Tender ID	AMR201904004
Date	16/04/19



SBI INFRA MANAGEMENT SOLUTIONS PVT. LTD., (SBIIMSPL),

(WHOLLY OWNED SUBSIDIARY OF SBI)

AMARAVATI CIRCLE OFFICE

INVITES e-TENDERS ON BEHALF OF

STATE BANK OF INDIA

THROUGH E-TENDERING PROCESS

FOR

PROPOSED ELECTRICAL WORKS AT SBI ONGOLE MAIN BRANCH NEW PREMISES SITUATED IN ONGOLE, PRAKASHAM DIST, ANDHRA PRADESH (Branch Code: 00890)

Contractors who are on the panel of SBI, Hyderabad Circle, (LHO) in the appropriate category are only eligible. (Contractors should submit proof of the same)

Note: Firm should possess valid digital signature for this tender.

Last date for submission of e-Tender: 3:00 P.M. (IST) on 30.04.2019

Opening of e Tenders: 3:30 P.M. (IST) on 30.04.2019

<u>CLIENT/EMPLOYER ON BEHALF OF SBI :</u>

VICE PRESIDENT,
SBI Infra Management Solutions Pvt. Ltd.,
Amaravati Circle Office,
2nd Floor, SBI Amaravati LHO Building,
Gun foundry, Abids,
HYDERABAD – 500 001.

Ph: 040-23387364, 365

E-mail: headand.sbiims@sbi.co.in

<u>ARCHITECT / CONSULTANTS :</u>

MAPE CONNOISSEURS,

(Milind Architectural, Interior &Pankaj Engineering Connoisseurs) 3-4-485 & 485/1, D1, First Floor, Adj. Bank of Baroda, Near Reddy women's College, Barkatpura,

HYDERABAD – 500 027. Tel.: 27566409 – 48557866.

URL: www.mapeindia.com
E-mail: info@mapeindia.com

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NOTICE INVITING TENDER (NIT)

SBI Infra Management Solutions Pvt Ltd. invites online e tenders on behalf of SBI for the below mentioned work from the Contractors who are on the panel of SBI, Hyderabad Circle, (LHO) in the appropriate category are only eligible. (Contractors should submit proof of the same).

1	Name of the work	PROPOSED ELECTRICAL WORKS AT SBI ONGOLE MAIN
		BRANCH NEW PREMISES SITUATED IN ONGOLE, PRAKASHAM DIST, ANDHRA PRADESH (Branch Code: 00890)
2	Cost of Tender Documents	1) Rs 500/- to be paid through SB Collect Payment Portal (in account of respective Tender ID mentioned above) available in SBI internet banking site https://www.onlinesbi.com/.
		2) Proof for crediting the amount i.e. Reciept / Unique Reference No. should be enclosed along with EMD.
3	Data and Time when	For further details see clause 5 in "Instructions to the Tenderer".
3	Date and Time where tender forms are available	Available from 16.04.2019 to 30.04.2019
	l terider forms are available	at (i). https://etender.sbi/
		(ii). SBI Procurement news.
4	Time and last date of	` '
	submission of online e- Tender	
5	Place, Time& Address for	· · · · · · · · · · · · · · · · · · ·
	submission of e	A) Tender documents (as specified) through online at
	tender/contact person	https://etender.sbi/
	/telephone no/email address.	B) EMD, Tender fees credit proof physically at the Address:
		SBI Infra Management Solutions Pvt. Ltd. Amaravati Circle Office
		2 nd Floor, SBI Amaravati LHO Building,
		Gun foundry, Abids
		Hyderabad – 500 001
		Ph : 040-23387364, 365
		e- mail id : headand.sbiims@sbi.co.in
6	Date, Time and Place of opening of e - Tenders	On 30.04.2019 at 3:30 PM
		SBI Infra Management Solutions Pvt. Ltd.
		Amaravati Circle Office
		2 nd Floor, SBI Amaravati LHO Building,
		Gun foundry, Abids Hyderabad – 500 001
		Ph: 040-23387364, 365
		email id : headand.sbiims@sbi.co.in
7	Quantum of Earnest Money	Rs. 20,000.00 /- (DD-Drawn in favor of Regional Manager, State
L_	Deposit (EMD).	Bank Of India, RBO, Region-4 payable at Ongole)
8	Quantum of Security	1. Initial Security Deposit (ISD) - 2% of the Tender value
	Deposit (SD).	including EMD.
		2 Detention Manay Deductible in market bills @ 400/ 5.9
		2. Retention Money- Deductible in running bills @ 10% of the

		value of work and Total deductible is 5% of value of work including EMD, ISD.
9	Estimated cost	Rs.19,39,833.00 /-
10	Terms of payment of Bills	No Advance will be paid Two running bills minimum of 8 lakhs will be paid.
11	Penalty clause/Liquidated Damages	@ 0.5% of the value of work per week of delay subject to a maximum penalty of 5% of the value of work would be strictly imposed.
12	Stipulated time for completion of the work/supply.	60 DAYS
13	Validity period of the tender.	90 days from last date for receipt of tender
14	Eligible Taxes	A) Income Tax will be deducted at source as per Govt. Guidelines.
		B) Reimbursement of GST will be made only on submission of proper GST invoice as per applicable GST provisions/Rules. The contractor should comply with the following; ① Contractor should have GST Registration Number. ② Invoice should specifically/separately disclose the amount of GST levied at applicable rate as per GST provisions/Rules. ② In case of Correction in the bills after scrutiny, contractor should submit fresh bills for payment. ③ Contractor should timely file his GST return in accordance with GST provisions to enable the bank to claim the credit of GST paid to the contractor. ④ The GST Number of State Bank Of India are
		For Telangana State -36AAACS8577K1ZQ For Puducherry U.T - 34AAACS8577K1ZU
15	Electronic Payment	Electronic payment shall be preferred. All the contractor must furnish contact details for communication in addition to, a. Name of their branch b. Account number c. Name of the account holder as in the bank account d. IFSC No of the branch a. PAN number.
16	For further Clarifications on Technical matters & Agency for arranging etender/online bidding	All e-Tender/Online bidding related issues, e-Procurement technologies Limited, Ahmedabad.
		Primary Contact Numbers:- M:- 9081000427 1.Sujith Nair:-079-68136857, sujith@eptl.in 2.Jaymeet Rathod:- 079-68136829, jaymeet.rathod@eptl.in 3.Vinayak Khambe:- 079-68136835, vinayak.k@eptl.in 4.Pratik Parekh:- 79-68136863, pratik.parekh@eptl.in 5.Anshul Juneja:- 079-68136840, anshul.juneja@eptl.in 6.Mehnaz Bano:-079-68136831, mehnaz@eptl.in 7.Devang Patel:- 079-68136859, devang@eptl.in

		Alternate Contact No.:- Mr. Yashrajsinh Rathod:- 079-68136815, yashrajsinh@auctiontiger.net 2. All technical matters contact, 1.Sri. Nagendra Prasad, Manager (Electrical),SBIIMS -8886034541. 2.M/s Mape connoisseurs, Architect, -9848059791.
17	Defect Liability Period.	One year from date of Virtual Completion
18	Any additional Information	The quoted rate should be inclusive of materials, labour, wages, fixtures, transportation, installation, all taxes (excluding GST), wastage's, Octroi, machinery, temporary works such as scaffolding, cleaning, overheads, profit, statutory expenses, incidental charges and all related expenses to complete the work

- Any clarifications sought after opening of the tenders will not be entertained at any cost. Firm should visit the website till last date of submission for changes/corrigendum if any.
- 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.
- The SBIIMS reserves the right to cancel or postpone the tenders at any stage without assigning any reason.

For and behalf of State Bank of India,

VICE PRESIDENT, SBIIMSPL, AMARAVATI.

MANDATORY / CHECKLIST DOCUMENTS

TO BE SUBMITTED BY BIDDER

- > Scanned copy of **Tender Fees** / **Cost credit proof paid through SB Collect** must be uploaded and physically the same needs to be submitted at given address within due date of tender.
- > Scanned copy of **D.D/B.C of EMD** must be uploaded and physically the same needs to be submitted at given address within due date of tender.
- > Scan copy of Letter of Empanel should be uploaded, failing which tender summarily rejected.
- Scan copy of valid Electrical contractor license of the respective bidder to be uploaded.
- > Scan copy of **Declaration copy** duly filled & signed by the respective bidder to be uploaded.
- > Scan copy of **Tender Form / Form of Submission** duly filled & signed by the respective bidder to be uploaded.
- > The signed and scanned copy of entire **Tender document** in pdf format which is downloaded from https://etender.sbi/.
- > Scan copy of **GST Registration certificate**, **PAN** of respective bidder to be uploaded.
- ➤ Communication details of the bidder in addition to details as per Pt No. 16 in Notice Inviting Tender(NIT).

1. TENDER FORM

PROJECT: PROPOSED ELECTRICAL WORKS AT SBI ONGOLE MAIN BRANCH NEW

PREMISES SITUATED IN ONGOLE, PRAKASHAM DIST, ANDHRA PRADESH

(Branch Code : 00890)

Dear Sirs,

I/We the undersigned have carefully gone through and clearly understood after visiting the site and the Tender drawings and tender documents comprising of the tender form, Notice to contractors, and conditions for building contract, Special Conditions, Specifications and Schedule of Probable quantities and Draft Agreement prepared by your Architects:-

MAPE CONNOISSEURS,

(Milind Architectural, Interior & Pankaj Engineering Connoisseurs) 3-4-485 & 485/1, D1, First Floor, Adj. Bank of Baroda, Near Reddy Women's college, Barkatpura, HYDERABAD – 500 0027.

Tel.: 27566409 – 48557866. URL: www.mapeindia.com
E-mail: info@mapeindia.com.

I/We do hereby undertake to execute and complete the whole or part of the work (as desired by you) at the respective rates which/I/We have quoted for the respective items of the Probable Bill of Quantities and at which rate the items specified amount to Rs._______/-

I/We are depositing as Earnest Money a sum of **Rs.** ______(Rupees ______Only) in favor of Regional Manager, RBO, Ongole payable at Ongole along with this tender for due execution of the work at my/our tendered rates together with any variations which shall be adjusted by the Architects at prices based on our tendered rates.

I/We shall deposit further sum equivalent to 2% of tender amount, less EMD paid in the event of my/our tender being accepted, towards initial security deposit.

In the event of this Tender being accepted I/We agree to enter into an agreement as and when required and execute the contract according to your form of Agreement, within 15 days of receipt of work order, in default thereof, I/We do hereby bind my-self/ourselves to forfeit the aforesaid initial security deposit.

I/We further agree to complete the work covered in the said schedule of quantities within **60 Days** from the 5th day reckoned from the date of issue of the work order to commence the work or on which contractor is instructed to take possession of the site, whichever is later.

I/We agree not to employ Sub-contractors other than those that may be specifically approved by your Architects for this contract work.

I/We agree to and to get the work, workers, employees (of contractor, Architect & Employer) engaged on the work at site and all materials at site for execution of the work shall be insured comprehensive insurance including fire/accidents/ rain/ floods/riots/CAR policy (contractor's all risk insurance policy) and the insurance shall cover the period from date of start of work to date of actual completion of work plus 3 months.

In case part work is taken over by the Employer before final completion of the whole work, such parts may not be covered by the insurance from the date of taking over that part of work by the Employer. Draft Insurance deed will be got vetted by the Architect, before obtaining the same. All the rates quoted by me/ us are inclusive of the same in full and nothing extra shall be claimed anytime on account of any of these.

I/We agree to pay Income tax, to be deducted at source, at the rate prevailing from time to time on the Gross value of the work done, and the rates quoted by me/we are inclusive of same.

Yours faithfully,	
Contractor's Signature	
Address:	Date:

2. NOTICE TO CONTRACTOR

ADDRESS:			

PROJECT: PROPOSED ELECTRICAL WORKS AT SBI ONGOLE MAIN BRANCH NEW

PREMISES SITUATED IN ONGOLE, PRAKASHAM DIST, ANDHRA PRADESH

(Branch Code : 00890)

Dear Sirs,

(a) On behalf of SBI we have pleasure in inviting tender for the aforesaid work.

- (b) The scope of work broadly as given below is for PROPOSED ELECTRICAL WORKS AT SBI ONGOLE MAIN BRANCH NEW PREMISES SITUATED IN ONGOLE, PRAKASHAM DIST, ANDHRA PRADESH (Branch Code: 00890)
- (c) Tender Documents should be filled and uploaded/quoted on the site of https://etender.sbi/
- (d) The tenderer must obtain for himself, on his own responsibility and at his own expenses, all the information which may be necessary for the purpose of filling this tender and for entering into a contract for the execution of the same and must examine the drawings and inspect the site of the work and acquaint himself with all local conditions and matters pertaining thereto.
- 5. Each of the tender documents page is required to be signed by the person or persons submitting the tender in token of his/their having acquainted himself/themselves with the General conditions etc., as laid down. Any tender with any of the documents not so signed will be rejected.
- 6. The tender shall be valid for a period of 90 days from the date of opening.
- 9 TOTAL SECURITY DEPOSIT: shall comprise of:
 - 2) Earnest Money deposit
 - 3) Initial Security deposit
 - 4) Retention money
- 9.1 The intending tenderer shall deposit EMD amount as mentioned in NIT by Demand Draft as a guarantee of good faith, which amount shall be forfeited as liquidated damages, in the event of any evasive/direct refusal or delay in starting the work and or signing the contract. The deposit of the unsuccessful tenderers will be returned, without interest, immediately after a decision is taken regarding the award of the contract. The Earnest money of the successful tenderer will be adjusted towards Security Deposit. A tender not accompanied by Earnest money deposit will not be considered.

- 9.2 The successful tenderer will have to pay further sum equivalent to 2% of his contract value, less EMD already paid, as initial Security Deposit (ISD) by means of a D.D./Banker's cheque in favor of Regional Manager, RBO, Ongole payable at Ongole within 14 days from the date of issue of work order to commence work. The EMD and Security deposit thus paid shall be held by the State Bank of India as Security deposit, for due execution and fulfillment of the contract, till the completion of the work and defect liability period in all respects and shall not bear any interest.
- 9.3 Together with the money paid above, further retention of 10% of the value of the work done will be deducted from every running bill, till total retention, including EMD and initial SD paid earlier, comes to 5% of the contract value, and same shall be held by the Bank as Total Security Deposit. On the Architect's certifying the completion of work, 50% of the total security deposit shall be released to the contractor along with the final certificate of payment, and the balance amount will be retained in the manner stated elsewhere for a further period of twelve months after the completion date recorded in completion certificate, issued by the Architects and agreed to by the Bank.
- 10. Within one month of the receipt of intimation from the Architects of the acceptance of his/their tender, the successful tenderer shall be bound to sign an agreement, on a stamp paper in accordance with the Draft Agreement and conditions of contract attached herewith, but the work order or the written acceptance of a tender by the Employer will constitute a binding agreement between the Employer and the person tendering whether such formal contract is or not signed by the contractor.
- All compensation or other sums of money payable by the contractors to the clients, under the terms of this contract, may be deducted from the Security Deposit or from any sum that may be or may become due to the contractor on any account whatsoever, and in the event of the Security deposit being reduced by reasons of any such deductions, the contractor shall within 15 days of being asked to do so make good in cash or cheque, any sum which have been deducted from his security deposit.
- 12. The rates quoted by the Contractor shall include all eventualities, such as heavy rain, sudden floods, accidents, fire, riots etc., which may cause damage to the executed work or which may totally wash out the work. Until the completion certificate is issued to the Contractors, neither the Architect nor the clients will be responsible for such damage or wash out of the construction work.
- 13. Time is the essence of the contract. The work should be completed <u>within 60 days</u> from the date of commencement. The date of commencement shall be within ONE day after confirmation.
 - a) The day five days from the date of issue of work order.

Or

b) The day on which the contractor receives the possession of the site which ever is later.

Or

c) The contractor is asked in writing to take over the possession of the site.

The successful contractor will have to give a CPM/PERT chart of various activities of work to be done so that the work gets completed within the stipulated time. The chart shall be submitted within 15 days from the date of acceptance of the tender.

- 14. If the contractor fails to complete the work by the Scheduled date of completion or within any sanctioned extended time, he will have to pay liquidated damages at the rate of ½% of contract amount for each week of delay the work remains incomplete beyond the completion (Original/extended date), subject to maximum of 5% of the contract value (without extra items).
- 15. The quantities contained in the Schedule are only indicative. The work as actually carried out and done will be measured up from time to time, for which payment will be made subject to the terms and conditions of contract.
- 16. The unit prices shall be deemed to be fixed prices. In case of extra items, a record of labour charges paid shall be maintained and shall be presented every month for extra/substituted items regularly to the Architects for checking. The settlement will be made based on figures arrived at jointly and taking into account unit prices of items of work mentioned in the contract assigned to the successful tenderers. In case, of extra items, where similar or comparable items are quoted in the tender, extra rates shall invariably be based on those tender rates to the extent reasonable.
- 17. SBI/SBIIMS, do not bind themselves to accept the lowest or any tender and reserve to themselves the right to accept or reject any or all tenders, either in whole or in part, without assigning any reason whatsoever for doing so.
- 18. No employee of the bank or SBIIMS is allowed to work as a contractor for a period of two years of his retirement from service, without the previous permission of the bank or SBIIMS. This contract is liable to be cancelled, if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of the bank or SBIIMS as aforesaid before submission of the tender or engagement in the contractor's service.
- 19. The tenderer, apart from being a competent contractor must associate himself with agencies of the appropriate class who are eligible to tender for (1) Electrical (2) Airconditioning works (3) Fire fighting systems & (4) Interiors (fixed furniture), as the case maybe.

ARCHITECTS: MAPE CONNOISSEURS.

(Milind Architectural, Interior & Pankaj Engineering Connoisseurs) 3-4-485 & 485/1, D1, First Floor, Adj. Bank of Baroda, Near Reddy Women's college, Barkatpura,

HYDERABAD – 500 0027. Tel.: 27566409 – 48557866. URL: www.mapeindia.com E-mail: info@mapeindia.com

3. ARTICLES OF AGREEMENT

ARTI betwe	ICLES OF AGREEMENT made the	day of	2019	
of				
	einafter called the "Employer") of the one part		"The Contractor")	of the other
part,	where as the Employer is	desirous of	,	work of executed
descr Engin Wom	has caused drawings, conditions of contractions the works prepared by mape contraction neering Connoisseurs) 3-4-485 & 485/1, Donen's college, Barkatpura, HYDERABAD —mapeindia.com E-mail: info@mapeindia.com.	noisseurs, (Milind Ar 1, First Floor, Adj. B	chitectural, Intericant of Baroda, N	antities etc., or & Pankaj ear Reddy
of co	WHEREAS the SAID DRAWINGS numbered ontract, specifications and schedule of quantities hereto.			
forth said of for su	WHEREAS THE CONTRACTOR has agree in the Schedule hereto (hereinafter referred drawings and described in the same specificated uch sum as may be ascertained to be payable nated to be Rs (Rupees	to as "Said Condition ations and included in	s") the works show the said schedule	wn upon the of quantities
	(hereinafter referred to as "Said Contract	Amount").		
NOW	VIT IS HEREBY AGREED AS FOLLOWS:			
2.	In consideration of the said forth in the said conditions, the contract execute and complete the work shown specifications.	tor shall upon and s	ubject to the said	conditions,
3.	The employer will be pay (Rupees contract sum or such other sum as shall specified in the said conditions.) he	rein after referred	
4.	The term "Architect" in to CONNOISSEURS, (Milind Architectural, In & 485/1, D1, First Floor, Adj. Bank of BHYDERABAD – 500 0027, Tel. : 27566 info@mapeindia.com. or in the event of the contract, such other person as shall be nor a person to whom the contractor shall obtain the said condition appointed to be the Architect under this contract.	nterior & Pankaj Engir Baroda, Near Reddy 1 409 – 48557866, UR eir ceasing to be the A minated for that purpo oject for reasons cons ns provided always f	weering Connoisses Women's college, L: www.mapeindia. Architect for the pure se by the Employe sidered to be suffichat no persons s	urs) 3-4-485 Barkatpura, com, E-mail: rpose of this r, not being cient by the ubsequently

previous decision or approval or direction given or expressed by the Architect for the time being.

