M/s. E-Procurement Technologies Ltd. will not be held responsible for consequential damages, including but not limited to systems problems, inability to use the system, loss of electronic information etc. N.B.
- All the Bidders are required to submit the Process Compliance Statement (Annexure II) duly signed to M/s. E-Procurement Technologies Ltd..
- All the bidders are requested to ensure that they have a valid digital signature certificate well in advance to participate in the online event.
   SIGNATURE OF THE CONTRACTOR WITH SEAL



#### **PROCESS TO DECIDE THE WINNER I.E. L-1 BIDDER:**

The following example will clarify the process to be followed by the SBIIMS Pvt. Ltd. in the proposed e-tendering to decide the winner i.e. L-1:

# **Illustrative Example:**

The Price Bids shall be submitted by the various bidders in the following format:

S.No.	Item description	Quantity	Unit	Rate Per Unit (in Rupees) ***	Amount (In Rupees) ***
(1)	(2)	(3)	(4)	(5)	(6)
1	ABC	6	Sq. mt.	100.00	600.00
2	EFG	1	Sq. mt.	50.00	50.00
3	HIJK	2	Sq. mt.	75.00	150.00
4	MNOP	3	Sq. mt.	100.00	300.00
Total Estimated Tender amount (sum of Items 1 to 4) denoted by (A)					1100.00
Per	centage rate	(+/-) X %			

<sup>\*\*\*</sup> The prices and amount mentioned in the above table are only meant for "Illustration" and the same has no relevance to the actual Price Bid required to be quoted by the bidders.



# (D).Process Compliance Statement (Annexure II)

(The bidders are required to print this on their company's letter head and sign, stamp before emailing)

To, E-Procurement Technologies Ltd. (Auction Tiger) B-704 Wall Street - II, Opp. Orient Club, Nr. Gujarat College, Ahmedabad - 380 006. Gujarat State, India

# Sub: Tender for PROPOSED AIRCONDITIONING WORK AT RBO FIMM NASHIK.

Dear Sir,

This has reference to the Terms & Conditions for the Reverse Auction mentioned in the Tender document

# This letter is to confirm that:

- 1) The undersigned is authorized representative of the company.
- 2) We have studied the Commercial Terms and the Business rules governing the Reverse Auction as mentioned in RFP of SBI as well as this document and confirm our agreement to them.
- 3) We also confirm that we have taken the training on the auction tool and have understood the functionality of the same thoroughly.
- 4) We confirm that SBI and ETL shall not be liable & responsible in any manner whatsoever for my/our failure to access & bid on the e-auction platform due to loss of internet connectivity, electricity failure, virus attack, problems with the PC, any other unforeseen circumstances etc. before or during the tendering event.

# 5) We also confirm that we have a valid digital signature certificate issued by a valid Certifying Authority.

- 6) We also confirm that we will mail the price confirmation / break up of our quoted price as per Annexure III & Annexure IV within 24 hours of the completion of the bid/ reverse auction and the format as requested by SBI/ETL.
- 7) We, hereby confirm that we will honor the Bids placed by us during the E-tendering/ auction process.

With regards,
Date:
Signature with company seal



Name:

Company / Organization: Designation within Company / Organization: Address of Company / Organization:

Scan it and send to this Document on sujith@eptl.in

# (E) Price Confirmation Letter (Annexure III)

(The bidders are required to print this on their company's letter head and sign, stamp before emailing)

To, E-Procurement Technologies Ltd. (Auction Tiger) B-704, Wall Street - II, Opp. Orient Club, Nr. Gujarat College, Ahmedabad - 380 006. Gujarat State, India

Sub: <u>Final Price Quoted During E-tendering for PROPOSED</u> **AIRCONDITIONING WORK AT RBO FIMM NASHIK.** 

(F) Price break up (Annexure IV)

Detailed Price Break up as per tender document



### **GENERAL CONDITIONS OF CONTRACT**

#### 1.0 **Definitions**: -

"Contract means the documents forming the tender and the acceptance thereof and the formal agreement executed between SBI Infra Management Solutions Pvt. Ltd. (client) and the contractor, together with the documents referred there in including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Architects/ Bank and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

- 1.1 In the contract the following expressions shall, unless the context otherwise requires, have the meaning hereby respectively assigned to them.
- 1.1.1 'SBIIMS' shall mean SBI Infra Management Solutions Pvt. Ltd. (Service Provider) having its Head Office, State Bank of India, Premises & Estate Department, Local Head Office, BandraKurla Complex, Bandra (E), Mumbai 400051 and includes the client's representatives, successors and assigns.
- 1.1.2 'Site Engineer' shall mean an Engineer appointed by the SBIIMS at site as their representative for day-to-day supervision of work and to give instructions to the contractors.
- 1.1.3 'The Contractor' shall mean the individual or firm or company whether incorporate not, undertaking the works and shall include legal personal representative of individual or the composing the firm or company and the permitted assignees of individual or firms of company.
- 1.1.4 The expression 'works' or 'work' shall mean the permanent or temporary work description in the "Scope of work" and / or to be executed in accordance with the contract includes materials, apparatus, equipment, temporary supports, fittings and things of kinds to be provided, the obligations of the contractor hereunder and work to be done by the contractor under the contract.
- 1.1.5 'Engineer' shall mean the representative of the Architect/consultant.
- 1.1.6 'Drawings' shall mean the drawings prepared by the Architects and issued by the Engineer and referred to in the specifications and any modifications of such drawings as may be issued by the Engineer from time to time 'Contract value shall mean value of the entire work as stipulated in the letter of acceptance of tender subject such additions there to or deductions there from as may be made under the provide herein after contained.
- 1.1.7 Specifications' shall mean the specifications referred to in the tender and modifications thereof as may time to time be furnished or approved by the Architect/ Consultant.
  - 1.1.7 "Month" means calendar month.
  - 1.1.9 "Week" means seven consecutive days.



- 1 .1.10 "Day" means a calendar day beginning and ending at 00 Hrs. and 24 Hrs. respectively.
- 1.1.11 "SBIIMS's Engineer" shall mean The Civil / Electrical Engineer in charge of the Project, as nominated by the V.P. and Circle Head, SBI Infra Management Solutions Pvt. Ltd.
- 1.1.12 The following shall constitute the Joint Project Committee (herein under referred to as JPC) for assessing and reviewing the progress of the work on the project and to issue instructions or directions from time to time for being observed and followed by the Architects Site Engineer /PMC and other consultants / contractors engaged in the execution of the project.
  - i) Vice President Circle Head / Vertical Head of SBIIMS
  - ii) SBIIMS Engineer (Civil and Electrical) in-charge of the Project, as may be nominated by the M.D. & C.E.O., SBI Infra Management Solutions Pvt. Ltd.
  - iii) Concerned partner / proprietor of the Architects and their Resident Architect Member.

#### **CLAUSE**

# 1.0 <u>Total Security Deposit</u>

Total Security deposit comprise of

**Earnest Money Deposit** 

Initial security deposit

Retention Money

# a) **EARNEST MONEY DEPOSIT** -

The tenderer shall furnish EMD of Rs.21,000/- (Rupees Twenty One Thousand Only) in the form of Demand draft or banker's cheque drawn in favour of SBIInfra Management Solutions Pvt. Ltd., on any Scheduled Bank. No tender shall be considered unless the EMD is so deposited in the required form. No interest shall be paid on this EMD. The EMD of the unsuccessful tenderer shall be refunded soon after the decision to award the contract is taken without interest. The EMD shall stand absolutely forfeited if the tenderer revokes his tender at any time the period when he is required to keep his tender open acceptance by the SBIIMS or after it is accepted by the SBIIMS the contractor fails to enter into a formal agreement or fails to pay the initial security deposit as stipulated or fails to commence the work within the stipulated time. EMD of successful tenderer shall also be refunded on receipt of ISD.



# b) INITIAL SECURITY DEPOSIT (LSD)

The amount of ISD shall be 2% of accepted value of tender in the form of DD/FDR drawn on any scheduled Bank and shall be deposited within 15 days from the date of acceptance of tender.

# **ADDITIONAL SECURITY DEPOSIT / PERFORMANCE GUARANTEE**

In case L-1 bidder quotes abnormally low rates (i.e. 10% or more, below estimated project cost), the bank may ask such bidder to deposit additional security deposit (ASD) equivalent to difference of estimated cost vis-à-vis L-1 quoted amount for due fulfillment of contract as performance guarantee. Such ASD could be in the form of FDR / Bank's guarantee in the Bank's name as per format approved by the Bank. On successful completion of work ASD will be returned to the contractor. In case contractor fails to complete the work in time or as per tender specification or leave the job incomplete, the bank will be at liberty to recover the dues from ASD or to forfeit such ASD as the case may be within its sole discretion.

No interest shall be paid to the amount retained by the Bank as Security Deposit.

# c) Retention Money: -

Besides the SD as deposited by the contractor in the above said manner, the Retention money shall be deducted from the running account bill at the rate of 10% of the gross value of work done by the contractor and claimed in each bill provided the total security deposit i.e. ISD plus EMD plus Retention Money shall both together not exceed 5% of the contract value. The 50% of the total security deposit shall be refunded to the contractor without any interest on issue of Virtual Completion certificate by the Architect/consultant. The balance 50% of the total security deposit shall be refunded to the contractors without interest within fifteen days after the end of defects liability period provided the contractor has satisfactorily attended to all defects, if any, in accordance with the conditions of contract including site clearance.

#### 2.0 Language

The language in which the contract documents shall be drawn shall be in English.

#### 3.0 **Errors, omissions and discrepancies**

In case of errors, omissions and/ or disagreement between written and scaled dimensions on the drawings or between the drawings and specifications etc., the following order shall apply.

- i) Between scaled and written dimension (or description) on a drawing, the latter shall be adopted.
- ii) Between the written or shown description or dimensions in the drawings and the corresponding one in the specification the former shall be taken as correct.



- iii) Between written description of the item in the specifications and descriptions in bills of quantities of the same item, the former shall be adopted:
- a) In case of difference between rates written in figures and words, the rate in words shall prevail.
- b) Between the duplicate / subsequent copies of the tender, the original tender shall be taken as correct.

#### 4.0 **Scope of Work:**

The contractor shall carryout complete and maintain the said work in every respect strictly accordance with this contract and with the directions of and to the satisfaction Bank to be communicated through the Architect/consultant. The Architect/consultant at the directions of the SBIIMS from time to time issue further drawings and / or write instructions, details directions and explanations which are here after collectively references to as Architect's /consultant's instructions in regard to the variation or modification of the design, quality or quantity of any work or the addition or omission or substitution work. Any discrepancy in the drawings or between BOQ and / or drawings and / or specifications. The removal from the site of any material brought thereon by the Contractor and any substitution of any other materials therefore the removal and / or re-executed of any work executed by him. The dismissal from the work of any person engaged there upon.

# 5.0 i) Letter of Acceptance:

Within the validity period of the tender the SBIIMS shall issue a letter of acceptance directly or through the Architect by registered post or otherwise depositing at the of the contractor as given in the tender to enter into a Contract for the execution of the work as per the terms of the tender. The letter of acceptance shall constitute a binding contract between the SBIIMS and the contractor.

#### ii) Contract Agreement:

On receipt of intimation of the acceptance of tender from the SBIIMS Pvt. Ltd/ Architect, the successful tenderer shall be bound to implement the contract and within fifteen days there of shall sign an agreement in a non-judicial stamp paper of appropriate value.

#### 6.0 **Ownership of drawings**:

All drawings, specifications and copies thereof furnished by the SBIIMS / SBI through its Architect / consultants are the properties of the SBIIMS They are not to be used on other work.

#### 7.0 **Detailed drawings and instructions:**

The SBIIMS through its Architects / consultants shall furnish with reasonable proper additional instructions by means of drawings or otherwise necessary for



the execution of the work. All such drawings and instructions shall be consistent with contract documents, true developments thereof and reasonably inferable there.

The work shall be executed in conformity therewith and the contractor prepare a detailed programme schedule indicating therein the date of start and completion of various activities on receipt of the work order and submit the same to the SBIIMS through the Architect/consultant

#### 7.1 Copies of agreement

Two copies of agreement duly signed by both the parties with the drawings shall be handed over to the contractors.

# 8.0 Liquidated damages:

If the contractor fails to maintain the required progress in terms of clause 28/29 of GCC or to complete the work and clear the site including vacating their office on or before the contracted or extended date or completion, without justification in support of the cause of delay, he may be called upon without prejudice to any other right of remedy available under the law to the SBIIMS on account of such breach to pay a liquidated damage at the rate of 0.50% of the contract value which subject to a maximum of 5% of the contract value.

