

STATE BANK OF INDIA

INVITES ONLINEE-TENDER

FOR

PROPOSED CIVIL WORK OF SBI RSETI AT PORBANDAR

FROM

THE CIVIL CONTRACTORS EMPANELLED FOR AHMEDABAD CIRCLE UNDER THE

ABOVE 50 LACS CATEGORY OF (AS PER THE LIST ENCLOSED)

THE LAST DATE OF SUBMISSION OF TECHNICAL BID: 20.08.2025 UP TO 12:00 PM NO PHYSICAL SUBMISSION OF DOCUMENTS REQUIRED EXCEPT PROCESS COMPLIANCE FORM.

PART – A: TECHNICAL BID		
TENDER SUBMITTED BY:		
NAME	:	
ADDRESS	:	
DATE	:	
Architect: HASIT KHOLIA		
407, COSMO COMPLEX,		
MAHILA COLLEGE,KALAWAD ROAD		
RAJKOT-360001.		
Phone:9825217626 (M)		

hasitkholia@gmail.com

NOTICE INVITING TENDERS

SBI invites E-tender through its Architect M/s. HASIT KHOLIA "Online e-tenders in two bid system i.e. online technical bid and online indicative price bidding" (BIDDER HAS TO SUBMIT HIS FINAL QUOTE IN TERMS OF ITEM RATE OF EACH ITEMS) from the SBI Empaneled Civil contractors of Ahmedabad Circle for Civil works at CIVIL WORK AT RSETI PORBANDAR. Please note that there will be no reverse auction and rates quoted after e-tender will be final. (THOSE CONTRACTORS CAN NOT PARTICIPATE IN THIS TENDER, WHOM DOES HAVE MORE THAN 2 PENDING WORKS IN PORBANDAR AND BHAVNAGAR/RAJKOT ADMINISTRATIVE OFFICE)

The details of tender are as under:

S.No.	Description	
1.		PROPOSED CIVIL WORKS OF CIVIL WORK AT RSETI PORBANDAR
2.	Nature of Work	CIVIL Work
3.	Time allowed for completion	120 days from date of acceptance of work order
4.	Tender Fees	NA
4(a)	Estimated Cost of Furnishing in Rs.	Rs. 73,53,610.00
5.		Rs. 75,000/-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 BHAVNAGAR.[Those registered with MSMEUDHYAM need not submitted EMD. Instead DD, Valid MSME UDHYAM certificate shall be uploaded]
6.	Initial Security Deposit	NA .
7.	Total Security Deposit	2.5% of the final bill amount
8.	Start and end date for downloading of tender documents form Bank's website	04/08/2025 to 20/08/2025 at www.sbi.co.in under <link/> <sbi in="" news="" the="">procurement news.</sbi>
9.	forsubmission of online technical bid and Online sealedPrice Bid	
10.		Regional Business Office -5, Opp Madhvani College, National Highway, Porbandar Gujarat.
11.	Date and time of opening of online Technical bid &Online Sealed Price bid at SBI address mentioned at Sr. No.10	

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12.	E-Tendering will be conducted by	
	our approved e-tendering consultant on mentioned site	1. Salina Motani:- 079-68136843, salina.motani@eptl.in
		2. Jaymeet Rathod:- 079-68136829, jaymeet.rathod@eptl.in
		3. Kanchan Kumari:- 079-68136820, <u>kanchan.k@eptl.in</u> 4. Vinayak Khambe:- 079-68136835, <u>vinayak.k@eptl.in</u>
		5. Anshul Juneja:- 079-68136840, anshul.juneja@eptl.in
		6. Nandan Valera:- 079-68136843, <u>nandan.v@eptl.in</u>
		7. Hemangi Patel:- 079-68136852, <u>hemangi@eptl.in</u>
		8. Nadeem Mansuri:- 079-68136853, <u>nadeem@eptl.in</u>
		9. Deepak Narekar:- 079-68136863, <u>deepak@eptl.in</u>
		10. Sujith Nair:- 079-68136857, sujith@eptl.in 11. Devang Patel:- 079-68136859, devang@eptl.in Primary Contact Numbers :- +91-9081000427, 9904407997 Name: Mr. Udit Yadav Email: udit@auctiontiger.net Phone: 079 6813 6815 Cell: +91 6354919566
13.	Date & time for e-reverse auction	NA
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 advance on materials / plant / machinery or mobilization advance shall be paid under any circumstances Only full and final payment shall be made after satisfactory completion of work
19.	Insurance	The contractor shall obtain all necessary insurance policies as per the governing laws applicable at the centre & shall require 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	Tenders can be downloaded from the bank's website www.sbi.co.in(link) < SBI In the news < Procurement News >. It shall be responsibility of the contractor to timely submit the technical and financial bid. SBI, in no case shall be responsible for site issues/ delay in tender submission.		
22	The contractor shall read and understand each page of the tender document thereby ensuring the number and sequence of all pages.		
23	No conditions other than mentioned in the tender will be considered, and if given they will have to be withdrawn before submission of final quote, else their bid will be rejected.		
24	The SBI reserve their rights to accept or reject any or all the tenders, either in whole or in part without assigning any reason(s) for doing so and no claim / correspondence shall be entertained in this regard.		
25	Tenders received without EMD and Process Compliance Form shall be summarily rejected and such tenders shall not be allowed to participate in the Price bid process/ rejected/ not considered.		
26	In case the date of opening of tenders is declared as a holiday, the tenders will be opened on the next working day at the same time.		
27	SBI has the right to accept / reject any / all tenders without assigning any reasons and no correspondence shall be entertained in this regard.		
28	The Bank will place order as per its requirement and quoting minimum rate for any category does not provide any guarantee for receiving order for that item by the firm who quotes lowest rates.		
29	Bank reserves right to cancel any / all tender sat any stage without assigning any reasons.		
30	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.		
31	In case the date of online tendering is declared as a holiday, the online tendering will be conducted on the next working day at the same time.		
32	SBI reserves the right to accept or reject any or all the tenders without assigning any reason whatsoever. For any clarification regarding E-Tendering procedure, System requirements etc. please contact M/s e-Procurement technologies Limited , Ahmedabad , whose address is mentioned in the NIT.		
33	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.		
34	ONLY FINAL PAYMENT WILL BE MADE		

Yours Faithfully,

AGM, State Bank of India, RBO-5, PORBANDAR

ST OF EMP	ANELLED CIVIL	. CONTRACTO	R UPTO RS.	<u>100.00 LAKH</u>

SI.	Name and Address	Contact Details
<u>No</u> .		
1	Firm- Shree Sai Construction.	9426007886
	E-402 SHIKHAR-1	9427612103
	BEHIND ABHAY NAGAR SOCIETY	shyamprasad.kumble@gmail.com
	NEAR ARUNACHAL CHAR RASTA	
	BEHIND SANGRILA	
	SUBHANPURA	
	VADODARA-390023	
2	FIRM - AKLINGJI	9426801431
	CONSTRUCTION	aklingjiconstruction@gmail.com
	203, REGENCY BUILDING	
	RAVESIA PARK, MORARJI	
	CIRCLE, GIDC-VAPI	
	396195, DISTRICT- VALSAD	
3	FIRM - N.K.ASSOCIATES	91-9824199146
	13, KAMLA PARK SOCIETY,	nk_associates@yahoo.com.
	MAIN RANDER ROAD, SURAT -	
	9.	
4	FIRM - M/S SAMVIT BUILD	97244525205
	CARE PVT. LTD.	info@samvitgroup.net
	11, NEW ALKAPURI SOCIETY,	
	OPP. GULMOR FLATS, GULBAI	
	TEKRA, AHMEDABAD - 380015	

5	FIRM - UMESH ENGINEERING WORKS GALA NO. A-10, D.M. SINGH COMPOUND, OPP. SHRADDHA TOWER, THAKUR COMPLEX,	9821098131 umeshengineering@gmail.com
	KANDIVALI(EAST), MUMBAI - 400101.	
6	M/S Payal	9426485544, 9825077428
	12/E, Shilpalay Shopping	manan.2407@gmail.com
	Centre, B/H Old Anjali Cinema,	
	Vasna, Ahmedabad - 280007	
7	Patel Construction Co.	9427007484
		patelconstructioncompany99@yahoo.com
	18/Sanket Complex, Near	
	Gagan Guest House, N.H.No.08,	
	Naroda - Ahmedabad	
8	M S SHAH & ASSOCIATES	8976001855
	111 1ST FLOOR, BALAJI ARCADE,	EMAIL - msshah_1@rediffmail.com
	S V ROAD, KANDIVALI (W),	
	MUMBAI - 400067	0705 470000 000050404 51444
9	D G CONSTRUCTIONS 2/17	9725478888,9898581314 EMAIL -
	ASHRAY APARTMENTS, NEXT TO	dgconstructions291@yahoo.com
	HP PETROL PUMP, JUDGES	
	BUNGLO RAOD, BODAKDEV,	
10	AHMEDABAD - 380054	0002020424
10	M/S BHAVESH ENTERPRISE	9892030431
	BALLAJI SHOPPING ARCADE, SHOP NO 115, 1ST FLOOR, S V	be1979@rediffmail.com
	ROAD, KANDIVALI (W),	
	MUMBAI - 400067	
11	Y M INFRA CO.	9825498095, 9825300586 EMAIL -
11	A 104 RUDRA APARTMENT,	yminfraco@yahoo.com
	NANBHAWADI, NR	yılılılı aco@yanoo.com
	TAKTESHWAR TEMPLE,	
	BHAVNAGAR	
12	ARIHANT DÉCOR,	9326877256, 9511637029
	301 WAIKIKI APARTMENT,	3320377230, 3311037023
	ANAND NAGAR, NEAR VARTAK	nirav_cshah@yahoo.co.in
	SCHOOL, VASAI(W) PALGHAR	

LIST OF EMPANELLED CIVIL CONTRACTOR UPTO RS. 200.00 LAKH

SI.	Name and Address	Contact Details
<u>No</u> .		
1	Pooran Chand Sharma & Sons	9810111055
		sds.pcss@gmail.com
	1/70 W.H.S. Kirti Nagar, New	
	Delhi - 110015	
2	M/S Tez Corporation	9426020113
	A/55, Akruti Society, Ajay	tez267@gmail.com
	Tenaments-5, Vastral Road,	
	Ahmedabad - 382418	
3	Milind Construction	079-26607346, 9898058957
	Milind Jayantilal Patel	milind.3027@gmail.com
	A/10, Madhav Appartment, B/h	
	Vasna Bus-stop, Opp. Municipal	
	Garden, Vasna, Ahmedabad -	
	380007	
4	SHAH ASSOCIATES,	02832-226067, 9825228305
	OPP LAXMI BHAVAN, NEW	shahassociates1@gmail.com
	STATION ROAD, BHUJ KUTCHH -	
	370001	

LIST OF EMPANELLED CIVIL CONTRACTOR UPTO RS. 500.00 LAKH

SI.	Name and Address	Contact Details
<u>No</u> .		
1	Firm- BHAVANI	9427262860,
	CONSTRUCTION COMPANY	9428078876.
	SHOP NO-212, 2ND FLOOR	bhavani_const@yahoo.in
	RATNADEEP COMPLEX, OPP.	
	CENTRAL SELT, WAGHAWADI	
	ROAD, BHAVNAGAR-364001	
2	MAHENDRA REALTORS &	022-28828239,28807684
	INFRASTRUCTURE PVT LTD	
	603 QUANTUM TOWER, 6TH	info@mripl.net,
	FLOOR, RAM BAUG LANE, NEXT	tenders@mripl.net
	TO SBI MALAD WEST	
	INDUSTRIAL BRANCH,	
	MALAD(W) MUMBAI - 400 064	
3	MAHENDRU CONSULTANTS,	011-25289843, 9818446200
		mahendruconsultants@gmail.com
	16 VINDHYACHAL	
	APARTMENTS, INDER ENCLAVE,	
	NEW DELHI : 110087	

FORM TENDER

To, AGM, State Bank of India, RBO-5, PORBANDAR.

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.

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MEMORANDUM

Description of work	Proposed CIVIL works of SBI CIVIL WORK AT RSETI PORBANDAR
Earnest Money	Rs. 75,000/-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 PORBANDAR.
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 fourteenth day after the date of written order or date of handing over of the site (whichever is later)to commence the work	45 days

I/We have deposited a sum of Rs. 75,000/-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 sum shall be forfeited by me/us to SBI.

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 PROPOSED CIVIL WORKS OF SBI CIVIL WORK AT RSETI PORBANDAR

(A) Business rules for E-tendering:

- 1. Only Bank's **empaneled CIVIL contractors** with SBI 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 Bank's Civil Engineer, at the address mentioned hereinbefore by the stipulated date i.e. (1) 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. <u>The e-tendering will be treated as closed only when the bidding process gets</u> 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 e-Procurement technologies Limited, Ahmedabad 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.

- 1. E-tendering shall be conducted by SBI through M/s e-Procurement technologies Limited 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
- 2. <u>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 tof this the time for the E-tendering can not be extended and SBI is not responsible for such eventualities</u>
- 3. **M/s e-Procurement technologies Limited**, shall arrange to train your nominated person(s), without any cost to you. They shall also explain you all the Rules related To the E-tendering. You are required to give your compliance on it before start of bid process.
- 4. BIDDING CURRENCY AND UNIT OF MEASUREMENT: Bidding will be conducted in Indian currency & Unit of Measurement will be displayed in Online E-tendering.

- 5. BID PRICE: The Bidder has to quote the rate as per the Tender Document provided by SBI through their appointed Architects.
- 6. 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.
- 7. Procedure of E-tendering:

i. <u>Online E-tendering:</u>

- (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 their item- wise rates for each item.
- (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.
- 8. LOG IN NAME & PASSWORD: Each Bidder is assigned a Unique User Name& Password by M/s e-Procurement technologies Limited. The Bidders are requested to change the Password after the receipt of initial Password from M/s e-Procurement technologies Limited. All bids made from the Login ID given to the bidder will be deemed to have been made by the bidder.
- 9. 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 fails 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.
- 10. At the end of the E-tendering, SBI will decide upon the winner.SBI decision on award of Contract shall be final and binding on all the Bidders.
- 11. SBI shall be at liberty to cancel the E-tendering process/tender at any time, before ordering, without assigning any reason.
- 12. SBI shall not have any liability to bidders for any interruption or delay in access to the site irrespective of the cause.

13. Other terms and conditions shall be as per your techno-commercial offers and other correspondences till date.

14. 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 e-Procurement technologies Limited 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 e-Procurement technologies Limited** is not responsible for any damages, including damages that result from, but are not limited to negligence.
 - SBI or its authorized service **M/s e-Procurement technologies Limited** 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.

<u>N.B.</u>

- All the Bidders are required to submit the Process Compliance Statement (Annexure-II) duly signed to M/s e-Procurement technologies Limited.
- 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 emailing)

To,

M/s e-Procurement technologies Limited,

Registered Office: #24, Sudha Complex, 3rd Stage, 4th Block, Ahmedabad – 380001

Email:

AGREEMENT TO THE PROCESS RELATED TERMS AND CONDITIONS FOR THE ONLINE E-TENDERING FOR PROPOSED CIVIL WORK OFSBI CIVIL WORK AT RSETI PORBANDAR

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 and M/s e-Procurement technologies Limited, Ahmedabad 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 Company / 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 the datebetween
	SBI,on behalf of SBI,having its office at Mumbai herein after called "the Service Provider" of the One Part and
	WHEREAS the SBI is desirous of
	and has caused drawings and specifications describing the work to be done to be prepared by M/s. HASIT KHOLIA , its Architects.
	ANDWHERE AS 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 for th here in 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.)
1)	NOW IT IS HEREBY AGREED AS FOLLOWS: In consideration of the said Contract Amount to be paid at the times and in the manner set forth in the said Conditions, the Contractor shall upon and subject to the said Conditions execute and complete the work shown upon the said Drawings and described in the said Specifications and the priced Schedule of Quantities.
2)	The Employer shall pay to the Contractor the said Contract Amount, or such other sum as shall become payable, at the times and in the manner specified in the said Conditions.
	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.
3)	The said Conditions and Appendix thereto shall be read and construed as forming part of 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.
L	The Plans Agreements and Documents mentioned herein shall form the basis of this Contract

4)

- 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.
- The Contractor shall afforde very reasonable facility for the carrying out of all works relating to CIVIL works, installation of lifts, Telephone, electrical installations, fittings air-conditioning and other ancillary works in the manner laid down in the said Conditions, and shall make good any damages done to walls, floors, etc. after the completion of his work.
- 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.
- 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 **RSETI Porbandar**.
- 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.

SIGNATURE CLAUSE

SIGNED AND DELIVERED by the

_________By the (Employer)

hand of Shri _______

(Name and Designation) In the presence of:

1) Shri /Smt.______

Address _______

Address _______

(Witness)		
SIGNED AND DELIVERED by the		
(Contractor)	Bythe	(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

Technical bid followed by price bid invited by M/s. HASIT KHOLIA, RAJKOT or and behalf of SBI for Proposed CIVIL works of SBI CIVIL WORK AT RSETI PORBANDAR.

- 1.1 Site and its location as mentioned in the NIT SI. No. 32
- 2.0 Tender Documents
- 2.1 The work has to be carried out strictly according to the conditions stipulated in the tender consisting of the following documents and the most workmen like manner.

Instructions to tenderers

General conditions of Contract

Special conditions of Contract

Additional Specifications

Drawings

Priced bid A

- 2.2 The above documents shall be taken as complementary and mutually explanatory of one another but in case of ambiguities or discrepancies, shall take precedence in the order given below;
 - a) Price Bid
 - b) Additional Specifications
 - c) Technical specifications
 - d) Drawings
 - e) Special conditions of contract
 - f) General conditions of contract
 - g) Instructions to Tenderers
- 2.3 Complete set of tender documents including relative drawings can be downloaded from the website www.sbi.co.in
- **2.4** The tender documents are not transferable.
- 3.0 Site Visit:
- 3.1 The tenderer must obtain himself on his own responsibility and his own expenses all information and data that may be required for the purpose of filling this tender document and enter into a contract for the satisfactory performance of the work. The tenderer is requested satisfy himself regarding the availability of water, power, transport and communication facilities, the character quality and quantity of

the materials, labour, the law and order situation, climatic conditions local authorities requirement, traffic regulations etc; The tenderer will be fully responsible for considering the financial effect of any or all the factors while submitting his tender.

