



**RESERVE BANK OF INDIA
ESTATE CELL, BYCULLA, MUMBAI**

General repair and application of waterproof coating on terraces of buildings at RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai

Reserve Bank of India, Mumbai invites two-part tender by e-tender mode from the contractors empaneled with Reserve Bank of India, Estate Office, Fort, Mumbai in category of Civil Works (D) costing between ₹25 Lakh to ₹50 Lakh for the captioned work. The tendering would be done through the e-Tendering portal of MSTC Ltd (<https://www.mstcecommerce.com/eproc/>). All interested eligible empaneled contractors must register themselves with MSTC Ltd through the above-mentioned website to participate in the tendering process.

SCHEDULE OF TENDER (SOT)

a. Name of work	General repair and application of waterproof coating on terraces of buildings at RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai
b. e-Tender no	RBI/Mumbai Regional Office/Estate/125/24-25/ET/730
c. Mode of Tender	e-Procurement System (Online Part I - Techno-Commercial Bid and Part II - Price Bid through https://www.mstcecommerce.com/eproc/)
d. Tender Value (Estimate Cost)	Rs. 40.17 Lakh
e. Date of NIT available to parties to download (View Tender Time)	On 09.01.2025 from 06:00 PM onwards
f. Pre-Bid meeting	Offline at 11:00 AM on 05.02.2025 at Estate Cell, Byculla
g. i) Earnest Money Deposit	i) Rs. 80,340/- (Rupees Eighty Thousand Three Hundred Forty only) in the form of NEFT or BG, in favour of Reserve Bank of India, Mumbai, to be delivered in physical form at Reserve Bank of India Estate Cell, Byculla, Mumbai Central before cut off time. NEFT details A/c No.: 04869229925 IFSC: RBIS0MBPA04 (5th & 10th digits are zero) Kindly provide the proof of EMD deposit to us at following email id: sgangurde@rbi.org.in / artiyadav@rbi.org.in

ii) Tender Fees	ii) No Tender Fees
h. Last date of submission of EMD	On or before 17.02.2025 by 2:00 PM Note – (i) In case of NEFT, EMD amount should be credited in above given account on or before Cut of Time (ii) In case of BG, BG should be delivered in physical form at Reserve Bank of India Estate Cell, Byculla, Mumbai Central before cut off time.
i. Date of Starting of e-Tender for submission of online Techno-Commercial Bid and price Bid	On 09.01.2025 from 06:00 PM onwards
j. Date of closing of online e-tender for submission of Techno-Commercial Bid & Price Bid	at 02:00 PM on 18.02.2025
k. Date & time of opening of Part-I (Techno-Commercial Bid) The date and time of opening of Part-II (Price Bid)	at 03:00 PM on 18.02.2025 at Estate Cell, Byculla, Mumbai 400008 The date and time of opening of Part-II (Price Bid) shall be intimated to the eligible vendors subsequently)
l. Transaction Fee	As per MSTP through MSTC payment gateway/NEFT/RTGS in favour of MSTC LIMITED

2. The Bank is not bound to accept the lowest Tender and reserves the right to accept either in full or in part any tender. The Bank also reserves the right to reject all the tenders without assigning any reason therefor.

3. Any amendments / corrigendum to the tender, if any, issued in future will only be notified on the RBI Website and MSTC Website as given above and will not be published in the newspaper.

Regional Director
Reserve Bank of India
Mumbai



RESERVE BANK OF INDIA

**Estate Cell, Byculla Office,
Mumbai - 400008**

e-TENDER FOR

**General repairs and application of waterproof coating on terraces of
buildings at RBI Senior Officers' Quarters at Jalada & Varada,
Prabhadevi, Mumbai 400 025.**

Part I (Techno-Commercial Bid)

(Containing Section I to Section IX)

Name of Bidder _____

Address _____

Date of Pre-Bid meeting: Offline: At 11:00 AM on 05.02.2025

**Venue: Conference Room in the Estate Cell, I-Floor, Byculla Office
Reserve Bank of India, Mumbai – 400 008**

Due Date and time of Submission of e-Tender: At 02:00 PM on 18.02.2025



भारतीय रिज़र्व बैंक
संपदा कक्ष, भायखला, मुंबई

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Regional Director
Reserve Bank of India
Mumbai

Important instructions for e-procurement

Bidders are requested to read the terms & conditions of this tender before submitting online tender.

1	Process of E-tender: Registration: The process involves vendor's registration with MSTC e-procurement portal which is free of cost. Only after registration, the vendor(s) can submit his/their bids electronically. Electronic Bidding for submission of Technical Bid as well as Commercial Bid will be done over the internet. The vendor should possess Class III signing type digital certificate. Vendors are to make their own arrangement for bidding from a P.C. connected with Internet. MSTC is not responsible for making such arrangement. (Bids will not be recorded without Digital Signature). SPECIAL NOTE: THE TECHNICAL BID AND THE COMMERCIAL BID HAS TO BE SUBMITTED ON-LINE AT https://www.mstcecommerce.com/eprocn/ 1). Vendors are required to register themselves online with www.mstcecommerce.com→ Filling up details and creating own user id and password→ Submit. 2) Vendors will receive a system generated mail confirming their registration in their email which has been provided during filling the registration form. In case of any clarification, please contact RBI/MSTC, (before the scheduled time of the e-tender). Contact person (RBI): 1. Shri Rajesh Khobarkhede Asst. Manager (Tech-Civil) – Mobile 8585017154, Email id: rbkhobarkhede@rbi.org.in for Technical Query. 2. Arti Yadav, Asst. Manager – (022) 2302 8190, Email id: artiyadav@rbi.org.in e-tender query. Contact person (MSTC Ltd): 1. Mr Tanmoy Sarkar, Deputy Manager; Email id: tsarkar@mstcindia.co.in Phone No: 8349894664 2. Ms. Rupali Pandey, Asst. Manager- rpandey@mstcindia.co.in – Mobile – 9458704037 3. Mr. Abhishek Kr. Kanaujia, Executive – Mobile – 9953089772 4. Helpdesk at MSTC Mumbai for vendors - 022-22886268/22822789 5. Helpdesk – Landline -- 022 22870471/022 22886266/033 22901004 Google hangout ID- (for text chat)- mstceproc@gmail.com System Requirement: i) Windows 7 or above Operating System ii) IE-7 and above Internet browser. iii) Signing type digital signature iv) Latest updated JRE 8 (x86 Offline) software to be downloaded and installed in the system. To disable “Protected Mode” for DSC to appear in The signer box following settings may be applied. a. Tools => Internet Options => Security => Disable protected Mode If enabled- i.e, Remove the tick from the tick box mentioning “Enable Protected Mode”. b. Other Settings:
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	Tools => Internet Options => General => Click On Settings under “browsing history/Delete Browsing History” => Temporary Internet Files => Activate “Every time I Visit the Webpage”. To enable ALL active X controls and disable ‘use pop up blocker’ under Tools→ Internet Options → custom level (Please run IE settings from the page www.mstcecommerce.com once)
2	The Techno-commercial Bid and the Price Bid shall have to be submitted online at https://www.mstcecommerce.com/eprocn/ . Tenders will be opened electronically on specified date and time as given in the Tender.
3	All entries in the tender should be entered in online Technical & Commercial Formats without any ambiguity.
4	Special Note towards Transaction fee: The vendors shall pay the transaction fee using “Transaction Fee Payment” Link under “My Menu” in the vendor login. The vendors have to select the particular tender from the event dropdown box. The vendor shall have the facility of making the payment either through NEFT or Online Payment. On selecting NEFT, the vendor shall generate a challan by filling up a form. The vendor shall remit the transaction fee amount as per the details printed on the challan without making change in the same. On selecting Online Payment, the vendor shall have the provision of making payment using its Credit/ Debit Card/ Net Banking. Once the payment gets credited to MSTC’s designated bank account, the transaction fee shall be auto authorized and the vendor shall be receiving a system generated mail. Transaction fee is non-refundable. A vendor will not have the access to online e-tender without making the payment towards transaction fee. NOTE Bidders are advised to remit the transaction fee well in advance before the closing time of the event so as to give themselves sufficient time to submit the bid.
5	Information about tenders /corrigendum uploaded shall be sent by email only during the process till finalization of tender. Hence the vendors are required to ensure that their corporate email id provided is valid and updated at the time of registration of vendor with MSTC. Vendors are also requested to ensure validity of their DSC (Digital Signature Certificate).
6	E-tender cannot be accessed after the due date and time mentioned in NIT.
7	Bidding in e-tender : a) Vendor(s) need to submit necessary EMD, Tender fees and Transaction fees (If ANY) to be eligible to bid online in the e-tender. Tender fees and Transaction fees are non-refundable. No interest will be paid on EMD. EMD of the unsuccessful vendor(s) will be refunded by the tender inviting authority. b) The process involves Electronic Bidding for submission of Technical and Commercial Bid. c) The vendor(s) who have submitted transaction fee can only submit their Technical Bid and Commercial Bid through internet in MSTC website https://www.mstcecommerce.com/eprocn/

	d) The vendor should allow running JAVA application. This exercise has to be done immediately after opening of Bid floor. Then they have to fill up Common Terms/Commercial specification and save the same. After that click on the Technical bid. If this application is not run then the vendor will not be able to Save/submit his Technical bid. e) After filling the Technical Bid, vendor should click 'save' for recording their Technical bid. Once the same is done, the Commercial Bid link becomes active and the same has to be filled up and then vendor should click on "save" to record their Commercial bid. Once both the Technical bid & Commercial bid has been saved, the vendor can click on the "Final submission" button to register their bid f) Vendors are instructed to use Attach Doc button to upload documents. Multiple documents can be uploaded. g) In all cases, vendor should use their own ID and Password along with Digital Signature at the time of submission of their bid. h) During the entire e-tender process, the vendors will remain completely anonymous to one another and also to everybody else. i) The e-tender floor shall remain open from the pre-announced date & time and for as much duration as mentioned above. j) All electronic bids submitted during the e-tender process shall be legally binding on the vendor. Any bid will be considered as the valid bid offered by that vendor and acceptance of the same by the Buyer will form a binding contract between Buyer and the Vendor for execution of supply. k) It is mandatory that all the bids are submitted with digital signature certificate otherwise the same will not be accepted by the system. l) Buyer reserves the right to cancel or reject or accept or withdraw or extend the tender in full or part as the case may be without assigning any reason thereof. m) No deviation of the terms and conditions of the tender document is acceptable. Submission of bid in the e-tender floor by any vendor confirms his acceptance of terms & conditions for the tender.
	Any order resulting from this tender shall be governed by the terms and conditions mentioned therein.
	No deviation to the technical and commercial terms & conditions are allowed.
	The tender inviting authority has the right to cancel this e-tender or extend the due date of receipt of bid(s) without assigning any reason thereof.
	Vendors are requested to read the vendor guide and see the video in the page www.mstcecommerce.com/eprochome to familiarize them with the system before bidding.

Important Note

1. THIS IS A LIMITED TENDER ENQUIRY. ONLY THOSE BIDDERS/VENDORS WHO ARE EMPANELLED AS VENDORS WITH RBI FOR SUCH WORKS GIVEN BELOW UNDER THE CATEGORY 50 to 100 LAKHS ARE ELIGIBLE TO PARTICIPATE IN THIS TENDER. BIDDERS ARE ADVISED TO CHECK WITH RBI REGARDING THEIR ELIGIBILITY FOR THIS TENDER BEFORE PARTICIPATING.

2. In the price bid due to number of words limitation of 1000 characters, complete description could not be accommodated, and description given thereof is brief. Before quoting rates, all the contractors must read the complete details of each items given in the un-priced bill of quantities given in Part-I of the tender.

Date: -

Signature and seal of the Tenderer

Place: -

Name and address:

Phone/Mobile no.

e-mail



भारतीय रिज़र्व बैंक
संपदा कक्ष, भायखला, मुंबई

General repairs and application of waterproof coating on terraces of buildings at RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025.