# 9.0 Materials, Appliances and Employees

Unless or otherwise specified the contractor shall provide and pay for all materials, labour, water, power, tools, equipment transportation and any other facilities that are required for the satisfactory execution and completion of the work. Unless or otherwise specified all materials shall be new and both workmanship and materials shall be best quality. The contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the work assigned to him. Workman whose work or behavior is found to be unsatisfactory by the SBIIMS /ARCHITECT/ consultant he shall be removed from the site immediately.

#### **10.0** Permits, Laws and Regulations:

Permits and licenses required for the execution of the work shall be obtained by the contractor at his own expenses. The contractor shall give notices and comply with the regulations, laws, and ordinances rules, applicable to the contract. If the contractor observes any discrepancy between the drawings and specifications, he shall promptly notify the SBIIMS in writing under intimation of the Architect/ Consultant. If the contractor performs any act, which is against the law, rules and regulations he shall meet all the costs arising there from and shall indemnify the SBIIMS any legal actions arising there from.

#### 11.0 **Setting out Work:**

The contractor shall set out the work and shall be responsible for the true and perfect setting out of the same and for the correctness of the positions, levels,



dimensions, and alignment of all parts thereof and get it approved by the Architect / consultant before proceeding with the work. If at any time any error in this respect shall appear during the progress of the works, irrespective of the fact that the layout had been approved by, the Architect / consultant the contractor shall be responsible for the same ad shall his own expenses rectify such error, if so, required to satisfaction of the SBIIMS

## 12.0 **Protection of works and property:**

The contractor shall continuously maintain adequate protection. of all his work from damage and shall protect the SBI's properties from injury or loss arising in connection with contract. He shall make good any such damage, injury, loss, except due to causes beyond his control and due to his fault or negligence.

He shall take adequate care and steps for protection of the adjacent properties. The contractor shall take all precautions for safety and protections of his employees on the works and shall comply with all applicable provisions of Govt. and local bodies' safety laws and building codes to prevent accidents, or injuries to persons or property on about or adjacent to his place of work. The contractor shall take insurance covers as per clause 24.0 at his own cost. The policy may be taken in joint names of the contractor and the SBIIMS and the original policy may be lodged with the SBIIMS

# 13.0 **Inspection of work:**

The SBIIMS / Architect / Consultant or their representatives shall at all reasonable times have free access to the work site and / or to the workshop, factories, or other places where materials are lying or from where they are obtained and the contractor shall give every facility to the SBIIMS/Architect/consultant and their representatives necessary for inspection and examination and test of the materials and workmanship. No person unless authorized by the SBIIMS/ Architect /Consultant except the representative of Public authorities shall be allowed on the work at any time. The proposed work either during its construction stage or its completion can also be inspected by the Chief Technical Examiner's Organization a wing of Central Vigilance commission.

#### 14.0 Assignment and subletting

The whole of work included in the contract shall be executed the contractor and he shall not directly entrust and engage or indirectly transfer, assign or underlet the contract or any part or share there of or interest therein without the written consent of the SBIIMS through the Architect and no undertaking shall relieve the contractor from the responsibility of the contractor from active & superintendence of the work during its progress.

#### 15.0 Quality of materials, workmanship & Test

All materials and workmanship shall be best of the respective kinds described in the contract and in accordance with Architect/consultant instructions and shall be subject from time to time to such tests as the Architect/consultant may direct at the place of manufacture or fabrication or on the site or an approved testing



laboratory. The contractor shall provide such assistance, instruments, machinery, labor, and materials as are normally required for examining measuring sampling and testing any material or part of work before incorporation in the work for testing as may be selected and required by the Architect/consultant.

# ii) Samples

All samples of adequate numbers, size, shades & pattern as per specifications shall be supplied by the contractor without any extra charges. If certain items proposed to be used are of such nature that samples cannot be presented or prepared at the site detailed literature / test certificate of the same shall be provided to the satisfaction of the Architect/consultant. Before submitting the sample / literature the contractor shall satisfy himself that the material / equipment for which he is submitting the sample / literature meet with the requirement of tender specification. Only when the samples are approved in writing by the Architect / consultant the contractor shall proceed with the procurement and installation of the particular material / equipment. The approved samples shall be the signed by the Architect / Consultant for identification and shall be kept on record at site office until the completion of the work for inspection / comparison at any time. The Architect/Consultant shall take reasonable time to approve the sample. Any delay that might occur in approving the samples for reasons of its not meeting the specifications or other discrepancies inadequacy in furnishing samples of best qualities from various manufacturers and such other aspects causing delay on the approval of the materials / equipment etc. shall be to the account of the contractor.

### iii) Cost of tests

The cost of making any test shall be borne by the contractor if such test is intended by or provided for in the specification or BOQ.

# iv) Costs of tests not provided for

If any test is ordered by the Architect/ Consultant which is either

a) If so intended by or provided for or (in the cases above mentioned) is not so particularized, or though so intended or provided for but ordered by the Architect / Consultant to be carried out by an independent person at any place other than the site or the place of manufacture or fabrication of the materials tested or any Government / approved laboratory, then the cost of such test shall be borne by the contractor.

#### 16.0 Obtaining information related to execution of work

No claim by the contractor for additional payment shall be entertained which is consequent upon failure on his part to obtain correct information as to any matter affecting the execution of the work nor any misunderstanding or the obtaining incorrect information or the failure to obtain correct information relieve him from any risks or from the entire responsibility for the fulfillment of contract.

#### 17.0 **Contractor's Superintendence**



The contractor shall give necessary personal superintendence during the execution the works and as long, thereafter, as the Architect / Consultant may consider necessary until the expiry of the defects liability period, stated here to.

#### 18.0 Quantities

i) The bill of quantities (BOQ) unless or otherwise stated shall be deemed to have been prepared in accordance with the Indian Standard Method of Measurements and quantities. The rate quoted shall remain valid for variation of quantity against individual item to any extent. The entire amount paid under Clause 19, 20 hereof as well as amounts of prime cost and provision sums, if any, shall be excluded.

#### 19.0 Works to be measured

The Architect/Consultant may from time to time intimate to the contractor that he requires the work to be measured and the contractor shall forthwith attend or send a representative to assist the Architect in taking such measurements and calculation and to furnish all particulars or to give all assistance required by any of them. Such measurements shall be taken in accordance with the Mode of measurements detail in the specifications. The representative of the Architect / Consultant shall take measurements with the contractor's representative and the measurements shall be entered in the measurement book. The contractor or his authorized representative shall sign all the pages of the measurement book in which the measurements have been recorded in token of his acceptance. All the corrections shall be duly attested by both representatives. No over writings shall be made in the Measurement Book (M.B.) Should the contractor not attend or neglect or omit to depute his representative to take measurements, the measurements recorded by the representative of the Architect / consultant shall be final. All authorized extra work, omissions and all variations made shall be included such measurement.

#### 20.0 Variations

No alteration, omission or variation ordered in writing by the Architect / consultant vitiates the contract. In case the SBIIMS / Architect / Consultant thinks proper at any during the progress of works to make any alteration in, or additions to or omission from the works or any. alteration in the kind or quality of the materials to be used therein, the Architect / Consultant shall give notice thereof in writing to the contractor shall confirm in writing within seven days of giving such oral instructions the contract shall alter to, add to, or omit from as the case may be in accordance with such but the contractor shall not do any work extra to or make any alterations or additions to or omissions from the works or any deviation from any of the provisions of the contract, stipulations, specifications or contract drawings without previous consent in writing of the Architect/ Consultant and the value of such extras, alterations, additions or omissions shall in all cases be determined by the Architect / Consultant and the same shall be added to or deducted from the contract value, as the case may be.



#### 21.0 Valuation of Variations

No claim for an extra shall be allowed unless it shall have been executed under the authority of the Architect / Consultant with the concurrence of the SBIIMS as herein mentioned. Any such extra is herein referred to as authorized extra and shall be made in accordance with the following provisions.

- a) (i) The net rates or prices in the contract shall determine the valuation of the extra work where such extra work is of similar character and executed under similar conditions as the work priced herein.
  - (ii) Rates for all items, wherever possible should be derived out of the rates given in the priced BOQ.
- b) The net prices of the original tender shall determine the value of the items omitted, provided if omissions do not vary the conditions under which any remaining items of Works are carried out, otherwise the prices for the same shall be valued under sub-Clause 'c' hereunder.
- c) Where the extra works are not of similar character and/or executed under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items or works are carried out, then the contractor shall within 7 days of the receipt of the letter of acceptance inform the Architect/ consultant of the rate which he intends to charge for such items of work, duly supported by analysis of the rate or rates claimed and the Architect/ consultant shall fix such rate or prices as in the circumstances in his opinion are reasonable and proper, based on the market rate.
- d) Where extra work cannot be properly measured or valued the contractor shall be allowed day work prices at the net rates stated in the tender, of the BOQ or, if not, so stated then in accordance with the local day work rates and wages for the district; provided that in either case, vouchers specifying the daily time (and if required by the Architect/Consultant) the workman's name and materials employed be delivered for verifications to the Architect /consultant at or before the end of the week following that in which the work has been executed.
- e) It is further clarified that for all such authorized extra items where rates cannot be derived from the tender, the Contractor shall submit rates duly supported by rate analysis worked on the 'market rate basis for material, labour hire / running charges of equipment and wastages etc. plus 15% towards establishment charges, contractor's overheads and profit. Such items shall, not be eligible for escalation.

#### 22.0 Final measurement

The measurement and valuation in respect of the contract shall be completed within two months of the virtual completion of the work.

### 23.0 Virtual Completion Certificate (VCC)



On successful completion of entire works covered by the contract to the full satisfaction of the SBIIMS, the contractor shall ensure that the following works have been completed the satisfaction of the SBIIMS:

- a) Clear the site of all scaffolding, wiring, pipes, surplus materials, contractor's labour equipment and machinery.
- b) Demolish, dismantle and remove the contractor's site office, temporary works, structure including labour sheds/camps and constructions and other items and things whatsoever brought upon or erected at the site or any land allotted to the contractor by the SBIIMS not incorporated in the permanent works.
- c) Remove all rubbish, debris etc. from the site and the land allotted to the contractor the SBIIMS and shall clear, level and dress, compact the site as required by the SBIIMS
- d) Shall put the SBIIMS in undisputed custody and possession of the site and all land allot by the SBIIMS
  - e) Shall hand over the work in a peaceful manner to the SBIIMS
- f) All defects / imperfections have been attended and rectified as pointed out by the Architects to the full satisfaction of SBIIMS

Upon the satisfactory fulfillment by the contractor as stated above, the contractor is entitled to apply to the Architect / consultant is satisfied of the completion of work. Relative to which the completion certificate has been sought, the Architect/ consultant shall within fourteen (14) days of the receipt of the application for completion certificate, issue a VCC in respect of the work for which the VCC has applied.

This issuance of a VCC shall not be without prejudice to the SBIIMS's rights and contractor liabilities under the contract including the contractor's liability for defects liability nor shall the issuance of VCC in respect of the works or work at any site be construction as a waiver of any right or claim of the SBIIMS against the contractor in respect of or work at the site and in respect of which the VCC has been issued.

#### 24.0 Work by other agencies

The SBIIMS / Architect / consultant reserves the rights to use premises and any portion the site for execution of any work not included in the scope of this contract which it may desire to have carried out by other persons simultaneously and the contractor shall not only allow but also extend reasonable facilities for the execution of such work. The contractor however shall not be required to provide any plant or material for the execution of such work except by special arrangement with the SBI. Such work shall be carried out in such manner as not to impede the progress of the works included in the contract.

#### 25.0 **Insurance of works**



- 25.1 Without limiting his obligations and responsibilities under the contract the contractor shall insure in the joint names of the SBI / SBIIMS and the contractor against all loss of damages from whatever cause arising other than the excepted risks, for which he is responsible under the terms of contract and in such a manner that the SBIIMS and contractor are covered for the period stipulated vide clause of GCC and are also covered during the period of maintenance for loss or damage arising from a cause, occurring prior to the commencement of the period of maintenance and for any loss or damage occasioned by the contractor in the course of any operations carried out by him for the purpose of complying with his obligations under clause.
- a) The Works for the time being executed to the estimated current Contract value thereof, or such additional sum as may be specified together with the materials for incorporation in the works at their replacement value.
- b) The constructional plant and other things brought on to the site by the contractor to the replacement value of such constructional plant and other things.
- c) Such insurance shall be affected with an insurer and in terms approved by the SBIIMS which approval shall not be unreasonably withheld and the contractor shall whenever require produce to the Architect / consultant the policy if insurance and the receipts for payment of the current premiums.