4.0 Earnest Money:

- 4.1 The tenderers are requested to submit the Earnest Money of Rs. 75,000/-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 **PORBANDAR**.
- 4.2 EMD in any other form other than as specified above will not be accepted. Tender not accompanied by the EMD in accordance with clause 4.1 above shall be rejected
- 4.3 No interest will be paid on the EMD.

5.0 Initial Security Deposit:

5.1 Security Deposit:

Total security deposit shall be 3% of contract value including EMD. 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.

5.2Signing of contract Documents:

The contractor who accepts 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 <u>Liquidated Damages:</u>

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:

The bidder should be signed each page of the estimated BOQ by the authorized person and cutting or over writing shall be duly attested by him. Each page shall be totaled and the grand total shall be given 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 each page of the BOQ shall be signed by the authorized person and cutting or over writing shall be duly attested by him. Each page shall be totaled and the grand total shall be given.

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 CIVIL 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 immediatelyon 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 be 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) <u>BILLING PROCESS</u>:
 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 sheets in soft copy (in Excel format).
- j) 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 SBI(client) and the contractor, together with the documents referred there in including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Architects / Bank and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

In the contract the following expressions shall, unless the context otherwise requires, have the meaning hereby respectively assigned to them.

- 1.0.1 'SBI shall mean SBI having its Circle Office at Third Floor, SBI, LHO, Bhadra, Laldarwaja, Ahmedabad-380001 and includes the client's representatives, successors and assigns.
- 1.0.2 'Architects/ Consultants' shall mean **M/s HASIT KHOLIA**, Architects & Interior Designers, Rajkot.
- 1.0.3 'Site Engineer' shall mean an Engineer appointed by the SBI at site as their representative for day-to-day supervision of work and to give instructions to the contractors.
- 1.0.4 'The Contractor' shall mean the individual or firm or company whether incorporation, undertaking the works and shall include legal personal representative of individual or the composing the firm or company and the permitted assignees of individual or firms of company.

The expression 'works' or 'work' shall mean the permanent or temporary work description in the "Scope of work" and/or to be executed in accordance with the contract includes materials, apparatus, equipment, temporary supports, fittings and things of kinds to be provided, the obligations of the contractor hereunder and work to be done by the contractor under the contract.

- 1.0.5 'Engineer' shall mean the representative of the Architect/Consultant.
- 1.0.6 'Drawings' shall mean the drawings prepared by the Architects and issued by the Engineer and refer red to in the specifications and any modifications of such drawings as may be issued by the Engineer from time to time Contract value shall mean value of the entire work as stipulated in the letter of acceptance of tender subject such additions there to or deductions there from as may be made under the provide herein after contained.
- 1.0.7 Specifications' shall mean the specifications referred to in the tender and modifications thereof as may time to time be furnished or approved by the Architect/Consultant.
- 1.0.8 "Month" means calendar month.
- 1.0.9 "Week" means seven consecutive days.
- 1.0.10 "Day" means a calendar day beginning and ending at 00 Hrs. and 24 Hrs. respectively.
- **1.1.11** "SBI Engineer" shall mean The Civil/Electrical Engineer in-charge of the Project, as nominated by the SBI, CIVIL WORK AT RSETI PORBANDAR.

- 1.1.12 The following shall constitute the Joint Project Committee (herein under referred to as JPC) for assessing and reviewing the progress of the work on the project and to issue instructions or directions from time to time for being observed and followed by the Architects Site Engineer / PMC and other consultants / contractors engaged in the execution of the project.
- i) Assist General Manager (P &E)
- ii) SBI Engineer (CIVIL and Electrical) in-charge of the Project.
- iii) Concerned partner of the Architects and their Resident Architect Member.

CLAUSE

1.0 Total SecurityDeposit:.

Total security deposit shall be 3% of contract value. Deduction from each running bill account (if permitted) will be @ 10% till Total Security Deposit (TSD) reaches to 5% of contract value. The 50% of the Total Security Deposit shall be paid to the contractor 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.

1.1 Earnest Money Deposit-

Rs. 75,000/- 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 payable at PORBANDAR. The EMD/ any other amount with the Bank shall stand absolutely forfeited if the tenderer revokes his tender after acceptance of rate at any time the period when he is required to keep his tender open acceptance by the SBI or after it is accepted by the SBI, the contractor fails to enter into a formal agreement or fails to commence the work within the stipulated time.

1.2 Initial Security Deposit (ISD): Not Applicable.

1.3 Retention Money:

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 plus Retention Money shall both together not exceeding3% of the contract value including EMD. The 50% of the total security deposit shall be refunded to the contractor without any interest on issue of Virtual Completion certificate by the Architect/consultant. The balance 50% of the total security deposit shall be refunded to the contractors without interest within fifteen days after the end of defects liability period provided the contractor has satisfactorily attended to all defects in accordance with the conditions of contract including site clearance.

2.0 Language:

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

3.0 Errors, omissions and discrepancies:

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

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

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

4.0 Scope of Work:

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

5.0 i) Letter of Acceptance:

Within the validity period of the tender the SBI shall issue a letter of acceptance directly or through the architect by registered post or otherwise depositing at the of the contractor as given in the tender to enter into a Contract for the execution of the work as per the terms of the tender. The letter of acceptance shall constitute a bind contract between the 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 there of shall sign an agreement in a non-judicial stamp paper of appropriate value.

6.0 Ownership of drawings:

All drawings, specifications and copies thereof furnished by the 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 architects / consultants shall furnish with reasonable proper additional instructions by means of drawings or otherwise necessary for the execution of the work. All such drawings and instructions shall be consistent with contract documents, true developments thereof and reasonably inferable there.

The work shall be executed in conformity there with and the contractor prepare a detailed programed 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 the architect/consultant

7.1 Copies of agreement:

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

8.0 Liquidated damages:

If the contractor fails to maintain the required progress in terms of clause 6.0 of GOC or to complete the work and clear the site including vacating their office on or before the contracted or extended date or completion, without justification in support of the cause of delay, he may be called upon without prejudice to

any other right of remedy available under the law to the SBI on account of such breach to pay a liquidated damages at the rate of 0.50% of the contract value which subject to a maximum of 5% of the contract value.

9.0 Materials, Appliances and Employees:

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

10.0 Permits, Laws and Regulations:

Permits and licenses required for the execution of the work shall be obtained by the contractor at his own expenses. The contractor shall give notices and comply with the regulations, laws, and ordinances rules, applicable to the contract. If the contractor observes any discrepancy between the drawings and specifications, he shall promptly notify the 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 the reform and shall indemnify the SBI any legal actions arising there from.

11.0 Setting out Work:

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

12.0 Protection of works and property:

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

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

13.0 Inspection 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 lying 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.

14.0 Assignment and subletting:

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

15.0 Quality of materials, workmanship &Test:

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

ii) Samples:

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

iii) Cost of tests:

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

iv) Costs of tests not provided for:

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

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

16.0 Obtaining information related to execution of work:

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

17.0 Contractor's superintendence:

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

18.0 Quantities:

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

19.0 Works to be measured:

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

20.0 Variations:

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

21.0 Valuation of Variations:

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

- (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 price herein.
- (ii) Rates for all items, wherever possible should be derived out of the rates given in the priced BOQ.

The net prices of the original tender shall determine the value of the items omitted, provided if omissions do not vary the conditions under which any remaining items of Works are carried out, otherwise the prices for the same shall be valued under sub- Clause 'c' hereunder.

Where the extra works are not of similar character and/or executed under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items or works are carried out, then the contractor shall within 7 days of the receipt of the letter of acceptance inform the Architect/ consultant of the rate which he intends to charge for such items of work, duly supported by analysis of the rate or rates claimed and the Architect/consultant shall fix such rate or prices as in the circumstances in his opinion are reasonable and proper, based on the market rate.

Where extra work cannot be properly measured or valued the contractor shall be allowed day work prices at the net rates stated in the tender, of the BOQ or, if not, so stated then in accordance with the local day work rates and wages for the district; provided that in either case, vouchers specifying the daily time (and if required by the Architect/Consultant) the workman's name and materials employed be delivered for verifications to the Architect /consultant at or before the end of the week following that in which the work has been executed.

It is further clarified that for all such authorized extra items where rates cannot be derived from the tender, the Contractor shall submit rates duly supported by rate analysis worked on the 'market rate basis for material, labour hire / running charges of equipment and wastages etc. plus 15% towards establishment charges, contractor's overheads and profit. Such items shall, not be eligible for escalation.

22.0 Final measurement:

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

23.0 Virtual Completion Certificate (VCC):

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

Clear the site of all scaffolding, wiring, pipes, surplus materials, contractor's labour equipment and machinery.

Demolish, dismantle and remove the contractor's site office, temporary works, structure including labour sheds/camps and constructions and other items and things whatsoever brought upon or erected at the site or any land allotted to the contractor by the SBI not incorporated in the permanent works.

Remove all rubbish, debris etc. from the site and the land allotted to the contractor by the SBI and shall clear, level and dress, compact the site as required by the SBI

Shall put the SBI in undisputed custody and possession of the site and all land allot by the SBI

Shall hand over the work in a peaceful manner to the SBI

All defects / imperfections have been attended and rectified as pointed out by the Architects to the full satisfaction of SBI

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

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

24.0 Work by other agencies:

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

25.0 Insurance of works:

Without limiting his obligations and responsibilities under the contract the contractor shall insure in the joint names of the SBland the contractor against all loss of damages from whatever cause arising other than the excepted risks, for which he is responsible under the terms of contract and in such a manner that the SBl and contractor are covered for the period stipulated I clause of GCC and are also covered during the period of maintenance for loss or damage arising from a cause, occurring prior to the commencement of the period of maintenance and for any loss or damage occasioned by the contractor in the course of any operations carried out by him for the purpose of complying with his obligations under clause.

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.

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.

Such insurance shall be affected 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 if insurance and the receipts for payment of the current premiums.

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

27.0 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 sub-clause 26.0 of this clause.

28.0 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 to 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.

29.0 Third Party Insurance:

Before commencing the execution of the work the contractor but without limiting his obligations and responsibilities under clause 25.0 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 25.0 thereof.

30.0 Minimum amount of Third Party Insurance:

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

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

31.0 Accident or Injury to workman:

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

32.0 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 persons are employed by him on the works and shall, when required, produce to the architect / consultant such policy of insurance and receipt for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor the contractor's obligation to insured as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that 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.

33.0 Remedy on contractor's failure to insure:

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

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

34.0 Commencement of Works:

The date of commencement of the work will be reckoned from the date of award of letter by the SBI

35.0 Time for completion:

Time is essence of the contract and shall be strictly observed by the contractor. The entire work shall be completed within the stipulated period 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.

36.0 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 of contract. If the contractor needs an extension of time for the completion of work or if the completion of work is likely to be delayed for any reasons beyond the due date of completion as stipulated in the contract, the contractor shall apply to the 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 reason in detail and his justification if an', 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 time which will qualify for levy of liquidated damages. For the balance period in excess of original stipulated period and duly sanctioned extension of time by the provision of liquidated damages as stated under clause 10.0 shall become applicable. Further the contract shall remain in force even for the period beyond the due date of completion irrespective whether the extension is granted or not.

37.0 Rate of progress:

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

38.0 Work during nights and holidays:

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

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

39.0 No compensation or restrictions of work:

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

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

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

40.0 Suspension of work:

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

- a) On account any default on the part of the contractor, or
- b) For proper execution of the works or part thereof for reasons other than the default the contractor, or
- c) For safety of the works or part thereof.

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

i)If the suspension is ordered for reasons (b) and (c) in sub-para (i) above:

The contractor shall be entitled to an extension of time equal to the period of every such suspension. No compensation whatsoever shall be paid on this account.

41.0 Action when the whole security deposit is forfeited:

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

To rescind the contract (of which rescission notice in writing to the contractor by - Architect / consultant shall be conclusive evidence) and in which case the security, deposit of the contractor shall be forfeited and be absolutely at the disposal of SBI.

To employ labour paid by the SBI and to supply materials to carry out the work, or part of the work, debiting the contractor with the cost of the labour and materials cost of such labour and materials as worked out by the Architect / consultant shall final and conclusive against the contractor) and crediting him with the value of the work done, in all respects in the same manner and at the same manner and at the same rates as if it had been carried out by the contractor under the terms of this contract certificate of architect /consultant as to the value of work done shall be final conclusive against the contractor.

To measure up the work of the contractor, and to take such part thereof as shall unexecuted, out of his hands, and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor, if the whole work had been executed by him (The amount of which excess the certificates in writing of the Architects / consultant shall

final and conclusive) shall be borne by original contractor and may be deducted any money due to him by 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 to compensation for any loss sustained by him by reasons of his having purchased or procured any material or entered into any engagements or make any advances on account of, or with a view to the execution of the work or the performance of the contract and incase the contract shall be rescind under the provision aforesaid, the contractor shall not be entitled to recover or to be paid any sum or any work thereto for actually performed under this contract, unless, and until the Architect / consultant will have certified in writing the performance of such work and the value payable in respect thereof, and he shall only been titled to be paid the value so certified.

42.0 Owner's right to terminate the contract:

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

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

Or shall assign or sublet this contract without the consent in writing of the 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:

has abandoned the contract; or

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

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 andrejected by the Architect/ consultant under these conditions; or has neglected or failed persistently to observe and perform all or any of the acts matters or things by this contract to be observed and performed by the contactor for seven days after written notice shall have been given to the contractor to observe or perform the same or has to the detriment of good workmanship or in defiance of the SBI or Architect's / 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 powers of 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 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, took scaffoldings, materials, sheds, machineries lying upon the premises or on the adjoining lands or roads use the same by means of their own employees or workmen in carrying on and completing the work or by engaging any other contractors or persons to the work and the contractor shall not in any was interrupt or do any act, matter or thing to prevent or hinder such other contractor or other persons employed for complement and finishing or using the materials and plant for the works.

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

43.0 Certificate of payment:

The contractor shall be entitled under the certificates to be issued by the Architect / consultant to the contractor within 10 working days from the date of certificate to payment from SBI From time to time SBI shall recover the statutory recovering other dues including the retention amount from the certificate of payment. Provided always that the issue of any certificate by the Architect / consultant during progress of works or completion shall not have effect as certificate of satisfaction relieve the contractor from his liability under clause.

The Architect / consultant shall have power to withhold the certificate if the work or in part thereof is not carried out to their satisfaction. The Architect/consultant may by any certificate make any corrections required previous certificate. The SBI shall modify the certificate of payment as issued by the architect/consultant from time to time while making the payment. The contractor shall submit interim bills only after taking actual measurements and properly recorded in the Measurement books. The Contractor shall not submit interim bills.

The final bill may be submitted by contractor within a period of one month from the date of virtual completion and Architect / consultant shall issue the certificate of payment within a period of two months. The 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.

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

44.0

A. Settlement of Disputes and Arbitration:

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

If the contractor considers that he is entitled to any extra payment or compensation in respect of the works over and above the amounts admitted as payable by the Architect or in case the contractor wants to

dispute the validity of any deductions or recoveries made or proposed to be made from the contractor raise any dispute, the contractor shall forthwith give notice in writing of his claim, or dispute to **The AGM**, **SBI,RBO-5**, **PORBANDAR** and endorse a copy of the same to the Architect, within 30 days from the date of disallowance thereof or the date of deduction or recovery. The said notice shall give full particulars of the claim, grounds on which it is based and detailed calculations of the amount claimed and the contractor shall not be entitled to raise any claim nor shall the SBI 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 AGM**, **SBI**, **RBO-5**, **PORBANDAR** 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 AGM**, **SBI**, **RBO-5**, **PORBANDAR** in writing in the manner and within the time aforesaid.

B. Settlement of Disputes and Arbitration:

The AGM, SBI, RBO-5, PORBANDAR shall give his decision in writing on the claims notified by the receipt of the contractor may within 30 days of the receipt of the decision of the Submit his claims to the conciliating authority namely the CDO,SBI, LHO, Ahmedabad for conciliation along with all details and copies of correspondence exchanged between him and the SBI.

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 **CGM** of the SBI for appointment of an arbitrator to adjudicate the notified claims falling which the claims of the contractor shall be deemed to have been considered absolutely barred and waived.

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 SBI shall be referred for adjudication through arbitration by the Sole Arbitrator appointed by the **CGM** and who will be of Deputy General Manager rank. It will also be no objection to any such appointment that the Arbitrator so appointed is aSBI, Officer and that he had to deal with the matters to which the Contract relates in the course of his duties as SBI, 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 **CGM** of the SBI Such person shall be entitled to proceed with the reference from the stage at which it was let by his predecessor.

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

It is also a term of this contract that no person other than a person appointed by such Chief General Manager as aforesaid should act as arbitrator. The conciliation and arbitration shall be conducted in accordance with the provisions of the Arbitration & Conciliation Act 1996 or any or any accordance modification or reenactment thereof and the rules made there under.

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

It is also a term of the contract that the Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any of the arbitrators shall, if required to be paid before the award is made and

published, be paid half and half by each of the parties. The Cost of the reference and of the award (including the fees, if any of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and din what manner, such costs or any part thereof, shall be paid and fix or settle the amount of costs to be so paid.

45.0 Water supply:

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

- i) That the water used by the contractor shall be fit for construction purposes to the satisfaction of the Architect /consultant's.
- ii) The contractor shall make alternative arrangements for the supply of water if the arrangement made by the contractor for procurement of water in the opinion of the Architect / consultant is unsatisfactory.
- iii) In case contractor is permitted to use SBI source of water i.e. Municipal connection, Bore well (existing or new) etc., the SBI will recover as per clause **51.0** of this document form the final bill of contractor.

The contractor shall construct temporary well / tube well in SBI Pvt. Ltd 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 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.

46.0 Power supply:

The contractor shall make his own arrangements for power and supply / distribution system for driving plant or machinery for the work and for lighting purpose at his own cost, the cost of running and maintenance of the plants are to be included in his tender prices, He shall pay all fees and charges required, by the power supply and include the same in his tendered rates and hold the owner free from all such costs. He has to obtain necessary approval from the appropriate authorities, if required.