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Section-I

Form of Tender-Bid

Regional Director
Reserve Bank of India
Estate Cell, Byculla
Mumbai

Dear Sir,

Having read and examined the Notice Inviting e-Tender, Specifications & designs,, Drawings, Schedule of Quantities, various schedules, General conditions of contract and, Special conditions of contract, General rules and instructions to bidders, clauses and all other contents in the tender document for the work specified in the memorandum hereinafter set out and having examined the site of the works 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 within the time specified in the said memorandum at the rates mentioned in the attached schedule of quantities and in accordance in all respects with the specifications & designs, drawings and instructions in writing referred to in General Conditions of Contract, the Articles of Agreement, Special Instructions, Schedule of Quantities and Special Conditions of Contract and with such materials as are provided for, by and in all other respects in accordance with such conditions so far as they may be applicable.

Memorandum

Description of work	General repairs and application of waterproof coating on terraces of buildings at RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025.
Estimated cost (₹)	As specified in Schedule 'E' of the Tender part I (Techno-Commercial Bid) ₹40.17 Lakh
Time allowed for completion of the work	As specified in Schedule 'E' of the Tender
Earnest Money Deposit (₹)	As specified in Schedule 'E' of the Tender part I (Techno-Commercial Bid) ₹ 80,340/-
Performance Bank Guarantee	The Contractor whose tender is accepted, will be required to furnish performance Bank guarantee equal to 5% (Five Percent) of the contract amount from any scheduled bank as per the approved Proforma annexed hereto OR amount equivalent to PBG through online mode (NEFT / RTGS) OR vendor shall furnish explicit written consent to Estate Cell, Byculla, Reserve Bank of India, Mumbai central to deduct amount equivalent to PBG to be withheld from the bills of the contractor. In case of delays in submission in unavoidable circumstances, charges for delay in submission of Bank Guarantee shall be recovered from the bills of

	the contractor at Bank rate. This guarantee shall remain in force up-to (60 days beyond the Defect liability period) The Performance Bank Guarantee shall be obtained from any Scheduled Bank and valid till completion of the work.
Percentage, if any, to be deducted from each bill. (RMD)	5 %
Waterproofing coating Performance Guarantee	Waterproofing coating Performance Bank Guarantee to be submitted from any Scheduled Bank for an amount equal to 5% of the quoted amount of waterproofing works valid till 3 years beyond date of virtual completion of the work.

1. We agree to keep the tender open for the validity period specified in Schedule 'E' of the tender and not to make any modification in its terms and conditions during the validity period or any other extended period as agreed mutually.
2. A sum of **₹ 80,340/-** is hereby forwarded/uploaded in the form as specified in Schedule 'E' of the tender document as Earnest Money Deposit. If I/We, fail to furnish the prescribed performance bank guarantee within the prescribed period, I/We agree that the Reserve Bank of India or its successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money deposit absolutely. Further, if I/We fail to commence work as specified, I/We agree that Reserve Bank of India or its successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender document upon the terms and conditions contained therein.
3. Further, I/We agree that in case of forfeiture of Earnest Money Deposit or Performance Bank Guarantee as aforesaid, I/We shall be debarred from participation in the re-tendering process of the work.
4. I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Reserve Bank of India, then I/We shall be debarred from tendering in Reserve Bank of India in future. Also, if such a violation comes to the notice of Reserve Bank of India before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.
5. I/We hereby declare that I/We shall treat the tender documents, drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the Reserve Bank of India.
6. 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 the Reserve Bank of India the amount

mentioned in the said conditions.

7. Our bankers are (Name and full address)

(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 the Bidder
with seal**

Address:

Contact Person:

Cell No.

Email:

Signatures and addresses of witnesses

	Signature	Address
(i)		
(ii)		

Section II

SCOPE OF WORK

Description of Work: General repairs and application of waterproof coating on terraces of buildings at RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025.

The scope of proposed work shall be as per the schedule of quantities & specifications given in this tender document. Some of the major items of works covered are listed below (in brief):

A) Civil works: -

- i) Structural Repairs to RCC member including chipping/dismantling of existing loosened/peeled off plastering/concrete, Applying external water proof plastering, etc.,
- ii) External water proof painting including providing metal double scaffolding.
- iii) Synthetic enamel painting on wood/metal surfaces, etc. complete.

B) It is not the intent to specify completely herein all details of design and construction of the works covered under this enquiry. Scope of work may also include such other related works as indicated in the drawings and /or schedule of quantities although they may not be specifically mentioned in the above paragraphs and all such incidental items of works not specified but reasonably implied and necessary for completion of the job as a whole, as directed by the Engineer-in-Charge and as directed hereunder. All works shall conform in all respects to high standards of engineering, design and workmanship and shall, fulfill the anticipated performance during the CONTRACTOR's guarantee period in a manner acceptable to the Engineer-in-Charge who shall have the power to reject any works or materials which in his judgment are not in full accordance with the specification requirements as directed hereunder.

Various works covered in this specification shall include furnishing of all materials, labour, tools plants and equipment, transportation, fabrication, supervision and construction as per construction as shown herein and as directed by the Engineer-in-Charge.

I/We hereby declare that I/we have read and understood the above information.

Place

Signature of bidder

Date

Section III

General Rules and Instructions to the Bidders

1. The Bidder who fulfil the following minimum **pre-qualification criteria** shall be eligible to participate in tendering process.

PRE-QUALIFICATION CRITERIA (Not Applicable for Empaneled Vendor)

A	Composition of the firm/organization	Details of Registration of the firm /organization- whether Sole Proprietorship/ Partnership firm /Private Limited/ Limited or Co-Operative Body etc. - Name of Registering Authority, Date, and Registration number, etc. The Bidder should have valid Goods and Service Tax registration	Bidder should fill up information in Format 1 and Format 1A annexed hereto and submit along with the following supporting documents. (i) Copy of registration certificate. (ii) Copy of the Articles of Association/ Power of Attorney/other relevant document (iii) copy of Goods and Service Tax registration certificate (iv) Details of registration of labour along with EPF and ESI documents if any.
B	Duration of past Experience	The bidder should have minimum 5 years of experience of executing similar work/s*. Bidder shall submit the documentary evidence in support of minimum experience of 5 years (i.e. the bidder should have undertaken similar work/s* prior to)	i) Bidder should fill up the information in Format 2 annexed hereto indicating client-wise names of similar work(s), awarded and actual cost(s), completion date stipulated in contract and actual dated of completion date, etc. and should submit along with the documentary evidence as proof of minimum 5 years of experience of completed similar work/s * viz. copies of detailed work order/s for qualifying works indicating date of award, contract amount, time given for completing the work, etc. and the corresponding completion certificate(s) indicating actual date of completion and actual value of executed similar work/s issued by the client(s) for works executed for government /public sector companies and copies of work order, work completion certificate along with Tax Deducted at Source (TDS) certificate(s) issued by the client(s) for works executed for private companies. ii) Bidder should also fill up the information about similar work/s* on-hand in the Format 2A annexed hereto and should submit along with supporting documents.viz. Copies of work order/s

			with details of items of work, issued by the client(s) for the work/s in progress. (iii) The details along with documentary evidence of previous experience, if any, of carrying out works for the Reserve Bank of India at any centre, should also be given.
C	Minimum value of each completed similar work/s (qualifying) during specified period	The bidder should have experience of successfully completed similar work/s * during last 5 years ending onshould be either of the following: i) Three completed similar works * each costing not less than the amount equal to ₹lakh or ii) Two completed similar works * each costing not less than the amount equal to ₹Lakh or iii) One completed similar work * each costing not less than the amount equal to ₹Lakh.	Bidder should fill up the informations in Format 3 annexed hereto and submit along with the following documents as proof of having successfully completed similar work/s * . (i) Copies of detailed work order/s for qualifying works indicating date of award, contract amount, time given for completing the work, etc. and the corresponding completion certificate(s) indicating actual date of completion and actual value of executed similar work/s issued by the client(s) for works executed for government /public sector companies and copies of work order, work completion certificate along with Tax Deducted at Source (TDS) certificate(s) issued by the client(s) for works executed for private companies. (ii) Client certificate/s for each of the qualifying work as per the Format 3A annexed hereto.
D	Annual financial turnover	Bidder should have had an annual financial turnover of amount equal to ₹Lakh or more per year during the last 3 financial years, ending on	Bidder should fill up the information in Format 4 annexed hereto and submit along with the following documents (i) Copies Audited financial statements/ accounts of the business of the bidder duly certified by a Chartered Accountant indicating the turnover for financial years referred in the format 4. (ii) Copies of the Income Tax Clearance Certificates / Income Tax Assessment orders duly certified by a Chartered Accountant as a proof creditworthiness
E	Solvency	Should furnish solvency certificate issued by the bidder's Banker specifically for the purpose of work for an amount equal to ₹Lakh.	(i) Bidder should submit solvency certificate issued by their Banker.

			(ii) Bidder should also submit Banker's certificate as per Format 5 annexed hereto from their Banker. (iii) Names and addresses of Bankers along with full details, like names, postal addresses, e-mail IDs, telephone (landline and mobile) nos., fax nos., etc. of the contact executives (i.e. the persons who can be contacted at the office of their bankers by the Bank, in case it is so needed) should be furnished.
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Note:

- (i) ***Similar work** shall mean 'renovation/addition/alteration work which includes civil works viz. flooring, false ceiling, partitions, etc. electrical and Air conditioning all composite under one contract agreement.
- (ii) Components of work executed other than those included in definition of similar work shall be deducted while calculating cost of similar work. Bidder shall submit abstract of cost of work in support of this.
- (iii) In respect similar work completion certificate(s), client certificate(s) issued by the private companies shall also accompany copy of Tax Deducted at Source (TDS) certificates. Bids received without the specified certificates shall be rejected and the Bank shall have the right to verify/ cause verification of authenticity of the said documents whenever felt necessary.
- (iv) Regarding client's certificate for qualifying similar completed works carried out for Government/public sector companies, the certificate should be signed by the concerned Executive Engineer or an officer in an make or higher rank. For qualifying similar completed works carried out for private companies, shall accompany Tax Deducted at Source (TDS) certificates has to be submitted for proving the credentials/contract amount.
- (v) Bank reserve its right to obtain the performance reports from the clients for the qualifying work/s, Banker/s report of the Bidders directly, if so desired. The Bank on its own may also conduct inspection of their work eligible/qualifying works referred by the Bidder in their bid.
- (vi) It is clarified that the work executed by the applicant for their in-house or capital use will not be considered for the purpose of work experience of completion of similar works.
- (vii) **All information called for in the annexed formats should be furnished against the relevant columns** in the formats. If for any reason, information is furnished on a separate sheet, this fact should be mentioned against the relevant column. Even, if no information is to be provided in a column, a '**nil**' or '**no such case**' entry should be made in that column. If any particulars/query is not applicable in case of the

bidder, it should be stated as **‘Not applicable’** Tender document shall contain all the enclosures mentioned and copies shall be self-attested.

- (viii) The bid submitted by a bidder who is found to be not satisfying the above prequalification criteria will be disqualified. Bids containing false and /or incomplete information are liable for rejection.

2	Bids in Two bid system	
	The tender in two parts (Part I comprising of duly filled tender part I, complete pre-qualifications criteria, EMD, technical bid/details, literature etc. and Part II comprising of duly filled-in tender part II) should be submitted online as e-Tender using digital signature not later than the date and time of submission of tender/bid on line (as specified in schedule ‘E’). Tender inviting authority and Name of work, office are specified in schedule ‘E’. No tender will be accepted after the specified date and time for submission of tender under any circumstances whatsoever. Bids shall be submitted online only and those received in physical form will not be entertained	
3.	The intending bidders are advised to follow the important instructions of e-Tender specified in Schedule ‘H’ and must have valid class III digital signature to submit the bid.	
4	Documents Comprising Tender/ Bid	
	Part I: (Techno-Commercial Bid)	
	i)	Form of Tender/Bid
	ii)	e-tender transaction fee shall be paid as specified in schedule ‘E’
	iii)	Earnest Money Deposit (EMD)/Bid Security in approved format as specified in schedule E.
	iii)	Power of Attorney (as per proforma annexed hereto) in favour of person signing the Bid
	iv)	Duly filled-in and digitally signed tender document consisting of:
	a)	Entire Tender Document Section I to Section IX
	b)	All formats towards prequalification/eligibility criteria, etc. annexed hereto duly filled-in along with relevant documents
	Part II: (Price Bid)	
	Schedule of Quantities, duly filled-in online.	
5	Clarifications and pre-bid meeting	
	If the bidder shall have any doubt as to the meaning of any portion general rules and instructions to bidders, general conditions, or the special conditions or the scope of the work or the specifications and drawings or any other matter concerning the work, he shall in good time, before the scheduled date of Pre-bid meeting, put forth the particulars thereof and submit them to the RBI, in writing, addressed to the Tender Inviting Authority, specified in Schedule ‘E’ in order that such doubts may be clarified authoritatively during Pre-bid meeting and shall be conveyed to all the bidders in due course. Once a tender is submitted, the matter will be decided according to tender conditions in the absence of such authentic pre-clarification.	