# 25.2 Damage to persons and property

The contractor shall, except if and so far as the contract provides otherwise indemnify the SBI against all losses and claims in respect of injuries or damages to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation of damages for or with respect to:

- a) The permanent use or occupation of land by or any part thereof.
- b) The right of SBIIMS to execute the works or any part thereof on, over, under, in or through any lands.
- c) Injuries or damages to persons or properties which are unavoidable result of the execution or maintenance of the works in accordance with the contract
- d) Injuries or damage to persons or property resulting from any act or neglect of the SBIIMS their agents, employees or other contractors not being employed by the contractor or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the contractor, his servants or agents such part of the compensation as may be just and equitable having regard to the extent of the responsibility of the SBIIMS, their employees, or agents or other employees, or agents or other contractors for the damage or injury.

#### 25.3 **Contractor to indemnify SBIIMS**



The contractor shall indemnify the SBIIMS against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the provision sub-clause 25.2 of this clause.

# 25.4 **Contractor's superintendence**

The contractor shall fully indemnify and keep indemnified the SBI/SBIIMS against any action, claim, or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claim made under or action brought against SBIIMS in respect of such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expenses to settle any dispute or to conduct any litigation that may arise there from, provided that the contractor shall not be liable to indemnify the SBIIMS if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Architect / consultant in this behalf.

## 25.5 Third Party Insurance

25.5.1 Before commencing the execution of the work the contractor but without limiting his obligations and responsibilities under clause 24.0 of GCC shall insure against his liability for any material or physical damage, loss, or injury which may occur to any property including that of SBIIMS, or to any person, including any employee of the SBIIMS, by or arising out of the execution of the works or in the carrying out of the contract, otherwise than due to the matters referred to in the provision to clause 24.0 thereof.

#### 25.5.2 Minimum amount of Third-Party Insurance

Such insurance shall be affected with an insurer and in terms approved by the SBIIMS which approval shall not be reasonably withheld and for at least the amount stated below. The contractor shall, whenever required, produce to the. Architect / consultant the policy or policies of insurance cover and receipts for payment of the current premiums.

25.6 The minimum insurance cover for physical property, injury, and death is Rs.5 Lakh per occurrence with the number of occurrences limited to four. After each occurrence contractor will pay additional premium necessary to make insurance valid for four occurrences always.

#### 25.7 **Accident or Injury to workman:**

25.7.1 The SBIIMS shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workmen or other person in the employment of the contractor or any subcontractor, save and except an accident or injury resulting from any act or default of the SBIIMS or their agents, or employees. The contractor shall indemnify and keep indemnified SBIIMS against all such damages and compensation, save and



except as aforesaid, and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

# 25.7.2 Insurance against accidents etc. to workmen

The contractor shall insure against such liability with an insurer approved by the SBIIMS during the whole of the time that any persons are employed by him on the works and shall, when required, produce to the Architect / consultant such policy of insurance and receipt for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor the contractor's obligation to insured as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that SBIIMS is indemnified under the policy but the contractor shall require such sub-contractor to produce to the Architect /consultant when such policy of insurance and the receipt for the payment of the current premium.

#### 25.7.3 Remedy on contractor's failure to insure

If the contractor fails to effect and keep in force the insurance referred to above or any other insurance which he may be required to effect under the terms of contract, then and in any such case the SBIIMS may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the SBIIMS as aforesaid from any amount due or which may become due to the contractor, or recover the same as debt from the contractor.

25.7.4 Without prejudice to the others rights of the SBIIMS against contractors. In respect of such default, the employer shall be entitled to deduct from any sums payable to the contractor the amount of any damages costs, charges, and other expenses paid by the SBIIMS and which are payable by the contractors under this clause. The contractor shall upon settlement by the Insurer of any claim made against the insurer pursuant to a policy taken under this clause, proceed with due diligence to rebuild or repair the works destroyed or damaged. In this event all the monies received from the Insurer in respect of such damage shall be paid to the contractor and the Contractor shall not be entitled to any further payment in respect of the expenditure incurred for rebuilding or repairing of the materials or goods destroyed or damaged

#### 26.0 **Commencement of Works:**

The date of commencement of the work will be reckoned as the date, fifteen days from the date of award of letter by the SBIIMS

#### 27.0 Time for completion

Time is essence of the contract and shall be strictly observed by the contractor. The entire work shall be completed within a period of **90 days** from the date of commencement. If required in the contract or as directed by the Architect / consultant. The contractor shall complete certain portions of work before completion of the entire work. However, the completion date shall be reckoned as the date by which the whole work is completed as per the terms of the contract.



#### 28.0 Extension of time

If, in the opinion of the Architect/consultant, the work be delayed for reasons beyond the control of the contractor, the Architect/consultant may submit a recommendation to the SBIIMS to grant a fair and reasonable extension of time for completion of work as per the terms of contract. If the contractor needs an extension of time for the completion of work or if the completion of work is likely to be delayed for any reasons beyond the due date of completion as stipulated in the contract, the contractor shall apply to the SBIIMS through the Architect' Consultant in writing at least 30 Days before the expiry of the scheduled time and while applying for extension of time he shall furnish the reason in detail and his justification if any', for the delays. The Architect/consultant shall submit their recommendations to the SBIIMS in the prescribed format for granting extension of time. While granting extension of time the contractor shall be informed the period extended time which will qualify for levy of liquidated damages. For the balance period in excess of original stipulated period and duly sanctioned extension of time by the provision of liquidated damages as stated under clause 8.0 shall become applicable. Further the contract shall remain in force even for the period beyond the due date of completion irrespective whether the extension is granted or not.

#### 29. Rate of progress

Whole of the materials, plant and labour to be provided by the contractor and the mode, manner and speed of execution and maintenance of the works are to be of a kind and conducted in a manner to the satisfaction of the Architect / consultant should the rate of progress of the work or any part thereof be at any time be in the opinion the. Architect / consultant too Slow to ensure the completion of the whole of the work the prescribed time or extended time for completion the Architect / consultant shall thereupon take such steps as considered necessary by the Architect / consultant to expedite progress so as to complete the works by the prescribed time or extended time. Such communications from the Architect / consultant neither shall relieve the contractor from fulfilling obligations under the contract nor will he be entitled to raise any claims arising out of such directions.

#### 30.0 Work during nights and holidays

Subject to any provision to the contrary contained in the contract no permanent work shall save as herein provided be carried on during the night or on holidays without the permission in writing of the Architect / consultant, save when the work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the work in which case the contractor shall immediately advise the Architect / consultant. However, the provisions of the clause shall not be applicable in the case of any work which becomes essential to carry by rotary or double shifts in order to achieve the progress and quality of the part of the works being technically required / continued with the prior approval of the Architect / consultant at no extra cost to the SBIIMS.

All work at night after obtaining approval from competent authorities shall be carried out without unreasonable noise and disturbance.

# 31.0 No compensation or restrictions of work



If at any time after acceptance of the tender SBIIMS shall decide to abandon or reduce the scope of work for any reason whatsoever and hence not required the whole or any part of the work to be carried out. The Architect / consultant shall give notice in writing that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise what so ever on account of any profit or advantage which he might have derived from the execution of the Work fully but which he did not derive in consequence of the foreclosure of the whole or part of the work.

Provided that the contractor shall be paid the charges on the cartage only of materials actually and bona-fide brought to the site of the work by the contractor and rendered surplus as a result of the abandonment, curtailment of the work or any portion thereof and then taken back by the contractor, provided however that the Architect / Consultant shall have in such cases the option of taking over all or any such materials at their purchase price or a local current rate whichever is less.

"In case of such stores having been issued from SBIIMS stores and returned by the contractor to stores, credit shall be given to him at the rates not exceeding those at which were originally issued to the contractor after taking into consideration and deduction for claims on account of any deterioration or damage while in the custody of the contractor and in this respect the decision of Architect / consultant shall be final.

# 32.0 Suspension of work

- i) The contractor shall, on receipt of the order in writing of the Architect / consultant (whose decision shall be final and binding on the contractor) suspend the progress of works or any part thereof for such time and in such manner as Architect /consultant may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of following reasons:
  - a) On account any default on the part of the contractor, or
- b) For proper execution of the works or part thereof for reasons other than the default the contractor, or
- c) For safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works the extent necessary and carry out the instructions given in that behalf by the Architect / consultant.

- i) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above: The contractor shall be entitled to an extension of time equal to the period of every such suspension. No compensation whatsoever shall be paid on this account.
- 33 Action when the whole security deposit is forfeited



In any case in which under any clause or clauses of this contract, the Contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit the Architect / consultant shall have the power to adopt any of the following course as they may deem best suited to the interest of the SBIIMS:

- a) To rescind the contract (of which rescission notice in writing to the contractor by -Architect / consultant shall be conclusive evidence) and in which case the security, deposit of the contractor shall be forfeited and be absolutely at the disposal of SBIIMS
- b) To employ labour paid by the SBIIMS and to supply materials to carry out the work, or part of the work, debiting the contractor with the cost of the labour and materials cost of such labour and materials as worked out by the Architect/consultant shall final and conclusive against the contractor) and crediting him with the value of the work done, in all respects in the same manner and at the same manner and at the same rates as if it had been carried out by the contractor under the terms of this contract certificate of Architect /consultant as to the value of work done shall be final conclusive against the contractor.
- c) To measure up the work of the contractor, and to take such part thereof as shall unexecuted, out of his hands, and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor, if the whole work had been executed by him ( The amount of which excess the certificates in writing of the Architects / consultant shall final and conclusive) shall be borne by original contractor and may be deducted f any money due to him by SBIIMS under the contract or otherwise, or from his security deposit or the proceeds of sale thereof, or sufficient part thereof.

In the event of any of above courses being adopted by the SBIIMS the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any material or entered into any engagements or make any advances on account of, or with a view to the execution of the work or the performance of the contract and in case the contract shall be rescind under the provision aforesaid, the contractor shall not be entitled to recover or to be paid any sum or any work thereto for actually performed under this contract, unless, and until the Architect / consultant will have certified in writing the performance of such work and the value payable in respect thereof, and he shall only be entitled to be paid the value so certified.

#### 34.0 Owner's right to terminate the contract

If the contractor being an individual or a firm commit any 'Act of insolvency' or shall be adjusted an insolvent or being an incorporated company shall have an order for compulsory winding up voluntarily or subject to the supervision of Govt. and of the Official Assignee of the liquidator in such acts of insolvency or winding up shall be unable within seven days after notice to him to do so, to show to the reasonable satisfaction of the Architect / Consultant that he is able to carry out and fulfill the contract, and to dye security therefore if so required by the Architect / Consultant or if the contractor (whether an individual firm or incorporated Company) shall suffer execution to be issued or shall suffer any payment under



this contract to be attached by or on behalf of any of the creditors of the contractor.

Or shall assign or sublet this contract without the consent in writing of the SBIIMS through the Architect/Consultant or shall charge or encumber this contract or any payment due to which may become due to the contractor there under:

- a) has abandoned the contract; or
- b) has failed to commence the works, or has without any lawful excuse under these conditions suspended the progress of the works for 14 days after receiving from the SBIIMS through the Architect / consultant written notice to proceed, or
- c) has failed to proceed with the works with such diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or

has failed to remove the materials from the site or to pull down and replace work within seven days after written notice from the SBIIMS through the Architect / Consultant that the said materials were condemned and rejected by the Architect/consultant under these conditions; or has neglected or failed persistently to observe and perform all or any of the acts matters or things by this contract to be observed and performed by the contactor for seven days after written notice shall have been given to the contractor to observe or perform the same or has to the detriment of good workmanship or in defiance of the SBIIMS or Architect's / consultant's instructions to the contrary subject any part of the contract. Then and in any of said cases the SBIIMS and or the Architect / consultant, may not withstanding any previous waiver, after giving seven days' notice in writing to the contractor, determine the contract, but without thereby affecting the powers of the SBIIMS or the Architect / consultant or the obligation and liabilities of the contractor the whole of which shall continue in force as fully as if the contract had not been determined and as if the works subsequently had been executed by or on behalf of the contractor. And, further the SBIIMS through the Architect / consultant their agents or employees may enter upon and take possession of the work and all plants, took scaffoldings, materials, sheds, machineries lying upon the premises or on the adjoining lands or roads use the same by means of their own employees or workmen in carrying on and completing the work or by engaging any other contractors or persons to the work and the contractor shall not in any was interrupt or do any act, matter or thing to prevent or hinder such other contractor or other persons employed for complement and finishing or using the materials and plant for the works.

When the works shall be completed or as soon thereafter as convenient the SBIIMS or Architect / consultant shall give a notice in writing to the contractor to remove his surplus materials and plants and should the contractor fail to do so within 14 days after receive thereof by him the SBIIMS sell the same by publication, and after due publication, and shall, adjust the amount realized by such auction. The contractor shall have no right to question any of the act of the SBIIMS incidental to the sale of the materials etc.