In case contractor is permitted to use Bank's source of power supply provided at one point, the SBI will recover as per clause **51.0**of this document from the final bill of contractor.

47.0 Treasure trove etc.

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

48.0 Method of measurement:

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

49.0 Maintenance of registers:

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

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

50.0 Force Majeure:

Neither contractor nor SBI shall be considered in default in performance of the obligations if such performance is prevented or delayed by events such as but not war, hostilities revolution, riots, civil commotion, strikes, lockout, conflagrations, epidemics, accidents, fire, storms, floods, droughts, earthquakes or ordinances or any act of or for any other cause beyond the reasonable control of the party affected or prevents or delayed. However, a notice is required to be given within 30 days from the happening of the event with complete details, to the other party to the contract, if it is not possible to serve a notice, within the shortest possible period without delay.

As soon as the cause of force majeure has been removed the party whose ability perform its obligations has been affected, shall notify the other of such cessation and the actual delay incurred in such affected activity adducing necessary evidence in support thereof.

From the date of occurrence of a case off or force majeure obligations of the party affected.

51.0 Water power and other facilities:

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

The rate quoted in the tender shall include the expenses for obtaining and maintaining power connections and shall pay for the consumption charges

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 connection for Construction purposes shall be borne by the contactor and charges payable for permanent connections, if any, shall be initially paid by the contactor and the SBI will reimburse the amount on production of receipts.

The SBI as well as the Architect / consultant shall give all possible assistance to the Contractor's to obtain the requisite Permission from the various authorities, but the responsibility for obtaining the same in time shall be of the contractor.

In case contractor is permitted to use Bank's source of water and power supply provided at one point, the SBI will recover @ 0.50% of final bill amount for water and electricity (Combined) from the bill of contractor.

52.0 Facilities for contractor's employees:

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

53.0 Lighting of works:

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

54.0 Firefighting arrangements:

The contractor shall provide suitable arrangement for firefighting at his own cost. This purpose he shall provide requisite number of fire extinguishers and adequate number of buckets, some of which are to be always kept filled with sand and some with water these equipment shall be provided at suitable prominent and easily accessible place and shall be properly maintained.

Any deficiency in the fire safety or unsafe conditions shall be corrected by the contractor at his own cost and, to the approval of the relevant authorities. The contractor makes the following arrangements at his own cost but not limited the following:

- a) Proper handling, storage and disposal of combustible materials and waste.
- b) Work operations which can create fire hazards.
- c) Access for fire-fighting equipment.
- d) Type, number and location of containers for the removal of surplus materials and rubbish.
- e) Type, size, number and location of fire extinguishers or other tire fighting equipment.
- f) General housekeeping.

55.0 Site order book:

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

56.0 Temporary fencing/barricading:

The contractor shall provide and maintain a suitable temporary fencing/barricading and gates at his cost to adequately enclose all boundaries of the site for the protection of the public and for the proper execution and security of the work and in accordance with the requirement of the architect/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.

57.0 Site meetings:

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

58.0 Disposal of refuse:

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

59.0 Contractor to verify site measurement:

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

60.0 Displaying the name of the work:

The contractor shall put up a name board of suitable size as directed by the architect/ consultant indicating there in 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.

61.0 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 some changes have been made. From the approved drawings as instructed by the SBI / Architect / Consultant. The contractor will make the changes made on these copies and return these copies to the architect / Consultant for their approval. In cases revision is required or the corrections are not properly marked the architect/Consultant will point out the discrepancies to the contractor. The contractor will have to incorporated these corrections and / or attend to discrepancies either on copies as directed by the architect / consultant and resubmit to him for approval. The architect / consultant will return one copy duly approved by him.

For the drawings prepared by the contractor:

The contractor will modify the drawing prepared by him wherever the changes made by the SBI / 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.

62.0 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 treatment, aluminum doors and windows and any other item as specified in the tender. The architect/consultant may approve any make / agency within the approved list as given in the tender after inspection of the sample/mockup.

63.0 Procurement of materials:

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

64.0 Excise duty, taxes, levies etc.;

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

65.0 Acceptance of tender:

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

66.0 Photographs:

The Contractor shall at his own expense supply to the Architects with duplicate hard copies of large photographs not less than 25 cm. x 20 cm. (10" x 8") of the works, taken from two approved portions of each building, at intervals of not more than one months during the progress of the work or at every important stage of construction.

In addition to above, the contractor shall be bound to submit adequate no. of site photographs along with each Running Bill for the project clearing showing major progress of work measured and claimed therein failing which the Architect/ SBI may consider returning the Bill to the contractor and no claim for delay on this account will be entertained.

67.0 Safety Codes:

- 1. First aid appliances including adequate supply of sterilized dressing and cotton wool shall be kept in a readily accessible place.
- 2. An injured person shall be taken to a public hospital without loss of time, in cases when the injury necessitates hospitalization.
- 3. Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from the ground.
- 4. No portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30 cm. (clear) and the distance between two adjacent running's shall not be more than 30 cm. When a ladder is used an extra labour shall be engaged for holding ladder.
- 5. The excavated material shall not be placed within 1.5 meters of the edge of the trench half of the depth of trench whichever is more. All trenches and excavations shall be provided with necessary fencing and lighting.
- 6. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one meter.
- 7. No floor, roof or other part of the structure shall be so overloaded with debris or material as to render it unsafe.

- 8. Workers employed on mixing and handling material such as asphalt, cement, mortar, concrete and lime shall be provided with protective footwear and rubber hand gloves.
- 9. Those engaged in welding works shall be provided with welders' protective eye shield and gloves.
- 10. (i) No paint containing lead or lead products shall be used except in the form of paste readymade paint. (ii)Suitable face masks should be supplied for use by the workers when the paint applied in the form of spray or surface having lead paint dry rubbed and scrapped.
- 11. Overalls shall be supplied by the contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during cessation of work.
- 12. Hoisting machines and tackle used in the works including their attachments anchor and supports shall be in perfect condition.
- 13. The ropes used in hoisting or lowering material or as a means of suspension shall be durable quality and adequate strength and free form defects.

APPENDIX HEREIN BEFORE REFERRED TO

Name of the organization offering Contract	: AGM, State Bank of India, RBO-5, PORBANDAR.			
2) Consultants	: Ar. HASIT KHOLIA			
3) Site Address 4) Scope of Work	:SBI, RSETI PORBANDAR : Proposed CIVIL Work of SBI CIVIL WORK AT RSETI PORBANDAR,			
5)Name of the Contractor	:			
6) Address of the Contractor	:			
7) Period of Completion	: within the stipulated period from the date of Issue of work order.			
8) Earnest Money Deposit	:Rs. 75,000/-by means of Demand Draft / Pay Order (Validfor a period of 90 Days from the last date of submission of the tender) from any scheduled Nationalized Bank drawn in favor of SBI payable at PORBANDAR.			
9) Retention Money	: As per clause no. 1.4 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.)	: Only full and final payment will be made after satisfactory			
completion of work	and satisfactory			

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.
15) Period of Final Measurement	:	2 Months from the date of Virtual Completion Certificate (VCC) issued by the project Architect.
16) Initial Security Deposit	:	NIL
17) Total Security Deposit	:	3% of the final bill amount or contract value
18) Refund of Total Security Deposit	:	50% of the Security Deposit Shall be refunded to the Contractor on completion of the work/along with the final bill andbalancerefunded only after the Defect LiabilityPeriod is over.
19) Period for Honoring Certificate	:	One Month for RA Bills
20) The final bill will be submitted by the Contractor and the Bill shall be certified within 3 Months from submitted with all pre-requisite documents/test report	the date	of receipt of final bill provided the bills are
	;	Signature of Tenderer.
		Date:

LETTER OF DECLARATION

To, AGM, State Bank of India, RBO -5, PORBANDAR.

Dear Sir,

PROPOSED CIVIL WORKS FOR SBI RSETI AT PORBANDAR

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

MEMORANDUM

(a)	Description of work	Proposed CIVIL works of SBI CIVIL WORK AT RSETI PORBANDAR
(b)	Earnest Money	Rs. 75,000/- 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, payable at PORBANDAR.
(c)	Time allowed for completion of work from the date of issue of work order.	45 days from the date of commencement as per tender

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

I/we have deposited Demand Draft / Banker's Cheque for a sum of Rs. 75,000/-as Earnestmoney 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.

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/buildings proposed (i.e. Institute Building, Staff Qtrs. And Director's Bungalow/Interior work) 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/building/buildings from the

scope of work of this tender at any stage during the contract period. Further, we also undertake to execute the work entrusted to us in phases 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	
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 Agreement

SN	Item Descriptio	Unit	Rate (Rs.)	As per	Tender	Up to F	Previous ill	Up to I (Gross		Preser	nt Bill	Remarks
	n			Qty	Amoun t (Rs.)	Qty	Amount (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.	
2.	If ad-hoc payment is made, it should be mentioned specifically.	Net Value since previous bill

CERTIFICATE

	of which the above entries for the R y on and are rec	•
Signature and date of Contractor	Signature and date of Architects Representative (Seal)	Signature and date of Site Engineer

The work recorded in the above-mentioned measurements has been done at the site satisfactorily as per tender drawings, conditions and specifications.

Architect	Signature and date of Site Engineer

MEMORANDUM FOR PAYMENT

R/A BILL NO.

R/A BILL NO) <u>.</u>	
1.	Total value of work done since previous bill (A)	Rs
2.	Total amount of secured advance due since Previous Bill (B)	Rs
3.	Total amount due since Previous Bill (C) (A+B)	Rs
4.	PVA on account of declaration in price of Steel, Cement and other materials and labour as detailed in separate statements enclosed.	Rs
5.	Total amount due to the Contractor	Rs
	OBJECTIONS:	
i)	Secured Advance paid in the previous R/A	Rs
ii)	Retention money on value of works as per accepted tenders 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.	Rs

The bill amount to Rs (both figures and words) checking of the measurements of work as required and is recommendated as the comment of the measurements of work as required and is recommendated.	
Date:	Signature of Architect with Seal
The bill amount to Rscertified by Consultants has checking of measurements of works as required and is recommendated in the consultants has checking of measurements of works as required and is recommendated.	

Date	
I JAIH	

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

This figures given in the Memorandum for payable has been verified and bill passed for payn	nent
Date:	
 Signature of the AGM	

TECHNICAL SPECIFICATION

SPECIFICATION FOR WORKMANSHIP

EXCAVATION:

Trenches and pit for excavation will be excavated to the length an breadth shown on the plans. The depth will vary according to available soil strata. This will be decided by the Architect at site.

If the excavation is carried out beyond the depth decided by the architect, the same shall be filled with non-cohesive soil at contractor's cost.

Shoring an strutting shall be restored to in case of soil caving in or where the foundations of adjoining buildings are likely to be exposed and affected.

Dewatering pumps of sufficient sizes will be used to keep the trenches and pit dry for concreting and masonry work.

EARTH FILLING:

Good alluvial soil of non-cohesive nature or sand will be used for earth filling. Maximum layer of each earth fill will be 20 cm and the same shall be properly watered at its optimum consolidation limit and compacted with power rammer or rammed with a 10 kg iron rammer. Earth filling will confirm to he level shown on the drawing or directed by the architect at site.

FOUNDATION CONCRETE:

Foundation concrete will be either 1:4:8 cement concrete or 1:2:4 lime concrete. The same shall be laid to the desired level and well compacted with power rammer or vibrated.

PLAIN AND REINFORCED CONCRETE:

The workmanship will confirm to the specifications mentioned in IS 456.

BRICK MASONRY:

Brick masonry will be carried out as per the details shown on the plan in the mortar mix specified in the schedule of quantities. Unless otherwise specified, the brickwork will be English bond. Vertical joints will be staggered at half brick length and alternate course joints will be in plumb. Brickwork shall be in true line, level & plumb. It will be cured for seven days. Maximum brick courses in a day's work will not exceed ten unless specifically allowed by the clerk – of – work. The joints will be properly raked to a depth of 1 cm.

Brick partition wall will be erected in cement mortar 1:4 with cement concrete bends in 1:2:4. The workmanship will confirm to IS 456.

WOOD WORK:

All timber shall be as per specification wood work shall be of best selected of respective quality as specified for individual item. The timber shall be properly planned, wrought in a workman like manner. The woodwork shall be according to the detail drawings. All joinery shall be enclosing fitting and tight. No plugging, patching or wedging will be allowed. The joints will be coated with waterproof synthetic adhesive (such as "Fevicol" SR grade). Joints will be pinned with bamboo pins. The wooden frames before erection shall be coated with water proof anti-termite preservative.

No painting will be done unless and until, the woodwork has been examined and approved by the architect.

Aluminium Widows, Ventiltors AND SAFETY grills

Aluminum sections shall be Jindal or equivalent make, of approved size and shape as specified in

Schedule of Quantities / Drawings. Sections shall be color anodized / powder coated as per approved sample. Glazing shall be 5mm.th. Clear transparent float glass of approved make. The sliding shutters shall be provided with necessary handles, locks etc.

For operable louvers, Premani or equivalent operable louvers color / anodized / powder coated aluminum section shall be fixed inside rectangular hollow pipe sections of Jindal or equivalent make. Aluminum Safety grills shall be prepared from color anodized / powder coated rectangular, hollow, aluminum pipe for frame. with a hollow round aluminum pipe of 15mm.dia.passing through and through vertical members of rectangular frame sections at not more than 150mm. C/C. 12 mm. dia. M.S. safety bar shall be provided inside each aluminum round pipe.

STEEL DOORS, WINDOWS, VENTILATORS

Steel used in the manufacture of rolled steel sections shall conform the IS: 226-1955 and IS: 1977-1962 in all respects.

Steel doorframes shall be either of EZ –7 or rolled steel sections are mentioned in schedule of quantities. They shall be fabricated and as per welded details given by the Architect. Fixing screws and lugs shall be used for fixing to RCC members, whereas 10 cm, long holdfast shall be used for fixing to masonry walls.

Steel windows and ventilators will be manufactured as per the Architect's drawing by an approved agency from standard window section heavy range. They will be preferably automatic butt welded. Pegstays and handles will be of brass and powder coated. Glass will be fixed with aluminium beading.

PLAIN AND COLOURED CEMENT TILES, MARBLE, MOSAIC AND TERRAZZO TILES FLOORING

The tiles shall confirm to IS 1237 having the colour approved by the Architect and rate shall include provision of border tiles and tiles of different colours in pattern, if directed. The mosaic topping of lighter shade tiles shall be made of white cement with an approved shade pigment, and neutral shade tiles shall be of Grey cement with an approved shade pigment. The type of tiles shall be as specified in respective items.

The sub-grade shall be thoroughly wetted after cleaning of all dirt, laitance and loose material. A bed of lime mortar consisting of one part of lime and two parts of sand shall be laid and properly leveled to an average thickness of 25 mm and the surface shall be kept slightly rough to form a satisfactory key for tiles. Neat cement paste of honey like consistency shall be spread over mortar bed, covering about 20 tiles at a time. Tiles shall be soaked in water for 15 minutes and allowed to dry for the same duration. Tiles shall then be fixed with a thin coat of cement paste on back of each tile and then each tile being gently tapped with a wooden mallet till it is properly bedded in level with adjoining tiles. Joints shall be fine and as imperceptible as possible.

After tiles have been laid in a room or a day's fixing work is completed, surplus cement grout that may have come out of joints may be wiped off gently and joints cleaned. A thin slurry of coloured cement matching to the colour of tiles shall be spread over it and rubbed so as to seal even a thinnest joint between the tiles and make it impervious and the flooring cured for 7 days. The tiles shall be polished and finished according to IS 1443.

VITRIFIED / CERAMIC / GLAZED TILES IN FLOORING & DADO

Glazed/Ceramic tiles from an approved manufacturer conforming to IS 777, IS13573, IS15622, shall be used. Vitrified tiles from an approved manufacturer conforming to international standards ISO13006, EN176 (group B1a), shall be used. They shall be of specified size and thickness. All special, viz. coves, internal and external angles, corners, thickness and mortar of stipulated proportion shall be laid as described in Marble mosaic flooring. Tiles shall be washed clean and set in cement grout, and each tile being gently tapped with a wooden mallet till it is properly bedded in level with straight or to suit the required pattern. After the tiles have been laid, surplus cement grout shall be cleaned off. The joints shall be cleaned off the gray cement grout with a wire brush or trowel to depth of 5 mm, and all dust and loosed mortar removed. Joints shall then pointed with white cement & pigment matching the shade of tiles. The floor shall then be kept wet for 7 days. The finished floor shall not sound hollow

when tapped with a wooden mallet.

PLASTERING

Mala Plaster :-

Cement mortar of specified proportion and thickness shall be prepared small batches and applied to the wall surface/ ceiling the sure plastered true to line and plumb taking special care to finish of windows, doors, wall returns, corners, junctions, etc. A patra shall be rubbed on wet plastered surface to give a smooth and even surface. The surface shall be kept moist 7 days and then given a coat of white wash.

SAND FACED PLASTER

The surface shall be prepared as above. The coat of cement mortar proportion of 1: 4 or as specified, shall be applied all over the surface a thickness on the surface. The surface shall be kept moist till the finish coat is applied.

The finishing coat shall be applied a day or two later in a proportion 1:3 cement mortar to form a uniform thickness of 6 mm. The surface shall be tapped to uniform grained texture by using wooden gutka as directed. Curing shall start after 24 hours and the surface kept wet for 7 days.

WATER PROOFING TREATMENT

Unless otherwise specified, the contractor shall carry out water – proofing treatment of basements, terraces, sunk slabs and water retaining structures through reputed firms having specialization in the line and approved by the architects. The contractor shall furnish full details of such treatment to the Architects and provide all information / proof etc., regarding effectiveness of the treatment when called upon to do so. All treatment shall have to be guaranteed in the form approved by the employer for a minimum period of 10 years. Any defects/ leakages noticed during the guarantee period shall be rectified free of cost by the contractors including reinstating the surface to its original condition and finish.

WHITE / COLOUR WASHING

White wash shall be prepared from lime slaked on spot, mixed and stirred with sufficient water to make a thin cream and shall be screened through clean cloth. Add 4 kg. Of gum dissolved in hot water to each cubic meter of the cream or ad glue from approved manufacturer (e.g. Fevicol DDL) as per their specifications, and blue to give required whiteness.

