ETender ID AHMSAO349

#### STATE BANK OF INDIA

# INVITES ONLINE E-TENDER FOLLOWED BY REVERSE AUCTION FOR

## PROPOSED ELECTRICAL WORK OF SBI RETAIL BRANCH, AT DIMOND BOURSE, SURAT

**FROM** 

THE ELECTRICAL CONTRACTORS EMPANELLED FOR AHMEDABAD CIRCLE UNDER THE CATEGORY OF WORKS UP TO 5 LAKHS TO 100 LAKHS (AS PER THE LIST ENCLOSED)

## THE LAST DATE OF SUBMISSION OF ONLINE TENDERS: 06.12.2022 UP TO 03:00 PM

## NO PHYSICAL SUBMISSION OF DOCUMENTS REQUIRED EXCEPT PROCESS COMPLIANCE FORM

#### **PART - A (TECHNICAL BID)**

TENDER SUBMITTED BY:
NAME :
ADDRESS:
DATE :
ADOUTEOTS
ARCHITECTS :
SOPAN
Ar. AJAY CHOWDHURY
202, RIVER PALACE WING-B NANPURA SURAT- 395001
M: <b>0261247102</b> . <b>09825117854</b> sopanrise@gmail.com, sopanssurat@gmail.com



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#### Tender documents are in two parts (Volumes) i.e. Part – A and Part – B

#### PART – A (TECHNICAL BID)

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#### **NOTICE INVITING TENDERS**

**SBI** through its Architect - SOPAN architects and interior designer, invites Online tender in two bid system(Online technical bid & sealed price bids) followed by e-reverse auction, from the Bank's Empanelled Electrical contractors of Ahmedabad Circle for Electrical Work at SBI RETAIL BRANCH SURAT.

The details of tender are as under:

111	e details of tender are as under:	
1.	Name of work	PROPOSED ELECTRIC WORK OF SBI RETAIL BRANCH, DIAMOND BOURSE SURAT-395007.
2.	Nature of Work	ELECTRICAL WORK
3.	Time allowed for completion	<b>30 (THIRTY)</b> Days from date of acceptance of work order or handing over of site whichever is later.
4.	Tender Fees	NA
5.	Earnest Money Deposit	Rs. 4,200.00 by means of Demand Draft / Pay Order (Valid for a period of 90 days from the last date of submission of the tender) from any scheduled Nationalized Bank drawn in favour of State Bank of India, payable at SURAT. [Those registered with MSME-UDYAM need not submitted EMD. Instead DD, Valid MSME UDHYAM certificate shall be uploaded]
6.	Initial Security Deposit	NA
7.	Total Security deposit	3% of the final bill amount
8.	Start and end date for downloading of tender documents form Bank's website	23-11-22 to 06-12-22 at <a href="https://www.sbi.co.in">www.sbi.co.in</a> under <link/> <sbi in="" news="" the=""> procurement news.</sbi>
9.	Last date & time for submission of on-line technical bid, EMD and online Sealed indicative Price Bid	06-11-22 by 03:00 PM
10.	Address at which EMD & Process compliance form has to be submitted.	The Asst Gen Manager, State Bank of India RBO III, GHOD DOD ROAD, SURAT 395002
11.	Date and time of opening of technical bid & Online sealed Indicative Price Bid at SBI address mentioned at Sr. No.10	06-11- 22 at 3:30 PM
12.	Date & time for e-reverse auction	Date and time for e- reverse auction will be informed to the qualified contractor separately
13	E-Tendering will be conducted by our approved e-tendering consultant	M/s. Antares Systems Limited, Bangalore, Contact No 91 80 40482000; 91-80-40482114 Mobile : 91 -9674758719, 9674758720
14.	Liquidated Damages	0.50% of contract amount per weeks subject to max. 5% of contract value or final bill value.
15.	Rates	Rates quoted shall be inclusive of all existing & future (including variation) taxes, duties, levies, royalties, transportation, other incidental charges, WCT etc. PVA & PVA Clause shall not be applicable.  Note: GST will be paid Extra as per Applicable norms.  If any tenderer puts any condition/anything/any taxes extra over and above their quoted rates the tender shall be summarily rejected.



16.	Defects liability period	12 Months from the date of Virtual Completion			
17.	Validity of offer	90 days from the date of opening of Price-bid			
18.	Value of Interim Certificate	No Interim payment will be paid. [No advance on materials / plant / machinery or mobilization advance shall be paid under any circumstances]			
19.	Insurance	The contractor shall obtain all necessary insurance policies as per the governing laws applicable at the centre & shall be required to produce the original policy of Insurance & receipt of the premium as applicable in the matter to the Architect/Bank.			
20.	Water and Electricity	If contractor is permitted to use SBI source of water & electricity, the SBI will recover @ 0.5% of contract amount from the final bill of contractor. However further distribution & extension & light fixtures etc. with required MCB switches, switch boards, lamp, tube etc. shall be arranged by the contractor at their own cost within the accepted tender amount. Bank will recover 0.5% of the final bill amount towards consumption of water & electricity.			
21					
22	The contractor shall read and understand each page of the tender document thereby ensuring the number and sequence of all pages.				
23					
	Tenders received without EMD & Process compliance form shall be summarily rejected and such tenders shall not be allowed to participate in the Price bid process/ rejected/ not considered.				
	7 The Bank reserves the right to accept the tender in full or in part and the tenderer shall have no claim for revision of rates or other condition if his tender is accepted in parts.				
	In case the date of tendering is declared as a holiday, the tendering will be opened/ conducted on the next working day at the same time.				
	9 SBI reserves the right to accept or reject any or all the tenders, either in whole or in part without assigning any reason(s) for doing so, no claim / correspondence shall be entertained in this regard. For any clarification regarding Tendering procedure, please contact The Asst Gen Manager/CM(Admin), State Bank of India RBO III, GHOD DOD ROAD, SURAT 395002 Whose address is mentioned in the NIT or Architect SOPAN ARCHITECTS AND INTERIOR DESIGNER (M) 9825117854.				
31	For any clarification regarding E-Tendering procedure, System requirements etc please contact M/s.  Antares Systems Limited, Bangalore, whose address is mentioned in the NIT.  It is vendor's/supplier's responsibility to be well prepared and get ready with E-Tendering procedures well equipped with all requirements. SBI will not take any responsibility of delay in submission due to EMD, slow internet connectivity, system failures etc.				



- Maximum 70% of bill amount (Certified by Architect) will be given as ad-hoc payment—if work inprogress and quality of work is satisfactory on recommendation of SBI. ONLY FINAL PAYMENT WILL BE MADE
- Percentage, if any, to be deducted from bills and total amount to be retained :10 % from Running Bills, subject to maximum Total 5% of contract amount or actual Final Bill value.

Yours Faithfully,

(For and on behalf of SBI)

The Asst Gen Manager, State Bank of India RBO III, GHOD DOD ROAD, SURAT 395002



#### LIST OF EMPANELLED ELECTRICAL CONTRACTORS

Annexure-"B"

### LIST OF EMPANELLED ELECTRICAL CONTRACTORS UP TO Rs. 5.0 LAKH

SN	Name, Office Address of the Applicant in Gujarat State including U/T	Contact number	E-mail ID
1	Patel Electricals, 1/A, Aastha Complex, Nr. Sanskar Mandal Chowk, Talaja Rd., Bhavnagar	9825088095	patelelectricals55@gmail.com
2	Shreeji Electricals, U-10, Lake View Flaaaat, Opp. Vastrapur Lake, Vastrapur, Ahmedabad	9427246110	shreejiele10@gmail.com
3	Paresh Electric Co., B-1, Harinagar Society, CTM Char Rasta, Ahmedabad-380026	9824129513	paresh_electrical_co@yahoo.co.in
4	Pay & Service, 309 Sadguru Arcade, Dhebar Road One Way, Rajkot-360001	9825075667, 8160197253	payandservice72@gmail.com
5	Riya Electricals, 64 Shiv Shankar Nagar, Nr. Malav Talav, Jivrajpark, Ahmedabad 380051	9723958466	riyaelectricals1988@gmail.com
6	Utkarsh Electricals, 37/6 Kharwar Nagar, Nr. Udhana Naher, Surat 395002	9825257117	utkarshelectricals@yahoo.co.in
7	Deep Enterprise, 306 Vishranti Enclave, Ambe School Road, Manjalpur,Vadodara- 390011	9512406797	gandhi_devesh@yahoo.in
8	Gorisha Electricals, A/102, Ayodhya Flats, Ayodhya Township, Tarasali, Vadodara 390009	9904757686	rajesh6765@gmail.com
9	Jay Shree Tulja Electricals, GF-12, Suryadeep Complex, Nr Rupam Cinema, Harni Road, Vadodara.	9879288410, 9825252364	vipulpurohit2013@gmail.com
10	Harshad Furniture Mart, Sadar Opp. Moti	9898198877, 9979744997	harshad_furniture@yahoo.com
11	Dhanlaxmi Electricals, B-206, Shreenath Re,	9428739476, 8690066012	dhanlaxmielectrical9428@gmail.com
12	Access Electrotech, B - 401, Tapi Enclave,	9904626310 9726226357	accesselectrotechwalitanicom
13	Mahadev Electric, 101, Shanti Complex Kotal Street Sanganva Chowk Rajkot-1,	9824509312	hirenkanabar54@yahoo.com
1	Shah Associates, Opp. Laxmi Bhavan, Nev Station Road, Bhuj Kachchh-370001	9825228305	shahassociate2@gmail.com



Annexure-"B"

## LIST OF EMPANELLED ELECTRICAL CONTRACTOR UP TO RS. 10.0 LAKH

51 6	) EMINAISCECES CO.		E-man ID
SN	Name and address	Contact number	
1	Umesh Engineering Works, Gala No.A-10, D.M. Singh Compound, Opp. Shraddha Tower, Thaaaaaaaaakur Complex, Kandivadi, Mumbai- 400010	9821098131	umeshengineeringwoooorks@gmail.com
2	RK Electricals, 30, Ghati Bhadbhunja, Nr. KMC School, Bhopal	9827216074	mosultan99@gmail.com
3	RP Enterprise, 309m Saraswati Complex, Manjalpur, Vadodara	9825467087	rpenterprise7@gmail.com
4	Vikalp Electricals, LL-1, Om Centre, Shreyash Crossing, Ambawadi, Ahmedabad-15		vikalp1991@gmail.com
5	Vaidehi Enterprise, 15 Trishila Residency, Nr. Ganesh Park Twin Bunglow, Sola, Ahmedabad 3800061	9327014869, 6352995533	piyushpatel@vaidehient.com, harshpatel@vaidehient.com



#### Annexure-"8"

### LIST OF EMPANELLED ELECTRICAL CONTRACTORS UP TO Rs. 25.0 LAKH

SN	Name, Office Address of the Applicant in Gujarat State including U/T	Contact number	E-mail ID
1	Shree Electricals, B/5, Vantage Point, 69sampatrao Colony, BPC Rd., Aikapuri, Vadodara	9825032710	shree.electricals94@gmail.com
2	Dharmesh A Mewada, 123, Sangath Mall-1, Opp. Govt. Engg. College, Visat Gandhinagar Highway, Motera, Ahmedabad-382481	9725043778	dharmeshmewada17@gmail.com
3	Kirti Traders, Jivan Mansion, Lati Bazar, Bhaynagar	9426548801	ananddoshi62@gmail.com
4	Dhriti Engineers, 28 Mahadevnagar Society, O/s: Panigate, B/h Govind Rao Park, Ayurvedik, Vadodara-19	9998981088	dhritiengineers@gmail.com
5	Maya Tranformer & Electricals, C/9, Gopinath Society, Opp. SK Complex, India Colony mRd., Bapunagar, Ahmedabad-380024	9825716962	mayatrel@yahoo.com
6	NK Electricals, SB/B3, Indraprasth Complex, Ellora Park, Vadodara-390007	9825061543	ketanna@gmail.com
7	Urmi Electric Co., B/5 Jaimini Society, Nava Vadaj, Ahmedabad-13	9825342374	urmiele22@gmail.com
8	Jay Engineers, F/S Mansi Apartment, B/h Galaxy Cinema, Naroda, Ahmedabad-382330	98244031888	kumudrathod@yahoo.co.in
9	Pooran Chand Sharma & Sons, 1/70, W.H.S. Timber Market, Kirti Nagar, New Delhi - 110015	9810111055, 01141420277	sds.pcss@gmail.com
10	Perameter Engineering Projects, 78.8, Third Floor, Jyoti Piaza, Shyasmal Cross Road, Ahmedabad 380015	07940060596, 07940060597	naidu@parameter.in
11	R S Enterprises, C-74, Patel Nagar, Raisen Road, Bhopal MP. 462022	9826961063, 9425378197	rsenterprises73@gmail.com
12	Mamta Electrical, 68 Shram Jivi Soc no 1 Umara, Ichanatha, Surat	9898599899	hem_sukhadia@yahoo.com
13	Sai Electrical Works, 19/2/28, Store Lane, S.A. Brelvi road, bahadur manzil, fort, Mumbai	9820326854	saielectricworks@gmail.com



#### Annexure-"B"

### LIST OF EMPANELLED ELECTRICAL CONTRACTORS UP TO Rs.50.0 LAKH

SN	Name, Office Address of the Applicant in Gujarat State including LI/T	Contact number	E-mail ID
1	Rudra Enterprise, B-9, Akahardeep Complex, Sanskar Mandal Chowk, Talaja Rd., Bhavnagar	9428996994	rudraenterprisework@gmail.com
2	RB Trading Co., 9 GF, HH Trust Building, Nr. Kothari Pole, Gandhi Rd., Ahmedabad1	9033077332	rbtrading99@yahoo.co.in
3	8hagat Electricals, 101, Shailja Saaaankul, Nr. Amrepali Railway Crossing, Ralya Rd., Rajkot	9825165426	bhagatelectricals@yahoo.co.in
4	Kruti Electrical, 626, Mandir Street, Mota Varacha, Surat	9723454883	archkrut@gmail.com
5	System Protection, 301/2, silverline Complex, Opp BBC Tower, Sayajiganj, Vadodara - 390005	2652225137	info@systemprotection.in



Annexure-"B"

### LIST OF EMPANELLED ELECTRICAL CONTRACTORS UP TO Rs. 100.0 LAKH

5N	Name and Office Address	Contact number	E-mail ID
1	Alpha Enterprise, A/2, Shri Hari Co;ony, Lad Society Rd., Nehru Park, Vastrapur, Ahmedabad-15	9408281388	info@alphaenterprise.co.in
2	Janta Electric Co., Shop No. 6, Bldg. 3, Chaltanya CHS, Opp. Ram Mandir Rd., SV Rd., Goregaon (W), Mumbai-400104	7208000817	jantaelectriccompany@yahoo.in
3	Power Control, 18, Sursarthi Complex, B/H Rudra Complex, Ambawadi, Ahmedabad-6	9327030790	info@powercontrol.com
4	Indian Electric Carporation, 1-A Hemali Bunglows Nr. Old ptwa nursing home, Opp. Kachhi Samaj, Paldi Ahmedabad.7	9327578375, 9825306291	info@iecprojects.co.in
5	Parth Energy Solutions, Shop No 1, Sal Darshan Apt, Santosh Park Main Road, 150ft Ring Road, Rajkot 360007	9998517133	parth_energy@rediffmail.com
6	Aum Electric Engineering Pvt. LTD. Plot No 7 Kadiwala Street Opp. Shivram Dyeing, Behind Kiran Mortors, Surat 395002	9825093003, 9879593825	aumelectric1994@yahoo.co.in
7	Bhavani Construction, 212, 2nd Floor, Ratandeep Complex, Opp. Central Selt, Waghawadi Road, Bhavnagar	9427262860/ 9428078876	bhavani const@yahoo.in





#### **FORM TENDER**

To,
The Asst Gen Manager,
State Bank of India
RBO III, GHOD DOD ROAD, SURAT 395002

Dear Sir,

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

#### **MEMORANDUM**

Description of work	ELECTRICAL WORKS OF SBI RETAIL BRANCH, DIAMOND BOURSE, SURAT, GUJARAT 395007.	
	RS. 4200.00 by means of Demand Draft / Pay Order (Valid for a period of 90 Days from the last date of submission of the tender) from any scheduled Nationalized Bank drawn in favour of SBI and payable at SURAT.	
Percentage, if any, to be deducted from Bills and total amount to be retained	10 % from Running Bills, subject to maximum Total 3% of contract amount or actual Final Bill value.	
Time allowed for completion of the Works from 3 rd day after the date of written order or date of handing over of the site (whichever is later) to commence the work	30 days.	

Should this tender be accepted, I/we hereby agree to abide by and fulfill the terms and provisions of the said conditions of Contract annexed hereto so far as they may be applicable or in default thereof to forfeit and pay to SBI, the amount mentioned in the said conditions.

We, hereby, also undertake that, we will not raise any claim for any escalation in the prices of any of the material during the currency of contract/execution/completion period. I/We have deposited a sum of Rs. \_\_\_\_\_ of the total tender amount as Earnest Money with the State Bank of India which is not to bear any interest. Should I / We fail to execute the Contract when called upon to do so I/ We do hereby agree that this/any sum shall be forfeited by me/us to SBI and any suitable action may be taken by the Bank against us. This may also include debarring of my empanelment for an year or so.

I/we have deposited Demand Draft / Banker's Cheque / FDR for a sum of Rs.4200/- as Earnest money deposit with the SBI. Should I/we do fail to execute the contract when called upon to do so, I/we hereby agree that this sum shall be forfeited by me/us to SBI.



#### Yours faithfully,

#### **Signature of contractor With Seal**

1) Our Bankers are: i)	ii)
The names of partners of our firm are: i)	ii)
Name of the partner of the firm Authorized to sign Or	
(Name of person having Power of Attorney to sign the Contract.) (Certified true copy of the Power of Attorney should be attached)	
Yours faithfully,	
Signature of Contractors.	
Signature and addresses of Witnesses i)	ii)



#### SAMPLE BUISNESS RULE DOCUMENT

ONLINE E-TENDERING FOR ELECTRICAL & ALLIED WORK OF SBI RETAIL BRANCH, DIAMOND BOURSE SURAT.

#### **Business rules for E-tendering:**

- 1. Only AHMEDABAD CIRCLE **empanelled ELECTRICAL contractors** under appropriate category who are invited by the project Architect/SBI shall only be eligible to participate.
- 2. SBI will engage the services of an E-tendering service provider who will provide necessary training and assistance before commencement of online bidding on Internet.
- 3. In case of e-tendering, SBI will inform the vendor in writing, the details of service provider to enable them to contact and get trained.
- 4. Business rules like event date, closing and opening time etc. also will be communicated through service provider for compliance.
- 5. Contractors have to send by email, the compliance form in the prescribed format (provided by service provider), before start of E-tendering. Without this the vendor will not be eligible to participate in the event.
- 6. The Contractors will be required to submit the various documents in sealed Envelope to the office of SBI RBO-III, Surat at the address mentioned hereinbefore by the stipulated date i.e.

   Demand Draft of specified amount of EMD (2) Process compliance form dully signed Contractors not submitting any one or more documents shall not be eligible to participate in the on-line price bidding.
- 7. E-tendering will be conducted on schedule date &time.
- 8. The e-tendering will be treated as closed only when the bidding process gets closed in all respects for the item listed in the tender.

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

SBI shall finalize the Tender through e-tendering mode for which M/s. Antares Systems Limited, Bangalore, has been engaged by SBI an authorized service provider. Please go through the guidelines given below and submit your acceptance to the same along with your Commercial Bid.

E-tendering shall be conducted by SBI through **M/s.** Antares Systems Limited, Bangalore, on pre-specified date. While the Contractors shall be quoting from their own offices/ place of their choice, Internet connectivity and other paraphernalia requirements shall have to be ensured by Contractors themselves. In the event of failure of their Internet connectivity, (due to any reason whatsoever it may be) it is the bidders' responsibility

In order to ward-off such contingent situation bidders are requested to make all the necessary arrangements/alternatives such as back—up power supply whatever required so that they are able to circumvent such situation and still be able to participate in the E-tendering successfully. Failure of power at the premises of Contractors during the E-tendering cannot be the cause for not participating in the E-tendering. On account of this the time for the E-tendering cannot be extended and SBI is not responsible for such eventualities.



- 1. M/s. Antares Systems Limited, Bangalore, shall arrange to train you nominated person(s), without any cost to you. They shall also explain you all the Rules related to the E-tendering. You are required to give your compliance on it before start of bid process.
- 2. BIDDING CURRENCY AND UNIT OF MEASUREMENT: Bidding will be conducted in Indian currency & Unit of Measurement will be displayed in Online E-tendering.
- 3. BID PRICE: The Bidder has to quote the rate as per the Tender Document provided by SBI their appointed Architects.
- 4. VALIDITY OF BIDS: The Bid price shall be firm for a period specified in the tender document and shall not be subjected to any change whatsoever.
- 5. Procedure of E-tendering:

#### i. Online E-tendering:

- (a) The hard copy of the Technical as well as Price Bid is available on the Bank's website during the period specified in the NIT.
- (b) Online e-tendering is open to the empanelled bidders who receive NIT from the Architect and qualified for participating in the price bidding as provisions mentioned hereinabove through SBI approved Service Provider.
- (c) The Price-Bid shall be made available online by the Service Provider wherein the contractors will be required to fill-in percentage Above/Below over given Estimated amount.
- (d) The Contractors are advised not to wait till the last minute to submit their online item-wise quote in the price bid to avoid complications related with internet connectivity, network problems, system crash down, power failure, etc.
- (e) It is mandatory to all the bidders participating in the price bid to quote their rates for each and every item.
- (f) In case, contractor fails to quote their rates for any one or more tender items, their tender shall be treated as *"Incomplete Tender"* and shall be liable for rejection.
  - LOG IN NAME & PASSWORD: Each Bidder is assigned a Unique User Name & Password by M/s. Antares Systems Limited, Bangalore, . The Bidders are requested to change the Password after the receipt of initial Password from M/s. M/s. Antares Systems Limited, Bangalore, All bids made from the Login ID given to the bidder will be deemed to have been made by the bidder.
- 6. **BIDS PLACED BY BIDDER: Bids** will be taken as an offer to execute the work as specified. Bids once made, cannot be cancelled / withdrawn and the Bidder shall be bound to execute the work at the quoted bid price. In case the L1 Bidder backs out or fail to complete the



work **as per the rates quoted,** SBI shall have the liberty to take action as deemed necessary including de-paneling such contractors and forfeiting their EMD and imposing heavy penalty to contractor to recover the losses occurred to the Bank.