	In order to explain the scope of work, other details and to clarify any issues/ queries raised by the bidders, a Pre-bid meeting shall be arranged on the date, time and venue specified in Schedule 'E'. The bidders are advised to peruse the tender and visit the site and submit any matter requiring clarification to the RBI latest by 5:00 PM on the previous working day. In case the bidder wishes to include any condition while tendering for the work, he will have to submit the same before the pre-bid meeting to enable the RBI to examine/ consider the same. RBI's decision in the matter shall be conveyed to all the bidders after pre-bid meeting but before the scheduled date of submission of the tenders. All the bidders are advised to attend the Pre-bid meeting in their own interest. Any tender received with any deviation/ Condition is liable for rejection.	
6	Amendment to Tender document	
	i)	At any time prior to the deadline for the submission of tender/bids, RBI may, for any reason, whether at its own initiative or in response to a clarification or query raised by a prospective Bidder, modify any part of the tender document by an amendment and will be uploaded on website.
	ii)	The said amendment in the form of the addendum/ corrigendum will be made available on website of RBI to all the prospective bidders to whom the tender documents issued online and this communication will be in writing and same shall be binding on the bidders. The prospective bidders should promptly acknowledge receipt of the addendum/corrigendum by fax/courier/e-mail to RBI. The addendum (s), if any, issued will form part of the contract document.
	iii)	In order to afford prospective Bidders reasonable time for preparing their Bids after taking into account such amendments, the RBI may, at its discretion, extend the deadline for submission of Bids.
7	Item Rate Tender	
	The Bidder should note that unless otherwise stated, the tender is strictly on item rates basis and his attention is drawn to the fact that rates for each and every item should be correct, workable and self-supporting. The quantities in the Schedule of Quantities approximately indicate the total extent of work, but may vary to any extent and may even be omitted thus altering the aggregate value of the Contract. Rates quoted shall remain firm for a variation of plus (+) or minus (-) 20% of the specified quantities of each item in the Schedule of Quantity.	
8	Preparation of bid and Cost of bidding	
	i)	The bidder must obtain for himself on his own responsibility and at his own expenses all the information which may be necessary for the purpose of making a tender and for entering into a contract and must examine the drawings and must inspect the site of the work and acquaint himself with all local conditions, means of access to the work, nature of the work and all matters pertaining thereto.
	ii)	The Contractor shall be deemed to have carefully examined the work and site conditions including labour, the general and special conditions, the specifications, schedules and drawings and shall be deemed to have visited the site of work, to have fully informed himself regarding the local conditions and carried out his own investigations to arrive at the rates quoted in the tender. In this regard, he will be given necessary information available with the RBI but without any guarantee about its sufficiency and accuracy.
9	Format to be used	

	The bidder must fill up and submit only the tender forms/formats issued (online) by the RBI, stating at what rate he is willing to undertake each item of the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort, including Conditional rebates, will be liable for rejection.	
10	Filling of Rates	
	i)	Rates should be quoted for each item of work both in figures and words in columns specified in the Schedule of Quantity. Care shall be taken to avoid discrepancy in the rate given in figures and words. The amount for each item should be worked out and requisite totals should be given in the specified column.
	ii)	In the event, no rate has been quoted for any item(s), leaving space both in figure(s), word(s) and amount blank, the tender shall be considered incomplete and shall not be considered.
	iii)	No advice of any change in rate or conditions after the opening of the tender will be entertained.
11	Earnest Money Deposit (EMD)/ Bid security	
	i)	The bidders are required to submit Earnest Money Deposit (EMD)/ Bid Security for an amount and in the manner as specified in Schedule 'E'.
	ii)	A tender, which is not accompanied by EMD, will not be considered. The Earnest Money will be refunded to the bidder if his tender is not accepted but without any interest.
	iii)	The Earnest Money Deposit paid by the successful bidder will be released after award of work on submission of Performance Bank Guarantee. No interest shall be paid on the said deposit.
12	Signing of Bid, Power of Attorney	
	i)	Each of the tender documents should be digitally signed as per instruction of e-tender specified in Schedule 'H' hereto by the person or persons submitting the tender in token of his/their acquainted himself/themselves with the General Rules and Instructions to bidders including prequalification criteria, General Conditions of Contract, Specifications, Special Conditions and other terms and conditions etc. as laid down.
	ii)	The tender submitted online on behalf of a firm must be digitally signed as per instructions of e-tender specified in Schedule 'H', it must be digitally signed on his behalf by a person holding a power-of attorney authorizing him to do so, such power of attorney to be uploaded along with the tender, or it must be digitally signed by a partner who has the necessary authority on behalf of the firm to enter into the proposed contract and it must disclose that the firm is duly registered under the Indian Partnership Act, 1952. Otherwise the tender may be rejected by RBI.
	iii)	Bidders shall submit online along with Part-I of the tender, a power of attorney, on a stamp paper of appropriate value and duly notarized, in favour of the person digitally signing the Bid documents authorizing him to sign the Bid documents, make corrections/ modifications thereto and interacting with Reserve Bank of India and act as the contact person. The proforma of the power of attorney shall be as annexed hereto.
13	Modification / substitution / Withdrawal of Bids	

	i)	No modification or substitution of the submitted Bid shall be allowed after the due date and time of submission of the tender.
	ii)	A Bidder may withdraw its submitted Bid, provided that written notice of the withdrawal is received by RBI before the last date for submission of Bids. In case a Bidder wants to resubmit his Bid, he shall submit within the due date a fresh Bid following all the applicable conditions.
	iii)	Only a single copy of the withdrawal notice shall be prepared and each page of the notice shall be signed and stamped by the authorized signatory. The notice shall be duly marked "WITHDRAWAL"
14	Bid Due Date	
	Bids should be submitted online as specified in instructions to e-Tender on or before the stipulated time and date as specified in Schedule 'E'. Reserve Bank of India may, in exceptional circumstances, and at its sole discretion, extend the Bid due date	
15	Late bids	
	No bid will be received after the due date/last date and time specified for submission of bids in schedule 'E' or after the extended Bid due date. If any.	
16	Opening of Bids	
	Duly filled tender Part I, accompanied by EMD, prequalification criteria, technical details, literature etc., called Part I of the tender, will be opened on e-Tender mode on the time and date, as specified in Schedule 'E', at his office, by the tender inviting authority, as specified in Schedule 'E' or his authorized representative in the presence of authorized representatives of the bidders who choose to be present. Duly filled-in tender-Part II, of those bidders, who are found qualified after scrutiny of Part I of the tender documents and prequalification criteria, only will be opened on the time and date, as specified in Schedule 'E', at his office, by the tender inviting authority, as specified in Schedule 'E' in presence of the authorized representatives of the qualified bidders.	
17	Bid Validity	
	Tenders shall remain open to acceptance by the RBI for a period as specified in Schedule 'E' from the date of opening of the Part-I of the tender which period may be extended by mutual agreement and the bidder shall not cancel or withdraw the tender during this period.	
18	Clarification & Evaluation of Bids	
	RBI would subsequently examine and evaluate bids as below:	
	i)	Only those tenders, which meet the minimum prequalification criteria, if applicable, set out in this tender, shall be processed further. After verification of the correctness/legality and adequacy of the information and supporting documents furnished and considering firms financial standing, business integrity, record of timely completion of works, quality of work executed, etc. and Price Bids of only those Bidders who are technically qualified as per part I of tender shall be opened.
	ii)	The price bids of unqualified bidders will not be opened and communication will be sent in this regard.
	iii)	Rates quoted for each item shall be considered during verification/ scrutiny.
	iv)	If the rates written in figures and in words do not tally, then the rates quoted by the contractor in words shall be taken as correct.
	v)	Where the rates quoted by the contractor in figures and in words tally, but the amount

		is not worked out correctly, the rates quoted by the contractor will be taken as correct and the amount will be worked out accordingly.
	vi)	To assist in the examination, evaluation and comparison of the bid, RBI may ask Bidders individually for clarifications. The request for clarification and the response shall be in writing. No change in the price or substance of the Bid shall be sought, offered or permitted except as required to during the evaluation of Bids in accordance with tender clauses.
	vii)	In the case of any tender where unit rate of any item/items appears unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.
	viii)	In case the lowest tendered amount (worked out on the basis of quoted rate of Individual items) of two or more bidders is same, then such lowest bidders may be asked to submit a revised offer quoting percentage discount on their already quoted tendered amount which shall be applicable on all tender items except buy-back amount. The lowest tender shall be decided on the basis of revised offer. Further, if any such lowest bidder does not revise his bid on lower side, his original bid shall remain valid for further processing.
	ix)	If the revised tendered amount (worked out on the basis of quoted rate of individual items) of two or more bidders received in revised offer is again found to be equal, then the RBI shall decide future course of action which shall be final and binding on all the bidders.
19	Acceptance of Tender and Award of Work	
	On receipt of intimation from the RBI of the acceptance of his/their tender, the successful bidder shall be bound to implement the contract and within tenth days from the date of issue of work order thereof, the successful bidder shall sign an agreement in accordance with the draft articles of agreement. Further, the written acceptance by the Reserve Bank of India of a tender will constitute a binding contract between the Reserve Bank of India and the person so tendering, whether such formal agreement is or is not executed subsequently.	
20	Performance Bank Guarantee	
	The Contractor whose tender is accepted, will be required to furnish initial performance Bank guarantee of 5% (Five percent) of the contract amount within the period specified in Schedule 'F'. This guarantee shall be from any Scheduled Bank as per the approved proforma annexed hereto.	
21	Retention Money/ Security Deposit	
	i)	In addition to the Performance Bank Guarantee under para 20 above, as further security for the due fulfillment of the contract by the Contractor, 5% of the value of the work done will be deducted by the RBI from each payment to be made to the Contractor towards Retention Money. This total amount (Performance Bank Guarantee + Retention Money) will be termed as Security Deposit. Earnest Money Deposit (EMD) will be released after award of work and on submission of Performance Bank Guarantee (PBG). RBI will release the Performance Bank Guarantee after completion of work and the remaining Security Deposit after rectification of the defects pointed out during the Defects Liability Period. The amounts retained by the RBI shall not bear any interest.
	ii)	All compensation or other sums of money payable by the Contractor to the Employer under the terms of this Contract may be deducted from the security deposit if the amount so permits and the Contractor shall, unless such deposit has become

		otherwise payable, within ten days after such deduction make good in cash the amount so deducted.
	iii)	The security deposit of the successful bidder will be forfeited if he fails to comply with any of the conditions of the Contract.
22	Taxes/ Duties/ Levies	
	i)	Goods and service tax (GST), purchase tax, turnover tax, Excise duty or any other tax applicable in respect of this contract shall be payable by the Contractor and RBI will not entertain any claim whatsoever in respect of the same
23	Time for Completion of Work	
	Time allowed for carrying out the work as mentioned in the Schedule 'E' shall be strictly observed by the Contractor and it shall be reckoned from the 10 th day from the date of the written work order.	
24	Work Program (Not Applicable)	
	The work shall throughout the stipulated period of the contract be proceeded with all due diligence and if the Contractor fails to complete the work within the specified period, he shall be liable to pay compensation as defined in the relevant clause of the General Conditions of Contract. The bidder shall, before commencing work, prepare a detailed work programme, as specified in the General Conditions of Contract, which shall be approved by the Engineer-In-Charge.	
25	RBI\Employer's right to accept or reject any or all the bids	
	Notwithstanding anything mentioned above, RBI reserves the right to accept or reject any Bid at any time prior to award of contract without thereby incurring any liability to the affected Bidder or Bidders. The RBI/Employer shall not assign any reason for rejection of any or all Bids.	
26	Integrity pact (Not applicable)	
	The bidders/ prospective vendors shall be required to enter in to an agreement with the Reserve Bank of India (RBI) called Integrity Pact (IP). The IP envisages an agreement between the RBI and the bidders/ prospective vendors as per the approved proforma, committing the persons/ officials of both sides not to resort to corrupt practices in any aspect/ stage of the contract. The IP shall be applicable from the stage of invitation of bids till the complete execution of the contract. The tenders of those bidders/ prospective vendors which do not contain the IP in the approved proforma shall be liable for rejection. Provided however, that the Integrity pact shall be applicable when specifically provided in Schedule 'E'.	
27	Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Central (Amendment) Rules, 2017 (Not Applicable)	
	EDUCATION CESS @ 1% from the bills raised by the contractor shall be deducted at source for all running works. Cess, so deducted shall be deposited with the concerned statutory authorities BOCW welfare board.	