Colors wash shall be prepared by adding mineral colors not affected lime to white wash. Shade/ tint of the colour wash must be approved by Architects.

White/ Colors wash shall be applied in specified coats by using flat brush or spray pumps, allowing each coat to dry before next coat is applied obtain uniform and smooth finish, irrespective of number of coats.

The finished dry surface shall not show any signs of cracking and peeling nor shall it come off readily on the hand when rubbed.

WATER PROOF CEMENT PAINT

The surface shall be prepared strictly as per manufacturer's specifications and the paint shall be prepared in such quantities as can be used up in an hour of its mixing.

The paint thus prepared shall be applied on clean and wetted surface brush or spraying machine; constantly stirring the solution during period of application. The completed surface shall be watered after day's work. Number of coats shall be specified in the item.

PAINTING - OIL/ ENAMEL/PLASTIC - ACRYLIC EMULSION ETC.

Ready mixed Oil paint, Flat paint plastic emulsion paint, ready mixed Synthetic enamel paint, Acrylic emulsion paint, Aluminum paint, etc. of approved make & shade, shall be brought in original containers and in sealed tins. Thinner used shall be of the brand and quantity recommended by the manufacturer

or as instructed by the Architect. The surface shall be prepared as specified above and a coat of approved primer shall be applied. After 24 hours of drying filler putty coating shall be applied to give a smooth finish. Each coat shall be allowed to dry thoroughly and then lightly rubbed with sand paper and cleaned –of dust before next coat is applied. Number of coats shall be as specified. After completion no hair marks from brush, clogging of paint puddles, in the corner of panels, angles of moldings etc shall be left on the work. The glass panels, floor etc. shall be cleaned of stains.

When the final coat is applied, if directed, the surface the surface shall be rolled with a roller or if directed, it shall be stippled with a stippling brush.

SANITARY AND WATER SUPPLY INSTALLATION

I. DRAINAGE (INTERNAL & EXTERNAL) Stoneware Pipe & Fittings:

It shall comply IS: 651 in every respect and all stoneware pipes, bends, gully traps and sewer traps shall be of the best salt glazed variety, glazed inside as well as outside, hard, smooth, even textured, free from fire cracks, blows and blisters. The pipe shall be truly circular in cross-section perfectly straight and of standard nominal diameter, length and depth of socket.

The pipes shall be carefully laid to the levels and gradient shown on the plans and sections with socket up the gradient with fittings such as tees, single and double junctions, taper etc. of approved quality with joints tightly packed with gasket of hemp of spun yarn soaked in neat cement slurry, finished with c.m. 1:1, perfectly air & water tight, laying 15 cm. 1:4:8 cement concrete bedding in the trenches underneath the pipes as specified in the schedule of quantities.

Stoneware Gully Traps:

S.W. gully traps of specified sizes and quality as described shall be fixed on 15 cm. Thick 1:4:8 cement concrete bedding extending 30 cms all around the trap, on which 23 cm. thick brick masonry chamber in c.m. 1:6 mix shall be constructed with 20 mm thick smooth cement finished plaster in c.m. 1:3, on both the sides. The corners and bottom of the chamber shall be rounded off so as to slope towards the grating.

The chamber shall have C.I. cover with frame 30 cm x 30 cm (inside) with machined seating faces shall then be fixed on the brick masonry with cement concrete 1:2:4 and rendered smooth. The weight of cover shall not be less than 4.5 kg and that of frame 2.7 kg. The finished top of cover shall be left 4 cm. Above the adjoining surface as to exclude the surface water from entering the gully trap.

Cast Iron Pipes:

All drainage lines passing under buildings, floors and roads in exposed horizontal positions above ground shall be of cast iron pipes. Pipes shall be sand cast conforming to Class A IS: 1537 or centrifugally spun cast iron pipes Class LA confirming to IS: 1536.

These shall be free from cracks and other flaws. The interior of pipes and fittings shall be clean and smooth and painted inside and outside with approved anti corrosive paint.

The access door fittings shall be proper design so as not for any cavities. Bores shall be provided with 3 mm (1/8") rubber insertion packing and when closed and bolted they shall be watertight.

The joints shall be filled with lead as described under soil pipes.

Manholes, Vent Shaft, Gully Chamber etc.

The size specified in the schedule of quantities shall be internal size of the manhole.

The work shall be done strictly as per standard drawing and following specifications.

Bed concrete shall be as stated in schedule of quantity and work shall be with locally available best quantity bricks, providing necessary brick arches, finishing the interiors with 12 mm, cement plaster 1:3 with heavy gas – proof C.I cover and frame approx. 50 kg. painted with bitumen and providing footrests complete as directed.

Septic Tank:

Septic tank shall be constructed as per design. All inlet and outlet connections shall be provided as shown in drawings. Septic tank shall be constructed with locally available best quality bricks in C.M. 1:4. it shall be plastered with 12mm.th. Waterproof cement plaster in C.M. 1:3. The flooring will be 40mm.th. I.P.S. and top shall be 150mm.th.R.C.C.slab with 2nos. heavy gas – proof C.I cover and frame approx. 50 kg. Painted with bitumen. It will have went pipe for fresh air inlet.

II SANITARY INSTALLATION

European Type W.C.

The closet shall be wall hung, white / light colored vitreous China readily flushed and shall be first quality manufactured by an approved firm, and fixed to the wall with manufacturer's C.I. chairs / brackets, with heavy duty flush cock, necessary flush pipe line with P.V.C. black seat, brass C.P. pin etc. complete as stated in schedule of quantity.

Wash Basins

They shall be of white/ light coloured vitreous China of best quantity manufactured by approved firm with C.I. brackets and fittings like brass C.P. heavy pillar cock, including making connection with 15 mm. Dia P.V.C. pipe brass ferrules and brass C.P. angular stop cock and making waste water connection with brass C.P. waste water coupling, bottle trap, P.V.C. waste water pipe up to trap, floor connection etc. of approved quality complete as specified the schedule of quantity.

Urinal

The urinal shall be flat back white / light coloured vitreous China, and shall be first quality manufactured by an approved firm, and fixed to the wall with manufacturer's C.I. brackets, with heavy duty angular cock, water spreader necessary bottle trap waste pipe connections etc. complete as stated in schedule of quantity.

III C.I. SOIL, WASTE AND VENT PIPES AND FITTINGS

C.I. Pipe & Fittings

Cast iron soil, waste and vent pipes and fittings shall be of heavy quantity conforming to I.S. 3989 for spun pipes which is preferred to sand cast pipes and I.S. 1729, I.S. 3989-1967 for centrifugally spun pipe and I.S. 1729-1964 for sand cast soil pipes.

The pipes shall be laid as described and as shown on the Architectural drawings carried above the roof and shall have C.I. vent cowl. The joint shall be lead caulked joints or as specified in the schedule of quantity. All C.I. pipes and fittings including joints shall be tested by smoke for connections between main pipe a branch pipe shall be made by appropriate branches and bends invariably with access doors for cleaning and completed as directed.

Asbestos Cement Pipes

Where specified, Asbestos cement pipes and fittings may be used for waste and vent pipes an rain water pipes. They shall be of best quality conforming to IS 1629-1960.

Joints shall be made by inserting a gasket of hemp saturated bitumastic jointing compound and caulked to about 1" depth and ground with stiff cement mortar 1:1 or as described of quantities.

Sluice Valves Fire Hydrants and Masonry Chambers

The valve shall be of the specified size and shall be of the specified quality.

Fixing of the valve shall be done by means of bolts, nuts and 3 mm, rubber insertions with the flanges of the spigot and socket tail pieces drilled to the same specification. The latter shall be jointed to the pipeline means of lead caulked joints.

PVC Pipes and Fittings

Un-plasticized PVC pipes and fittings conforming to IS 4985, 13592 - 1992 shall be used the joints will

be done with resins as specified by the manufacturer. Pipe for water supply shall be capable to withstand a pressure of 10-kg/sq. cm. Pipes used for drain water & sewerage withstand a pressure of 6 kg/sq.cm.

SPECIFICATIONS OF MATERIALS TO BE USED General

- **1.** Unless mentioned specifically all materials used in the construction shall conform to the relevant Indian Standards published by Bearau of Indian Standards.
- **2.** The contractor whenever in doubt should get the material approved by the architect, before use. A sample of approved material should be deposited with the architect.
- **3.** Test certificates from the laboratory, approved by the architect have to the furnished, if so directed by him. All costs for the same will be paid by the contractor.
- **4.** For special items to be used, the manufacturer's instructions handling and installation shall be strictly adhered to. Contractor shall obtain, the guarantee certificate from manufacturer and pass on the same to the owner.
- **5.** Materials supplied by the employer shall be properly stored in safe custody of the contractor. The same be carefully used shall be properly preserved till the work is completed and handled to the employer.

Proper accounts of such materials will be maintained and will present for inspection and physical verification as and requested by the employer.

6. Unless otherwise mentioned to the contrary, the quality of material and workmanship shall be as specified hereunder.

Cement:

Unless otherwise stated, only ordinary or rapid hardening Portland cement shall be used. The cement shall be the product of major cement plant such as L & T, Ambuja, Sanghi, etc. (mini cement plant product will not be allowed) and shall conform to IS 269. Each bag shall weigh 50 kg. Net, and shall be equivalent to 35 liters. Fresh Cement bags, if affected by the inclement weather shall be rejected. Cement stored for more than three months shall be retested in approved laboratory and the test reports will be forwarded to employer, who will decide, on the advice of the architect, whether that batch of cement should be allowed to be used.

In case of doubts regarding the quality of cement, the architect will request in writing to the contractor to get such cement tested in approved laboratory and may thereafter, if fully satisfied, and in sole discretion, allow the use of such cement.

Cement shall be properly stored so that weather does not spoil characteristics.

Records of incoming and outgoing cement (i.e. used on site) shall be maintained on day-to-day basis and shall be presented to the architect on demand.

Reinforcement:

Reinforcement shall be mild steel round bars or T.M.T bars conforming to IS 432, IS 1786, IS 1139 or hard drawn steel fabric, conforming to IS 1566.All finished bars shall be free from cracks, face flows, laminations and imperfect edges.

Fine Aggregates:

Fine aggregates such as sand with fineness modulus ranging from 2.60 to 3.20 shall comply with the requirement of IS 383 and relevant portion of IS 515. It shall be free from dust, clay, shale, salt, organic matters, loam, mica or other deleterious matters. If required by the site engineer, it shall be washed before use.

Coarse Aggregate:

The same shall conform to IS 383 and 515 and shall be well graded so that proper compaction of concrete is effected. They shall be chemically inert when mixed with cement and water and shall be

free from organic matters, dust, debris and delirious matters. Fineness modulus may range from 6.0 to 7.0.

Water:

Water to be used in the construction work will be pure potable water conforming to the standards as specified in IS 456.

Bricks:

Bricks shall generally comply with IS 1077 except in size which shall be conforming to the sizes locally available. Depending upon the quality of bricks they shall be classified as 1st and 2nd class. 1st Class bricks shall be the best quality locally available / from approved source, table molded, well burnt but not over burnt, have plain rectangular faces with parallel sides and sharp right angled edges, have a fine compact and uniform texture. The bricks shall be free from cracks, chips, flaws, stones or lumps of any kind and shall not show efflorescence either dry or subsequent to soaking in water. It shall emit a clear ringing sound on being struck and shall not absorb water more than 20% by weight. Common building bricks shall have a minimum compressive strength of 35 kg/sq. cm. unless otherwise specifically stated in the schedule of quantities.

2nd class bricks shall be generally as specified above, expect that they may be slightly over burnt, be slightly distorted and have round edges. They shall have a fine compact weight. The compressive strength shall be 10% less than that specified for 1st class bricks.

Neru:

Shall be made of Class "C" lime (i.e. pre fat lime) as mentioned in IS-712. It shall be slaked with fresh water and then sifted and reduced to a thick paste by grinding in a mill. Neeru thus prepared shall be kept moist until used and not more than that can be consumed in 15 days shall be prepared at a time.

Surkhi:

Shall be made by grinding well burnt bricks, brickbats, burnt clay balls etc. The brick etc. to be used shall be prepared from selected clay. The quality shall confirm to IS 1344.

A brickbat etc. shall be ground in a mechanical disintegrator to a fine powder passing through IS Sieve No. 9 (2.36 mm) with a residue not exceeding 10% by weight.

Surkhi for lime plaster shall be ground to a fine powder in a mortar mill to pass through IS Sieve 150 micron (No. 100).

Surkhi shall be stored in a weatherproof shed on a brick paved platform.

Lime:

Lime shall comply in every respect with the requirements of IS 712 and shall be made from approved Lime Stone or Kankar and properly burnt. It shall be free from excess of un-burnt kankar or lime stone ashes or other etc. various materials and shall be stored in weatherproof sheds. Lime been damaged by rain, moisture or air slaking not be used and shall be removed from the site of work forthwith. Lime shall be slaked with fresh water and screened through appropriate screens and stored and used within 14 days provided it is protected from dying out.

Field tests according to IS 1624 shall be carried out from time to time to determine the quality of lime.

Timber:

Timber shall be well seasoned and of the best quality Indian Teak of specified species viz. Dandeli, Balarshah, Malbar, C. P. etc. or imported from Nigeria, Ghana, Burma.

Timber shall be considered as well seasoned, if its moisture content does not exceed the following limits.

Timber for frames 14%

Timber for planking, shutters etc. 12%

The moisture content of timber shall be determined according to method described in paragraph 4 of IS 287 for Maximum permissible moisture content of Timber used for different purpose in different climatic zones.

In measuring cross sectional dimensions of the frames pieces tolerance upto 1.5 mm shall be allowed for each planed surface.

Superior Quality Teak Wood:

Superior quality Indian Teak Wood means Dandeli, Balarshah and Malbar Teak or imported from Nigeria, Ghana, and Burma. It shall be good quality and well; seasoned. It shall have uniform colour, reasonably straight grains and shall be free from large, loose, dead knots, cracks, shakes, wrap, twists, bends bore hole, sap wood or defects of any kind. No individual hard and sound knot shall be more than 1 cm in diameter and aggregate area of al knots shall not exceed ½% of the area of the piece. It shall be close grained and there shall not be less than 6 growth rings per 2.5 cm width.

1st Class Indian Teak Wood:

1st Class Indian Teak Wood means C.P. or Bulsar Teak of good quality and well seasoned. It shall have uniform colour, responsibility straight grains and shall be free from large, loose, dead knots, cracks, shakes, wrap, twists, bends, sap wood or defects of any kind. No individual hard and sound knot shall be more than 2.5 cm in diameter and aggregate area of all knots shall not exceed 1% of the area of the piece. There shall not be less than 5 growth rings per 2.5 cm width.

2nd Class Indian Teak Wood:

Shall be similar to 1st class Indian Teak Wood except that knots upto 4 cm diameter and aggregate area of all knots upto 1.5% of the area of the piece shall be allowed. There shall not less than 4 growth rings per 2.5 cm width.

Steel Windows & Doors:

Steel windows and doors shall be fabricated out of steel sections conforming to IS 226. They shall conform to IS 1038. Unless otherwise specified, the details of construction etc. shall be as described under specifications.

Floor Tiles:

Plain cement tiles, chequerred tiles, mosaic tiles, terrazo tiles shall conform to IS 1237. For neutral tiles gray cement shall be used. Tiles shall be compacted by mechanical vibration and hydraulically pressed. It shall be of choice shade and shall have desired pattern of chip distribution. The sizes of chips and proportion of chips to cement in Terrazo or mosaic floor shall be as specified in IS 1237. The size and thickness of tiles shall be as approved by the Architect.

Glazed /Ceramic / Vitrified Tiles:

Glazed/Ceramic tiles from an approved manufacturer conforming to IS 777, IS13573, IS15622, shall be used. Vitrified tiles from an approved manufacturer conforming to international standards ISO13006, EN176 (group B1a), shall be used. It shall be shall be flat and true to shape. It shall be free from cracks, crazing, sports, edges and corners. The glazing and color shall be of uniform shade and unless otherwise specified the glazed/ ceramic tiles shall not be less than 6 mm thick for flooring and dedo & vitrified tiles shall not be less than 9mm thick.

Kotah/ shahabad/ Cudapa/Granite:

Shall be of selected quality, hard, sound dense, and homogenous texture, free from cracks, delay,

weathering and flaws. Stone slabs shall be of uniform color as approved by the Architect. They shall be machine cut and machine polished where specified and shall conform to the required sizes. Thickness shall be 20 – 25 mm or as specified in the respective items.

Glass used for glazing shall be floating glass of best quality, free from flaws, specks, and bubbles and shall be 3 mm. thick up to 0.60 x 0.60 mt sizes and for larger size it shall be 4 mm. thick unless otherwise specified in the schedule of quantities.

Galvanized iron pipes and fittings:

Galvanized iron pipe shall be of medium type (B class) and of required diameter and shall comply with IS 1239-1979. The specified diameter of the pipes shall refer to the inside diameter of the bore. Clamps, screw and all galvanized iron fittings shall be of the standard "R" or equivalent make.

Cast Iron pipes and fittings:

All soil, waste, vent and anti-syphonage pipe and fittings shall conform to IS 1729-1964. The pipe shall have spigot and socket ends with head on spigot end. The pipes and fittings shall be true to shape, smooth, cylindrical, their inner and outer surfaces being as nearly as practicable concentric. They shall be sound and nicely cast and shall be free from cracks, laps, pinholes or other imperfection and shall be neatly dressed and carefully fettled.

Glazed Stone Ware Pipe and Fittings:

The pipes and fittings shall be of best quality manufactured from stone ware of fire clay, salt – glazed thoroughly burnt through the whole thickness, of a close even texture, free from air blows, fire blisters, cracks and other imperfection which affect the serviceability. The inner and outer surfaces shall be smooth and perfectly glazed. The pipes shall conform to IS 651-1980.

A.C. Rain Water Pipes:

All Asbestos pipes and fitting shall comply with IS 459 and shall be free from cracks, chipped edges or corners and other damages.