- 7. At the end of the E-tendering, SBI will decide upon the successful bidder. SBI decision on award of Contract shall be final and binding on all the Bidders.
- 8. SBI shall be at liberty to cancel the E-tendering process/tender at anytime, before ordering, without assigning any reason.
- 9. SBI shall not have any liability to bidders for any interruption or delay in access to the site irrespective of the cause.
- 10. Other terms and conditions shall be as per your techno-commercial offers and other correspondences till date.

#### 11. OTHER TERMS & CONDITIONS:

- The Bidder shall not involve himself or any of his representatives in Price manipulation of any kind directly or indirectly by communicating with other suppliers/ bidders.
- The Bidder shall not divulge either his Bids or any other exclusive details of SBI to any other party.
- SBI decision on award of Contract shall be final and binding on all the Bidders.
- SBI reserve their rights to extend, reschedule or cancel any E-tendering within its sole discretion.
- SBI or its authorized service provider M/s. Antares Systems Limited, Bangalore shall not have any liability to Bidders for any interruption or delay in access to the site irrespective of the cause.
- SBI or its authorized service provider **M/s. Antares Systems Limited, Bangalore** is not responsible for any damages, including damages that result from, but are not limited to negligence.
- SBI or its authorized service M/s. **M/s. Antares Systems Limited, Bangalore** will not be held responsible for consequential damages, including but not limited to systems problems, inability to use the system, loss of electronic information etc.

#### N.B.

- All the Bidders are required to submit the Process Compliance Statement (Annexure-II) duly signed to M/s. Antares Systems Limited, Bangalore.
- All the bidders are requested to ensure that they have a valid digital signature certificate well in advance to participate in the online event.



#### PROCESS COMPLIANCE STATEMENT (ANNEXURE II)

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

To,

M/s. Antares Systems Limited, Bangalore,

#24,3rd Stage, 4th Block, Basveshwaranagar, Bangalore- 560079, India

**E-mail**: kushal.b@anataressystems.com Contact No.- 91 - 9674758719, 9674758720

## AGREEMENT TO THE PROCESS RELATED TERMS AND CONDITIONS FOR THE ONLINE E-TENDERING FOR PROPOSED ELECTRICAL WORK OF SBI RETAIL BRANCH, SURAT.

Dear Sir,

This has reference to the Terms & Conditions for the E-tendering mentioned in the Tender document

This letter is to confirm that:

- 1) The undersigned is authorized representative of the company.
- 2) We have studied the Commercial Terms and the Business rules governing the E-tendering as mentioned in RFP of SBI as well as this document and confirm our agreement to them.
- 3) We also confirm that we have taken the training on the E-tendering tool and have understood the functionality of the same thoroughly.
- 4) We confirm that SBI **M/s. Antares Systems Limited, Bangalore** shall not be liable & responsible in any manner whatsoever for my/our failure to access & bid on the e-E-tendering platform due to loss of internet connectivity, electricity failure, virus attack, problems with the PC, any other unforeseen circumstances etc. before or during the E-tendering event.
- 5) We confirm that we have a valid digital signature certificate issued by a valid Certifying Authority.
- 6) We, hereby confirm that we will honor the Bids placed by us during the E-tendering process.

With regards,	Date:
Signature with company seal Name:	
Company / Organization:	
Designation within Company / Organization: Address of Compan	y / Organization:
Scan it and send to this Document on	



#### **ARTICLES OF AGREEMENT**

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

ARTICLES OF AGREEMENT made thedate of				
between SBI, on behalf of SBI, having its office at Mumbai here in after called" the Service				
Provider" of the One Part and				
Trovider of the one rare and				
WHEREAS the SBI is desirous of				
and has caused drawings and specifications describing the work to be done to be prepared				
by <b>M/s.</b> , its Architects.				
ANDWHEREAS the said Drawings numbered to				
inclusive, the Specifications and the Schedule of Quantities have been signed by or on behalf				
of the parties hereto.				
AND WHEREAS the Contractor has agreed to execute upon and subject to the Conditions set				
forth herein and to the Conditions set forth herein in the Special Conditions and in the				
Schedule of Quantities and Conditions of Contract (all of which are collectively hereinafter				
referred to as "the said conditions") the works shown upon the said Drawings and / or				
described in the said Specifications and included in the Schedule of Quantities at the				
respective rates therein set forth amounting to the sum as therein arrived at our such other				
sum as shall become payable there under (hereinafter referred to as "the said Contract				
Amount.)				
NOW IT IS HEREBY AGREED AS FOLLOWS:				
In consideration of the said Contract Amount to be paid at the times and in the manner				
set forth in the said Conditions, the Contractor shall upon and subject to the said				
Conditions execute and complete the work shown upon the said Drawings and described				
in the said Specifications and the priced Schedule of Quantities.				
The Employer shall pay to the Contractor the said Contract Amount, or such other sum as				
shall become payable, at the times and in the manner specified in the said Conditions.				
The term "the Architects" in the said Conditions shall mean the M/s.				
, or in the event of their ceasing to be the Architects for the				
purpose of this Contract for whatever reason, such other person or persons as shall be				
nominated for that purpose by the Employer, not being a person to whom the Contractor				
shall object for reasons considered to be sufficient by the Employer, PROVIDED ALWAYS				
that no person or persons subsequently appointed to be Architects under this Contract				
shall be entitled to disregard or overrule any previous decisions or approval or direction				
given or expressed in writing by the outgoing Architects for the time being.				
The said Conditions and Appendix thereto shall be read and construed as forming part of				

1)

2)

3)

SOPAN SURAT Sign & Seal of contractor.

this Agreement, and the parties here to shall respectively bide by submit themselves to



- the said Conditions and perform the Agreements on their part respectively in the said Conditions contained.
- 4) The Plans, Agreements and Documents mentioned herein shall form the basis of this Contract.
- 5) This Contract is neither a fixed lump-sum contract nor a piece work contract but a contract to carry out the work in respect of the entire building complex to be paid for according to actual measured quantities at the rates contained in the Schedule of Quantities and Rates or as provided in the said Conditions.
- 6) The Contractor shall afford every reasonable facility for the carrying out of all works relating to ELECTRICAL works, installation of lifts, Telephone, electrical installations, fittings air-conditioning and other ancillary works in the manner laid down in the said Conditions, and shall make good any damages done to walls, floors, etc. after the completion of his work.
- 7) The SBI reserves to itself the right of altering the drawings and nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this Contract.
- 8) Time shall be considered as the essence of this Contract and the Contractor here by agrees to commence the work soon after the Site is handed over to him or from the date of issue of formal work order as provided for in the said Conditions whichever is later and to complete the entire work within **the specified time** subject to nevertheless the provisions for extension of time.
- 9) All payments by the SBI under this contract will be made only at Ahmedabad.
- 10) All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Ahmedabad and only the courts in Ahmedabad i shall have jurisdiction to determine the same.
- 11) That the several parts of this Contract have been read by the Contractor and fully understood by the Contractor.
  - IN WITNESS WHEREOF THE SBI and the Contractor have set their respective hands to these presents and two duplicates hereof the day and year first hereinabove written.

hand of Shri	
	By the (Employer)
SIGNED AND DELIVERED by the	
SIGNATURE CLAUSE	



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

(Witness



#### SECTION - 1

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

#### 1.0 Scope of work

Sealed Tender followed by price bidding (on percentage basis) are invited by M/s. SOPAN, SURAT. For and behalf of SBI Proposed ELECTRICAL works of ELECTRICAL WORK at SBI RETAIL BRANCH SURAT

#### 2.0 Site and its location

The proposed work is to be carried out at SBI RETAIL BRANCH, H- TOWER GR. FLOOR DIAMOND BOURSE, SURAT, GUJARAT-395007.

**Tender Documents** 

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

Instructions to tenderers

General conditions of Contract Special conditions of Contract Additional Specifications

**Drawings** 

#### Priced bid A

- **2.2** The above documents shall be taken as complementary and mutually explanatory of one another but in case of ambiguities or discrepancies, shall take precedence in the order given below;
  - a) Price Bid
  - b) Additional Specifications
  - c) Technical specifications
  - d) Drawings
  - e) Special conditions of contract
  - f) General conditions of contract
  - g) Instructions to Tenderers
- **2.3** Complete set of tender documents including relative drawings can be downloaded from the website www.sbi.co.in
  - **2.4** The tender documents are not transferable.

#### 3.0 Site Visit:

3.1 The tenderer must obtain himself on his own responsibility and his own expenses all information and data that may be required for the purpose of filling this tender document



and enter into a contract for the satisfactory performance of the work. The tenderer is requested satisfy himself regarding the availability of water, power, transport and communication facilities, the character quality and quantity of the materials, labor, the law-and-order situation, climatic conditions local authorities' requirement, traffic regulations etc; The tenderer will be fully responsible for considering the financial effect of any or all the factors while submitting his tender.

4.0 Earnest Money: RS. 4200.00

5.0 Initial Security Deposit: Not applicable

#### **5.1 Security Deposit:**

Total security deposit shall be 3% of contract value. Deduction from each running bill account will be @ 10% till Total Security Deposit (TSD) reaches to 3% of contract value. The 50% of the Total Security Deposit shall be paid to the contract on the basis of architect's certifying the virtual completion. The balance 50% would be paid to the contractors after completion Defects Liability Period as specified in the contract/WORK ORDER.

#### **5.2 Signing of contract Documents:**

The contractor who accept the standard rates shall be bound to implement the contract by signing an agreement and conditions of contract attached herewith within 15 days from the receipt of intimation of acceptance of the tender by the Bank. However, the written acceptance of the bidder by the Bank will constitute a binding agreement between the Bank and contractor who accept the L-1 rates (Standard Rates) whether such formal agreement is subsequently entered in to or not.

#### **6.0 Completion Period:**

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

#### 7.0 Validity of Tender: As per NIT

If the tenderer withdraws his/her offer during the value period or makes modifications in his/her original offer which are not acceptable to Bank without prejudice to any other right or remedy the Bank shall be at liberty to forfeit the EMD.

#### 8.0 Liquidated Damages:

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

#### 9.0 Rate and Prices:

#### 9.0.1 In case of Item Rate Tender:

i. The bidder should submit online bid by the authorized person through his digital signature. This estimate should have clear and complete specifications and scope of each item and its estimated quantity. The intending bidders shall quote their rates of each item separately.



ii. The bidder offering Lowest Tender Amount for projects pertaining to Procurement Purchase Contract and Highest Tender Amount for Sales Contracts shall be declared as "Successful Bidder".

iii. In case, the Lowest Tendered Amount of two or more contractors is same, such lowest contractors will again be asked to submit sealed / online. Revised sealed bid on item rate basis including all sub sections/sub heads as the case may be, but the revised total amount quoted shall, in no case, be higher than the total amount quoted during their initial offer for the project. The lowest tender shall be decided on the basis of revised offers.

iv. The process of online re-bidding amongst Two or more contractors offering same total amount shall continue till L-1 bidder is discovered.

v. In case, any of such contractor(s) (quoted same tender amount during initial bidding or subsequent re-bidding) refuses to submit revised offer, it shall be treated as "withdrawal of tender/' by the Contractor before acceptance. The earnest money of such contractors shall be forfeited.

vi. In case all the lowest contractors those have quoted same tendered amount, refuse to participate in online revised bidding process for the project, the EMD of such Contractors shall be forfeited and the tenders shall be re-invited for the project.

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

viii. The tenderers should not change the units as specified in the tender. If any unit is changed the tenders would be evaluated as per the original unit and the contractor would be paid accordingly. The tenderer should not change or modify or delete the description of the item. If any discrepancy is observed he should immediately bring to the knowledge of the Architect/ SBI.

The rate quoted shall be firm and shall include all costs, allowances, materials, labours, taxes etc. except G.S.T, which shall be payable / reimbursed as per actual as applicable.

The SBI reserve their rights to accept any tenders, either in whole or in part or may entrust the work in phases or may drop the part scope of work at any stage of the project within its sole discretion without assigning any reason(s) for doing so and no claim / correspondence shall be entertained in this regard.

Signature Of The Contractor With Seal



#### **GENERAL & IMPORTANT NOTES**

#### 1 GENERAL NOTES:

- (i) Unless otherwise specified in these tender documents mode of measurements specifications etc. shall be as per relevant IS codes.
- (ii) Source of materials / samples / brands / makes etc. shall be got approved from the Architects / Bank before using. In case of deviations, decision of the Bank shall be final and binding and shall not be open for arbitration.
- (iii) The Architects have their specific role / duties / rights as defined in these tender documents. However, in the event of any dispute arising out of differences between the opinions of the Architects and also their role/ duties/rights, the Banks' decision shall be final & binding on the Architects and the Contractor and shall not be open to arbitration.
- (vi) The Contractor will extend full co-operation, support and all required assistance to Architect / Bank for discharging their duties and responsibilities efficiently and effectively.
- (vii) The contractor has to supply and adhere to the specific makes and specifications of all the items, which are mentioned in the separate list of approved makes. Any work found not as per the tender specifications and list of approved the contractor has to replace the same without any delay. The contractor is instructed of get approval of all the materials to be used on this site before starting the work. He should provide different sample of material for approval, before execution of work.
- (viii) All quantities indicated in the tender are approximate & are likely to change. The contractor must take actual measurement at site and billing shall be done as per the actual measurement of the work done at site.
- (ix) Work has to be got executed at site in coordination with various agencies working at site.
- (x) The contractor is instructed to get the approval of the materials to be used on this site before starting the work. He shall provide different sample of materials for approval before execution of the work
- (xi) All material has to be used in full size/length only. Joints should be avoided as far as possible.
- (xii) Any item mentioned in the BOQ with "TO THE SHAPE" will have measurement of onsite executed to the shape area only.
- (xiii) Making various levels & line out for total layout on site for the items in scope of the work shall be done by the contractor at his own cost.
- (xiv) MTC (Manufacturer Test certificate) Where ever applicable shall be arranged & submitted by the contractor. Testing of wood for moisture, knot % etc. shall be carried out by the contractor at his own cost.

#### 2. IMPORTANT NOTES:

(i) The contractor's qualified & authorized representative shall remain on site during the entire execution process for coordination with various agencies / Architect / Bank & execution of work.



- (ii) If the assigned work is in running/working Branch, the contractor should have executed the site erection work in odd hours, Holidays and Sundays.
- (iii) The contractor shall prepare all loose furniture items at his workshop only & deliver the same to the site at appropriate time as instructed by the Architect/BMs/Bank Officials.
- (iv) The site shall be cleaned on day-to-day basis & all debris shall be disposed away at the location beyond the limit as approved by the local authority.
- (v) Hidden measurements: It is contractor's responsibility to get the measurement checked immediately on completion of such items. This shall be done before finishing the same The Architect shall be provided with such details well in advance so that the other work is not held up due to last moment action.
- (vi) Before starting the work at site, the contractor shall mark out the plan & levels of the false ceiling, partitions etc. in coordination with other agencies on site.
- vii) The rates quoted shall be inclusive of all taxes, Duties, Octroi, Transportation, Delivery, Installation, Testing, Commissioning etc. complete at the site. No extra will be paid for any kind of taxes. However, the GST will be paid extra as applicable as per actual.
- viii) The entire job shall be executed in total coordination with the other agencies working on the project & also with landlord, Branch Manager and Bank officials etc.
- ix) Architect of the project shall be kept informed about the progress of the work at various stages.
- x) The contractor shall arrange on his own for lighting & plug point with socket & electrical wiring, DB's etc. required during entire execution process. However, supply at point shall provided by the bank / landlord
- (xi) Any Hidden item MUST be photographed and need to be sent via e- mail or CD to Architect / Bank

#### xii) BILLING PROCESS:

The contractor/Architect should take care of the following while submitting the final Bill

#### The Final Bill Should Contain: -

- a) Abstract in tender BOQ format only.
- b) Schedules for detailed measurement sheet for all items (in detailed break up).
- c) original insurance policies as per tender terms and conditions.
- d) Completion certificate issued by the concerned Architect.
- e) Inspection & completion certificates for all types of false ceiling.
- f) Test report for Toughened Glass.
- g) Copy of LOA etc.
- h) All documents shall carry contractor's signature & seal with address. All documents shall be submitted in 1 + 1 copies.
- i) The contractor shall also provide all measurement sheet in soft copy (in Excel format).
- i) The contractor shall submit the purchase bill copy of major items used in the project.
- k) That extension of time, if any, beyond scheduled date of completion has been granted



by the Competent Authority.

- I) original receipt of purchase of Corian/plywood/Gypboard and other major materials used in the work from the original manufacturer/authorized dealers/distributors.
- m) If any advances paid during the execution of the work.
- n) Acceptances form the contractor that "Accepted as full and final settlement of all claims"
- o) The total cost of work should be within the sanction amount, if not, revised sanction taken from the Competent Authority to be attached with the Final Bill

IMPORTANT: ALL DOCUMENTS SHALL BE SUBMITTED AT ONCE (NOT IN PIECEMEAL MANNER) ALONG WITH FULL&FINAL BILL &SHALL BE DULY SIGNED BY PUTTING COMPANY'S ADDRESS SEAL



#### **GENERAL CONDITIONS OF CONTRACT**

#### 1.0 Definitions:

"Contract" means the documents forming the tender and the acceptance thereof and the formal agreement executed between State Bank of India (client) and the Contractor, together with the documents referred therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Architects/ Bank and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

- 1.1 In the contract the following expressions shall, unless the context otherwise requires, have the meaning hereby respectively assigned to them.
- 1.1.1 'SBI' shall mean State Bank of India (client) a body corporate created under State Bank of India Act 1955,having its Corporate Centre at State Bank Bhavan, Madame Cama Road, Mumbai-400 021 and LHO at Bhadra, Ahmedabad and includes the Client's representatives, successors and assigns.

#### 'Architect/ consultants' shall mean SOPAN, Surat - 395001.

'Project Management Consultant' shall mean -----Not Applicable -----

- 1.1.2 'Site Engineer' shall mean an Engineer appointed by the Bank as their representative to give instructions to the contractor.
- 1.1.3 'The Contractor' shall mean the individual or firm or company whether incorporated or not, undertaking the works and shall include legal personal representative of such individual or the composing the firm or company and the permitted assignees of such individual or firm or company.
  - The expression 'Works' or 'Work' shall mean the permanent or temporary work described in the 'Scope of Work' and / or to be executed in accordance with the contract and includes materials, apparatus, equipments, temporary supports, fittings and things of all kinds to be provided, the obligations of the contractor hereunder and work to be done by the contractor under the contract.
- 1.1.4 'Engineer' shall mean the representative of the Architect/ Consultant.
- 1.1.5 'Drawings' shall mean the drawings prepared by the Architects and issued by the Engineer and referred to in the specifications and any modifications of such drawings as may be issued by the Engineer from time to time 'Contract value shall mean the value of the entire work as stipulated in the letter of acceptance of tender subject to such additions thereto or deductions there from as may be made under the provision herein after contained.
- 1.1.6 'Specifications' shall mean the specifications referred to in the tender and any modifications thereof as may time to time be furnished or approved by the Architects/ consultant.
- 1.1.7 "Month" means calendar month.
- 1.1.8 'Week' means seven consecutive days.
- 1.1.9 'Day" means a calendar day beginning and ending at 00 hr and 24 hrs respectively.



#### **CLUASE**

#### 1.0 Total Security Deposit

Total Security Deposit comprise of Earnest Money deposit Initial security deposit Retention money

#### a) Earnest Money Deposit:

The tenderer shall furnish EMD as specified in the NIT in the form of Demand draft drawn in favor of the State Bank of India on any Scheduled Bank. No tender shall be considered unless the EMD is so deposited in the required form. No interest shall be paid on this EMD. The EMD of the unsuccessful tenderer shall be refunded soon after the decision to award the contract is taken without interest. The EMD shall stand absolutely forfeited if the tenderer revoke his tender at any time during the period when he is required to keep his tender open for acceptance by the SBI or after it is accepted by the SBI the contractor fails to enter into a formal agreement or fails to pay the initial security deposit as stipulated or fails to commence the work within the stipulated time.

#### b) Initial Security Deposit (ISD)

The ISD shall be 2% of accepted value of tender including the EMD in the form of DD drawn in favor of any scheduled bank and shall be deposited within 15 days from the date of acceptance of tender.

#### c) Retention Money:

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

#### 2.0 Language

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

#### 3.0 Errors, omissions and discrepancies

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

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



- a) In case of difference between rates written in figures and words, the rate in word shall prevail.
- b) Between the duplicate/ subsequent copies of the tender, the original tender shall be taken as correct.

#### 4.0 Scope of work:

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

5.0

#### (I) Letter of acceptance:

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

#### (II) Contract Agreement:

On receipt of intimation of the acceptance of tender from the SBI/ Architect the successful tenderer shall be bound to implement the contract and within fifteen days thereof. He shall sign an agreement on a non judicial stamp paper of appropriate value.

#### 6.0 Ownership of drawings:

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

#### 7.0 Detailed drawings and instructions:

The SBI through its Architect / Consultants shall furnish with reasonable promptness additional instructions by means of drawings or otherwise, necessary for the proper execution of the work. All such drawings and instructions shall be consistent with the contract document, true developments thereof and reasonably inferable there from.

The work shall be executed in conformity therewith and the contractor will prepare a detailed program schedule indicating therein the date of start and completion of various activities on receipt of the work order and submit the same to the SBI through its Architect / Consultant.

#### 8.0 Copies of agreement

Two copies of agreement duly signed by both the parties (Bank & the Contractor) with the drawings shall be prepared one each for both the parties; a photo copy of such Agreement shall be kept by the Architect.



#### 9.0 Liquidating damages:

If the contractor fails to maintain the required progress or to complete the work and clear the site including vacating their office on or before the contracted or extended date or completion without justification in support of the cause of delay, he may be called upon without prejudice to any other right of remedy available under the law to the SBI on account of such breach to pay a liquidated damages as mentioned in NIT

#### 10.0 Materials, Appliances and employees:

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

#### 11.0 Permits, laws and Regulations:

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

#### 12.0 Setting out work:

The contractor shall set out the work and shall be responsible for the true and perfect setting out the same and for the correctness of the positions, levels, dimensions, and alignment of all parts thereof and got it approved by the Architect/Consultant before proceeding with the work at any time any error in this respect shall appear during the progress of the works, irrespective of the fact that the layout had been approved by the Architect/Consultant the contractor shall be responsible for the same and shall at his own expenses rectify such error, if so, required to satisfaction of the SBI.