# 35.0 **Certificate of payment**



The contractor shall be entitled under the certificates to be issued by the Architect / consultant to the contractor within 10 working days from the date of certificate to payment from SBIIMS from time to time. The SBIIMS shall recover the statutory recovering other dues including the retention amount from the certificate of payment.

Provided always that the issue of any certificate by the Architect / consultant during progress of works or completion shall not have effect as certificate of satisfaction relieve the contractor from his liability under clause.

The Architect / consultant shall have power to withhold the certificate if the work or in part thereof is not carried out to their satisfaction.

The Architect / consultant may by any certificate make any corrections required previous certificate.

The SBIIMS shall modify the certificate of payment as issued by the Architect / consultant from time to time while making the payment

The contractor shall submit interim bills only after taking actual measurements and properly recorded in the Measurement Book (M. B.)

The Contractor shall not submit interim bills when the approximate value of work done by him is less than Rs. 20.00 Lakh.

The final bill may be submitted by contractor within a period of one month from the date of virtual completion and Architect / consultant shall issue the certificate of payment within a period of two months. The SBIIMS shall pay the amount within a period of three months from the date of issue of certificate provided there is no dispute in respect of rates and quantities.

The contractor shall submit the interim bills in the prescribed format with all details.

### **36.0 A. Settlement of Disputes and Arbitration**

Except where otherwise provided in the contract all questions and disputes to the meaning of the specifications, design, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question , claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings specifications, estimates, instructions orders or these conditions or otherwise concerning the work or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:

i) If the contractor considers that he is entitled to any extra payment or compensation in respect of the works over and above the amounts admitted as payable by the Architect or in case the contractor wants to dispute the validity of any deductions or recoveries made or proposed to be made from the contract or raise any dispute, the contractor shall forthwith give notice in writing of his claim,



or dispute to The M.D.& C.E.O. SBIIMS Pvt. Ltd., Head Office, Raheja Chambers, Free Press Journal Marg, Mumbai and endorse a copy of the same to the Architect, within 30 days from the date of disallowance thereof or the date of deduction or recovery. The said notice shall give full particulars of the claim, grounds on which it is based and detailed calculations of the amount claimed and the contractor shall not be entitled to raise any claim nor shall the Bank be in any way liable in respect of any claim by the contractor unless notice of such claim shall have been given by the contractor to the M.D. & C.E.O. SBIIMS Pvt. Ltd., Head Office in the manner and within the time as aforesaid. The Contractor shall be deemed to have waived and extinguished all his rights in respect of any claim not notified to the M.D. & C.E.O. SBIIMS Pvt. Ltd., Head Office in writing in the manner and within the time aforesaid.

### **B. Settlement of Disputes and Arbitration**

The M.D & C.E.O. SBIIMS Pvt. Ltd., Head Office shall give his decision in writing on the claims notified by the receipt of the contractor may within 30 days of the receipt of the decision of the M.D & C.E.O. SBIIMS Pvt. Ltd., Head Office / Submit his claims to the conciliating authority namely the V.P & Circle Head, SBIIMS, S.B.I., Premises & Estate Department, L.H.O., Bandra Kurla Complex, Bandra, Mumbai 400051. For conciliation along with all details and copies of correspondence exchanged between him and the V.P. & Circle Head (Premises & Estate).

- i) If the conciliation proceedings are terminated without settlement of the disputes, the contractor shall, within a period of 30 days of termination thereof shall give a notice to the concerned M.D. & C.E.O. of the SBIIMS for appointment of an arbitrator to adjudicate the notified claims falling which the claims of the contractor shall be deemed to have been considered absolutely barred and waived.
- ii) Except where the decision has become final, binding and conclusive in terms of the contract, all disputes or differences arising out of the notified claims of the contractor as aforesaid and all claims of the SBIIMS Pvt. Ltd shall be referred for adjudication through arbitration by the Sole Arbitrator appointed by the M.D. & C.E.O. and who will be of Deputy General Manager rank. It will also be no objection to any such appointment that the Arbitrator so appointed is a SBIIMS, Officer and that he had to deal with the matters to which the Contract relates in the course of his duties as SBIIMS, Officer. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid by the said M.D. & C.E.O. of the SBIIMS Pvt. Ltd. Such person shall be entitled to proceed with the reference from the stage at which it was let by his predecessor.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each dispute along with the notice for appointment of arbitrator.

It is also a term of this contract that no person other than a person appointed by such Chief General Manager as aforesaid should act as arbitrator.



The conciliation and arbitration shall be conducted in accordance with the provisions of the Arbitration & Conciliation Act 1996 or any or any accordance modification or reenactment thereof and the rules made there under.

It is also a term of the contract that if any fees are payable to the Arbitrator these shall be paid equally by both the parties. However, no fees will be payable to the arbitrator if he is a SBIIMS Officer.

It is also a term of the contract that the Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any of the arbitrators shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The Cost of the reference and of the award (including the fees, if any of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and din what manner, such costs or any part thereof, shall be paid and fix or settle the amount of costs to be so paid.

# 37.0 Water Supply

The contractor shall make his own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following condition.

- i) That the water used by the contractor shall be fit for construction purposes to the satisfaction of the Architect / consultant's.
- ii) The contractor shall make alternative arrangements for the supply of water if the arrangement made by the contractor for procurement of water in the opinion of the

Architect / consultant is unsatisfactory.

37.1 The contractor shall construct temporary well / tube well in SBIIMS Pvt. Ltd land for taking water for construction purposes only after obtaining permission in writing from the SBIIMS. The contractor has to make his own arrangements for drawing and distributing the water at his own cost. He has to make necessary arrangements. To avoid any accidents or damages caused due to construction and subsequent maintenance of the wells. He has to obtain necessary approvals from local authorities, if required, at his own cost. He shall restore the ground to its original condition after wells are dismantled on completion of work or hand over the well to the SBIIMS without any compensation as directed by the Architect / consultant.

# 38.0 **Power Supply**

The contractor shall make his own arrangements for power and supply / distribution system for driving plant or machinery for the work and for lighting purpose.

#### 39.0 Treasure Trove etc.



Any treasure trove, coin or object antique which may be found on the site shall be the property of SBIIMS and shall be handed over to the bank immediately.

### **40.0 Method of Measurement**

Unless otherwise mentioned in the schedule of quantities or in mode of measurement, the measurement will be on the net quantities or work produced in accordance with up to date rules laid down by the Bureau of Indian Standards. In the event any dispute / disagreement the decision of the Architect / consultant shall be final and binding on the corrector.

# 41.0 **Maintenance of Registers**

The contractor shall maintain the following registers as per the enclosed perform at site of work and should produce the same for inspection of SBIIMS Pvt. Ltd/Architect / consultant whenever desired by them. The contractor shall also maintain the records / registers as required by the local authorities / Govt. from time to time.

- I) Register for secured advance
- ii) Register for hindrance to work
- iii) Register for running account bill
- iv) Register for labour

### 42.0 Force Majeure

- 42.1 Neither contractor nor SBIIMS shall be considered in default in performance of the obligations if such performance is prevented or delayed by events such as but not war, hostilities revolution, riots, civil commotion, strikes, lockout, conflagrations, epidemics, accidents, fire, storms, floods, droughts, earthquakes or ordinances or any act of or for any other cause beyond the reasonable control of the party affected or prevents or delayed. However, a notice is required to be given within 30 days from the happening of the event with complete details, to the other party to the contract, if it is not possible to serve a notice, within the shortest possible period without delay.
- 42.2 As soon as the cause of force majeure has been removed the party whose ability perform its obligations has been affected, shall notify the other of such cessation and the actual delay incurred in such affected activity adducing necessary evidence in support thereof.
- 42.3 From the date of occurrence of a case of force majeure obligations of the party affected shall be suspended during the continuance of any inability so caused. With the caused itself and inability resulting there from having been removed, the agreed time completion of the respective obligations under this agreement shall stand extended a period equal to the period of delay occasioned by such events.
- 42.4 Should one or both parties be prevented from fulfilling the contractual obligations by state of force majeure lasting to a period of 6 months or wore the two parties, shall each other to decide regarding the future execution of this agreement.

### 43.0 Local laws, Acts Regulations:

The contractor shall strictly adhere to all prevailing labour laws inclusive at contract labour (regulation and abolition act of 1970) and other safety regulations. The contractors should comply with the provision of all labour legislation including



the latest requirements of the Acts, laws, any other regulations that are applicable to the execution of the project.

- i) Minimum wages Act 1948 (Amended)
- ii) Payment of wages Act 1936 (Amended)
- iii) Workmen's compensation Act 1923 (Amended)
- iv) Contract labour regulation and abolition act 1970 and central rules 1971 (Amended)
  - v) Apprentice act 1961 (amended)
  - vi) Industrial employment (standing order) Act 1946 (Amended)
- vii) Personal injuries (Compensation insurance) act 1 963 and any other modifications
- viii) Employees' provident fund and miscellaneous provisions Act 1952 and amendment thereof
  - ix) Shop and establishment act
- x) Any other act or enactment relating thereto and rules framed there under from time to time.
- xi) Prevailing Indian Electricity rules & act.

#### 44.0 Accidents

The contractor shall immediately on occurrence of any accident at or about the site or in connection with the execution of the work report such accident to the Architect / consultant. The contractor shall also such report immediately to the competent authority whenever such report is required to be lodged by the law and take appropriate actions thereof.

- 45. The contractor's shall be bound to comply the following provision in terms of "Restrictions imposed by the Government of India, Ministry of Finance Department of Expenditure under Rule 144 (XI) of General Financial Rules 2017 vide their order no. F. No 6/18/2019/PPD dated 23rd July 2020" as under:
- Any bidder from a country which shares a land border with India will be eligible to bid in this tender ONLY if the bidder is registered with the Competent Authority (registration committee constituted by the Department for Promotion of Industry and Internal Trade).
- II. 'Bidder' (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial judicial person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. 'Bidder from a country which shares a land border with India (such a country)' for this purpose means:
- a. An entity incorporated, established or registered in such a country; or
- b. A subsidiary of an entity incorporated, established or registered in such a country; or
- c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
- d. An entity whose beneficial owner is situated in such a country; or
- e. An Indian (or other) agent of such an entity; or



- f. A natural person who is a citizen of such a country; or
- g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- IV. The beneficial owner for the purpose of (iii) above will be as under:
- 1. In case of A Company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more judicial person, has a controlling interest or who exercises control through other means. Explanation-
- a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five percent of shares or capital or profits of the company;
- b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
- 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more judicial person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
- 3. In case of an unincorporated association or body of Individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more judicial person, has ownership of or entitlement to more than fifteen percent of the property or the capital or profits of such association or body of individuals;
- 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
- 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person to do any act for another, or to represent another in dealings with third person.
- VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.
- VII. All bidders need to submit a declaration-cum-certificate (along with evidence) in this regard as per **"Annexure Q"**. Failure to submit such valid declaration-cum-Certificate will make the bid liable for rejection."

### **ANNEXURE "Q"**

<u>Declaration-Cum- Certificate on the Letter Head of Bidder Regarding Restrictions on</u>

<u>Procurement From Bidders From A Country Or Countries, On Grounds Of Defence In India, Or</u>

<u>Matters Directly Related Thereto, Including National Security.</u>

Restrictions under Rule 144 (XI) of General Financial Rules 2017 of Ministry of Finance, India order no. F. No 6/18/2019/PPD dated 23<sup>rd</sup> July 2020



I/We have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India;
I/We, the bidder (Specify full name
I/We hereby certify that we fulfil all requirements in this regard and is eligible to be considered.
(Signature of Authorised Signatory along with Seal)
Name of authorised signatory:
Designation of Authorised signatory:
List of Evidences enclosed:
Copy of certificate of valid registration with the Competent Authority (Score out if not applicable)
Date:
Place:

1.

3.
 4.



# Scope of work

# 1.0 The scope of work is to carry out for the **PROPOSED AIRCONDITIONING WORK AT RBO FIMM NASHIK**

### 2.0 Address of site

The site is located at **NEW PREMISES OF RBO, JALGAON.** 

### 3.0 **Dimensions and levels**

All dimensions and levels shown on the drawings shall be verified by the contractor and the site and he will be held responsible for the accuracy and maintenance of. All the dimensions and the levels. Figured dimensions are in all cases to be accepted and dimension shall be scaled. Large scale details shall take precedence over small scale drawings. In case of discrepancy the contractor shall ask for clarification from the Architect / consultant before proceeding with the work.

# 4.0 **Notice of operation**

The contractor shall not carry out any important operation without the Consent in with from the Architect / consultant:

### 5.0 **Construction records**

The contractor shall keep and provide to the Architect / consultant full and accurate records of the dimensions and positions of all new work and any other information necessary to prepare complete drawings recording details of the work as construction.