PVC Pipes and Fittings:

Unplasticised PVC pipes and fittings conforming to IS 4985, 13592 -1992 shall be used. The joints will be done with resin as specificied by the manufacturer. Pipes for water supply shall be capable to withstand a pressure of 10 kg/sq. cm. Pipes used for drain water & sewage shall withstand a pressure of 6 kg/sq.cm.

Nahni trap:

Nahni trap shall be of cast iron and shall be sound and free from porosity or other defects which effect serviceability. The thickness of the base metal shall not be less than 6.5 mm. The surface shall be smooth and free from craze, chips and other flaws or any other kind of defects, which affect serviceability. It shall be of self-cleansing design and with deep seal, minimum 50 mm except where trap with deep seal cannot be accommodated. It shall be covered with stainless steel grating of appropriate size.

Gully Trap:

Gully trap shall conform to IS 651-1960. It shall be sound free from defect such as fire cracks or hair cracks. The glaze of the traps shall be free from crazing. They shall give a sharp clean noise when struck with light hammer. There shall be no broken blisters.

Bib cock and Stop cock:

A bibcock is a draw off tap with a horizontal inlet and free outlet. A stopcock is a value with a suitable means of connection for insertion in a pipeline for controlling or stopping the flow, they shall be of screw down type and or brass chromium plated and shall conform to IS 781-1977.

White Glazed porcelain wash basin:

Wash basin shall be of white light coloured porcelain first quality and it shall conform to IS 2556 (Part IV) 1972 and IS 771-1979.

European type water closet:

The European type water closet shall be wall hung, white light coloured glazed porcelain first quality and shall be wash down type conforming to IS 2556-1973 and IS 771-1979. 'P' trap shall be provided as required with water seal not less than 50 mm. The solid plastic seat and cover shall be of the original manufacturer of E.W.C. conforming to IS 2548-1980.

Orissa type water closet:

The specification of Orissa type white / light colour glazed water closet of first quality shall conform to IS 2556 (Part – III) 1981.

Paints:

Lime for lime wash, dry distemper, oil bound distemper, cement primer, oil paint, enamel paint, flat oil paint, plastic emulsion paint, anticorrosive primer, red lead, water proof cement paint shall be from an approved manufacturer and shall conform to the relevant latest Indian Standard for various paints. Ready mixed paints as received from the approved manufacturer, without any admixture shall be used, except for addition of thinner, if recommended by the manufacturer.

Mortars: -

Lime Surkhi Mortar:

Lime and Surkhi shall conform to the specifications. It shall be composed of approved lime and surkhi in proportion of 1 lime to 2 surkhi mixed thoroughly. The ingredients shall be accurately gauged by measure and shall be well and evenly mixed together on a platform and water added to make it homogeneous. When large quantities are required the mortar shall be mixed in a mechanical grinder.

Cement Mortar:

Cement mortar shall be of proportions specified for each type of work in the schedule. It shall be composed of Portland cement and sand. The ingredients shall be accurately gauged by measure and shall be well and evenly mixed together in a mechanical pan mixer, care being taken not to add more water than required. No mortar that has begun to set shall be used River sand shall be used unless otherwise specified.

Composite lime, cement, sand mortar:

The mortar shall be of proportions specified for each type of work in the schedule of quantities. It shall comprise of Portland cement, lime and sand. Lime shall be measured in gauges boxes similar to one used for measuring cement and sand in the proportions specified and sufficient water then added to it to form thick slurry. The slurry thus obtained shall then be added to dry cement and sand mixture and thoroughly mixed to make a workable homogenous mortar of uniform colour by adding more water if necessary. Mechanical mixers shall generally be used for mixing such mortars. If hand mixing is allowed it shall be done pucca platform.

Bitumen Felt for waterproofing:

Bitumen felt shall be on the fibre bases and shall be of type 2, self-finished felt grade –2 and shall conform to IS 1372-1970.

Miscellaneous Items:

All items whose specifications are not given above shall be carried out according to instructions of the Architect / Bank and as per the relevant description / specifications mentioned in bill / schedule of quantities. The mode of measurement also shall be as per the schedule of quantities.

SPECIFICATIONS OF MATERIALS TO BE USED

General:

These specifications are for the work to be executed items to be supplied and materials to be used in the works as shown and defined on the drawings and described here in all under the supervision and to the satisfaction of the architect / employer.

The workmanship is to be the best available and to a high standard. Use must be made of specialist tradesmen in all aspects of the works, and allowance must be made in the rates for doing so.

The materials and items to be provided by the contractor shall be the best of their respective kinds, approved by the architect in accordance with any samples, which may be submitted for approval, and generally in accordance with the specification. Where materials or products are specified in this specification and/ or bill of quantities by the name of the manufacture or the brand trade name or catalogue references the contractor will be required to obtain the approval of the architect/ employer before using a material or product other than the specified. The contractor shall produce all invoices, vouchers or receipted accounts for any materials of called upon to do so by the architect.

Sample of all material are to be submitted to the architect for his approval before the contractor orders or delivers in bulk to the site. Also, the contractor will be required to submit specimen finishes to colors, fabrics etc. For the approval of the architect before proceeding with the works. Should it be necessary to prepare shop drawings, then four copies of such drawings shall be submitted for the approval of the architect who will retain to copies, all at the contractors expenses.

Materials

The materials shall be of the best-approved quality obtainable and shall comply with the respective Indian standard specification.

If directed, materials shall be tested in any approved testing laboratory and the test certificates in original shall be submitted to the architect and the entire charges for repeated testes, if ordered shall be borne by the constructor.

It shall be obligatory for the contractor to furnish certificate, it demanded by the architect, from manufacturer of the material supplier that the work has been carried out by using their material and as per their recommendations.

All materials supplied by the employer / any other specialist firm shall be properly stores and the contractor shall be responsible for its safe custody until they are required on the works and till the completion of work.

Unless otherwise shown on the drawings or mentioned in the "Schedule of Quantities" or special specifications, the quality of materials, workmanship, dimensions etc., shall be as specified herein under.

The contractor without any extra cost for carrying out field-tests on materials shall provide all equipment and facilities.

Unless mentioned specifically, all materials used in the construction shall conform to the relevant Indian standards published by bureau of Indian standards.

The contractor whenever in doubt should get the materials approved by the architect, before use. A sample of approved material should be deposited with the architect.

Test certificates from the laboratory approved by the architect will have to be furnished, if so directed by him. The contractor will pay all costs for the same.

For special items to be used, the manufacturer's instruction of handling and installation shall be strictly adhered to. The contractor shall obtain the guarantee certificate from the manufacturer and pass on the same to the owner.

Materials if supplied by the owner shall be properly stored in the safe custody of the contractor. The same shall be carefully used and shall be properly preserved till the work is completed and handed over to the owner. Proper accounts of such materials will be maintained and will be presented for inspection and physical verification as and when requested by the owner.

Timber:

Timber generally is to be the best of its kind, well and properly seasoned, of mature growth, free from worm holes large loose or dead knots or other defects and sawn die square and will not supper warping, splitting or other defects through improper handling.

The wood is to be Steam beach weighting not less than 45 lbs per cubic foot with moisture content not exceeding 12% to 14%. The moisture content of timber shall be determined according to method described in paragraph 4 of is: 287 for "maximum permissible moisture content of timber used for different purpose in different zones".

In measuring cross-sectional dimensions of the frame pieces tolerance up-to 1.5 mm shall be allowed for each planned surface.

Good quality Steam beach wood:

Steam beach wood be of good quality and well-seasoned. It shall have uniform color, reasonably straight grains and shall be free from large, loose dead knots, cracks, shakes, warp, twists, bends, borer, holes or defects of any kind. No individual hard and sound know shall be more than 1 cm. In diameter and aggregate area of all knots shall not exceed $\frac{1}{2}$ % of the area of the piece. It shall be close gained and there shall not be less than 6 growth rings per 2.5 cm width.

Good quality Steam beach wood:

Steam beach wood shall be of good quality and well-seasoned. It shall have uniform color reasonably straight grains and shall be free from large, loose, dead knots, cracks, shakes, warp, sound knot shall be more than 2.5 cm. In diameter and aggregated area of all knots shall not exceed 1% of the area of the piece. There shall not be less than 4 growth rings per 2.5 cm width.

Timber is to be cut to the required sizes and lengths as soon as practicable after the works are begun and stored under cover so that the air will circulate freely around it. Joinery is to be prepared,

immediately after the placing of the contract, framed up (but not bonded) and stored until required for fixing in position, when it is to be bonded and wedged up. Any portions that warp or develop shakes or other defects are to be replaced before wedging up. The whole of the work is to be framed and finished in a proper and workman like manner, in accordance with the detailed drawings, and fitted with all necessary motets straps, belts screws etc. Running bounded joints are to be cross tongued with teak onguese and where over 1-1/2% thick double cross tongued. Joiner's work generally is to be finished with fine class papered surfaces unless otherwise specified.

Templates boxes and moulds shall be accurately set out and rigidly constructed so as to remain accurate during the time they are in use.

Grounds are to be clean shown, free from large knots, splayed as required, plugged and fixed to walls etc. At 1'-6" centers.

Wood plugs are to be put cut on the twist. Patent wall plugs or plastic filling may be used in lieu of wood plugs with the approval of the architect.

All unexposed surfaces of timber e.g. fails ceilings, backings fillets backs of doors frames backs of doors frames, cupboard framing, grounds etc. Are to be treated with two coats of approved timber preservative like soigné, kirticite, term seal or castral or vacuum pressure impregnated with and approved water soluble timber preservative before fixing or bedding.

Timber shall be well seasoned and of the best quality Indian teak of specified species. Timber shall be considered as well seasoned, if its moisture content does not exceed the following limits.

- (1) timber for frames. 14%
- (2) timber for planking, shutters etc. . . 12%

The moisture content of timber shall be determined according to method described in paragraph 4 of is 287 for "maximum permissible moisture content of timber used for different purposes in different climatic zones".

In measuring cross-sectional dimensions of the frame pieces tolerance up-to 1.5mm shall be allowed for each planed surface.

Carpentry & Joinery:

The carpenter and joiner shall include the finishing of all labor, materials, equipment, and appliances required to complete the work including the installation of hardware as per the drawing. The timber shall be of the quality as described on the drawings or in the bills of quantities, shall be seasoned and uniform in texture, free from fungal growths, knots, wanes, open shake borer holes, rot, decay, discoloration, soft or spongy spots, hollow pockets, patch or box heart and all other defects.

Skilled workmen, using proper tools, shall carry out all the carpenter's work. All joints shall be securely nailed without splitting the wood. Wherever it is necessary the members shall be lapped of joining by g.i. stapes or extra wood blocks. All joints and nailing shall be done in neatness, and shall be approved by the architects. All assembly is exactly at right angles.

Finish woodwork and joinery including doors shall be surfaced with straight without any warp of bow

and shall have smooth, well-planned faces at right angles to each other. The frame members shall be planned on the three sides exposed at right angles to each other.

All joinery work shall be securely mortised and tanned with synthetic resign conforming to I.S. 851-1957. Heads, posts, transoms, mullions of door and window frames shall be made out of single pieces of timber only. The heads and posts shall be thought - tanned into the mortises of not less than $\frac{1}{2}$ ". Solid wood panels of not less than 5" and not more than 8" in width shall be used and jointed together with tongue and groove joint.

All interior wood finish doors, cabinetwork shall be smoothly traded and sanded after erection, until all defects are entirely removed. Assembled door frame without sills shall be fitted with temporary stretchers. All exposed wood and plywood shall be straight-grained method grain and color and shall be approved by the architects. Interior wood finished doors cabinets and other fixed wooden equipment shall be properly installed, level plumb and true. But joints shall be avoided wherever possible; if unavoidable the joint shall be leveled. All exterior angles shall be mitered. Adjoining interior woodwork shall match and harmonies. All woodwork in contact with masonry shall be painted with bitumen paint or red oxide paint.

Joints:

All joints will be standard, mortised and tenon, dovetail, dowel, cross-halved, metered, tongued and grooved and rebated. Nailed or glued but joints, will not be permitted exceptional cases, ailed but joints will not be accepted. All joints shall be smeared with white lead.

Whenever solid wood is specified it shall be as per I.S.I. and of good quality. The type of wood shall be got approved before collecting the same on site. Fabrication of wooden members shall be started only after approval. It shall be free from large, loose, dead of cluster knots, flows, shakes, wraps, bends or any other defect. It shall be uniform in substance and of straight fibers as far as possible. It shall be free from rats, decay, harmful fungi and other dejects of nature which will affect the strength, durability of it usefulness for the purpose for which it is required. The color of wood shall be uniform as far as possible. The scantlings planks etc. Shall be seen in straight lines and planes in the direction of grain and have uniform thickness.

Plywood:

Plywood for general purpose shall confirm I.S. 303 MR grade & I.S. 710 B.W.P. / marine grade as specified. It shall be formed with 0.8 mm. Thicknesses commercial face veneers and 1.5 mm. Thicknesses. Intermediate veneers in two opposite grain direction shall be 1:1. The moisture content shall not be more than 12.5% by mass. It shall either be kit ply make or other equivalent approved make. Where B.W.P. grade is specified it should be boiling waterproof confirming to I.S. standards.

The plywood for general purpose shall conform to is I.S. 303 MR grade & I.S. 710 B.W.P. / marine grade as specified Cementing together thin boards or sheets of wood into panels makes plywood. There is always an odd number of layers 3,5,7,9 ply etc. The plies are placed so that grain of each layer is right angle to the grain in the adjacent layer.

According to is I.S. 303 MR grade & I.S. 710 B.W.P. / marine grade as specified the plywood for general purpose shall be of three grades namely I.S. 303 MR grade & I.S. 710 B.W.P. / marine grade as specified depending upon the adhesives used for bonding and veneers, and it will be further classified into six types namely aa, ab, ac, bb, bc and cc based on the quality of the two face, each face being of three kinds namely, a, b and c.

I.S. 303 MR grade & I.S. 710 B.W.P. / marine grade as specified formed with 0.8 mm. Thickness

commercial face veneers and 1.5 mm. Thick intermediate veneers in to two opposite grain direction. The moisture content shall not be more than 12.5 % by mass. Where B.W.P. grade is specified it should be boiling waterproof conforming to Indian standards.

Laminates:

All the laminate to be used shall be of 1.0 mm (or 1.5 mm or 0.5 mm where specified) thickness in approved the color and shade as approved and specified by the architect. It shall be matt finish manufactured by recommended makes as per sample shown by the consultant unless otherwise specified. It shall satisfy all the I.S.I. standards for melamine coated laminated fiber board's before the use of such fiberboard laminated. The contractor shall have to take approval of the department of each sheet of the laminates.

Fixtures & Fastenings:

The fixtures and fastening, that is, butt hinges, tend strap hinges, sliding door bolts, tower bolts, door latch, bath room latch, handles, door stoppers, casement window fasteners, casement stays and ventilators catch shall be made of the metal as specified in the item or its specifications.

They shall be of S.S., S.S. brush finish, iron, brass, aluminum, chromium plated iron, and chromium plated brass, copper oxidized iron, copper oxidized brass or anodized aluminum as specified.

The fixtures shall be heavy type. The fixtures and fastenings shall be smooth finished and shall be such as will ensure ease of operation.

The samples of fixtures and fastening shall be got approved as regards quality and shape before providing them in position. Brass and anodized aluminum fixtures and fastenings shall be bright finished.

Screws, nails, bolts will be of brass or other no corrosive metal. In hardware, they will match the finish of the hardware item. Nails, in a finished surface shall be neatly punched and the hole filled with wood filler matching the finish. Screws in a finished surface will be round head, raised head or sunk beneath the surfaces and the hole plugged with a wood plug with matching color and grain of the wood surface as directed.

S.S. fittings should be proper polish finished.

Screws, nails, bolts, will be of brass or non-corrosive metal. In hardware, they will match with the hardware items.

Nails, in a finished surface shall be neatly punched and the holes filled with wood filler matching the finish. Screws, in a finished surface will be round head, raised head or sunk beneath the surfaces and the hole plugged with a wood plug with matching color and grain of the wood surface, unless especially detailed

Hardware:

Hinges, locks, latches, door tracks etc. Shall be as specified and as far as possible, by the manufacturer specified. In any variation of this quality of the substitute shall be equal to or better than the original specified, and the samples shall be submitted to the architect for prior approval.

Hardware and metals:

The hardware throughout shall be of approved brand and supply well made and equal in every respect to the samples deposited with the architect. The contractor may be required to produce and provide samples many different sources before the architect is able to make the decision and he should allow in his rates for doing so.

Fittings generally shall have a brass finish or powder coated finish unless otherwise specified and should be suitable for their intended purposes.

Screws are to match the finish of the article to be fixed and to be rounded or flat headed or counter sunk as required.

Cover up and protect at the brass or powder coated surfaces with a thick grease or other suitable material, renew as necessary and subsequently clean off and clear away on completion

All steel, brass, bronze, aluminum and stainless steel articles shall be submitted to a reasonable test for strength. If so required by the architect at the contractors expenses.

Door closers:

The overhead door closer shall be of standard make as listed by the architect. The overhead door closer shall be of color as approved by the architect. Fixing of the overhead door closer shall be done by and experienced worker preferable from the principal supplier of the item.

After successful installation of the overhead door closer the same shall be checked for speed of door closing. The contractor shall make necessary adjusted operating mechanism as per manufacturer's guidelines to arrive at most suitable operating speed. The selected operating speed should remain constant on all repeated operations. If an overhead door closer is found to lose its adjusted operating speed often during warranty period then the shall have to be replaced with a new piece without charging any extra.

In case of a steel frame door the overhead door closer shall have to be mounted on a special plate supplied by the manufacturer. No extra payment shall be due for such mounting plate.

The rate shall include all materials, labor, required civil work etc. Complete and shall be paid per no. Of overhead door closers installed.

Paints:

Lime for lime wash, dry distemper, oil bound distemper, cement primer, oil paint, enamel paint, flat oil paint, plastic emulsion paint, anti-corrosive primer, red lead, water-proof cement paint shall be from an approved manufacturer and shall conform to the latest Indian standard for various paints. Ready mixed paints as received from the manufacturer without any admixture shall be used, except for addition of thinner, if recommended by the manufacturer. However, if ready mixed paint of specified shed or tint is not available then only ready mixed paint with approved strainer will be allowed. In such a case, the contractor shall ensure that the shade of the paint so allowed shall be uniform.