#### 13.0 Protection of works and property:

The contractor shall continuously maintain adequate protection, of all his work from damage and shall protect the SBI's properties from the injury or loss arising in connection with contract. He shall make good any such damage, injury, loss, except due to causes beyond his control and not due to his fault or negligence.

He shall take adequate care and steps for protection of the adjacent properties. The contractor shall take all precautions for safety and protections of his employees on the works and shall comply with all applicable provisions of Govt. and local body's safety laws and building codes to prevent accidents or injuries to persons or property on about or adjacent to his place of works.

#### 14.0 Inspections of work:

The SBI/ Architect/Consultant or their representatives shall at all reasonable times have free access to the work site and/ or to the workshop, factories, or other places where materials are laying or from where they are obtained and the contractor shall give every



facility to the SBI/ Architect/Consultant and their representatives necessary for inspection and examination and test of the materials and workmanship. No person unless authorized by the SBI/ Architect/Consultant except the representative of Public authorities shall be allowed on the work at any time. The proposed work either during its construction stage or its completion can also be inspected by the Chief Technical Examiner's organization a wing of Central Vigilance commission.

#### 15.0 Assignment and subletting:

The whole of work included in the contract shall be executed by the contractor and he shall not directly entrust and engaged or indirectly transfer, assign or underlet the contract or any part or share thereof or interest therein without the written consent of the SBI though the Architect and no undertaking shall relieve the contractor from the responsibility of the contractor form active superintendence of the work during its progress.

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

i) All materials and workmanship shall be best of the respective kinds described in the contract and in accordance with the Architect/Consultant's instruction and shall be subject from time to time to such test as the Architect/Consultant may direct at the place of manufacture or fabrication or on the site or in an approved testing laboratory. The contractor shall provide such assistance, instruments, machinery, labor and materials as are normally required for examining, measuring, sampling and testing any material or part of work before incorporation in the work for testing a may be selected and required by the Architect/Consultant.

#### ii) Samples

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

#### iii) Cost of Tests

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

#### iv) Cost of test not provided for

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



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

#### 17.0 Obtaining information related to execution of work:

No claim by the contractor for additional payment shall be entertained which is consequent upon failure on his part to obtain correct information as to any matter affecting the execution of the work or any misunderstanding or the obtaining incorrect information or the failure to obtain correct information relieve him from any risks or from the entire responsibility for the fulfillment of contract.

#### 18.0 Contractor's superintendence

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

#### 19.0 Quantities:

- i) The bill of quantities (BOQ) unless or otherwise stated shall be deemed to have been prepared in accordance with the Indian Standard method of Measurements and quantities. The rate quoted shall remain valid for variation of quantity against individual item to any extent subject to maximum variation of the contract value by 25%. The entire amount paid under clause 21 hereof as well as amount of prime cost and provisional sums if any shall be excluded.
- **Variation exceeding 25%:** the items of work executed in relation to variation exceeding 25% shall be paid on the basis of provisions of clause 22 hereof.

#### 20.0 Works to be measured

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

#### 21.0 Variations

No alteration, omission or variation ordered in writing by the Architect/ Consultant shall vitiate the contract. In case the SBI/ Architect/Consultant thinks proper at any time during the progress of works to make any alteration in, or additions to or omissions from the works or any alteration in the kind or quality of the materials to be used therein, the Architect/Consultant shall give notice thereof in writing to the contractor or



shall confirm in writing within seven days of giving such oral instructions, the contractor shall alter to, add to, or omit from as the case may be in accordance with such notice, but the contractor shall not do any work extra to or make any alterations or additions to or omissions from the works or any deviation from any of the provisions of the contract, stipulations, specifications or contract drawings without previous consent in writing of the Architect/Consultant and the value of such extras, alternations, additions or omissions shall in all cases be determined by the Architect/Consultant and the same shall be added to or deducted from the contract value, as the case may be.

#### 22.0 Valuation of variations:

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

a)

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

#### 23.0 Final measurements:

The measurements and the valuation in respect of the contract shall be completed within one month of the virtual completion of the work.



#### 24.0 Virtual Completion Certificate (VCC)

On successful completion of the entire works covered by the contract to the full satisfaction of the SBI, the contractor shall ensure that the following works has been completed to the satisfaction of the SBI.

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

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

This issuance of a VCC shall be without prejudice to the SBI's rights and contractors liabilities under the contract including the contractor's liability for defect liability period nor shall the issuance of VCC in respect of the works or work at any site be construed as a waiver of any right or claim of the SBI against the contractor in respect of works or works at the site and in respect of which the VCC has been issued.

#### 25.0 Work by other agencies:

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

#### 26.0 Insurance of works:

26.1

Without limiting his obligations and responsibilities under the contract, the contractor shall insure in the joint names of the SBI and the contractor against all loss or damages



from whatever cause arising other than the excepted risks, for which he is responsible under the terms of contract and in such a manner that the SBI and contractor are covered for the period stipulated in clause 28 and 29 of GCC and are also covered during the period of maintenance for loss or damage arising from a cause, occurring prior to the commencement of the period of maintenance and for any loss or damage occasioned by the contractor in the course of any operations carried out by him for the purpose of complying with his obligations under clause.

- a) The works for the time being executed to the estimated current Contract value thereof, or such additional sum as may be specified together with the materials for incorporation in the works at their replacement value.
- b) The constructional plant and other things brought on to the site by the contractor to the replacement value of such constructional plant and other things.
- c) Such insurance shall be effected with an insurer and in terms approved by the SBI which approval shall not be unreasonably withheld and the contractor shall whenever required produce to the Architect/Consultant the policy of insurance and the receipts for payment of the current premiums.

#### 26.2 Damage to persons and property

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

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

#### 26.3 Contractor to indemnify SBI

The contractor shall indemnify the SBI against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the provision of these subclauses of 26.2

#### 26.4 Contractor's superintendence

The contractor shall fully indemnify and keep indemnified the SBI against any action, claim, or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in



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

#### 26.5 Third party Insurance

26.5.1 Before commencing the execution of the work the contractor without limiting his obligations and responsibilities under clause 26.0 of GCC shall insure against his liability for any material or physical damage, loss, or injury which may occur to any property including that of SBI, or to any person, including any employee of the SBI, by or arising out of the execution of the works or in the carrying out of the contract, otherwise than due to the matters referred to in the provision to clause 26.0 thereof.

#### 26.5.2 Minimum amount of third party insurance

Such insurance shall be effective with an insurer and in terms of approved by the SBI which approval shall not be reasonably withheld and at least the amount stated below. The contractor shall whenever required produce to the Architect / Consultant the policy or policies of insurance cover and receipts for payment of the current premiums. The minimum insurance cover for physical property, injury and death is **Rs. 5 lacs per occurrence with the number of occurrences limited to four**. After each occurrence contractor will pay additional premium necessary to make insurance valid for four occurrences always.

#### 26.6 Accident or Injury to workman:

26.6.1 The SBI shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the contractor or any sub-contractor, save and expect an accident or injury resulting from any act or default of the SBI or their agents, or employees. The contractor shall fully indemnify and keep indemnified the SBI against all such damages and compensations, save and except as aforesaid and against all claims proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

#### 26.6.2 Insurance against accidents etc. to workmen:

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

#### 26.6.3 Remedy on Contractor's failure to insure:

If the contractor fails to effect and keep in force the insurance to above referred to above or any other insurance which he may be required to effect under the terms of contract, then and in any such case the SBI may effect and keep in force any such



insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the SBI as aforesaid from any amount due or which may become due to the contractor, or recover the same as debt from the contractor.

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

#### 27.0 Commencement of Works:

The date of commencement of the work will be reckoned as the date of handing over site or fifteen days from the date of issue of letter of acceptance of the tender by the SBI whichever is later.

#### 28.0 Time of completion:

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

#### 29.0 Extension of time:

If, in the opinion of the Architect/Consultant, the work be delayed for reasons beyond the control of the contractor, the Architect/Consultant may submit a recommendation to the SBI to grant a fair and reasonable extension of time for completion of work as per the terms for contract. If the contractor needs an extension of the time for completion of the work or if the completion of work is likely to be delayed for any reasons beyond the due date of completion as stipulated in the contract, the contractor shall apply to the SBI through the Architect/Consultant in writing at least 30 days before the expiry of the scheduled time and while applying for extension of time he shall furnish the reasons in detail and his justification if any, for the delays. The Architect/Consultant shall submit their recommendations to the SBI in the prescribed format for granting extension of time. While granting extension of time the contractor shall be informed the period extended times, which will quality for levy of liquidated damages. For the balance period in excess of original stipulated period and duly sanctioned extension of time by the SBI. The provision of liquidated damages as stated under clause 9 of GCC shall become applicable. Further the correct shall remain in force even for the period beyond the due date of completion irrespective whether the extension is granted or not.

#### **30.0** Rate of progress:

Whole of the materials, plant and labor to be provided by the contractor and the mode, manner and speed of execution and maintenance of the works to be of a kind and conducted in a manner to the satisfaction of the Architect/Consultant should the rate of



progress of the work or any part thereof be at any time be in the opinion of the Architect/Consultant too slow to ensure the completion of the whole of the work by the prescribed time or extended time for completion the Architect/Consultant shall thereupon take such steps as considered necessary by the Architect/Consultant to expedite progress so as to complete the works by the prescribed time or extended time. Such communications from the Architect/Consultant neither shall relieve the contractor from fulfilling obligations under the contract nor will he be entitled to raise any claims arising out of such directions.

## 31.0 Work during nights and holidays:

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

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

#### 32.0 No compensation for restrictions of work:

If at any time after acceptance of the tender SBI shall deduct to abandon or reduce the scope of work for any reason whatsoever and hence not required the whole or any part of the work to be carried out, the Architect/Consultant shall give notice in writing to that effect to the contactor and the contactor shall act accordingly. In the matter the contactor shall have no claim to any payment of compensation or otherwise whatsoever on account of any profit or advantage which he might have derived from the execution of the work fully but which he did not derive in consequences of the foreclosure of the whole or part of the work.

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

"In case of such stores having been issued form SBI stores and returned by the contactor to stores, credits shall be given to him at the less rate not exceeding those at which were originally issued to the contactor after taking into consideration and deduction for claims on account of any deterioration or damage while in the custody of the contactor and in this respect the decision of the Architect/Consultant shall be final.

#### 33.0 Suspension of work:

The contactor shall, on receipt of the order in writing of the Architect/Consultant (whose decision shall be final and binding on the contractor) suspend the progress of work or any part thereof for such time and in such manner as the Architect/Consultant may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:



- a) On account any default on the part of the contractor, or
- b) For proper execution of the works or part thereof for reasons other than the fault of the contactor or
- c) For safety of work or part thereof, the contactor shall during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Architect/Consultant.
- ii) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above, the contactor shall be entitled to an extension of time equal to the period of every such suspension. No compensation whatsoever shall be paid on this account.

#### 34.0 Action when the whole security deposit is forfeited

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

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

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

#### 35.0 Owner's right to terminate the contract:

If the contractor being an individual or a firm commit any 'Act of Insolvency' or shall be adjusted an Insolvent or being an incorporated company shall have an order for



compulsory winding up voluntarily or subject to the supervision of Govt. and of the Official Assignee of the liquidator in such acts of insolvency or winding up shall be unable within seven days after notice to him to do so, to show to the reasonable satisfaction of the Architect/Consultant that he is able to carry out and fulfill the contract and to give security therefore if so required by the Architect/Consultant.

Or if the contractor (whether an individual firm or incorporated company) shall suffer execution to be issued or shall suffer any payment under this contract to be attached by or on behalf of any of the creditors of the contractor.

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

- a) has abandoned the contract; or
- b) has failed to commence the works, or has without any lawful excuse under these conditions suspended the progress of the works for 14 days after receiving from the SBI through the Architect/Consultant written notice to proceed, or
- c) has failed to proceed with the works with such diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or has failed to remove the materials from the site or to pull down and replace work within seven days after written notice from the SBI through the Architect/Consultant that the said materials were condemned and rejected by the Architect/Consultant under these conditions; or has neglected or failed persistently to observe and perform all or any of the acts, matters or things by this contract to be observed and performed by the contractor for seven days after written notice shall have been given to the contractor to observe or perform the same or has to the detriment of good workmanship or in defiance to the SBI's or the Architect/Consultant's instructions to the contrary subject any part of the contract. Then and in any of said cases the SBI and or the Architect/Consultant, may not withstanding any previous waiver, after giving seven days notice in writing to the contractor, determine the contract, but without thereby affecting the power the SBI or the Architect/Consultant or the obligation and liabilities of the contractor the whole of which shall continue in force as fully as if the contract had not been so determined and as if the works subsequently had been executed by or on behalf of the contractor. And further the SBI through the Architect/Consultant their agents or employees may enter upon and take possession of the work and all plants, tools, scaffoldings, materials, sheds, machineries lying upon the premises or on the adjoining lands or roads use the same by means of their own employees or workmen in carrying on and completing the work or by engaging any other contractors or persons to complete the work and the contractor shall not in any was interrupt or do any act, matter or thing to prevent or hinder such other contractor or other persons employed for completing and finishing or using the materials and plant for the works.

When the works shall be completed as soon thereafter as convenient the SBI or the Architect/Consultant shall give a notice in writing to the contractor to remove his surplus materials and plants and should the contractor fail to do so within 14 days after receipt thereof by him the SBI sell the same by public auction after due publication, and shall adjust the amount released by such auction. The contractor shall have o right to question any of the acts of the SBI incidental to the sale of the materials etc.

#### 36.0 Certificate of payment:

The contractor shall be entitled under the certificates to be issued by the Architect/Consultant to the contractor within 10 working days from the date of receipt



of certificate to the payment from SBI from time to time. The SBI shall recover the statutory recoveries other dues including the retention amount from the certificates of payments.

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

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

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

The SBI shall modify the certificate of payments as issued by the Architect/Consultant from time to time while making the payment.

The contractor shall submit interim bills only after taking actual measurements and properly recorded in the M books.

The contractor shall not submit interim bills when the approximate value of work done by him is less than Rs 9 lacs and the minimum interval between two such bills shall be one month.

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

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

#### 37.0 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 or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instruction, orders or these conditions or otherwise concerning the work or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter.

i) If the contractor consider 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 concerned Assistant General Manager, 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 given full particulars of the claim, grounds on which it is based and detailed calculations of the amount claimed and the contractor shall not be entitled to raise any claim nor shall the Bank be in any way liable in respect of any claim by the contractor unless notice of such claim shall have been given by the contractor to the Assistant General Manager, 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 Assistant General Manager, in writing in the manner and within the time aforesaid.



- ii) <u>The Assistant General Manager</u>, 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 <u>Assistant General Manager</u> submit his claims to the conciliating authority namely the DGM (B&O) for conciliation along with all detail and copies of correspondence exchanged between him and the <u>Assistant General Manager</u>.
- iii) If the conciliation proceedings are terminated without settlement of the disputes, the contractor shall, within a period of 30 days of termination thereof shall give a notice to the concerned <u>CHIEF GENERAL MANAGER</u>, of the Bank 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.
- iv) Except where the decision has become final, binding and conclusive in terms of the contract, all disputes or differences arising out of the notified claims of the contractor as aforesaid and all claims of the Bank shall be referred for adjudication through arbitration by the Sole Arbitrator appointed by the CHIEF GENERAL MANAGER. It will also be no objection to any such appointment that the Arbitrator so appointed is a Bank Officer and that he had to deal with the matters to which the contract relates in the course of his duties as Bank 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 CHIEF GENERAL MANAGER. 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 **CHIEF GENERAL MANAGER** as aforesaid should act as arbitrator.

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

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

#### 38.0 ROLE OF ARCHITECT / CONSULTANT

38.1. Architect/Consultant's duties are to design, control and supervise the works and to test any materials to be used or workmanship employed in connection with the works,



- quality control, project scheduling and monitoring and co-coordinating with all other agencies and Civil Contractor, checking of measurements, certification of bills, preparing extra deviation items, preparing minutes of meetings etc.
- 38.2 Wherever it is mandatory by law that the Architect / Consultant so appointed by the Bank shall be registered with the council of architecture/Competent Authority.
- 38.3 The Contractor shall afford the Architect/Consultant every facility and assistance for examining the works and materials and checking and measuring time and materials. The Architect/Consultant shall have no power to revoke, alter, enlarge, or relax any requirements of this Contract, or to sanction any day-work, additions, alterations, deviations or omissions unless such an authority may be specially confirmed by a written order of the Bank.
- 38.4 The Architect/Consultant shall act in consultation with the Bank regarding quality of works, interpretation of drawings, contract documents and finalize the selection of finishing materials. The Architect/Consultant shall check/ record the measurements made by Contractor's representative for all items of works and on completion hand over the records to the Bank.
- 38.5 The Architect/Consultant shall have the power to give notice to the Contractor or his Engineer In charge 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 / Consultant in consultation with Bank if required is obtained. The work will from time to time be visited by the Architect/Consultant / Bank but such examination 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 this clause, the Contractor shall take instructions only from the Architect / Consultant as the case may be. In other words the contractors shall take total responsibility for the execution of work / items of work by using quality materials and providing best of workmanship to fulfill the true intent of the tender provision.
- 38.6 The Architect/Consultant shall have such other powers and discharge other functions as are specifically provided in this contract including such incidental or consequential powers or duties, subject always to such specific instructions or directions of the Bank, which shall be duly notified to the Contractor.
- 38.7 The Architect / consultant shall have right to take remuneration loss from the contactor's bill due to non working / completing work in time, & loss due to not clearance the site for other agencies in time. This amount has been deducted from contractor's final bill.

#### 39.0 To define terms and explain plans

The various parts of the Contract are intended to be complementary to one another; but should any discrepancy appear, or any misunderstanding arise as to the import of anything contained therein, the explanations of the Architect/Consultant shall be final and binding. The correction of any errors or omissions of the Drawings and Specifications may be made by the Architect/Consultant, when such correction is necessary to bring out clearly the intention, which is indicated by a reasonable interpretation of the drawings & Specifications as a whole.

#### 40.0 Matters to be finally determined by the Architect / Consultant:

40.1 The Architect/Consultant's decision, opinion, direction, Certificates (except for payments) with respect to all or any of the matter under clauses explained above in condition of contract and the schedule of rates, hereof shall be final and conclusive and binding on the parties here to and shall be without appeal. Bank's instructions (if any), in this regard in case of any urgency, shall also be confirmed / vetted by the Architect/Consultant at the earliest possible.



40.2 Any of the decision, opinion, direction certificate, or valuation of the Architect or any refusal of the Architect to give any of the same shall be subject to the right of Arbitration and review in the same way in all respect (including the provision as to opening the reference) as if it were a decision of the Architect under the following clause.

#### 41.0 Typographical or clerical errors:

The Architect/Consultant's clarifications regarding partially omitted particulars or Typographical or clerical errors shall be final and binding on the Contractor.

#### 42.0 Site visits:

The Architect/Consultant /Bank shall visit the site from time to time at their discretion, or when expressly called upon to do so, to co-ordinate various activities and/or to answer such queries that may be posed at site as on drawings. The contractor / or his specified personal must attend these meetings. Any absence of contractor / his personal without prior notice will not acceptable.

#### 43.0 Address for service

All letters and Notices under or pursuant to these presents shall be hand delivered against acknowledgement or sent by Registered Post with Acknowledgement Due at the respective addresses mentioned below. Any change in the addresses shall be duly intimated by the concerned Party to all others.

Address of Bank:	Name & Address of Architect/Consultant
The Asst Gen Manager, State Bank	SOPAN
of India, RBO III, GHOD DOD ROAD,	B-202 River palace, Nr. Bahumali, Nanpura, Surat
SURAT 395002	395 002. (Gujarat)
	<u>Tel:0261</u> 2471302, 98251 17854

## 44.0 Water Supply

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

- i. That the water used by the Contractor shall be fit for construction purpose to the satisfaction of the Architect/Consultant.
- ii. The Contractor shall make alternative arrangements for the supply of water if the arrangements made by the Contractor for procurement of water in the opinion of the Architect/Consultant is unsatisfactory.
- iii. The Contractor shall construct temporary well/tube well in SBI land for taking water for construction purposes only after obtaining permission in writing from the SBI. The contractor has to make his own arrangements for drawing and distributing the water at his own cost. He has to make necessary arrangements. To avoid any accidents or damages caused due to construction and subsequent maintenance of the wells. He has to obtain necessary approvals from the local authorities, if required at his own cost. He shall restore the ground to its original condition after wells are dismantled on completion of work or hand over the well to the SBI without any compensation as directed by the Architect/Consultant.

#### 45.0 Power Supply:

The contractor shall make his own arrangements for power and supply/distribution system for driving plant or machinery for the work and for lighting purpose at his own cost. The cost of running and maintenance of the plants are to be included in his tender prices. He shall pay all fees and charges required for the power supply and include the



same in his tendered rates and hold the owner free from all such costs. He has to obtain necessary approvals from the appropriate authorities, if required.

45.1 The bank will not provide / make availability of lift / other means for transportation of goods / workers for floor to floor. The contractor has to arrange his own mean of transportation for this purpose with society's permission. Contractor can avail lift facility by paying society charges if available. Any security deposit / any other charges is levied by society for this purpose, the contractor has to pay it by himself. Bank will not pay any charges for it / take any responsibilities regarding this issue. If bank will get any complaint regarding using common areas / utilities without society's permission the bank will take actions on contractor for it. And if the bank has to pay any amount to society as aforesaid from any amount due or which may become due to the contractor, it will be recover the same as debt from the contractor. The contractor has to produce N.O.C from the society for payment of final bill.

#### 46.0 Treasure trove etc. :

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

#### 47.0 Method of measurements:

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

#### 48.0 Maintenance of registers:

The contractor shall maintain the following registers as per the enclosed format at site of work and should produce the same for inspection of SBI/Architect/Consultant whenever desired by them. The contractor shall also maintain the records/registers as required by the local authorities/Government from time to time.