- 5. Tender documents containing Notice Inviting Tender(NIT), work order, Contractors acceptance letter, Notice to the Contractor, General Conditions of Contract, Appendix thereto, Special Conditions of Contract, Specifications and Schedule of Quantities with the rates entered therein, drawing shall be read and studied as forming part of this agreement and the parties hereto shall respectively abide by and submit themselves to the conditions and stipulations and perform the agreement on their part respectively in such conditions contained.
- 6. The contract is neither a fixed lumpsum contract or a piece work contract, but is a contract to carry out work in respect of the entire works to be paid for according to actual measured quantities, including variations from BOQ at the rates contained in the Schedule of rates and Probable bill of quantities or as provided in the said conditions.
- 7. The Employer through the Architect, reserves to himself the right of altering the drawings and natures of the work, of adding/substitution to or omitting any items of work or having portions of the same carried out through alternate agencies without prejudice to this contract.
- Time shall be considered a the essence of this agreement and the contractor hereby agrees to commence the work soon after the site is handed over to him but within 15 days reckoned from the date of issue of work order to execute the work, as provided for in the said conditions and complete the entire work in 60 days subject to nevertheless to the provisions for extension of time.
- 9. This agreement and contract shall be deemed to have been made in Ongole, Guntur District, Andhra Pradesh and any questions or dispute rising out of or in any way connected with this Agreement and Contract shall be deemed to have arisen in Ongole, Guntur District, Andhra Pradesh and only the courts in Ongole, Guntur District, Andhra Pradesh shall have jurisdiction to determine the same. The limitation period will be 90 days from the date of dispute having arisen.

AS WITNESS our hand this	day of	2019
Signed by the said in the presence of:		
WITNESS: SIGNATURE		
NAME :		
ADDRESS:		EMPLOYER
WITNESS: SIGNATURE		
NAME :		
ADDRESS:		

4. APPENDIX TO GENERAL CONDITIONS OF CONTRACT

1	Earnest Money Deposit (EMD)	Rs. 20,000/-
2	Initial Security Deposit (ISD)	2% of contract value including EMD.
3	Period of completion	60 DAYS
4	Defects Liability period	12 months after completion as recorded in the completion certificate.
5	Agreed Liquidated Damages	½% of contract amount per week of delay subjected to a maximum of 5% of contract value
6	Period of final measurement	One months after completion as recorded in the completion certificate
7	Minimum value of work to be Executed for issue of interim Certificates for making payment	Minimum Rs. 8.00 Lakhs
8	Retention money from each bill	10% of gross value of each interim bill, subject to max. 5% of contract value
9	Total retention money including Earnest money and initial security Deposit	5% of the contract value
10	Release of Security deposit after Virtual completion.	50% of the total security to be released along with final certificate of payment, but only after removing all his materials, equipment, labour, huts/force, temporary sheds/stores, all his installations, machinery etc., from the site. Balance payment to be released on completion of defects liability period of 12 months
11	Period for honoring Architect's certificate	20 working days from date of receipt of Architect's certificate of payment for interim bills and 30 working days for final certificate.

WITNESS :

DATE : SIGNATURE OF THE CONTRACTOR WITH DATE

5. INDEX TO GENERAL CONDITIONS OF CONTRACT

1.	Interpretations	23.	Removal of improper work and materials
2.	Scope of Contract	0.4	
3.	Drawings and Specifications	24.	Defects after completion
4.	Schedule of Quantities	25.	Certificate of virtual completion
5.	Sufficiency of Schedule of Quantities	26.	Other persons engaged by the Employer
6.	Errors in schedule of Quantities	27.	Insurance in respect of damage to persons and property
7.	Contractor to provide everything necessary	28.	Contractor's All risk policy
8.	Authorities, Notices, Patent rights and royalties	29.	Minimum amount of third party Insurance
9.	Materials and workmanship to conform to description.	30.	Commencement and completion
10	·	31.	Delay and extension of time
10.	The setting out	32.	Damages for Non-completion
11.12.	Removal of all offensive matters Opening up works	33.	Failure by contractor to comply with Architect's instructions
13.	Contractor's superintendence and representative on the work	34.	Architect's delay in progress.
1.1		35.	Supervision of works
14.	Dismissal of workmen	36.	Prime cost and provisional sums
15.	Access to works	37.	Certificates and payments
16.	Employer's representative/PMC	38.	Notices
17.	Assignment of sub-letting	39.	Termination of contract by the
18.	Sub contractors		Employer.
19.	Variations not to vitiate contract	40.	Termination of contract by the contractor.
20.	Measurement to works	41.	Matters to be finally determined by the
21.	Prices of Extras etc., Ascertainment of		Architects
22.	Unfixed materials	42.	Settlement of dispute (Arbitration)

6. GENERAL CONDITIONS OF CONTRACT

1. **INTERPRETATIONS**:

In construing these conditions and the specifications, schedule of quantities and contract agreement, the following words shall have the meaning herein assigned to them except where the subject or context otherwise required:

- a. "Employer" shall mean SBIIMS/SBI
- b. and shall include his/their heirs, legal representatives, assignees and successors.

C.	"Contractor" shall mean
	and shall include his/their heirs, legal representatives, assignees and successors.

- d. "Banks Engineer" shall mean any Engineer who is employed by SBIIMS/SBI or any other Engineer appointed from time to time by the Employer to act as Engineer for the purpose of the Contract.
- e. "Architects" shall mean any Engineer/ representative appointed by **mape connoisseurs**, (Milind Architectural, Interior & Pankaj Engineering Connoisseurs) 3-4-485 & 485/1, D1, First Floor, Adj. Bank of Baroda, Near Reddy Women's college, Barkatpura, **HYDERABAD 500 0027.** Tel.: 27566409 48557866. URL: www.mapeindia.com E-mail: info@mapeindia.com.
- f. "Works" shall mean the works to be executed in accordance with contract specifications, quantities etc.
- g. "Contract" shall mean the Articles of Agreement, the General Conditions, Special Conditions, the Appendix, the Schedule of Quantities, Specifications and drawings, work order etc., attached hereto and duly signed.
- h. "Contract Price" shall mean the sum named in the Tender, subject to such amount additions thereto or deductions there from as may be made under the provisions, hereinafter contained.
- i. "Site" shall mean the Premises, on which the works are to be carried out provided by the Employer for the purpose of the Contract.
- j. "Drawings" shall mean the drawings referred to in the contract etc., and any modifications of such drawings approved in writing by the Architect and the Bank and such other drawings as may from time to time be furnished or approved in writing by the Architect and Employer.
- k. "Notice in Writing" or written notice shall mean a notice in writing, typed or printed characters sent (unless delivered personally or otherwise provided to have been received) by registered post to the last known private or business address or registered office of the address and shall be deemed to have been received, when in the ordinary course of post, it would have been delivered.
- I. "Act of Insolvency" shall mean any Act of Insolvency as defined by the Presidency Towns Insolvency Act, or the Provincial Insolvency Act or any act amending such original.

- m. "Net Prices" if in arriving at the Contract Amount, the contractor has added to or deducted from the total of the items of the Tender any sum, either as a percentage or otherwise, then the net price of any items, in the tender, shall be the sum arrived at by adding to or deducting from the actual figure appearing in the Tender, as the price of that item, a similar percentage or proportionate sum. Provided always that in determining the percentage or proportion of the sum so added or deducted by the contractor, the total amount of any Prime cost items and provisional sums of money shall be deducted from the total amount of the Tender. The expression "net rates" or "net prices" when used with reference to the contract or account shall be held to mean rates or prices so arrived at.
- n. "Virtual Completion" shall mean that the building is in the opinion of the Architect and Employer, sufficiently completed for occupation by the Employer, in relation to the scope of work of this contract.
- o. Words importing persons include firms and corporations. Words importing the singular only, also include the plural and vice versa, where the context requires.

2. **SCOPE OF CONTRACT:**

The contractor shall carry out and complete the said work in every respect in accordance with this contract with the directions of and to the satisfaction of the Architect and Employer. Architect, with the approval of the Employer, may issue further drawings and/or written instructions, details, directions and explanations, which are hereafter collectively referred to as "Architect's Instructions" in regard to:

- a. The variations or modifications of the designs, quality or quantity of works or the addition or omission or substitution of any work.
- b. Any discrepancy in the drawings or between the Schedule of Quantities/ or drawings and/or specifications etc.
- c. The removal and/or re-execution or any works executed by the contractor.
- d. The removal from the site of any material brought there on by the contractor, and the substitution of any other material there from.
- e. The dismissal from the works of any person employed thereupon.
- f. The opening up for inspection of any work covered up.
- g. The amending and making good of any defects under clause 24 "Removal of Improper works and Materials".

The contractor shall forthwith comply and fully execute any work comprised in such Architect's instruction, provided always that instructions, directions and explanations given to the contractor or his representative upon the works by the Architect shall, if involving a variation, be confirmed in writing by the contractor or within 7 days, and if not dissented from in writing within further 7 days by the Architect, such shall be deemed to be the Architects instructions within the scope of contract.

If compliance with the Architect's instructions as aforesaid involved work and/or expense and/or loss beyond that contemplated by the contract, then unless the same were issued owing to some breach of this contract by the contractors, the employer shall pay to the Contractor on the

Architect's certificate, the price of the said work (as an extra to be valued as herein after provided) and/or expense and/or loss.

The Brief Scope of work involves the following.

- 1. Main Panel Installation, DB installation, Ac wiring etc.
- 2. Fan point wiring, light point wiring.
- 3. Installation of switch boards, Light fixtures etc.
- 4. Supply and installation of lights, fans...etc.
- 5. Earthing and UPS installations..etc.

3. DRAWINGS AND SPECIFICATIONS:

The works shall be carried out to the entire satisfaction of the EMPLOYER and the Architect, in accordance with the contract document, drawings and specifications and such further drawings and details as may be provided by the Architect, and in accordance with such written instructions, directions and explanations, as may from time to be given by the Architect and the SBIIMS, whose decision as to the sufficiency and quality of the work and materials shall be final and binding on the contractor. If the work shown on any such further drawings or work that may be necessary to comply with any such instructions, directions or explanations, be in the opinion of the contractor outside the scope of work or reasonably could not be inferred from the contract, he shall before proceeding with such work, give notice in writing to this effect to the Architect and the SBIIMS, and in the event of the Architects and the SBIIMS agreeing to the same in writing, the contractor shall be entitled to an allowance in respect of such extra work as an authorized extra. If the Architect and the contractor fail to agree, as to whether or not there is an extra, then, if the Architect decided that the contractor is to carry out the said work, the contractor shall do so, and the question whether or not there is any extra and if so, the amount thereof, shall failing agreement be settled by Arbitration as hereinafter provided, but such reference shall in no way delay the fulfillment of this contract.

No drawing shall be taken as in itself an order for variation, unless in addition to the Architect's signature, it bears express works stating that it is intended to be such an order or bears a remark "VALID FOR CONSTRUCTION". No claim for payment for extra work shall be allowed, unless the said work shall have been executed under the provisions of clause 8 (Authorities, notices, patents, rights and royalties) or by the authorities, of directions in drawing of the Architect as herein mentioned.

One complete set of the signed drawings and a copy of contract document (specifications and schedule of quantities etc) shall be furnished by the Architect to the contractor. The Architect shall furnish within such time as he may consider reasonable, one copy of any additional drawings, which in his opinion may be necessary for the execution of any part of the work. Such copies shall be kept at the works, and the Architect or hiss representatives shall, at all reasonable times have access to the same and shall be returned to the Architect by the Contractor, before the issue of the final certificate. The original contract documents shall remain in the custody of employer.

4. SCHEDULE OF QUANTITIES:

The Schedule of Quantities unless otherwise stated shall be deemed to have been prepared in accordance with the Standard Procedure of the Architects and shall be considered to be approximate and no liability shall attach to the Architect for any error/variations that may be discovered therein.

Please refer Clause 5, 6 of Special conditions of contract.

5. SUFFICIENCY OF SCHEDULE OF QUANTITIES:

The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the prices stated in the schedule of Quantities and/or the Schedule of Rates and Prices, which rates and prices shall cover all things necessary for the proper completion of the works.

6. ERRORS IN SCHEDULE OF QUANTITIES:

Should any error appear in the Schedule of Quantities, other than in the Contractor's prices and calculations, it shall be rectified and such rectification shall not vitiate the contract but shall constitute a variation of the contract and be dealt with as an authorised extra or deduction.

7. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY:

The contractor shall provide everything necessary for the proper execution of works according to the true intent and meaning of the drawings, specifications and the Schedule of Quantities etc., taken together, whether the same may or may not be particularly shown or described there in, provided the same can be inferred there from. The several document forming the contract are to be taken as mutually explanatory to one another; detailed drawings and figured dimensions in preference to scale, and special conditions in preference to General conditions and particular specifications in preference to General specifications.

In case of discrepancy between the Schedule of Quantities, the specifications and/or the drawings, the following order of preference shall be observed:-

- i) Description of Schedule of Quantities.
- ii) Particular specifications and special condition, if any.
- iii) Drawings.
- iv) C.P.W.D. specifications.
- v) Indian Standard specifications of B.I.S.

If there are varying or conflicting provisions made in any document forming part of the contract, the Architect shall be the deciding authority, with regard to the intention of the document and his decision shall be final and binding on the contractor.

Any error in description, quantity or rate in schedule of quantities or any omission there from shall not vitiate the contract or release the contractor from the execution of the whole or any part of the works expressed therein according to drawings and specifications or from any of his obligations under the contract.

The contractor shall make his own arrangements for providing water, for carrying out the work, at his own cost. If water from any source other than Municipal main is to be used for construction, the same shall be tested at the contractor's cost, and a report submitted to the Architect for his approval, before such water is used for the works. Temporary Electrical connections shall be obtained by the contractor to facilitate execution and completion of work at their cost and all the charges there of should be borne by them.

The contractor shall supply, fix and maintain at his cost, during the execution of any works, all the necessary scaffolding, staging, hoarding, watching and lighting during nights as well as by day required not only for the proper execution and protection of the said works, but also for the protection of the public and the safety of any adjacent road, streets, cellars, vaults, pavements, walls, houses, buildings and all other erections, matters or things. The Contractor shall take down and remove any or all such scaffolding, staging, etc., as occasion shall require or when

ordered or so to do, and shall fully reinstate at his own cost and make good all the matters and things disturbed during the execution of the works to the satisfaction of the Architects.

8. AUTHORITIES, NOTICES, PATENT RIGHTS AND ROYALTIES:

The contractor shall conform to the provisions of the statutes relating to the works, and to the regulation and by laws of any local authority, and of any water, lighting and other companies or authorities, with whose systems the structures are proposed to be connected; and shall before making any variation from the drawings or specifications, that may be necessitated by so conforming, give to the Architects a written notice, specifying the variations proposed to be made and the reason for making it and apply for instruction thereon. In case, the contractor shall not within ten days receive such instructions, he shall proceed with the work conforming with the provisions, regulations or by laws in question.

The contractor shall bring to the attention of the Architect all notices required by the said acts, regulations or bylaws to be given to any authority, and pay to such authority or to any Public Officer all fees that may be properly chargeable in respect of the works, and lodge the receipts with the Architects.

The contractor shall indemnify the Employer against all claims in respect of patent rights, designs, trademarks or name or other protected rights in respect of any constructional plant, machine, work or material used for or in connection with works or temporary works and from and against all claims, demands, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto. The Contractor shall defend all actions arising from such claims, unless he has informed the Architects, before any such infringement and received their permission to proceed, and shall himself pay all royalties, licence fees, damages, cost and changes of all and every sort that may be legally incurred in respect thereof.

9. MATERIALS AND WORKMANSHIP TO CONFORM DESCRIPTION:

All materials and workmanship shall, so far as procurable be of the respective kinds specified in the Schedule of Quantities and/or specifications and in accordance with the Architect's instructions and the contractor shall on the request of the Architects furnish to them all invoices, accounts, receipts and the other vouchers to prove that the materials comply therewith. The contractor shall at his own cost arrange for and/or carry any test of any materials, which the Architect & Employer may require. The costs of materials used for testing, packing, transportation and testing shall be borne by the contractor and his quoted rates/amounts shall include all such expenses/contingencies.

In case of non-availability of specified Make/brand of any material the alternate make/brand will be given by the Employer/Architect.

10. THE SETTING OUT:

The Contractor shall at his own expense, set out the works accurately in accordance with the plans and to the complete satisfaction of the Architect. The Contractor shall be solely 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. If at any time any error shall appear during the progress or on completion of any part of the work, the contractor shall at his cost rectify such error if called upon to the satisfaction of the Architects/Employer. The work shall from time to time be inspected by the Architect and/or his representatives, but such inspections shall not exonerate the contractor in any way form his obligation to remedy any

defects, which may be found to exist at any stage of the work or after the same is completed, at his own cost.

11. REMOVAL OF ALL OFFENSIVE MATERIALS:

All debris arising out of the work shall be disposed off as per the rules and regulations of the Local authorities concerned.

12. **OPENING UP WORKS:**

In the event of the Architect / Employer feels that the work is not carried out as per tender specifications, contractor at his cost shall open the concealed work at his cost for which no Extra cost will be paid.

13 CONTRACTOR'S SUPERINTENDENCE & REPRESENTATIVE ON THE WORKS:

The contractor shall give all necessary personal superintendence during the execution of the works and so long thereafter as the Architect may consider it necessary until the expiration of the "Defects Liability Period". The Contractor shall meet the Architect or his representative, whenever required and so informed by the Architect.

The Contractor shall maintain and be represented at site at all times, while the work is in progress, by a responsible and efficient foreman, approved by the Architect and who must thoroughly understand all the trades entailed and be constantly in attendance while the men are at work. Any directions, explanations, instructions or notices give by the Architect & Employer to such foreman shall be deemed to have been given to the contractor and shall be binding as such on the contractor. The Foreman shall be thoroughly conversant with the English language and should be able to read, write and speak English.

14 **DISMISSAL OF WORKMEN**:

The contractor shall on the request of the Architect and Employer immediately dismiss from the works any person employed thereon who may, in the opinion of the Architect and Employer be unsuitable or incompetent or who may misconduct himself, and such person shall not again be employed or allowed on the works without the permission of the Architect & Employer.

15 **ACCESS TO WORKS**:

The Architect, the Employer and any person authorized by them shall at all reasonable times have free access to the works and to the workshops, factories or other places where materials are being prepared or constructed by the contract and also to any place where the materials are lying or from which they are being obtained. The Contractor shall give every facility to the Architect and the Employer and their representatives for inspection and examination and test of the materials and workmanship. No person, unless authorised by the Architect or the Employer, except the representatives of Public authorities, shall be allowed on the works at any time. If any work is to be done at a place other than the site of works, the contractor shall obtain the written permission of the Architect for doing so.

16 **EMPLOYER'S REPRESENTATIVE/PMC**:

The Employer may appoint an assistant to the Engineer, any Site Engineer or Project Management Consultant (PMC), who shall be the representative of the Employer. The duties of the Employer's representatives are to watch and supervise the works and to test any materials to be used and of workmanship employed in connection with the works. He shall have no authority either to relieve the contractor of any of his duties or obligations under the

contract, or except those expressly provided hereunder, to order any work involving delay or any extra payment by the Employer or any variation of or in the works.

The contractor shall afford the Employer's representative every facility and assistance for examining the works and materials and checking and measuring item and materials. Neither the Employer's representative nor any assistant to the Architect shall have power to revoke, alter, enlarge or relax the requirements of this contract, or to sanction any new-work, additions, alterations, deviations or omissions unless such an authority may be specially conferred by a written order of the Architect and Employer.

The Employer's representative shall have to give notice to the Contractor or his representating about the non-approval of any work or materials and such works shall be suspended or the use of such materials should be discontinued until the decision of the Architect is obtained. The work will from time to time be examined by the Architect or the Employer's representative, but such examinations shall not in any way exonerate the contractor from the obligation to remedy any defects, which may be found to exist at any stage of the work or after the same is completed. Subject to the limitations of the clause, the contractor shall take instructions only from the Architect and Employer.

17 **ASSIGNMENT OF SUB-LETTING:**

The works included in the contract shall be executed by the contractor and the contractor shall not directly or indirectly transfer, assign or underlet the contract or any part/share thereof or interest therein without the written consent of the Architect and Employer, and no undertaking shall relieve the contractor from the full and entire responsibility of the contract or from active superintendence of the works during their progress.

18 **SUB-CONTRACTORS**:

All specialists, merchants, tradesmen, and others, executing any work or supply and fixing any goods for which prime cost prices or provisional sums are included in the Schedule of Quantities and/or specifications, who may be nominated or selected by the Architect and employer and hereby declared to be sub-contractors employed by the Contractor, are herein referred to as nominated sub-contractors. No nominated sub-contractors shall be employed on or in connection with the works, against whom the contractor shall make reasonable objection or (see where the Architect and contractor shall otherwise agree), who will not enter into a contract provided.