All the paints shall met with following general requirements:

Paint shall not show excessive setting in a freshly opened full can and shall easily be re-dispersed with a paddle to a smooth homogeneous state. The paint shall show no curdling, levering, cracking or color separation and shall be free from lumps and skins.

Paint as received shall brush easily; possess good leveling properties and show no running or sagging

tendencies.

The paint shall not skin within 48 hours in a three guarters filled closed container.

The paint shall dry to a smooth uniform finish free from roughness, grit, unevenness and other imperfections.

General: wherever scaffolding is necessary, it shall be double scaffolding.

The surface shall be thoroughly brushed free from mortar droppings, and foreign matter. All steel work shall be cleaned of loose rust, mill scales, etc. So as to expose the original surface. All broken edges, cracks, loose-plaster and wavy surface shall be brought up either by patch plasterwork or by plaster of Paris.

All materials viz. Dry distemper, oil bound distemper, oil paint, flat oil paint, synthetic enamel paint, plastic emulsion paint, cement primer, red lead and other primers and metallic paints shall conform to respective i.s. specifications and shall be obtained from approved manufacturers.

Painting - Flat / Plastic emulsion etc.:

Ready mixed flat oil paint, plastic emulsion paint, ready mixed synthetic enamel paint, aluminum paint, etc. Shall be brought in original containers and in sealed tins, if for any reason thinner is necessary, the brand and quality of thinner recommended by the manufacturer or as instructed by the architect shall be used.

The surface shall be prepared as specified above and a coat of approved primer shall be applied. After 24 hours drying, approved or specified quality paint shall be applied evenly and smoothly. Filler putty coating may be given to give to give a smooth finish. Each coat shall be allowed to dry out thoroughly and then lightly rubbed down with sand paper and cleaned of dust before the next coat is applied. Number of coats shall be as specified in the item and if the finish of the surface is not uniform, additional coats as required shall be applied to get good and uniform finish at no extra cost. After completion no hair marks from the brush or clogging of paint puddles in the corners of panels, angles or moldings etc. shall be cleaned of stains.

Pigmented priming coat (emulsion thinned with water) followed by three or more finishing coats of plastic emulsion paint. Pasted filler to be applied after every coat exempting the final finishing coat and sanded. When the final coat is applied, if directed the surface shall be rolled with a roller or if directed, it shall be stippled with a stippling brush.

Enamel paints

Oil paints shall be of first quality and of the specified color and shade, and as approved. The ready mixed paints shall be only used. However, if ready mixed paint of specified shade or tint is not available while ready mixed paint with approved strainer will be allowed. In such a case, the contractor shall ensure that the shade of the paint so allowed shall be uniform.

All the paints shall meet with the following general requirements:

Paint shall not showed excessive setting in a freshly opened full can and shall easily be re-dispersed with a paddle to a smooth homogeneous stage. The paint shall show no curdling levering, caking or color separation and shall be free from lumps and skins.

Paint as revived shall brush easily; possess good leveling properties and show no running or sagging

tendencies.

The paint shall not skin within 48 hours in a three guarters filled closed container.

The paint shall dry to a smooth uniform finish free from roughness, grit, unevenness and other imperfections.

Ready mixed paint shall be used exactly as received from the manufacturers and generally according to their instructions and without any admixtures what so ever.

French polish:

The French polish of required tint and shape shall be prepared with the below mentioned ingredients and other necessary material:

- (i) denatured spirit of approved quality
- (ii) chandras
- (iii) shellac
- (iv)pigment

The French polish so prepared shall conform to is 348.

French polishing:

French spirit polish shall be an approved make conforming to i.s.: 348. If it has to be prepared on site, dissolving 0.7 kg shall make the polish. Of best shellac in 4.5 liters of mentholated spirit without heating. To obtain required shade pigment may be added and mixed.

Surface shall be cleaned. All unevenness shall be rubbed down smooth with sand paper and well dusted. Knots, if visible, shall be covered with a preparation of red lead and glue. Resinous or loose knots and gaps shall be filled with seasoned timber pieces and made level with rest of the surface. Holes and indentations on surface shall be filled with putty made of whiting and linseed oil. Surface shall be given a coat of filler made of 2.25 kg. Of whiting in 1.5 liter of mentholated spirit. When it dries, surface shall again be rubbed down perfectly smooth with sand paper and wiped clean.

Piece of clean fine cotton cloth and cotton wool made into shape of pad shall be used to apply polish. The pad shall be moistened with polish and rubbed hard on the surface applying the polish sparingly but uniformly and completely over the entire surface. It shall be allowed to dry and another coat applied in the same way. To give CIVIL coat the pad shall be covered with a fresh piece or clean fine cotton cloth, slightly damped with mentholated spirit and rubbed lightly and quickly with a circular motion, till the finished surface attains uniform texture and high glass.

Wax polishing:

Wax polish shall either be prepared on site or obtained ready made from market. Polish made on the state shall be prepared from a mixture of purr bees wax, linseed oil, turpentine oil and varnish in the ration or 2:1 ½:1: ½ by weight. The bee's wax and the boiled linseed oil shall be heated over a slow fire. When the wax is completely dissolved the mixture shall be cooled till it is just warm, and turpentine oil and varnish added to it in the required proportions and the entire mixture is well stirred.

Surface shall be prepared as described under "French polishing" except that the final rubbing shall be done with sand paper, which has been slightly moistened with linseed oil.

Mixture or polish shall be applied evenly, with a clean cloth pad in such a way that no blank patches are

left, and rubbed continuously for half an hour. When the surface is quite dry a second coat shall be applied in the same manner and rubbed continuously for an hour or until the surface is dry. Final coat shall then be applied and rubbed for two hours or more if necessary, until the surface has assumed a uniform glass and is quite dry showing no sign of stickiness when touched. Glass rubbing must be continuous and with uniform pressure and frequent change is direction.

Glass:

All glass shall be of best quality, free from flaws, specks, bubbles, veins, smokes, air holes blisters and other defects. The thickness and kind of glass to be used shall be as mentioned in the item or as shown in detailed drawing. The thickness of glass panel shall be uniform. All glass shall be of approved make by the architect and conforming to is 3548.

All glass shall be float glass of the best quality, free from specks, bubbles, smokes, veins, air holes, blisters and other defects. The kind of glass to be used shall be as mentioned in the item or specification or in the special provisions or as shown in detailed drawings thickness of glass panel shall be uniform. All glass to be approved manufacture complying with is: 3548-1966 or as per approved quality and sample.

The compound for glazing to metal is to be special non-hardening compound manufacture for the purpose and of 9 brands and quality approved the interior designer.

In cutting glass, proper allowance shall be made for expansion. Each square of glazing to be in one whole sheet and after cutting the edges to be properly filled.

On completion, clean all glass inside and out, replace all cracked scratched or broken panes and leave in good condition to the satisfaction of the architect.

The contractor shall furnish all labor, materials, and equipment's required for the installation of glass and glazing items.

The glass shall be of the type, quality and substance specificity in the bills of quantities.

In case of the glass being supplied by the owners, the contractor shall take the delivery of the glass at site and shall be responsible for proper handling and stacking. We shall insure glass against theft, fire, etc.

The contractor shall replace at his own expense all broken, damaged or disfigured glass caused in the execution of the work of faulty installation, before the virtual completion of the work.

Patterned or translucent glass shall be 4 mm. In thickness and shall be approved by the architects. Sheet glass shall be in 5 mm. in thickness. Wired glass shall be 6 mm. in thickness.

The putty used for glazing metal door, window or ventilator shall conform to I.S. 420:1953.

Before installation of the glass, the contractor shall ensure against the following:

All glazing rebates shall be square, putty, true in plane, clear, dry and free of dust. The frames shall be adjusted before glazing. The weight of the glass in side hung casement causes it to drop slightly on its hinges. Before glazing it shall be set in slightly high position in its frame. Glass edges shall be clean and cut to the exact size, chipped or damaged edges shall be rejected. Sashes shall be glazing in the closed position and shall not be open till the putty is set.

The glass shall be set in teak wood beading or metal glazing chips and so installed to achieve water lightness.

The platter glass shall be bedded on strips of leather or felt turned over the two sides of the glass to form packing between the glass and the metal coating. The ground glass shall be getting with smooth surface outside.

Glazing large panes of glass, or when heavy wind pressure is experienced, glazing bead may be used instead of front putty. In this case putty shall be applied to the face of the bead, which is in contact with glass. Putty would also be necessary, at the back.

Beads shall be of timber, rustproof steel or aluminum and shall have mitered corners. The position and size of the bead may depend on the thickness of glass used. The beads shall be fixed with screws 0" apart.

On completion of the job, all glass shall be thoroughly cleaned. All paint or other marks to be removed.

SPECIFICATION FOR WORKMANSHIP

Painting And Polishing: Various Readymade Paints:

The surface to be painted shall be cleaned and all cracks, holes and surface defects shall be repaired with plaster of Paris. All irregularities shall be sand papered and wiped clean. The surface so prepared must be dry and free from dust.

The priming coat shall be applied over in the manner recommended by the manufacture in case of special paint. When no priming coat is specified by the manufacturer, putty composed of powered whitening chalk mixed with double polished linseed oil of required workable consistency shall be applied to prepare a good, hard background in case of undecorated surfaces. The surface shall be then rubbed down again with a fine grade sand paper and made smooth.

The paint shall be of 1st quality and of specified color and shade and as approved.

Ready mixed paint as received from the manufacturer without any admixture shall be used, except for addition of thinner, if recommended by the manufacturer. However, if ready mixed paint of specified shade or tint is not available while ready mixed paint with approved strainer will be allowed. In such a case, the contractor shall ensure that the shade of the paint so allowed shall be uniform.

Polishing To Wood Work:

Woodwork to be polished shall be finished smooth with plane. It shall then be rubbed smooth with medium and fine sand papers. In no case sand paper shall be rubbed across the grains. All holes, cracks, open joints and small defects if all allowed to remain by the architect shall be stopped with putty made from pure whiting mixed to the proper consistency with linseed oil.

Polish shall be applied in very thin coats with special fine haired varnishing brushes. Before applying first coat after stopping, the wood surface shall be rubbed down lightly with a fine sand paper taking care to rub along the grains and to leave the color even. The number of coats shall be as specified in the item.

Measurement:

No separate measurement and payment shall be made for such finishing work. The cost of such finishing shall be included in the rate of related item of woodwork. But if the item is to be carried out independent item of measurement shall be as per is 1270.

Melamine polishing to wood work:

All unevenness shall be rubbed down to smooth with sand paper and surface shall be cleaned of dust.

The wood to be polished should be first painted with filler composed of a mixture of whiting and mentholated spirit to obtain a good glass surface. The surface shall be again rubbed down for making perfectly smooth with sand paper.

The number of coats of melamine polish shall be as specified in the item. On the woodwork a pad of woolen cloth covered by fine cloth shall apply a thin coat of melamine polish. The pad shall be moistened with polish and rubbed on a surface in a series of overlaying circles, applying the polish

uniformly over the entire area to give even surface. A trace of linseed oil on the face of pad facilitates this operation. The surface shall be allowed to dry and the remaining coats shall be applied in the same manner to finish off. The pad shall be covered with a fresh piece of clean fine cloth, slightly damped with mentholated spirit and rubbed lightly and quickly with circular motion.

The finished surface shall have uniform texture and high glass. The melamine polish shall be applied with spray gun and even coating shall be applied to get the very good quality of finishes.

Measurement:

No separate measurement and payment shall be made for such finishing work. The cost of such finishing shall be included in the rate of related item of woodwork. But if the item is to be carried out independent item of measurement shall be as per IS 1270.

SPECIFICATIONS (MAKES/MODELS)

LIST OF APPROVED BRANDS AND / OR MANUFACTURER FOR CIVIL WORK

SN	Particulars and Specifications	Approved Make/ model
1	Gypsum Board	Gyproc (saint gobain)/ USG BORAL
	Framing with complete system	Gyp steel ultra (saint gobain) /USG BORAL
2	Locks	
	Auto latch Lock	P-ALL1-22 (Ebco)/EG
	Multipurpose group Lock	E-MPL1-22 / E-MPL1C-22 (Ebco)/EG/Godrej
	Night latch	8812 (Godrej)/Doorset-NL 180 s/s / Europa 8010 NS of SS brush Finished
	Cylindrical lock (SS matt finish)	3792-with key and 3786-keyless (Godrej) / C120SS (Europa)
Mortise dead lock (two way) 8815(Godrej)/ Door set -l		8815(Godrej)/ Door set -ML 102 S/ Dorma Make
	Mortise lock with door handle	Matiz 8083(Godrej) / Door set- HL 170 S/S / Dorma Make
3	Drawer channels	
	Telescopic channels (zink plated)	STDS35(i)35/ STDS45(i)35/ STDS50(i)35/ STDS60(i)35 (Ebco)/ EFG/Everite/
	Bottom channels (powder coated)	BMDS 35/ BMDS 37/ BMDS 55/ BMDS 60 (Ebco)
4	General hardware	SS matt finish
	Door stopper	 i) Black/ivory/brown/silver color Powder coated DS1 (Ebco) ii) Spring type black/brown/ivory color powder coated (ECGL's sterling)
	'D' bracket	50x12 mm (Oswal)
	Hinges	i) 3"/4"/5"/6" 1.8mm th. SS matt finish (Suzu) ii) 75x12x19 1.2 mm th. SS matt finish for storage (Suzu) iii) Auto close hinges – slip on hinge- euro / click on hinge-I (Ebco) for storage
	Handles 'D' or 'C' type	1) 3"/4"/6"10mm dia SS 202 matt finish (Anjali)
	Tower bolt	3"/4"/6"/8" brass extruded SS matt finish (Oswal)
5	Floor spring	
	60 kg	7477 (Godrej) / M-74 (Hardwyn)/Dorma /Everite
	80 kg	8293 (Godrej) / M-74 (Hardwyn)/Dorma/Everite
	100 kg	8294 (Godrej) / M-76 (Hardwyn)/Dorma/Everite
6	Door closer	
	60 kg	Double speed 8292-silver, 7345- golden (Godrej) / scorpio (Hardwyn)/Dorma/Ebco/Ozone
	Fire rated 60 kg	1938 (Godrej) / Triton (Hardwyn)

lock, L arm, L connect, connector, floor spring, handle, plastic profile)	
8 Particle boards Novapan / Deco boa	ard
9 Computer accessories	
Keyboard tray with mouse tray KTE-1-45M (Ebco) /	Hettich/Innofit/Featherlite
CPU hanger/ shelf Side mounted IS /CPUSM(Ebco) , 4/2-	S CPU HL SM (Innofitt) 2-SMCS (Zipco)
	co) black/ivory/grey color
10 Foam Sleepwell / Feather f	foam
11 Glass film 3M INDIA /AVERY [DENNISON
12 Wood For Partition and Paneling Marandi wood or Equ Frame	uivalent
Wooden for Visible surface Steam Beach or Equivalent (ieBeading,jambs, etc.	uivalent
A <u>INTERIOR WORK</u>	
1 Vitrified floor tiles(600mm x 600mm) Johnson / Somani / A	
	at / Royel bond / Mevicol
Sealant Pidilite / Roaper	
3 Paint on Wall & Ceiling Asian Paint / Nerolac	С
4 Paint on Wood: Polyurethane systems (PU) Sirca Paint / Asian pa	aint
Ply wood (IS 303 BWR)/ water proof ply IS 701 / Block Board IS 1659 / Flush Door IS 2202 Green / Century / An 303 BWR]	nchor / Archid / Mayur / Kit [IS
6 Laminate IS 2046 Green / Formica / Su Century	unmica / Marino / Bloom /
7 MDF Exterior Grade ISI Mark Nuwood / Action tesl	la / Dura turff / Century/Green
8 Bison board NCL Industries	
Timber for lipping, moulding& when CIVIL Superior quality seas is to be finished in polish	soned Ghana teak.
10 Timber for all other type of CIVIL work First class seasoned	
11 Decorative laminate (1.0mm) Marino / Green / Sun	nmica / Formica
12 Exterior Grade Compact Laminate (5mm,6mm) Clads (Greenlam) / S	•
13 Veneer Green ply nature ma	ax / Century / Lignin
14 Hardware	
a) Latches Ebco / Hafele / Hettic	ch
b) Locks Ebco / Hafele / Hettic	ch / Godrej
c) Screw Nettle fold / GKW / H	Hafele
d) Floor Spring Doorset / Dorma / Oz	zone / Godrej
e) Patch Fitting Dorma / Haffle / Ozo	one
f) Handles Doorset / Ozone / Go	odrej