- i) Register for secured advance
- ii) Register for hindrance to work
- iii) Register for running account bill
- v) Register for labor

#### 49.0 Force Majeure:

- 44.1 Neither contractor nor SBI shall be considered in default in performance of their obligations if such performance is prevented or delayed by events such as but not to war, hostilities revolution, riots, FURNITURE commotion, strikes, lockout, conflagrations, epidemics, accidents, fire, storm, floods, droughts, earthquakes or ordinances or any act of god or for any other cause beyond the reasonable control of the party affected or prevented or delayed. However a notice is required to be given within 30 days from the happening of the event with complete details to the other party to the contract, if it is not possible to serve a notice, within the shortest possible period without delay.
- 44.2 As soon as the clause of force majeure has been removed the party whose ability to perform its obligations has been affected, shall notify the other of such cessation and the actual delay incurred in such affected activity adducing necessary evidence in support thereof.



- From the date of occurrence of a case of force majeure obligations of the party affected 44.3 shall be suspended during the continuance of any inability so caused. With the cause it and inability resulting there from having been removed, the agreed time of completion of the respective obligations under this agreement shall stand extended by a period equal to the period of delay occasioned by such events.
- Should one or both parties be prevented from fulfilling the contractual obligations by a state of force major lasting to a period of 6 months or more the two parties shall each other to decide regarding the future execution of this agreement.

#### 45.0 Local laws, Acts, Regulations:

The contractor shall strictly adhere to all prevailing labor laws inclusive of contract labor (regulation and abolition act of 1970) and other safety regulation. The contractor shall comply with the provision of all labor legislation including the latest requirements of all the Acts, Laws, any other regulations that are applicable to the execution of the project.

- i) Minimum Wages Act 1948 (Amended)
- ii) Payment of Wages Act 1936 (Amended)
- iii) Workmen's Compensation Act 1923 (Amended)
- iv) Contract labor regulation and abolition act 1970 and central rules 1971 (amended)
- v) Apprentice act 1961 (amended)
- vi) Industrial employment (standing order) Act 1946 (amended)
- vii) Personal injuries (compensation insurance) act 1963 and any other modifications
- viii) Employees' provident fund and miscellaneous provisions Act 1952 and amendment thereof
- ix) Shop and establishment Act
- x) Any other act or enactment relating thereto and rules framed there under from time to time.

#### 46.0 Accidents:

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

- During the execution of work, if any damage shall occur to the works already done, either due to rain or any other circumstances, the same shall be rectified and made good to the entire satisfaction of the Architect/Consultant by the contractor at his costs and risks.
- **48.0** Testing of Material's etc.: The contractor at his own cost (without any extra cost to the Bank) shall arrange for the laboratory and/or field testing of materials and works as required by the architects/Bank.



## **SPECIAL CONDITIONS OF CONTRACT**

**Scope of Work:** As defined & explained in these tender documents.

## 48.0 Dimensions and levels

All dimensions and levels shown on the drawings shall be verified by the contractor on the site and he will be held responsible for the accuracy and maintenance of all the dimensions and the levels. Figured dimensions are in all cases to be accepted and no dimension shall be scaled. Large scale details shall take precedence over small-scale drawings. In case of discrepancy the contractor shall ask for clarification from the Architect/Consultant before proceeding with the work.

## 49.0 Notice of operation:

The contractor shall not carry out any important operation without the consent in writing from the Architect/Consultant.

#### **50.0** Construction records:

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

## 51.0 Safety of adjacent structures and trees

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

## 52.0 Temporary works:

Before any temporary works are commenced the contractor shall submit at least 7 days in advance to the Architect/Consultant for approval complete of all temporary works he may require for the execution of the works. The contractor shall carry out the modifications relating to strength, if required by the Architect/Consultant may require in accordance with the conditions of contract at his own cost. The contractor shall be solely responsible for the stability and safety of all temporary works and unfinished works and for the quality of the permanent works resulting from the arrangement eventually adopted for their execution.

#### 53.0 Temporary roads

The contractor shall provide access road to the site from the nearest main road at no extra cost and as directed by the Architect/Consultant. The contractor shall also be responsible for proper maintenance of this access road and would take all care to see that existing services, if any, are maintained in working order at his own cost. The laying and maintaining the temporary roads within the site area shall be the contractor's responsibility and the contractor shall take such measures that are necessary and as directed by the Architect/Consultant.

#### 54.0 Water, power, and other facilities:

- a) The rate quoted by the contractor shall include all expenses that are required for providing all the water required for the work and the contractor shall make his own arrangements for the supply of good quality water suitable for the construction and good quality drinking water for their workers. If necessary the contractor has to sink a tube well/ open well and bring water by means of tankers at his own cost for the purpose. The SBI will not be liable to pay any charges in connection with the above.
- b) The rate quoted in the tender shall include the expenses for obtaining and maintaining power connections and shall pay for the consumption charges.



- c) The contractors for other trades directly appointed by the SBI shall be entitled to take power and water connections from the temporary water and power supply obtained by the contractor. However the concerned contractor shall make their own arrangements to draw the supply and pay directly the actual consumption charges at mutually agreed rates between them. All municipal charges for drainage and water connections for construction purposes shall be borne by the contractor and charges payable for permanent connections, if any, shall be initially paid by the contractor and the SBI will reimburses the amount on production of receipts.
- d) The SBI as well as the Architect/ Consultant shall give all possible assistance to the contractors to obtain the requisite permission from the various authorities, but the responsibility for obtaining the same in time shall be of the contractor.

#### 55.0 Office accommodation

- a) The contractors shall provide and maintain all necessary offices, workshops, stores, shelters, sanitary facilities, canteens and other temporary structures for themselves in connections with the work at the site at their own cost after getting the approval from the Architect/ Consultant.
- b) A site office for the use of SBI/ the Architect/ Consultant shall be provided by the contractors at his own expenses.
- c) All temporary buildings and facilities as mentioned above shall be removed on completion of the work or at any other earlier date as directed by the contractors.

All the expenses for obtaining statutory approvals and maintenance of the above facilities as well as running expenses shall be borne by the contractor at no extra cost. It is also the responsibility of the contractor to obtain statutory approvals for providing the above facilities

#### 56.0 Facilities for Contractor's employees:

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

## 57.0 Lighting of works:

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

#### 58.0 Fire fighting arrangements:

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



- e) Type, size, number and location of fire extinguishers or other fire fighting equipments.
- f) General housekeeping.

#### 59.0 Site order book:

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

#### 60.0 Temporary fencing/ barricading

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

#### 61.0 Site meetings:

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

## 62.0 Disposal of refuse:

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

#### **63.0** Contractor to verify site Measurements:

The contractor shall check and verify all site measurements wherever requested by other specialist contractors or other sub-contractors to enable them to prepare their own shop drawings and pass on the information with sufficient promptness as will not in any way delay the works.

## 64.0 Displaying the name of the work:

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



#### 65.0 Bar bending schedule:

The contractor shall prepare a detailed bar bending schedule for all reinforced concrete works and got them approved by the Architect/ Consultant well in advance.

#### 66.0 As built drawings:

- ) For the drawings issued to the contractor by the Architect/ Consultant. The Architect/ Consultant will issue two sets of drawings to the contractor for the items for which some changes have been made from the approved drawings as instructed by the SBI/ the Architect/ Consultant. The contractor will make the changes made on these copies and return these copies to the Architect/ Consultant for their approval. In case any revision is required or the corrections are not properly marked, the Architect/ Consultant will point out the discrepancies to the contractor. The contractor will have to incorporate these corrections and/or attend to discrepancies either on the copies as directed by the Architect/ Consultant and resubmit to him for approval. The Architect/ Consultant will return one copy duly approved by him.
- ii) For the drawings prepared by the contractor,
  The contractor will modify the drawings prepared by him wherever the changes are
  made by the SBI/ the Architect/ Consultant and submit two copies of such modified
  drawings to the Architect/ Consultant for approval. The Architect/ Consultant will
  return one copy of the approved drawing to the contractor.

#### 67.0 Approved make:

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

#### 68.0 Procurement of materials:

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

## 69.0 Excise duty, Taxes, Levies etc.

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

## 70.0 Compliance to Bank's/legal norms

#### 1 Notices

a) The Contractor shall give all notices and pay all fees and shall comply with all Acts and Regulations for the successful completion of the Contract works.



## 2 Authorities, notices, patents, rights & royalties

The Contractor shall conform to the provisions of all the statutes relating to the works, and to the Regulations and bye laws of any local Authority, and of any Water, Lighting, Electric supply, and of other Companies or Authorities with whose systems the structure is proposed to be connected, and shall before making any variation from the drawings or specifications that may be necessitated by so confirming, give to the Architect/Consultant 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 120 days receive such instructions, he shall proceed with the work conforming to the provision or Regulations or Byelaws in question.

- a) The Contractor shall bring to the attention of the Architect / Consultant all notices required by the said Acts, Regulations or Bye-laws to be given to any Authority by the Bank or the Architect/Consultant 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 Architect/Consultant.
- b) The Contractor shall indemnify the Bank against all claims in respect of patent rights, design, trademarks of name or other protected rights in respect of any constructional site, machine work or material used for or in connection with the works or temporary works 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 Architect / Consultant before any such infringement and received their permission to proceed, and shall himself pay all royalties, license fees, damages, costs and charges of all and every sort that may be legally incurred in respect thereof. All statutory fees, deposits etc paid by the contractor for permanent works to be handed over to Bank which shall be reimbursed to him by the Bank against documentary proof.
- c) The Contractor shall assist and co-ordinate with the Architect /Consultant in obtaining all statutory approvals and/or amendments to such approvals as per the rules in force from Municipality and other local bodies. Any expenditure incurred in obtaining such approvals is deemed included in the rates quoted by the Contractor.

## 71.0 Notices to Local Bodies:

a) The Contractor shall comply with and give all notices required under any law, rule, regulations, or byelaw of parliament, State Legislature or Local Authority relating to works. The Contractor shall before commencing the execution of work issue a certificate to the Bank/ Architect / Consultant that he has obtained all the permissions Registrations and give all the notices as are required to be obtained or given under law particularly blasting permission the Police permission etc.

#### 72.0 MUNICIPAL REGULATIONS:

The whole of the work is to comply with the requirements and byelaws of the concerned Municipal Corporation and local bodies

## 73.0 Acceptance of tender:

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

#### 75.0 Defects after Virtual completion and defects liability period:

Any defect shrinkage, settlement or other faults which may appear within the



"Defects Liability Period" which shall be as per NIT from the date of the virtual completion of the work, arising in the opinion of the Architect from materials or workmanship not in accordance with the contract, shall upon the direction in writing of the Architect, and within such reasonable time as shall be specified therein, be amended and made good by the contractor, at his own cost and in case of default then Bank may employ and pay other person /agency to amend and make good such defects, shrinkage, settlement or other faults, and all damages, loss, and expenses consequent thereon 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 Bank or may be deducted by the Bank, upon the Architect's certificate in writing, from any money due or may be deducted by the Bank, upon the Architect's certificate in writing, from any money due or that may become due to the contractor, or the bank may in lieu of such amending and marking good by the contractor deduct from any money due to the contractor a sum, to be determined by the Architect equivalent to the cost of amending such work and in the event of the amount retained under clause of GCC, hereof being insufficient, recover the balance from the contractor, together with any expenses the Bank may have incurred in connection therewith. Should any defective work have been done or material supplied by any sub-contractor employed on the works, who has been nominated or approved by the Architect as provided in clauses of GCC the contractor shall be liable to make good in the same manner as if such work or material has been done or supplied by the Contractor and been subject to the provisions of this Contract. The Contractor shall remain liable under the provisions of this Contract notwithstanding the signing of any Certificate or the passing of any accounts, by the Architect.

#### 76.0 ANTI-TERMITE TREATMENT AND WATER PROOFING TREATMENT:

- a) Pre-construction soil treatment shall be carried out in co-ordination with the building work and shall be executed in such a manner that the civil works are not hampered or delayed by the anti-termite treatment. The treatment shall be carried out as detailed in IS: 6313 (Part III) latest revision. The water proofing treatment shall be type and specification as given in the schedule of quantities. The anti-termite and water proofing treatment shall be got done through specialized agencies only.
- b) The treatment against water-proofing of basement, roofs, water retaining area and termite infestation shall be and remain fully effective for a period of not less than 10 (ten) years to be reckoned from the date of expiring of the defect liability period , prescribed in the contract.
- c) The SBI reserves the right to get the quality of treatment checked in accordance with recognize test methods and in case it is found that the chemicals with the required concentration and rate of application have not been applied, or the water proof treatment is done as per specifications, the contractor will be required to do the retreatment in accordance with the required concentration & specifications at no extra cost failing which no payment for such work will be made. The extent of work thus rejected shall be determined by the Architect.
- d) Water proofing and anti-termite termite treatment shall be got done through approved and specialized agencies only.
- e) The contractor shall make such arrangement as may be necessary to safe guard the workers and residents of the building against any poisonous effect of the chemicals used during the execution of the work.



- f) The contractor whose tender is accepted shall execute Free Maintenance Guarantee agreement Bond in the prescribed form as appended for guaranteeing the anti-termite and water proofing treatment.
- **77.0** During the execution of work, if any damage shall occur to the works already done, either due to rain or any other circumstances, the same shall be rectified and made good to the entire satisfaction of the Architect/Consultant by the contractor at his costs and risks.

## 78.0 Testing of Material's etc.:

The contractor at his own cost (without any extra cost to the Bank) shall arrange for the laboratory and/or field testing of materials and works as required by the architects/Bank.



#### ADDITIONAL CONDITIONS OF CONTRACT

Notwithstanding anything contained herein above the following ADDITIONAL CONDITIONS shall be applicable for this contract / work.

#### 1.0 PRICE VARIATION ADJUSTMENT (PVA):

The rates quoted by the bidder shall remain firm throughout the contract / construction period. PVA & PVA Clause mentioned elsewhere in these documents shall not be applicable.

#### 2.0 WORKING SCHEDULE / BAR CHART:

Detailed working date schedule and bar chart for the work shall be prepared by the contractor and got approved from the Bank / Architect. A detailed flow chart of activities highlighting curing, setting time / period, pot life period / predecessor, successor & critical activities etc. shall also be prepared by the contractor for effective management of work and also to make a realistic bar chart / working date schedule.

#### **3.0 RATES:**

It may be noted that it is an item rate contract. Rates accepted by the bank shall be for all levels/height and lead unless otherwise specified in the schedule of quantities and shall be inclusive of all man, labour, supervision, materials, tools, equipment, scaffoldings, water, electricity, taxes, insurances, arrangements, temporary works, over heads, collection & carting away & final disposal of rubbish & debris, regular cleaning of site etc. required to complete the works in all respect to the satisfaction of the architects / Bank and nothing additional or extra shall be paid on these accounts and / or on account of variation in rates / taxes and / or imposition of new tax / levy during currency of contract / work, except for the items, taxes, works etc. for which there is a specific mention for additional payment in these tender documents. The rates shall remain firm throughout the contract period.

#### 4.0 BASIC RATE:

Wherever for any item of work basic rate of materials are specified, the materials of that basic rates as selected by the Bank/Architect at any commercial establishment/ seller of Ahmadabad or nearby centre, if such materials are not available at Ahmadabad, shall be procured and used by the contractor.

Basic rate of any material (Without processing) is the rate offered by seller against Bill and credit period not exceeding 15 days, including any applicable taxes ex-godown. Payments for procurement of materials shall be made by the contractor themselves.

If the basic rate of any material actually used for the work is more or less than the basic rate given in schedule of quantities, in that case adjustments in the rate admissible to the contractor shall be modified by adding or subtracting, as the case is, from the accepted tender rates an amount equivalent to difference in the basic rates plus 15 % of difference of the basic rate.

## 5.0 BRANDED / FINISHING ITEMS:

Branded items such as tiles, construction chemicals, hardware, sanitary wares and other finishing items shall be used as per the samples selected and approved by the architects / Bank from the brands/makes mentioned in the tender document. If the contractor intend to use an equivalent substitute than, they have to produce necessary documentary evidences establishing the equivalency to the satisfaction of the architect/Bank and shall use the same only after approval of the architect.



#### 6.0 INSURANCE

The contractor shall keep the Bank indemnify from all the claims arising out of damage to workman/person & property of Bank and/or third party and the SBI shall have right to recover the cost of such damages /claim from any amount due to the contractor. If the claim amount exceeds the amount due to be paid to the contractor, the contractor shall immediately pay such excess amount to the Bank. Decision of the Bank regarding determination of the amount of claim /damage shall be final & binding to the contractor. Being a short period work, the Bank may not be able to check or verify the various insurance policies required to be taken by the contractor and trust that the contractor has obtained all such policies.

#### 7.0 SITE CONDITION & WORKING HOURS.

The tenderer must visit the site and acquaint themselves with the site conditions. It must be noted that the work is to be carried out in the functional branch without hindering the normal functioning of the Branch. The work shall generally be carried out on holidays or after Banking hours only.

The work is to be carried out in vacant premise; therefore the work shall be carried out day & night with prior permission from the society. Contractor must follow the rules and regulation of society and local authorities to work at night. **The Lift shall not be used by Contractor for any propose**.

The contractor has to work in coordination with the other contractors and daily/weekly schedule of working shall be prepared in consultation with the Architects/Banks. Regular updating / modification of such schedule shall be required.

For normal functioning of the Bank/Branch the contractor shall be required to shift the FURNITURE etc and/or relocate the existing and/or new loose and/or fix FURNITURE and/or any other item of works and/or any such materials at new location at times. The contractor shall carry out all such activities with utmost priority and without any additional/extra cost to the bank. The tenderer shall quote the rates inclusive of all such activities/works as may be required as per site conditions. The rates quoted by the tenderer shall be inclusive of all such temporary/semi-permanent works/activities.

## 8.0 GENERAL:

- (i) Source of materials / samples / brands / makes etc. shall be got approved from the Architects /Bank before using. In case of deviations, decision of the Bank shall be final and binding and shall not be open for arbitration.
- (ii) The Architects have their specific role/duties/rights as defined in these tender documents However in the event of any dispute arising out of differences between the opinions of the Architects and also their role/duties/rights, the Banks' decision shall be final & binding on the Architects and the Contractor and shall not be open to arbitration.
- (vi) Any item mentioned in the BOQ with "TO THE SHAPE" will have measurement of onsite executed to the shape area only.
- (vii) The contractor's qualified & authorized representative shall remain on site during the entire execution process for coordination with various agencies/ Architect/Bank & execution of work
- (viii) Hidden measurement. It is contractor's responsibility to get the measurement checked immediately on completion of such items. This shall be done before finishing the same & before ceiling boarding done. The Architect shall be provided with such details well in advance so that the other work is not held up due to last moment action.
- (ix) MTC (Manufacturer Test certificate) Where ever applicable shall be arranged & submitted by the contractor.



- (x) Water & Electricity, if available, shall be provided by the Bank at one point with charges (NIT - point no. 18). However, if the water & electricity could not be provided by the Bank, the same shall be arranged by the contractor at their own cost within the quoted/accepted rate. Nothing extra shall be paid by the Bank on account of not providing the water & Electricity.
- (XI) Wherever the specifications are not specified in details the work shall be carried out as per CPWD specifications or Manufacturer's instructions or architects instructions depending upon the site conditions as directed by the Bank/ Architects
  - (XII) The contractor shall produce the bills / challans / documentary evidences and proof in respect of genuineness of materials used by him when so ever asked/demanded by the Architects/Bank.



# **Safety Code:**

- 1. All personnel at site should be provided with Helmets and Safety Boots with some identification Mark. Visitors also should be provided with helmets. It should be ensured that these are used properly.
- 2. First Aid Box should be kept at site with all requisite materials appliances including adequate supply of sterilized dressing and cotton wool shall be kept in a readily accessible place.
- 3. No one should be allowed to inspect / work at a height without safety belt.
- 4. An injured person shall be taken to a public hospital without loss of time, in cases when the injury necessitates hospitalization.
- 5. Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from the ground.
- 6. No portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30 cm. (clear) and the distance between two adjacent running's shall not be more than 30 cm. When a ladder is used an extra labour shall be engaged for holding ladder.
- 7. The excavated material shall not be placed within 1.5 meters of the edge of the trench half of the depth of trench whichever is more. All trenches and excavations shall be provided with necessary fencing and lighting.
- 8. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one meter.
- 9. No floor, roof or other part of the structure shall be so overloaded with debris or material as to render it unsafe.
- 10. Workers employed on mixing and handling material such as asphalt, cement, mortar, concrete and lime shall be provided with protective footwear and rubber hand gloves.
- 11. Those engaged in welding works shall be provided with welders' protective eye shield and gloves.
- 12. Overalls shall be supplied by the contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during cessation of work.
- 13. Hoisting machines and tackle used in the works including their attachments anchor and supports shall be in perfect condition.
- 14. The ropes used in hoisting or lowering material or as a means of suspension shall be durable quality and adequate strength and free form defects.
- 15. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can done safely from ladders. When a ladder is used an extra Mazdoor shall be engaged for holding the ladder



and if the ladder is used for carrying materials as well as suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than ¼ to 1 (¼horizontal and 1 vertical).

- 16. Scaffolding or staging more than 3.5 meters above the ground or floors, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached, bolted, braced and otherwise secured at least 1 meter high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- 17. Working platforms, Gangways, and Stairways should be so constructed that they do not sag unduly or unequally, and if the height of the platform or the Gangway or the Stairway is more than 3-5 meters above ground level or floor level they should be closely boarded, should have adequate width and should be suitably fenced, as described.
- 18. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 1 meter.
- 19. Safe means of access shall be provided to all working platform and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 Meters in length while the width between side rails in rung ladder shall in no case be less than 30cms for ladder upto and including Meters in length. For longer ladders this width should be increased at least 6mm for each additional 30cms. Uniform step spacing shall not exceed 30cms.
- 20. Adequate precautions shall be taken to prevent danger from electrical equipments. For electrical on line work gloves, rubber mats, and rubber shoes shall be used.
- 21. All trenches 1.2 Meters or more in depth shall at all times be supplied with at least one ladder for each 30 meters length or fraction thereof. Ladder shall be extended from bottom of the trench to at least 1Meter above the surface of the ground. The sides of the trenches, which are 1.5 meters or more in depth shall be stepped back to give suitable slope, or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 Meters of the edge of the trench or half of the depth of the trench whichever is more cuttings shall be done from top to bottom. Under no circumstances undermining or under cutting shall be done.
- 22. Before any demolition work is commenced and also during the process of the work:-
  - (a) All roads and open areas adjacent to the work site shall either be closed or suitably protected;
  - (b) No electrical cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
  - (c) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.