# 6.0 Safety of adjacent structures and trees

The contractor shall provide and erect to the approval of the Architect / consultant supports as may be required to protect effectively all structures and protective give to trees, which may be endangered by the execution of the works or otherwise such permanent measures as may be required by the Architect to protect the tree structures.

### 7.0 **Temporary works.**

Before any temporary works are commenced the contractor shall submit at least in advance to the Architect / consultant for approval complete drawings of all temporary works he may require for the execution of the works. The contractor shall carry out the modifications relating to strength, if required by the Architect / consultant may require in accordance with the conditions of contract at his own cost the contractor shall be solely responsible for the stability and safety of all temporary works and unfinished works and for the quality of the permanent works resulting from the arrangement eventually adopted for their execution.

# 8.0 Water power and other facilities



- a) The rate quoted by the contractor shall include all expenses that are required for providing all the water required for the work and the contractor shall make his own arrangements for the supply of good quality water suitable for the construction and good quality drinking water for their workers If necessary the contractor has to sink a tube well / open well and bring water by means of tankers at his own cost for the purpose The SBIIMS will not be liable to pay any charges in connection with the above
- b) The rate quoted in the tender shall include the expenses for obtaining and maintaining power connections and shall pay for the consumption charges as instructed.
- c) The contractors for other trades directly appointed by the SBIIMS shall be entitled to take power and water connections from the temporary water and power supply obtained by the contractor However, the concerned contractor shall make their own arrangements to draw the supply and pay directly the actual consumption charges at mutually agreed rates between them. All municipal charges for drainage and water connection for Construction purposes shall be borne by the contractor and charges payable for permanent connections, if any, shall be initially paid by the contractor and the SBIIMS will reimburse the amount on production of receipts
- d) The SBIIMS as well as the Architect / consultant shall give all possible assistance to the Contractor's to obtain the requisite permission from the various authorities, but the responsibility for obtaining the same in time shall be of the contractor

# 9.0 Facilities for contractor's employees

The contractor shall make his own arrangement for the housing and welfare of his staff and workmen including adequate drinking water facilities. The contractor shall also make the arrangements at his own cost for transport where necessary for his staff and workmen to and from site of work at his own cost.

# 10.0 **Lighting of works**

The contractor shall at all times provide adequate and approved lighting as required for the proper execution and supervision and inspection of work.

### 11.0 Firefighting arrangements

- i) The contractor shall provide suitable arrangement for firefighting at his own cost. This purpose he shall provide requisite number of fire extinguishers and adequate number of buckets, some of which are to be always kept filled with sand and some with water this equipment shall be provided at suitable prominent and easily accessible place and shall be properly maintained.
- ii) Any deficiency in the fire safety or unsafe conditions shall be corrected by the contractor at his own cost and, to the approval of the relevant authorities. The contractor makes the following arrangements at his own cost but not limited the following:
- a) Proper handling, storage and disposal of combustible materials and waste.
  - b) Work operations which can create fire hazards.
  - c) Access for fire-fighting equipment.
- d) Type, number and location of containers for the removal of surplus materials and



rubbish.

- e) Type, size, number and location of fire extinguishers or other tire fighting equipment.
  - f) General house keeping

### 12.0 Site order book

A site order book shall be maintained at site for the purpose of quick communication between the Architect / Consultant. Any communication relating to the work may be conveyed through records in the site order book. Such a communication from one party to the other shall be deemed to have been adequately served in terms of contract Each site order book shall have machine numbered pages in triplicate and shall carefully maintained and preserved by the contractor and shall be made available to the Architect / consultant as and when demanded- Any instruction which the Architect /consultant may like to issue to the contractor or the contractor may like to bring to the Architect / consultant two copies of such instructions shall be taken from the site order book and one copy will be handed over to the party against proper acknowledgment and the second copy will be retained for their record.

# 13.0 Temporary fencing/ barricading

The contractor shall provide and maintain a suitable temporary fencing / barricading and gates at his cost to adequately enclose all boundaries of the site for the protection of the public and for the proper execution and security of the work and in accordance with the requirement of the Architect I consultant and regulations of local authorities. These shall be altered, relocated and adopted from time to time as necessary and removed on completion of the work.

# 14.0 Site meetings

Site meetings will be held to review the progress and quality evaluation. The contractor shall depute a senior representative along with the site representative and other staff of approved sub-contractors and suppliers as required to the site meetings and ensure all follow up actions. Any additional review meetings shall he held if required by the Architect/consultant. -

### 15.0 **Disposal of refuse**

The contractor shall cart away all debris, refuse etc. arising from the work from the site and deposit the same as directed by the Architect / consultant at his own cost. It is the responsibility of the contractor to obtain from the local authorities concerned to the effect that all rubbish arising out of contractor's activities at the construction site or any other off-site activities borrow pits has been properly disposed of.

### **16.0** Contractor to verify site measurement

The contractor shall check and verify all site measurements whenever requested other specialist contractors or other sub-contractors to enable them to prepare the own shop drawing and pass on the information with sufficient promptness as will in any way delay the works.

### 17.0 Displaying the name of the work



The contractor shall put up a name board of suiable size as directed by the Architect/consultant indicating therein the name of the project and other details as given by the Architect/consultant at his own cost and remove the same on completion of work.

# 18.0 As built drawings

- i) For the drawings issued to the contractor by the Architect / Consultant. The Architect Consultant will issue two sets of drawings to the Contractor for the items for some changes have been made. From the approved drawings as instructed by the SBIIMS / Architect / Consultant. The contractor will make the changes made on these copies and return these copies to the Architect / Consultant for their approval. In cases revision is required or the corrections are not properly marked the Architect / Consultant will point out the discrepancies to the contractor. The contractor will have to incorporated these corrections and / or attend to discrepancies either on copies as directed by the Architect / consultant and resubmit to him for approval. The Architect / consultant will return one copy duly approved by him.
- ii) For the drawings prepared by the contractor

The contractor will modify the drawing prepared by him wherever the changes made by the SBIIMS / Architect / Consultant and submit two copies of such modified drawings to the Architect / Consultant for approval. The Architect / consultant will return one copy of the approved drawing to the contractor.

# 19.0 Approved make

The contractor shall provide all materials from the list of approved makes at his own cost and also appoint the specialized agency for the waterproofing anti-termite, aluminum doors and windows and any other item as specified in the tender. The Architect / Consultant may approve any make / agency within the approved list as given in the tender after inspection of the sample/mock up.

### 20.0 Procurement of materials

The contractor shall make his own arrangements to procure all the required materials for the work. All wastages and losses in weight shall be to the contractors account

### 21.0 Excise Duty, Taxes, Leveis etc.;

The contractor shall pay and be responsible for payment of all taxes, duties, levies, royalties, fees, cess or charges in respect of the works including but not limited to sales tax, tax on works contract excise duty, and octroi, payable in respect of materials, equipment plant and other things required for the contact. All of the aforesaid taxes, duties, levies, fees and charges shall be to the contractor's account and the SBIIMS shall not be required to pay any additional or extra amount on this account. Variation of taxes, duties, fees, levies etc. if any, till completion of work shall be deemed to be included in the quoted rates and no extra amount on this account. Variation of taxes, duties, fees, levies etc. if any, till completion of work shall be deemed to be included in the quoted rates and no extra claim on this account will in any case be entertained. If a new tax or duty or levy or cess or royalty or octroi is imposed under as statutory law during the currency of contract the same shall be borne by the contractor.

# 22.0 Acceptance of tender



The SBIIMS shall have the right to reject any or all tenders without assigning any reason. They are not to bind to accept the lowest or any tender and the tenderer or tenderers shall have no right to question the acts of the SBIIMS However adequate transparency would be maintained by the SBIIMS

### 23.0 **Photographs:**

- The Contractor shall at his own expense supply to the Architects with duplicate hard copies of large photographs not less than 25 cm. x 20 cm. (10" x 8") of the works, taken from two approved portions of each building, at intervals of not more than one months during the progress of the work or at every important stage of construction.
- In addition to above, the contractor shall be bound to submit adequate no. of site
  photographs along with each Running Bill for the project clearing showing major progress
  of work measured and claimed therein failing which the Architect/ SBIIMS may consider
  returning the Bill to the contractor and no claim for delay on this account will be
  entertained.

### **ARTICLES OF AGREEMENT**

(On non-judicial Stamp Paper of Rs. 500/- or as per latest Govt. Rules)

			date of _ einafter called "the			•
WHEREAS	the	SBIIMS	PVT.LTD.	is	desirous	of
specifications (	describing the v	ork to be done to	be prepared by <b>SB</b>		nd has	caused
		-	edsigned by o			•



AND WHEREAS the Contractor has agreed to execute upon and subject to the Conditions set forth herein and to the Conditions set forth herein in the Special Conditions and in the Schedule of Quantities and Conditions of Contract (all of which are collectively hereinafter referred to as "the said conditions") the works shown upon the said Drawings and / or described in the said Specifications and included in the Schedule of Quantities at the respective rates therein set forth amounting to the sum as therein arrived at our such other sum as shall become payable there under (hereinafter referred to as "the said Contract Amount.)

# NOW IT IS HEREBY AGREED AS FOLLOWS:

- In consideration of the said Contract Amount to be paid at the times and in the manner set forth in the said Conditions, the Contractor shall upon and subject to the said Conditions execute and complete the work shown upon the said Drawings and described in the said Specifications and the priced Schedule of Quantities.
- 2) The Employer shall pay to the Contractor the said Contract Amount, or such other sum as shall become payable, at the times and in the manner specified in the said Conditions.
- 3) The term "The Architects" in the said Conditions shall mean the **SBIIMSPL** or in the event of their ceasing to be the Architects for the purpose of this Contract for whatever reason, such other person or persons as shall be nominated for that purpose by the Employer, not being a person to whom the Contractor shall object for reasons considered to be sufficient by the Employer, PROVIDED ALWAYS that no person or persons subsequently appointed to be Architects under this Contract shall be entitled to disregard or overrule any previous decisions or approval or direction given or expressed in writing by the outgoing Architects for the time being.
- 4) The said Conditions and Appendix thereto shall be read and construed as forming part of this Agreement, and the parties hereto shall respectively abide by submit themselves to the said Conditions and perform the Agreements on their part respectively in the said Conditions contained.
- 5) The Plans, Agreements and Documents mentioned herein shall form the basis of this Contract.
- 6) This Contract is neither a fixed lump-sum contract nor a piece work contract but a contract to carry out the work in respect of the entire building complex to be paid for according to actual measured quantities at the rates contained in the Schedule of Quantities and Rates or as provided in the said Conditions.
- 7) The Contractor shall afford every reasonable facility for the carrying out of all works relating to civil works, installation of lifts, Telephone, electrical installations, fittings air-conditioning and other ancillary works in the manner laid down in the said Conditions, and shall make good any damages done to walls, floors, etc. after the completion of his work.
- 8) The SBIIMS reserves to itself the right of altering the drawings and nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this Contract.



- 9) Time shall be considered as the essence of this Contract and the Contractor hereby agrees to commence the work soon after the Site is handed over to him or from 14<sup>th</sup> day after the date of issue of formal work order as provided for in the said Conditions whichever is later and to complete the entire work within **90 days** subject to nevertheless the provisions for extension of time.
- 10) All payments by the SBI under this Contract will be made only at Mumbai.
- 11) All disputes arising out of or in any way connected with this Agreement shall be deemed to have arisen at Mumbai and only the Courts in Mumbai shall have jurisdiction to determine the same.
- 12) That the several parts of this Contract have been read by the Contractor and fully understood by the Contractor.

IN WITNESS WHEREOF THE SBIIMS and the Contractor have set their respective hands to these presents and two duplicates hereof the day and year first herein above written.

SIGNATURE CLAUSE	
SIGNED AND DELIVERED by the	
(Employer) By the	
hand of Shri	(Signature of Employer)
(Name and Designation)	, <del>-</del>
In the presence of:	
1) Shri / Smt	(Signature of Witness)
Address	_
(Witness)	_
SIGNED AND DELIVERED by the	
(Contractor) In the presence of:	(Signature of Contractors)
Shri / Smt	(Signature of Witness)
Address	_
(Witness)	_



### **SAFETY CODE**

- 1. First aid appliances including adequate supply of sterilized dressing and cotton wool shall be kept in a readily accessible place.
- 2. An injured person shall be taken to a public hospital without loss of time, in cases when the injury necessitates hospitalization.
- 3. Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from the ground.
- 4. No portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30 cm. (clear) and the distance between two adjacent running shall not be more than 30 cm. When a ladder is used an extra mazdoor shall be engaged for holding ladder.
- 5. The excavated material shall not be placed within 1.5 meters of the edge of the trench half of the depth of trench whichever is more. All trenches and excavations shall be provided with necessary fencing and lighting.
- 6. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one meter.
- 7. No floor, roof or other part of the structure shall be so overloaded with debris or material as to render it unsafe.
- 8. Workers employed on mixing and handling material such as asphalt, cement, mortar, concrete and lime shall be provided with protective footwear and rubber hand gloves.
- 9 Those engaged in welding works shall be provided with welders' protective eye shield and gloves.
- 10. (i) No paint containing lead or lead products shall be used except in the form of paste readymade paint.
  - (ii) Suitable facemasks should be supplied for use by the workers when the paint applied in the form of spray or surface having lead paint dry rubbed and scrapped.
- 11. Overalls shall be supplied by the contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during cessation of work.
- Hoisting machines and tackle used in the works including their attachments anchor and supports shall be in perfect condition.
- 13. The ropes used in hoisting or lowering material or as a means of suspension shall be durable quality and adequate strength and free form defects.