I/We hereby declare that I/we have read and understood the above instructions.

Place

**Signature & Seal of
bidder
Address**

**Contact Person &
Cell No.**

Date

Section IV

General Conditions of the Contract (GCC)

Definitions	1.	The Contract means all the documents forming the tender and acceptance thereof together with any correspondence leading thereto and the formal agreement executed between the competent authority on behalf of the Employer and the Contractor, together with the documents referred to therein including the General Conditions, Special Conditions, General rules and instructions to bidders, the Technical specifications, designs, drawings, correspondences exchanged and instructions issued from time to time by the Engineer-in- Charge. All these documents taken together, shall be deemed to form one contract and shall be complementary to one another.	
	2.	In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-	
		i)	The expression works or work shall, unless there be something either in the subject or context repugnant to such renovation /construction be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional, as defined in Schedule 'F'
		ii)	The Site shall mean the land/or other places on, into or through which work is to be executed under the contract including any building and erections thereon or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract, as defined in Schedule 'F'.
		iii)	Employer shall mean The Reserve Bank of India (as mentioned in schedule 'F') and shall include its assignees and successors
		iv)	RBI shall mean Reserve Bank of India, having its Central Office at Shahid Bhagat Singh Road, Mumbai – 400001 and having its Regional Offices at various places.
		v)	Tender document shall mean document named as such issued/ uploaded by the Employer to the bidders for inviting Bids for the Project / work.
		vi)	Day shall mean Calendar day
		vii)	Working day shall mean The days when Employer's office is working i.e. Days excluding Public holidays, Saturdays and Sundays
		viii)	Month shall mean the calendar month.
		ix)	Year shall mean Calendar Year
		x)	Bidder (s) shall mean all parties participating in the bidding process pursuant to and in accordance with the terms of the Tender document.

		xi)	The Contractor shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the
			persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company.
		xii)	Sub-Contractor means the person or persons, firm or company engaged by the Contractor for executing any part or to whom any part thereof has been sub-let with the consent in writing of the Employer
		xiii)	The Engineer-in-charge means the Engineer Officer employed and paid by the Employer and acting under the orders of the Employer who shall supervise and be in-charge of the work.
		xiv)	The Authorized representatives of Engineer-in-charge (AGM(Tech)/Manager(Tech)/AM(Tech)) means the Engineer officers employed and paid by the Employer and acting under the orders of the Employer who shall supervise day to day execution of work under the direction and guidance of Engineer-in-Charge.
		xv)	Contract Price or Contract Amount shall mean the total amount as calculated from quoted unit rates by the successful bidder and quantities mentioned in the Schedule of quantities (Price Bid) and as accepted by the Employer and indicated in the letter of award of work.
		xvi)	Contract Period shall mean the period specified in the tender document for execution of the contract/ completion of the work, including any authorized extended period by the Employer
		xvii)	Contract Agreement shall mean the agreement signed between the Contractor and the Employer for the execution of the Project.
		xviii)	Notice in writing or written notice shall mean a notice in written, typed or printed characters sent (unless delivered personally or otherwise proved to have been received) by registered post to the last known private or business address or registered office of the addressee and shall be deemed to have been received when in the ordinary course of post, it would have been delivered and/or sent. The communication delivered by any accepted electronic means shall also be deemed to be a written notice.
		xix)	Act of Insolvency shall mean any act of insolvency as defined by the Presidency Towns Insolvency Act, or the Provincial Insolvency Act or any Act amending such original.
		xx)	Manufacturer refers to a person or firm who is the producer and furnisher of the material or designer and fabricator of equipment
		xxi)	Contractor's Works or Manufacturer's Works shall mean and include the land and other places which are used by the CONTRACTOR/FABRICATOR or SUB- CONTRACTOR/SUB-FABRICATOR for the manufacture of "Equipment" or performing the "Works".
		xxii)	Market Rate shall be the rate as decided by the Engineer-in-Charge on the basis of the cost of materials and labour at the site

			where the work is to be executed plus the percentage mentioned in Schedule 'F' to cover all overheads and profits.
		xxiii)	Net Rate/Price - If in arriving at the contract amount the Contractor shall have added to or deducted from the total of the items in the Tender any sum, either as a percentage or otherwise, then the net price of any item in tender shall be the sum arrived at by adding or deducting from the actual figure appearing in the Tender as the price of that item a similar percentage or determining the percentage or proportion of the sum so added or deducted by the contractor the total amount of any Prime Cost items and provisional sums of money shall be deducted from the total amount of the tender. The expression "net rates" or "net prices" when used with reference to the contract or accounts shall be held to mean rates or prices so arrived at.
Scope and performance	3.		Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.
	4.		Headings and Marginal notes to these General Conditions of Contract shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.
	5.		The contractor shall be furnished, free of cost one certified copy of the contract documents except Indian standard specifications and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.
Works to be carried out	6.		The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The Contractor shall provide at his cost everything necessary for the proper execution of the works according to the intent and meaning of the drawings, Schedule of Quantities and Specification taken together, whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from and if the Contractor finds any discrepancy in the drawings or amongst the drawings, Schedule of Quantities and Specifications, he shall immediately and in writing refer same to the Engineer-in-Charge who shall decide which is to be followed. The descriptions given in the Schedule of Quantities shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labour necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles. The Contractor shall carry out and complete the said work in every respect in accordance with this Contract and with the directions of and to the satisfaction of the Engineer-in-Charge. The Engineer-in-Charge

		may in his absolute discretion and from time to time issue further drawings and/or written instructions, detailed directions and explanations which are hereafter collectively referred to as “Employer’s Instructions” in regard to : - The variation or modification of the design, quality or quantity of works or the addition or omission or substitution of any work. - Any discrepancy in the drawings or amongst the Schedule of Quantities and/or drawings and/or specification. - The removal from the site of any material brought thereon by the Contractor not fulfilling the tender specifications and the substitution of any other material therefor. - The removal and/or re-execution of any material/works executed by the Contractor but not fulfilling the tender specifications. - The dismissal from the works of any persons employed by the contractor thereupon. - The opening up for inspection of any work covered up. - The amending and making good of any defects noticed and reported during Defect Liability Period. The Contractor shall forthwith comply with and duly execute any work comprised in such Employer’s instructions provided always that verbal instructions, directions and explanations given to the Contractor or his representatives upon the works by the Engineer-in-Charge shall, if involving a variation, be confirmed in writing by the Contractor within seven days, and if the same is not approved/ disapproved by the Engineer-in-charge in writing within a further period of seven days, such shall be deemed to be Employer’s Instructions within the scope of the Contract.
Sufficiency of Tender	7.	The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.
Discrepancies and Adjustment of Errors (order of preference)	8.	The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.
	8.1	In the case of discrepancy between the schedule of Quantities, the Specifications and/ or the Drawings, the following order of preference shall be observed:-
	i)	Description of Schedule of Quantities.
	ii)	Particular Specification and Special Condition, if any.
	iii)	Drawings.
	iv)	General Specifications.
	v)	Indian Standard Specifications of B.I.S
	8.2	If there are varying or conflicting provisions made in any one document forming part of the contract, the Competent Authority as defined in the

		schedule 'F' shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.	
	8.3	If there is a discrepancy between actual scaled drawing and written dimension (or description) on a drawing, the latter shall be followed.	
	8.4	The Schedule of Quantities, unless otherwise stated shall be deemed to have been prepared in accordance with standard method of measurement. Any error in description or in quantity in Schedule of Quantities or any omission of items therefrom shall not vitiate the Contract but shall be rectified and the value thereof, as ascertained under clause 12 hereof shall be added to, or deducted from the Contract amount (as the case may be) provided that no rectification or errors, if any, shall be allowed in the contractor's Schedule of rates. The above discrepancies in Schedule of Quantities shall not release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.	
Signing of Contract	9.	The successful tenderer/contractor, on acceptance of his tender by the Employer, shall, within 14 days from the stipulated date of start of the work, sign the contract consisting of:-	
		i)	Articles of agreement on non-judicial stamp paper/s of appropriate values (The cost of the stamp paper/s shall be borne by the contractor. One Certified copy of the agreement will be handed over to the contractor by the Employer)
		ii)	the notice inviting tender, all the documents including drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
		No payment for the work done will be made unless contract is signed by the contractor.	

CLAUSES OF CONTRACT

	CLAUSE 1	
Performance Bank Guarantee (PBG)	i)	The contractor shall submit an irrevocable Performance Guarantee of 5% (Five percent) of the Contract amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Schedule 'F' from the date of issue of letter of award. This period can be further extended by the Engineer-in-Charge up to a maximum period as specified in schedule 'F' on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in-Charge. This guarantee shall be in the form of Demand Draft of any scheduled bank/Pay Order of any scheduled bank (in case guarantee amount is less than Rs.1,00,000/-) or Bank Guarantee issued by any Scheduled Bank in the approved pro-forma annexed hereto.
	ii)	The Performance Guarantee shall be initially valid up to the stipulated date of completion plus 30 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such extended time for completion of work. After recording of the completion certificate for the work by the Engineer-in-charge, the performance guarantee shall be returned to the contractor, without any interest. However, in case of contracts involving maintenance of building and services/any other work after construction of same building and services/other work, then 50% of Performance Guarantee shall be retained as Security Deposit and the same shall be returned year wise proportionately as specifically provided in Special conditions of Contract.
	iii)	The Engineer-in-Charge shall not make a claim under the performance guarantee except for amounts to which the Employer is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
		a) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance Guarantee.
		b) Failure by the contractor to pay the Employer any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
	iv)	In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Employer.
	CLAUSE 1 A	