- (d) All necessary personal safety equipment as considered adequate by the site Engineer should be kept available for the use of the persons employed on the site and maintained in a condition suitable for immediate use; and the contractor should take adequate steps to ensure proper use of equipment by those concerned.
- (e) Workers employed on mixing Asphaltic materials, Cement and lime mortars shall be provided with protective footwear and protective goggles.
- (f) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes shall be provided with protective goggles.
- (g) Those engaged in welding works shall be provided with Welder's protective eye-shields.
- (h) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- 23. Use of hoisting machines and tackle including their attachments, anchorage and support shall conform to the following standard or conditions:-
  - (a) These shall be of good mechanical construction, sound material and adequate strength and free from patent defect and shall be kept in good repairs and in good working order.
  - (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
  - (c) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in-charge of any hoisting machine including any scaffold, winch or give signals to the operator.
  - (d) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or lowering or as means of suspension the safe working load shall be ascertained by adequate means.
  - (e) Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of hoisting machine having a variable safe working load, each safe working load of the conditions under which it is applicable shall be clearly indicated. No part of any machine or of any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
  - (f) Motor, gearing, Transmission, Electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards, hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load, adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced.
  - (g) When workers are employed on electrical installation, which are already energized, insulating mats, wearing apparel such as gloves, sleeves, and boots as may be necessary should be provided. The workers should not wear any rings, watches and carry keys or other materials, which are good conductors of electricity.



- 24. All scaffolds, ladders and other safety devices, mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities shall be provided at or near places of work.
- 25. (i) These and all other necessary safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
  - (i) To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the labor officer, Engineers of the Department or their representatives.
  - (ii) Notwithstanding the above clauses, there is nothing in these to exempt the contractor from the operations of any other Act or rule in force in the Republic of India.

## **SCAFFOLDS**

- i) Suitable double type steel H frame scaffolds or suitable alternative arrangements shall be provided for workmen for all works that cannot be done safety from the ground, or from solid construction except in the case of short duration work which can be done safety from ladders. When a ladder is used, it shall be of rigid construction made either of good quality wood or steel. The steps shall have a minimum width of 450 mm and a maximum rise of 300mm. Suitable hand holds of good quality wood or steel shall be provided and the ladder shall be given an inclination not steeper than ¼ to 1(1/4 horizontal and 1 vertical).
- ii) Scaffolding or staging more than 4 m above the ground floor, swung or suspended from an overhead support or erected with a stationary support shall have a guard rail properly bolted, braced or otherwise secured, at least 1 m above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened so as to prevent it from swaying from the building or structure.
- iii) Moving or Suspended type scaffolding specifications: Instead of Double type H frame steel scaffolding, if any Contractor desires to use suspended type of scaffolding or any other type of arrangement, they may do so but it should be supported by the full specifications, methodology and other relevant details in order to study and approve the same by the Consultant. No such arrangement of scaffolding will be altered unless the same is approved by the Consultant / Bank.
- iv) Working platforms, gangways and stairways shall be so constructed that they do not sag unduly or unequally and if the height of the platform, gangway or stairway is more than 4 m above ground level or floor level, they shall be closely boarded and shall have adequate width and be suitably fenced as described in (ii) above.
- Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 1m.
   Wherever there are open excavations in ground, they shall be fenced off by suitable railing and danger signals installed at night so as prevent persons slipping into the excavations.



#### **OTHER SAFETY MEASURES**

- i) All personnel of the contractor working within the plant site shall be provided with safety helmets. The welder's goggles while welding works and all metal workers shall be provided with safety gloves. Persons employed in metal cutting and grinding shall wear safety glasses. For polymer application suitable hand gloves and other safety equipment / devices shall be provided.
- ii) Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public.

#### **EXCAVATIONS & TRENCHING**

- i) All trenches, 1.25 m or more in depth shall at all times be supplied with at least one ladder each 3 m in length or fraction thereof. The ladder shall be extended from bottom of the trench to at least 1 m above the surface of the Ground, Sides of trenches which are 1.5 m or more in depth shall be stepped back to give suitable slope or securely held by timber bracing so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5m of the edges of the trench or half of the depth of the trench whichever is more. Undercutting shall be done.
- ii) The Contractor shall take all measures on the site of the work to protect the public from accidents and shall be bound to bear the expenses of defense of every suit, action or other proceedings at law that may be brought by any persons for injury sustained owing to neglect of the above precautions and to any such persons or which may with the consent of the contractor, be paid to compromise any claim by any such person.

## **DEMOLITION.**

- i) Before any demolitions / chiseling / breaking work is commenced and also During the process of the work:
- a) All roads, open areas adjacent to the work site shall be suitably protected as directed by providing covered sturdy shed for thoroughfare of the staff, customers and public.
- b) No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
- c) All practical steps shall be taken to prevent danger to persons employed from the risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.

#### PERSONNEL SAFETY EQUIPMENTS.

- i) All necessary personal safety equipment as considered adequate by the Engineer should be kept available for the use of the person employed on the site and maintain in a condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment by those concerned.
- a) Workers employed on mixing asphaltic materials, Cement and Chemicals/ Polymer shall be provided with protective footwear, goggles and hand groves as per the requirements etc.



- b) Those engaged in white washing and mixing or stacking of cement Bags or any materials shall be provided with protective goggles.
- c) Those engaged in welding works shall be provided with welder's Protective eyesight lids.
- d) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- e) When workers are employed in sewers and manholes, which are in use, the contractor shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers are allowed to get into manholes and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.
- f) The contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form, Where ever men above the age of 18 are employed, on the work of lead painting the following precautions should be taken:
- i. No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
- ii. Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scraped.
- iii. Overalls shall be supplied by the contractor t the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
- iv. When the work is done near any public place where is risk of drawings all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

#### (G) INJURY TO OR DEATH OF A PERSON

The Contractor shall be liable for and shall, indemnify the Employer against any expense, liability, loss, claim or proceedings whatsoever arising under any statute or at Common Law in respect of personal injury to or death of any person whomsoever arising out of or in the course of or caused by the carrying out of the Works.



# **APPENDIX HEREIN BEFORE REFERRED TO**

1	Name of the organization Offering Contract	:	The Asst Gen Manager, State Bank of India, RBO III, GHOD DOD ROAD, SURAT 395002
2	Consultants	:	SOPAN Architects & Interior Designer
3	Site Address	:	SBI RETAIL BRANCH, H-TOWER GR.FLOOR, DIAMOND BOURSE, SURAT, GUJARAT 395007.
4	Scope of Work:	:	Proposed ELECTRICAL & ALLIED works for SBI RETAIL BRANCH DBS .
5	Name of the Contractor	:	
6	Address of the Contractor	:	
7	Period of Completion	:	30 days from the date of Issue of work order.
8	Earnest Money Deposit	:	Rs. 4200/- (OR Valid MSME UDHYAM certificate)
9	Retention Money	:	As per clause no.1d. of general Conditions
10	Defects Liability Period	:	Twelve Months from the date of Virtual Completion
11	Insurance to be undertaken by the Contractor at his cost (Contractor's all risk policy)		125% of Contract Value
12	Liquidated damages	:	0.5% of the Contract amount shown in the tender per week subject to max. 5% of the contract value or actual final bill value
13	Value of Interim Bill (Min.)	:	No Interim payment will be paid
14	Date of Commencement	:	From the date of work order issued to the Contractor/ or the day on which the Contractor is instructed to take possession of the site whichever is earlier.

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15	Period of Final Measurement	:	2 Months from the date of Virtual completion.
16	Initial Security Deposit	:	2% of the Accepted Value of the Tender.
17	Total Security Deposit	:	5% of the final bill amount including ISD
18	Refund of initial Security Deposit comprising of EMD and ISD	:	50% of the Security Deposit shall be refunded to the Contractor on completion of the work and balance refunded only after the Defect Liability Period is over.
19	Period for Honoring Certificate	:	One Month for R. A. Bills
20	completion work and the Bill shall be	e Ce	entractor within one month of the date fixed for ertified within 3 months from the date of receipt of d with all pre-requisite documents/test reports etc.

Signature of Tenderers.

Date:



## **LETTER OF DECLARATION**

To,

The Asst Gen Manager, State Bank of India, RBO III, GHOD DOD ROAD, SURAT 395002

# PROPOSED ELECTRICAL & ALLIED WORKS FOR SBI RETAIL BRANCH, H-TOWER GR.FLOOR, DIAMOND BOURSE, SURAT, GUJARAT 395007.

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

#### **MEMORANDUM**

(a)	•	Proposed Electrical & allied works at SBI RETAIL BRANCH, H-TOWER GR.FLOOR, DIAMOND BOURSE,
		SURAT, GUJARAT 395007.
(b)	Earnest Money	Rs. 4200 by means of Demand Draft / Pay Order (Valid for a period of 90 days from the last date of submission of the tender) from any scheduled Nationalized Bank drawn in favour of State Bank of India, payable at BHARUCH. [Those registered with MSME-UDYAM need not submitted EMD. Instead DD, Valid MSME UDHYAM certificate shall be uploaded]
(c)	Time allowed for completion of work	30 days from the date of commencement as per
	from the date of issue of work order.	tender.

Should this tender be accepted, I/we hereby agree to abide by and fulfill the terms and provisions of the said conditions of Contract annexed hereto so far as they may be applicable or in default thereof to forfeit and pay to SBI, the amount mentioned in the said conditions.

Should I / We fail to execute the Contract when called upon to do so I/ We do hereby agree that suitable action shall be initiated against us by SBI. This may also include debarring of my empanelment for an year or so.

We understand that as per terms of this tender, the SBI may consider accepting our tender in part or whole or may entrust the work of various jobs/ works proposed (i.e. Wiring work, cabling work, lighting work etc) in phases. We, therefore, undertake that we shall not raise any claim/compensation in the eventuality of Bank deciding to drop any of the work (proposed in tender documents) from the scope of work of this tender at any stage during the contract period. Further, we also undertake to execute the work entrusted to us in phases as per L-1 rates/standard rates accepted by us/on our approved rates and within the stipulated time limit without any extra claim for price escalation as provided for in Clause 9.0.1 "Instructions to Tenderers" of this tender. We, hereby, also undertake that, we will not raise any claim for any escalation in the prices of any of the material during the currency of contract/execution/completion period.

Yours faithfully,

## Signature of contractor With Seal



# PROFORMA FOR RUNNING A/C BILL TABLE - XIII

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

SN	ltem Descripti	Unit	Rate (Rs.)	As Tende	•	Up Previ	to ous R.A.	•		Prese	nt Bill	Remark s
	on			Qty	Amou nt (Rs.)	Bill Qty	Amoun t (Rs.)	Qty	Amount (Rs.)	Qty	Amount (Rs.)	
1	2	3	4	5	6	7	8	9	10	11	12	13

## Note:

1.	If part rate is allowed for any items, it
	should be indicated with reasons for allowing such a
	rate.

Net Value since previous bill



# **CERTIFICATE**

The measurements on the basis were made have been to format. Excel sheet enclosed	_	
Signature of Contractor with date	Signature Architects Representative with date & Seal	Signature of Site Engineer with date.
	mentioned measurements has beings, conditions and specification	
 Architect	 Signature of Site Engine	 eer with date



TABLE - XV

## **MEMORANDUM FOR PAYMENT**

R/A BILL NO. 1.	Total value of work done since previous bill (A)	Rs								
2.	Total amount of secured advance due since  Previous Bill (B)  Rs									
3.	Total amount due since Previous Bill (C) (A+B)									
4.	PVA on account of declaration in price of Steel,  Cement and other materials and labour as detailed in separate statements enclosed.									
5.	Total amount due to the Contractor  OBJECTIONS:	Rs								
i)	Secured Advance paid in the previous R/A	Rs								
ii)	Retention money on value of works as per accepted tenders up to date amount Rs.	Rs								
	Less already recovered	Rs								
	Balance to be recovered	Rs								
iii)	Mobilization Advance, if any	Rs								
(a)	Outstanding amount (principal + interest) as on date	Rs								
(b)	To be recovered in this bill	Rs								
iii.	Any other Departmental materials cost to be recovered as per contract, if any	Rs								
iv.	Any other Departmental service charges to be recovered if any, as per contract (water, power etc.) enclose statement.									
	unt to Rs (both figures and words) has been to Rs. he measurements of work as required and is recomm	•								
Date:		ignature of Architect vith Seal								
test checking	unt to Rscertified by Consultants has been got measurements of works as required and is recommendated.									
Signature of	Banks/ SBI Engineer									



# **STATUTORY DEDUCTION:**

i)	Total Amount due (E) Rs					
ii)	Less I.T. Payable Rs					
iii)	Less S.T. Payable		Rs			
	Net Payable		Rs			
	•	payable has been verified and	•			
payment		(in words and	figures)			
Date:						
Signature of the	e CM (GB)					



#### **SPECIFICATION OF MATERIALS**

All the material to be used shall be as per the specified make of the materials list and ISI approved Brand. Any deviation from this shall be got approved from Architect / Owner, the contractor shall submit samples of material to be used for verifications and Produce Bill in original.

1. SAMPLES: After receipt of the bids but prior to award of the contract, bidder shall, Upon notification from owner submit samples of materials he intends to Use.

The owner shall reserve the right to evaluate the sample with regard to the Specification before award of work. Samples as directed by the Architect / Owner for various items shall be prepared / brought for approval without Any cost.

#### Special Notes:

- a) The successful tendered will have to supply the make of the materials as recommended and in consultation with the Client / Architect / Consultant without any extra cost.

  Client / Architect / Consultant reserve the rights to choose any make out of above list.
- b) Tenderer should have to specify the list of makes considered in the tender while quoting the rates in the tender, in covering letter of separate letter enclosure. However, the final decision for accepting make specified by tenderer would be of client / Architect / Consultants.
- As far as possible, the successful tenderer will have to place order directly to the manufacturer or its authorized dealer.
- d) The client / Architect/ Consultant have right to Check the Challans of supplier.
- e) The RCCB, RCBO, MCB and MCB DBs must be of same make.
- f) Make of components required to be used by contractor to complete the installation, if not mentioned anywhere, shall be required to GOT it Approved by Client / Architect/ Consultant before installation in writing manner.
- g) Within a week of work order, the contractor shall submit the sample of each item / component of above-mentioned approved make for the approval of the Client / Architect / Consultant.



# **APPLICABLE STANDARDS**

	Sr. No. IS No.	<u>Description</u>
1)	IS:2026-1977 IS 3639	: Distributing transformers & fittings. Fittings and acc. For P.T.
2)	IS:7886 IS:660	: Installation of Transformer.
3)	IS:2516-1972	: Specification for AC circuit Breakers.
4)	IS:335	: Insulating oil for Transformers & switch gear.
5)	IS:2705	: CT for measuring and protection.
6)	IS:3155	: Voltage (Potential) Transformers.
7)	IS:3236 Part II	: Voltage Transformer.
8)	IS:373	: Busbar arrangement and marking.
9)	IS:2099	: Bushing
10)	IS:5621	: Large Hollow Porcelains
11)	IS:2544	: Insulators
12)	IS:2629 & 2633	: Hot Dip Galvanizing
13)	IS:3842	: Relays.
14)	IS:1248-1958	: Meters (measuring).
15)	IS:3072-1975	: Installation of Switch gears.
16)	IS:692	: HV cable.
17)	IS:1255	: Installation of HV cables and jointing.
18)	IS:3043	: Code of practice for earthing.
19)	IS:4047-1977	: HD Air breaker, Switch gears and fuses for Voltage not exceeding 1000 Volts.
20)	IS:8106-1966	: Selection, installation and maintenance of fuses upto 650 Volts.
21)	IS:4237-1967	: for voltage not exceeding 1000 Volts.
22)	IS:2607-1976	: Air-break isolators for Voltage not exceeding 1000 Volts.
23)	IS:8623-1977	: Factory built assemblies of switch gears and control gears for
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			voltage upto and including 1000 Volts A.C. and 1200 Volts D.C.
24)	IS:375-1963	:	Marking and arrangement of switch gear bus bars main connectors and auxiliary wiring.
25)	IS:2147-1962	:	Cubical Boards.
26)	IS:8084-1972	:	Insulated conductor rating.
27)	IS:2675-1983	:	Enclosed distribution fuse boards and cutouts for Voltage not exceeding 1000 Volts.
28)	IS:8828-1978	:	Miniature Circuit Breaker.
29)	IS:9926-1981	:	Fuse wire used in re-wearable type electric fuses upto 650Volts.
31)	IS:3961 (Part II)	:	Recommended current rating for cables.
32)	IS:2982	:	Copper conductor in insulated cables and cores.
33)	IS:8130	:	Conductor for insulated electric cables and flexible rods.
34)	IS:3975	:	Mild steel wires, strips and tapes for armouring cables.
35)	IS:5831	:	PVC insulation and sheath of electric cables.
36)	IS:1753	:	Aluminum conductor for insulated ables.
37)	IS:4288	:	PVC insulated and PVC sheathed solid aluminum conductor cables of voltage rating not exceeding 1100 volts.
38)	IS:961	:	Recommended current rating for Cable.
39)	S:732	:	Code of practice for electrical wiring installation system Voltage not exceeding 650 Volts.
40)	IS:1646	:	Code of practice for fire safety of Buildings (general) electrical installation.
41)	IS:1653	:	Rigid steel conduits for electrical wiring.
42)	IS:2667	:	Fittings for rigid steel conduits for electrical wiring.
43)	IS:3480	:	Flexible steel conduit for electrical wiring.
44)	IS:3837	:	Accessories for rigid steel conduits for electrical wiring.
45)	IS:694	:	PVC insulated cables (wires).
46)	IS:2509	:	Rigid non-metallic conduits for electrical wiring.
47)	IS:6946	:	Flexible (playable) nonmetallic conduits for electrical installation.

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48)	IS:1293	:	Three pin plugs and sockets.
49)	IS:8180	:	Conductors for insulated electrical cables and flexible codes.
50)	IS:9537-1980	:	Specification for conduit for electrical installation.
51)	IS:3419	:	Accessories for non-metallic conduits for electrical wiring.
52)	IS:3854	:	Switches.
53)	IS:6538	:	Plugs.
54)	IS:2834-1954	:	Shunt Capacitors for power systems.
55)	IS:2208	: 1	HRC cartridge fuse and links up to 660 volts.
56)	IS:1913-1969	:	General and safety requirement for lighting fittings.
57)	IS:2944-1981	:	Code of practice for lighting public thorough fares.
58)	IS:3528	:	Waterproof electric lighting fittings.
59)	IS:3553-1966	:	Water tight electric lighting fitting.
60)	IS:1239-1958	:	Mild Steel tubular and other wrought steel pipe fitting.
63)	IS:2149-1970	:	Luminaries for street light.
64)	IS:9224	:	HRC fuses having rupturing capacity of 90 KA.
65)	IS:2312-1967	:	Exhaust Fan.
66)	IS:374-1979	:	Class I Ceiling Fan.

NOTE:

All codes and standards means the latest where not specified otherwise the installation shall generally follow the Indian Standard codes of practice or relevant British Standard Codes of Practice in the absence of corresponding Indian Standards.

## **PLEASE FOLLOW:**

- a. Indian Electricity Act of 1910 and rules issued there under revised up to date.
- b. Special Attention should be given to Rule No. 50.
- c. Regulations for electrical equipment in building issued by The Bombay Regional Council of insurance Association of India.



#### **ELECTRICAL MATERIAL SPECIFICATION**

#### **DISTRIBUTION BOARDS**

The scope of work shall cover supply, installation testing and commissioning of all distribution boards -

#### Standards:

AS PER SCHEDULE OF INDIAN STANDARDS, ATTACHED IN THE DOCUMENT.

#### **Distribution Boards:**

Distribution boards along with the controlling MCB's/Fuse or Isolator as shown shall be fixed in an M.S. Box with hinged door suitable for recessed mounting in wall. Distribution boards shall be made of 18 SWG steel sheet duly rust inhibited through a process of de-greasing, acid pickling, phosphate and powder coated to an approved color of adequate micron rating duly approved by architect/consultant.

Three phase boards shall have phase barriers and a wire channel on three sides. Neutral bars shall be solid tinned copper bars with tapped holes and chase headed screws. For 3 phase DB's, 3. Independent neutral bars shall be provided. All DB's shall be internally pre-wired using copper insulated PVC wires brought to a terminal strip of appropriate rating for outgoing feeders.

Conduit knockouts shall be provided as required/shown on drawings and the entire board shall be rendered dust and vermin proof with necessary sealing gaskets. The top and bottom side of DB should be detachable.

MCB's shall have quick make and break non - welding self wiping silver alloy contacts for 10 KA short circuit both on the manual and automatic operation. Each pole of the breaker shall be provided with inverse time thermal over load and instantaneous over current tripping elements, with trip - free mechanism. In case of multi-pole breakers, the tripping must be on all the poles and operating handle shall be common. Breakers must conform to BS 3871 with facility for locking in OFF position. Pressure clamp terminals for stranded/solid conductor insertion are acceptable up to 4 sq.mm. aluminum or 2.5 sq.mm. Copper and for higher ratings, the terminals shall be suitably shrouded. Wherever MCB isolators are specified they are without the tripping elements.

Fuses shall be HRC link type re-wire able with necessary fuse carriers and with rating of not less than 25 MVA. Bottle type fuses are not acceptable. Fuse carrier terminals shall be suitably shrouded. Re-wireable fuse carriers shall be porcelain. HRC fuses for motor duty should be time lag type.

Distribution boards shall have HRC/re-wire able fuses as shown on the schedule and drawings. Board shall meet with the requirements of IS 2675 and marking arrangement of bus bars shall be in accordance with I.S. standards.

Bus bars shall be suitable for the incoming switch rating and sized for a temperature rise of 35° C over the ambient. Each board shall have two separate earthing terminals. Circuit diagram indicating the load distribution shall be pasted on the inside of the DB as instructed. One earthing terminal for single phase and two terminals for 3 phase DB's shall be provided with an earth strip connecting the studs and the outgoing ECU earth bar.

In the case of MCB distribution boards, the backup fuses wherever shown shall be not less than 63 A with a delayed characteristic and a minimum pre-arcing time of 0.5 sec. At 9 KA/3 KA fault current.

All outgoing feeders shall terminate on a terminal strip which in turn is interconnected to the MCB/Fuse base by means of insulated single conductor copper wires as follows :



Up to 15 A 2.5 sq.mm. 40 A 10 sq.mm.

25 A 4.0 sq.mm. 63 A 16 sq.mm.

32 A 6.0 sq.mm.

#### RCCB / MCB:

The RCCB should suffices all the requirements of IS as per code IS - 12640 - 1988. The RCA should be current operated and not on line voltage.