The steps involved in making the payment through SB Collect are as under:-

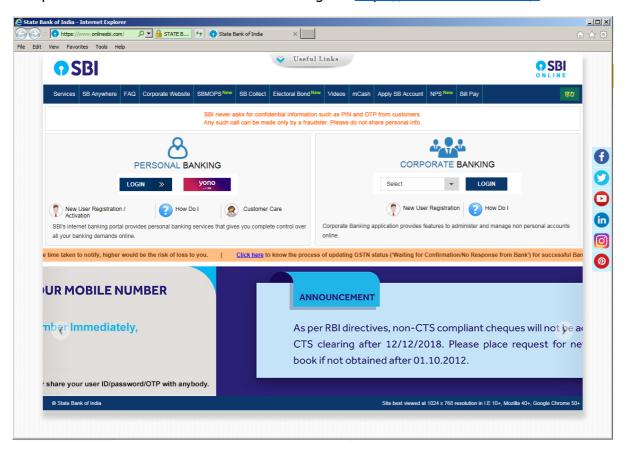
- 1. The Vendor needs to use SBI internet banking site https://www.onlinesbi.com/.
- 2. Select **"SB Collect"** from Top Menu, that will lead to the next page:
- 3. **"Proceed"** will lead to the next page:
- 4. Select "All India" in "State of Corporate / Institution" & Select "Commercial Services" in "Type of Corporate / Institution".
- 5. **"Go"** will lead to the next page:
- 6. Select "SBI Infra Management Solutions" in Commercial Services Name and "Submit"
- 7. Select "Tender Application Fee" in "Payment Category" and enter the "Tender ID" exactly as we preloaded with characters in Uppercase only in place of Circle Codes.
- 8. The next Page will be ready with few of the Preloaded Tender Details:
- 9. The Vendor will have to fill up the fields properly and upon making the payment a receipt will be generated with a Reference No.

**NOTE:** Any type of vendor, whether dealing with SBI or other bank can use this SB Collect facility. Even a contractor not dealing with any bank can use this portal and generate challan and deposit by cash in any SBI branch. The bank charges for cash deposit will be also borne by the vendor himself.



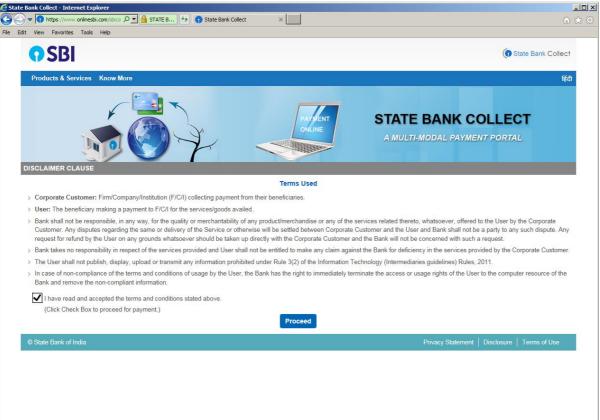
# **Procedure for payment of Tender Fee through SB Collect payment portal:**

The portal link is available in SBI online banking site <a href="https://www.onlinesbi.com/">https://www.onlinesbi.com/</a>.

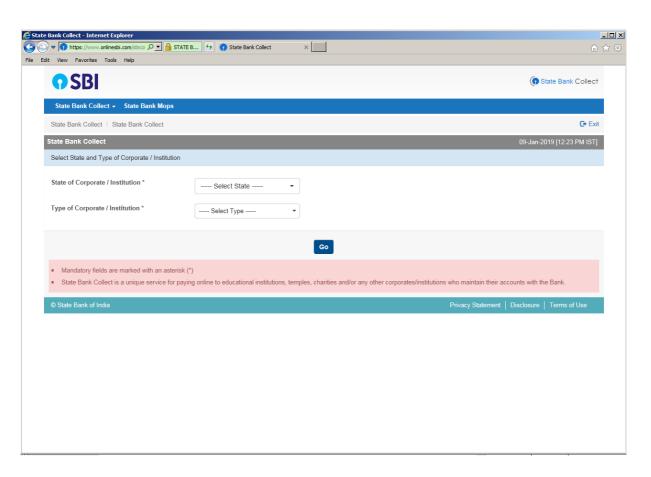


Select "SB Collect" from Top Menu, that will lead to the next page:





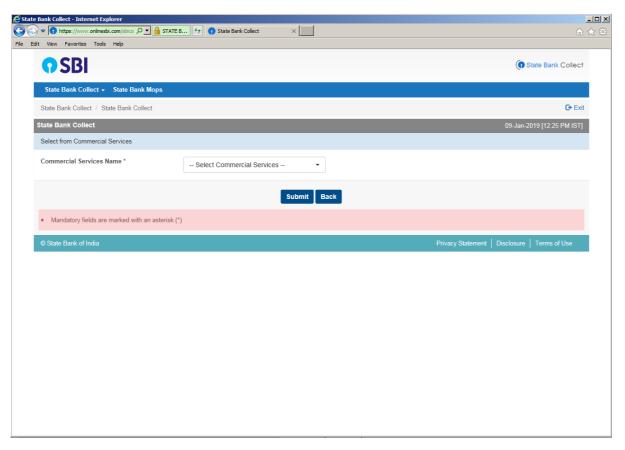
# "Proceed" will lead to the next page:





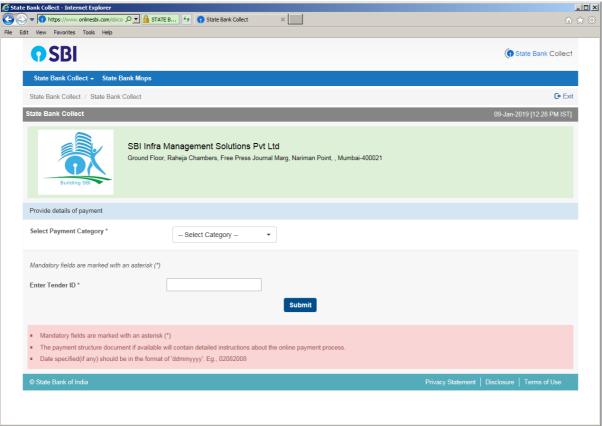
Select "All India" in "State of Corporate / Institution " & Select "Commercial Services" in "Type of Corporate / Institution".

"Go" will lead to the next page:



Select "SBI Infra Management Solutions" in Commercial Services Name and "Submit"

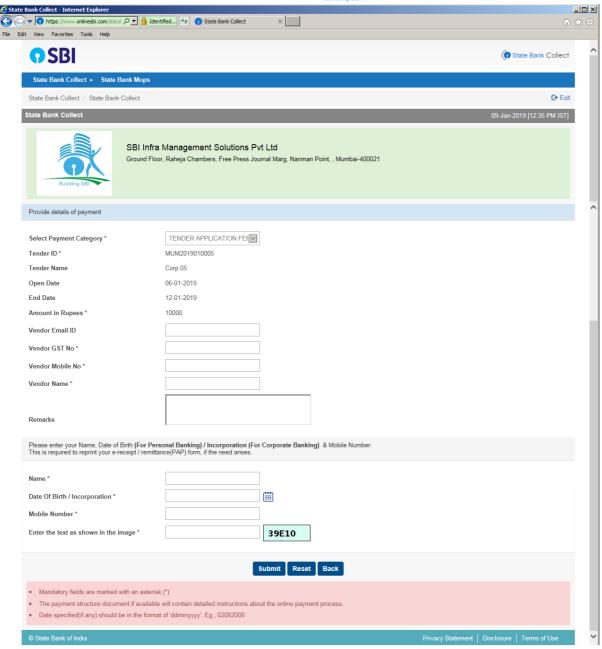




Select "Tender Application Fee" in "Payment Category" and enter the "Tender ID" exactly as we preloaded with characters in Uppercase only in place of Circle Codes.

The next Page will be ready with few of the Preloaded Tender Details:





The Vendor will have to fill up the fields properly and upon making the payment a receipt will be generated with a Reference No. Submit the printout of the Receipt, along with the Tender Application.



# **APPENDIX HEREIN BEFORE REFERRED TO**

1)	Name of the organization Offering (	Contract	: The V.P. & Circle Head, SBIIMSPL, State Bank of India, Premises & Estate Department, Local Head Office, Bandra Kurla Complex, Bandra (E), Mumbai 400 051
2)	Consultants	:	NA
3)	Site Address	:	RBO FIMM NASHIK, Wave building, pathardi Road, Nahik
4)	Scope of Work	:	AC works
5)	Name of the Contractor	:	
6)	Address of the Contractor	:	
7)	Period of Completion	:	90 days from the date of Commencement
8)	Earnest Money Deposit Only)	<b>l</b> fr	Rs. 21,000/- (Rupees Twenty One Thousand hundred Only) by means of Demand Draft / Pay Order om any scheduled Nationalized Bank drawn in favour f SBI Solutions Pvt. Ltd. and payable in Mumbai.
9)	Retention Money	:	clause no. 1(c) of GCC
10)	Defects Liability Period	:	Twelve Months from the date of Virtual Completion.
11)	Insurance to be undertaken by the Contractor at his cost	:	125% of Contract Value (Contractor's all-risk policy)
12)	Liquidated damages	:	0.5% of the Contract amount shown in the tender per week subject to max. 5% of the contract value or actual final bill value.
13)	Value of Interim Bill (Min.)	:	Rs. 5.00 Lakhs.
14)	Date of Commencement	:	7 days from the date of acceptance



letter is issued to the Contractor/ or the day on which the Contractor is instructed to take possession of the site whichever is earlier.

15) Period of Final Measurement : 2 Months from the date of Virtual

Completion.

16) Initial Security Deposit : 2% of the Accepted Value of the Tender. (Clause

No. 1.0 (b) of GCC)

17) Total Security Deposit : Retention/ TSD As per clause No. 1.0 (c) of GCC

18) Refund of initial Security Deposit

Comprising of EMD and ISD. : 50% of the Security Deposit shall be refunded to the

Contractor on completion of the work and balance refunded only after the Defect Liability Period is over.

19) Period for Honoring Certificate : 1. One Month for R.A. Bills

2. The final bill will be submitted by the

Contractor within one month of the date fixed for completion work and the Bill shall be Certified within 3 months from the date of receipt of final bill provided the bills are submitted with all pre-requisite documents/test reports etc. prescribed in the tender.

Signature of Tenderer.

Date:



**TABLE-XII** 

# **PROFORMA FOR HINDRANCE TO WORK**

Name of Work : Date of Start of work : Name of Contractor : Period of Completion :

Agreement No. : Dt. of Completion of work :

S.No.	Nature of Hindrance	Date of Occurrence of Hindrance	Date of which Hindrance was removed	Period of which Hindrance existed	Signature of Site Engineer	Signature of Bank / Architects Representative
1	2	3	4	5	6	7



# **PROFORMA FOR RUNNING A/C BILL**

i. Name of Contractor / Agency
ii. Name of Work
iii. Sl.No. of this Bill
iv. No. & Date of previous Bill
v. Reference to Agreement No.
vi. Date of Written order to commence
vii. Date of Completion as per Agreement

S.No.	Item Description	Unit	Rate (Rs.)	As per Tender		
				Quantity	Amount (Rs.)	
1	2	3	4	5		

Upto Previ	ous R.A. Bill	Up Date (Gross		Prese	nt Bill	Remarks
Quantity	Amount (Rs.)	Quantity	Amount (Rs.)	Quantity	Amount (Rs.)	
	6	7		8		9

Note:	1.	If part rate is allowed forany items, it	
		should be indicated with reasons for	
		allowing such a rate.	Net Value since previous bill

2. If ad-hoc payment is made, it should be mentioned specifically.



were made have been	taken jointly on	and are recorded at pages
to	of measurement book N	0
Signature and date of Contractor	Signature and date of Architects Representative (Seal)	Signature and date of Site Engineer
The work recorded in	the above-mentioned measur	rements has been done at the site satisfactoril
as per tender drawings, cond	itions and specifications.	
Architect		Signature and date of Site Engineer



TABLE - XIV

# **ACCOUNT OF SECURED ADVANCE, IF ADMISSIBLE ON** MATERIALS HELD AT SITE BY THE CONTRACTOR

S.No.	Item	Quantity	Unit	Amount	Remarks
1	2	3	4	5	6

В

(i)	That the materials mentioned above have actually been brought by the Contractor to the site of the work and on advance on any quantity of any of this item is outstanding on their security.
(ii)	That the materials (are of imperishable nature) and are all required by the Contractor for use in the work in connection with the items for which rates of finished work have been agreed upon.
	Dated Signature of Site Engineer Preparing the bill Rank
	Date signature of Banks Architects (Name of the Architects)
	Dated Signature of the Contractor

Total value of materials at Site.

