SBI INFRA MANAGEMENT SOLUTIONS PVT.LTD.

HEAD OFFICE-GROUND FLOOR RAHEJA CHAMBERS,
FREE PRESS JOURNAL MARG, NARIMAN POINT, MUMBAI-21

TENDER FOR PROPOSED AIRCONDITIONING WORK AT 10TH FLOOR,CENTER- 01, WORLD TRADE CENTER, CUFFE PARADE, MUMBAI

PART – A: TECHNICAL BID

TENDER SUBMITTED BY:

NAME : _____

ADDRESS : _____

_____

_____

GSTIN NO. : _____

DATE : _____

Signature of Contractor with Seal

NOTICE INVITING TENDERS

TENDER FOR PROPOSED AIRCONDITIONING WORK AT 10TH FLOOR,CENTER- 01, WORLD TRADE CENTER, CUFFE PARADE, MUMBAI

SBIIMS of behalf of SBI invites "online item rate E-tender" for captioned work from the HVAC contractors who have carried out Air-conditioning & allied work above 25lacs based in Mumbai/Thane/Navi Mumbai.

The details of tender are as under:

S.No.	Description	
1.	Name of work	**Proposed Air-conditioning Work At 10TH FLOOR,CENTER- 01, WORLD TRADE CENTER, CUFFE PARADE, MUMBAI**
2.	Nature of Work	Air-conditioning Works
3.	Time allowed for completion	**(45 Days)**
4.	Cost of Tender Documents (Processing Fee) non-refundable	Rs. 5**00/-** (To be deposited along with Tender Part-A by way of Demand Draft in favour of **SBI Infra Management Solutions Pvt. Ltd. and payable in Mumbai.)**
5.	Earnest Money Deposit	**Rs. 4,000/- (Four Thousand only) by means of Demand Draft / Pay Order** (Valid for a period of 180 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.**
6.	Initial Security Deposit	2% of contract amount including EMD
7.	Date of issue of tender documents form Bank's website	
	(a) **Technical Bid** (for all prequalified bidders who receive NIT from SBIIMS)	18.08.2018 to 27.08.2018 from Bank's website www.sbi.co.in under <Link>procurement news.
	(b) Price Bid	18.08.2018 to 27.08.2018 from Bank's web site

8.	Eligibility Criteria	Original manufacturers of approved makes or their authorised dealers shall apply.

9.	Last date & time for submission of Technical bid, EMD and cost of tender document	**27-08-2018** by **3.00 PM**
10.	Date Of Opening of Technical Bid	**27-08-2018** by **3.30 PM**
11.	Address at which Technical bid (hard copy) along with EMD & Cost of tender document has to be submitted.	M.D.& CEO, SBI Infra Management Solutions Pvt. Ltd. Ground Floor, Raheja Chambers, Free Press Journal Marg, Nariman Point, Mumbai-21.
12.	Last date & time for submission of price bid.	**27-08-2018at 3.00 PM** At: - https://tenderwizard.com/
12.	Date & time for opening of price bid.	**27-08-2018 at 3.30 PM** At: - https://tenderwizard.com/
13.	Place of opening tenders	M.D.& CEO, SBI Infra Management Solutions Pvt. Ltd. Ground Floor, Raheja Chambers, Free Press Journal Marg, Nariman Point, Mumbai-21.
14.	Liquidated Damages	0.50% of contract amount per weeks subject to max. 5% of contract value or final bill value.
15.	Defects liability period	12 Months from the date of Virtual Completion
16.	Validity of offer	90 days from the date of opening of Price-bid

Signature of Contractor with Seal

17.	Value of Interim Certificate	**Rs. 2.0 Lakhs**. No advance on materials / plant / machinery or mobilization advance shall be paid under any circumstances

19. Tenders can be downloaded from the bank's website **www.sbi.co.in** (link) <Procurement News>. It shall be responsibility of the contractor to arrange and ensure that all pages of technical and financial bid are properly bound separately. Tenders in loose pages may be disqualified.

20. The contractor shall sign and stamp each page of the tender document thereby ensuring the number and sequence of all pages.

21. 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.

22. The SBIIMS Pvt. Ltd. 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.

23. 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.

24. 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.

25. SBIIMS Pvt. Ltd. has the right to accept / reject any / all tenders without assigning any reasons and no correspondence shall be entertained in this regard.

Yours Faithfully,

Assistant Vice President (Electrical)
For **SBIIMS**
MUMBAI- 400021

LETTER OF UNDERTAKING

To,
The MD & CEO,
SBI Infra Management Solutions Pvt. Ltd,
Head Office, Ground Floor,
Raheja Chamber, Free press Journal Marg,
Nariman Point, Mumbai 400 021.

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

(a)	Description of work	**Proposed Air-conditioning Work At10TH FLOOR,CENTER- 01, WORLD TRADE CENTER, CUFFE PARADE, MUMBAI**
(b)	Earnest Money	**Rs. 4,000/- (Four Thousand only) by means of Demand Draft / Pay Order** (Valid for a period of 180 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	**45 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.4,000/- (Four 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 fulfillment 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 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 11.1.6 "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.

6) 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)

ARTICLES OF AGREEMENT

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

ARTICLES OF AGREEMENT made the _____ date of _____ between SBIIMS PVT.LTD., on behalf of SBI, having its office at Mumbai hereinafter called "the Service Provider" of the One Part and _____ _____ _____

WHEREAS the SBIIMS PVT.LTD. is desirous of _____ _____ _____and has caused specifications describing the work to be done to be prepared by SBIIMS.