The RCCB should ensure mainly the following functions.

Measurement of the fault current value.

Comparison of the fault current with a reference value.

The RCCB should have a torroidal transformer witch has the main conductors of primary (P - N) which check the sum of the current close to zero.

All metal parts should be inherently resistant to corrosion and treated to make them corrosion resistant.

It should be truly current operated.

It should operate on core balance torroidal transformer.

It's accuracy should be ± 5 %.

It should operate even in case of neutral failure.

It should trip at a present leakage current within 30 M.S.

It's enclosure should be as per IP 30.

It's mechanical operation life should be more than 20,000 operations.

It should provide full protection as envisaged by IE rules – 61-A, 71 – ee, 73 – ee, 1985 and also rule 50 of IE rule1956.

It should conform to all national and international standards like IS 8828:1993, IS 12640-1988, BS 4293-1983, CEE 27 (International commission Rules for the approved of electrical equipment)



#### **MEDIUM VOLTAGE CABLING**

#### Scope:

The scope consists of Laying & testing L. T. Cable and its termination.

#### Standards:

AS PER SCHEDULE OF INDIAN STANDARDS; ATTACHED IN THE DOCUMENT

#### Cables:

All cables shall be 1100 Volt grade XLPE insulated, sheathed with or without steel armoring as specified and with an outer PVC protective sheath. Cables shall have high conductivity stranded aluminum or copper conductors and cores color coded to the Indian Standards. All cables laid up to load should be without any joint.

All cables shall be new without any kind or visible damage. The manufacturers name, insulating material, conductor size and voltage class shall be marked on the surface of the cable at every 600 mm centers.

#### Cable joints and termination:

#### **Connectors:**

Cable terminations shall be made with copper Heavy duty long nack copper crimping lugs only crimped type solder less lugs for all aluminum cables and stud type terminals. For copper cables copper crimped solder less lugs shall be used. Crimping shall be done with the help of hydraulically operated crimping tool. All cable lugs should be long neck type only.

#### Cable Glands:

Cable glands shall be of heavy duty brass single compression type as specified. Generally single compression type cable glands shall be used for indoor protected locations and double compression type shall be used for outdoor locations. Glands for classified hazardous areas shall be CMRS approved.

#### Ferrules:

Ferrules shall be of self sticking type and shall be employed to designate the various cores of the control cable by the terminal numbers to which the cores are connected, for ease in identification and maintenance.

#### Cable joints:

Kit type joint shall be done and filled with insulating compound. The joint should be for 1.1 KV grade insulation.

#### **CONDUIT WIRING**

- 1.0 Scope :
- 1.1 The scope of work shall cover supply, installation testing and commissioning of all.
- 2.0 Standards : As per annexure iv
- 3.0 Rigid and Flexible conduits
- 3.1 All PVC conduits shall be laid in open/concealed manner which are approved by F.I.A.& I.S.I. & of 25 mm. Diameter.
- 3.2 Flexible conduits shall be formed from a continuous length of spirally wound interlocked steel strip with a fused zinc coating on both sides. The conduits shall be terminated in brass adapters.



- 4.0 Accessories
- 4.1 PVC conduit fittings such as bends, elbows, reducers, chase nipples, split couplings, plugs etc. shall be specifically designed and manufactured for their particular application. All conduit fittings shall conform to IS:2667-1974 and IS:3887-1966. All fitting associated with galvanized conduit shall also be galvanized.
- 5.0 Wires:
- 5.1 All wires shall be single core multi-strand/ flexible copper or single strand Aluminum / Copper, PVC insulated as per IS:694 and shall be 660v/ 1100V grade.
- 5.2 All wires shall be color coded as follows:

Phase

Phase	Colour of wire
R	Red
Υ	Yellow
В	Blue
N	Black
Earth	Green (insulated)
Control (If any)	Grey
All off wires	Same as Phase wire

- 5.3 Color code should be strictly used for all wiring.
  - ii) Installation, commissioning and testing.
  - iii) Cable marking.

For cable buried underground :

- i) Cables and protective bricks & tiles.
- ii) Installation, commissioning & testing.
- iii) Cable markers.
- 6.0 **Switches & Sockets:**
- 6.1 Switches shall be module type/ flush piano type with silver-coated contacts. Sockets shall be 3 pin with switch and plate type cover. Combination of multiple switch units and sockets should be used to minimize the switch boxes.
- 6.2 For heavy duty, metal clad sockets with M.C.B./ Isolator mounted in a galvanized steel box shall be provided.
- 7.0 Installation:
- 7.1 Conduits shall be kept at a minimum distance of 100 mm. From the pipes of other nonelectrical services. And maintain minimum 300 mm distance between telephone, TV & Computer piping.
- 7.2 Separate conduits/raceways shall be used for:



- 1. Normal lights and 5 A 3 pin sockets on lighting circuit.
- 2. Separate conduit shall be laid from D.B. to switch board or point.
- 3. Power outlets 15 A 3 pin 20 A/30 A, 2 pin scraping earth metal clad sockets.
- 4. Emergency lighting.
- 5. Telephones.
- 6. Fire alarm system.
- 7. Public address system & Music system.
- 8. For all other voltages higher or lower than 230 V.
- 9. T.V. Antenna.
- 10. Water level guard.
- 11. Computer Wiring.
- 7.3 Call bell wiring layout of conduits shall be generally indicated on drawings and the layout shall be supplemented and complemented by contractor on site with approval of the Engineer.
- 7.4 Wiring for short extensions to outlets in hung ceiling or to vibrating equipments, motors etc., shall be installed in flexible conduits. Otherwise rigid conduits shall be used. No flexible extension shall exceed 1.25 m.
- 7.5 Conduits run on surfaces shall be supported on metal 12 mm. thick saddles which in turn are properly screwed to the wall or ceiling. Saddles shall be at intervals of not more than 500 mm. Fixing screws shall be with round or cheese head and of rust-proof materials. Exposed conduits shall be neatly run parallel or at right angles to the walls of the building. Unseemly conduit bends and offsets shall be avoided by using fabricated mild steel junction/pull through boxes for better appearances. No cross-over of conduits shall be allowed unless it is necessary and entire conduit installation shall be clean and neat in appearance.
- 7.6 Conduits embedded into the walls shall be fixed by means staples at not more than 500 mm. intervals. Chases in the walls shall be neatly made and refilled after laying the conduit and brought to the finish of the wall but final finish will be done by the building contractor. The contractor shall provide wire mesh before making rough plaster.
- 7.8 Conduits buried in concrete structure shall be put in position and securely fastened to the reinforcement and got approved by the Engineer, before the concrete is poured. Proper care shall be taken to ensure that the conduits are neither dislocated nor choked at the time of pouring the concrete suitable fish wires shall be drawn in all conduits before they are embedded.
- 7.9 Inspection boxes shall be provided for periodical inspection to facilitate withdrawal and removal of wires. Such inspection boxes shall be flush with the wall or ceiling in the case of concealed conduits. Inspection boxes shall be spaced at not more than 12 meters apart or two 90° solid bends or equal. All junction and switch boxes shall be covered by 6 mm. clear Perspex plate truly cut and fixed with cadmium plated brass screws. These junction boxes shall form part of point wiring or conduit wiring as the case may be including the cost of removing the Perspex cover for painting and re-fixing. No separate charges shall be allowed except where specially mentioned.
- 7.10 Conduits shall be free from sharp edges and burrs and the threading free from grease or oil. The entire system of conduits must be completely installed and rendered electrically continuous before the conductors are pulled in. conduits should terminate in junction boxes of not less than 32 mm. deep.
- 7.11.1 An insulated earth wire of copper rated capacity shall be run in each conduit for entire length.



- 8.0 Lighting & Power Wiring:
- all final branch circuits for lighting and appliances shall be single conductor/ stranded/ flexicables run inside conduits. The conduit shall be properly connected or jointed into sockets, bens, and junction boxes.
- 8.2 All circuits shall preferably be kept in a separate conduit up to the Distribution Board. No other wiring shall be bunched in the same conduit except those belonging to the same phase. Each lighting branch circuit shall not have more than ten outlets or 800 watts whichever is lower. Each conduit shall not hold more than three branch circuits of same phase.
- 8.3 Flexible cords for connection to appliances, fans and pendants shall be 650/1100V grade (three or four cores i.e with insulated neutral wire of same size) with tinned stranded copper wires, insulated, twisted and sheathed with strengthening cord. Color of sheath shall be subject to the Engineer's approval.
- 8.4 Control switches shall be connected in the phase conductors only. Switches shall be fixed in 3 mm. thick painted or galvanized steel boxes with cover plates as specified. Cadmium plated brass screws shall be used.
- 8.5 Power wiring shall be distinctly separate from lighting wiring. Conduits not less than 25 mm. and wires not less than 2.5 sq. mm. copper shall be used.
- 8.6 Every conductor shall be provided with identification ferrules at both ends matching the drawings.
- 9.0 Testing:
- 9.1 The entire installation shall be tested for :
  - a) Insulation resistance.
  - b) Earth continuity.
  - c) Polarity of single pole switches.

A test certificate shall be submitted in the Performa shown under Appendix – I.

- 10.0 Mode of measurement:
- 10.1 The definition of point wiring shall be in accordance with sketch drawing and should wiring from D.B. onwards together with all junction boxes, connectors, earth wire, fixing accessories, connection to all light fittings switches etc. as specified and shown on drawings. The point rate shall include circuit wiring from distribution board to switch board and/or directly to the point. The circuit wire shall be in separate conduit. The contractor may draw maximum 2/3 circuits of the same phase in circuit mains conduit.
- 10.2 All switches sockets with boxes, earthing interconnection and plate type silver contact switch shall be inclusive in point wiring.
- 10.3 All empty conduit runs, including junction boxes fish wires etc. shall be paid on the basis of unit length.
  - Measurements shall be along the conduit and concurrent length of sub-circuit wiring.



- 10.4 Buzzer indicator of the ways specified shall consist of indicating lamps, reset button, electromagnet, Perspex cover plate, chromium plated brass screws etc. shall be considered as on unit for measurement and payment.
- 10.5 Two way light points shall be classified according to and consist of 2 Nos. 2 way plate type switches, wiring from the 1 st 2 way switch to the 2nd 2 way switch to the first light controlled. Subsequent lights, if any, shall be measured as ordinary secondary point.

#### **EARTHING**

#### Scope:

The Scope of work shall cover supply of earthing stations, laying copper earth strips and connecting the power panels, DB's and switch boards.

#### Standards:

AS PER ANNEXURE - IV.

#### **Plate Earthing Station:**

The substation earthing shall be with copper plate earthing station unless otherwise specified.

The earthing station shall be as shown on the drawing. The earth electrodes shall be  $450 \times 450 \times 3 \text{ mm}$  /  $600 \times 600 \times 6 \text{ mm}$ . Copper plate – as specified in B.O.Q. The earth resistance shall be maintained with a suitable soil treatment as shown on drawings.

The resistance of each earth station should not exceed 1 ohms.

The earth lead shall be connected to the earth plate through copper/brass bolts as shown on the drawing.

Minimum distance between two earth pits shall be 2 Mts.

All earth pits shall be minimum 1 Mt. Away from building foundation.

#### **Pipe Earthing Station:**

The earth station shall be as shown on the drawing and shall be used for equipment earth grid. The earth electrode shall be 2.5 m. long 50 mm. Diameter galvanized steel pipe. The earth resistance shall be maintained with a suitable soil treatment as shown on drawings.

The resistance of each earth station should not exceed 5 ohms.

The earth lead shall be fixed to the pipe with a and safety set screws. The clamps shall be permanently accessible.

#### Earth leads and connections:

Earth lead shall be bare copper or aluminum or galvanized steel as specified with sizes shown on drawings. At road crossings necessary Hume pipes shall be laid. Earth lead run on surface of wall or ceiling shall be fixed on saddles or wall.

The complete earthing system shall be mechanically and electrically bonded to provide an independent return path to the earth source.



#### Power transmission apparatus:

Metallic conduit shall not be accepted as an earth continuity conductor. A separate insulated/bare earth continuity conductor of size 50% of the phase conductor subject to the minimum and maximum shall be provided.

Non-metallic conduit shall have an insulated earth continuity conductor of the same size as for metallic conduit. All metal junction and switch boxes shall have an inside earth stud to which the earth conductor shall be connected. The earth conductor shall be distinctly colored (green) for easy identification.

In the case of cable, an earth continuity conductor shall either be run outside along the cable or should form a separate insulated core of the cable.

Three Ph. Power panels and distribution boards shall have 2 distinct earth connections of the size correlated to the incoming cable size. In case of 1 Ph. DB's a single earth connection is adequate. Similarly for 3 Ph and 1 Ph isolating switches there shall be 2 and 1 earth connections respectively, sizes being correlated to the incoming cable.

#### Testing:

The following earth resistance values shall be measured with an approved earth meggar and recorded.

Each earthing station

Earthing system as a whole

Earth continuity conductors

#### Mode of measurements:

Providing earthing station complete with excavation, electrode, watering pipe, soil treatment, masonry chamber with cast iron cover etc. shall be treated as one unit of measurement.

The following items of work shall be measured and paid per unit length covering the cost of the earth wires/strips clamps, labor etc.

Main equipment earthing grid and connections to the earthing stations.

Connections to the switchboard, power panels, distribution boards etc.

The cost of earthing the following items shall become part of the cost of the item itself and no separate payment for earthing shall be made.

Isolating switches and starters should form part of mounting frame, switch starter etc.

Light fittings – form part of installation of the light fitting.

Conduit wiring cabling – should form part of the wiring or cabling.

#### **TELEPHONE DISTRIBUTION**

This cover supply ,installation, testing, commissioning of telephone system.



#### 1) The scope of work shall cover supply, installation, commissioning and testing of:

Telephone cables

**Telephone Tag Blocks** 

Telephone wiring in conduits

The telephone exchange and the hand sets shall be supplied by the clients.

#### 2) Conduits:

Conduits shall be as given below:

Indoor: medium gauge Rigid PVC conduit.

If in flooring provide heavy gauge.

The conduit shall generally be as specified under section 'CONDUIT WIRING'.

#### 3) Cables and Wires:

The type of cables and the services shall be as follows:

Indoor Multi pair, PVC insulated sheathed armored and sheathed.

Inside Twin core PVC insulated with conduit twisted cores.

All multi core cables and wires shall be of tinned copper conductor of not less than 0.5 mm dia and shall be color coded twisted pairs with rip cord.

The conductor resistance shall be less than 150 ohms per KM and the insulation resistance between the conductors not less than 50 mega ohms and the nominal capacitance of about 0.1 micro farad per kilometer.

Cables laid underground or locations subject to dampness and flooding shall be filled with polyethylene compound and shall have sufficient protection against moisture and water ingress.

All armoring shall be of galvanized steel wires and protected against corrosion by an outer sheath of PVC in the case of indoor cables and polyethylene in the case of outdoor cables. Outer sheathing must be fire retarding and anti - termite.

All unarmored single core cables and inner sheath of armored cables shall be provided with rip cord.

All single pair cables for final extension to the telephone outlet box shall be unarmored tinned copper conductors of not less than 0.6 mm. Diameter and shall be drawn in conduits. All telephone outlets shall consist of 2 A 2 pair polythene connector in G.I box with 6 mm bus bar cover with bus bar edges and chromium plated brass hardware.

#### Tag blocks:

The telephone tag blocks shall be suitable for the multi core telephone cables and shall have two terminal blocks, cross connect type. All incoming and outgoing cables shall be terminated on separate terminal blocks and termination shall be silver soldered. The cross connecting jumpers shall be insulated wires of same diameter and screw connected.



The tag blocks shall be mounted inside fabricated sheet steel boxes with removable hinged covers and shall be fully accessible. The enclosure shall be painted with 2 coats of red oxide and stove bus bar.

#### Installation:

The installation of conduits shall generally be as specified under section `CONDUIT WIRING'.

Telephone / Data pipes shall be kept 100 from power conduit.

Separate J.B. shall be provided for telephone & Computer.

All cables shall be on cable racks and neatly stitched together.

The connection at the tag blocks shall be silver soldered so as to achieve minimum contact resistance.

The final branch connections with single pair cables in conduits and the maximum number of cables in each conduit shall be as follows:

Conduit diameter	Max. I	No. of cables
inch		mm.
³⁄4" 20		2 Nos. single pair
1"	25	6 Nos. single pair
1¼" 32		12 Nos. single pair
1½" 40		18 Nos. single pair



### **INSTALLATION TESTS CERTIFICATE**

#### BY ELECTRICAL CONTRACTOR

This contractor is to certify that the work is carried Out work confirming to IE Rules and code of practice. He has to give the test report is under.

(i)	Insulation Resistance test is	R - N M. Ohms Y - N M. Ohms B - N N. Ohms
(ii)	Load test : -	
	5A - 1000 W Power Poin	t - 15 Minutes
	15A - 3000	W Power Point - 15 Minutes
(iii)	Earth resistance for each electi	rode - 1 Ohm - 2 Ohm - 3 Ohm - 4 - N - E Volts
(iv)	Certificate of makes of ma	aterials used in the work
(v)	Circuit diagram	
(vi)	Certified that the election the supervision of licensed	trification work has been carried out under Electrical supervision.
(vii)	Certified that the eart correct depth confirm	hing plate / pipe has been verified and Placed at hing to IE Rules.
Signat	ture of Electrical Supervision	Signature of Contractor
Name	:	
Licens	se No. :	



## **IMPORTANT POINTS TO BE NOTED**

- Rates for LIGHT, FAN, EX. FAN, CALL BELL, RAW POWER ETC. POINTS includes the cost of main wires and PVC pipes from LDB-ROW POWER DB to DIFFERENT SWITCHBOARDS WITH REQUIRE CIRCUITS.
- Rates for COMPUTER POWER POINTS include the cost of wires and PVC pipes from UPS DB to COMPUTER POWER POINTS.
- 3) Rates for **COMPUTER I/O** include the cost of **DATA** cables and PVC pipes from **SERVER SWITCH** to **COMPUTER NODES**.
- 4) Rates for **TELE POINTS** include the cost of TELEPHONE Wires and PVC pipes from **EPABX/CRONE BOX** to **TELE. POINTS**.
- 5) Rates for A.C. / POWER POINTS include the cost of wires and PVC pipes from A.C.DB to DIFFERENT A.C. AND POWER POINTS WITH REQUIRE CIRCUITS.
- THE CONTRACTOR SHOULD SUBMIT THE BUILTUP SLD OF PANEL, SLD OF DIFFERENT DBS TO DIFFERENT SWITCHBOARDS WITH NUMBERING, SLD OF DATARACK TO DIFFERENT I/O POINTS WITH NUMBERING, TELE. KRONE BOX TO DIFFERENT TELE. POINTS WITH NUMBERING, ETC. AFTER EXECUTION OF THE BRANCH. 2 SETS OF COPIES 1 WITH LAMINATION.
- 7) THE CONTRACTOR SHOULD USE MAX. 3 CIRCUITS IN ONE CONDUIT FOR UPS & RAW POWER POINTS.
- 8) THE CONTRACTOR SHOULD USE MAX. 3 WIRES OF DATA & TELE. IN ONE CONDUIT.
- 9) EVERY CONDUIT FOR UPS, RAW POWER, DATA & TELE., POWER POINTS, AC POINTS, LIGHTING POINTS SB SHOULD BE SEPARATE.
- 10) FOR DATA & TELE. POINTS, BIG JUNCTION BOX MUST BE REQUIRED.
- 11) FOR UPS & RAW POWER POINTS, BIG/ SMALL JUNCTION BOX MUST BE REQUIRED.
- 12) EMPTY CONDUIT MUST BE LAID FOR SECURITY SYSTEM.
- 13) PVC CONDUITS MUST BE CLAMPED WITH SADDLES IN CEILING ONLY.
- 14) ELE. CONTRACTOR MUST SUBMIT CERTIFIED LOAD LIST WITH ELE.
  LICENSE NO. / SUPERVISOR CERTIFICATE NO.
- 15) CONTRACTOR SHOULD SUBMIT TEST REPORT.
- 16) CONTRACTOR SHOULD PRESENT EARTHING PLATES BEFORE EXECUTION



	APPROVED MAKE	LIST OF EQUIPMENT AND ACCESSORIES
1	PVC rigid conduits & Accessories (FRLS)	1.5 mm thick ISI and FIA approved - Precision / Vraj / Nihir / BLP / PFI /Anchor/ Polycab make. (Only white coloured pipes to be used.).
	MS Pipe conduit & Accessories (MMS ISI Mark)	BEC/Bharat/ERW/AKG Make(MMS)
2	L.T. Cables	Havells / Diamond / KEI / Finolex./Poly Cab
3	Wires (FRLS)	R. R. Kable / Havells / L & T / KEI/Poly Cab
4	Main Distribution Boards	MDS Legrand (Lexic ) / Hager / Crabtree XPRO / Schneider (Eazy 9) L & T Exora / C &S Wintrip
5	ELCB / RCCB /Miniature Circuit Breaker	MDS Legrand (Lexic ) / Hager / Crabtree XPRO / Schneider (Eazy 9) L & T Exora/ C &S Wintrip
6	Switch Gears	MDS Legrand (Lexic ) / Hager / Crabtree XPRO / Schneider (Eazy 9) L & T EXORA/ C &S Wintrip
7	Change Over Switch	HPL Socomac/ Havells / L & T./Hager
8	Domestic fittings	
	a) All Switching Modular Accessories.	Schneider Livia / L & T Oris/ Crabtree Verona / Salzer S90 ( Elite Plate) / Legrand Myris.
	b) Holder/Ceilling roses	Anchore or Equivalent Approved make.
	c) Adhesive Tape	Bhor (Steel Grip) or approved .
9	10 - 30 A Polycarbonate Socket & Top	MDS Legrand (Lexic ) / Hager / Crabtree XPRO / Schneider ( Eazy 9 ). L &T EXORA / C &S Wintrip
10	Telephone Wires / Cable	Finolex / R. R. Kable / Havells / L & T./ Polycab
11	Telephone tag block	Krone make.
12	Cable Lugs	Dowell / Lotus / Jainson / 3 D.
13	Cable gland Single / Double Compression	HMI / Comet / 3D.
14	Ammeter / Voltmeter	AE / HPL /MECO/ Enercon make.
15	Selector switches	L & T salzer / Kaycee make.
16	Indicator lamps	LED type Teknic / Precifine/ Binay.
17	Connector strips	Wago / Elmex make.