- a. The nominated sub-contractors shall indemnify the contractor against the same obligations in respect of the sub-contract as the contractor is under, in respect of this contract
- b. The nominated sub-contractors shall indemnify the contractor against claims in respect of any negligence by the sub-contractor, his servants or agents or any misuse by him or them of any scaffolding or other plant, the property of the contractor or under any Workman's Compensation Act in force.
- c. Payment shall be made by the contractor to the nominated sub-contractor, within 14 days of receipt of the Architect's certificate, provided that before any certificate is issued, the contractor shall upon request furnish to the Architect proof that all nominated sub-contractor's account included in the previous certificates have been duly discharged; in default whereof the Employer may pay the same upon a certificate of the Architect and deduct the amount thereof from any sums due to the contractor. The exercise of this power shall not create any contract between Employer and Sub-contractor.

19 **VARIATIONS NOT TO VITIATE CONTRACT**:

The contractor shall when directed in writing by the Architect, omit from or vary works shown upon the drawings or described in the specifications or included in the priced schedule of quantities, but the contractor shall not make any alterations or additions to or omissions from the works or any deviations from the provisions of the Contract without such authorizations or direction in writing from the Architect and Employer.

No claim for any extra item or deviations shall be allowed, unless it shall have been executed by the Authority of the Architect and Employer as herein mentioned. Any such extra item or deviation is hereinafter referred to as an authorised extra item or deviation. No variations i.e., additions, omissions or substitutions shall vitiate the contract.

The rate of items not included in the bill of quantities shall be settled by the Architect and Employer in accordance with the provisions of clause 21, hereof.

20 **MEASUREMENTS OF WORKS:**

The Architect/PMC may from time to time intimate the Contractor that he requires the works to be measured and the contractor shall forthwith attend or send a qualified agent to assist PMC/Architect's representative in taking measurements and calculations, and to furnish all particulars or give all assistance required by either of them.

Should the contractor not attend or neglect or omit to send such an agent, then the measurements taken by the PMC/Architects representative approved by them shall be taken to be the correct measurements. The mode of measurements wherever not mentioned in contract documents be taken in accordance with the Indian Standard of Method of measurements of building works (I.S.1200 – 1958) and its revisions, if any. In case of any discrepancy between various contract documents on mode of measurements, the mode given in Bill of Quantities will take precedence over others.

The contractor or his agent may at the time of measurement take such notes and measurements as he may require.

21. PRICES FOR SUBSTITUTIONS/EXTRA ETC., ASCERTAINMENT OF:

Should it be found after the completion of the works from measurements taken (in accordance with the previous paragraph) that any of the quantities or amounts specified for the works in the priced schedule of quantities of work thus ascertained are less or greater than the amounts and/or tender or that any variations, is made, and any substituted/ extra (new) items have been executed, the valuation of such quantities/items, amounts or variations, unless previously or otherwise agreed upon, shall be made in accordance with the following rules:

- a. The net rates or prices in the original tender shall determine the valuation of the extra (additional quantities and or extra/substituted item of work), where that work is of a similar character and executed under similar conditions of the work priced therein. This applies to extra and substituted items of work to the extent, they are similar in nature to the items in the contract.
- b. The net prices given in the original tender shall determine the value of the items omitted, provided if omissions vary the conditions under which any remaining items of work are carried out, the prices for the same shall be valued under thereof.
- c. Where extra/substituted item of works are not of similar character (either partly & fully) and/or executed under similar conditions as aforesaid or where the omissions vary the

conditions under which any remaining items of works are carried out or if the amount of any omission or additions relative to the amount of the whole of the contract works or to be any part thereof shall be such that in the opinion of the Architects the net rate or price contained in the priced schedule of quantities or tender or for any item of the work involves less or more beyond that reasonably contemplated by the Contractor or is by reason of such omission or addition rendered unreasonable for in-applicable, the Architect shall fix in consultation with the Employer such other rates or prices as in the circumstances he shall think reasonable and proper, which shall be final and binding on the contractor. For extra and substituted items this will apply for portions of the items for which, items of similar nature are not available in the contract.

d. Where extra and or substituted items of work cannot be properly measured or valued, the contractor shall be allowed based on the net local day work rates and wages for the district and prevalent market rates for materials etc., at the time of ordering that item; provided that in either case vouchers for wages paid specifying the daily time (and if required by the Architect, the workmen's name) and materials employed at or before the end of the week following that in which the work has been executed.

The measurements and valuations in respect of the extra and substituted items of work shall be completed within the "Period of final measurement" or within 3 (three) months from the completion of the contract works as defined under clause No.26(certificate of virtual completion).

22. **UNFIXED MATERIALS:**

When any materials intended for the works shall have been placed at site by the contractor, such materials shall not be removed there from (except for the purposes of being used on the works) without the written authority of the Architect and Employer and when the contractor shall have received payment in respect of any certificate in which the architect shall have stated that he has taken into account the value of such unfixed materials on the works such materials shall become the property of the Employer and the Contractor shall be liable for any loss or damage to any such materials.

23. **REMOVAL OF IMPROPER WORK AND MATERIALS:**

The Architect shall, during the progress of the works, have power to order in writing from time to time the removal from the works, within such reasonable times as may be specified in the order, of any materials which in the opinion of the Architect and Employer are not in accordance with the specifications or the instructions of the Architect and Employer and the substitution with proper materials and the removal and proper re-execution of any work, which has be executed with materials or workmanship, not in accordance with the contract/drawings and specifications or instructions etc., the contractor shall forthwith carry out such orders at his own cost. In case of default on the part of the contractor to carry out such orders, the Employer shall have the power to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be borne by the Contractor, and shall be recoverable from the contractor by the Employer, or may be deducted by the Architect, from any money due or may become due to the contractor for this work or on any other account.

Instead of this procedure for work not done in accordance with the contract, the Architect and Employer may allow such work to remain, and in that case may make allowance for the difference in value together with such further allowance for damages to the Employer, as in his opinion may be reasonable. This allowance shall be recoverable from the contractor by the Employer, or may be deducted by the Architect, from any money due or may become due to

the contractor for this work or on any other accounts. The decision of Architects in these matters shall be final and binding on the contractor.

24. **DEFECTS AFTER COMPLETION:**

Any defect, bend, bubbles in laminate, shrinkage, settlement or other faults which may appear with in the "Defects Liability Period" i.e. within 12 months after the virtual completion of the works arising in the opinion of the Architect and the Bank, from materials or workmanship not in accordance with the contract, shall upon the directions and writing of the Architect and Employer and within such reasonable time as shall be specified therein, be rectified and made good by the Contractor at his own cost. In case of default, the Employer may employ any other person to rectify and make good such defects, shrinkage, settlements or other faults. All damages, loss and expenses consequent therein or incidental thereto shall be made good and borne by the contractor and such damage, loss and expenses shall be recoverable from him by the employer or may be deducted by the Employer, the damages, loss and expenses from any sums that may be due to the contractor or amount retained under condition 37 (Certificate and payment) and in event of the amount retained being insufficient recover the balance from the amount held against EMD & Security deposit or any other amounts due or may become due later.

25 **CERTIFICATE OF VIRTUAL COMPLETION:**

The contractors shall intimate in writing to the Architects, as and when the works are complete in all respects in order to enable the Architect to intimate the Employer to take possession of the same. The works shall not be considered as virtually completed, until the Architect has certified in writing that the same have been "Virtually completed" and accepted by the employed. The defects liability period shall commence, only from the date of such virtual completion certificate.

26. OTHER PERSONS ENGAGED BY THE EMPLOYER:

The Employer reserves the right to use the premises and any portions of the site for the execution of any work not included in this contract which he may desire to carry out through other persons, and the contractor is to allow all reasonable facilities for the execution of such work, except by special arrangement with the Employer. Such work shall be carried out in such a manner a not to impede the progress of the works included in the contract, and the contractor shall not be responsible for any damage or delay which may happen to or be occasioned by such work.

27. INSURANCE IN RESPECT OF DAMAGE TO PERSONS AND PROPERTY:

The contractor shall be responsible for all injury to persons, animals or things and for all structural and decorative damage to property, which may arise from operation or neglect of himself or any of his or sub-contractor's employees, whether or any other cause whatever in any way connected with the carrying out of this contract. This clause shall be held to include, interalia any damage to buildings, whether immediately adjacent or otherwise, any damage to roads, caused to the buildings and works forming the subject of this contract by frost or other inclement weather. The contractor shall indemnify the employer and hold him harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of government or otherwise, and also in respect of any award of compensation or damages consequent upon such claim.

The Contractor shall reinstate all damages of every sort mentioned in this clause, so as to deliver up the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

The contractor shall indemnify the Employer against all claims which may be made against the Employer, by any member of the Public or other party, in respect of anything which may arise in respect of the works or in consequence thereof and shall at his own cost, effect and maintain until one month after the works are taken over by the Employer or three months after the date of completion of the contract with an approved office, a policy of Insurance in the joint names of the Employer and the contractor against such risks and signing of the contract. The contract shall also indemnify the employer against all claims which may be made upon the Employer whether under the Workmen's compensation act or any other statute in force during the currency of this contract or at common law in respect of any employees of the contractor or of any sub-contractor and shall at his own expense effect and maintain until one month beyond the virtual completion of the contract, with an approved office. A policy of Insurance in the joint names of the Employer and the Contractor against such risks and deposit such policy or policies with the Employer/Architects from time to time, during the currency of the contract. In default of the contractor insuring as provided above, the Architect on behalf of the Employer may so insure and may deduct the premiums paid from any money due or which may become due to the contractor.

The contractor shall be responsible for anything which may be excluded from the Insurance Policies above referred to and also for all other damages to any property arising out of and incidental to the negligent or defective carrying out of this contract however, such damage shall be caused.

The Contractor shall also indemnify the Employer in respect of any costs, charges or expenses arising out of any claim or proceedings and also in respect of any Award of or compensation of damages arising there from.

The Employer with the concurrence of the Architect shall be at liberty and is hereby empowered to deduct the amount of any damages, compensations, costs, charges and expenses arising or occurring from or in respect of any such claims of damages from any sums due or to become due to the contractor.

28. **CONTRACTOR'S ALL RISK POLICY:**

The contractor shall within 14 days from the date of commencement of the work insure the works at his cost and keep them insured until one month after the works are taken over by the Employer or three months after the date of completion whichever is earlier, against loss or damage by fire and usual risks other than fire against which insurers generally provide cover in a CONTRACTOR'S ALL RISK POLICY, with an insurer to be approved the Architects, in the joint names of the Employer and contractor (the name of the former being placed first in the policy), progressively for the full amount of the contract, in three stages, beginning with 1/3 of the contract value, and for any further sum as called upon to do so by the Architect, with the prior written consent of the Employer, the premium of such further sum being allowed to the contractor as an authorised extra. Such policy shall cover the property of the Employer only and Architects and surveyor's fees for assessing the claim and in connection with his services generally in reinstatement and shall not cover any property of the contractor of any subcontractor or employee. The contractor shall deposit the policy and receipts for the premiums paid with the Architects, within twenty one days of the date of commencement of work, unless otherwise instructed, as provided above failing which the employer or the Architect on his behalf may insure and may deduct the premium paid from any money that may be due or that may become due to the contractor. The contractor shall as soon as the claim under the policy is settled, or the work reinstated by the insurers should they elect to do so,

proceed with all due diligence with the completion of the works in the same manner as though the fire or other such risk had not occurred and in all respects under the same conditions of contract.

The contractor in case of rebuilding or reinstatement after fire or other such usual risk shall be entitled to such extension of time for completion as recommended by the Architect.

29. MINIMUM AMOUNT OF THIRD PARTY INSURANCE:

Such insurance shall be effected with an insurer and in terms approved by the SBIIMS/SBI 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 premium.

The minimum insurance cover for physical property, injury, and death is Rs.5.00 lakhs per occurrence or as per law prevailing 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.

30. **COMMENCEMENT AND COMPLETION:**

The contractor shall be allowed admittance to the site on the "Date of Commencement" stated in the Appendix, and he shall thereupon and forthwith begin the works and shall regularly proceed with and complete the same (except such painting or other decorative work as the Architect may desire to delay) on or before the 'Day of Completion" started in the Appendix subject nevertheless to the provisions for extension of time hereinafter contained.

31. **DELAY AND EXTENSION OF TIME:**

If in the opinion of the Architect the works be delayed:

- a. by force majeure, or
- b. by reason of any exceptionally inclement weather, or
- c. by reason of proceedings taken on threatened by or dispute with adjoining or neighbouring owners or public authorities arising otherwise, than through the contractor's own default, or
- d. by the works or delays of the contractors or tradesmen engaged or nominated by the Employer or Architect and not referred to in the Schedule of Quantities and/or specifications, or
- e. by reason of civil, commotion, local combination of workmen or strike or lock-out affecting any of the buildings/traders, or
- f. by reason of the Architect's instructions or
- g. In consequence of the contractor not having in due time, necessary instructions from the Architect, for which he shall have specifically applied in writing ahead of time, giving reasonable time to prepare such instructions.

The Architect shall make a fair and reasonable assessment for extension of time, for completion of the contract works which may be approved by the Employer.

In case of such strike or lock-out, the contractor shall as soon as possible, give written notice thereof to the Architect, but the contractor shall nevertheless constantly use his endeavours to prevent delay and shall do all that may reasonably be required, to the satisfaction of the Architect to proceed with the work.

32. **DAMAGES FOR NON-COMPLETION:**

If the contractor fails to complete the works within the time mentioned in NIT or within any extended time certified (extension of time) and if the Architect shall certify in writing on or before the date of issue of the certificate for the last payment to which the contractor may become entitled hereunder that the works could have been reasonably completed by the said date or within the said extended time, then the contractor shall pay to the Employer or allow the employer to recover from dues to the contractor on any account the sum by liquidated damages and not by way of penalty, subject to a maximum amount of 5% of contract value as stated in Appendix of General Conditions of contract and as stated in "Notice to contractors" and such damages may be deducted from any money due or which may become due to the contractor.

The deduction of such sums shall not, however, absolve the contractor of his responsibility and obligations to complete the work in its entirety.

33 FAILURE BY CONTRACTOR TO COMPLY WITH ARCHITECT'S INSTRUCTIONS:

If the contractor after receipt of written notice from the Architect requiring compliance with such further drawings and/or Architects instruction, fails within seven days to comply with the same, the Architect and Employer may employ and pay other persons to execute any such work whatsoever as may be necessary to give effect thereto and all costs incurred in connection therewith shall be recoverable from the contractors by the employer on a Certificate by the Architect as a debit or may be deducted by him from any money due or which may become due to the contractors.

34. **ARCHITECT'S DELAY IN PROGRESS:**

The Architect may delay the progress of the works in case of rains or otherwise, without vitiating the contract and grant such extension of time with the approval of the Employer for the completion of the contract as he may think proper and sufficient in consequence of such delay, and the contractor shall not make any claim for compensation or damage in relation thereto.

35. **SUSPENSION OF WORKS:**

If the contractor, except on account of any legal restraint upon the employer preventing the continuance of the works, or on account of any of the causes mentioned in the clause "Extension of time" or in the case of certificate being withheld or not paid when due, shall suspend works or in the opinion of the Architects, shall neglect or fail to proceed with due diligence in the performance of his part of the contract or if he shall more than once make default in the respects mentioned in clause -removal of improper work and materials, the Employer through the Architect shall have the power to give notice in writing to the contractor required that the works be provided within a reasonable manner, and with reasonable dispatch, such notice shall not be unreasonably given and must signify that it purports to be a notice under the provisions of this clause and must specify the acts or defaults on the part of the contractor upon which it is based. After such notice shall have been given, the contractor shall not be at liberty to remove from the site of works, or from any ground contiguous thereto, the site of works, or from any ground contiguous thereto, any plant or materials belonging to him

which shall have been placed thereon for the purpose of work, and the Employer shall have lien upon such plants and materials to subsist from date of such notice being given until the notice shall has been complied with, provided always that such line shall not under any circumstances subsist after the expiration of 30 (thirty) day from the date of such notice given, unless the employer shall have entered upon and taken possession of the works and site, as hereinafter provided.

If the contractor shall fail for seven days after such notice has been given, to proceed with the works as therein prescribed, the Employer may enter upon and take possession of the works and site, and of all such plants, machinery and materials thereon intended to be used for the works, and the Employer shall retain and hold a lien upon all such plants, machinery and materials until the work shall have been completed, under powers hereinafter conferred upon him;

If the Employer shall exercise the above power, he may engage any other person to complete the works and exclude the contractor, his agents and servants from entry upon or access to the same, except that the contractor or any person appointed in writing may have access at all times during the progress of the works to inspect, survey and measure the works. Such written appointments or a copy thereof shall be delivered to the Architects before the person appointed comes on to the works and the Employer shall take such steps as in the opinion of the Architect may be reasonably necessary for completion the works, without undue delay or expenses using for that purpose the plant, machinery and materials above mentioned in so far as they as they are suitable and adopted to such use.

Upon the completion of the works, the Architects shall certify the amount of the expenses properly incurred consequent on and incidental to the default of the contractor as aforesaid and in completion the works by other persons.

Should the amount so certified as the expenses properly incurred be less than amount which should have been due to the contractor upon the completion of the works by him, the difference shall be paid to the contractor by the Employer, should the amount of the former exceed the later, the difference shall be paid by the contractor to the Employer. The Employer shall not be liable to make any further payments or compensations to the contractor for or on accounts of the proper use of the plant for the completion of the works under the provisions herein before mentioned other than such payments as is included in the contract.

After the works shall have been so completed by persons other than the contractor, under the provisions herein before contained, the Architect shall give notice to the contractor to remove his plan and all surplus materials as may not have been used in the completion of the works from the site.

If such plant and materials are not removed within a period of 14 days after the notice shall have been given, the Employer may remove and sell the same, holding the proceeds less the cost of the removal and sale, to the credit of the contractor. The Employer shall not be responsible for any loss sustained by the Contractor from the sale of the plant in the event of the Contractor not removing it after notice.

36. PRIME COST AND PROVISIONAL SUMS:

(a) Where "Prime Cost" (P.C.) prices or provisional sums of money are considered for any goods or works in the specifications or Schedule of quantities or deviations hereof, the same are exclusive of any trade discounts, or allowances, discount for cash, or profit which the contractor may require and or carriage and fixing.

- (b) All goods or work, for which prime cost prices or provisional sums of money are considered may be selected or ordered from any manufacturer's or firms, at the discretion of the Architect or the Employer. The Employer reserves to himself the right of paying directly for any such goods or work and the Architect may deduct the said prices or sums from the amount of the contract. Should any goods or works for which prime cost prices or provisional sums are considered or portions of same be not required, such prices or sums, together with the profits allowed for such additional amount as the Contractor may have allowed for carriage and fixing will be deducted in full from the amount of the Contract. Whether the goods be ordered by the Contractor or otherwise, the contractor shall at his own cost fix the same, if called upon to do so, and the contractor shall also receive and sign for such goods and be responsible for their safe custody as and from the date of their delivery upon the works.
- (c) In cases in which provisional quantities of items/materials are contained in the contract, the contractor shall provide such materials and or execute such items to such amounts or to greater or lesser amounts as the Architect shall direct in his schedule of quantities.
- (d) No prime cost sum or sums (or any portion thereof) shall be included in any certificate for payment to the contractor until the receipted accounts relating to them have been produced by the contractor to the Architect. Such accounts shall show all discounts and any sum or sums in respect of such discounts shall be treated as a trade discount. Provided always, that should the contractor in lieu of producing such receipted accounts, request the Architect in writing to issue a certificate to the Employer for such sum or sums, due either on account or in settlement to a sub-contractor direct, the Architect shall, upon satisfying himself that the sub-contractor is entitled to the same, so issue the certificate and such sum or sums be deducted from the amount of the contractor, at the settlement of accounts and any profit or sum to which the contractor is properly entitled, in respect of such sub-contract, and which is in conformity with the terms of contract as though the amount of such certificates to the sub-contractor has been included in a certificate drawn in favour of the contractor.
- (e) If the contractor neither produces the receipt not gives authority to the Architect to issue a certificate in favour of such sub-contractor direct, the Architect may upon giving the contractor SEVEN DAYS NOTICE in writing of his intentions to do so, issue to the sub-contractor such certificate direct to the Employer and obtain a receipt from the sub-contractor, which receipt shall be deemed as a discharge for the amount of such certificates, as though given by the contractor. In such event, the contractor shall not be allowed any profit he may have added in the Schedule of Quantities upon such sub-contract.
- (f) The exercise of the option before referred to by the Contractor and the issue of certificates, as before described to sub-contractor direct of certificates by the Architect, shall not however, relieve the contractor from any of the liabilities in respect of insufficient, faulty of incompleted work of the sub-contractor for which he may be liable under the terms of the contract.