AND WHEREAS the said Drawings numbered _____ to_____ inclusive, the Specifications and the Schedule of Quantities have been signed by or on behalf of the parties hereto.
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:

1) 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 **SBIIMS,** 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 Pvt. Ltd. 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 14th 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 **110 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 PVT. LTD. and the Contractor have set their respective hands to these presents and two duplicates hereof the day and year first hereinabove written.

SIGNATURE CLAUSE

SIGNED AND DELIVERED by the
_____ By the
(Employer)

hand of Shri _____
_____ (Signature of Employer)
(Name and Designation)

In the presence of:

1) Shri / Smt. _____ (Signature of Witness)

Address _____
_____
(Witness)

SIGNED AND DELIVERED by the

_____ by the
(Contractor) (Signature of Contractors)
In the presence of:

Shri / Smt. _____ (Signature of Witness)

Address _____
_____
(Witness)

SECTION – 1

INSTRUCTIONS TO THE TENDERERS

1.0 Scope of work

Sealed Tenders are invited **by SBIIMS,** for and behalf of SBI / SBIIMSPL for the Proposed Airconditioning Work At 4th Floor, C & D Wing, GITC Building, At Sector 11, CBD Belapur, Navi Mumbai.

1.1 Site and its location

The proposed work is to be carried out at **10TH FLOOR,CENTER- 01, WORLD TRADE CENTER, CUFFE PARADE, MUMBAI**

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

Priced 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) Additional Specifications

c) Technical specifications

d) Drawings

e) Special conditions of contract

f) General conditions of contract

g) Instructions to Tenderers

2.3 Complete set of tender documents including relative drawings can be downloaded from the website www.sbi.co.in

2.4 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. 4,000/-(Rs. Four Thousand only) by means of Demand Draft / Pay Order** (Valid for a period of 180 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 be retained as a part of security deposit.

5.0 **Initial/ Security Deposit**

The successful tenderer will have to submit a sum equivalent to 2% of accepted tender value less EMD by means of DD drawn in favour of SBIIMS Pvt. Ltd. within a period of 15 days of acceptance of tender.

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.

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 45 **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 item rate tender**

11.1.1 The tenderers shall quote their rates for individual items both in words and figure. In case of discrepancy between the rate quoted in words and figures, the unit rate quantity in words will prevail. If no rate is quoted for a particular item the contractor shall not be paid for that item when it is executed.
The amount of each item shall be calculated and the requisite total is given. In case of discrepancy between the unit rate and the total amount calculated from multiplication of unit rate and the quantity the unit rate quoted will govern and the amount will be corrected.

11.1.2 The tenderers need not quote their rates for which no quantities have been given. In case the tenderers quote their rates for such items those rates will be ignored and will not be considered during execution.

11.1.3 The tenderers should not change the units as specified in the tender. If any unit is changed the tenders would be evaluated as per the original unit and the contractor would be paid accordingly.

The tenderer should not change or modify or delete the description of the item. If any discrepancy is observed he should immediately bring to the knowledge of the Architect/ SBIIMS Pvt. Ltd.

11.1.4 Each page of the BOQ shall be signed by the authorized person and cutting or overwriting shall be duly attested by him.

11.1.5 Each page shall be totaled and the grand total shall be given.

11.1.6 **The rate quoted shall be firm and shall include all costs, allowances etc. except G.S.T, which shall be payable / reimbursed at actuals.**

11.1.7 The SBIIMS Pvt. Ltd. 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 within its sole discretion without assigning any reason(s) for doing so and no claim / correspondence shall be entertained in this regard.

11.1.8 In case it is decided by the SBIIMS Pvt. Ltd. to drop one or more buildings from the scope of work at any stage of the project, the contractor shall not be entitled to raise any claim / compensation for such deleted scope of work. Also, the SBIIMS Pvt. Ltd. may consider issuing work order for various 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.

SIGNATURE OF THE CONTRACTOR

WITH SEAL

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, Ground Floor, Raheja Chambers, Free Press Marg, Nariman Point, Mumbai- 400 021 and includes the client's representatives, successors and assigns.

1.1.2 SBIIMS shall mean **SBI INFRA MANAGEMENT SOLUTION PVT. LTD.**, Mumbai.

1.1.3 '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.

1.1.4 '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.

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.

1.1.8 "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 M.D. & CEO, 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 of SBIIMS Pvt. Ltd.
ii) SBIIMS Engineer (Civil and Electrical) in-charge of the Project, as may be nominated by the M.D. & CEO, SBI Infra Management Solutions Pvt. Ltd. …. Members.
iii) Concerned partner of the Architects and their Resident Architect…. Member.

CLAUSE

1.0 Total Security Deposit

Total Security deposit comprise of

Earnest Money Deposit

Initial security deposit

Retention Money

a) **Earnest Money Deposit -**

The tenderer shall furnish EMD of **Rs. 4,000/- (Rs. Four Thousand only**) in the form of Demand draft or bankers cheque drawn in favour of SBIIMS 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 Pvt. Ltd. or after it is accepted by the SBIIMS Pvt. Ltd. the contractor fails to enter into a formal agreement or fails to pay the initial security deposit as stipulated or fails to commence the commence the work within the stipulated time.

b) **Initial Security Deposit (ISD)**

The amount of ISD shall be 2% of accepted value of tender including the EMD 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 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 thereupon.