CERTIFIED:

Secured Advance @ ----- of above value -





# **MEMORANDUM FOR PAYMENT**

	R/A BILL NO.		
1.	Total value of work done since previous bill (A)		Rs
2.	Total amount of secured advance due since Previous Bill (B)		Rs
3.	Total amount due since Previous Bill (C) (A+B)		Rs
4.	PVA on account of declaration in price of Steel, Cement and other materials and labour as detailed in separate statements enclosed.		Rs
5.	Total amount due to the Contractor		Rs
	OBJECTIONS:		
i)	Secured Advance paid in the previous R/A	Rs	
ii)	Retention money on value of works as per accepted tenders upto date amount Rs.	Rs	
	Less already recovered	Rs	
	Balance to be recovered	Rs	
iii)	Mobilization Advance, if any		
(a)	Outstanding amount (principal + interest) as on date	Rs	
(b)	To be recovered in this bill	Rs	
iii.	Any other Departmental materials cost to be recovered as per contract, if any	Rs	
iv.	Any other Departmental service charges to be recovered if any, as per contract (water, power etc.) enclose statement.	Rs	



		Total Deduction as per contract (F)	Rs	
		Adjustments, if anyAmount less received by Contractor in Contractor)	า	
		P.V.A.	Rs	
		Total amount payable as per contract (E+F+G)	t Rs	
		(Rupeesi words)	ו	
checking	of the	e measurements of work as required and	• •	due
Date:			nature of Architect	
checking	of m		with Seal isultants has been scrutinized by me after due if it is recommended for payment for an amount	
Date :				
			Signature of Owners Engineer	
		STATUTORY DEDUCTION:		
	i)	Total Amount due (E)	Rs	
	ii)	Less I.T. Payable	Rs	
	iii)	Less S.T. Payable	Rs	
		Net Payable	Rs	
		given in the Memorandum for payable h (in words	as been verified and bill passed for payments and figures)	
Date:		 Sic		



# TECHNICAL SPECIFICATION FOR THE AIR CONDITIONING CONTRACT WORK

SR.	Description of work		
NO	·		
01	Supply of split A/C 1.0 tr. (3 star):- Wall mounted air conditioner shall have 1.0Tr i.e nominal 12.000 BTU/capacity per hour at the ambient of 40 degree centigrade capacity. Unit shall have maximum 90/46 dB noise level at the distance of 1 MT for outdoor/indoor units. The unit shall be suitable for 230 volts power supply. With temperature indicator and remote for operation. (5- Start AC high wall type split A/C). The air filter shall be easy to maintain and preferable showing the status of choking. Every unit shall be supported by warrantee of one year however sealed unit war- rantee must be given for 5 years from the manufacturer. CONDESOR MUST BE OF COPPER METAL.		
02	SUPPLY OF SPLIT a/c 1.5 Tr. (3 star):- Wall mounted air conditioner shall have 1.5 Tr i.e. nominal 18,000 BTU/capacity per hour at the ambient of 40 degree centigrade capacity. Unit shall have maximum 90/46 dB noise level at the distant of 1 MT for indoor/outdoor units. The units shall be suitable for 230 volts of power supply. With temperature indicator and remote for the operations. (5- star A/C high wall type split A/C) The air filter shall be easy to maintain and preferably showing the status of choking. Every unit shall be supported by warrantee of one year however sealed unit warrantee must be given for 5 years from the manufacturer. CONDESOR MUST BE OF COPPER METAL.		
03	Installation of split 1& 1.5 Tr:  Total work comprising of unpacking till commissioning of each units indoor as well as outdoor. Connecting the pipes & electrical cables/wires. With necessary support & fabricating for hanging the unit from ceiling. Installation shall be done with the control panel.  The installation of A/C. charging towards installation testing and commissioning of split and cassette A/C. this includes nitrogen flushing, pressure testing, attending leakages, loading, unloading, gas charging and panel fittings.		
04	Cassette type indoor units.  These units shall be installed between the bottom of finished slab & top of false ceiling. The maximum allowable height for the cassette type units shall not exceed 350 mm. The unit shall be pre charged with first charge of R 32 / R 134A / R 407 / R 410 refrigerant. Additional charge shall be added as per refrigerant piping at site. The unit must have in built drain pump, suitable for vertical lift of 750 mm.  The unit casing shall be Galvanized Steel Plate / or as per manufacturer's specifications. Unit must be insulated with sound absorbing thermal insulation material, Polyurethane foam. The noise level of unit at the highest operating level shall not exceed 42 dB(A), at a vertical distance of 1.5 m from the grille of the unit. Unit shall have provision of connecting fresh air without any special chamber & without increasing the total height of the unit (288 mm maximum). The unit shall be supplied with suitable decorative panel. The unit shall be supplied with Resin Net filter with Mild Resistance. The filter shall be easy to remove, clean & re install. The unit will be connected in series to a suitable outdoor unit & it must be possible to operate the unit independently, through corded/cordless remote specified in the "Bill of quantities". The unit will be further connected to Intelligent Building Management System (To be supplied by other vendors) & it shall be possible to operate the unit shall be supplied with		



following from the factory with following: Operation Manual Installation Manual Paper pattern for installation Drain hose/ Clamp metal/ Washer fixing plate/ Sealing pads/ Clamps/ Screws/ Washer for hanging bracket/ Insulation for fitting 05 Extra copper pipe: a) The contractor shall have to provide extra length of copper pipe with proper lag- ging to make the perfect job of insulation. All the copper pipe shall be without joints and proper flare-up shall be done with tools and tackles for excellent workmanship. No dent shall be allowed while bending the pipe of laying it on connecting it to machine/evaporate/condenser. High grade of foam insulation shall be provided. Entire piping shall be done over the false ceiling and do not compromise any aesthetic look... b) Then contractor shall have to provide copper pipe with proper lagging to make the perfect job of insulation. All the copper pipe shall be without joints and proper flare- up shall be done with tools and tackles for excellent workmanship. No dent shall be allowed while bending the pipe of laying it or connecting it to machine/evaporator /condense. High grade of foam insulation shall be provid- ed. Entire piping shall be done over the false ceiling and do not Compromise any aesthetic look. Size of copper shall sleeve insulated with saddling and clamping. 06 Wiring:-SPLIT UNIT TO OUTDOOR UNIT The A/C contractor has to get the wiring from the MCB/MCCB unit provided by the electrical contractor in house. All the wiring shall be of approved make only. The wiring shall pass through ISI approved conduits as mentioned in approved list of materials. Any drilling of the wall for getting copper pipe or wiring shall be sealed and finished by the A.C contractor. Size of the wires shall be suitable. for each & every A.C unit. 07 Drain water piping:-Condensed water in the interior of the banking hall shall be drained outside/toilet block through gravity-slop. The entire piping shall be 25/32 M.M. ISI approved pipes to carry condensed water. All the piping shall be maintainable and testing shall be done before connecting. 08 supply and installation of fabricated steel supports for outdoor units for (1T.1.5 Tr) 09 Civil work: The A/C contractor has to complete the zari work in the wall and coordinate with the

civil contractor while doing flooring to run the drainage pipe etc. finishing has to

be done by the A/C contractor with required labour &materials.



### **VARIABLE REFRIGERANT FLOW SYSTEM**

# 9.1. **Scope:**

The scope of this section comprises the supply, erection, testing and commissioning of Variable Refrigerant Volume System conforming to these specifications and in accord- ance with the requirements of Drawings and Schedule of quantities.

# 9.2. **Type:**

Unit shall be air cooled, variable refrigerant volume air conditioner consisting of one out- door unit and multiple indoor units. Each indoor unit having capability to cool independent- ly for the requirement of the rooms. All indoor units shall be provided with isolation valves so that a particular unit can be isolated and removed for servicing, while system keeps functioning in normal way.

It shall be possible to connect multiple indoor units on one refrigerant circuit as shown in the drawings or as indicated in schedule of quantities. The indoor units on any circuit can be of different type and also controlled individually. Following type of indoor units shall be connected to the system:

- Ceiling mounted cassette type.
- Wall Mounted Split type
- Compressor installed in outdoor unit shall be equipped with capacity control mechanism and capable of changing the rotating speed / mass flow rate of refrig- erant by scroll engaging / disengaging mechanism to follow variations in cooling. Outdoor unit shall be suitable for mix-match connection of all type of indoor units.

The refrigerant piping between indoor units and outdoor units shall be extended up to 100m with maximum 50 m level difference without any oil traps. Oil recovery system shall be managed without disturbance to normal operation cycle of the system / compressor.

Both indoor unit and outdoor unit shall be factory assembled, tested and filled with first charge of refrigerant before delivery at site.

# 9.3. Out Door Unit:

The outdoor unit shall be factory assembled, weather proof casing constructed from heavy gauge mild steel panels with powder coated finish.

All outdoor units above 5 HP rating shall have minimum two number scroll compressors. In case of outdoor units with multiple compressors, the operation shall not be disrupted with failure of any compressor. The noise level shall not be more than 60 dB (A) at normal operation measured horizon- tally 1m away and 1.5 m above ground level. The outdoor unit shall be modular in design with possible future expansions. The unit shall be provided with microprocessor control panel.



# 9.4. Compressor:

The compressor shall be high efficiency scroll type and capable for capacity controlling. It shall change the speed / refrigerant mass flow rate in accordance to the variation in cool- ing load requirement. Refrigerant mass flow rate can be changed by speed modulation of compressor / mechanical control system. System shall incorporate liquid sub-cooling mechanism with liquid injection at intermediate pressure. The inverter used, shall be IGBT (insulated gate bipolar transistor) type for efficient and quiet operation.

All outdoor units shall have multiple steps of capacity control to meet load fluctuation and indoor unit individual control. All parts of compressor shall be sufficiently lubricated. Forced lubrication may also be employed.

Oil heater shall be provided in the compressor casing.

# 9.5. Heat Exchanger:

The Heat Exchanger shall be constructed with copper tubes mechanically bonded

to aluminum fins to form a cross fan coil and larger surface area.

The fins shall have anticorrosion treatment for Heat Exchanger Coil. The treatment shall be suitable for areas of high pollution, moisture and salt laden air. The casings, fans, motors etc. shall also be with anticorrosion treatment as a standard fea- tures.

The unit shall be provided with necessary number of direct driven low noise level propeller type fans arranged for vertical / horizontal discharge. Each fan shall have a safety guard.

#### 9.6. Refrigerant Circuit:

The Refrigerant Circuit shall include a liquid receiver /accumulator, liquid & gas shut off valves and a solenoid valve. All necessary safety devices shall be provided to ensure the safety operation of the system..

# 9.7. Safety Devices:

All necessary safety devices shall be provided to ensure safe operation of the system. Following safety devices shall be part of the outdoor unit: high pressure switch, low pres- sure switch, fuse, crankcase heater, fusible plug, over current protection for inverter, and short recycling guard timer.

### 9.8. Piping:

All connections of Refrigerant piping shall be in high grade Copper of Refrigeration quality with Eddy Current Testing and material test Certificates. All connections, tees, reducers etc. shall be standard make fittings.

Insulation of cold lines shall be carried out with Armaflex / K-Flex insulation sheets and tubes of appropriate thickness so that condensation does not occur. For individual Piping 50 / 100 mm wide Aluminum Tape shall be used at joints of Piping with Bands for identification.

For outdoor piping, the finish shall be woven GRP Mat finished with colored Epoxy paints to withstand outside ambient conditions and UV Radiation.

# 9.9. Oil Recovery System:

Unit shall be equipped with an oil recovery system to ensure stable operation



with long refrigerant piping.

System shall be designed for proper oil return to compressor along with the distribution of oil to individual compressor.

The refrigerant piping shall be extended upped 100 M with 50-M level difference without oil traps.