37. **CERTIFICATES AND PAYMENTS:**

The contractor shall be paid by the Employer after due checking and after making necessary correction from time to time, by instalments under Interim Certificates to be issued by the Architect on account of the works executed by the contractor based on the joint measurements taken by the PMC, the Architects representative and the contractors representative, work to the minimum value mentioned in NIT/Appendix as "Value of work for Interim Certificates", (or less at the reasonable discretion of the Employer) has be executed in accordance with the Contract, subject to however, to a retention of the percentage of such value mentioned in the Appendix/conditions hereto mentioned as "Retention Percentage for Interim Certificates", until

the total amount retained shall reach the sum mentioned in the appendix as Total Retention Money.

And when the works have been virtually completed and the Architect shall have certified in writing that they have been so completed, the contractor shall be paid by the Employer after satisfying himself in accordance with the certificate issued by the Architect, the sum of money named in the Appendix as 'Instalment after Virtual Completion' being a part of the said Total Retention Money.

The Contractor shall be entitled to the payment of the final balance (balance security deposit/retention money) in accordance with the final certificate to be issued in writing by the Architect at the expiration of the period referred to as 'The Defects Liability period' in appendix hereto, from the date of virtual completion or as soon after the expiration of such period as the work shall have been finally completed and all defects made good according to the true intent and meaning hereof, whichever shall happen, provided always that the issue by the Architect of any Certificate during the progress of the works or after the completion shall not relieve the contractor from his liabilities in cases of fraud, dishonesty or fraudulent concealment relating to the works or materials or any matter dealt within the certificate, and in case of all such defects and insufficiencies in the works or materials, which reasonable examination would have disclosed. No certificate of the Architect shall by itself be conclusive evidence that any works or materials to which it relates are in accordance with the contract.

The Architect shall have power to withhold any Certificate, if the works or any parts thereof are not being carried out to his and employers satisfaction. The Architect may by any certificate make any correction in any previous Certificate, which shall have been issued by him. Payment upon the Architect's Certificates shall be made within the period named in the Appendix as 'Period of Honoring of Certificates, after such certificates have been delivered to Employer.

38. **NOTICES:**

Notices for the Employer, the Architect, or the Contractor may be served personally or by being left at or sent by registered post to the last known place of abode or business of the party to whom the same is to be given or in the case of the contractor by being left on the works. In case of a company or corporation, notices may be served at or sent by registered post to the Registered Offices of the Company or Corporation. Any notice sent by registered post shall be deemed to be served at the time, when in the ordinary course of post it would be delivered.

39. TERMINATION OF CONTRACT BY THE EMPLOYER:

If the contractor being an individual or a firm, commit any act of insolvency, or shall be adjudged as Insolvent or being an incorporated Company shall have an order for compulsory winding up made against it or pass an effective resolution for winding up voluntarily or subject to the Supervision of the Court 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 requiring him to do so, to show to the reasonable satisfaction of the Architect that he is able to carry out and fulfill the contract, and to give security thereof, if so required by the Architect.

Or if the contractor (whether an individual, firm or incorporated Co.) 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 Architects/Employer first obtained.

Or shall charge or encumber this Contract or any payments due or which may be due to the Contract thereunder.

Or if the Architect shall certify in writing to the Employer that the contractor,

- 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 Architect written notice to proceed, or
- c. has failed to proceed with the works with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or
- d. has failed to remove materials from the site or to pull down and replace work for 7 days after receiving from the Architect written notice that the said materials or work were condemned and rejected by the Architect under these conditions, or
- e. has neglected persistently to observe and perform all or any of the acts, matters or things by this contract to the observed and performed by the Contractors for 7 days after written notice shall have been given to the contractor requiring the contractor to observe or perform the same, or
- f. has to the determent of good workmanship or in defiance of the Architect's instructions to the contrary, sublet any part of the contract.

Then and in any of the said cases the Employer with written consent of the Architect, may notwithstanding any previous waiver, after giving 7 days notice in writing to the contractor, determine the contract, but without hereby affecting the powers of the Architect to continue in force as full as if the contract has not been so determined and as if the works subsequently executed has been executed by or on behalf of the contractor.

And further, the Employer under recommendations of the Architect, by his Agents, or servants may enter upon and take possession of the works and all plants, tools, scaffoldings, sheds, machinery, and other equipment and materials also laying upon the premises or the adjoining lands or roads, and use the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completion the works or by employing any other contractors or other persons to complete the works and the contractor shall not in any way interrupt or do not act. matter or thing to prevent or hinder such other contractor or other persons or person employed for completing and finishing or using the materials and plant for the works. When the works shall be completed or soon thereafter as convenient, the Architect shall give a notice in writing to the contractor to remove his surplus materials and plant, and should the contractor fail to do so, within a period of 14 days, after receipt thereof by him, the Employer shall sell the same by publication and shall give credit to the contractor for the amount realised. The Architect shall thereafter ascertain and certify in writing under his hand when (if anything) what shall be due to or payable by the Employer for the value of the said plant and materials so taken possession of by the Employer, and the expense or loss, which the Employer shall have incurred due to the contractor, and the amount which shall be so certified shall thereupon be paid by the Employer to the contractor or by the contractor to the Employer, as the case may be.

40. TERMINATION OF CONTRACT BY CONTRACTOR:

If payment of the amount payable by the Employer under certificate of the Architect as provided for hereinafter shall be in arrears and unpaid for 30 (thirty) days after notice in writing requiring payment of the amount, as aforesaid shall have been given by the Contractor to the Employer, or if the Employer obstructs the issue of any such certificates, or if the employer commits any Act of insolvency, or if the Employer (being an incorporated company) shall have an order made against him or pass an effective.

Resolution for winding up, either compulsorily or subject to the supervision of the Court or voluntarily, or if the Official Liquidator or the Employer shall repudiate the contract, or if the if the Official Liquidator in any such winding up shall be unable within 15 days notice to him requiring him to do so, to the reasonable satisfaction of the contractor that he is not able to carry out and fulfill the contract and to give security for the same (including Earnest money), or if the works be stopped for any payments due, and to become due thereunder and if required under the order of the Architects or the Employer or by an injunction or other order of any court of law, then in any of the said cases, the contractor shall be at liberty to determine the contract by notice in writing to the Employer/Architect, and he shall be entitled to recover from the Employer, payment for all works executed and for any losses he may sustain, upon any plant or materials supplied or purchased or prepared for the purpose of the contract.

In arriving at the amount of such payment, the net rates contained in the contract shall be followed, or where the same may not apply, valuation shall be made in accordance with clause 21 thereof.

- 41. Matters to be finally determined by the Architects and the Bank (Called excepted matters) (refer 42(a) below), which shall be final, conclusive and binding on the following matters:
 - a) Instructions
 - b) Transactions with local authorities
 - c) Proof of quality of materials
 - d) Assigning or under letting of the contract,
 - e) Certificate as to the causes of delay on the part of the contractor and justifying extension of time or otherwise.
 - f) Rectification of defects pointed out during the defects liability period.
 - g) Notice to the contractor to the effect that he is not proceeding with due diligence.
 - h) Certificate that the contractor has abandoned the contract.
 - i) Notice for determination of the contract by the Employer.

42. **ARBITRATION:**

- a. When the contractor is dissatisfied with the decision of the Architect/Employer, the contractor is required to give a notice to the Employer within 30 days of the receipt of such decision, for the appointment of the Arbitrator for the settlement of the outstanding disputes.
- b. Circle Head, SBIIMS shall be empowered to refer those disputes for adjudication to a sole arbitration.
- c. It is also a term of the contract that if the contractor does not make any demand for Arbitrator in respect of any claims within 90 days of receiving the intimation from the Bank that the final bill

is ready for payment, the claims if any received after 90 days period shall be absolutely barred from reference to the Arbitrator.

- d. All disputes or differences of any kind whatsoever, which shall at any time arise between the parties hereto touching or concerning the works or the execution or maintenance thereof this contract, or the rights touching or of this contract, effect thereof, or to the rights or liabilities of the parties arising out of or in relation thereto, whether during progress or after determination, foreclosure or breach of the contract (other than those in respect of which the decision expressed to be final and binding in cases listed out in condition 40 above), Architects shall, after written notice to either party to the contract and to the appointing Authority, who shall be appointed for this purpose by the employer refer those disputes for adjudication to a sole arbitrator, to be appointed as hereinafter provided.
- e. For the purpose of appointing the sole arbitrator referred to above, the Appointing authority will send, within thirty days of receipt by him of the written notice aforesaid, to the contractor a panel of three names of persons, who shall be presently unconnected with the organization for which the work executed.
- f. The contractor shall on receipt by him of the names as aforesaid, select any one of the persons named to be appointed as a sole arbitrator and communicate his name to be appointed as a sole arbitrator to the Appointing Authority, within thirty days of receipt of the names by him. The Appointing Authority shall thereupon without any delay appoint the said person as the sole arbitrator. If the contractor fails to communicate such selection as provided above within the period specified, the Appointing Authority shall make the selection and appoint the selected person as the sole arbitrator.
- g. If the Appointing Authority fails to send to the contractor the panel of three names as aforesaid within the period specified, the contractor shall send to the appointing authority a panel of three names of persons, who shall be unconnected with either party. The Appointing Authority shall on receipt by him of the names as aforesaid select any one of the persons named and appoint his as the sole arbitrator. If the Appointing Authority fails to select the person and appoint him as the sole arbitrator within 30 days of receipt by him of the panel and inform the contractor accordingly, the contractor shall be entitled to appoint one of the persons from the panel as the sole arbitrator and communicate his name to the Appointing Authority.
- h. If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reasons whatsoever, another sole arbitrator shall be appointed as aforesaid.
- i. The work under the contract, shall however, continue during the arbitration proceedings and no payment due or payable to the contractor shall be withheld on account of such proceedings.
- j. The arbitrator shall be deemed to have entered on the reference, on the date he issues notice to both the parties, fixing the date of first hearing.
- k. The arbitrator may from time to time, with the consent of the parties, enlarge the time for making and publishing the award.
- I. The Arbitrator shall give a separate award in respect of each dispute or difference referred to him. The Arbitrator shall decide each dispute in accordance with the terms of the contract and give a reasoned award. The venue of arbitration shall be such a place, as may be fixed by the Arbitrator in his sole discretion.

The fees, if any, of the Arbitrator, if required to be paid before the award is made and published, shall be paid half and half by each of the parties. The costs of the reference and of the award including the fees, if any, of the Arbitrator, who may direct to any by whom and in what manner such costs or any part there of shall be paid and may fix or settle the amount of costs to be so paid.

- m. The award of the Arbitrator shall be final and binding on both the parties.
- n. Subject to aforesaid, the provisions of the Arbitration and Conciliation Act, 1996, or any statutory modifications or re-enactments thereof, and the rules made there under, and for time being in force, shall apply to the arbitration proceedings under this clause.

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8. SPECIAL CONDITIONS OF CONTRACT

1. INSPECTION OF DRAWINGS:

Before filling in the tender, the contractor will have to check up all drawings and Schedule of quantities, and will have to get immediate clarifications from the Architect on any point, that he feels is vague or uncertain. No claim/damages or compensation will be entertained on this account.

CONTRACTOR TO VISIT SITE:

Each tenderer must, before submitting his tender, visit the site of works, so as to ascertain the physical site conditions prices and availability and quality of materials according to specifications before submitting the quotations. No excuse regarding non-availability of any materials or changes in the price will be entertained or extra allowed on that account.

The existing adjacent buildings belonging to Govt/private which are in close proximity of the proposed ELECTRICAL WORKS, hence the contractor shall cater for all arrangements to carry out the work without causing any disturbance to the occupants by providing screens with bamboo matting or other suitable material approved by Architects/Engineer. The contractor shall ensure that no dust or construction material falls near/around the existing buildings.

3. **EXECUTION OF WORK (PRICES TO INCLUDE):**

The whole of the work as described in the Contract (including the Schedule of Quantities, the specifications and all drawings pertaining thereto) and as advised by the Architect & employer from time to time is to be carried out and completed in all its parts to the entire satisfaction of the Architect & Employer. Any minor details of construction, which may not have been definitely referred to in this contract, but which are usual in sound building, road and all construction practice and essential to the work, are deemed to be included in this contract. Rates quoted in the Tender are inclusive of transportation and other over heads.

The rates quoted in the tender should also include all charges for:

- 1. Carrying
- 2. Hauling
- 3. Labour
- Fixing
- Watering
- Cleaning
- 7. Making good and
- Maintenance etc.

The contractor should arrange timely at his cost for all required.

- Plant, machinery, scaffolding, formwork, ladders, ropes, nails, spikes, shuttering, temporary supports, platforms, tools, all materials etc., required for executing the work, and protecting them from weather and other normal/natural causes.
- ii) Covering/protecting for the walling and other works, during inclement weather, strikes etc., as and when necessary and or as directed.
- iii) All temporary canvas covers/covering, lights, tarpaulin, barricades, water shoots etc.
- iv) All stairs and steps, thresholds and any other requisite protection for the works.

- v) All required temporary weather-proof sheds at such places and in a manner approved by the Architect, for the storage and protection of materials, against the effects of sun and rain
- vi) All required temporary fences, lighting/sign-boards etc., guards, approaches and roads as may be necessary for execution of the contract works and for safegaurding the public.

The Architect & Employer will be the sole judge in deciding as to the suitability or otherwise of the tools/formwork/machinery or plant that may be brought to the work site by the contractor for the proper execution of the work.

The rates quoted by the tenderer in the Schedule of Probable items of work will be deemed to be for the finished work.

4. SCHEDULE OF QUANTITIES:

The Schedule of quantities forms part of the contract, but the Employer reserves the right to modify the same or any part thereof as per variation clause stated herein below. The contractor shall not be allowed any compensation or damages for the work which is so omitted or cancelled or added or substituted by the Architect & Employer.

5. **QUANTITIES LIABLE TO VARY:**

This clause applies for unlimited variations (+ or -) for items of foundations and those executed below plinth level. For all other items, only in case where + variations of any item exceeds 100% of Quantities of respective items given in the schedule of quantities of the contract, such additional quantities of those items shall be treated as extra items and valued as per relevant clause of special conditions of contract, considering of that rates for these items cannot be derived from the contracted items of work.

The quantities indicated in the bill of quantities are only approximate, and hence may vary on either side (+ or -) for accomplishing the works enunciated under the scope of works, in accordance with designs, drawings and specifications and or instructions of the Architect & Employer. Variations may also occur, consequent upon addition or deletion or substitution of particular items, change of designs or specifications during the course of execution. The contractor, in either case, is bound to carryout the modified quantities upto +100% (plus one hundred percent) variation, without any enhancement in rates and at the same rates as per accepted original tendered rates.

6. **FILLING OF TENDERS:**

The rates are to be quoted electronically in online mode. For any clarification on e-tendering please refer NIT for agency conducting e-tendering.

7. ACCESS OF INSPECTION:

The contractor is to provide at all times, during the progress of the works and the maintenance period, means of access with ladders, gangways etc., and the necessary attendants to move and adopt the same as directed for the inspection or measurement of the work by the Architect and Employer or any other agency employed by the client.

8. **DIMENSIONS:**

In all cases figured dimensions are to be accepted in preference to scaled sizes. Large scale details shall take precedence over small scale details/drawings. In case of any discrepancy, the contractor shall ask for a clarification, before proceeding with the work. Accordingly, if any work is executed without prior clarification, it is liable to be rejected and shall not be paid for.

9. **PROGRAMME OF WORKS:**

The contractor on starting the work shall furnish to the Employer and Architect a PERT/CPM programme, for carrying out the work stage by stage in the stipulated time, for the approval of Architects and Employer, and follow strictly the approved time schedule by incorporating changes, if any, so authorised by the Architect and Employer, to ensure the completion of construction work ins stipulated time. A graph or chart on individual item/group of items/trades of work shall be maintained, showing the progress both in terms of quantities and value, week by week. The contractor shall submit to the Employer and Architect a weekly progress report stating the number of skilled and unskilled labourers employed on the work, working hours done, quantity of cement, steel and other major items of materials (quantity and value wise) used and corresponding place, type and quantity of work done during the period.

The contractor must inform the Architects, 10 days in advance of requirement of respective drawings and details by him, from time to time. The contractor shall strictly adhere to the approved programme and arrange for the materials and labour etc., accordingly.

Despite repeated instructions, if the contractor fails to show satisfactory progress of the work, the Employer/Architect may take suitable action as deemed fit, including levying of liquidated damages not exceeding ½% of contract price for delay of every week or part thereof, subject to a limit of total liquidated damages levied under this clause to 5% of contract price without prejudice to any terms and conditions of the contract.

10. OFFICES, STORES, SHEDS ETC., ON THE SITE:

- a. The contractor shall provide for all necessary storage on the site, in a specified area for all materials, in such a manner that all such materials, tools etc., shall be duly protected from damages by weather or any other cause. Stores for storage of cement shall have all weather proof floors, walls and roof and have proper locking arrangements and must be secure. All these must be maintained till the work is completed and so certified by the Architect. Necessary and adequate watch and ward for all such accommodations and stores shall be provided for by the contractor at his cost and same included in the rates/amounts quoted by him. All such stores shall be cleared away and the ground left in good and proper order on completion of this contract unless otherwise expressly mentioned herein.
- b. All materials which are stored on the site such as plywood, false ceiling material etc., shall be stacked in such a manner as to facilitate rapid and easy checking of quantities of such materials and prevent deterioration in quality due to water etc.

11. **WATER AND ELECTRICITY:**

Contractor shall make his own and adequate arrangements for water required for drinking and construction purposes and also for required electric supply at site for satisfactory execution and completion of the work, at his own cost. The contractor shall get the water used for construction purpose tested periodically as per relevant BIS codes at his cost, and shall get the same approved from Architect and clients before using such water for the work.

12. **PROCUREMENT OF MATERIALS:**

Contractor shall procure all the materials for the work from the open market. Time is the essence of the contract. Acceptance of the completion date by the contractor shall mean that he has taken into consideration the availability of all materials of approved make and quality in sufficient quantities at respective markets/sources, to enable him to complete the entire work in the stipulated period.

Contractor will get samples of all materials approved by the Architect and employer, before placing order/purchase/procurement. They shall conform to relevant B.I.S. codes and or tender specifications as applicable.

For all materials, the contractor shall quote for the best quality of the materials of best make/source or supply and they should be got approved by the architect and employer, before procurement.

In case sufficient quantities of approved quality materials from approved sources are not available in time, contractor may have to procure the same from neighboring areas even with longer leads, as required and directed, at no extra cost.

13. **SANITARY& ACCOMMODATION IN SITE:**

The contractor shall provide and maintain at his own cost and expense adequate closet and sanitary, accommodation for the use of his workmen and others in accordance with the rules and regulations of the relevant local authorities.

14. **FACILITIES TO OTHER CONTRACTORS:**

The contractor shall give full facilities and co-operation to all other contractors working at site doing plumbing, Electrical, civil, AC works etc., as directed by the Architect & Employer and shall arrange his programme of work, so as not to hinder the progress of other works. The decision of the Architect & Employer, on any point of disputes between the various contractors, shall be final and binding on all parties concerned.

15. **TESTING:**

The contractor shall, as and when directed by the Architect & Employer, arrange to test materials and/or portions of the work at site in any approved laboratory at his own cost, in order to provide their soundness and efficiency. The contractor shall transport all the materials from site to the approved laboratory at his own cost. The contractor shall carryout all the mandatory tests as per list attached at the frequencies stated therein. Even after such tests, any materials brought to site or incorporated in the works are found to be defective or unsound or not as per approved samples, the contractor shall remove the same and re-erect at his own cost and without any additional time/period for the same, with reference to the date fixed for completing the work. In case these tests are not carried out at the frequencies stated, then proportionate costs of materials not so tested, including cost of testing and quantities of items of work executed with such materials, if otherwise accepted for retention in the work, will be deducted from the dues to the contractor. The deductions will be worked out by the Architect/client and shall be final and binding on him.

Tolerance on various material and items of work shall be allowed laid down in the documents below and the order of precedence shall be:

- a) Relevant Indian Standards Specifications.
- b) CPWD norms.
- c) Manufacturer's Specifications.

In absence of above Architect's decision basing on the general practice being following shall be final.

16. **SITE MEETINGS:**

A senior representative of the contractor shall attend weekly meetings at works site; and in additions, meetings as and when arranged by Architect & Employer to discuss the progress of the work and sort out problems, if any, and ensure that the work is completed in the stipulated time.

17. **CUSTODY AND SECURITY OF MATERIALS:**

The contractor shall be responsible for the custody and security of all materials and equipment at site and he will provide full time watchman/watchmen to look after his materials, stores, equipments etc., including cement, steel, ply, laminate etc at site and ensure that at no time unauthorised persons gains any access at works site.