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 bind 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 Pvt. Ltd SBI through its Architect / consultants are the properties of the SBIIMS Pvt. Ltd. They are not to be used on other work.

7.0 **Detailed drawings and instructions:**

The SBIIMS Pvt. Ltd. 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 Pvt. Ltd. through the architect/consultant

7.0 **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 6. 0 of GOC 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 Pvt. Ltd. on account of such breach to pay a liquidated damages 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 Pvt. Ltd. /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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd.

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 Pvt. Ltd. and the original policy may be lodged with the SBIIMS Pvt. Ltd.

13.0 **Inspection of work:**

The SBIIMS Pvt. Ltd. / 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 Pvt. Ltd./Architect/consultant and their representatives necessary for inspection and examination and test of the materials and workmanship. No person unless authorized by the SBIIMS Pvt. Ltd./ 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 Pvt. Ltd. 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 by 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 quantity 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 M book 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 Pvt. Ltd. / 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 Pvt. Ltd. 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 Pvt. Ltd., the contractor shall ensure that the following works have been completed the satisfaction of the SBIIMS Pvt. Ltd.:

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 Pvt. Ltd. not incorporated in the permanent works.

c) Remove all rubbish, debris etc. from the site and the land allotted to the contractor the SBIIMS Pvt. Ltd. and shall clear, level and dress, compact the site as required by the SBIIMS Pvt. Ltd.

d) Shall put the SBIIMS Pvt. Ltd. in undisputed custody and possession of the site and all land allot by the SBIIMS Pvt. Ltd.

e) Shall hand over the work in a peaceful manner to the SBIIMS Pvt. Ltd.

f) All defects / imperfections have been attended and rectified as pointed out by the Architects to the full satisfaction of SBIIMS Pvt. Ltd.

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 Pvt. Ltd. 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 Pvt. Ltd. / 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 SBIIMS Pvt. Ltd. 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 Pvt. Ltd. and contractor are covered for the period stipulated I 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd., their employees, or agents or other employees, or agents or other contractors for the damage or injury.

25.3 **Contractor to indemnify SBIIMS Pvt. Ltd**.

The contractor shall indemnify the SBIIMS Pvt. Ltd. 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 SBIIMS Pvt. Ltd. against any action, claim, or proceeding relating to infringement or use of any patent or design or any alleged patent r 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd., or to any person, including any employee of the SBIIMS Pvt. Ltd., 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 Pvt. Ltd. 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 Pvt. Ltd. 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 sub-contractor, save and except an accident or injury resulting from any act or default of the SBIIMS Pvt. Ltd. or their agents, or employees. The contractor shall indemnify and keep indemnified SBIIMS Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd.

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 **110 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 Pvt. Ltd. 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 Pvt. Ltd. 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 an', for the delays. The architect/consultant shall submit their recommendations to the SBIIMS Pvt. Ltd. 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 10.0 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.

29.0 **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 he will 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 Pvt. Ltd.

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 Pvt. Ltd. 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 bonafide 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 Pvt. Ltd. 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 Pvt. Ltd.:

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 Pvt. Ltd..

b) To employ labour paid by the SBIIMS Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. or Architect's / consultant's instructions to the contrary subject any part of the contract.

Then and in any of said cases the SBIIMS Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. from time to time. The SBIIMS Pvt. Ltd. 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 Pvt. Ltd. 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 M books

The Contractor shall not submit interim bills when the approximate value of work done by him is less than **Rs. 2.0 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 Pvt. Ltd. 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 SBIIMS Pvt. Ltd 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 M.D.& C.E.O. SBIIMS Pvt. Ltd., Head Office, Raheja Chambers, Free Press Journal Marg, Mumbai. For conciliation along with all details and copies of correspondence exchanged between him and the SBIIMS Pvt. Ltd.

iii) 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 Pvt. Ltd. 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.

iv) 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 Pvt. Ltd., Officer and that he had to deal with the matters to which the Contract relates in the course of his duties as SBIIMS Pvt. Ltd., 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 Pvt. Ltd. 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.

iii) In case contractor is permitted to use SBIIMS's source of water i.e. Municipal connection, bore well (existing or new) etc., the SBIIMS Pvt. Ltd may consider recovering @1% of contract amount form the final bill of contractor.

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 Pvt. Ltd. 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 Pvt. Ltd. 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 at his own cost, the cost of running and maintenance of the plants are to be included in his tender prices, He shall pay all fees and charges required, by the power supply and include the same in his tendered rates and hold the owner free from all such costs. He has to obtain necessary approval from the appropriate authorities, if required.

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 Pvt. Ltd. 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 Pvt. Ltd. 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.

SPECIAL CONDITION OF CONTRACT

Scope of work

1.0 The scope of work is to carry out for the Proposed Airconditioning work of 4th Floor, C & D Wing, GITC Building, At Sector 11, CBD Belapur, Navi Mumbai.

2.0 **Address of site**

The site is located at **4th Floor, C & D Wing, GITC Building, At Sector 11, CBD Belapur, Navi Mumbai.**

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 **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 Pvt. Ltd. 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

c) The contractors for other trades directly appointed by the SBIIMS Pvt. Ltd. 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 contactor and charges payable for permanent connections, if any, shall be initially paid by the contactor and the SBIIMS Pvt. Ltd. will reimburse the amount on production of receipts

d) The SBIIMS Pvt. Ltd. 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 off.