h) Key board trey i) CPU trolley Ebco/ Hettich / Innofit j) Door Closer Ozone / Dorma / Hafele / Godrej k) Cable Manger Ebco / Easy l) Glass Bracket Flora / Riddhi m) Magnet Suprime / Bentex / Honda n) Tower Bolt o) Hinge Suzu matt / Gary premium p) Nails Mehta / chakra / Sun q) L & key Riddhi / Prince 15 Glazing, Lacquered glass Tata / Modi guard / Saint gobain 16 Vinyl & Glass film 3M India / Avery Dennison 17 Roller Blinds Vista wall fashion / Mac 18 Fabric Masper / D Décor 19 Calcium silicate board Saint Gobain / Usgboral / Hilux 20 Mineral fiber ceiling tiles tabulated profile Armstrong / USG / Usgboral / AMF 21 Fire proofpvc sheet Vardhman wonder boards / Hilux 22 Corian (Solid Surfaces) DUPONT 23 Solid hardwood floor Vista / ACP Aluminum skirting Ozone Aluminum Section Jindal / Hindustan / Hindalco Featherlite/ godrej / wipro day 18 Fabrite Glass film Shardwood floor Vista / Armstrong / Squarfoot Aludecore / Armstrong / Urobond / Timex Dyone Aluminum Section Jindal / Hindustan / Hindalco Featherlite/ godrej / wipro Featherlite/ godrej / wipro Texture paint Asian / Nerolac 30 Sanitary Fixture Hindware / Jaquare / Grohe / Kohler		a) Drower elides telepoppie	Fb /11-f-1- /11-#:-b
i) CPU trolley Ebco/ Hettich / Innofit		g) Drawer slides telescopic	Ebco / Hafele / Hettich
j) Door Closer k) Cable Manger k) Cable Manger il) Glass Bracket m) Magnet suprime / Bentex / Honda n) Tower Bolt o) Hinge p) Nails q) L & key Riddhi / Prince 15 Glazing, Lacquered glass Tata / Modi guard / Saint gobain vinyl & Glass film 3M India / Avery Dennison 17 Roller Blinds Vista wall fashion / Mac 18 Fabric Masper / D Décor 19 Calcium silicate board Mineral fiber ceiling tiles tabulated profile Pire proofpvc sheet Vardhman wonder boards / Hilux Corian (Solid Surfaces) Solid hardwood floor Vista / ACP Aluminum Section Modular items like chairs, storage units, drawer units Wall Putty Banitary Fixture Hindware / Jaquare / Grohe / Kohler Sanitary Fixture Hindware / Jaquare / Grohe / Kohler Sanitary Fixture Hindware / Jaquare / Grohe / Kohler		, , ,	
k) Cable Manger I) Glass Bracket Flora / Riddhi m) Magnet Suprime / Bentex / Honda n) Tower Bolt O) Hinge Suzu matt / Gary premium Mehta / chakra / Sun q) L & key Riddhi / Prince 15 Glazing, Lacquered glass Tata / Modi guard / Saint gobain 16 Vinyl & Glass film 3M India / Avery Dennison Vista wall fashion / Mac 18 Fabric Masper / D Décor 19 Calcium silicate board Saint Gobain / Usgboral / Hilux 20 Mineral fiber ceiling tiles tabulated profile Armstrong / USG / Usgboral / AMF 21 Fire proofpvc sheet Vardhman wonder boards / Hilux 22 Corian (Solid Surfaces) DUPONT 23 Solid hardwood floor Vista / Armstrong / Squarfoot 24 ACP Aluminum skirting Ozone 26 Aluminum Section Jindal / Hindustan / Hindalco Featherlite/ godrej / wipro Texture paint Asian / Nerolac 30 Sanitary Fixture Hindware / Jaquare / Grohe / Kohler Hindware / Jaquare / Grohe / Kohler		i) CPU trolley	Ebco/ Hettich / Innofit
I) Glass Bracket m) Magnet Suprime / Bentex / Honda n) Tower Bolt Rolex / Flora / Riddhi o) Hinge Suzu matt / Gary premium p) Nails Mehta / chakra / Sun q) L & key Riddhi / Prince 15 Glazing, Lacquered glass Tata / Modi guard / Saint gobain 16 Vinyl & Glass film Track / Modi guard / Saint gobain 17 Roller Blinds Vista wall fashion / Mac 18 Fabric Masper / D Décor 19 Calcium silicate board Saint Gobain / Usgboral / Hilux 20 Mineral fiber ceiling tiles tabulated profile Armstrong / USG / Usgboral / AMF 21 Fire proofpvc sheet Vardhman wonder boards / Hilux 22 Corian (Solid Surfaces) DUPONT 23 Solid hardwood floor Vista / Armstrong / Squarfoot ALUMinum skirting Ozone 24 ACP Aluminum skirting Ozone 25 Aluminum Section Jindal / Hindustan / Hindalco Featherlite/ godrej / wipro Featherlite/ godrej / wipro Featherlite/ godrej / wipro Presture paint Asian / Nerolac 30 Sanitary Fixture Hindware / Jaquare / Grohe / Kohler Hindware / Jaquare / Grohe / Kohler		j) Door Closer	Ozone / Dorma / Hafele / Godrej
m) Magnet n) Tower Bolt Rolex / Flora / Riddhi o) Hinge Suzu matt / Gary premium p) Nails Mehta / chakra / Sun q) L & key Riddhi / Prince 15 Glazing, Lacquered glass Tata / Modi guard / Saint gobain 16 Vinyl & Glass film 3M India / Avery Dennison 17 Roller Blinds Vista wall fashion / Mac 18 Fabric Masper / D Décor 19 Calcium silicate board Saint Gobain / Usgboral / Hilux 20 Mineral fiber ceiling tiles tabulated profile Armstrong / USG / Usgboral / AMF 21 Fire proofpvc sheet Vardhman wonder boards / Hilux 22 Corian (Solid Surfaces) DUPONT 23 Solid hardwood floor Vista / Armstrong / Squarfoot ACP Aludecore / Armstrong / Urobond / Timex 25 Aluminum skirting Ozone 26 Aluminum Section Jindal / Hindustan / Hindalco Peatherlite/ godrej / wipro Featherlite/ godrej / wipro Featherlite/ godrej / wipro Featherlite/ godrej / wipro Texture paint Asian / Nerolac 30 Sanitary Fixture Hindware / Jaquare / Grohe / Kohler		k) Cable Manger	Ebco / Easy
n) Tower Bolt o) Hinge Suzu matt / Gary premium p) Nails Mehta / chakra / Sun q) L & key Riddhi / Prince 15 Glazing, Lacquered glass Tata / Modi guard / Saint gobain 16 Vinyl & Glass film 3M India / Avery Dennison 17 Roller Blinds Vista wall fashion / Mac 18 Fabric Masper / D Décor 19 Calcium silicate board Saint Gobain / Usgboral / Hilux 20 Mineral fiber ceiling tiles tabulated profile Armstrong / USG / Usgboral / AMF 21 Fire proofpvc sheet Vardhman wonder boards / Hilux 22 Corian (Solid Surfaces) DUPONT 23 Solid hardwood floor Vista / Armstrong / Squarfoot ACP Aluminum skirting Ozone 26 Aluminum Section Jindal / Hindustan / Hindalco Modular items like chairs, storage units, drawer units Wall Putty Birla white / J.K. white 29 Texture paint Asian / Nerolac 30 Sanitary Fixture Hindware / Jaquare / Grohe / Kohler		I) Glass Bracket	Flora / Riddhi
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Mineral fiber ceiling tiles tabulated profile Armstrong / USG / Usgboral / AMF	18	Fabric	Masper / D Décor
21 Fire proofpvc sheet 22 Corian (Solid Surfaces) 23 Solid hardwood floor 24 ACP 25 Aluminum skirting 26 Aluminum Section 27 Modular items like chairs, storage units, drawer units 28 Wall Putty 29 Texture paint 30 Sanitary Fixture 31 Sanitary Fittings Vardhman wonder boards / Hillux DUPONT Vista / Armstrong / Squarfoot Aludecore / Armstrong / Urobond / Timex Ozone Jindal / Hindustan / Hindalco Featherlite/ godrej / wipro Birla white / J.K. white Asian / Nerolac Hindware / Jaquare / Grohe / Kohler Hindware / Jaquare / Grohe / Kohler		Calcium silicate board	· ·
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23Solid hardwood floorVista / Armstrong / Squarfoot24ACPAludecore / Armstrong / Urobond / Timex25Aluminum skirtingOzone26Aluminum SectionJindal / Hindustan / Hindalco27Modular items like chairs, storage units, drawer unitsFeatherlite/ godrej / wipro28Wall PuttyBirla white / J.K. white29Texture paintAsian / Nerolac30Sanitary FixtureHindware / Jaquare / Grohe / Kohler31Sanitary FittingsHindware / Jaquare / Grohe / Kohler	21		Vardhman wonder boards / Hilux
24 ACP Aluminum skirting Ozone 26 Aluminum Section Jindal / Hindustan / Hindalco 27 Modular items like chairs, storage units, drawer units Featherlite/ godrej / wipro 28 Wall Putty Birla white / J.K. white 29 Texture paint Asian / Nerolac 30 Sanitary Fixture Hindware / Jaquare / Grohe / Kohler 31 Sanitary Fittings Hindware / Jaquare / Grohe / Kohler			DUPONT
25 Aluminum skirting 26 Aluminum Section 27 Modular items like chairs, storage units, drawer units 28 Wall Putty 29 Texture paint 30 Sanitary Fixture 31 Sanitary Fittings Ozone Jindal / Hindustan /	23	Solid hardwood floor	Vista / Armstrong / Squarfoot
26 Aluminum Section 27 Modular items like chairs, storage units, drawer units 28 Wall Putty 29 Texture paint 30 Sanitary Fixture 31 Sanitary Fittings Jindal / Hindustan / Hi	24	ACP	Aludecore / Armstrong / Urobond / Timex
27 Modular items like chairs, storage units, drawer units 28 Wall Putty 29 Texture paint 30 Sanitary Fixture 31 Sanitary Fittings Featherlite/ godrej / wipro Birla white / J.K. white Asian / Nerolac Hindware / Jaquare / Grohe / Kohler	25	Aluminum skirting	Ozone
drawer units 28 Wall Putty Birla white / J.K. white 29 Texture paint 30 Sanitary Fixture 31 Sanitary Fittings Featherlite/ godrej / wipro Birla white / J.K. white Asian / Nerolac Hindware / Jaquare / Grohe / Kohler	26	Aluminum Section	Jindal / Hindustan / Hindalco
29Texture paintAsian / Nerolac30Sanitary FixtureHindware / Jaquare / Grohe / Kohler31Sanitary FittingsHindware / Jaquare / Grohe / Kohler	27		Featherlite/ godrej / wipro
29Texture paintAsian / Nerolac30Sanitary FixtureHindware / Jaquare / Grohe / Kohler31Sanitary FittingsHindware / Jaquare / Grohe / Kohler	28	Wall Putty	Birla white / J.K. white
31 Sanitary Fittings Hindware / Jaquare / Grohe / Kohler	29		Asian / Nerolac
31 Sanitary Fittings Hindware / Jaquare / Grohe / Kohler	30	Sanitary Fixture	Hindware / Jaquare / Grohe / Kohler
	31		·
1 1 1 1 1 2	32	Wall paper	Green / Asian

Note:

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

LIST OF APPROVED MAKE FOR CIVIL WORKS

1) Ordinary Portland Cement

2) White Cement

3) TMT "Fe - 415/ 500 D" Ribbed bars

4) Structural Rolled Steel sections-beams,

5) Structural Hollow steel sections

6) Structural tubular sections

7) Coarse Aggregates (machine cut)

8) Stone Rubbles & Gravels

9) Shuttering plywood

10) Water proof/Marine grade plywood

11) Commercial Plywood –

12) Decorative ply

13) MDF

14) Prelam particle board

15) Laminate sheet

16) Cement bonded particle board

17) Calcium silicate board / Gypsum Board.

18) Flush door – decorative / non decorative

19) Compact sheet

20) Dead Locks/ Mortise locks/

Narrow stile dead locks/ Tubular locks

21) Float Glass / wired Glass, Mirror

22) Reflective Glass

23) Paver block

24) MS Rolling shutter

25) Precast terrazo tiles &skirting(Mosaic)

26) Glazed tiles

27) Ceramic tiles

29) Vitrified tiles

30) Non-metallic floor hardener

31) Glass mosaic

32)Construction chemicals

Plasticisers, Bonding agents,

SBRmicro concrete

Water proofing chemicals

Chemical Water proofing &

Integral water proofing compound

Crystalline water proofing

33) Silicon sealant/ Silicon paint

Polysulphide sealant

P.U sealant/

As per latest approved list from R & B Dept.

Birla, J.K.

Tata, RINL. (VIZAG). SAIL

Tata, SAIL, RINL tee, flats, angles, bars(round, square,

hexagonal)

(Square & Tata, Asian, Jindal, Surya, Appolo.

Rectangular)

Tata, Asian, Jindal, Surya, Appolo.

6mm to 40mm sizesApproved quarry from Sevalia.

(Hardblack trap stone)

Approved quarry from Sevalia. (Hard

black trap stone)

Anchor, Green, Archid, Silicon, Century

as per Anchor, Green, Archid, Silicon, Century

- IS - 710 (BWP)

IS - 303 (BWR) Anchor, Green, Archid, Silicon,

Century

(Veneer) Anchor, Green, Archid, Silicon, Century

Nuwood, Duratuff (exterior grade only) Novapan, Bhutan. (exterior grade only)

Formica, Greenlam, Archid, Bloom, Aerolam.

Shera ,NCL (Bison board), Everest (Eternite).

Saint Gobain (India Gypsum), Hilux ,Lafartz.

Anchor, Green, Archid, Silicon, Century

Alfiaca, Sundek, Vir, Bloom, Formica, merino.

Kich, Dorma, Dorset, Yale.

Modi guard, Saint Gobain, Asai, HNG.

Saint Gobain, PPG, Asahi, Emirates, Pilkington.

Vyara, Super eq..

Sona, Sagar, Suryoday, Gandhi,.

Royal(PORBANDAR), Alcock, Vyara, Nitco,...

Asian, Johnson, Somani, Kajaria, Nitco,

Asian. Johnson, Somani, Nitco, Kajaria,

Kajaria, Johnson, Simpolo, Nitco, Somany

Ironite

Bisazza, Palladio

BASF, Fosroc

Cico or PidilitePenetron or Kryton

Wacker, Dowcorning, GE, Soudal, Bostik

Pidilite, Chawksey, Sika (Exterior grade - UV resistant)

34) Pre-coated steel roofing/ walling sheets

35) Polypropylene fibers

550 Mpa Tata bluescope, Interarch, Nippon Dendro (poly steel)

ShreePrecoated (Meta color)
Nina concrete. Reliance

36) Paint, primer, putty Asian, Nerolac, ICI, Birla (putty), JK (Putty)

37) Liquor /Melamine /PU polish MRF, Asian, ICI, ICA

38) PVC Water stop
39) Door Window Hardware,
40) Floor spring
Dorma. Mab, Hafle, Godrej, Inox,Ozone
Dorma. Yale., Hafle, Godrej, Ozone

42) AdhesivesWooden Adhesives Fevicol, Blue coat, Araldite.
Tile adhesives & grouting material BAL, Laticrete, Kerakoll.

43) Oil & water finish Double boiled CAT brand linseed oil & MTO of reliance

44) Fire door Shaktimat, AGEW, Radiant.

45) Aluminum sections Jindal, Hindalco (Indal), Banco, Royal touch,

Bhoruka, Pankaj, Alufit, Gulf extrusion. 46) Aluminum finish

Interior works

Super durable powder coated (Akzonobel, Jotun, FullerAG)

Façade exteriors PVDFfinish (Valspar, PPG, Akzonobel)

Non visible surface Chromatizing.

47) Aluminum Window locks, handle, Alualpha, Securestyle, Giessee, Roto, Geze, Savio,

Frikstay

47a) Rough ground for Aluminium works IS 710 ply, 6mm to 8mm thick or Ghana teak.

48)Gasket of infill panel for Aluminum Amee rubber, gold seal, Osaka rubber, Maharashtra

polymer, Maharashtra tyre& rubber industries.

Axel, Hilti, Fischer, Kundan, Mungo, Corroshield,

Buildex Glass wool

50) Spandrel Insulation Glass wool
51) Wool felt/weather strip Anand, reddiplex ltd.

52) Rust Remover/converter Feovert (Krishna Conchem), Roff Rust Clear

(Pidilite Industries)
Fosroc, BASF

53) Non-shrink general purpose grout Fosroc, BASF 54) Anchoring chemical for rebar dowell bar Hilti, Fischer, Axel

55) Roll down mosquito curtain Netmos

56) Baker Rod, Expansion joint pre-moulded filler board Supreme.

57) SS clamps for cladding
Hilti, Axel.
58) Aluminium operable Louvers
Technal, Domal
59) Spacer tape
Norton, tremco, bow.

60)Anodising Bhoruka alum, Alufit alum, Ajit India, Alufin

61) Glass Processor

49) Anchor Fasteners

For HS/HT, Bulletproof, DGU, Toughness.

lamination etc. Impact safety, sejal, Glasstech, GSC, Asahi, FG

Glass, Goldplus, Emirates Intumecent Hilti/3M.

63) Elevator Schindler, Otis, Mitsubishi
64) uPVC windows Kommerling, Fenesta

65) First Class Brick Jay Jalaram Bricks, Jindal Mechno Bricks

66) Autoclaved Aerated Concrete Block Aerocon, Green

Note:

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- [b] Before starting of work, contractor must get all samples/make approved from Architect/ Bank's authorities before using at site
- [c] Consultants/Bank's authorities reserve the right to add or delete name of any manufactures and when required.
- [d] Consultants/Bank's authorities reserve rights to select any of the specified brands mentioned above.