18. **NOTICES**:

The contractor shall give all notices and pay all necessary and relevant fees and shall comply with all Acts and Regulations, for the successful completion of the contract work.

19. **STATUTORY REGULATIONS:**

The whole of the work including sanitation and electrical is to be complied with, as per the requirements and bylaws of the relevant statutory authorities, including Contract Labour (Regulation and Abolition)Act, 1970 of Central Government.

LOCAL LAWS, ACTS, REGULATIONS

The contractor should abide by the central labour regulation and also shall strictly adhere to all prevailing labour laws inclusive of contract labour (Regulation and abolition act of 1970) and other safety regulations. The agency shall comply with the provision of all labour legislation including the latest requirements of all the acts, laws, any other regulations that are applicable to the execution of the tests.

- a) Minimum wages act, 1948 (Amended)
- b) Payment of wages act, 1936 (Amended)
- c) Workmen's compensation act 1923 (Amended)
- d) Contract labour Regulation and Abolition act 1970 and Central rules 1971 (Amended)
- e) Chief Labour Commissioner(C) , Ministry of Labour&Employment vide Gazette notification No.F.No.1/13(3)/2017-LS-II dated 20th April 2017 on minimum wages
- f) Apprentice act 1961 (Amended)
- g) Industrial employment (Standing order) Act 1946 (Amended)
- h) Personal injuries (compensation insurance) Act 1963 and other modifications
- i) Employees' Provident Fund and Miscellaneous Provisions Act 1952 and amendment thereof
- j) Shop and Establishment Act
- k) Employer's Liability Act.
- I) Any other Act or enactment thereof and rules framed there under from time to time.

The contractor shall keep the Employer saved harmless an indemnified against claims if any of the workmen and all costs and expenses as may be incurred by the Employer in connection with any claim that may be made by any workmen.

The contractor shall comply at his own cost with the order for requirement of any Health Officer of the State or any local authority or of the Employer regarding the maintenance of proper environmental sanitation of the area where the contractor's laborers are housed or accommodated, for the prevention of small pox, cholera, plague, typhoid, malaria and other contagious diseases. The contractor shall provide, maintain and keep in good sanitary condition adequate sanitary accommodation and provide facilities for pure drinking water at all times for the use of men engaged on the works and shall remove and clear away the same on completion of the works. Adequate precautions shall be taken by the contractor to prevent nuisance of any kind on the works or the lands adjoining the same.

The contractor shall arrange to provide first aid treatment to the laborers engaged on the works. He shall within 24 hours of the occurrence of any accident at or about the site or in connection with execution of the works report such accident to the Employer and also to the competent Authority where such report is required by law.

20. MEASUREMENT TO BE RECORDED BEFORE WORK IS COVERED UP:

The contractor shall take joint measurements with the Employer's representative (Project Management Consultant or any Engineer identified by the Bank) and Architect's representative before covering up or otherwise placing beyond the reach of measurement any item of work. Should the contractor neglect to do so, the same shall be uncovered at the contractor's expense or in default thereof, no payment or allowance shall be made for such work or the materials with which the same was executed.

21. WORKING AT NIGHT OR ON HOLIDAYS:

The contractor can carry out major work at night, only with prior permission of the Site Engineer of Employer/Architect and with proper supervision. However, all concrete work will be carried out only during the day light. While carrying out work at night contractor should ensure that, neighbors have no objection/disturbance.

WORKS AT NIGHT:

If the contractor is required to do preliminary works at night, in order to complete the work within the Time Schedule, the contractor shall provide and maintain at his own cost necessary and sufficient barricades/lights etc., to enable the work to proceed satisfactorily without danger. Approaches to the site also shall be sufficiently lighted by the contractor.

22. **WORKING ON 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 SBI/SBIIMSPL/Architect, 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 SBI/SBIIMSPL/Architect.

23. **ACTION WHERE THERE IS NO SPECIFICATION:**

In case of any item/class of work, for which there is no specification mentioned (either in part or full), the same will be carried out in accordance with the relevant CPWD specifications (only for the specifications missing in the contract) and if not available even there (either in part or full) in, relevant standards of BIS shall be followed (only for the portions of specifications missing in

the contract specifications and CPWD specifications). Indian standard specifications, subject to the approval of the Architect & Employer.

24. **REPORTING OF ACCIDENT TO:**

The contractor shall be responsible for the safety of all persons employed by him on the works and shall report serious accidents to any of them, whenever and wherever occurring one the works to Employer. This shall be without prejudice to the responsibility of the Contractor, under the Insurance clause of the General Conditions. Contractor shall take all the precautions as detailed in the safety code attached separately.

25. CLEARING THE SITE ON COMPLETION/DETERMINATION OF WORKS:

The contractor shall clear the site of works as per the instructions of the Architect. The site of works shall be cleared of all men, materials, sheds, huts etc., belonging to the contractor. The site shall be delivered in a clean and neat condition, as required by Architect, within a period one week after the job is completed. In case of failure by the contractor, the Employer, under advice to the Architect, have the right to get the site cleared to his satisfaction at the risk and cost of the contractor.

26. **POSSESSION OF BUILDINGS/WORK COMPLETED:**

The contractor shall hand over to the Employer possession of the completed works in stages, as and when required, and as directed by the Architect & Employer. The Employer will take over the possession of completed works in stages as directed by the Architect, and defects liability period will commence only from the date of final handing over of all the work accordingly.

27 TYPOGRAPHIC, CLERICAL AND OTHER ERRORS:

The Architects/Employer's clarification regarding partially omitted particulars or typographical, clerical and other errors shall be final and binding on the contractors.

28 **INFORMATION TO BE SUPPLIED BY THE CONTRACTOR:**

The contractor shall furnish to the architect & Employer the following from time to time:

- a. Detailed industrial statistics regarding the labour employed by him, etc, every month (within 5th of succeeding month),
- b. The Power of Attorney, name and signature of his authorised representative, who will be in charge for the execution of work.
- c. The list of technically qualified persons (to be approved by the Architect) employed by him for the execution of the work within 15 days from date of start of work,
- d. The total quantity and quality of materials used for the works, every month within 5th of succeeding month.

29 **FORCE MAJEURE**:

Neither party shall be held responsible by the other for breach of any condition of this Agreement, attributable to any "Act of God", Act of State, Strike, lock-out or control or any other reason, beyond the control of the parties and any breach of clauses arising from such Force

Majeure conditions as aforesaid shall not be regarded as breach of the provisions of this Agreement.

30 ARCHITECT'S DRAWINGS AND INSTRUCTIONS:

A set of major drawings, along with the contract documents shall be provided to the contractor. If any clarification or further drawings are required by the Contractor during or before the start of construction work, the contractor shall inform the Architects and the SBIIMS sufficiently in advance in writing to provide the same. Working details will be given to the Contractor from time to time, during the progress of work, as and when required. In case, any other drawing/detail is required by the contractor, he will give a minimum of fifteen days notice to the Architect.

31. **COMPLETION OF WORK AND LIQUIDATED DAMAGES:**

The work should be completed within the time mentioned in NIT and shall be intimated to the Architect/Employer, failing which Liquidated Damages will be levied@ 0.5% of the value of work per week of delay subject to a maximum penalty of 5% of the value of work would be strictly imposed

32 **BILLS OF PAYMENTS**:

The minimum value of completed work for interim payments should be as mentioned in Appendix/NIT. The contractor shall submit interim bills on the basis of joint measurements recorded at site by the contractor's, Employer's and the Architects representatives. The bill will be certified by the Architect within 15 working days from the date of submission of the bill by the contractor, and the Employer will make payment as stated in the Appendix to General Conditions of Contract. All such interim payments shall not be considered as an admission of the due performance of the contract or any part thereof in any respect and shall not preclude the requiring of bad unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected at contractor's cost, all as per Employer and Architect's instruction and directions.

33. **WORKMANSHIP:**

Quality of materials and workmanship shall conform strictly to specifications given/stipulated in the tender/contract, and contractor will ensure that the best quality of work will be done to the satisfaction of the Architect and Employer, with strict control on the materials, workmanship and supervision.

34 **SCHEDULE OF QUANTITES**:

Quantities mentioned in the Schedule of Quantities, included in the contract, are approximate and are subjected to variations as per actual site conditions & requirements and as directed by the Architect & Employer. The work shall be executed and completed accordingly.

35 **SITE SUPERVISION**:

The contractor shall appoint at his own cost competent and adequate number of qualified Engineers at site, for (a) joint measurements and preparations of bills. (b) for testing materials at site and outside laboratory. (c) for quality checking (d) for other general supervision. Their appointment shall be approved by the Architect & Employer. The site engineers shall not be removed from the site without the written consent of the Architect & Employer.

36. **ENGAGEMENT OF APPRENTICES:**

The Contractor shall during the currency of the contract, when called upon by the clients, engage and also ensure engagement by sub-contractors and others employed by the contractor in connection with the works such number of apprentices in the categories mentioned in the act and for such period as may be required by the clients. The contractor shall train them as required under the Apprentice Act 1961 and the Rules made there under and shall be responsible for all obligations of the clients under the said Act, including the liability to make payment of apprentices, as required under the said Act.

37. **RATES:**

The rates are to be quoted electronically in online mode. If any discrepancy is observed he should immediately bring to the knowledge of the Architect / SBIIMS.

38 **INCOME TAX:**

Income tax shall be deducted at source by the client from the contractor's interim and final bill payments as required by law.

39 **EXTRA/SUBSTITUTED ITEM RATES:**

Such items shall be executed as per directions/instructions of the Architects of the employer. The work on extra/substituted items shall be started only after the receipt of written order from the client/Architect. Rates for additional/extra or substituted (altered) items of work, which are not covered in the contract cannot be derived from the contract item rates either in full or partly, shall be calculated on the basis of actual costs plus 15% for overhead and profit etc., only to the extent not derivable from the contract item rates.

40. <u>SERVICES DRAWINGS/SHOP DRAWINGS/CATALOGUE(WHEREVER APPLICABLE):</u>

After getting approval from the Architect & Employer, the contractor shall submit to the concerned local authorities necessary services drawings showing layouts etc., for getting approval of the schemes. On completion, the contractor shall arrange to get Drainage Completion Certificate and other Certificate necessary for obtaining Building Completion certificate. The contractor shall furnish completion drawings of all services in triplicate, showing the work as actual executed, along with levels. Contractor shall submit for approval 4 copies of shop drawings/ catalogue/ equipment characteristics/ manufacturer's specifications, drawings etc., as and when required and directed by the Architect & Employer. Costs of all these are deemed to have been included in the respective item rates quoted by the contractor and nothing extra shall be paid on account of any of these requirement/acts.

41. **PAYMENT:**

No payment whatsoever shall be made by the Employer, if the Contractor abandons the work, due to any site difficulties etc.,

42. **PERMISSION:**

The contractor shall also obtain necessary permission approvals from the relevant authorities at no extra cost.

43 MAINTAINING REGISTERS AT SITE:

The contractor shall maintain registers for consumption of various materials, testing of materials, labour etc., in the proforma which shall be given by the Architect & Employer from time to time.

44 **AGREEMENT**:

The successful contractor shall be required to enter into an agreement in accordance with the Draft Agreement and Schedule of Conditions etc., within 15 days from the date the contractor is advised by the Architect & Employer that his tender has been accepted. The contractor shall pay for all stamps and legal expenses incidental thereto. However, the written acceptance of the tender by the Employer, will constitute as a binding contract between the Employer and contractor, whose tender has been accepted, whether such formal agreement is or is not subsequently executed.

45 **INSURANCE**:

The contractor shall provide insurance in respect of damage to persons and property and firm insurance as per relevant clauses of General conditions of contract. In addition he will also insure against riots and civil commotion. The insurance shall also cover third party and all the persons working at site and visitors including contractor's, worker's, Architect's and clients people, other contractor's workers etc. The contractor shall indemnify the Employer against any claim or compensation or mishaps of whatsoever nature at site during the progress of work.

The contractor shall prove to the Architect/Client from time to time that he has taken out all the insurance policies as required and directed and has paid the necessary premium for keeping the policies valid as per relevant clauses of General Conditions of Contract.

In case of failure by the Contractor or sub-contractor to effect and keep in force the insurance policies, then the client, without being bound to, may pay such premiums as may be necessary and deduct the same from any money due or which may become due to the contractor or recover the same as a debt due from the contractor.

46 **INDEBTEDNESS AND LIENS**:

The contractor agrees to furnish the Employer from time to time, during the progress of the work as requested, verified statement showing the contractor's total outstanding indebtedness in connection with the work covered by the contract. Before final payment is made, the Employer may require the contractor to furnish the Employer with satisfactory proof that there are no outstanding debts or liens in connection with the contract. If during the progress of the work, the contractor shall allow any indebtedness to accrue to sub-contractor or other and shall fail to pay or discharge same within five (5) days after demand, then the Employer may withhold any money due to the contractor until such indebtedness is paid, or apply the same towards the discharge thereof.

47. WORK PERFORMED AT CONTRACTOR'S RISK:

The contractor shall take all precautions necessary and shall be responsible for the safety of the work and shall maintain all lights, guards, signs, barricades, temporary passages or other protection necessary for the purpose. All work shall be done at the contractor's risk and if any loss or damage shall result from fire or from any other cause, the contractor shall promptly repair or replace such loss or damage free from all expenses to the Employer. The Contractor shall be responsible for any loss or damage to materials, tools or other articles used or held for

use in connection with the work. The work shall be carried on to Employer or of others and without interference with the operation of existing machinery or equipment, if any.

48. **PHOTOGRAPHS**:

The contractor at his own cost shall take photographs of site and individual buildings during the progress of the work as directed by the Architect/Client and submit two copies of each photograph with minimum size 20 cm x 15 cm to the client/Architect.

49 <u>INSPECTION BY THE CHIEF TECHNICAL EXAMINERS (VIGILANCE):</u>

The proposed work covered under this tender, during the progress and/ or after completion, can also be inspected by the Chief Technical Examiner/ Technical Examiner or Officers of the Central Vigilance Commission, Government of India, on behalf of Architect & Employer to ascertain that the execution of the work has been done with materials and workmanship all as stipulated in the contract and as directed.

Contractor shall afford all reasonable facilities to the above vigilance staff and also provide them with ladders, tapes, plum bob, level etc., as required and directed and also necessary labourers skilled/unskilled to enable them to complete their inspection/study/technical scrutiny and no extra shall be admissible to the contractor on this account.

50. **SPECIAL CONDITIONS OF CONTRACT:**

In the event of any discrepancy with clauses mentioned anywhere else in the tender with the clauses mentioned within special conditions of contract, the clauses mentioned within the special conditions of contract shall supersede there mentioned elsewhere.

51. BIS CODES

It is compulsory for the contractor to keep all the B.I.S. codes mentioned in this tender document at his cost at the site to ensure the proper supervision/quality of work and materials.

52. **AS BUILT DRAWINGS**

The contractor shall prepare and submit a set of as-built drawings, duly certified by the Architect. The set consists of 2 soft copies and 3 sets of hard copies.

OTHER SPECIAL CONDITIONS.

- 1. Contractor shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing the work, what ever the cause of the delays may be, including delays arising out of modifications to the work entrusted to him or in any subcontract connected there with or delays in awarding contracts for other trades of the project or in commencement or completion of such works in obtaining water and power connections for construction purpose or for any other reason what so ever and the Employer shall not be liable for any claim in respect thereof. The Employer does not accept liabilities for any sum besides the tender amount, subject to such variations as are provided for herein.
- 2. The successful tenderer is bound to carry out any items of work necessary for completion of the job if such instructions in respect of such additional items and their quantities will be issued in writing by the Architects with the prior consent in writing of the Employer.
- 3. The rates quoted in tender shall also include electric consumption charges for power. If no power is available at site the contractor shall have to make his own arrangement to obtain power connection and maintain at his expense an efficient service of electric light and power and shall pay for the electricity consumed. The Employer shall give all possible assistance to the contractor to obtain the requisite permission from the various authorities, but the responsibility for obtaining the same shall be that of contractor.
- If the work is delayed beyond 30 days after the date of completion, the remaining work will be carried out through other agencies at the risk and cost of the contractors under the contract with prevailing market rates.
- 5. Before filling in the tender the contractor will check all the drawings and schedule of quantities and will get an immediate clarification from the employer / Architects on item not clearly understood. No claims for any loss or compensation will be entertained on this account.
- 6. The rates quoted in the tender shall be for the finished items of work They shall include all the charges labour, materials, transportation of material equipment, double scaffolding water and electric charges, tool and plants, marking out and cleaning of site, to do all things necessary to provide complete finished item for work consistent with the specifications attached to this tender document. The rates shall be inclusive of octroi duty, excise duty, packing and forwarding, loading or unloading or any other duties or fees levied by any government, public or local bodies. The rates shall be firm and shall not be subject to exchange variations, labour conditions or any other conditions whatsoever.
- 7. The calculations made by the tenderer should be based upon the probable quantities of the several items of work which are furnished for the tenderer's convenience in the schedule of quantities ,but it must be clearly understood that the contract is not a lumpsum contract , that neither the probable quantities nor the value of individual items nor the aggregate value of the entire tender will form part of the contract and that the employer / Architects do not in any way assure the tenderer or guarantee that the work would correspond there to.
- 8. Adequate engineering and technical staff to be appointed at site. INTERIOR contractor should inform of their number and qualification. An Approval of employer / Architects should be taken prior to appointing such technical staff on site.
- 9. The contractor shall keep the tender submitted by him open for acceptance for a minimum period of three months from the date of it's submission .When once the tender is accepted the rates quoted by the successful tenderer shall be firm and the variation in rates

of any one or all the items on any account shall not be allowed during the entire duration of the contract.

- 10. During the execution of work, contractor must check the work with his drawings .The contractor shall be responsible for all the errors in this connection and shall have to rectify all the defects at his own cost, failing which the client reserves the right to get the same rectified at the risk and cost of contractor.
- 11. No claim for extra item or deviation from specification shall be entertained unless the same is pointed out and accepted as such before the work is taken in hand or within 15 days of work by the successful tenderer.
- 12. The contractor shall comply with all bye- laws and tax regulations (including GST) of local and other statutory authorities having jurisdiction over the works and shall be responsible for the payment of all the fees and other charges and for giving and receiving of all necessary notices drawings and test certificates.
- 13. The successful tenders shall properly safeguard against damage or injury to the public and to any property or thing and shall alone be responsible for any such damage and injury to any person or persons or thing arising in connection with it's execution of work .The successful tenderer shall protect and hold harmless the employer against any or all claims for any such injury or damage.
- 14. The work in every respect during the progress and till final acceptance by the employer, including raw materials delivered at the site to be incorporated or used in INTERIOR work by the successful tenderer will be at his own risk. Any loss or damage to any such material or work shall immediately be replaced by the successful tenderer at his own expense.
- 15. The employer shall have the right to direct the contractor to purchase and use the materials from any source for proper execution of work.
- 16. The employer / Architects or their authorized representatives shall have full power for inspecting the contractor's works or at any place from which the material is obtained. Acceptances of any such materials shall no way relieve the contractor of his responsibility for meeting the requirements and /or analysis not called for in the specifications shall be borne by the employer in case the material or work is found defective or of inferior quality .tests and /or analysis shall be done in the laboratory approved by the client and the contractor shall permit SBIIMS and or the client's or their authorized representative to be present during any of the tests and /or analysis.

17. **INSURANCE**

The contractor shall indemnify the employer up to CAR Policy (Contractor's All Risk Policy) against all claim which may be made against SBI/SBIIMS by any member of the public or third party in respect of anything which may arise in consequence thereof and shall at his own expense arrange to effect and maintain up to one month, after the virtual completion from an office approved by the SBI/SBIIMS a policy of insurance in the joint names and deposit such policy or policies with the employer from time to time during the currency of this contract. The contractor shall also indemnify SBI/SBIIMS against all claims which may be made upon the employer under the workman's compensation act or any other statute in force during the currency of this contract or at common law in respect of any employee of the contractor or any sub contractor and shall at his own expenses effect and maintain upto one month after virtual completion of the contract, from an office approved by SBI/SBIIMS a policy or policies of insurance in the joint names of the employer and the contractor as aforesaid .The contractor

shall be responsible for any other thing which may be excluded from the insurance policies above referred to and also for any other damage to any property arising out of and incidental to the negligent or defective carrying out of this contract.

He shall also indemnify SBI/SBIIMS in respect of any costs, charges or expenses arising out of any claim or proceedings and also in respect of any award of compensation or damage arising there from. SBI/SBIIMS shall be at liberty and is hereby empowered to deduct the amount of any damages, compensation caused, charges and expenses arising or occurring from or in respect of any such claims or damages from any sum or sums due or to become due to the contractor.