16.0 **Contractor to verify site measurement**

The contractor shall check and verify all site measurements whenever requested other specialists 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 suitable 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 Pvt. Ltd. / 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 Pvt. Ltd. / 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, levies 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 Pvt. Ltd. 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 Pvt. Ltd. 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 Pvt. Ltd. However adequate transparency would be maintained by the SBIIMS Pvt. Ltd.

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 Pvt. Ltd. may consider returning the Bill to the contractor and no claim for delay on this account will be entertained.

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.

12 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.

APPENDIX HEREINBEFORE REFERRED TO

1) Name of the organization Offering Contract: The M.D.& CEO, SBI Infra Management Solutions Pvt. Ltd. Head Office, Ground Floor Raheja Chambers, Free Press Journal Marg, Nariman Point, Mumbai-21.

2) Consultants : N/A

3) Site Address : **10TH FLOOR,CENTER- 01, WORLD TRADE CENTER, CUFFE PARADE, MUMBAI**

4) Scope of Work : Proposed, Airconditioning works

5) Name of the Contractor : ----------

---

6) Address of the Contractor : ----------

---

7) Period of Completion : 45 **days** from the dated of Commencement

8) Earnest Money Deposit : **Rs. 4,000/- (Rs. Four Thousand only) by means of Demand Draft / Pay Order** (Valid for a period of 180 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.**

9) Retention Money : As per clause no. 11(a) of general Conditions

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. 10.00 Lakhs.
14)	Date of Commencement acceptance	:	07 days from the date of 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	:	1 Months from the date of Virtual Completion.
16)	Initial Security Deposit	:	2% of the Accepted Value of the Tender. (Clause No. 22)
17)	Total Security Deposit	:	As per clause No. 11 a
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:

LETTER OF DECLARATION

To,
The MD & CEO,
Head Office,
SBI Infra Management Solutions Pvt. Ltd.,
Ground Floor, Raheja Chambers,
Free Press Marg, Nariman Point,
Mumbai- 400 021.

Dear Sir,

PROPOSED AIRCONDITIONING WORK AT 10TH FLOOR,CENTER- 01, WORLD TRADE CENTER, CUFFE PARADE, MUMBAI

Having examined the terms & conditions, drawings, specifications, design 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 and affecting the quotation, I/We hereby offer to execute the works specified in the said memorandum within the time specified in the said memorandum on the item rate basis mentioned in the attached schedule and in accordance in all respect with the specifications, design, drawings and instructions in writing referred to in conditions of Tender, the articles of agreement, conditions of contract and with such conditions so far as they may be applicable.

MEMORANDUM

(a)	Description of work	**Proposed Airconditioning Work At10TH FLOOR,CENTER- 01, WORLD TRADE CENTER, CUFFE PARADE, MUMBAI**
(b)	Earnest Money	**Rs. 4,000/- (Four Thousand only) by means of Demand Draft / Pay Order** (Valid for a period of 180 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 work from the date of issue of work order.	**45 days** from the date of commencement as per tender.

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 they

may be applicable or in default thereof to forfeit and pay to SBIIMS PVT.LTD., the amount mentioned in the said conditions.

I/we have deposited Demand Draft / Banker's Cheque / FDR for a sum of **Rs. 4,000/- (Rs. Four Thousand only)** as Earnest money deposit with the SBI Infra Management Solutions Pvt. Ltd. Should I/we do fail to execute the contract when called upon to do so, I/we hereby agree that this sum shall be forfeited by me/us to SBI Infra Management Solutions Pvt. Ltd.

We understand that as per terms of this tender, the SBIIMS Pvt. Ltd. may consider accepting our tender in part or whole or may entrust the work of various buildings proposed (i.e. Institute Building, Staff Qtrs. And Director's Bungalow) in phases. We, therefore, undertake that we shall not raise any claim / compensation in the eventuality of Bank deciding to drop any of the building / buildings 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 the stipulated time limit without any extra claim for price escalation as provided for in Clause 11.1.7 and 11.1.8 "Instructions to Tenderers" of this tender.

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.

Yours faithfully,

Signature of contractor
With Seal

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 Previous R.A. Bill		Up Date (Gross		Present Bill		Remarks
Quantity	Amount (Rs.)	Quantity	Amount (Rs.)	Quantity	Amount (Rs.)	
6		7		8		9

Note:
1. If part rate is allowed for any items, it should be indicated with reasons for allowing such a rate.
2. If ad-hoc payment is made, it should be mentioned specifically.

_____
_____
Net Value since previous bill

CERTIFICATE

The measurements on the basis of which the above entries for the Running Bill No. ---------- were made have been taken jointly on ---------- and are recorded at pages ---------- to ---------- of measurement book No. ----------.

---	---	---
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 measurements has been done at the site satisfactorily as per tender drawings, conditions and specifications.