Recovery of Security Deposit	i)	The Contractor shall permit Employer at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 5% of the gross amount of each running account and final bill till the sum deducted will amount to security deposit of 5% of the Contract price of the work. Such deductions will be made and held by the Employer by way of Security Deposit till the successful completion of Defect Liability Period.
	ii)	All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from his security deposit or from any sums which may be due to or may become due to the contractor by Employer on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions, the contractor shall within 10 days make good in cash any sum or sums which may have been deducted from his security deposit or any part thereof. The security deposit shall be collected from the running bills and the final bill of the contractor at the rates mentioned above.
	iii)	The security deposit as deducted subject to the condition that amount of such Bank guarantee is equal to security deposit amount which shall be initially valid till end of defect liability period (DLP) + 60 days. Provided further that the validity of bank guarantee including the one given against the earnest money shall be in conformity with provisions contained in clause 17 which shall be extended from time to time depending upon extension of contract granted under provisions of clause 2 and clause 5.
	iv)	In case of contracts involving maintenance of building and services/any other work after construction of same building and services/other work, then 50% of Performance Guarantee shall be retained as Security Deposit and the same shall be returned year wise proportionately as specifically provided in Special conditions of Contract.
CLAUSE 2		
Compensation for Delay		If the contractor fails to maintain the required progress in terms of clause 5 or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the Employer on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as per the authority specified in schedule 'F' (whose decision in writing shall be final and binding) may decide on the amount of contract price of the work for every completed day (as applicable) that the progress remains below that specified in Clause 5 or that the work remains incomplete.
		This will also apply to items or group of items for which a separate period of completion has been specified

	i)	Compensation at the rate as specified in schedule 'F' per week of delay for delay of work to be computed on per day basis, Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Contract Price of work or of the Contract price of the item or group of items of work for which a separate period of completion is originally given.
	ii)	The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Employer. In case, the contractor does not achieve a particular milestone mentioned in Schedule 'F', or the re-scheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of Extension of Time. With-holding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.
	CLAUSE 3	
When Contract can be Determined		Subject to other provisions contained in this clause, the Engineer-in-Charge may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:
	i)	If the contractor has abandoned the contract
	ii)	If the contractor having been given by the Engineer-in-Charge a notice in writing to rectify, pull down, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un-workman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter or has failed to remove the materials from the site within seven days of the written instructions of the Engineer-in-charge that the same were condemned and rejected by him under these conditions.
	iii)	If the contractor has failed to commence the work or, without any lawful excuse under these conditions suspended the progress of the work for tenth days after receiving notice from the Engineer-in-charge to proceed or has failed to proceed with the work with due diligence so that in the opinion of the Engineer-in-Charge (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Engineer-in-Charge.

	iv)	If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge.
	v)	If the contractor persistently neglects or fails to carry out his obligations
		under the contract and/ or commits default in complying with all or any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge.
	vi)	If the contractor shall offer or give or agree to give to any person in Employer's service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for Employer
	vii)	If the contractor shall enter into a contract with Employer in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Engineer-in-Charge.
	viii)	If the contractor had secured the contract with Employer as a result of wrong tendering or other non-bonafied methods of competitive tendering or commits breach of Integrity Agreement.
	ix)	If the contractor being an individual, or if a firm, any partner thereof commits an "Act of Insolvency" or shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall suffer execution or other process of court attaching property to be issued against the contractor or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors and shall be unable within seven days after notice to him requiring him to do so, to show to the reasonable satisfaction to the Engineer-in-charge that he is able to carry out and fulfill the contract and to give security therefore, if so required by the Engineer-in-charge.

	x)	If the contractor being a company shall pass an effective resolution for winding up voluntarily or shall have an order for compulsory winding up made against it or shall subject to the supervision of court and the official Assignee or the liquidator in such acts of insolvency or winding up, as the case may be, or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
	xi)	If the contractor shall suffer any payment under this contract to be attached by or on behalf of any of the creditors or the contractor or shall charge or encumber this contract or any payments due or which may become due to the contractor hereunder
	xii)	If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
	xiii)	If the contractor assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer - in-Charge. When the contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of the Employer shall have powers:
	a)	To determine the contract, notwithstanding any previous waiver, after giving seven days' notice in writing to the Contractor, as aforesaid (of which termination notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, the Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Employer.

		b)	After giving notice to the contractor measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands. The action will be without thereby affecting the powers of the Engineer-in-charge or the obligations and liabilities of the Contractor, the whole of which shall continue in force as fully as if the Contract had not been so determined, and as if the work subsequently executed had been executed by or on behalf of the Contractor. And further, the Employer by his agents or servants may enter upon and take possession of the works and all plants, tools, scaffoldings, sheds, machinery steam and other power utensils and materials lying upon the premises or the adjoining lands or roads, and use the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completing the works or by employing any other Contractor or other person or persons to complete the works, and the Contractor shall not in any way interrupt or do any act, matter or thing to prevent or hinder such other Contractor or other person or persons employed for completing and finishing or using the materials and plant for the works. When the works shall be completed or as soon thereafter as convenient the Engineer-in-charge shall give a notice in writing to the Contractor to remove his surplus materials and plant, and should the Contractor fail to do so within a period of fourteen days after receipt thereof by him, the Employer may sell the same by public auction, and give credit to the Contractor for the net amount realized. The Employer shall thereafter ascertain and certify in writing under his hand what (if
			anything) shall be due or payable to or by the Employer and expense or loss which the Employer shall have been put to in procuring the works to be completed and the amount, if any, owing to the Contractor and the amount which shall be so certified shall thereupon be paid by the Employer to the Contractor or by the Contractor to the Employer, as the case may be, and the Certificate of the Engineer-in-charge shall be final and conclusive between the parties. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work, if resorted to by the Employer.

		In the event of above courses being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.
	CLAUSE 3A	
	a)	In case, the work cannot be started due to reasons not within the control of the contractor within 1/8th of the stipulated time for completion of work or one month whichever is higher, either party may close the contract.
	b)	If the payment of the amount payable by the Employer under Certificate of the Engineer-in-charge shall be in arrears and unpaid for thirty days after notice in writing requiring payment of the amount as aforesaid shall have been given by the Contractor to the Employer, or if the Employer interferes with or obstructs the issue of any such Certificate, or if the Employer shall repudiate the Contract, or if the works be stopped for three months under the order of the Engineer-in-charge or the Employer or by any injunction or other order of any court of Law, then and in any of the cases the Contractor shall be at liberty to determine the Contract by notice in writing to the Employer, through the Engineer-in-charge and he shall be entitled to recover from the Employer, payment for all works executed and for any loss he may sustain upon any plant or materials supplied or purchased or prepared for the purpose of the Contract. In arriving at the amount of such payment, the net rates contained in the Contractor's original tender shall be followed or where the same may not apply, valuation shall be made in accordance with Clause hereof.
	c)	In case contractor wants to close the contract, he shall give notice to the Employer stating the failure on the part of Employer. In such eventuality, the Performance Guarantee of the contractor shall be refunded within following time limits :
	i)	If the Contract price of work is up to ₹.....: 15 days.
	ii)	If the Contract price of work exceeds ₹.....: 30 days.
	d)	If Performance Guarantee is not released within prescribed time limit, then a simple interest @ 0.25% per month shall be payable on Performance Guarantee amount to the contractor from the date of expiry of prescribed time limit. A compensation for such eventuality, on account of damages etc. shall be payable @ 0.25% of Contract price subject to maximum limit of ₹ 10 lakh.
	CLAUSE 3B	

Termination of Contract in case of death of Contractor	Without prejudice to any of the rights or remedies under this contract, if the contractor, being an individual, dies, the Employer shall have the option of terminating the contract without any liability for such termination and compensation to the contractor.	
	CLAUSE 4	
Contractor liable to pay Compensation even if action not taken under Clause 3		In any case in which any of the powers conferred upon the Engineer-in-Charge by Clause-3 thereof, shall have become exercisable and the same are not exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of (at the sole discretion of the Engineer-in-Charge which shall be final and binding on the contractor) or use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge) all or any tools, plant, materials and stores, in or upon the works, or the site thereof belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work/or any part thereof, paying or allowing for the same in account at the contract rates, or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge, whose certificate thereof shall be final, and binding on the contractor, clerk of the works, foreman or other authorized agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.
	CLAUSE 5	
Time and Extension for Delay		The time allowed for execution of the Works as specified in the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from such time period as mentioned in schedule 'F' or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, Employer shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the performance guarantee absolutely.

5.1	As soon as possible after the award of work but in any case, before 14 days from the date of award of work, the Contractor shall submit a Time and Progress Chart for each mile stone and get it approved by the Engineer-in-charge. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the Contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (same for special jobs for which a separate programme has been agreed upon) complete the work as per mile stones given in Schedule 'F'.	
	PROGRAMME CHART	
i)	The Contractor shall prepare a detailed work programme for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfillment of the programme within the stipulated period or earlier and submit the same for approval to the Engineer-in- Charge within tenth days of award of the contract.	
ii)	The programme should include the following:	
	a)	Descriptive note explaining sequence of the various activities.
	b)	Network (PERT / CPM / BAR CHART).
	c)	Programme for procurement of materials by the contractor.
	d)	Programme for deployment of man power by the contractor.
iii)	If at any time, it appears to the Engineer-in-Charge that the actual progress of work does not conform to the approved programme referred above or after rescheduling of milestones, on his instructions , the contractor shall produce a revised programme within 7 (seven) days, showing the modifications to the approved programme to ensure timely completion of the work. The modified schedule of programme shall be approved by the Engineer-in-Charge.	
iv)	The submission for approval by the Engineer-in-Charge of such programme or such particulars shall not relieve the contractor of any	

		of the duties or responsibilities under the contract. This is without prejudice to the right of Engineer-in-Charge to take action against the contractor as per terms and conditions of the agreement.
	v)	The contractor shall submit the progress report for works with reference to base line programme referred above for the work done during previous month to the Engineer-in-charge on or before 5th day of each month.
	5.2)	If the work(s) be delayed by:-
	i)	force majeure, or
	ii)	abnormally bad weather, or
	iii)	serious loss or damage by fire, or
	iv)	civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or
	v)	delay on the part of other contractors or tradesmen engaged by Engineer-in- Charge in executing work not forming part of the Contract, or
	vi)	non-availability of stores, which are the responsibility of Employer to supply or
	vii)	non-availability or break down of tools and Plant to be supplied or supplied by Employer or
	viii)	any other cause which, in the absolute discretion of the Engineer-in-Charge is beyond the Contractor's control.
		then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the authority as indicated in Schedule 'F' but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.
	5.3)	Request for rescheduling of Mile stones and extension of time, to be eligible for consideration with reasons, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay to the authority as indicated in Schedule 'F'. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.
	5.4)	In such case the authority as indicated in Schedule 'F' may give a fair and reasonable extension of time and reschedule the mile stones for completion of work. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the authority as indicated in Schedule 'F' in writing, within 3 months or 4 weeks of the date of receipt of such request respectively. Non application by the contractor for extension of time/ rescheduling of the milestones shall not be a bar for giving a fair and reasonable extension of time by the authority as indicated in Schedule 'F' and this shall be binding on the contractor. After

		giving a fair and reasonable extension of time, the authority shall advise the contractor to reschedule the milestones and submit for approval.
	CLAUSE 6	
Measurements of Work Done	i)	Engineer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement, the value in accordance with the contract of work done.
	ii)	All measurement of all items having financial value shall be entered in Measurement Book and/or level field book so that a complete record is obtained of all works performed under the contract.
	iii)	All measurements and levels shall be taken jointly by the Engineer-in-Charge or his authorized representative and by the contractor or his authorized representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer-in-Charge and the contractor or their representatives in token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.
	iv)	If for any reason, the contractor or his authorized representative is not available and the work of recording measurements is suspended by the Engineer-in-Charge or his representative, the Engineer-in-Charge and the Employer shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorized representative does not remain present at the time of such measurements after the contractor or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the Contractor.
	v)	The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels.
	vi)	Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards (IS 1200) or any other relevant code of practice and if for any item no such standard is available, then a mutually agreed method shall be followed.
	vii)	The contractor shall give, not less than seven days' notice to the Engineer-in-Charge or his authorized representative in charge of the work, before covering up or otherwise placing beyond the reach of

		measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-in-Charge or his authorized representative in charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or the Engineer-in-Charge's consent being obtained in writing, the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.
	viii)	Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the department to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.
	ix)	It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.
	CLAUSE 6A	
Computerized Measurement Book	i)	Engineer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the contract.
	ii)	All measurements of all items having financial value shall be entered by the contractor and compiled in the shape of the Computerized Measurement Book having pages of A-4 size as per the proforma of Measurement Book annexed hereto, so that a complete record is obtained of all the items of works performed under the contract.
	iii)	All such measurements and levels recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the contractor from the Engineer-in-Charge or his authorized representative as per interval or program fixed in consultation with Engineer-in-Charge or his authorized representative. After the necessary corrections made by the Engineer-in-Charge or his authorized representative the measurement sheets shall be returned to the contractor for incorporating the corrections and for re-submission to the Engineer-in-Charge for the dated signatures by the Engineer-in-Charge and/or his authorized representative and the contractor or their representatives in token of their acceptance.
	iv)	Whenever bill is due for payment, the contractor would initially submit