Major	CIVIL Repairing and Renovation WORK FOR SBI AT RSET	I - PORBA	NDAR		
Sr. No.	Description	Quantity	Unit	Rate	Amount
Note :	Rate should be inclusive of material,labour,tools, machinery, scaffolding, final disposal of debris, cleaning cutting wastage etc. all taxes, transportation, VAT, Excise, Octroi etc. Excluding GST complete. [GST Will be paid as per Applicable at the time of payment of bills]				
	Basic Rate of Items are Excluding GST				
1.00	EARTH WORK				
1.00	EXCAVATION WORK	220.50	CMT		
	Excavation in all types of soil by mechanical means (Hydraulic Excavator) Or Manual Means, including murum, for foundations of wall, columns, plinth beams etc. including shoring strutting, bailing out water/pumping off water if required, refilling the trenches, foundatin pits, ramming, watering consolidating in 15 cms to 20 cms layers, removing and stacking simultaneously the excavated stuff as directed within/outside the site area upto any lead and/or spreading soils in layers for site development and consolidating as directed etc. complete.				
2.00	Backfilling in trenchs as well as with available earth as mentioned below (well graded murram or equivalent) including watering, ramming and compacting in layers of 150mm depth by using 8 to 10 ton roller after sprinkling required quantity of water to attain 95% of maximum dry density. Filling shall be carried out to the grades as shown in the drawings or as directed by Engineer in charge Payment for the item includes site clearance and filling with approved fill material to be carried out as per detailed specifications. With selected excavated earth.	184.50	CMT		
3.00	Filling in trenchs as well as with selected approved earth as mentioned below (well graded murram or equivalent) including watering, ramming and compacting in layers of 150mm depth by using 8 to 10 ton roller after sprinkling required quantity of water to attain 95% of maximum dry density. Filling shall be carried out to the grades as shown in the drawings or as directed by Engineer in charge Payment for the item includes site clearance and filling with approved fill material to be carried out as per detailed specifications. With murrum brought from outside	107.00	Jivii		
4.00	P/L PCC 1:2:4 FOR WALL FOUNDATION AND FLOOR	2025.00	CMT		
4.00	ETC.	6.00	CMT		

	Providing and laying PCC (plain cement concrete) 1:2:4 by volume (1 part of cement: 2 parts of coarse sand: 4 parts of stone aggregates of size 20mm and downgraded), M15 under foundation, plinth protection, grade slab etc. manufactured in a fuly automatic batching plant and transported to site of work in transit mixers having continuous agitation, for all leads and placing/pumping from Transit mixers to site of laying ,spreading, ramming, compacting as per requirement and curing etc, in line, level and plumb including the cost of centering, shuttering, finishing and complete in all aspects as per specification or as directed by Architect/Engineer.			
5.00	P/L PCC (M-25)FOR Various RCC Memebers	33.14	CMT	
	Providing and laying machine mixed Plain Cement ConcreteM-25 GRADE CONCRETE 1:1:2 (1 part cement: 1 parts coarse sand: 2parts of stone agreegat of size 40 mm and down.) for specified thickness, for foundaitons below walls, column footings, below floor ,sLABS, BEAMS, LINTEL,COLUMN,COPING etc. ANY RCC MEMBER including centering and shuttering if required, laying spreading, ramming, consolidating as per requirement and curing etc. complete as directed.			
6.00	P/F REINFORCEMENT BARS FOR DAMAGED BARS (FE 500GRADE)			
	Providing TMT bar (Fe-500/500D) Reinforcement for RCC work including bending binding and placing in position complete up to floor to Level.Reinforcement shall be measured in length including hooks, if any, separately for different diameters as actually used in work, excluding overlap, from the length so measured, the weight of reinforcement shall be calculated in tonnes on the basis of IS: 1732 Wastage, overlaps, couplings, welded joints, spacer bars, chairs, stays, hangers and annealed steel wire or other methods for binding and placing shall no be measured and cost of these items shall be deemed to be included in the rates for reinforcement.			
		7144.00	KG	
7.00	REPARING OF DAMAGED RCC WORK	100.00	Kg	
	Disemntalling damaged RCC work, applying "CONBONDSNA or equivalent Epoxy Rasin to concrete and reinforcement, covering reinforcement with concrete using 'EXPACRETE SN70' Non shrink free flow grouting product in 75 mm thickness, including, leak proof centering shuttering, curing and carting away debris. Rate is all levels. 'CONBONDSNA' & 'EXPACRETE SN70' Mfg. by ESSEN SUPPLEMENTS (I) LTD. or equivalent chemicals admextures as per the manufacturer's detail and instructions of the Engineer-in-charge. While repairing the column/slab/beam the surrounding structural member shall be edquat supporting. (Cost of Reinforcement shall be paid seperatly as per Item No 2.4).			
8.00	P/C BELA MASONARY WALLS (230/350 mm Thick)	107.81	CUMT	

	White stone bela masonry block in course with locally available good quality brick masonry including scaffolding, curing, etc. for walls, parapets, etc. below and above plinth at all levels, joints/wall surface prepared either for pointing or plastering complete, as per the enclosed detailed specifications, drawings or as directed by Engineer in charge with bricks having minimum crushing strength of 35 Kg/Cm2 230mm thick Bela work in cement mortar 1:5			
9.00	P/C 115 MM THICK BRICK PARTITION WALLS	59.33	SMT	
	White stone bela masonry block in course with locally available good quality brick masonry including scaffolding, curing, etc. for walls, parapets, etc. below and above plinth at all levels, joints/wall surface prepared either for pointing or plastering complete, as per the enclosed detailed specifications, drawings or as directed by Engineer in charge with bela having minimum crushing strength of 35 Kg/Cm2 115mm thick Bela work in cement mortar 1:4 including scaffolding, racking out joints, reinforcement of 2 nos. 8 mm dia MS bars at every fouth leayer, curing etc. complete as directed at all heights as follows. (Rate includes the cost of MS bars or Iron hoop)			
10.00	P/A 12 MM THICK CEMENT PLASTER ON OLD WALL AND CEILLING	100.00	SMT	
	Providing and applying 12mm thick finish cement plaster at all heights and below plinth in 1:4 cement mortar to the walls, beams, ceiling, stair, column, pattias, patch work grooves including scaffolding, curing & finishing smooth. The plaster surface shall be rubbed with 'Iron plate". till the surfae shows cement paste in line and level complete as directed. Including dismantling existing plaster.cleaning the site and carting away debris at all levels. Its disposal also Rates includes removing switch board plates and refixing same after plastering.			
11.00	P/A 12MM THICK FINISH CEMENT PLASTER ON NEW WALL AND CEILLING	117.53	SMT	
	Providing and applying 12mm thick finish cement plaster at all heights and below plinth in 1:4 cement mortar to the walls, beams, ceiling, stair, column, pattias, grooves including scaffolding, curing & finishing smooth. The plaster surface shall be rubbed with 'Iron plate". till the surfae shows cement paste in line and level complete as directed. Plaster on New walls and ceilling	117.33	JIVI I	
12.00	P/A 19MM THICK SAND FACED CEMENT PLASTER	502.00	SMT	
	Providing and applying 19 mm thick sand faced cement plaster in two coats at all heights with first coat of 12 mm with cement mortar 1:4 (1 part cement : 4 parts of sand) and second coat of 7 mm with cement mortar 1:3 , rough finish with using sponge/ " Tipani ", on all types of concrete/brick surfaces making grooves,plastre pattas,projecting pattas paches work as per detail, including scaffolding, curing etc. complete as directed. Including dismantling existing plaster.cleaning the site and carting away debris at all levels. Its disposal			
13.00	FILLING CRACK IN WALL AND PLASTER	100.00	RMT	

	Filling crack in wall & plaster by making V shape joint with high strength non shrink free flow cement of Fosroc (Chemical Rendroc CF) or equivalent. Finishing the joint with Polymer cement mortor. Rate also includes cleaning the site and carting away debris at all levels.			
14.00	Provding and applying Damp Proof Ultra (Product Code No-5698) of Asian Paints water proofing membrane on New/Old surface at all heights and levels. including Horizonal and vertical surfaces, Applicantion must be according to company applicators with Company warrenty certifications. including the cost of labour, scaffolding, applicator, material at any height including scraping of old paint etc all complete as per the instruction of Architect.	2750.00	SMT	
15.00	P/A ACRYLIC EMULSION PAINT (PLASTIC PAINT)	1885.00	SMT	
10.00	Providing and applying (with rollers only) Acrylic emulsion paint of required shed and approved make on new/old work in two or more coats to give an even shed including the preparation of surface for painting, applying FULL primer and putty, at all heights complete as per manufacturer's specification and as directed.	1865.00	SIVIT	
16.00	P/A SYNTHETIC ENAMEL PAINT	582.00	SMT	
	Providing and applying synthetic enamel paint, at all heights of required shade and approved make on old work including the scrapping/cleaning and preparation of surfaces for painting, applying primer and putty, with two or more coats of approved first quality enamel.			
17.00	P/A APEX PAINT	3540.00	SMT	
	Provding and applying Apex Ultima Stratch paint (Asian Paint Advanced Anti Algal wheather proof emulsion) on New/Old surface at all heights and levels. Work includings preparation of surfae cleanning and scraping by wire brush.Filling cracks with "Rendroc cs"(fosroc) and applying coat of Hydroproof liquid mixed with white cement.Applying primer coat as per company specifications and apply 2 or more coats of paint to give uniform shed at all levels complete.			
18.00	P/F VITRIFIED TILES FLOORING [600mmx600mm]	76.28	SMT	
	Providing & fixing 600 x 600 Vitrified tiles flooring of approved make and shade for flooring as per design. in CM 1:4 over a cement mortor bedding, .Levelling the existing underneath CM bedding & providing cement slurry including light compaction as directed. The rate includes filling the joints of tiles using adhesive & pigments. The rate includes curing acid cleaning, cutting etc. complete. Rate shall be same for all levels. Basic price of Tiles shall be Rs. 500=00 per Sq. Mt (Excluding GST). etc. complete as directed. The rates include removal of existing Flooring up to bedding mortar. Its disposaal .No additional sand bedding charges shall be paid for Electric trenches filling			
19.00	P/L SHOT BLASTED RUBBER MOULD MATT/GLOSSY FINISH PAVER BLOCK	661.00	SMT	

	Providing, laying and fixing in line, level, two coloured patten as directed by Architect and slope as per requirement inter locking colored C.C paver block fixing in pattern as per details and design having block thickness 60mm with compressive strength 40 N/nM2 and water absorption less than 3% and wear resistance of under 2mm including laying and fixing paver block on good quality river sand layer of approx. 25mm to 40mm thick over prepared base and filling the joints and edges at ends in C.M. (1:2), curing, all tools and tackles etc. complete as directed. [For Front side Entrance & Margin] Paver Block of Alcock Cement Pipe & Concrete Works or Equivelent Make to be used			
20.00	P/F POLISHED GREEN KOTAH STONE FLOORING/SILLS IN Windows			
	Providing and laying polished green kotah stone flooring using one side pre polished chiesel dressed green kotah stone in uniform shade of size 17"x17" / 17"x23" / 23"x23" (thickness of the stone 30 mm to 35 mm) over 37 mm thick cement morter 1:6 with flush pointing of joints with cement paste mixed with green pigment colour, machine and hand	58.50	SMT	
	polishing, daily moping with water and kerosene as directed for atleast 15 days etc. complete as directed.			
21.00	P/L CERAMIC TILES FLOORING/DADO IN TOILET	30.00	SMT	
	Providing & fixing 600 x 600 mm/300x 600 or as per theinstruction of Architect coloured ceramic Tiles Flooring of approved make first quality ceramic tiles for flooring as per design, Laying Tiles in CM in 1:4 over cement mortor beading laid to proper slope, line & level as specified. The rate includes curing acid cleaning, cutting etc. complete. Rate shall be same for all levels (Toilet).Sample of the tiles must be got approved from Architect/Bank. Rate includes dismantling of existing tiles flooring and disposal complete as directed. (Basic price of tiles shall be Rs.400=00 Per Sqmt)			
22.00	P/F GRANITE FOR PANTRY PLATFORM	4.58	SMT	
	Providing and fixing selected black jet granite, mirror polish, 18mm to 19 mm thick with machine cut edges, in required length and width as per architects detail for sandwich platform etc. including cutting holes etc. for sink etc. providing & fixing borders, facia at platform with machine cut & mirror polish edges filling joints with balck colour pigment mixed in white black colour pigment in white cement, using araldite for borders & facias will be paid in square meter only. Facia Patti also will be measured. For Pantry Platform Basic price of Granite shall be Rs. 1700=00 per Sq. Mt (Excluding GST)			
23.00	Providing and injection Silicone waterproof paste along the gapes in the existing windows as per the instruction and manuals of approved brand with all materials and loabour including removing the damaged silicon, etc complete as per the instruction of Architect	35.00	No	
			1,40	
24.00	P/F ALUMINIUM SLIDDING WINDOW	17.00	SMT	

	Providing and fixing powder coated aluminium Two track sliding shutter glass windows using alluminium sections of following sizes outer frame of 63.50 x 38.10 x 1.41 mm thick wt. 0818 kg. Rmt. Top and sides frame 61.85 x 18 x 1.30 mm thick Wt. 0659 Kg/Rmt bottom frame 61.85 mm x 31.75 x 1.20 mm thick Wt. 0695 Kg/Rmt Shutter Top & Bottom 40.00 x 18.00 mm x 1.29 mm thick Wt. 0456 Kg/Rmt Shutter Interlock 40.00x18.00+8.34 x 1.29 mm thick Wt. 0547 Kg/Rmt Shutter Side (Handle) 40.00x18.00x1.29mm thick Wt.0456 Kg/Rmt 5mm thick glass shall be framed in Alluminium section of 40.0 x 18.0 mm with necessary slidding channel and locking arrangement size of the shutter shall be as directed. Alluminium sections shall be of powder coated.				
	Rate includes all necessary fixing arrangements, Neoprine lining, filling the gaps the between AL. section and wall with sealent as directed. (Aluminium sections to be used shall be of Jindal make of Series 18 mm or equivalent section of Hindalco etc. as approved by the Architect in charge). There can be variation of plus or minus 10% in the thicknees and weight of aluminum sections.				
25.00	Removing if necesarry , repairing, refixing existing aluminium sliding winodws for proper and smooth funcitiong with Changing of broken glass in existing steel windows pannel & louvers by 4mm thick glass matching with existing glass fixing same with putty.locks, handles etc. complete. Including Removing broken glasses	0.7.00			
	and the same of th	35.00	smt		_
26.00	REPAIRING OF FLUSH DOOR SHUTTER WITH BOTH SIDE LAMINATE FINISH	67.00	SMT		
	Repairing of flush door shutter repairing/replaceing the damaged TW leapingon all edges of shutters with replacing damaged laminate as per architect's detail, supplying & fixing approved fixtures & fittings such as S.S hinges 4" long, tower bolts 8" long, handles 6" long ,Aldrops 12" Long, as per the details flush shutters are with frame.				
27.00	P/F Wall panelling with laminate finishing for wall and Pillar Near Doors`				
	Providing and laying panelling on walls & pillars having 12 mm thick MDF Board exterior grade / 6 mm thick ply and 1.0 mm th laminate fixed on wall & pillars with Aluminium. framing of 25mmx25mmx1.20mm thick at maximum 2'-0" c/c bothways on wall and pillar etc complete as directed as per design and instruction of Architect.	107.00	SMT		
28	WEATHER SHADE ON WINOWS				
	Providing & Making all the necessary works for Providing & fixing 6 mm thk. U.V. resistant Poly Carbonate Shed Roof Supported on necessary 30 x 30 mm MS frame, preparing groove in wall,inserting the sheets, P&L C.M. 1:3 Lodhiya (Vata) with SBR/Waterproofing Compound and making good the wall etc. all complete as directed. Area of Polycarbonate Sheet in plan shall be measured.	37.00	SMT		

29	Providing & fabrication of Concertina Coil Fence: 0.6 Mtr. Dia			
	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 meter open able length (total length 90 m), having 50 nos rounds per 6 meter length, up to 3 m height of wall with angle iron 'Y' (50mm x 50 mm x6 mm and oil painting 3 coats) shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43 478 gm/ meter			
	mm thick) and weight 43.478 gm/ meter .	290.00	RMT	
30.00	Charges for dismantling work including stacking debris and reusable material as directed including carting away debris all levels.			
30.10	Dismantling Brick wall/ Brick partition wall with or without plaster etc.	40.00	СМТ	
30.20	Dismantling very carefully the RCC Weather shade /slab/beam/ lintel etc with or without plaster Rate including cutting of existing reinforcement bars etc complete	0.00	CMT	
30.30	Removing of Existing Plaster and carting away debris	50.00	SMT	
30.40	Dismantling tile work in floors and roofs laid in cement mortar including stacking material	60.00	SMT	
31.00	Providing and fixing concealed SDR-13.5 CPVC water supply line ISI approved mark, including all necessary specials, making zaries, making holes, cutting floors and making good after work is complete etc. complete as directed for. Pipe shall be Astral/Supreme make. at all levels			
[a]	- Do - for 15 mm dia line.	20.00	RMT	
[b]	- Do - for 25 mm dia line.	20.00	RMT	
[c]	- Do - for 38 mm dia line.	20.00	RMT	
[d] 32.00	- Do - for 40 mm dia line. Cleaning of terrace/loft water storage/UNder ground water tank (inside surface area) upto any capacity at all heights with coconut brushes, duster etc., removal of silt, rubbish from the tank and cleaning the tank with fresh water disinfecting with bleaching powder @ 0.5gm per litre capacity of tank including marking the date of cleaning on the side of tank body with the help of stencil and paint and disposing of malba all complete as per direction of Engineer-in-Charge. (The old date alreadywritten on tank should be removed with paint remover or black paint and if date is not written with the stencil or old date is not removed deduction will be made @ Rs. 0.10 per litre) (if during cleaning any Gl fittings or ball cock is damaged that is to be repaired by contractor at his own cost and nothing	20.00	RMT	

33.00	Providing & laying & fixing UPVC SWR drainage line concealed/open in the structure as per details and requirement with necessary specials such as Y-2, T-2, offset, plugs, bends and filling the joints with approved adhesive including cutting of wall floor and making good after the work is cover etc. all as above. Pipe shall be Prince/Supreme / Astral make at all levels.			
[a]	For 75 mm dia 6 Kg/Cm2	50.00	RMT	
[b]	For 100 m dia pipe 6 Kg/Cm2	120.00	RMT	
[c]	Providing laying &fixing concealed 38 mm dia P.V.C. waste water pipe line complete as directed.	10.00	RMT	
34.00	P/F RAIN WATER DISPOSAL PVC PIPE			
	Providing & Fixing 110 mm dia PVC pipe 4 Kg/Cm2 for rain water disposal including welding of joints, Fixing with M.s Clamps as per approved design from Architect details and as directed. This also includes fixing of shoe band. The item shall be measured in RMT and nothing extra shall be paid for the fitting. Pipes shall be Finolex/Prince/Supreme make at all levels.	50.00	RMT	
35.00	Constructing brick masonry manhole in cement mortar 1:4 (1 cement: 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement: 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement: 4 coarse sand (zone-III): 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design: 19.7.2 Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg): 19.7.2.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	13.00	No	
36.00	Dismentalling and Removal Of existing external Drainage line and making the reconnection of newly laid drainiage lines to existing septic tank, soak pit and inspection chembers will all labours and materials.	1.00	Job	
27.00	Debaging steel in DCC manufacture by the continue of the form			
37.00	Rebaring steel in RCC member by using various diameter 10mm to 20mm. Dia, hilti make chemical (Re-500) max.depth 300 mm	150.00	No	
38.00	Providing and fixing Polyster,fiberglass ,aluminium MOSQUITO NET of approved make and size and weight with VELCROW on existing windows with necesarry scafolding and all materials and labour at any floor as per the instruction of engineer in charge	175.00	Smt	

GRAND TOTAL	1
URAND I UTAL	1