---	---
Architect	Signature and date of Site Engineer

Building SBI

A.	**SPECIAL REQUIREMENTS OF CONTRACT**
A.01	**General**
A.01.01	These special requirements are intended to amplify the General Conditions of Contract and shall be read in conjunction with them. In case of any discrepancy between the General Conditions of Contract and these special requirements, the most stringent shall apply.
A.02	**Scope of Work**
A.02.01	The Scope of Work shall include supplying, installing, testing and commissioning of air conditioning systems as described in the Tender Drawings, the Technical Specifications and the Schedule of Quantities. The contractor shall carry out and complete in every respect all work under this contract in conformity with the contract documents and to the entire satisfaction of the Owner.
A.02.02	All items of work shall be executed strictly to fulfil the requirements laid down under the tender. The type of equipment, material specifications, method of installation and testing and type of controls shall be in accordance with the Technical Specifications, the approved shop drawings and the relevant Indian Standards.
A.02.03	The Scope of Work shall include all materials, labour, equipment, appliances and incidental work, whether specifically mentioned or not, but are necessary and customary to make a complete installation. It shall include all fittings, accessories, hardware, foundation bolts, terminal lugs, cable glands, junction boxes and other items, whether specifically mentioned or not, but are useful and necessary for proper and efficient working of the equipment.
A.02.04	The Scope of Work shall broadly include the following:
A.02.04.01	Ducted Split Air Conditioning Units
A.02.04.02	Hi-Wall Mounted Split Air Conditioning Units
A.02.04.03	Sheet Metal Work
A.02.04.04	Thermal and Acoustic Insulation Work
A.02.04.05	Electrical Work
A.02.04.06	Drain Piping
A.02.04.07	Vibration Isolation and Sound Attenuation.
A.02.04.08	Surface Painting.
A.02.04.09	Commissioning, Balancing and Performance Testing.
A.02.04.10	Shop Drawings Before Installation and As Built Drawings After Installation.
A.02.04.11	Test Reports, Lists of Spares and Operation and Maintenance Manuals.
A.02.04.12	On Site Training of Owner's Personnel.

A.02.04.13 Maintenance During Defects Liability Period.

A.03 **Site Visit Before Bidding**

A.03.01 The bidder shall visit site to study the site conditions and availability of resources at site before submitting the bid.

A.04 **Performance Guarantee**

A.04.01 The contractor shall guarantee the performance of all equipment and the efficiency of the air conditioning systems as a whole to achieve the desired results. The capacities of the equipment are suggested by the HVAC Consultants based on the building orientation and the available constructional details. However the bidders are advised to visit site to ascertain them and confirm that the capacities are adequate.

A.04.02 The contractor shall guarantee that the individual equipment power consumption shall not exceed the ratings furnished by him under the Technical Data to be Submitted with the Tender. If the actual power consumption exceeds the ratings furnished by him under the Technical Data to be Submitted with the Tender, then the Owner shall levy a penalty for the excess power consumed.

A.05 **Vibration Isolation and Sound Attenuation**

A.05.01 The equipment shall operate under all conditions of load without any objectionable vibration and noise. The contractor shall take the necessary precautions for vibration isolation and sound attenuation.

A.05.02 The noise with all equipment operating shall not exceed the following levels:

A.05.02.01 65 dBA in external areas at a distance of 5 m from building line.

A.06 **Project Management**

A.06.01 The contractor shall have adequate experience of installing equipment of similar type and capacity operated for a minimum period of two years in India.

A.06.02 The contractor shall ensure that the project is planned and executed in a professional manner. The planning, engineering and shop drawing work shall be carried out by an experienced planning and design engineer. The drawings shall clearly show the exact locations, dimensions, levels, etc. of all equipment.

A.06.03 The contractor shall submit for approval a method statement for each activity and the work shall be carried out as per the approved method.

A.06.04 The contractor shall have a full time site supervisor to control all site activities including co-ordination with other disciplines of work at site. He shall ensure high-class quality of workmanship and timely completion of the project. The contractor shall provide necessary quality assurance personnel.

A.07 **Shop Drawings Before Installation and As-Built Drawings After Installation**

A.07.01 The contractor shall prepare and submit for approval his shop drawings based on actual

measurement at site. The shop drawings shall broadly cover the following drawings:

A.07.01.01 Equipment Layout giving complete details of all equipment.

A.07.01.02 Duct Layout showing all sizes, air quantities, air outlet/ intake details, damper locations and fabrication and support details.

A.07.01.03 Refrigerant and drain pipe layout showing all sizes, locations and fabrication and support details.

A.07.01.04 Electrical drawings showing schematic control and power wiring diagrams, cable sizes, switch details, fuse sizes, control components and wiring details.

A.07.01.05 Civil foundation details for all equipment.

A.07.02 The contractor shall verify adequacy of sizes of shafts, openings, clearances, etc. and shall co-ordinate with other contractors. Anomaly, if any, may be brought to the notice of the Engineer – in – Charge. He shall also co-ordinate his layouts with other disciplines of work.

A.07.03 After the completion of installation, the contractor shall prepare as-built drawings incorporating all the changes made in locations, routing, dimensions, levels, etc. during execution of the project.

A.08 **Surface Painting**

A.08.01 All equipment shall be factory finished with epoxy paint before despatch. If the shop paint gets damaged or marred during shipment and installation, the affected surface shall be cleaned with mineral spirit, wire brushed, spot primed and then coated with epoxy paint to match the finish over the adjoining shop painted surfaces.

A.09 **Commissioning, Balancing and Performance Testing**

A.09.01 The commissioning of the air conditioning systems shall be carried out under the supervision of an experienced commissioning engineer.

A.09.02 The air conditioning systems shall be tested for their performance during peak summer and monsoon. The performance test shall be for eight hours on six consecutive days in each season. All tests shall be carried out in the presence of the Owner's representative.

A.09.03 The contractor shall rectify at his cost any defects in materials and/ or workmanship detected in the course of performance testing. The installation shall be tested again after the defects are rectified.

A.10 **Test Reports**

A.10.01 The results of the performance tests during summer and monsoon shall be submitted for scrutiny and approval. The test reports shall include record of all safety and automatic control settings for the entire installation.