18. WORKMAN AT SITE:

The contractor's workpeople shall not be allowed to live on the site at any time throughout the contract nor to trespass beyond the limits of the site. The contractor will be held responsible for any acts of trespass by his workpeople.

19. **DIMENSIONS**:

Figures dimensions are to be taken in preference to scaled dimensions in all cases. Before commencing any work the contractor shall verify all measurements. If any discrepancies are found they shall immediately be brought to the notice of the Architects.

20. **DISCREPANCIES**

All the items shown on the drawings or specifications are taken to be included in both. Any discrepancies, which occur in either the drawings or specifications, shall immediately be brought to the attention of the Architects.

21. CUTTING AND MAKING GOOD

Where it is found necessary to interfere with finished work in order to execute this contract, the contractor will be required to do all necessary work at his expenses. Only approved hangers and bolts or other metal fixing devices shall be used to secure frames panels and other units in position. Wooden plugs will not be permitted . Holes shall be formed with electric drills whenever possible . Structural members shall not be cut or drilled without prior consent of the client .

22. MAINTENANCE AND GUARANTEE

The whole of the work to be performed under this contract shall be completed to the satisfaction of the Architects / Bank.

The contractor without additional charge to the employer renew or replaces any works which prove faulty from workmanship or materials and fully maintain the whole installations for a period of 6 months after the commencement of defects liability period of the main contract and a sum of 5% of the contract amount shall be retained by the employer for his period.

23. PREVENTION OF SPOIL DUMPING

The contractor shall take all reasonable steps to prevent spoil, rubbish, debris surplus materials etc.. arising from a work being dumped on any area. It should be carted away to unobjectionable place. Contractor will be held responsible for and shall indemnify the employer against any claim or loss arising there from.

24. **LEAVE PERFECT:**

The Contractor shall remove all rubbish and superfluous material from the site of the works with all reasonable speed from time to time and at completion. On no account shall W.C' S or the employer's receptacles to be used for this purpose.

The client reserves its right to clear contractors un cleared debris at contractors own cost without any reasons & not more than one notice will be given for this.

25. **SETTLEMENT OF DISPUTES AND ARBITRATION:**

Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, design, drawings and instructions herein before mentioned and as to the quality of workmanship of materials used on the work or as to any other question, claim, right matter or thing whatsoever in any way arising out of our 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 work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:

- (a) 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 Vice President, SBI Infra Management Solutions Pvt. Ltd., Amaravati Circle Office, 2nd Floor, SBI Amaravati LHO Building, Gunfoundry, abids, HYDERABAD-500 001 and endorse a copy of the same to the Architect, within 30 days from the date of disallowance thereof or the date of deduction or recovery. The said notice shall give full particulars of the claim, grounds on which it is based and detailed calculations of the amount claimed and the contractor shall not be entitled to raise any claim nor shall the bank be in any way liable in respect of any claim by the contractor unless notice of such claim have been given by the Contractor The Vice President, SBIIMS 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 Vice President, SBIIMS in writing in the manner and within the time aforesaid.
- (b) The Vice President, SBIIMS shall give his decision in writing on the claims notified by the contractor. The contractor may within 30 days of the receipt of the decision of The Vice President, SBIIMS submit his claims to the conciliating authority namely the Circle Development Officer, State Bank of India, Local Head Office, Amaravati for conciliation along with all details and copies of correspondence exchanged between him and The Vice President, SBIIMS.
- (c) 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 SBIIMS for appointment of an arbitrator to adjudicate the notified claims failing which the claims of the contractor shall be deemed to have been considered absolutely barred and waived.
- (d) Except where the decision has become final, binding and conclusive in terms of the contract, all disputes of differences arising out of the notified claims of the contractor as aforesaid and all claims of the Bank shall be referred for adjudication through arbitration by the Sole Arbitrator appointed by SBIIMS. It will also be no objection to any such appointment that the Arbitrator so appointed is a Officer and that he had to deal with the matters to which the Contract relates in the course of his duties as 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 SBIIMS. Such person shall be entitled to proceed with the reference from the stage at which it was left 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 SBIIMS as aforesaid should act arbitrator.

The conciliation and arbitration shall be conducted in accordance with the provisions of the Arbitration & Conciliation Act 1996 or any statutory modification or re-enactment thereof and the rules mad 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 Bank 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 settlement 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 arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parities. 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 in what manner, such costs or any part thereof, shall be paid and fix or settle the amount of costs to be so paid.

26. TERMINATION OF CONTRACT BY EMPLOYER:

If the contractor (being an individual or a firm) commit any "Act of Insolvency ", or shall be adjudged as insolvent, or shall make an assignment or composition of the greater part in number of amount of his creditors, or shall enter into a Deed of Assignment with his creditors, or (being an incorporated Company) shall have an order made against him or pass an effective Resolution for winding up either compulsorily, or Subject to the supervision of the court or voluntarily, or if the official Assignee of the contractor shall repudiate the Contract, or if the Official Assignee or the Liquidator in any such winding up shall be unable, within seven days after notice to them requiring him to do so, to show to the reasonable satisfaction of the Architect that he is able to carry out and fulfill the Contract and if required by the Architect to give a security there for, or if the contractor shall suffer any payment under this contract to be attached by or on behalf of any of creditors of the Contractor, if the Contractor shall assign or sublet the contract without the consent in writing of the Architect first obtained, or if the contractor shall charge or encumber this Contract for any payments due or which may become due to the Contractor thereunder, or if the Architect shall certify in writing to the Employer that in his opinion the Contractor:

- (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 work for fourteen days after receiving from the Architect written notice to proceed, or
- (c) Has failed to proceed with the work with such due diligence and failed to make such due progress as would enable the works to completed within time agreed upon or
- (d) Has failed to remove materials from site or to pull down and replace works within seven days after receiving from Architect written notice that the said materials or work where condemned and rejected by the Architect under these conditions or
- (e) Has neglected or failed persistently to observe and perform all or any of the acts, matters or things required by this Contract to be observed and performed by the Contractor for seven days after written notice shall have been given to the Contractor requiring the contractor to observe or perform the same, or

(f) Has to the detriment of good workmanship or in defiance of the Architects instructions to the Contrary, submit any part of the contract or has used in the permanent works important materials which are substandard and not as per specification fraudulently making the Architect / Employer to believe that it is the specified material.

Then and in any of the said caused the Employer with the written consent of the Architect may, notwithstanding any previous waiver, after giving seven days notice in writing to the Contractor. determine the contract, but without thereby affecting the powers of the Architect or the obligations and liabilities of the Contractor, the whole of which shall continue to be in force as fully as if the contract has not been so determined and as if the works subsequently executed and being executed by or on behalf of the contractor. And further, the Employer with the consent of the Architect by his agents or servants may enter upon and take possession of the works and all plant, tools, scaffoldings, shed, machines, steam and other power utensils and materials lying upon premises or the adjoining lands or roads, and use the same as his own property or may employ the same by means of his own servants and workman in carrying on and completing of the works or by employing any other Contractor or any other person or persons to complete the works and the Contractor shall not in any way interrupt or do any act, matter or thing to prevent or hinder such other Contractor or other person or persons employed for completing and finishing or using the materials and plant for the works, when the work shall be completed, or as soon thereafter as convenient, the Architect shall give a notice in writing to the Contractor, to remove his surplus material and plant and should the Contractor fail to do so within a period of fourteen days after receipt thereof by him, the Employer may sell the same by public auction and shall give credit to the Contractor for the amount so realized. The Architects shall thereafter shall assertion and certify in writing under his hand what (if anything) shall be due or payable to or by the Employer, for the value of the said plant and materials so taken possession of by the Employer, and the expense or loss which the Employer shall have been put to in getting the works to be so completed, and the amount, if any owing to the Contractor and the amount which shall be so certified shall, thereupon, be paid by the Employer to the Contractor or by the Contractor to the Employer as the case may be, and the certificate of the Architect shall be final and conclusive between the parties.

- 27. CONTRACTOR SHOULD WORK AT ODD HOURS, ON HOLIDAYS TO KEEP UP TIME SCHEDULE. CONTRACTOR TO CO-ORDINATE WITH L/W WITH REGARDS TO WORKING HOURS.
- 28. The Contractor shall not be eligible for any material advance.

29. LABOUR LAWS AND RULES

The contractor shall ensure to maintains relevant records and fulfils all conditions and requirements in accordance with

- a. The payment of Wages Act
- b. Employer's Liability Act
- c. Workmen's Compensation Act
- Contract Labour (Regulations & Abolition) Act 1970 and Central Rules 1971.
- e. Apprentices Act 1961.
- f. Required notice boards, registers and records as provided in section 29 of the Act.

- g. Payment of proper wages as per the rules are effected within the prescribed time limits.
- h. Prescribed facilities and amenities are provided
- i. Proper efforts are made to set right contravention of law as soon as the notice pointing out the same is received from the Labour Enforcement Officer, and reports "on action taken" are sent to the Labour Enforcement officer at the earliest with copies to the Employer.
- j. Any other Act or enactment relating thereto and rules framed there under from time to time.

SPECIAL CONDITIONS AND SAFETY CONDITIONS

The contractor is hereby advised to read the following conditions carefully before quoting rates and to be strictly adhered during execution of work.

SPECIAL INSTRUCTIONS

- (a) Contractor to provide proof of monthly remittances with regard to the workmen deployed at the site.
- (b) Contractor shall submit copies of all statutory compliance certificates such as ESIC, PF, Contract labour registration, shop & establishment and or any other local authority registration as applicable.
- (c) All workmen, engineers, supervisors shall be converted as per ESIC, PF & minimum wages act.
- (d) All workmen, engineers, supervisors shall under go pre employment medical check up through company recognized medical officer and submit copies of test report.
- (e) Contractor is responsible to ensure that his workmen are confined to their work area and comply with all safety, security and administrative instructions given by the site engineer.
- (f) Contractor shall provide identification badges to all his people. On completion of day's work, the entire area shall be kept clean and neat. All debris, surplus material etc., shall be removed immediately from the site.
- (g) Any such standard material used during execution will be rejected and fully deducted from the bills.
- (h) The contractor has to carry out the work in coordination with the other appointed agencies. The contractor should study the situation at site and organize the work accordingly.
- (i) Whenever work needs to be done in coordination with other agencies, the contractor shall work out the actual time required to complete his part of the job in respects and inform the company.
- (j) Revision of rates is not allowed and will be not paid for any reason due to unexpected increase in the cost of the materials or delay in completing the works etc.,
- (k) No labour hutment is allowed inside the premises.
- (I) The areas is in "No smoking Zone" therefore smoking is strictly prohibited.
- (m) All workmen, Mastri, supervisor and Engineers wearing shoes and safety helmets are only allowed to enter the gate.
- (n) Every day contractor / his supervisor should take necessary "Work permit" from the company engineer before starting the job.
- (o) Workers are not allowed to sleep during night and cook good inside the premises.
- (p) Work to be carried out only under supervision of the qualified engineer.

- (q) Contractor should strictly follow safety guidelines.
- (r) Contractor should use only angle/pipe scaffolding. Wooden scaffolding is not allowed.
- (s) All contractor's people need to undergo induction/safety training and formal interview by company selection committee.
- (t) Contractor shall submit a copy of competency certificates like wiremen license, supervisor's license, IBR welder license etc., issued by competent authority before starting the work.
- (u) Contractor shall maintain daily master roll book for his people at site. Based on that, ESIC & PF contribution to be made.

COMPANY SAFETY GUIDE LINES

WORKING BELOW GROUND LEVEL:

- Check that there are no underground cables/ water/sewage lines prior to start of work area. If found inform site in-charge. Disconnect power supply to any cables found in work areas with permission.
- 2. For pits deeper than 3 feet workmen should be provided with lifelines. Ladders should be provided for quick escape from the pit. Provide firmly supported side shuttering or shoring to prevent accidental collapse of earth into pits; cordon off the area around the pit to prevent accidental falls. (cordon must be at least 3 feet beyond the pit edge) excavated earth from the pit must be stacked only beyond the cordon.
- 3. Refill the pit promptly on completion.
- 4. Incase pits need to be left open for any reason, ensure proper covers over the pits.

WORKING AT HEIGHTS:

- 1. All personnel working at heights beyond 1.8M should wear safety belts.
- 2. Ensure that safety belts are tied security to anchors while working at heights.
- 3. Ensure that rigging is well anchored to solid supports prior to erecting items like trusses at a height.
- 4. Ensure that debris is cleared on a daily basis from work spots.
- 5. Ensure that a nylon safety net is securely fitted under the trusses to provide safety against accidental falls to personnel (who will need to have safety belts securely fastened) working on the t6russes and roofing. Alternatively well-supported platforms with protected railings should be used a height suitable for personnel to work while standing.
- 6. Ensure that roof top ladders are used while laying and working on the roof.
- 7. Ensure that ladders used for climbing to heights are firmly secured against slippage.
- 8. All scaffolding should be in steel frames.

9. Scaffolding should be provided with 3 feet wide working platforms. The platforms should be provided with protective railings.

WORKING WITH ELECTRICITY

- 1. Ensure proper earthing of all electrical machines used.
- 2. Ensure that all connection s are taken throughout earth leakage's circuit breakers. Providing ELCB on the main distribution board prevents accidental shocks.
- 3. Ensure that welders always used suitable welding goggles and gloves while welding.
- 4. Ensure availability of 2 CO2 type fire extinguishers at any easily accessible location at site for fire fighting
- 5. Provide a paid of fire buckets filled with dry sand for fire fighting at site.
- 6. As far as possible DC generators sets shall be used instead of AC transformer sets.
- **7.** Contractor shall get his welding sets certified by inspector of electrical department.
- 8. The welding transformer shall be fed through an armored cable.
- 9. All connections from main to individual M/C (such as cutter, planer, compressor etc) to be taken through shielded cable and 3-pin plug only.
- 10. The potable machines should be of fully insulated or plastic body. No metal body is allowed.
- 11. During welding the earthling to be provided directly to the member to be welded throughout cable only not using any reinforcement rod/angles.

PERSONAL PROTECTIVE GEAR

Following is a list of itmes to be provided to workmen by the contractor as and when required the items must be ISI certified.

- (a) Safety shoes
- (b) Hard hats
- (c) Safety belts
- (d) Goggles
- (e) Gloves
- (f) Safety nets
- (g) Roof top laddes
- (h) GENERAL

BREAKING WORKS:

Workmen engaged in breaking stones/chipping of concrete should wear safety goggles.

OTHER CONDITIONS:

CONTENTS:

- A) SPECIAL CONDITIONS
- **B) TECHNICAL SPECIFICATIONS**

Chapter 1 INTERNAL ELECTRIFICATION
Chapter 2 POWER CONTROL CENTERS
Chapter 3 LAYING OF CABLES
Chapter 4 EARTHING
Chapter 5 STANDARD DRAWINGS
GI PIPE EARTH STATION
COPPER PLATE EARTH STATION

- C) RECOMMENDED MAKES OF MATERIAL
- D) SCHEDULE OF QUANTITIES

A) SPECIAL CONDITIONS

1. General:

- 1.1 These special conditions shall be read in conjunction with the description of the item of work in the Bill(s) of Quantities, the particular Specifications, Local Statutory Regulations, Indian Standards Specifications/Codes and the drawings. All the above quoted documents, shall be considered supplementary to each other. However, in the case of conflict amongst the various provisions the owner's and the consultants opinion will be final and shall be adopted.
- 1.2 The tenderer is advised to inspect the site to ascertain the nature of site, access thereto, local facilities for procurement of materials and working labour rates prevalent in the area, in fact all matters affecting his prices and execution of the work. The tenderer shall be deemed to have full knowledge of the site and drawings whether or not he actually inspects them.

2. Rates

- 2.1 The rates quoted shall be deemed to allow for all minor extras and constructional details which are not specifically shown on drawings or given on the specifications but are essential in the opinion of the Engineer-in-charge to the execution of works to confirm to good workmanship and sound engineering practice. The Consultant/SBIIMS reserves the right to make any minor changes during the execution without any extra payment.
- 2.2 The Consultants/SBIIMS decision to clarify any item under minor changes, minor extras and constructional details shall be final, conclusive and binding on the Contractor.
- 2.3 The rates quoted by the Contractor shall be net so as to include all requirements described in the contract agreement and no claim whatsoever due to fluctuations in the price of material and labour will be entertained.
- 2.4 The rates quoted by the Contractor shall include for supplying materials and labour necessary for completing the work in the best and most workmanship like manner to the satisfaction of the Consultant/SBIIMS and which in the opinion of the Consultant cannot be made better, and for maintaining the same. The rates shall be complete in all respects also including cost of materials, erection, fabrication, labour, supervision, tools and plant, transport, sales and other taxes,

royalties, duties and materials, contingencies, breakage, wastage, sundries, scaffoldings, etc., on the basis of works contract. The rates quoted shall include all transport, insurance, octroi, or any other levies applicable under the statute.

3.0 Materials:

3.1 The Contractor shall ensure to the satisfaction of the Consultant/SBIIMS that the materials are packed in original sealed containers/packing bearing manufacturer's markings and brands etc., except where the gross quantity required is a fraction of the smallest packings. Materials not complying with this requirement shall be rejected.

3.2 Testing of Materials:

a) When required by the Consultant / SBIIMS, the Contractor shall provide all facilities at site or at manufacturer's works or in an approved laboratory for testing the materials and/or workmanship. All the expenditure in respect of this shall be borne by the Contractor unless specified otherwise in the Contract. The Contractor shall, when required to do so by the Consultant shall submit at his own cost, manufacturer's certificate of tests, proof sheets, mill sheets etc., showing that the materials have been tested in accordance with requirements of these specifications. The samples for Tests shall be selected by SBIIMS / Consultant.

4.0 Rectification of Defects:

4.1 Any defect in the work done or materials used in the works pointed out by the Consultant / SBIIMS shall be rectified within a week or such extended time as may be allowed in this failing which the said defect shall be got rectified by the Consultant at the risk and cost of the Contractors.

5.0 Conduit and Cables Layout:

5.1 Prior to the pulling of wires, the Contractor shall verify the conduits laid at site by Civil Contractors and satisfy themselves about the adequacy of the same. The contractors shall prepare Wiring layout along with Conduit layout and submit for approval. Prior to laying of the cables, the Contractor shall submit to the Consultant /SBIIMS detailed layout plans of the cable net work and get the same approved. The layout plans shall contain particulars regarding size and routes of the cables. The Cables shall be procured only after approval of Layout Drawings.

6.0 Regulations & Standards:

6.1 The installation shall conform in all respects to Indian Standard Code of Practice for Electrical Wiring Installation IS:732 and IS:2274. It shall also be in conformity with the current Indian Electricity Rules and Regulations and requirements of the local Electric Supply Authority in so far as these become applicable to the installation. Wherever this specification calls for higher standard of material and/or workmanship than those required by any of the above regulations then this specification shall take precedence over the said regulations and standards.

7.0 **Shop Drawings**:

7.1 The Contractor shall prepare and submit to the Consultant / SBIIMS for the approval of detailed fabrication drawings for Main LT Panels/SwitchGears/Rising Mains special boxes and Distribution Board, switch board, special any other equipment to be fabricated by Contractor within 7 days of signing of the contract.

8.0 Completion Drawings:

- 8.1 At the completion of the work and before issuance of certificate of virtual completion the contractor shall submit to the consultant / SBIIMS layout drawings drawn at approved scale indicating the complete wiring system "As Installed". These drawings shall in particular, give the following information.
- (a) Run and size of conduits, inspection, junction and pull boxes.
- (b) Location and rating of sockets and switches, controlling the light and power outlets.
- (c) Number and size of conductors in each circuit.
- (d) Location and details of distribution boards, mains, switches, switchgear and other particulars.
- (e) A complete wiring diagram, as installed and schematic drawings showing all connections in the complete electrical system.
- (f) Location of telephone outlets, T.V. Music & Fire Alarm outlet boxes, junctions boxes, sizes of various conduits.
- (g) Locations of all earthing stations, routs and size of all earthing conductors, manholes etc.
- (h) Layout and particulars of all cables.

9.0 Manufacturer's Instructions:

9.1 Where manufacturers have furnished specific instructions, rating to the materials used in this job, covering points not specifically mentioned in the documents, these instructions shall be followed in all cases.

10.0 Completion Certificate:

10.1 On completion of the Electrical Installation a certificate shall be furnished by the Contractor counter signed by a licensed supervisor, under whose direct supervision the installation was carried out.

This certificate shall be in the prescribed form as required by the local supply authority. The Contractor shall be responsible for getting the drawings and Electrical Installation inspected and approved by the local Authority concerned.