		draft computerized measurement sheets and these measurements would be got checked/test checked from the Engineer-in-Charge and/or his authorized representative. The contractor will, thereafter, incorporate such changes as may be done during these checks/test checks in his draft computerized measurements, and submit to the Employer a computerized measurement book, duly bound, and with its pages machine numbered. The Engineer-in- Charge and/or his authorized representative would thereafter check this MB, and record the necessary certificates for their checks/test checks.
	v)	The final, fair, computerized measurement book given by the contractor, duly bound, with its pages machine numbered, should be 100% correct, and no cutting or over-writing in the measurements would thereafter be allowed. If at all any error is noticed, the contractor shall have to submit a fresh computerized MB with its pages duly machine numbered and bound, after getting the earlier MB cancelled by the Employer. Thereafter, the MB shall be taken in the Office records, and allotted a number as per the Register of Computerized MBs. This should be done before the corresponding bill is submitted to the Office for payment. The contractor shall submit two spare copies of such computerized MB's for the purpose of reference and record by the concerned officers of the Employer.
	vi)	The contractor shall also submit to the Employer separately his computerized Abstract of Cost as perform at annexed hereto and the bill based on these measurements, duly bound, and its pages machine numbered along with two spare copies of the bill. Thereafter, this bill will be processed by the Employer and allotted a number as per the computerized record in the same way as done for the measurement book meant for measurements.
	vii)	The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements/levels by the Engineer-in- Charge or his representative.
	viii)	Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards or any other relevant code of practice and if for any item no such standard is available then a mutually agreed method shall be followed.
	ix)	The contractor shall give not less than seven days' notice to the Engineer-in-Charge or his authorized representative in charge of the work before covering up or otherwise placing beyond the reach of checking and/or test checking the measurement of any work in order that the same may be checked and/or test checked and correct dimensions thereof be taken before the same is covered up or placed beyond the

		reach of checking and/or test checking measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-in-Charge or his authorized representative in charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of checking and/or test checking measurements without such notice having been given or the Engineer-in- Charge's consent being obtained in writing the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.
	x)	Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the department to check the measurements recorded by contractor and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.
	xi)	It is also a term of this contract that checking and/or test checking the measurements of any item of work in the measurement book and/or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.
	CLAUSE 7	
Payment on Interim Certificate to be Regarded as Advances	i)	No payment shall be made for work, estimated to cost ₹One Lakh or less till after the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over Rs. One Lakh, the interim or running account bills shall be submitted by the contractor for the work executed on the basis of such recorded measurements on the format of the Employer as provided in the proforma annexed hereto. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment/ adjustment of advances for material collected, if any, since the last such payment is less than the amount specified in Schedule 'F', in which case the interim bill shall be prepared only after the requisite progress is achieved. Engineer-in-Charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. In the event of the failure of the contractor to submit the bills, Engineer-in-Charge shall prepare or cause to be prepared such bills in which event no claims whatsoever due to delays on payment including that of interest shall be payable to the contractor. Payment on account of amount admissible shall be made by the Engineer-in- Charge certifying the sum to which the contractor is considered entitled by way of interim payment at such rates as decided by the Engineer-in-Charge. The Contractor shall be paid by the Employer from time to time, by

		installments under Interim Certificates to be issued by the Engineer-in-Charge to the Contractor on account of the works executed as aforesaid in accordance with this contract, subject, however, to a retention of the percentage of such value named in the schedule 'F' as "Retention percentage for Interim Certificates" until the total amount retained shall reach the sum named in the schedule 'F' as "Total Retention Money". The Engineer-in-charge may in his discretion include in the Interim Certificate such amount as he may consider proper on account of materials delivered upon the site by the Contractor for use in the works. And when the works have been virtually completed and the Engineer-in-charge shall have certified in writing that they have been completed, the Contractor shall be paid by the Employer in accordance with the Certificate, the sum of money named in the schedule as "Installment after Virtual Completion" being a part of the said Total Retention Money. The Contractor shall be entitled to the payment of the Final Balance in accordance with the final certificate to be issued in writing by the Engineer-in-Charge at the expiry of the period referred to as "the Defects Liability Period" in clause 17 or as soon as after the expiration of such period as the works shall have been finally completed and all defects made good according to the true intent and meaning hereof whichever shall last happen, provided always that the issue by the Engineer-in-Charge of any Certificate during the progress of the works or at or after their completion shall not relieve the Contractor from his liability under this contract nor relieve the Contractor of his liability in case of fraud, dishonesty or fraudulent concealment relating to the works or materials or to any matter dealt with in the certificate, and in case of all defect and insufficiencies in the works or materials which a reasonable examination would not have disclosed. No certificate of the Engineer-in-charge shall of itself be conclusive evidence that any works or materials to which it relates are in accordance with the Contract neither will the Contractor have a claim for any amounts which the Engineer-in-charge might have certified in any interim bill and paid by the Employer and which might subsequently be discovered as not payable and in this respect the Employer's decision shall be final and binding.
	a)	75% of the amount payable to the Contractor on the RA bills will be released as ad-hoc payment within 7 working days from the date of certification by the Engineer-in-charge, pending test checking of work and verification of detailed arithmetical accuracy by Employer.
	b)	The Employer shall have power to withhold any certificate if the works or any parts thereof are not being carried out to his satisfaction.
	c)	No payment shall be made to the Contractor if the Contractor fails to insure the works and keep them insured till the issue of the Completion Certificate.
	d)	The amount admissible shall be paid within the specified period of honouring certificates in the schedule 'F' after the day of presentation of

		the bill by the Contractor to the Engineer-in-Charge together with the account of the dismantled materials, if any and all required details/ documents. In case of delay in payment of Running Account bills after 45 days of submission of bill by the contractor, provided the bill submitted by the contractor found to be in order, a simple interest @ 3% per annum shall be paid to the contractor from the date of expiry of prescribed time limit.
	ii)	All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-Charge relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer-in-Charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract
	iii)	Pending consideration of extension of date of completion, interim payments shall continue to be made as herein provided without prejudice to the right of the Employer to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority.
Payments in composite Contracts	iv)	In case of composite tenders, running payment for the major and minor components shall be made after certification of works by concerned engineers of respective discipline.
	v)	In case main contractor fails to make the payment to the contractor associated by him within 15 days of receipt of each running account payment, then on the written complaint of contractor associated for such minor component, Engineer-in-charge shall serve the show cause to the main contractor and if reply of main contractor either not received or found unsatisfactory, she/he may make the payment directly to the contractor associated for minor component as per the terms and conditions of the agreement drawn between main contractor and associate contractor fixed by him. Such payment made to the associate contractor shall be recovered by Engineer-in-charge from the next RA/ final bill due to main contractor as the case may be.
	CLAUSE 7A	
Unfixed materials when taken into account to be		Where in any Certificate (of which the Contractor has received payment), the Engineer-in-Charge has included the value of any unfixed materials intended for and/or placed on or adjacent to the works such materials shall become the property of the Employer and they shall not be removed except for use upon the works, without the written authority of the Engineer-in-Charge. The

the property of the Employer	Contractor shall be liable for any loss of, or damage to, such materials.	
	CLAUSE 8	
Completion Certificate and Completion Plans	i)	Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice, the Engineer-in-Charge shall inspect the work if the work is found incomplete, the contractor shall be advised suitably. Further, in the completed work, if there is no defect, the Engineer-In-Charge shall furnish the contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution; thereof, and not until the work shall have been measured by the Engineer-in-Charge. If the contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the Engineer-in-Charge may at the expense of the contractor remove such scaffolding, surplus materials and rubbish etc., and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.
	ii)	The works shall not be considered as completed until the Engineer-in-charge has certified in writing that they have been completed. The Defects Liability Period shall commence from the date of such certificate.
	CLAUSE 8A	
Contractor to Keep Site Clean		The splashes and droppings from white washing, colour washing, painting etc., on walls, floor, windows, etc shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done. The cleaning shall be carried out as soon as possible without waiting for the actual completion of all the other items of work in the contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor through any other agency. Before taking such action, the Engineer-in-Charge shall give ten days' notice in

		writing to the contractor.
	CLAUSE 8B	
Completion Plans to be Submitted by the Contractor	i)	The contractor shall submit completion plan (as built drawing in AUTOCAD or any such approved software and one hard copy) as applicable to related drawings depending upon the scope of work within thirty days of the completion of the work.
	ii)	The contractor shall submit all the data and details as regards the work to enable the Employer to prepare the 'As built drawings' for layouts etc.
	iii)	The contractor shall also submit the operation and maintenance manuals and other technical literature/ warranty certificates provided by OEMs in respect of all the electrical/ electro-mechanical and electronic equipment/ systems etc.
	iv)	In case, the contractor fails to submit the completion plan as aforesaid, the Employer will not process its bills for payment till such time the completion plan is submitted.
	CLAUSE 9	
Payment of Final Bill		The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will, as far as possible be made within the period specified hereunder, the period being reckoned from the date of receipt of the bill by the Engineer-in- Charge complete with account of materials wherever applicable.
	i)	If the Contract price of work is up to Rs. 50 lakh : 2 months
	ii)	If the Contract price of work is more than Rs.50 lakh : 3 months
		In case of delay in payment of final bills after prescribed time limit, a simple interest @ 3% per annum shall be paid to the contractor from the date of expiry of prescribed time limit, provided the final bill submitted by the contractor found to be in order.
	CLAUSE 9A	
Payment of Contractor's Bills through electronic means	i)	Payments due to the contractor shall be made to his bank through NEFT. For this purpose, the contractor shall furnish to the Engineer-in-Charge (1) an authorization in the form of a legally valid document such as a power of attorney conferring authority on the bank; to receive payments and all other required particulars in the approved format (2) his own acceptance of the correctness of the amount made out as being due to him by Employer or his signature on the bill or other claim preferred against Employer before settlement by the Engineer-in-Charge

		of the account or claim by payment to the bank. While the NEFT transaction slip shall constitute a full and sufficient discharge for the payment, the contractor shall whenever possible, present his bills duly receipted and discharged through his bank.
	ii)	Nothing herein contained shall operate to create in favour of the bank any rights or equities vis-a- vis the Employer.
	CLAUSE 10	
Materials to be provided by the Contractor	i)	The contractor shall, at his own expense, provide all materials, required for the works.
	ii)	The contractor shall, at his own expense and without delay, supply to the Engineer-in- Charge samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The materials shall be selected from the list of approved makes of materials at Section VI. The contractor shall, if requested by the Engineer-in- Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. The Engineer-in-Charge shall within thirty days of supply of samples or within such further period as he may require intimate to the Contractor in writing whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Engineer-in-Charge for his approval, fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with specifications, approval of the Engineer-in-Charge shall be issued after the test results are received.
	iii)	The Contractor shall at his risk and cost submit the samples of materials to be tested or analyzed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by the Engineer-in-Charge. The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.
	iv)	The contractor shall, at his risk and cost, make all arrangements and shall provide all facilities as the Engineer-in-Charge may require for collecting, and preparing the required number of samples for such tests at such time and to such place or places as may be directed by the Engineer-in-Charge and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Engineer-in- Charge or his authorized representative shall at all times have access to the works and to all workshops, factories or/ and other places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access for inspections and examination and test of the materials and workmanship. No person not authorized by the employer except the

		representatives of public authorities shall be allowed on the works at any time.
	v)	The Engineer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default, the Engineer-in-Charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full powers to require other proper materials to be substituted thereof and in case of default, the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor.
	vi)	Basic price adjustment shall be done on the measured quantities for the finished items of work with specified "Basic Prices / Rates". In addition to the difference in the Basic Price / Rate and the actual purchase Price / Rate, Contractor's overhead and profit @ 15% on the difference shall be considered for the Basic price / Rate adjustment. While carrying out price adjustments, NO other components such as wastage, transportation, handling, insurance, labour, etc. shall be taken in to account.
Clause 10A		
Price Adjustment - Payment on Account of variation in Material Prices/Wages (Not Applicable)	i)	Where scheduled period of completion is more than one year, in order to take in to account the variations in Material prices and wages during the contract period when the work is in progress, including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, adjustments in the costs of materials and labour shall be allowed on the basis of formulae as given below; (1) Materials $VM = 70/100 \{0.88V - (M)\} \times \{(WI - WIO)/WIO\}$ Where VM = Variation in material cost, i.e., increase or decrease in the amount in Rs to be paid or recovered. V = Value of work done excluding advances on materials, if any, during the period under reckoning. M = Cost of materials for which basic rates, if any, are indicated in the tender WI = Average of All India Wholesale Price Index for all commodities for the period under reckoning as published in the RBI Bulletin.