18	Lighting Fixtures	Philips / Havells / GE/Crompton/ Orient Make.
19	Exhaust fan (Light duty)	Khaitan / Crompton / Havells./ Luminious.
20	Ceiling Fan	Orient (PSPO)/Crompton (High Breeze)/Havells / Luminious.
21	Wall mounted Fan	Almonard or Equivalent make
22	Data Cable - I / O Unit	D - Link./Digi Link
		CAT NO. & SPECIFIED MAKE IN THE FINANCIAL BID. OR APPROVED OVED MAKE LIST DIRECTED BY ARCHITECT/ BANK

#### Note:

- [a] Where other Material are proposed to be used these should be got Approved from the Architect before execution of particular item. In case of Non- Availability of any material of specified make, The Alternative should be used only after it is Approved in writing by the Employer or the Architect. The Material shall be used in prefential Order only
- [b] Before starting of work contractor must get all samples/make approved from Architect before using at site
- [c] Consultants reserve the right to add or delete name of any manufacture as and when required.
- [d] Consultants reserve rights to select any of the specified brands mentioned above.



# BILL OF QUANTITY (NOT TO BE FILLED)

### BOQ: ELECTRIC & ALLIED WORK of SBI RETAIL BRANCH DIAMOND BOURSE SURAT.

BOQ : Interior Decoration & Furniture work : ELECTRICAL WORK of RETAIL BRANCH, REG. 3, DIAMOND BOURSE , SURAT, SAO for State Bank of India.

Sr. No.	DESCRIPTION	QTY	UNIT
	NOTE: ALL CHARIS OR CHASES IN WALLS / COLUMNS / SLABS MADE BY THE ELECTRICAL CONTRACTOR FOR INSTALLATION OF CONDUITS / S.B. / BOXES ETC. THE FILLING OF THE SAME IS IN THE SCOPE OF THE ELECTRICAL CONTRACTOR INCLUDING ALL NECESSITY MATERIAL AND LABOUR. ALL CONDUITS ABOVE FALSE CEILING MUST BE HANGED WITH STUD / CLAMPS WITH HOOKS OR DIN CHANNEL WITH SLAB AS SLAB HEIGHT IS MORE THAN 16 FEET.		OR E
	PART - A :::: BRANCH		
A	INTERNAL WIRING: Phase wire must be Red colour for LDB, Yellow colour for PDB & Blue for ACDB, Neutral Wire of Black colour & Green Wire for Earthing. Color code must be maintained. Tagging from DB MCB and Switch board must be done.		
1	SITC of point wiring in concealed in walls, furniture's & for above false ceiling, or on ceiling, on beams shall be fixed with saddles & spacers etc., with conduits taken in slab with 20 mm dia PVC Rigid conduits 1.5 mm thick ISI mark with 2 nos. of 1.5 sq. mm. phase & nutral & 1 nos. of 1.0 sq. mm. earthing with modular switch with company made flush metal box/surface PVC box etc. comp. with nec. main lines for switch board from LDB of mains of 2 nos. of 2.5 sq.mm wire and 1 no.of 1.0 sqmm pvc Insulated copper conductor wire FRLS type laying in with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark .These will be used with point wiring of light, fan, ex. fan, callbell points, etc { Max. 3 Switchboards in one circuit - One Sp MCB }.Phase wire must be Red colour, Nutral Wire must be Black color & Green Wire for Earthing. Color code must be maintained. Tagging from Lighting DB MCB and Switch board must be done.		
1.1	One 5A switch controling one light / fan point.	20	nos
1.2	One switch controlling Two light points .	15	nos
1.0			
1.3	One switch controlling Three light points .		nos
1.4	5A socket outlet with 5A switch ( on common board ) ( 1 FOR WATER COOLER).	12	nos
1.5	5A socket outlet with 5A SP switch (as an independent point ) [ for ex. Fan, wall fan , QMS, Token M/C Display, etc. points.]	10	nos
1.6	Call bell point with bell push complete.	1	nos



1.7	SITC of loop light points 0f 2 nos. of 1.5 sq. mm. off wires & 1 nos. of 1.0 sq. mm. earth wire from Main panel timer of mains of 2 nos. of 2.5 sq.mm wire and 1 no.of 1.0 sqmm pvc Insulated copper conductor earth wire laying in with 20 mm/25 mm dia type PVC rigid conduits 1.5 mm thick ISI mark (This point is for Signage and Down Lighter Points at Entrance).		nos
	SITC of 6/16 Amp. Switch and cocket complete with possessory require wiring		
2.1	SITC of 6/16 Amp. Switch and socket complete with necessory require wiring from LDB of 2 no of 4.0 sq mm wires and 1 no of 2.5 sq mm PVC Insulated copper conductor earth wire laying in with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark. These will be used with point wiring of power points ,etc. No Looping of Neutral or earthing is allowed. Each point needs to provide seperate circuit. This Points Need to Be Connected through LDB. (For Cash Room, Locker Room, Record Room. Compactor room - wiring points).	1	nos
2.2	SITC of 6/16 Amp. Switch and socket complete with necessory require wiring from PDB of 2 no of 4.0 sq mm wires and 1 no of 2.5 sq mm PVC Insulated copper conductor earth wire laying in with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark. These will be used with point wiring of power points ,etc No Looping of Neutral or earthing is allowed. Each point needs to provide seperate circuit. This Points Need to Be Connected through PDB. (For Printer, Water Cooler, Freeze, Motor, Note Counting Machine points).	3	nos
	CITC of 20 A / 25 A 220 M with DD ELCP 100 mA all analoged in a		
3	SITC of 20 A/ 25 A , 230 V, with DP ELCB, 100 mA all enclosed in a prefabricated M S boxes complete to the satisfaction of E.I.C. For SPLIT AC 1.5TR / 2.0 TR unit with necessory require wiring from ACDB of 2 no of 4.0 sqmm wires and 1 no of 2.5 sqmm PVC Insulated copper conductor wire FRLS type laying in with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark. These will be used with point wiring of A.C. points ,etc . Server Room AC Supply need to be given through Main Panel. Color code must be maintained. Tagging from DP MCB and AC point must be done. This point should be installed near Split / window AC in concealed manner. No Looping of Neutral or earthing is allowed. Each point needs to provide seperate circuit. For Cassate AC power supply indoor or outdoor need to be given as per AC vendor's requirement. The height of switchboard must be at reachable point for easily operation.from that point to Split AC,empty conduit + necessary bends must in concealed mode by ele. contractor. THE ENCLOSURE SHOULD BE SAME MAKE AS MCB MAKE.	1	nos
В	LIGHTING FIXTURES :		
	(NOTE: ANY OF FIXTURES AND FITINGS SHALL BE RE-		
	CONFIRMED WITH THE ARCHITECTS / CONSULANTS BEFOTE ORDERING THEM.		



4	SITC of (including supply and fixing flexible wires from holder to fixtures hardwares etc.) of The LED lamps should be of same make as fixture make The marking & cutting of fixtures should be in ele. contractor's scope fixtures should be approved by bank's ele. engineer / ele. consultant / architect. from the given make list before installations. LM 79 & LM 80 test reports to be submited. nichia / LUmileds / cree - LED should be used by manufacture. Lighting Luminaire of LED for Office single piece die cost aluminium M24 housing complete with driver unit, mirror optic and other accessories Lamps of about 100 lumen/W injection moulded PC diffusers with high brightness complete unit complying with international standard (LU49, LH801) - opertive on 190V - 270 V 50 Hz with Mini 3 years warranty complete with mounting stystem and lamp dully wired and tested Details as under.		
4.1	SITC of LED 1 x 31 W ( 3100 lumens ) ( 2' X 2') RECESS MOUNTED LUMINAIRE with 2KV surge protection, making earthing conection complete to be recessed in false ceiling with all necessary hardwares, hanging - die cast frame arrangement, chains or hook arrangement with ceiling, connected to supply wire with PVC connector. Earthing connection with lugging need to given to body of Fixture, etc. complete. (Crompton Model ORION II Cat Ref No: LCTLRN-36-FO-CDL, CCT 6000 K and CRI > 80, lumen O/P > 3300 lumen, Syatem wattage (LED + Driver) < 40 Watt. or Equivalent in GE/Philips / Havells / Wipro make) .	20	nos
4.2	SITC of 1x12 W Square / Round LED DOWN LIGHT pressure die cast fixture with 2KV surge protection (950 lumens) to be recessed in false ceiling with all necessary hardwares, chains, hook etc. complete.( CROMPTON make cat no. Crompton Model CROM LCDD-15-CDL/TL/ WW, CCT 6000 K and CRI > 80,Lumen output1450 lumen, System wattage( LED + Driver ) 12 Watt or Equivalent in GE / Philips / Havells / Wipro make). Energy Efficient round recessed mounted LED down lighter with premium white powder coating and die cast aluminium housing. as per details above. Die casting material should not be CRCO type material. should be connected to supply wire with PVC connector. Earthing connection with lugging need to given to body of Fixture.	17	nos
4.3	SITC of LED tube light 1 x10 W ( 560 lumens ) Surface mounting type with LED tube, complete. (Crompton Model : LINNET; CAT Ref No: LCL-07-CDL or Equivalent PHILIPS / GE / Wipro make ) . For Toilet area.	2	nos
4.4	Supply and installation of Call bell with Indicator. (Max or equivalent make)	1	nos
4.5	SITC of Exhaust fan of 300 mm, fresh air ventilator type complete & 6 Amp. 3 pin TOP. (Crompton/ Khaitan / Havells make) [Wooden mounting frame should be fixed in coordination with carpenter - furniture contractor.] - Two Ex. Fan is of heavy duty industrial for Ups room.	5	nos
4.6	SITC of 48" Ceiling Fan with fan step socket modular regulator, Max. 3 feet Fan Rode, Anchor Fastner, etc. (WHITE COLOUR - BEE 5 star labeled ceiling fan Alluminium body and copper winding.) (Orient PSPO or Equivalent approved make in Crompton / Havells Model High Breeze Plus BEE 5 Star labeled ceiling fan , Aluminium body , copper winding .).	3	nos



4.7	SITC of 1 x 18W led batten light fixture (T-5) with electronic driver and tube complete with necessory hardwares, etc and per watt lumens output must be above 120/watt and 90%lumems maintaiance for 90% of life with input voltage 90-270v ac 50hz operational without affecting the life, input mov.gtd protection in driver for above 270v protection. and 2 years waranty.LED Batten Comprises of Thermally conductive material. Pre-wired with high efficiency electronic driver. High translucent frosted diffuser gets glare free, smooth light distribution. (Cormpton / GE/ Philips / Havells / Wipro make).	6	nos
4.8	SITC of 450 mm sweep wall mounted fan with metal body, metal stand, guard and blade, 6 a. 3 pin top With on site 2 years warranty. (ALMONARD tempest mark II or equivalent make.) Wall fan with PVC body strictly rejected.	4	nos.
С	COMPUTER POWER SUPPLY & NETWORKING - TELE. SYSTEM.: Phase wire must be Yellow colour for UPS O/P DB, Red colour for PDB, Neutral Wire of Black colour & Green Wire for Earthing. Color code must be maintained. Tagging from DB MCB and Switch board must be done.		
5	SITC of 2 nos. of 6 A, 5 pin Sockets and 1 no. of 6 \ 16 A socket below table outlets with one 16 A switche with indicator Computer power supply with concealed company made metallic boxes or PVC flush box on walls / furniture's / trunking etc complete all respect with necessary wiring of mains of 2 no of 2.5 sq mm and 1 no of 1.5 sqmm pvc insulated copper conductor multi-stranded flexible wire with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. complete from UPSDB to Computer power supply boards.{Maxi. 3 computers in one circuit}. Complete with necessary termination etc. complete.[White Colour Outer Plate For These Switchboards]. LOOP POINTS MUST BE OF SAME SIZED WIRES. Phase wire must be Red colour, Nutral Wire must be Black color & Green Wire for Earthing. Color code must be maintained. Tagging from UPS O/P DB MCB and Switch board must be done.	17	nos
6	SITC of 2 nos. of 6 A, 5 pin Sockets and 1 no. of with one 6 A switches raw power supply with concealed company made metallic boxes or PVC flush box on walls / furniture's / trunking etc complete all respect with necessary wiring of mains of 2 no of 2.5 sq mm and 1 no of 1.5 sqmm pvc insulated copper conductor multi-stranded flexible wire with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. complete from PDB to Computer power supply boards.{Maxi. 3 Raw Power Points in one circuit}. complete with necessary termination etc. complete [ Black Colour Outer Plate For These Switchboards].LOOP POINTS MUST BE OF SAME SIZED WIRES. Phase wire must be Red colour, Nutral Wire must be Black color & Green Wire for Earthing. Color code must be maintained. Tagging from PDB MCB and Switch board must be done.	11	nos
7	SITC of CAT 6 UTP pvc insulated copper conductor data cable of D - Link with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. or to be cleated on wall / ceiling with saddles / spacer etc. necessary termination etc. with ferrule numbering at both ends of each piece of cable complete. [1 Lines from BSNL Krone to new krone in server room].	100	mtr



8	SITC of CAT 6, RJ 45 information outlet (I/O) of D-link mke with front modular cover plate, flush box metallic or PVC for trucking system etc. complete with terminations etc complete.with Providing, installing, testing, commissioning of CAT 6 UTP pvc insulated copper conductor data cable of D-link make with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. or to be cleated on wall / ceiling with saddles / spacer etc. necessary termination etc. with ferrule numbering at both ends of each of piece of cable etc. complete as per the requirement from data rack to I/O points below tables. etc. (One for LCD & Two for ATM & one for IP phone in BM cabin). Dual jack plate will not be allowed. Cross Ferruling need to be provided for each point. on Data point tagging must be done).	18	nos
9	SITC of 12 U metal rack for computer clamping switch etc complete with Tray Mounting Fan + power supply board. Bank's hardware - port switch / patch panel must be installed by ele. Contractor in this rack ( make : D Link / Digi Link / Elixer ).	1	nos
10	SITC of 24 - port ithernet switch. (make: D Link/Digi Link).	nil	nos
11	SITC of 24 port patch panel for computers mounting in metal rack. (make: D Link/Digi Link).	1	nos
12	Supply and crimping of RJ 45 connector with proper testing.	nil	nos
13	Supply & fixing the Patch cord 1 mtr. Long (factory built)When supplying , then first ask to BM / Consultant / Architect / Bank Authority.	18	nos
14	Supply & fixing the Patch cord 2 mtr. Long (factory built)When supplying , then first ask to BM / Consultant / Architect / Bank Authority.	14	nos
15	SITC of telephone point with Telephone socket outlets of RJ 11 of aapproved make with company made concealed boxes in walls / furniture's etc. complete with Providing, installing, testing, commissioning of 2 pair of 0.51 cross section pvc insulated copper conductor telephone wire of ITI approved with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. or to be cleated on wall / ceiling with saddles / spacer etc. necessary termination etc. complete.from krone box to tele. RJ - 11 sockets below tables. etc for Intercom / fax / direct Tele. facility. Cross Ferruling need to be provided for each point. on Telephone point tagging must be done.	13	nos
17 (A)	SITC of <b>20</b> pair krone telephone tag block duly enclosed in sheet metal powder coated box with locking arrangement complete with necessary terminations.	1	nos
17 (B)	SITC of <b>10</b> pair krone telephone tag block duly enclosed in sheet <b>metal powder</b> coated box with locking arrangement complete with necessary terminations o/s the branch.	nil	nos
D	DISTRIBUTION BOARD AND PANELS:		
L			1



18	SITC of metallic double door type distribution board with all necessary connection complete to be installed concealed in wall / surface mount complete to the satisfaction of the Engineer in charge. <b>The DB should be of same make as MCB make.</b>		
18.1	4 - WAY TPN DB: (LDB). All MCB should be 'B' type.	1	nos
10.1	incoming: 40 A FP MCB - 1 NO.		1100
	outgoing: 25 A DP ELCB, 100 mA - 3 NO.		
	outgoing: 6 to 20 A SP MCB (6 nos).		
	, ,		
18.2	6 - WAY TPN DB: (PDB - ACDB). All MCB should be 'C' type.	1	nos
	incoming: 63 A FP MCB - 1 NO.		
	outgoing: 40 A DP ELCB, 100 mA - 3 NO.		
	outgoing : 20 A / 25 A DP MCB (1 nos ) for HI- WALL SPLIT AC / CASSETTE AC points.		
	outgoing: 10 to 20 A SP MCB (10 nos).		
18.4	8 WAY SPN DB : (UPS DB) OUTPUT All MCBs must be C Type Characteristic.	1	nos
	incoming: 40 A DP 100 mA ELCB.		
	outgoing: 10 to 20 A SP MCB (6 nos).		
	outgoing . To to 2011 of the b ( o 1000 ).		
18.5	4 WAY SPN DB. (For essential ups points - UPS O/P DB.).	1	nos
10.5			1105
	outgoing: 25 A. DP MCB - 1 NO FOR UPS OUTPUT.		
	outgoing : 10 A / 20 A. SP MCB - 2 NO FOR essential ups points - DATA		
	RACK / FIRE PANEL / CCTV NVR PTS.		
18.9	4 WAY SPN DB. (For UPS O/P DB. AT UPS ROOM).	1	nos
10.9		1	nos
	outgoing: 40 A. DP MCB - 2 NO FOR UPS OUTPUT.		
18.10	UPS 6 WAY SPN DB (For all computers ) All MCBs must be C Type Characteristic.	1	nos
	incoming: 63 A FP MCB - 1 NO FOR 3 - phase UPS.(big).		
	outgoing: 25 A DP MCB - 1 NO FOR 1 - phase UPS.		
19.1	SITC of 25 A / 32A / 40 A / 63 A FP MCB (C - Curve) with powder coated compny made metallic double door sheet stell enclosure complete For three phase 3.0 / 5.5 / 8.5 TR VRF / DUCTABLE / CASSETTE AC units. (as per IP 65 protection ). THE ENCLOSURE SHOULD BE SAME MAKE AS MCB MAKE.	1	nos
-	CUTCO (ASE A. DDDA (CD. (C. C. ) ) 11		
19.2	SITC of 25 A DP MCB (C - Curve) with powder coated compny made metallic double door sheet stell enclosure complete for single phase 2.0 TR CASSETTE AC units. ( as per IP 65 protection ). THE ENCLOSURE SHOULD BE SAME MAKE AS MCB MAKE.		nos



21	SITC of Main panels as per drawing and specifications. Panel should be dust and vermin proof. Panel shall be fabricated from 14/16 SWG CRCA sheet metal duly powder coated of approved paints. Panel should be as per the specifications of ERDA/CPRI. fabrication, Switch gear installation. Internal wiring and Test Certificate from Manufacturer to be submitted All MCBs must be C Type Characteristic. Panel Drawing Need to be approved by Electrical Consultant / Bank's Engineer before starting work. READ SLD CARFULLY.		
	MAIN PANEL:	1	nos
	Incoming feeder: 80 A C&S Make CSE1N80ETM4P-80A (1 No.). The MCCB should have inbuilt Earth Fault & Neutral Overload Protection with Power Supply & Display Module for Metering & Fault Recording.		
	Incoming feeder: 63 A C&S Make CSE1N63ETM4P-63A (1 No.).		
	* 80 A, FP Change over switch (1 No.).		
	* 63 A, FP Change over switch (1 No.).		
	* 125 AMP. 500 Volts, 3 phase 50 Hz FP ${\bf Alu}$ . bus bars of suitable length - Current ratio shall be 1 sq mm = 1.2 A.		
	* 80 AMP. 500 Volts, 3 phase 50 Hz FP $\bf Alu$ . bus bars of suitable length -Current ratio shall be 1 sq mm = 1.2 A.		
	* 63 AMP. 500 Volts, 3 phase 50 Hz FP <b>Alu</b> . bus bars of suitable length - Current ratio shall be 1 sq mm = 1.2 A.		
	* Digital AVF Meter with control fuses. C.T. shall be of 15VA class 1 type and shall be resin cast type.		
	* Phase indicator lamps phase wise.		
	* Outgoing feeder:		
	* Timer of L & T make Cat. No. 67DDTO digicom Timer with 16A. 4P contactor / Theben make Cat no. SUL 180 a - T180 0 001 ANALOG Timer with L & T make contactor MNX 18 (operating coil voltage 230V, 50 Hz). (24 hrs) 1 No for signage light.		
	* 25 A DP MCB (1 no - Sign board for branch).		
	* 40 A FP MCB (1 NO - LDB).		
	* 63 A FP MCB (1 NO - PDB).		
	* 40 A FP MCB (1 NO - UPSDB).		
	* 63 A FP MCB (1 NO - ACDB - 11.0 tr AHU UNIT FEEDER.).		
	* 40 A FP MCB (1 NO - SPARE DB).		
21	SITC of 100A FP MCCB- C&S Make CSE1N125ETM4P-125A ( 36KA) (1 No.) (Ics =100% Icu., confirmed to IS / IEC 60947 -2 adjustable Ir rating from 0.7 to 1 ) Unit in existing M. S. Compartment complete. THIS WILL BE INSTALLED NEAR MAIN DOOR - INSIDE OR OUTSIDE - OF THE BANK. (first ask to BM / Consultant / Architect / Bank Authority.	1	nos
E	EARTHING SYSTEM:		