11.0 Qualified Competent Supervision:

11.1 The Contractor shall employ competent fully licensed, qualified full time Engineer to direct the work of Electrical installation in accordance with drawings and specifications. The Engineer shall be available at all times on the site to receive instructions from Consultant in the day to day activities, through out the duration of the contract. The foremen shall co-relate the progress of the work in conjunction with all relevant requirements of the supply authorities.

12. Approval from SEB/ Electrical Inspectorate:

The Contractor shall prepare and submit all the relevant drawings as per the Requirement of AP TRANSCO/ Electrical Inspectorate and obtain the Approvals from CEIG,CEA, Hyderabad. No incidental expenses will be paid towards the same. Only statutory fees if any will be paid by SBIIMS.

TECHNICAL SPECIFICATIONS CHAPTER 1 INTERNAL ELECTRIFICATION

1.0 Scope:

This specification is intended to cover the requirements of supply, installation, testing and commissioning of electrical wiring installation and other accessories required for its satisfactory operation. This covers the essential requirements or precautions regarding wiring installations for ensuring satisfactory and reliable service.

2.0 Standards:

The Electrical wiring installations and other accessories shall comply with latest IS: 732 - 1989 and National Electrical code - 1985.

3. Construction

Wall mounted switch boards shall be installed such that the bottom is at a minimum height of 1.35 m above finished floor level wherever applicable, as indicated in the drawing. Equipment which is on the front of a switch board shall be so arranged that inadvertent personnel contact with live parts is unlikely during the manipulation of switches, changing of fuses or similar operation.

In every case in which switches and fuses are fitted on the same pole, these fuses, shall be so arranged that the fuses are not live when their respective switches are in 'OFF' position. No fuses other than fuses in instrument circuit shall be fixed on the back or behind a switch board panel or frame.

4. Capacity of circuit:

Lighting Circuits shall not have more than a total of ten points of fans, 5A socket outlets and light points and its total load shall not exceed 800 watts. Lights, fans, and 5A socket outlets can be wired on a single common circuit. If fan circuit is drawn separately, circuit shall not be used more than eight points and load shall not exceed more than 800 watts. In the circuit, the neutral and earth wires can be looped up to 10points. From distribution boards Neutral & Earth wires shall be run for every circuit.

The **power circuits** shall not have more than two outlets per circuit if load to be fed by each outlet is less than 1KW, and if load is more than 2KW, each outlet shall be connected to a separate circuit.

Switches: All switches shall be placed in the live conductor of the circuit and no single pole switch or fuse shall be inserted in the earth or earthed neutral conductor of the circuits. Single pole switches (other than for multiple control) carrying not more than 15amperes may be of the piano flush type and the switch shall be 'ON' When the knob is down.

Lamp holders: Lamp holders for use on brackets and the like shall have not less than 1.3 cm nipple and all those for use with flexible pendant shall be provided with cord grips. All lamp holders shall be provided with shade carriers. Where centre contact Edison screw lamp holders are used, the outer or screw contact shall be connected to the 'middle wire' or the neutral or to the earthed conductor of the circuit.

Lamps: All incandescent lamps, unless otherwise specified shall be hung at a height of not less than 2.5 m above the finished floor level.

Ceiling rose: a) A ceiling rose or any other similar attachment shall not be used on circuit, the voltage of which normally exceeds 250 volts. A ceiling rose shall not embody fuse terminals as an integral part of it.

Every socket outlet shall be controlled by a switch. The switch controlling the socket shall be on the 'live' side of side line.5 Amps and 15 Amps socket-outlet shall normally be fixed at any convenient place 60 cm above the floor level or near such level as indicated in drawing. 15 Amps socket outlets in kitchen shall be fixed at convenient place 23cm above the working platform. In a room containing a fixed bath or shower, there shall be no socket outlet and there shall be no provision for connecting a portable appliance.

5 Recessed MS conduit wiring system

- a) **Making of chase**: The chase in the wall shall neatly be made and shall be of suitable dimension to permit the conduit to be fixed in the manner desired by the Engineer-in-charge. In the case of buildings under construction, chases shall be provided in the wall, ceiling, etc. at the time of their construction and shall be filled up neatly after erection of conduit and brought to the original finish of the wall.
- b) **Fixing of conduit in chase:** The conduit shall be fixed by means of staples or by means of saddles not more than 600 mm apart. Fixing of standard bends or elbows shall be avoided as far as practicable and all curves maintained by bending the conduit pipe itself with a long radius which will permit easy drawing-in of conductors. All the threaded joints of rigid steel conduits shall be treated with approved preservative compound to ensure protection against rust.
- c) **Inspection boxes**: To permit periodical inspection and to facilitate replacement of wires, suitable inspection boxes shall be provided at convenient locations. They shall be mounted in flush with the wall. The minimum size of inspection boxes shall be 75 x 75 mm. Suitable ventilating holes shall be provided in the inspection box covers.
- d) **Types of accessories to be used**: All outlets, such as switches and sockets, may be either of flush mounting type or of surface mounting type.

The switches and other outlets shall be mounted on such boxes. The metal box shall be efficiently earthed with the earth continuity wire run along the conduit.

When crossing through expansion joints in buildings, the conduit sections across the joint may be through flexible copper bellows of the same size as PVC conduit. The Number of wires that can be drawn through a conduit shall be strictly as per IS 732 and as mentioned in Drawings.

6. MS Conduits:

MS conduit shall be black enameled and of thickness not less than 16SWG and of size minimum 19 mm dia. The Conduit shall conform to IS 9537/ Part II

Bunching of cables: Separate conduits shall be used for bunching of conductors of AC supply and DC supply for lighting and small power outlet circuits.

All outlets of conduit systems shall be properly drained and ventilated, but in such a manner so as to prevent the entry of insects etc. as far as possible.

Bends in conduit : Wherever necessary, bends or diversions may be achieved by bending the conduits or by employing normal bends, inspection bends, inspection boxes, elbows or similar fittings.

In case of plain conduit, heat may be used to soften the conduit for bending and forming joints. Positioning of conduit in close proximity to hot surfaces should be avoided.

7. TESTING OF WIRING:

The following tests shall be carried out on all types of wiring on completion of the work and before energizing the installation :

- i) Insulation resistance test.
- ii) Electrical continuity test,
- iii) Earth continuity test,
- iv) Earth electrode resistance test.
- v) Switch polarity test.

i) Insulation Resistance test:

The insulation resistance shall be measured by using 500 v megger between the following points. Phase and neutral conductor with all fuses in position and all switches in closed condition and main switch in OFF position with lamps and other devices removed. Between earth and whole system of conductors with all fuses in place, all switches closed and all lamps in position.

Between all conductors connected to one phase of the supply of the above tests shall not be less than 50 divided by the number of points on the circuit. Where a whole installation is being tested, a lower value than that given by the above formula is acceptable subject to a minimum of one megaohm.

The insulation resistance in megaohm as obtained by each of the above tests shall not be less than 50 divided by the number of points on the circuit. Where a whole installation is being tested, a lower value than that given by the above formula is acceptable subject to a minimum of one megaohm.

(ii) Electrical continuity test:

Each and every circuit shall be tested for electrical continuity by using a multimeter.

(iii) Earth continuity test:

The earth continuity conductor including metal conduit shall be tested for electrical continuity and the resistance of the same along with the earthing lead measured from the connection with the earth electrode to any point in the earth continuity conductor in the complete installation shall not exceed one ohm.

iv) Earth electrode resistance test:

The earth electrode resistance shall be tested as specified in section

(v). Switch polarity test:

Test shall be made to verify that all switches in every circuit have been fitted in the same conductor throughout and such conductor shall be marked for connection to the phase conductor.

8 Distribution Boards:

All the distribution boards shall be with MCBs as described in the respective schedule. The distribution boards shall be controlled by a switch fuse, miniature circuit beaker or an isolator as described in the respective schedule. Each outgoing circuit shall be provided either with MCB or a fuse on the phase.

The neutral shall be connected to a common link and be capable of being disconnected individually for testing purposes.

The distribution boards shall be located as indicated in the respective electrical working drawings and as directed by Engineer - in - charge. The distribution boards shall be fixed on wall in the niche provided and marked with the details of circuits, source of supply, size of incoming wires Etc.,

All marking shall be clear and legible. The total load of the consuming devices shall be evenly distributed between the number of ways of distribution board. The consuming devices circuit shall be connected to distribution board in proper sequence, so as to avoid unnecessary crossing of wires.

Cables shall be connected to a terminal only by crimped lugs. Cables shall be rigidly fixed in such a manner that a clearance of at least 2.5cm is maintained between conductors of opposite polarity or phase and between the conductors and any material other than insulating material. The incoming and outgoing cables shall be neatly bunched.

9. MOUNTING HEIGHTS:

The Mounting heights of various fixtures shall be as specified in the Drawings.

CHAPTER 2

POWER CONTROL CENTRES

1.0 **Scope**:

This specification is to cover the requirement of design, supply, installation, testing and commissioning of LT power control centres / main switch boards with all components, Instruments, fittings and accessories for efficient operation without any trouble.

2.0 Standards:

The PCC specified herein, unless otherwise stated shall conform to the relevant and latest revisions of Indian standards and Indian Electricity Rules.

3.0 Design and construction:

3.1 Design requirements: The power control centres shall be suitable for operation on 440volt, 3 phase,4wire 50HZ system to withstand a short circuit level of 50 KA RMS symmetrical.

The PCC shall be designed for operation in high ambient temperature upto 45 degrees centigrade and high humidity upto 95% and tropical atmospheric conditions. Means shall be provided to facilitate ease of inspection, Maintenance and Servicing.

3.2 Constructional requirements:

The power control centre shall be of

- i) Metal clad, cubicle, indoor, free standing type suitable for Mounting on Built up Trenches with U Channels of adequate size.
- ii) Made up of the requisite vertical sections, which when coupled together shall form continuous dead front switch board.
- iii) Dust and damp protected, the degree of protection shall be better than IP-54 as specified in IS-2147.
- iv) Readily extendable on both sides by the addition of vertical sections after removal of the end covers.
- v) Single front construction with the circuit beaker feeder and switch fuse feeders suitable for operation from the front of the panel.

The PCC shall have the feeder ratings as per the schematic diagrams enclosed with the schedule and constructed only of materials capable of withstanding the mechanical, electrical and thermal stresses as well as the effects of humidity, which are likely to be encountered in normal service.

3.3 Vertical Sections :Each vertical section shall comprise a front framed structure rolled folded sheet steel channel section of minimum 2 mm thickness rigidly bolted together. This structure shall house the components contributing the major weight of the equipment such as circuit breaker, switch fuse units, main horizontal busbars, vertical risers and other front mounted accessories. The structure shall be mounted on a rigid base frame of folded sheet steel of minimum of 2.5 mm thickness and 100mm height. The design shall ensure Structural stability during Transit and also during Operation after Commissioning Suitable cable chamber housing the cable end connections

and power / control cable terminations shall be provided. The design shall ensure generous availability of space for ease of installation and maintenance of cabling and adequate safety for working in one vertical section without coming into accidental contact with live parts in the adjacent section.

A cover plate at the top of the vertical section shall be provided with necessary ventilating arrangements. Any aperture for ventilation shall be covered with a perforated sheet having less than 1 mm diameter perforations to prevent entry of vermin.

3.4 Sheet Steel Cubicle:

3.4.1 The sheet steel cubicle shall be designed in fully segregated multitier formation. Each cubicle shall have hinged front access door with easy operating fasteners. All the doors and covers shall be heavily gasketed to make the compartment dust tight. Each cubicle shall have a covering at the bottom to make a dust and vermin proof construction. Door hinges shall be of concealed type.

The cubicle shall be of minimum 2 mm thick sheet steel. Sheet steel shrouds and partitions shall be of minimum 1.6 mm thickness. All sheet steel work forming the exterior of switch boards shall be smoothly finished, leveled and free from flaws. The corners shall be rounded. The minimum Thickness of Gland plates shall be 3mm.

- 3.4.2 The apparatus and circuits in the power control centers shall be so arranged as to facilitate their operation and maintenance at the same time to ensure the necessary degree of safety. Apparatus forming part of the control centers shall have the following minimum clearance.
 - i) between phases 25 mm,
 - ii) between phase and neutral 25 mm,
 - iii) between phases and earth 25 mm,
 - iv) Between neutral and earth 19 mm,

When, for any reason, the above clearances are not available suitable insulation shall be provided. Clearance shall be maintained during normal service conditions. Creepage distances shall comply with those specified in relevant standards.

- 3.4.3 All insulating materials used in the construction of the equipment shall be non hygroscopic duly treated to withstand the effect of high humidity, high temperature and tropical ambient service conditions.
- 3.4.4 Functional units such as circuit beakers and fuse switches shall be arranged in multitier formation, except that not more than One air circuit braker housed in a single vertical section.
- 3.4.5 Metallic/insulated barriers shall be provided within vertical sections and between adjacent sections to ensure prevention of accidental contact with:
 - i) Main busbars and vertical risers during operation, inspection or maintenance of functional units and front connected accessories.
 - ii) Cable terminations of one functional unit, when working on those of adjacent unit/units.
- 3.4.6. All doors / covers providing access to live power equipment / circuits shall be provided with tool operated fastners to prevent unauthorized access.

3.4.7 Provisions shall be made for permanently earthing the frames and other metal parts of the switchgear by two independent connections.

3.5 Metal treatment and finish:

All steel works used in the construction of the switch boards shall have undergone a suitable rigorous metal treatment process so as to remove oxide scales and rust formation and to facilitate a durable coating of the paint on the metal surfaces and also to prevent the spreading of rust, in the event of the paint film being mechanically damaged.

Two coats of Anti Corrosive primer followed by a finishing coat of Epoxy spray power coating of the shade 631 of IS: 5 (i.e. Siemens grey) shall be given. The total thickness of paint shall not be less than 25 micron.

3.6 Bus Bars:

- 3.6.1 The busbars shall be housed in non-segregated sheet steel compartments in the cubicle at convenient locations with provision for access to the buses from the front of the panel. The busbar shall be suitably braced with DMC/SMC supports to provide a through fault withstand capacity of 50 KA RMS symmetrical for one second and a peak short circuit withstand capacity 150 KA minimum. The neutral as well as the earth bus shall be capable of withstanding the above fault level.
- 3.6.3 Large clearance and creeping distance shall be provided on the busbar system to minimize the possibility of a fault.
- 3.6.4 High tension bolts, nuts and spring washers shall be provided at all busbar joints.
- 3.6.5 The continuous rating of the busbar shall be 125% of the rated current. Maximum temperature of the bus and the connections shall not exceed 85 degrees centigrade. The busbars shall be of liberal design for the required current rating i.e. 0.8Amp/sq.mm.

The main phase busbars shall have continuous current rating throughout the length of each power control centre and the neutral busbars shall have continuous rating of at least 50% of phase busbars.

3.6.6 Connections from the main busbars to functional circuits shall be arranged and supported so as to withstand without any damage or deformation, the thermal and dynamic stresses due to short circuit currents.

All busbars and tapings shall be provided with color coded sleeves for phase identification.

All joints/tapping points of the buses shall be suitably shrouded to prevent accidental contact.

4.0 Circuit Breakers:

4.1 General:

- 4.1.1 Circuit breakers shall be of triple pole / four pole, air break, horizontal draw out /Fixed type, as given in the schedule of work and comply with the requirements of relevant IS with latest amendments and shall have the following :
 - i) A short circuit breaking capacity of not less than 50 KA RMS at 415 volts, 50 Hz AC.
 - ii) A short circuit making capacity of 105 KA.
 - iii) A short time withstand capacity of 150 KA for one second.
 - iv) Electrical overload performance at 6 times the rated current, 100% of the rated voltage

as recovery voltage at 0.5 power factor.

- v) Dielectric test of 2.5 KV applied for one minute on main circuits.
- 4.1.2 The circuit breakers shall be fitted with detachable arc chutes on each pole designed to permit rapid dispersion, cooling and extinction of the arc. Interphase barriers shall be provided to prevent flash over between phases.
- 4.1.3 Arcing contacts shall be of hard wearing material copper tungsten or silver tungsten and shall be easily replaceable. Main contacts shall be of silver plated copper of high pressure type and generous cross section.

4.2 Operating Mechanism:

The operating mechanism shall be of robust design, with minimum number of linkages to ensure maximum reliability. Manually operated circuit breakers shall be provided with spring operated closing mechanism which are independent of speed of manual operation. Electrically shall be independent of the motor which shall be used slowly for charging the closing spring.

The operating mechanism shall be such that the breaker is at all times free to open immediately when the trip coil is energized.

Mechanical operation indicators shall be provided to show open and close positions of the breaker. Electrically operated breakers shall be additionally provided with mechanical indications to show charged and discharged conditions of the charging spring.

Means shall be provided for slow closing and opening of the breaker for maintenance purposes, and for manual changing and closing of electrically operated breakers during emergencies,

4.3 Protection:

Provisions shall be available for fitting a minimum of five trip devices - three over current, as shunt trip and an under voltage release or two over current and earth fault release, a shunt trip and one under voltage release. The breakers shall be of the shunt or series trip type as specified in the schedule.

4.4 Housing of Circuit Breaker:

Circuit breakers shall be individually housed in sheet metal castle provided with hinged doors. The breaker along with its operating mechanism shall be mounted on a robust carriage moving on guide rollers with in the castle. Isolating contacts for both power and control circuits shall be of robust design and fully self aligning. The assembly shall be designed to allow smooth and easy movement of the breakers within its castle.

The breaker shall have three distinct positions within the castle as follows:

- i) Service' position: With main and auxiliary contacts connected.
- ii) 'Test' position: with power contacts fully disconnected and control circuit contacts connected.
- iii) 'Isolated' position: with both power and control circuit contacts fully disconnected.

It shall be possible to achieve any of the above positions with the castle doors closed. Mechanical position indicators shall be provided for the three positions of the breakers.

4.5 Interlocking:

- 4.5.1. The moving portion of the circuit breaker shall be interlocked so that :
- i) It shall not be possible either to isolate it from the connected position, or to plug it in from the Isolated position with the breaker closed.
- ii) The circuit breaker can be closed only when it is in one of the three positions or when it is fully out of the castle.
- iii) It shall not be possible to open the hinged door of the castle unless the breaker is drawn to the isolated position.
- iv) Inadvertent with drawl of the circuit breaker too far beyond the supporters is prevented by the suitable stops.
- 4.5.2 Provisions shall be available for the padlocking of the circuit breaker access flame in any of the three positions.
- 4.5.3 Automatically operated safety shutters shall be provided to screen the fixed isolating contacts when the breaker is drawn out from the castle.
- 4.5.4 The moving portion of the circuit breaker shall be provided with a heavy duty, self aligning earth contact, which shall make before and break after the main isolating contacts during insertion into with drawl from the service position of the breaker. Even in the isolated position positive earthing contact should exist.
- 4.5.5 Auxiliary switches directly operated by the breaker operating mechanism and having 4 `NO' and 4 `NC' contacts, shall be provided on each breaker. The auxiliary switch contacts shall have a minimum rated thermal current of 10 amps.

5.0 Switch Fuse Units:

5.1 General:

The switch fuse units shall be of the load break, heavy duty, cubicle type conforming to the requirements IS and of AC 23 duty.

The switch fuse units shall be capable of withstanding the thermal and electromagnetic stresses caused by short circuits for the time of operation of the associated fuse links.

The switch fuse units shall be double break and have quick make break mechanism, designed to ensure positive operation.

All switch fuse contacts shall be silver plated at the current transfer surfaces.

The unit shall be provided with a front operating handle. The ON and OFF positions of the switch handle shall be clearly marked.

5.2 Interlocks and Safety:

Interlocks shall be provided so as to prevent opening of the unit door when the switch is in the ON position and also to prevent closing of the switch with the door not properly secured. It should however be possible for a competent person to operate the switch shall be suitable for locking with switch in the OFF position by means of a padlock.

The interior arrangement of the switch fuse unit shall be such that all 'Live' parts are shrouded.

5.3 HRC Fuses:

The switch fuse units shall be fitted with High rupturing capacity cartridge fuse links with ISI marking for a rupturing capacity of not less than 80 KA at 415 volts. The fuse links shall be mounted in a drawout carriage, thus ensuring positive isolation of contacts during fuse replacements.

6.0 Current Transformers.

Current transformers shall comply with the requirements of relevant latest amendment IS. They shall have ratios, outputs and accuracy as specified in the schedule.

7.0 Indicating / Integrating Meters :

All indicating instruments shall be of flush mounted industrial pattern conforming to the relevant latest amended IS. The instrument shall have non reflecting bazels, clearly, divided and indelibly marked scales, and shall be provided with zero adjusting devices in the front. Integrating instruments shall be of flush mounted switch board pattern complying with the requirements of relevant latest IS.