		WIO = All India Wholesale Price Index for all commodities during the month of receipt of final Price Bid of the tender as published in the RBI Bulletin (2) Labour VL = $30/100 \{0.88V - (M)\} \times \{(CI - CIO)/CIO\}$ Where VL = Variation in labour cost, i.e., increase or decrease in the amount in Rs to be paid or recovered. V = As stated in (1) above M = As stated in (1) above CI = Average of All India Consumer Price Index for industrial workers declared by Labour Bureau, Government of India as published in the RBI Bulletin during the period under reckoning. CIO = All India Consumer Price Index for industrial workers declared by Labour Bureau, Government of India as published in RBI Bulletin during the month of receipt of final Price Bid of the tender.
	ii)	The base date for working out such price adjustment shall be the last stipulated date of receipt of Final Price bid of the tenders.
	iii)	The cost of work on which price adjustment will be payable shall be reckoned as below:
	a)	Gross value of work done up to last price adjustment: (A)
	b)	Gross value of work done up to the current date: (B)
	c)	Gross value of work done during the period under reckoning (A-B) : (C)
	d)	Extra items/deviated quantities of items paid as per Clause 12 Based on prevailing market rates during the period under reckoning: (D)
	k)	Then, Cost of work for which price adjustment is applicable: $V = C - D$
	iv)	Materials which are covered by the provision of basic prices/ rates are excluded from the purview under this adjustment.
	v)	Adjustments based on the above formulae will be made for each bill as and when the indices are published. The Contractors shall submit the bill for price adjustment with detailed calculations.
	vi)	The downward adjustment on account of labour element will be made only if the minimum wages also register corresponding fall compared to the minimum wages prevailing in the month of receipt of final price bid of the tenders.

	vii)	The price adjustment clause shall be applicable only for the work executed during the contract period including authorized extension, if any. In case the work is not completed within the contract period including authorized extension and the provision of liquidated damages has to be enforced, this adjustment clause will not be applicable for work done during that period. It is also clarified that price adjustment clause will not be applicable to any extra variation items, the rates of which are based on prevailing market rate.
	viii)	In view of the price adjustment in cost being covered as above, no other adjustments viz. increase or decrease due to statutory measures/levies etc. will be allowed for any reason whatsoever.
	ix)	In case the bill is submitted to the Employer prior to 15th of a particular month, index for the previous month will be reckoned for calculating the average indices for arriving at the adjustment. If however, the bill is submitted on or after 15th, the Indices for that particular month shall be taken into consideration.
Work to be Executed in Accordance with Specifications, Drawings, Orders etc.	CLAUSE 11	
	i)	The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the Engineer-in-Charge and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in any Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the contract.
	ii)	In the case of any class of work for which there is no such specifications as referred above, such work shall be carried out in accordance with the Bureau of Indian Standards Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturers' specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.
	iii)	The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.
Action in case Work not done	CLAUSE 11 A	
	i)	All works under or in course of execution or executed in pursuance of the

as per Specifications		contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-in-charge, his authorized subordinates in charge of the work and all the superior officers of the Employer or any organization engaged by the Employer for Quality Assurance and of the Chief Technical Examiner's Office, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.
	ii)	If it shall appear to the Engineer-in-charge or his authorized representatives or to the Superior Officers of the employer or the officers of the organization engaged by the Employer for Quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within Defects Liability Period stated in schedule 'F' or, if none stated, then within twelve months (Four months in the case of work costing Rs Five Lakh and below)after completion of the work, from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of him failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 2 of the contract (for non-completion of the work in time) for this default.
	iii)	In such case the Engineer-in-Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the authority specified in S chedule 'F' may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.
Deviations/ Variations	CLAUSE 12	
		The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original

Extent and Pricing			specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided. The Engineer-in-Charge shall be the final authority to decide whether any item of work is extra/ deviation/ substitution item.
	12.1		The time for completion of the works shall, in the event of any deviations resulting in additional cost over the Contract price sum being ordered, be extended, if requested by the contractor, as follows
		i)	In the proportion in which the additional cost of the altered, additional or substituted work (The difference of Final completed cost of work(including the financial impact of all extra, substituted and deviated items but excluding the financial impact due to operation of price adjustment clause) and the Contract price), bears to the original Contract price plus
		ii)	25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.
Deviation - Extra Items and Pricing	12.2	A)	Items that are completely new, and are in addition to the items contained in the contract
			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 of works are carried out or if the amount of any omissions or additions relative to the amount of the whole of the contract works or to any part thereof shall be such that in the opinion of the Engineer-in-charge the net rate or price contained in the Priced Schedule of Quantities or tender or for any item of the works involves loss or expense beyond that reasonably contemplated by the Contractor or is by reason of such omission or addition rendered unreasonable or inapplicable, the Engineer-in-charge shall fix such other rate or price as in the circumstances he shall think reasonable and proper, with the prior approval in writing of the Employer.
			Where extra work cannot be properly measured or valued, the Contractor shall be allowed day work prices as the net rates stated in the tender of the Priced Schedule of Quantities 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 Engineer-in-charge, the workman's name) and materials employed be delivered for verification to the Engineer-in-charge or his representative at or before the end of the week following that in which the work has been executed.	
			In the case of extra item(s) (items that are completely new, and are in addition to the items contained in the contract), the contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper rate analysis (CPWD method shall be followed as far as possible) worked on the "actual cost basis" plus 15% towards establishment charges, contractor's overhead and profit and the Engineer-in-charge shall within prescribed time limit of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.	
Deviation - Substituted Items and Pricing		B)	Items that are taken up with partial substitution or in lieu of items of work in the contract	
			In the case of substituted items (items that are taken up with partial substitution or in lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall, wherever possible, be derived out of the rates given in priced schedule of quantities in the manner as mentioned in the following para.	
			a)	The net rates or prices in the original tender shall determine the valuation of the extra work where such extra work is of similar character and executed under similar conditions as the work priced therein.
			b)	The net prices of the original tender shall determine the value of the items omitted provided if omissions vary the conditions under which any remaining items of works are carried out the prices for the same shall be valued under sub-clause (A) thereof.
			c)	If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).

			d)	If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).		
Deviation - Deviated Quantities and Pricing		C)	In the case of contract items, substituted items, contract cum substituted items which exceed the pre-specified limits over the tender quantity			
			In the case of contract items, substituted items, contract cum substituted items, which exceed the pre-specified limits laid down in Schedule 'F', the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper rate analysis (CPWD method shall be followed as far as possible) worked on the "actual cost basis" plus 15% towards establishment charges, contractor's overhead and profit for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within prescribed time limit of receipt of the claim supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.			
			The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in Schedule F, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.			
	12.3		The prescribed time limits for finalizing rates for Extra Item(s), Substitute Item(s) and Deviated Quantities of contract items are as under:			
			i)	If the Contract price of work is up to ₹ 2 lakh :	15 days.	
			ii)	If the Contract price of work exceeds ₹2 lakh:	30 days.	
	12.4	The contractor shall send to the Engineer-in-Charge once every three months, an up to date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-Charge which he has executed during the preceding quarter failing which the				

		contractor shall be deemed to have waived his right. However, the Employer may authorize consideration of such claims on merits.
	12.5	Any operation incidental to or necessarily has to be in contemplation of tenderer while filing tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.
Foreclosure of contract due to Abandonment or Reduction in Scope of Work	CLAUSE 13	
	If at any time after acceptance of the tender, Employer shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Engineer-in-Charge shall give notice in writing to 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 whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.	
	The contractor shall be paid at contract rates, full amount for works executed at site and, in addition, a reasonable amount as certified by the Engineer-in-Charge for the items hereunder mentioned which could not be utilized on the work to the full extent in view of the foreclosure;	
	i)	Employer shall have the option to take over contractor's materials or any part thereof either brought to site or of which the contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided, however Employer shall be bound to take over the materials or such portions thereof as the contractor does not desire to retain. For materials taken over or to be taken over by Employer, cost of such materials as detailed by Engineer-in-Charge shall be paid. The cost shall, however, consider purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor.
	The contractor shall, if required by the Engineer-in-Charge, furnish to him, books of account, wage books, time sheets and other relevant documents and evidence as may be necessary to enable him to certify the reasonable amount payable under this condition.	
Carrying out part work at risk & cost of contractor	CLAUSE 14	
	If contractor:	
	i)	At any time makes default during currency of work or does not execute any part of the work with due diligence and continues to do so even after a notice in writing of 7 days in this respect from the Engineer-in-Charge; Or
	ii)	Commits default in complying with any of the terms and conditions of

		the contract and does not remedy it or takes effective steps to remedy it within 7 days even after a notice in writing is given in that behalf by the Engineer-in-Charge; or
	iii)	Fails to complete the work(s) or items of work with individual dates of completion, on or before the date(s) so determined and does not complete them within the period specified in the notice given in writing in that behalf by the Engineer-in-Charge.
		The Engineer- in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to Employer, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to:
	a)	Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or
	b)	Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.
		The Engineer-in-Charge shall determine the amount, if any, is recoverable from the contractor for completion of the part work/ part incomplete work of any item(s) taken out of his hands and execute at the risk and cost of the contractor. The liability of contractor because of loss or damage suffered by Employer because of action under this clause shall not exceed 10% of the Contract price of the work.
		In determining the amount, credit shall be given to the contractor with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original contractor under the terms of his contract, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor. The certificate of the Engineer-in-Charge as to the value of work done shall be final and conclusive against the contractor provided always that action under this clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the Employer are less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the contractor.
		Any excess expenditure incurred or to be incurred by Employer in completing the part work/ part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by Employer as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to Employer in law or as per agreement be recovered from any money due to the contractor on any account, and if such money is insufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days.
		If the contractor fails to pay the required sum within the aforesaid period of 30 days, the Engineer-in-Charge shall have the right to sell any or all of the contractors' unused materials kept at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the contractor under the contract

	and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the contract.	
	In the event of above course being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to the execution of the work or the performance of the contract.	
Suspension of Work	CLAUSE 15	
	i)	The contractor shall, on receipt of the order in writing of the Engineer-in-Charge, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:
	a)	on account of 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 of the contractor; or
	c)	for safety of the works or part thereof. The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in- Charge.
	ii)	If the suspension is ordered for reasons (b) and (c) in sub-para (i) above:
	a)	the contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part, and;
	b)	If the total period of all such suspensions in respect of an item or group of items or work for which a separate period of completion is specified in the contract exceeds thirty days, the contractor shall, in addition, be entitled to such compensation as the Engineer-in- Charge may consider reasonable in respect of salaries and/or wages paid by the contractor to his employees and labour at site, remaining idle during the period of suspension, adding thereto 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in- Charge within fifteen days of the expiry of the period of 30 days.
	iii)	If the works or part thereof is suspended on the orders of the Engineer-in-Charge for more than three months at a time, except when suspension is ordered for reason (a) in sub- para (i) above, the contractor may after receipt of such order serve a written notice on the Engineer-in-Charge requiring permission within fifteen days from receipt by the Engineer- in-