A.10.02 The contractor shall also submit along with the test reports, the manufacturers' certified performance data/ curves for all equipment highlighting the operational parameters for the project.

A.11	**Operation and Maintenance Manuals**
A.11.01	On completion of the work but before handing over the air conditioning systems to the Owner, the contractor shall submit three ring-bound copies of operation and maintenance manual. The manual shall include following:
A.11.01.01	A list of all equipment giving full details such as model numbers, part numbers, serial numbers, names and addresses of the manufacturers, etc.
A.11.01.02	Start up operation and maintenance instructions for the entire installation.
A.11.01.03	Step-by-step routine, periodical and breakdown maintenance procedure for all equipment.
A.11.01.04	Exploded view of all equipment detailing spare parts.
A.12	**Availability of Spares and Services During the Life of the Machines**
A.12.01	The contractor shall furnish an undertaking that he shall make available all spares, consumables and services required for proper operation and maintenance of the air conditioning systems for a minimum period of 10 years.
A.13	**On Site Training of Owner's Personnel**
A.13.01	On completion of the work but before handing over the air conditioning systems to the Owner, the contractor shall train the Owner's operation and maintenance staff to operate, adjust and maintain all equipment installed.
A.14	**Completion Period**
A.14.01	The entire work covered under this contract shall be completed within three months from the date of the Letter of Award. If the work is delayed due to any cause over which the contractor has no control, then the Owner may, at the request of the contractor and in consultation with the Consultants, extend the completion period by a reasonable time.
A.15	**Warranty**
A.15.01	The air conditioning systems shall carry a warranty for twelve months from the date of handing them over to the Owner against any defective materials, unsuitable product design and bad workmanship. Any shortcomings found during this warranty period shall be made good and defective materials shall be repaired/ replaced at site free of cost.
A.16	**Maintenance During Defects Liability Period**
A.16.01	The contractor shall receive service calls for any and all problems experienced in the operation of the air conditioning systems during defects liability period, which shall extend to twelve months from the date of handing over the installation to the Owner.
A.16.02	The contractor shall attend to these calls within 24 hours of receiving the complaints and take immediate steps to correct any deficiencies that may exist.
A.16.03	All equipment requiring repairs shall be immediately serviced and repaired. The contractor shall supply all replacement parts and labour at his cost.

B. **SYSTEM DESCRIPTION**

B.01 **General**

B.01.01 Proposed composite works (interior, civil, air-conditioning, electrical & allied work of Business Continuity Centre/ Dealing Room on 6th Floor of State Bank of India's Local Head Office, Bandra- Kurla Complex, Bandra (E), Mumbai

B.02 **Air Conditioning System**

B.02.01 It is proposed to air condition the working areas with split air conditioning systems. The areas to be air conditioned are main hall, counters and working areas, cabins and system rooms, cabins, partitioned office, UPS and systems rooms on the ground floor. The air conditioning systems shall be provided for maintaining comfortable inside temperature of 24°C and less than 60% RH.

B.02.02 The Bank shall have 2 nos. cassate units of about 8.5 TR capacities each, 6 nos. of Split units of about 1 TR capacities each and 1 nos. of Split units of about 1.5 TR capacities each.

B.02.03 The conditioned air from the ducted split air conditioning units shall be carried through suitable supply air ducts and supply air diffusers to the respective areas to be air conditioned. The return air shall be carried back to the ducted split air conditioning units through suitable return air diffusers and false ceiling void acting as return air plenum.

B.02.04 The condensed water from the split air conditioning units shall be carried through suitable drain water pipe work and discharged outside the building at ground level.

B.02.05 All supply air diffusers shall have volume control dampers to control the airflow through them.

B.02.06 The supply air sheet metal duct work shall have thermal insulation to reduce heat gain. The initial portions of the supply air ducts shall have acoustic insulation to reduce noise carry over. The roof shall have insulation underneath to reduce heat gain. All insulation exposed to atmosphere shall have weatherproof covering to prevent water ingress.

B.02.07 All rotating equipment shall be mounted on vibration isolation pads and all pipe and duct connections to the rotating equipment shall be through flexible connectors to prevent vibrations from being transmitted through the building structure.

C. **SCHEDULE OF DRAWINGS**

C.01 The following drawings shall form part of the Tender Documents:

Drawing No.	
C.01.01	HVAC layout

C.02 The Tender Drawings show the suggested equipment and duct layouts. These drawings are prepared by the Consultants for the guidance of the bidders and to make the intent of the Scope of Work clear. These drawings are not meant to be working drawings.

C.03 The Schedule of Quantities is based on the Tender Drawings. In case of conflict between the Schedule of Quantities and other documents including the Technical Specifications and the Tender Drawings, the most stringent shall apply and the interpretation of the Consultants shall be final, conclusive and binding.

C.04 The contractor shall prepare the following drawings. This list is only indicative and indicates minimum requirement. The contractor shall prepare any other drawing that may be required for proper execution of the work.

C.04.01 Equipment Layout giving complete details of all equipment.

C.04.02 Duct Layout showing all duct sizes, air quantities, air outlet/ intake details, damper locations and fabrication and support details.

C.04.03 Refrigerant and Condensate Drain Pipe Layouts showing all pipe sizes, valve sizes, locations and fabrication and support details.

C.04.04 Electrical drawings showing schematic control and power wiring diagrams, cable sizes, switch details, fuse sizes, control components and wiring details.

C.04.05 Civil foundation details for all equipment.