8.0 Relays:

Circuit breakers shall be provided with integrally mounted relays as specified in the schedule. The relay shall have a set of three phase characteristics, which shall be adjustable over a wide range, to provide discrimination between a multiplicity of devices. The relay shall be able to provide over current and earth fault protection. Also UV and Shunt trip Relays are to be provided.

9.0 Control switches/Selector switches:

Control switches/Selector switches shall be of the heavy duty rotary type, with plates clearly marked to show the operating position. They shall be of semi-flush mounted type with only the front plate and the operating handle projected. Circuit breakers control switches shall be of the spring return to neutral type.

10.0 Indicating lamps and push buttons:

Indicating lamps shall be of the LED type of low watt consumption, provided with series resistors where necessary and with translucent lamp covers. Bulbs and lenses shall be easily replaceable from the front.

Push buttons shall be of the momentary contact, push to actuate type fitted with self-reset contacts and provided with plates marked with its junctions.

11.0 Cable terminations:

Cable entries and terminals shall be provided in the switch board to suit the number, type and size of aluminum conductor power cables and copper conductor control cables as indicated in the schematic diagram.

Provision shall be made for top or bottom entry of cables as required. Generous size of cabling chambers shall be provided, with the position of cable glands and terminals such that cables can be easily and safely terminated.

Barriers or shrouds shall be provided to permit safe working at the terminals of one circuit without accidentally touching that of another live circuit.

Cable riser shall be adequately supported to withstand the effects of rated short circuit currents without damage and without causing secondary faults. Cable sockets shall be of copper and of the crimping type/soldering as required.

12.0 Control wiring:

All control wiring shall be carried out with 1100/650 V grade single core Copper cable conforming to relevant IS having stranded copper conductors of minimum 2.5 sq.mm. section for CT Wiring and 1.5sq.mm for Control/indicating Instruments.

Wiring shall be neatly bunched, adequately supported and properly routed to allow easy access and maintenance.

Wires shall be identified by numbered ferrules at each end. The ferrules shall be of the ring type of non-deteriorating material. They shall be firmly located on each wire so as to prevent free movement.

All control circuit fuses shall be mounted in front of the panel and shall be easily accessible.

13.0 Terminal blocks and lables:

Terminal block shall be of 500 volts grade of the stud type. Insulating barriers shall be provided between adjacent terminals.

Terminal block shall have minimum current rating of 10 amps and shall be shrouded.

Provisions shall be made for lable inscriptions.

Lables shall be made of anodized aluminum, with white engraving on black background. They shall be properly secured with fasteners. Danger plate of size and descriptions as recommended in the relevant IS shall be provided on the PCC.

14.0 Tests:

- i) The power control centre shall be completely assembled, wired, adjusted and tested for operation under simulated conditions to ensure correctness of wiring and interlocking and proper functioning of all components.
- ii) Each power control centre and components shall be subjected to standard routine tests as per applicable clauses of relevant standards.
- iii) All current carrying parts and wiring of power control centre shall be subjected to power frequency voltage withstand test.

15.0 Drawings:

After the award of the contract the contractors shall submit three copies of the following drawings for approval of the Department.

i) Outline dimensional drawing of the PCC showing the general arrangement indicating the following :

- a) Busbar clearances;
- b) power and control cable entry points;
- c) Configuration of busbars;
- d) Details of support insulations and spacings;
- e) Outgoing power cable termination arrangements.
- ii) Single line diagram of power control centre showing Protection, Metering etc.
- iii) Cubicle wiring diagram.
- iv) List of Firements with Ratings & makes / Models

16.0 Installation Testing and commissioning:

The power control centre shall be installed over the cable trench/cable pit using suitable size of MS channel including grouting of the channel with necessary bolts and nuts.

Proper earthing of PCC shall be done using two independent copper/GI strip of sizes as indicated in the schedule.

The channel shall be painted with one coat of red oxide primer and two coats of anticorrosive enamel paint of proper shade as directed by the Engineer-i-charge.

The pre-commissioning tests as required shall be done and the PCC shall be commissioned.

CHAPTER 3 LAYING OF CABLES

1.0 **Scope**:

This specification is intended to cover the requirements of installation and energizing of PVC/XLPE/PILCDSTA power cables including jointing of cables.

2.0 Standards:

The power cable and its fixing accessories shall comply with the latest relevant Indian Standards and National Electrical Code.

3.0 Laying of Cables:

3.1 General:

- 3.1.1 Before the commencement of cable laying, it shall be ensured by the Engineer-in-Charge that only ISI marked cables are used. It shall be the responsibility of the contractor to check the soundness and correctness of the size of the cable while taking delivery of the cable from stores. Any defect noticed shall be brought to the notice of the issuing authorities immediately. If any defects is noticed after the cable is laid or during the process of laying, it shall be brought to the notice of the Engineer-in-Charge and upon his satisfaction, that the cable is not damaged due to bad handling, it will be the entire responsibility of the contractor to retrieve the cable already laid and return the defective cable to store and take fresh length of the cable from the store and relay the same.
- 3.1.2 The material such as bricks, sand, cable route markers, RCC slab of best quality as approved by the Engineer-in-Charge only shall be used for cable laying works.
- 3.1.3 The contractor shall provide all the necessary labour, tools, plants and other requisites at his own cost for carrying out pumping of water and removing of water from trenches, if any, where required.
- 3.1.4 Installation shall be carried out in a neat, workman like manner by skilled, experienced and competent workman in accordance with standard practices.
- 3.1.5 While laying the cable care shall be taken to avoid formation of kinks and also damage to the cable. In the case of cable bends, it shall not have bent radius lesser than 20 times the overall diameter of the cable.
- 3.1.6 A cable loop of about five meters length and as directed by the Engineer-in-Charge / SBIIMS shall be provided at the following locations.
 - a) Near the termination points
 - b) Near to the straight through joint
- 3.1.7 The method of cable laying and routing of cables, shall in every case be as directed by the Engineer-in-Charge / consultant / SBIIMS.
- 3.1.8 Whenever cable passes through hume pipes/GI pipes embedded across the wall in a building, both the ends of the pipe shall be suitably sealed.
- 3.1.9 Identification tags indicating the size of the cable and feeder designation shall be securely attached at both ends of the cable. Such tags shall also be attached to the cable at intervals of 50 Mtrs. The materials of the tag shall be of either 12 SWG GI sheet. In case of plastic, the details have

to be engraved and incase of GI sheet, the details should be punched. Cable route markers shall be provided at the intervals of 200 M with a minimum of one number route marker. The details of the route makers shall be as per the drawing. At the locations of straight through joints, necessary joint-markers shall be provided.

3.1.10 When cable runs vertically, it shall be clamped on mild steel flats or angle iron fixed on walls and are spaced at such intervals as to prevent buckling of the cables. All steel work shall be painted with a coat of red oxide and thereafter finished with suitable anticorrosive paints.

3.2 Cable laid in ground:

- 3.2.1. All MV cables (up to 1.1 KV) shall be laid at a minimum depth of 0.75 M & HT cables (1.1 KV to 11 KV) shall be laid at a depth of 1.0 M when laid in ground. When cable pass through roads, nallahs etc. they must be protected by either hume pipe or GI pipe of suitable dimensions.
- 3.2.2. Excavations of trenches shall be carried out as indicated in the drawing. The width of the trench at the bottom shall be 0.4 M for one cable. In case the total number of cables laid in trenches is more than one, then the width shall be such that the spacing between the cables is maintained as shown in the drawing. Before the cable is laid in the trench the bottom of the trench shall be cleared from stones and other sharp materials and filled with sand layers of 75 mm, as shown in the drawing.
- 3.2.3. While removing the cable from the drum, it shall be ensured that the cable drum is supported on suitable jacks and the drum is rotated to unwind the cable from the drum. The cable should never be pulled while unwinding from the drum. It shall be ensured that the cables are run over the wooden rollers placed in the trench at intervals not exceeding 2 M.
- 3.2.4. After placing the cables in the trench shall be filled in layers ensuring that each layer is well rammed by spraying water and consolidated. The extra earth shall be removed from the place of trench and deposited at a place as directed by the Engineer-in-Charge/consultant / SBIIMS.
- 3.2.5. The HT cables shall be provided with RCC slabs (marked HT cable) on top as protection.

3.3 Cables laid in built up trench:

3.3.1. Before the commencement of cable laying the cable trench shall be drained properly. Cable shall be laid as explained in item 3.2. Cable shall be properly clamped to the cable supports, which are provided in the cable trench. The method of clamping shall suit the size of the cable and the cable supports, which are provided in the cable trench. The method of clamping shall suit the size of the cable and the cable supports, as directed by the Engineer-in-Charge / SBIIMS.

Care shall be taken while removing and replacing the trench cover slab. It is the responsibility of the contractor to make good any damaged trench covers.

3.4. Cable terminations and straight through joints :

- 3.4.1. All cable jointing materials such as straight through joint boxes, cable compound, cable lugs, insulation tapes etc. shall be of best quality and as approved by the Engineer-in-Charge / SBIIMS.
- 3.4.2. Cable glands for strip / armoured cables shall include a suitable armour clamp for receiving and securely attaching the armouring of the cable in a manner such that no movement of the armour occurs when the assembly is subjected to tension forces.

The cable gland shall not impose on the armouring, a bending radius not less than the diameter of the cable. The clamping ring shall be solid and of adequate strength.

Provision shall be made for attachment of an external earthing bond between the metallic covering of the cable and the metallic structure of the apparatus to which the cable box is attached.

3.5 Sealing boxes :

- 3.5.1 A sealing box, irrespective of the class of insulation of the cable for which it is intended, shall be so designed that it may be filled with compound after connecting the cable specially in flame proof/hazardous areas.
- 3.5.2 All parts and connection for attaching the armouring, wiping or clamping the metallic sheath in a sealing box, shall be easily accessible. This may be achieved by splitting the box or by providing a suitable cover or other such means.
- 3.5.3 The joints in the box shall prevent leakage of the compound.
- 3.5.4 Provision shall be made to ensure that the cores of the cable are efficiently sealed to prevent moisture penetrating along the strands or the cable conductors.
- 3.5.5 The sealing box shall be provided with compound filling orifices with suitable covers or plugs of size that will permit easy pouring of the compound.

In all cases where screwed plugs are used, one or more air vents shall be provided to ensure complete expulsion of air and total filling of the box with compound.3.5.6 The box shall be of sufficient length to allow for manipulation of the insulated cover without damage to them or to the insulation.

- 3.5.7 A sealing box intended to be attached directly to the apparatus shall be designed such that the box together with the connected cable may be detached from the apparatus without disturbing the sealing compound.
- 3.5.8 Cable sealing and dividing boxes intended for use in the flame proof areas shall comply additionally with the relevant requirements of IS:2148-1968.

4.0 Testing

Once cable is laid, following tests shall be conducted in the presence of Engineer-in-Charge, before energizing the cable:

- i) Insulation resistance test (Sectional and Overall).
- ii) Sheathing continuity test.
- iii) Continuity and conductor resistance test.
- iv) Earth test.
- v) High voltage test.

Tests conducted shall be as per Indian Standards and National Electrical Code.

CHAPTER 4 EARTHING

1.0 **SCOPE**:

This specification is intended to cover the requirements of supply, installation, testing and commissioning of

- a) Pipe earthing
- b) Plate earthing
- c) Strip earthing

2.0 **STANDARDS**:

Earthing installations shall conform to the Indian Electricity Rules - 1956, as amended from time to time and IS 3043-1989 "code of practice for earthing", with latest amendments.

3.0 Earth electrode arrangement :

- 3.1 Pipe electrode:
- 3.1.1 Electrode shall be made of CI pipe having a clean surface and not covered with paint, enamel or poorly conducting material. Galvanized pipe shall not be smaller than 100 mm ID. Earthing with pipe electrode shall be done as per the details indicated in IS: 3043/87.
- 3.1.2 Electrodes shall be embedded below permanent moisture level.
- 3.1.3 The length of pipe electrodes shall not be less than 2.5 m. if rock is encountered, pipes shall be driven to a depth of not less than 2.5 m with suitable inclination. Pipe shall be in one piece and deeply driven.
- 3.1.4 To reduce the depth of burial of an electrode without increasing the resistance, a number of rods or pipes may have to be connected together in parallel. The distance between two electrodes in such a case shall not be less than twice the length of the electrode. The earthing lead shall be connected by means of a through bolt, nuts and washers and cable socket.

3.2 Plate electrode:

For plate electrodes, minimum dimensions of the electrode shall be as under.

- 3.2.1 GI plate electrode: 600 x 600 x 6 mm thick.
- 3.2.2 Copper plate electrode: 600 x 600 x 3.15 mm thick
- 3.2.3 The electrode shall be buried in ground, with its faces vertical and top not less than 2.5 M from the surface of the ground.
- 3.2.4 Earthing using plate electrode shall be done as per details, indicated in drawing.
- 3.2.5 Plate electrodes shall have a galvanized iron water pipe, buried vertically and adjacent to the electrode. One end of pipe shall be atleast 5 cm above the surface of the ground and need not be more than 10 cm. The internal diameter of the pipe shall be atleast 19 mm. The length of pipe under the earth's surface shall be such that it shall be able to reach the center of the plate. The earthing lead shall be securely bolted the plate with two bolts, nuts, check nuts and washers.

3.3. Strip or conductor electrodes:

- 3.3.1. Strip electrode shall not be smaller than 25×1.6 mm, if of copper and 25×3 mm, if of galvanized iron and steel. If round conductors are used as earth electrodes, their cross sectional area shall not be smaller than 3 sq.mm, if of copper and 6 sq.mm. if galvanized iron and steel.
- 3.3.2. Conductor shall be buried in trenches not less than 0.5 m deep.

4.0 General:

- i) All materials used for connecting the earth lead with electrode shall be of GI in case of GI pipe and GI plate electrodes, and of tinned brass in case of copper plate electrode. The earthing lead shall be securely connected at the other end to the main board.
- ii) The earthing lead from electrode onwards shall be suitably protected against mechanical injury by routing the earth wire / strip through a suitable size of GI pipe.
- iii) All medium voltage equipments shall be earthed by two separate and distinct connections with the earth. In the case of high and extra high voltages, the neutral points shall be earthed by not less than two separate and distinct connections with the earth, each having its own electrode at the generating station or substation.
- iv) All materials, fittings etc. used in earthing shall conform to Indian standard specifications wherever they exist. In the case of materials for which Indian standard specifications do not exist, such materials shall be approved by the Engineer-in-Charge.
- v) The earth electrode shall be kept free from paint, enamel and grease.
- vi) It shall be ensured that similar materials for respective earth electrodes and earth conductors are used.
- vii)Earth electrode shall not be installed in proximity to a metal fence.
- viii)Copper/GI strip shall be connected to the respective earth electrodes, either by brazing or welding respectively. The Copper/GI strip shall be jointed only either by brazing or by riveting at the end of over lapping portions. The over lap shall not be less than 50 mm.
- ix) Earthing clamps used for supporting earth strips shall be made of such materials so as to avoid bimetallic action between strip and clamps.

5.0 Testing:

The earth resistance of each electrode shall be measured by using a reliable and calibrated earth megger and the value shall be as per IS/IE rules .

LIST OF I.S.CODES FOR INTERNAL ELECTRIFICATION INSTALLATIONS

1.	EXTERNAL ELECTRIFICATION wiring installation (system voltage not exceeding 650V)	IS 732 – 1989
2.	Graphical symbols used in Electro-technology art-XI-Electrical Installation buildings	IS 2032-1969
3.	Fire safety of buildings (General) Electrical Installation	IS 1646-1961
4.	3 pin plugs and sockets	IS 1293
5.	Earthing.	IS 3043-1966
6.	Rigid steel conduits for electrical wiring	IS 9537-PII-1989
7.	Fittings for electrical wiring	IS 2667-1964
8.	Flexible steel conduits electrical wiring	IS 3430-1966
9.	Accessories for rigid steel conduit insulated cables	IS 3837-1966
10.	General and safety requirements for electric lighting fittings	IS 1913-1969
11.	Protecting of buildings and allied structures against lightning	IS 2309-1967
12.	Busbar ratings	IS 8084-1976
13.	On load change over switches	IS 4064-1978

STATE BANK OF INDIA

LIST OF APPROVED MANUFACTURERS OF MATERIALS TO BE USED IN THE ELECTRICAL WORKS SUBJECT TO THE APPROVAL OF SAMPLES BY THE CONSULTANT/ ENGINEER

S.No	Material Name.		
1	Switches/Sockets: Legrand –Mosaic / MK-wrap around/ Anchor -Woods / Schneider-Clipsal/ Crabtree-Thames/Athena /Wipro (North west) - Stylus/Convex / GM Four- Five		
2	Copper Conductor wires : Finolex /RR Cable/Havells/ Poly Cab/ KEI		
3	PVC conduits, Casing, Capping & Accessories: Precision / Sudhakar/ Avon plast/ FINOLEX		
4	Metal clad Sockets: Legrand /L&T- Hager /ABB/SIEMENS/ Schneider/ Inodo- Asian		
5	MCBs /MCB Distribution boards(Powder coated Only): ABB/Siemens/ Legrand / Schneider /L&T/ Hager /Havells		
6	MCCBs/Switchgear : GE Power /Hager(Compact) /L&T/ ABB/Schneider/ Legrand/ Siemens		
7	Underground Cables: CCI /Nicco /Havells/ Universal/ Poly Cab/ Gloster		
8	Cable Glands: HMI /Comet/ Cosmos/Dowells (Biller India)/ Hax Brass		
9	Capacitor Bank: Epcos /Neptune/ Tibcon		
10	Cable Lugs: Dowell's / 3D		
11	MV Panels (PCCs): Manufacturers with CPRI Test Certificate.		
12	Measuring Instruments: Conzerv/ CMS/ El measure/IME/ L&T/ Nippen/ Schneider Electric		
13	Selector Switches: Vaishno / Salzer / Kaycee		
14	Indication Lamps LED :Schneider / Vaishno / Binay		
15	Resign cast CTs : AE / Kappa		
16	Telephone Wires: Lapp / Delton / Polycab/ Finolex/		
17	LAN Cables: D LINK, Finolex, Ploycab, Legrand		
18	Light Fixtures (LED): Philips / GE/ Havells/ CG/ Wipro/Bajaj		
19	Ceiling Fans, Wall mounted fans & Exhaust Fans : Havells/Bajaj/ CG/Orient/ USHA/ Almonard		
	Note:All Items Materials Used on site shall be ISI Mark only & Materials will be selected by bank only		

DECLARATION

The Vice president,
SBI Infra Management Solutions Pvt. Ltd.,
Amaravati Circle Office,2nd Floor,
SBI Amaravati LHO Building,
Gun foundry,Abids,
Hyderabad – 500 001.

Dear sir.

I/We have inspected the site SBI ONGOLE MAIN BRANCH NEW PREMISES SITUATED IN ONGOLE, PRAKASHAM DIST, ANDHRA PRADESH (Branch Code: 00890) and I/We have made me/ us fully acquainted with the local conditions in and around the sites of works and Lay out drawings of works, drawings of each items etc. complete.

I/We hereby declare that I/ We have carefully gone through the conditions laid down in the Notice Inviting Tender, General notes, General Conditions of Contract, Special conditions, Schedule of approximate quantities and rates , Form of Agreement, General Specification, Approved manufacturers/ natural source of materials (i.e. all parts of Technical bid), Technical Specifications of schedule of quantities (i.e. all parts of Price bid), and clearly understood all the same and on the basis of the same I/ We have quoted our rates in the Schedule of Quantities/BOQ attached with the tender documents.

We accept all the terms and conditions of tender documents. We will abide by the technical specification mentioned in the tender. We here by undertake to use only specified material/ make as per the tender schedule. I/ We hereby declare that, in particular during execution of all works at site; it will be my/ our sole responsibility to strictly adhere to/ meticulously follow the General Specification, Approved manufacturers/ natural source of materials, Technical Specifications of schedule of quantities, all drawings of layout and items.

For any type of deviation (to any of above or subsequent instructions), it will be my/ our responsibility to obtain the written instruction of the Engineer-in-charge for the same failing which it shall be deemed that I have carried out any such deviations at my own and I shall be duty bound to replace the all deviated material/ works from the site at my/ our cost as well as I shall be liable to penalized by the employer as deemed fit and for all such loses made thereof, I/ we shall not have any right to arbitrate in any manner.

I/ We hereby declare that I/ We shall obtain necessary drawings of items from employer in time and also shall uniformly maintain such progress as may be directed by the employer to ensure completion of same within the target date/ time as mentioned in the tender document.

Date:	Signature and seal of Contractor/ Tenderer
Witness:	
1.	

2.