### 9.10. Indoor Units:

Units shall be factory assembled, wired, piped and tested.

Units shall have DX coils with copper tubes and bonded aluminum fins for highly efficient heat transfer.

Units shall have Centrifugal fans for adequate amount of Air circulation and low Noise. Units shall have inlet filters, which are easily cleanable and replaceable.

All components of Units are easily accessible for connection, repairs and maintenance. Units shall have very low noise.

All units with Factory manufactured Units, Grills shall have auto swing feature for proper Air distribution.

All unit shall be controlled by electronic Expansion Valves only.

All units mounted inside the ceiling shall have fans capable of sustaining duct connections, and special filters if necessary.

Visible indoor units shall have wireless remotes. Price of the same shall be included in cost of unit by default.

Concealed indoor units shall have sensor mounted on supply air grilles / diffusers which can be controlled with wireless remotes unless specified.

Anticorrosion treatment for avoiding corrosion of coils.

All units shall have adequate insulation or Lining to avoid condensation.

Cooling coil and refrigeration parameters shall be designed in such a way that supply air temperature shall not be less than  $14^0\mathrm{C}$  or  $1^0\mathrm{C}$  above room dew point temp, whichever is more. Contractor shall guarantee inside conditions with selected supply air temperature.

# 9.11. Ceiling Mounted Cassette Type Unit (Multi-Flow Type):

The unit shall be ceiling mounted type. The unit shall include pre-filter, fan section and DX-coil section. The housing of the unit shall be powder coated galvanized steel. The body shall be light in weight and shall be possible to suspend from four corners.

Unit shall have a external attractive panel for supply and return air. Unit shall have four way supply air grilles on sides and return air grille in centre.

Each unit shall have high lift drain pump, fresh air intake provision (if specified), low gas level detection system and very low operating sound.

# 9.12 Ceiling Mounted Ductable Type Unit:

Unit shall be suitable for ceiling mounted type. The unit shall include pre filter, fan section & DX-coil section. The housing of unit shall be light weight powder coated galvanized steel. The unit shall have high static fan for ductable arrangement.

### 9.13 High Wall Mounted Units:

The units shall be high wall mounted type. The unit shall include pre-filter, fan section & DX-coil section. The housing of unit shall be light weight powder



coated galvanized steel. Unit shall have an attractive external casing for supply and return air.

# 9.14. Ceiling Mounted Concealed type units:

Unit shall be suitable for ceiling mounted type. The unit shall include pre filter, fan section & DX-coil section. The housing of unit shall be light weight powder coated galvanized steel. It shall be slim and quite in operation

# 9.15. Central Remote Controller (Option if Specified in BOQ):

A multi-functional microprocessor based centralized controller (central remote controller) shall be supplied as an optional accessory.

The controller shall be able to control up to min. 64 zones of 64 group (each group con- sisting of max. 16 units) or 128 nos. of indoor units with the following functions.

- Temperature setting for each zone, or group, or indoor unit.
- On/Off as a zone or individual unit.
- Indication of operating condition.
- Select ON of all operation modes for each zone..
- The controller shall have wide screen liquid crystal display and shall be wired by a non polar 2 wire transmission cable to a distance of 1000m away from the indoor unit.
- The controller shall be integrated to BAS system thru software for monitoring & controlling of all above parameters including start/ stop of each indoor / outdoor unit. All necessary interface cards / units should be supplied as a part of the system to integrate to the BAS Software.

# 9.16. Unified On/Off Controller (Option if Specified in BOQ):

Unified ON / OFF controller shall be supplied as an optional accessory. The controller shall be able to control minimum 2 groups (each group containing maxi- mum 16 indoor units) or 128 nos. of indoor units with the following functions.

- On / Off as a zone or individual unit.
- Indication of operation condition of each group.
- Select one of 4 operation modes.

The controller shall be wired by a non-polar 2 wire transmission cable to distance of 1 km away from indoor unit.

The controller shall be integrated to BAS system thru software for monitoring & control- ling of all above parameters including start/ stop of each indoor / outdoor unit. All nec- essary interface cards / units should be supplied as a part of the system to integrate to the BAS Software.

### 9.17. Condensate:

25mm dia UPVC pipes, 40mm dia UPVC headers & fittings shall be used for condensate, from Evaporator Unit to drain point. The joints shall be properly sealed so that there is no water leakage. U-trap shall be provided. Additional insulation drain tray shall be provided below the Evaporator Unit, if required.

#### Mounting

All indoor units shall be mounted with Brackets, Hangers etc. with proper size anchor Fasteners.

### 9.18 Electrical installation:



For Variable Refrigerant flow systems, power will be provided near outdoor unit location. HVAC Contractor to provide suitable distribution panel along with 3-phase power to out- door units and single phase power to all indoor units fed by these outdoor units. Power / control cabling along with supports shall be included.

### **AIR DISTRIBUTION**

# 10.1 SCOPE (AS PER "SMACNA" STANDARDS)

The scope of this section comprises supply fabrication, installation and testing of all sheet metal / aluminum ducts, supply, installation, testing and balancing of all grilles, registers and diffusers. All to be in accordance with these specifications and the general arrangement shown on the Drawings

# 10.2 DUCT ATERIAL

### 10.2.1 RAW MATERIALS

Galvanizing shall be Class VII – light coating of zinc, nominal 180gm/sq.m surface ar- ea and Lock Forming Quality prime material along with mill test certificates. In addition, if deemed necessary, samples of raw material, selected at random by owner"s site repre- sentative shall be subject to approval and tested for thickness and zinc coating at con- tractor's expense.

### 10.2.2. GAUGES, BRACING BY SIZE OF DUCTS

All ducts shall be factory fabricated from galvanized steel / aluminum of the following thickness, as indicated as below:

10.2.2.1 For Ducts with external SP up to 250 Pa (ESP up to 25mmWg)

Rectangular	Pressure 250 Pa				
Ducts G. S.	Duct Section Length 1.2 m (4 ft)				
Maximum	Gaug	Joint Type	Bracing		
<b>Duct Size</b>	е		Spacing		
1–500 mm	26	C&S Connector	Nil		
501 - 750	26	C&S Connector	Nil		
mm					
751 – 900	24	TDF Flange	Nil		
mm					
901 - 1200	24	TDF Flange	Nil		
mm					
1201 - 1500	22	TDF Flange	Nil		
mm		_			
1501 - 1800	20	TDF Flange	JTR or ZEE		
mm			BAR		
1801 - 2100	20	TDF Flange	JTR or ZEE		
mm			BAR		
2101 – above	18	TDF Flange	JTR or ZEE		
			BAR		

<sup>\*</sup>Distance of reinforcement/bracing from each joint. Bracing material to be same as of material used for joining of duct sections.



# **10.3 DUCT NSTRUCTION**

# 10.4 All ducts shall be fabricated and installed in workmanlike manner, conform- ing to relevant SMACNA codes.

a) Ducts so identified on the Drawings shall be acoustically lined and insulated from outside as described in the section "Insulation" and as indicated in schedule of Quantities. Duct dimensions shown on drawings, are overall sheet metal dimen- sions inclusive of the acoustic lining where required and indicated in Schedule of quantities. The fabricated duct dimensions should be as per approved drawings and care should be taken to ensure that all connecting sections are dimensional- ly matched to avoid any gaps

# 10.5 **DAMPERS**

a. Dampers: All duct dampers shall be opposed blade louver dampers of robust 16 G GSS construction and tight fitting. The design, method of handling and control shall be suitable for the location and service required.

# 10.6 SUPPLY AND RETURN AIR DIFFUSERS / GRILLS

Supply and return air diffusers shall be as shown on the Drawings and indicated in Schedule of Quantities. Aluminium diffusers shall be powder coated & made from extrud- ed aluminium section as specified in schedule of quantities.

- a) Rectangular Diffusers shall be extruded aluminium construction, square & rectan- gular diffusers with flush fixed pattern for different spaces as per schedule of quantities These shall be selected in consultation with the consultant / client. These shall be procured only after obtaining written approval from **CLIENT** for each type of diffuser.
- b) Supply air diffusers shall be equipped with fixed air distribution grids, removable key-operated volume control dampers, and anti-smudge rings as required in specific applications, and as per requirements of schedule of quantities.

# **DOCUMENTATION & MEASUREMENTS FOR DUCTING**

All ducts fabricated and installed should be accompanied and supported by proper documentation viz:

a) Bill of material/Packing list for every duct section supplied.

Measurement sheet covering each fabricated duct piece showing dimensions and external surface area along with summary of external surface area of duct gauge- wise.

Each and every duct piece to have a tag number, which should correspond to the serial number, assigned to it in the measurement sheet. The above system will ensure speedy and proper site measurement and verification.

Unless otherwise specified, measurements for ducting for the project shall be on the basis of centerline measurements described herewith



Ductwork shall be measured on the basis of external surface area of ducts. Duct meas- urements shall be taken before application of the insulation. The external surface area shall be calculated by measuring the perimeter comprising overall width and depth, includ- ing the corner joints, in the center of each duct section, multiplying with the overall length from flange face to flange face of each duct section and adding up areas of all duct sec- tions. Plenums shall also be measured in a similar manner.

For tapered rectangular ducts, the average width and depth shall be considered for perim- eter, whereas for tapered circular ducts, the diameter of the section midway between large and small diameter shall be adopted, the length of tapered duct section shall be the cen- terline distance between the flanges of the duct section.

For special pieces like bends, tees, reducers, branches and collars, mode of measure- ment shall be identical to that described above using the length along the centerline.

The quoted unit rate for external surface of ducts shall include all wastage allowances, flanges and gaskets for joints, nuts and bolts, hangers and angles with double nuts for supports, rubber strip 5mm thick between duct and support, vibration isolator suspension where specified or required, inspection chamber/access panel, splitter damper with quad- rant and lever for position indication, turning vanes, straightening vanes, and all other accessories required to complete the duct installation as per the specifications. These accessories shall NOT be separately measured nor paid for.

- b) Special Items for Air Distribution shall be measured by the cross-section area perpendicular to air flow, as identified herewith:
- I. Grilles and registers width multiplied by height, excluding flanges. Volume control dampers shall form part of the unit rate for registers and shall not be separately accounted.
- II. Diffusers cross section area for air flow at discharge area, excluding flanges. Volume control dampers shall form part of unit rate for supply air diffusers and shall not be separately accounted.
- III. Linear diffusers shall be measured by cross-sectional areas and shall exclude flanges for mounting of linear diffusers. The supply air plenum for linear diffusers shall be measured with ducting as described earlier.
- IV. Flexible connection shall be measured by their cross sectional area perpendicular to the direction of air flow. Quoted rates shall include the necessary mounting arrangement, flanges, nuts and bolts and treated- for-fire requisite length of canvas cloth.

#### 10.7 FLEXIBLE DUCT:

Insulated flexible duct should be UL 181 CLASS I AIR DUCT LISTED AND LABELLED WITH NFPA 90A & 90B ANDSEAL OF AIR DIFFUSION COUN-

CIL with double lamination of tough polyester which encapsulates steel helix wire forms the air tight inner core, double layer core wrapped in a multiple thickness of fiber- glass wool with R Value 4.2, Green guard certification of fiberglass wool must.



, Reinforced and sheathed in a rugged and durable tri directionally reinforced metalized polyester jacket.

Flexible duct connections should be made as per UL181 listing procedure with proper flexible right forming brace connection allowing right connections for flexible duct into energy efficient. and Strapping the flexible duct connections with flexible duct strap ties.

List Of Approved Makes					
Equipment / Material	Makes				
VRF / VRV Units	Mitsubishi Electric / Hitachi/ Daikin/				
	Mitsubishi Heavy Industries/Toshiba/ Blue				
	star/Carrier				
Cassette Unit	Mitsubishi Electric / Hitachi/ Daikin/				
	Mitsubishi Heavy Industries/Toshiba/ Blue				
Calibiliais	star/Carrier				
Split Unit	Mitsubishi Electric / Hitachi/ Daikin/				
	Mitsubishi Heavy Industries/Toshiba/ Blue star/Carrier				
Copper Pipe	Mandev / Rajco / Totaline				
Hard PVC Pipes	Supreme / Prince				
G.I Sheet	Tata / Jindal / Essar / Nippon				
Acoustic Insulation	Arma sound (Arma cell) / Equivalent				
7,000000	ruma seama (ruma ceny) zapamanem				
Thermal Insulation Material					
a) NITRILE RUBBER	Armaflex / K Flex / Equivalent				
b) Thermocole	Breadshell / Equivalent				
Cable					
a) Armored Cable	Finolex / Universal / Polycab / RR Kabel				
b) Flexible Cable	Finolex / Universal / Polycab / RR Kabel				
PVC rigid Ac- Conduits &					
cessories	FIA approved				