D.01 **Split Air Conditioning Units**

D.01.01 The split air conditioning units shall be compact, lightweight design completely factory assembled and tested before despatch. Each unit shall be complete with energy efficient rotary/ scroll compressor(s), direct expansion cooling coil, air cooled condenser, all interconnecting refrigerant piping, starter and control panels with all necessary operating and safety controls, indicating lights, interconnecting wiring, condensate drain piping, etc.

D.01.02 The indoor units shall be ceiling suspended ducted type, hi-wall mounted or ceiling suspended cassette type as shown in the drawings. The outdoor units shall be installed over mild steel base frames/ brackets painted with two coats of red oxide and final coat of enamel and shall be located on the service slabs at the back. They shall be adequately isolated by vibration isolation pads to prevent vibrations being carried over to the building structure.

D.01.03 The split air conditioning units shall be factory tested and charged. The manufacturer shall provide factory test certificate. After the units are properly installed, they shall be field tested to ensure that the units meet the tender requirements. The necessary quantities of refrigerant, oil and other consumables shall be provided during initial testing and commissioning. The manufacturer's factory representative shall be present during initial testing and commissioning at site.

D.01.04 The noise and vibration levels shall also be checked to establish that both are within acceptable limits.

D.02 **Sheet Metal Work**

D.02.01 All rectangular ducts shall be fabricated out of bright galvanised steel sheets with no watermarks. The galvanised steel sheets shall conform to IS 277. The thickness of sheets shall be as under:

Duct longer side	Sheet thickness
Up to 750 mm	0.63 mm (24 gauge)
751 mm to 1500 mm	0.80 mm (22 gauge)
1501 mm to 2250 mm	1.00 mm (20 gauge)
2251 mm and above	1.25 mm (18 gauge)

D.02.02 The duct fabrication and installation shall generally conform to IS 655 – 1963 and specifically conform to following:

Longer side	Thickness	Transverse joints	Reinforcement
Up to 400 mm	24 gauge	25 mm pocket slip	Cross bracing
401 to 750 mm	24 gauge	25 mm pocket slip	25x25x3 mm angle at 1200 mm

751 to 1000 mm	22 gauge	Sheet metal flange	25x25x3 mm angle at 1200 mm
1001 to 1500 mm	22 gauge	40x40x3 mm angle	40x40x3 mm angle at 1200 mm
1501 to 2250 mm	20 gauge	50x50x3 mm angle	50x50x3 mm angle at 1200 mm
Above 2250 mm	18 gauge	50x50x6 mm angle	50x50x6 mm angle at 1200 mm

D.02.03 All duct work shall be transversely supported as under:

Below 1800 mm perimeter	40x40x3 mm angle with 10 mm rod
1801 to 2500 mm perimeter	40x40x6 mm angle with 10 mm rod
Over 2500 mm perimeter	50x50x6 mm angle with 10 mm rod

D.02.04 All supports shall be painted with two coats of red oxide and final coat of enamel. Wherever ducts pass through concrete or brickwork, galvanised steel sheet skirting and bitumen applied curb shall be provided around it. All joints shall have 3 mm thick rubber gaskets. All duct work shall be measured on the external surface and shall include all fittings and supports.

D.02.05 All duct dampers shall be multi-blade louver type of robust construction and tight fitting. They shall be fabricated out of 1.6 mm thick bright galvanised steel sheets. The design and method of handling and control shall be suitable for the location and the service required.

All duct dampers shall be provided with suitable linkages, index levers and quadrants as required for their proper operation, control and setting in any desired position. The duct dampers and their operating devices shall be robust, easily operable and accessible through suitable access doors. Each duct damper shall have an indicating device clearly showing its open/ close position and a locking device to keep it in fixed position at all times after air balancing of the entire system.

D.02.06 All air outlets shall be powder coated aluminium diffusers. All supply air diffusers shall be provided with volume control dampers operated from front face by removable keys. All volume control dampers shall be of aluminium anodised in matt black finish. All return/ exhaust air grills shall be without volume control dampers.

D.02.07 All duct work shall be tested for air leakage at joints and connections before application of insulation. The entire air distribution system shall be balanced to supply the required air quantities in different rooms and areas to maintain the specified design conditions.

D.03 Insulation

D.03.01 All supply air shall be insulated with aluminium foil faced resin bonded rigid glass fibre of minimum 48 kg/m^3 density set in hot asphalt or any other approved adhesive. The thickness of insulation shall be minimum 25 mm.

D.03.02 All insulation shall be applied on clean surface with 85/40 or 85/25 industrial grade bitumen or any other approved adhesive. All insulation joints shall be filled with insulation material and sealed with aluminium tape to prevent leakage. All insulation shall be measured on the external

surface and shall include all accessories.

D.03.03 The effectiveness of the thermal insulation of ducting shall be tested by measuring the temperature rise in the supply air between each evaporating unit and the farthest air outlet. This temperature rise shall not be more than 1° C.

D.02.07 All duct work shall be tested for air leakage at joints and connections before application of insulation. The entire air distribution system shall be balanced to supply the required air quantities in different rooms and areas to maintain the specified design conditions.