23	SITC of Earthing Pit with all necessary material and making masonry kundi, watering arrangement etc complete as per ISI 3043-1987 (FOLLOWING ITEMS MAY OPERATE). Resistivity as per IEC / IS. ( 3 years Manufacturer Warranty. Earthing Certificate Need to Attached). ( At the Time of buried of earthing Photograph must be taken Without Photographic Proof Earthing Will be Rejected. Earthing Rod Photo Must be attached with Bill.). Earthing need to measure at Site and it should be less than 5 Ohm. If found more than 5 ohm than will be rejected. Earthing Pit Must be Provided for both Cu as well as GI earthpit.		
23.2	ECO SAFE environment friendly electrical grounding system with T-193-Copper electrode used upto 11 KV, having 50mm dia. of outer pipe and 25 mm dia. of inner pipe and length of 3mtrs with 50kg Back Fill Compound as per UL 476, of Power fill Eco friendly electrical grounding backfill compound and clamp (UPS) - Chemical GI Earthing) ERDA & NSIC approved, E link or ETP MAKE or ASHLOK MAKE. Any other make will not be consider Cu. (UPS)		nos
24	SITC and jointing of following wire / strip / earth cable on walls, ceiling		
24.1	etc. With necessary non rusting clamps, washers, nuts and bolts etc complete.  SITC of 6.0 sq. mm. Cu. Flexible wire with 20 / 25 mm dia. PVC rigid conduit duly cleated / concealed / burried in floor etc. complete From Cu. earthing pit to Main Panel + From Cu. Earthpit to UPS I / P DB.	150	Rmt
24.2	SITC of 4.0 sq. mm. Cu. Flexible wire with 20 mm dia. PVC rigid conduit duly cleated / concealed / burried in floor etc. complete for all DBS, AC outdoor units, etc.	70	Rmt
F	CABLES & CABLE TERMINATIONS:		
25	Supply, Laying, installation, testing and commissioning of following sizes of PVC insulated PVC sheathed copper / aluminum conductor armoured cable to be laying in existing cable trench or to be laid in existing pipes of with necessary clamps, spacers with cleating on wall ceiling etc. complete to the satisfaction of EIC. All types of cable excavation works should be in contractor's scope.(LENTH TO BE VERIFY AT SITE) with end termination of following PVC insulated armoured cables including supply and fixing of brass single compression type cable glands and crimping type aluminum / copper lugs suitable for terminations of armoured cables of following overall diameters, incl.		
25.1	3 C x 2.5 sq. mm Cu . Conductor YWY cable. (for Signboard ).	55	mtr
25.2	4 C x 4.0 sq. mm Cu. Conductor YWY cable. (3 PHASE CASSETTE ACDB 2 & 3 to 3 PHASE CASSETTE AC - 3.0 TR OUTDOOR UNIT. ).		mtr
25.3	4 C x 6.0 sq. mm Cu. Conductor YWY cable. (Main Panel to UPS I/P DB ).	45	mtr
25.3	4 C x 10.0 sq. mm Cu. Conductor YWY cable. (Main Panel to 3 PHASE ACDB 4, UPS I/P DB ).		mtr
25.5	4 C x 16.0 sq mm Alu. Conductor AYFY cable. ( Main Panel to LDB, 11.0 TR DUCTABLE AHU UNIT, PDB.) .	80	mtr
25.6	<b>Removal &amp; reinstallation of existing</b> $3.5  \text{C} \times 50.0  \text{sq.}$ mm Alu. Conductor AYFY cable. (main cable from Panel to main mccb nr. energy meter) (LENGTH as per site condition) .	50	mtr



1		I	
25.7	$4.0~{\rm C}~{\rm x}~35.0~{\rm sq}~{\rm mm}$ Alu. Conductor AYFY cable. ( Main Panel to DG SET) .		mtr
25.8	35.0 sq. mm single core Cu. wire supply & laying for main load wire from meter to main switch in flexible pipe. <u>if required.</u>		mtr
25.9	3 C X 10.0 sq. mm flexible Cu. cable with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark . ( UPS to UPS O/P DB & UPS I/P DB to UPS) for branch.		mtr
25.10	3 C X 6.0 sq. mm flexible Cu. cable with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark . ( UPS to UPS O/P DB & UPS I/P DB to UPS) for branch.	60	mtr
25.11	3~C~X~4.0~sq. mm. flexible PVC Insulated copper conductor cable laying in with $20~mm/25~mm$ dia PVC rigid conduits $1.5~mm$ thick ISI mark from AC indoor unit to AC outdoor unit.		mtr
G	MISCELLANEOUS ITEMS :		
26	SITC of 300 x 300 x 40 mm size GI box duly fabricated from 18 SWG m.s. sheet with top cover of s. s. sheet complete with necessary knock outs at all the sides of box for conduit entries duly fixed in floor, including breaking in floor and re-finished the same etc. complete (Wire Draw Box).	8	nos
27	SITC of 150 x 150 x 40 mm size GI box duly fabricated from 18 SWG m.s. sheet with top cover of s. s. sheet complete with necessary knock outs at all the sides of box for conduit entries duly fixed in floor, including breaking in floor and re-finished the same etc. complete (Wire Draw Box).	2	nos
28	SITC of 2.5 sq. mm. 3 core flexible cable of approved make (3 mtr. Length) with	,	
20	heavy duty industrial pvc flexible pipe & 15 amp. 3 pin top of approved make for the supply of compactor room.	1	nos
29	heavy duty industrial pvc flexible pipe & 15 amp. 3 pin top of approved make	1 100	nos
	heavy duty industrial pvc flexible pipe & 15 amp. 3 pin top of approved make for the supply of compactor room.  SITC of CABLE TV cable line with proper fixing and connecting with modular		
29	heavy duty industrial pvc flexible pipe & 15 amp. 3 pin top of approved make for the supply of compactor room.  SITC of CABLE TV cable line with proper fixing and connecting with modular Co-Axial TV Socket 2 run.  SITC of 24 Hr, 7 days A/C timer with of M.D.S, L & T, SEIMENS, THEBEN (indoasian) Make. All enclosed in sheet steel powder coated enclosure of 200 X 200 mm complete with all necessary termination for UPS room ex fan supply. Here Ready made Cyclic Timer Will not be permited to be installed in ups room.	100	mtr
29	heavy duty industrial pvc flexible pipe & 15 amp. 3 pin top of approved make for the supply of compactor room.  SITC of CABLE TV cable line with proper fixing and connecting with modular Co-Axial TV Socket 2 run.  SITC of 24 Hr, 7 days A/C timer with of M.D.S, L & T, SEIMENS, THEBEN (indoasian) Make. All enclosed in sheet steel <b>powder coated enclosure of 200</b> X 200 mm complete with all necessary termination for UPS room ex fan supply. Here Ready made Cyclic Timer Will not be permited to be	100	mtr
29	heavy duty industrial pvc flexible pipe & 15 amp. 3 pin top of approved make for the supply of compactor room.  SITC of CABLE TV cable line with proper fixing and connecting with modular Co-Axial TV Socket 2 run.  SITC of 24 Hr, 7 days A/C timer with of M.D.S, L & T, SEIMENS, THEBEN (indoasian) Make. All enclosed in sheet steel powder coated enclosure of 200 X 200 mm complete with all necessary termination for UPS room ex fan supply. Here Ready made Cyclic Timer Will not be permited to be installed in ups room.	100	mtr



34	Providing Necessary plug points & light points for tube lights (including necessry wiring) at various locations as required by various contractors for execution of various works / to run equipments such as drill / cutter etc. during the entire execution process. The accessaories used for this purpose shall be of temp. nature (anchor piano or eq.) & the contractor has to take back the same on completion of the project. The supply for this shall be taken from the temporary connection provided at / from nearby general meter under co.ordintion with the LANDLORD. & also providing temporary power supply for computers and data connection for computers with wiring, switchboard, Comp. I/O Points,etc. for smoothly running of the branch with removing & reshifting of the computers, printers, etc. bank hardware accessories.	1	job
	TOTAL - PART A :::		
	% DISCOUNT IF ANY :::		
	GRAND TOTAL :::		
	ALL RATES SHOULD BE INCLUDE OF ALL TAXES EXCLUDING GST WH	ATEVE	ER IS
1	APPLICABLE.		
2	THE CONTRACTOR SHOULD DEPUTE ONE PERSON AT SITE FROM START TO FINISH FOR GIVING TEMPORARY CONNECTIONS & ATTENDING PRO		
3	THE CONTRACTOR SHOULD WORK ACCORDING TO THE FINAL LAYOUT		
4	THE CONTRACTOR SHOULD SUBMIT & APPROVE MAKE LIST WITH ARCHENGINEER / ELE. CONSULTANT BEFORE WORKING & SUBMIT SIGNED COFINAL BILL SUBMISSION.		
5	THE CONTRACTOR SHOULD CHECK ELE. APPROVED MAKE LIST BEFORE	QUOT	E.
6	THE CONTRACTOR SHOULD SUBMIT TEST CERTIFICATE OF PANEL FROM BUILDER AS PER PERFOMA GIVEN IN TENDER. BUT THE PANEL SHOULD PER CPRI TERMS & CONDITIONS & ALSO APPROVED BY BANK'S ELE. ENCONSULTANT. THE CONTRACTOR SHOULD FOLLOW THE GA DRAWING SLD IF GIVEN IN TENDER.	BE MA SINEER	DE AS
7	LOWEST BIDDER SHALL BE DECIDED AFTER DEDUCTING THE BUYBACK	VALUI	Ξ.
8	THE CONTRACTOR SHOULD SUBMIT BANK GUARANTEE OR WARRANTY FIXTURES - LED FOR MIN. 3 YEARS.	OF	
9	CONTRACTOR SHOULD BE SUBMITTED THE CERTIFICATE OF WIRES THO THE BRANCH FROM DULY SIGNED BY COMPANY AUTHORISED PERSON PROJECT BASIS.		ED FOR
10	EARTH RESISTANCE SHOULD BE CHECKED & SUBMITTED THE REPORT W SIGNED BY ELE. CONTRACOTR AT THE TIME OF BILL CHECKING.	VITH D	ULY
11	SINGLE LINE DIAGRAM SHOULD BE SUBMITTED AT BRANCH & ONE COF BE ATTACHED NEAR DB / MAIN PANEL.	Y SHO	ULD
12	SHOCK TREATMENT CHART SHOULD BE PEST NEAR DB / MAIN PANEL. SHOULD BE PEST ON DBS / MAIN PANEL.	STICKE	ERS



13	THE CONTRACTOR'S PRESENCE MUST BE COMPULSORY FOR SHIFTING / INSTALLING OF UPS, DATA RACK, EPABX SYSTEMS MUST HELP TO BANK'S VENDORS LIKE PCS (HARDWARE), UPS, DATACRAFT (PORT SWITCH - SOFTWARE), ETC.
14	CONFIRMATION/ RECEIVED SIGNATURE FROM BRANCH MANAGER REQUIRED FOR SUPPLY OF PATCH CORDS.
15	THE RATES QUOTED BY THE CONTRACTOR IN THE COLUMN WHERE QUANTITY & UNIT ARE NOT MENTIONED IN THE TENDER ARE NOT NECESSARY BE ACCEPTED, IF LATER THE SAME ARE TO BE FIXED ON SITE.
16	THE CONTRACTOR SHOULD BE ADVISED NOT TO LAY ANY CONDUIT / CABLE MAIN LINES THROUGH THE CASH ROOM / LOCKER ROOM / RECORD ROOM FOR SECURITY SAFETY AUDITS.
17	IF THE CONTRACTOR HAS NOT CARRIED OUT ELECTRICAL WORK AS PER STANDARD SPECIFICATION THEN CONTRACTOR IS LIABLE TO REMOVE AND REWORK AS PER STANDARD SPECIFICATION AND WHATEVER THE DAMAGE IN CONNECTION WITH CIVIL/ FURNITURE/ AC WORK WILL BE BEAR BY CONTRACTOR. IF CONTRACTOR WILL NOT DONE REWORK THEN WHATEVER BEEN THE COST FOR REWORK WILL BE DEDUCTED FROM CONTRACTOR'S BILL.
18	THE CONTRACTOR SHOULD BE ADVISED TO FIX 2 / 3 INCH SIZE PIES FOR HOLES IN OUTSIDE AREA WHERE THERE WILL BE CREATED THE HOLES IN WALL FOR CABLES / EARTH STRIP LAYING WORKS. FILLED WITH CEMENT / MORTAR WITH END CAPS OF PIPES.



## ELE. POINTS FOR STATE BANK OF INDIA , <u>RETAIL BRANCH</u>, GF, DIAMOND BOURSE, REG. 3, SURAT, SAO.

S.B. No.	Locatio n of S.B.	MCB PHASE - LOOP FROM	MCB PHAS E - LOOP	modu lar	1 s/w 1L	1 s/w 2L	1 s/w 3L	on board plug	S. Plug	S.S.	S.S.	A.C.	1x36W led fitting	1x11W Led down	1x10W	Ex. Fan	Fan	1x20W led wall	Wall Fan
	BOQ NO.	SB - CKT. DAETA ILS	FROM SB - CKT. DAET AILS	box size	BOQ A1.1	BOQ A1.2	BOQ A1.3	BOQ A1.4	BOQ A1.5	BOQ A 2.1	BOQ A 2.2	BOQ A3	BOQ B 4.1	BOQ B 4.2	BOQ B 4.3	BOQ B 4.5	BOQ B 4.6	BOQ B 4.7	BOQ B 4.8
										Н	Щ					1			
SB 1	on colum n entranc e right side.	LDB 1 - R 1.		8 M - 1 no. + 2 M - 1 no.	1	3		1	1				7						1
SB 2	on colum n entranc e left side.	LDB 1 - Y 1.		8 M - 1 no + 2 M - 1 no.		3		1	1				3	3					1
SB 3	CM cabin entranc e.	loop from SB 1 - R 1.	PDB 1 - B 1.	2 M - 2 no.	1				1			1	1						1
SB 4	on wall b/h. CM table 1.	loop from SB 3 - R 1.		6 M - 1 no.		2		1						4					
SB 5	on colum n nr. Officer table 2.	LDB 1 - B 1.		8 M - 1 no. + 2 M - 1 no.	3			1	1				1	2					1
	water cooler nr. Colum n of toilet passag e.	PDB 1 - R 1.		6 M - 1 no.				1			1								
SB 6	L. toilet.	loop from SB 2 - Y 1.		2 M - 1 no.	1									1					
SB 7	G. toilet.	loop from SB 4 - R 1.		4 M - 1 no. + 2 M - 1 no.	2	1								4					



SB 8	on wall nr. Swo 1 table.	loop from SB 7 - Y 1.	8 M - 1 no + 2 M - 1 no.	2	1		1	1				2	2					1
	note counti ng machin e nr. SWO 2.	PDB 1 - Y 1.	6 M - 1 no.				1			1								
SB 9	cash room.	LDB 1 - B 2.	8 M - 1 no + 3 M - 1 no.	3			1		1							1	2	
SB 10	record room.	LDB 1 - R 2.	8 M - 1 no + 3 M - 1 no.	1	1		1		1							1	2	
SB 11	on wall b/h. table 5.	LDB 1 - Y 2.	8 M - 1 no + 2 M - 1 no.	3	1		1	1				4	1					1
SB 12	ups room.	sp mcb from ups i/p db.	12 M - 1 no + 2 M - 2 no.	3			1	2							2	1	2	
	ТОТА			2	1												_	_
	L.			0	1 2	0	11	8	2	2	1	18	17	0	2	3	6	6

		T					2		11		2	2	1	18	1.7	0	•	3	6	6
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# DATA TELE. POINTS FOR STATE BANK OF INDIA, <u>RETAIL BRANCH</u>, GF, DIAMOND BOURSE, REG. 3, SURAT, SAO.

S.B. No.	Locati on of S.B.	UPS	UPS	UPS NO. ferr uls	RPP BO	RAW POW ER NO. ferru ls	RJ- 45	IP TEL E.	I/O NO. ferru ls	INT ERC OM TEL E.	FA X TE LE.	DI RE CT TE LE.	INT ERC OM TEL E. Ferr uls	1 MTR PAT CH COR D	2 MTR. PATC H COR D
	ITEM NO.	Q A - 1.4	Q C-5		Q C-6		Q C-8	Q C-9		C - 15	C - 15	Q C - 15	uis	C - 13	C - 14
1	CM CABI N TABL E 1.		1	U 1	1	R 1	1	1	N1, N2	1	1	1	V1, V2, V3	2	1
2	CM CABI N. CC TV		1	U 2											
3	OFFIC ER TABL E 2.		1	U 3	1	R 2	1		N 3	1			V 4	1	1
4	SWO 1.		2	U4, U5	1	R 3	2		N4, N5	1			V 5	2	1
5	SWO 2.		2	U6, U7	1	R 4	2		N 6 , N 7	1			V 6	2	1
6	OFFIC ER TABL E 5.		1	U 8	1	R 5	1		N 8	1			V 7	1	1
7	OFFIC ER TABL E 6.		1	U 9	1	R 6	1		N 9	1			V 8	1	1
8	OFFIC ER TABL E 7.		1	U 10	1	R 7	1		N 10	1			V 9	1	1
9	OFFIC ER TABL E 8.		1	U 11	1	R 8	1		N 11	1			V 10	1	1
10	OFFIC ER TABL E 9.		1	U 12	1	R 9	1		N 12	1			V 11	1	1
11	OFFIC ER TABL		1	U 13	1	R 10	1		N 13	1			V 12	1	1



	E 10.													
12	ATM.		1	U 14		2		N 14 , N 15					2	1
13	TOKE N MAC HINE DISPL AY.		1	U 15		1		N 16					1	1
14	LCD TV.		1	U 16		1		N 17					1	1
15	QMS MAC HINE.		1	U 17		1		N 18					1	1
16	FIRE ALAR M PANE L	1		U 18							1	V 13		
17	DATA RACK		2	U 19 , U 20										
TO	OTAL	1	19		10	17	1		10	1	2		18	14



lo.		Load items	Qty	Kw.	Total Kw.
	NO.				
<u>\</u>		A.C.			
	1	0.8 TR HW		1.00	0.00
	2	1.5 TR HW	1	1.80	1.80
	3	2.0 TR HW		2.40	0.00
	4	3.0 TR CASSETTE		3.60	0.00
	5	4.0 TR CASSETTE		4.80	0.00
	6 7	5.5 TR DUCTABLE		7.00	0.00
	8	8.5 TR DUCTABLE 11.0 TR DUCTABLE.	1	10.20 13.20	0.00 13.20
B]	0	LIGHTING FIXTURES	1	13.20	13.20
<u> </u>	1	1 X 40 W LED SQUARE	18	0.04	0.72
	2	12 W LED FIXTURE	17	0.015	0.72
	3	1 X 10 W MINOLTA	3	0.013	0.20
	4		6		
		1 X 20 W T/L	6	0.02	0.12
	5	LEDSTRIP. IN MTRS.		0.007	0.00
	6	CEILING FAN	3	0.06	0.18
	7	WALL FAN / PEDSTRAL FAN	6	0.06	0.36
	8	EX. FAN	6	0.07	0.42
	9	LCD	2	0.25	0.50
	10	WATER COOLER / FREEZE	1	0.3	0.30
	11	SIGN BOARD	1	1.00	1.00
	11	COFFE MACHINE.		0.50	0.00
	12	FREEZE.		0.30	0.00
C]		COMPUTER SYSTEM			
	1	UPSS - 10 KVA		8.00	0.00
	2	UPSS - 5 KVA	1	4.00	4.00
	3	UPSS - 3 KVA		2.40	0.00
	4	UPSS - 2 KVA	1	1.60	1.60
	5	UPSS - 1 KVA	_	0.80	0.00
	6	COMPUTERS	12	0.25	3.00
	7	PRINTERS - BIG	1	0.30	0.30
	8	PRINTERS - DRAFT / PASSBOOK	5	0.30	1.50
	9	ZEROX.		0.50	0.00
	10	ATM	1	1.00	1.00
	1	TOTAL LOAD REQUIRED KW		<u>'</u>	30.29
		TOTAL LOAD SANCTIONED			
		EXTRA LOAD DEMANDED KW			30.29
		DIVERSITY FACTOR 75 % KW			22.71
		DEM	AND LOAI	O IN KVA	25.24

KW = 1.71 \*V\*I\*0.85 PER PHASE AMP.

47.35

### APPROVED MAKE LIST



1	PVC rigid conduits & Accessories:	1.5 mm thick (MMS) ISI and FIA approved - Precision/Vraj/Nihir/BLP/PFI/Astral/Polycab/Anchor make. (Only white coloured pipes FRLS type to be used.).
2	L.T. Cables:	Havells / KEI / Polycab / R. R. Kable / Finolex.
3	Wires (FRLS):	Havells / KEI / Polycab / R. R. Kable / Finolex / Anchor.
4	Main Distribution Boards:	MDS Legrand (Lexic) / Hager / Havalls / Schneider (Eazy 9) / C & S Wintrip / Siemens Bitaguard / ABB.
5	ELCB/RCCB/ Miniature Circuit Breaker:	MDS Legrand (Lexic) / Hager / Havells / Schneider (Eazy 9) / C & S Wintrip / Siemens Bitaguard / ABB.
6	Switch gears:	MDS Legrand (Lexic) / Hager / Havells / Schneider (Eazy 9) / C & S Wintrip / Siemens Bitaguard / ABB.
7	Change Over Switch:	HPL Socomac/ Havells / L & T / Hager.
8	Domestic fittings:	
	a) All Switching Modular Accessories.	for all lighting switchboards / wall switchboards LEGRAND ARTEOR or equivalent & BELOW all work stations - Legrand Lyncus or equivalent. Company is same for both switchboards.
	b) Holders / ceiling roses	Anchor / ABB or equivalent approved make.
	c) Adhesive Tape	Bhor (Steel Grip) or approved .
9	10 - 30 A Polycarbonate Socket & Top:	MDS Legrand (Lexic) / Hager / Havells / Schneider (Eazy 9) / C & S Wintrip / Siemens Bitaguard / ABB.
10	Telephone Wires / Cable:	Finolex/R. R. Kable/Havells/L & T/Polycab.
11	Telephone tag block:	Krone make.
12	Cable Lugs:	Dowell/Lotus / Jainson / 3 D.
13	Cable gland Single / Double Compression:	HMI/Comet/3D.
14	Ammeter/ Voltmeter:	AE/HPL/MECO/ Enercon make.
15	Selector	L & T salzer / Kaycee / ABB make.



	switches:	
16	Indicator lamps:	LED type Teknic / Precifine / Binay / ABB.
17	Connector strips:	Wago / Elmex make.
18	Lighting Fixtures :	Wipro/Philips/GE/Crompton/Havells No orient make fixture will be allowed.
19	Exhaust fan (Light duty):	Khaitan / Crompton / Havells.
20	Ceiling Fan (5 star rated):	Crompton (High Breeze Plus) / Havells / Orient (PSPO).
21	Wall mounted Fan (5 star rated):	Crompton ( High Flow Wave) / Havells.
22	Data Cable - I/ O Unit:	D - Link / Digi Link.
	LIGHTING	/ FAN FIXTURES - SEE CAT NO. & SPECIFIED MAKE IN THE PRICE BID.
		R SHOULD USE ONLY ONE COMPANY FOR ALL SWITCHBOARDS / DBS.
	CONTRAC	TOR SHOULD SUBMIT SIGNED COPY OF MAKE LIST BEFORE WORK STARTED.

## Drawings.