E.01 Unless otherwise mentioned in the Technical specifications, the equipment and materials shall conform to the following standards:

E.01.01 IS 3615 – Glossary of terms used in refrigeration and air conditioning

E.01.02 IS 325 – Three phase induction motors

E.01.03 IS 1822 – Motor starters of voltages not exceeding 1000 V

E.01.04 IS 996 – Single phase small AC and universal motors

E.01.05 IS 1239 – Mild steel tubes, tubulars and other wrought steel fittings

E.01.06 IS 3589 – Electrically welded steel pipes for water, gas and sewage

E.01.07 IS 6392 – Steel pipe flanges

E.01.08 IS 778 – Gun metal gate, globe and check valves for general purposes

E.01.09 IS 277 – Galvanised steel sheets

E.01.10 IS 737 – Wrought aluminium and aluminium alloy sheet and strip for general engineering purposes

E.01.11 IS 655 – Metal air ducts

E.01.12 IS 732 – Code of practice for electrical wiring and fittings for buildings

E.01.13 IS 2516 – AC circuit breakers for voltages not exceeding 1000 V

E.01.14 IS 900 – Code of practice for installation and maintenance of induction motors

E.01.15 IS 1248 – Direct acting electrical indicating instruments

E.01.16 IS 4047 – Heavy duty air break switches and composite units of air break switches and fuses for voltages not exceeding 1000 V

E.01.17 IS 8183 – Specification for bonded glass/ mineral wool

E.01.18 IS 660 – Safety code for mechanical engineering

E.01.19 IS 659 – Safety code for air conditioning

E.01.20 IS 5216 – Code for safety procedures and practices in electrical works

E.01.21 IS 3016 – Code of practice for fire precautions in welding and cutting operations

G. PERFORMANCE TESTS

G.01 General

G.01.01 After installation, initial testing and successful commissioning of all equipment as per the Technical Specifications, the performance tests shall be carried out to establish the equipment ratings.

G.01.02 All equipment capacities shall be computed from temperature/ pressure readings and air flow measurements, whereas power consumption shall be computed from voltage, current and power factor measurements.

G.01.03 The contractor shall arrange at his cost all instruments required for the performance tests. They shall be properly calibrated and the calibration certificates shall be furnished to the HVAC Consultants for approval before starting the performance tests.

G.01.04 The computed results shall tally with the capacity and power consumption figures furnished in the tender. All equipment shall be guaranteed for specified ratings with + 3% tolerance.

G.01.05 The performance tests shall be carried out during peak summer and monsoon. The performance test shall be for ten hours on seven consecutive days in each season. All tests shall be carried out in the presence of the Owner's representative.

G.01.06 All safety and control instruments shall be checked for proper operation. At least four sets of readings shall be taken on each day and for each item. The test readings shall be acceptable only if steady conditions of temperature/ pressure, water flow rates and voltage, current and power factor prevail for at least 15 minutes before taking each set of readings.

G.01.07 The test readings and the computed test results shall be properly recorded and furnished to the Consultants for approval.

H.01 General

H.01.01 The bidder shall furnish complete information about all equipment and materials offered. The tender shall be accompanied by two sets of technical literature giving full description of equipment and materials offered including but not limited to EER, cooling capacity, air flow rate, motor rating, insulation material, etc. The model numbers, if any, of the equipment offered shall be clearly marked on the technical literature.

I. SCHEDULE OF TECHNICAL DEVIATIONS

The bidder shall furnish below a schedule of technical deviations giving reasons and price implication, if any. If there is no deviation, the bidder shall explicitly mention that there is no deviation. If this schedule is left blank, the offer shall be presumed to be in conformity with the Tender Specifications.

Clause No.	Technical Deviation and Reason	Price Implication (Rs.)

LIST OF MATERIALS OF APPROVED BRAND AND THEIR MANUFACTUERS

ITEM	MAKES
1. Aircooled Split	**Daikin/ BlueStar / Hitachi /Voltas/ Carrier/General/ Mitsubishi /or equivalent**
2. Wires.	**Finolex / RR Kabel/ Polycab**
3. Cables	**Finolex / RR Kabel/ Polycab**
4. Circuit Breaker IS 2516	**Legrand/ Schneider**
5. Miniature Circuit breakers & Isolators	**Legrand/ Schneider**
6. Contactors	**L & T / Merlin Gerin/ Crompton Greaves/ ABB**
7. Copper Pipes	**Mandev/ Nippon/ Total Line**
8. Nitrile Rubber Tube	**Armaflex / Aeroflex/ Superlon/ K-flex**
9. Brazing Rod	**Harris / Imperial**
10. G.I. Sheet for Ducting	**Sail / Tata /Nippon**
11. Readymade Ducts	**Alpha / Techno Fabriduct**
12. Spiral Duct	**Western Air Ducts**
13. Thermal/Acoustic Insulation	**Kimmco / Twiga**
14. Air outlets, grilles & Diffusers	**AirBreeze / Air Master / Cosmo**
15. Suction Line Filter	**Emerson/ Danfoss/Sporlon**
16. Shut Off Valve	**Danfoss / Equivalent**
17. Transmission Cable	**LAPP(to be purchased from EGPL Only)**
18. Drain Pipes	**Prince or Equivalent**

Note: 1) The contractor should obtain prior approval from SBIIMSPL/ Consultants before placing order for any specific materials SBIIMSPL may / delete any of the makes or brands out of the above list.

2) All materials should conform to relevant standards and codes of BIS.

3) Materials with I.S.I. mark shall be used duly approved by the SBIIMSPL Engineer/Architect.

4) If any material is found to be not up to the mark, the contractor will have to produce original bills/certificate from the manufacturer or his authorised Distributor for authenticity and genuineness of the material for consideration and as per make approved by the SBIIMSPL. The same will not be considered for payment.

Signature of Contractor with Seal