		Charge of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by Employer or where it affects whole of the works, as an abandonment of the works by Employer, shall within ten days of expiry of such period of 15 days give notice in writing of his intention to the Engineer-in-Charge. In the event of the contractor treating the suspension as an abandonment of the contract by Employer, he shall have no claim to payment of any compensation on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to such compensation, as the Engineer-in-Charge may consider reasonable, in respect of salaries and/or wages paid by him to his employees and labour at site, remaining idle in consequence adding to the total thereof 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in-Charge within 30 days of the expiry of the period of 3 months.
Dismantled Material Employer's Property	CLAUSE 16	
	The contractor shall treat all materials obtained during dismantling work at site (except material mentioned in Bill of quantity under rebate item and debris) etc. as Employer's property and such materials shall be disposed off as per the specific instructions in this regard or in absence of the same to the best advantage of Employer according to the instructions in writing issued by the Engineer-in-Charge.	
Contractor Liable for Damages, defects during defect liability period	CLAUSE 17	
	i)	If the contractor or his working people shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage, settlement or other faults appear in the work within Defects Liability Period stated in schedule 'F' or, if none stated, then within twelve months after a certificate final or otherwise of its completion shall have been given by the Engineer- in-Charge as aforesaid arising out of defect or improper materials or workmanship, the contractor shall upon receipt of a notice in writing on that behalf and within such reasonable times as shall be specified therein, make the same good at his own expense or in case of default the Engineer-in-Charge may employ and pay other persons to amend and make good such defects, shrinkage, settlements or other faults and all damages, loss and expenses consequent thereon or incidental thereto shall be made good and borne by the Contractor and such damage, loss, expenses shall be recoverable from him by the Employer or may be deducted by the Employer, upon the Engineer-in-

		Charge's Certificate in writing, from any money due or may become due to the Contractor, or the Employer may in lieu of such amending and making good by the Contractor deduct from any money due to the Contractor, a sum, to be determined by the Engineer-in-Charge make to the cost of amending such work and in the event of the amount retained as Security Deposit being insufficient, recover the balance from the Contractor, together with any expenses the Employer may have incurred in connection therewith. Should any defective work have been done or material supplied by any sub-contractor employed on the works who has been nominated or approved by the Employer, the Contractor shall be liable to make good in the same manner as if such work or material had been done or supplied by the Contractor and been subject to the provisions of this Clause. The Contractor shall remain liable under the provisions of this Clause notwithstanding the signing of any certificate or the passing of any accounts, by the Employer. . The security deposit of the contractor shall not be refunded before the expiry of the Defect Liability Period after the issue of the certificate final or otherwise, as provided elsewhere.
	ii)	In case of Maintenance and Operation works of E&M services, the security deposit deducted from contractors shall be refunded within one month from the date of final payment or within one month from the date of completion of the maintenance contract whichever is earlier.
Setting out of works	Clause 18	
	The Contractor shall set out the works 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. If at any time, any error in this respect shall appear during the progress of the works or within the Defect Liability Period after completion of the works, the Contractor shall, if so required, at his own expense rectify such error to the satisfaction of the Engineer-in-Charge. The checking of any setting-out or of any line or level by the Engineer-in-charge or his representative shall not in any way relieve the Contractor of his responsibility for the correctness thereof and the Contractor shall carefully protect and preserve all bench-marks, sight rails, pegs and other things used in setting out the works.	
All relevant Statutory Laws to be complied by the Contractor	CLAUSE 19	
	i)	The contractor shall obtain a valid licence under the Contract Labour (R&A) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986, Minimum Wages (Central) Rules, 1950.
	ii)	The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers

		Welfare Cess Act, 1996.	
	iii)	The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, or the modifications thereof or any other relevant laws and the rules made thereunder from time to time.	
	iv)	The contractor shall comply with provisions of any other relevant law in connection with the work, as may be applicable.	
	v)	Any failure to fulfill these requirements shall attract the penal provisions of the concerned Act and Contractor shall be liable to face the consequences thereof in addition to any other penal provisions of this contract. The contractor shall indemnify the Employer for any loss caused due to non-compliance with any of the provisions of laws applicable.	
Payment of wages:	CLAUSE 19 A		
	i)	The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.	
	ii)	The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.	
	iii)	In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with the Labour Regulations made by Government from time to time in regard to payment of wages, wage period, deductions from wages, recovery of wages not paid and deductions unauthorizedly made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.	
	iv)	a)	The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of the Regulations.

	b)	Under the provision of Minimum Wages (Central) Rules, 1950, the contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at the same rate as for duty. In the event of default, the Engineer-in-Charge shall have the right to deduct the sum or sums not paid because of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the contractor.
	v)	The contractor shall indemnify as per the approved format and keep indemnified the Employer against payments to be made under and for the observance of the laws aforesaid without prejudice to his right to claim indemnity from his sub-contractors.
	vi)	The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.
	vii)	The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered from the wage of workmen.
	CLAUSE 19 B In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per the Safety Code annexed and shall also at his own expense provide for all facilities in connection therewith.	
	CLAUSE 19 C The contractor shall submit by the 4th and 19th of every month, to the Engineer-in-Charge, a true statement showing in respect of the second half of the preceding month and the first half of the current month respectively:- 1. the number of labourers employed by him on the work, 2. their working hours, 3. the wages paid to them, 4. the accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them, and The decision of the Employer shall be final in deducting from any bill due to the contractor, the amount levied as fine if any by relevant statutory authorities and be binding on the contractor.	
	CLAUSE 19 D In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with all the rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by him/her..	
	CLAUSE 19 E	

	The Engineer-in-Charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractor's employment upon the work who may be incompetent or misconduct himself and the contractor shall forthwith comply with such requirements. In respect of maintenance/repair or renovation works etc. where the labour have an easy access to the individual houses, the contractor shall issue identity cards to the labourers, whether temporary or permanent and he shall be responsible for any untoward action on the part of such labour.	
	CLAUSE 19 F i) It shall be the responsibility of the contractor to see that the site under renovation is not occupied by anybody unauthorizedly during renovation, and is handed over to the Engineer-in-Charge with vacant possession of the site. If such site though completed is occupied illegally, then the Engineer-in-Charge shall have the option to refuse to accept the said site in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay, the provisions of clause 2 shall be applied by the Employer whose decision shall be final both with regard to the justification and quantum and be binding on the contractor. ii) However, the Employer, through a notice, may require the contractor to remove the illegal occupation any time on or before renovation and handing over.	
Employment of skilled/semi skilled workers	CLAUSE 19 G (Not Applicable) i) The contractor shall, at all stages of work, deploy skilled/semi-skilled tradesmen who are qualified and possess certificate in particular trade from Industrial Training Institute/National Institute of construction Management and Research (NICMAR)/ National Academy of Construction, CIDC or any similar reputed and recognized Institute managed/ certified by State/Central Government. The number of such qualified tradesmen shall not be less than 20% of total skilled/semi-skilled workers required in each trade at any stage of work. The contractor shall submit number of man days required in respect of each trade, its scheduling and the list of qualified tradesmen along with requisite certificate from recognized Institute to Engineer-in-charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade, the contractor shall substitute such tradesmen within two days of written notice from Engineer-in- Charge. ii) Provided always, that the provisions of this clause, shall not be applicable for works with estimated cost put to tender being less than ₹ 5 crores.	
Contribution of EPF and ESI	CLAUSE 19 H (Not Applicable) The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor. The quoted rate shall be inclusive of these amounts. The contractor shall submit the details of registration of labour for EPF and ESI and documents evidencing these payments shall be submitted every	

	month.
Ensuring Payment and Amenities to Workers if Contractor fails	CLAUSE 19 I
	In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, Employer is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and under the rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by Contractors. Employer will recover from the contractor, the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the Employer under sub-section(2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, Employer shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Employer to the contractor whether under this contract or otherwise Employer shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the contractor and upon his giving to the Employer full security for all costs for which Employer might become liable in contesting such claim.
Authorities and Notices	CLAUSE 20
	(i) The Contractor shall conform to the provisions of any Act of the Legislature relating to the work, and to the regulations and bye-laws of any authority, and of any water, electric supply and other companies and/or authorities with whose systems the structure is proposed to be connected and shall before making any variations from the Drawing or Specifications that may be necessitated by so conforming give to the Employer written notice, specifying the variation proposed to be made and the reason for making it and apply for instructions thereon. In case the Contractor shall not within ten days receive such instructions he shall proceed with the work conforming to the provisions, regulations or bye-laws in question, and any variation so necessitated shall be dealt with under Clause 12 thereof.
	(ii) The Contractor shall bring to the attention of the Employer all notices required by the said Acts, regulations or bye-laws to be given to any authority and pay to such authority, or to any public office all fees that may be properly chargeable in respect of the works, and lodge the receipts with the Employer.
Work not to be sublet. Action in case of insolvency	CLAUSE 21
	The whole of the works included in the contract shall be executed by the Contractor and the Contract or any part/share thereof or any interest therein shall not be assigned or sublet without the prior written consent of the Employer, and no undertaking shall relieve the Contractor from the full and entire responsibility of the Contract or from active superintendence of the works during their progress. And if the contractor shall assign or sublet his contract, or attempt to do so,

		or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor, or any of his servants or agent to any public officer or person in the employment of the Employer in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-Charge on behalf of the Employer shall have power to adopt the course specified in Clause 3 hereof in the interest of Employer and in the event of such course being adopted, the consequences specified in the said Clause 3 shall ensue.
Recovery of Compensation paid to Workmen		CLAUSE 22
		In every case in which by virtue of the provisions of the Workmen's Compensation Act, 1923, or any statutory modification or re-enactment thereof, Employer is obliged to pay compensation to a workman employed by the contractor, in execution of the works, Employer shall be entitled to recover from the contractor, the amount of the compensation so paid; and, without prejudice to the rights of the Employer under the provisions of the said Act, Employer shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Employer to the contractor whether under this contract or otherwise. Employer shall not be bound to contest any claim made against it under the provisions of the said Act, except on the written request of the contractor and upon his giving to Employer full security for all costs for which Employer might become liable in consequence of contesting such claim.
Changes in firm's Constitution to be intimated		CLAUSE 23
		Where the contractor is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained before any change is made in the constitution of the firm. Where the contractor is an individual or a Hindu undivided family business concern, such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.
Contractor to Supply Material, Machinery, Equipment, Tools & Plants etc.		CLAUSE 24
		The contractor shall arrange at his own expense all materials (including consumables such as welding rods etc.), all tools, plant, machinery and equipment (hereinafter referred to as T&P) required for execution of the work. In addition to this, appliances, implements, other plants, ladders, cordage, tackle, steel scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specifications or other documents forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge as

	to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials.	
	CLAUSE 25	
Settlement of Disputes & Arbitration	Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in 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 works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:	
	i)	The decision, opinion, direction, certificate of payment issued by the Engineer-in-Charge in respect of all or any of the excepted matters as provided in the contract shall be final, conclusive and binding on the parties hereto and shall be without appeal. Such decision may be in the form of a final certificate or otherwise.
	ii)	All other disputes and differences of any kind whatsoever arising out of or in connection with the contract or the carrying out of the works (whether during the progress of the works or after their completion and whether before or after the determination abandonment or breach of the contract) shall be referred to and settled by the Competent Authority of the Employer as specified in the schedule 'F'. The designated authority shall state its decision in writing within 28 days from the date of receipt of reference from the contractor.
	iii)	But If the Competent Authority (CA) fails to give his decision within the aforesaid period or if either party be dissatisfied on any matter it may, within 28 days after receiving notice of such decision, give a written notice to the other party requiring that the matters in dispute be arbitrated upon. Such written notice shall specify the matters, which are in dispute or difference of which such written notice has been given. If both the parties agree, a single arbitrator would be appointed for the purpose. In case there is no agreement on the appointment of arbitrator, the employer shall prepare a panel of three person's names and forward to the contractor to select one among them as arbitrator. The arbitrator so appointed/selected shall confine himself only to the dispute/difference referred to him while adjudicating and pronouncing his decision.

	The arbitrator shall make his or their award within one year (or such further extended time as may be decided by him or them as the case may be with the consent of the parties) from the date of entering on the reference. In case during the arbitration proceedings the parties mutually settle or compromise their dispute or difference, on the parties filing their joint memorandum of the settlement or compromise, the arbitrator or the arbitrators as the case may be, shall make an award in terms of such settlement or compromise. Upon any such reference, the decision on the cost incidental to the reference and award respectively shall be in the discretion of the arbitrator as the case may be, who may determine the amount thereof or direct the same to be taxed as between the party and party, and shall direct by whom and to whom and in what manner the same shall be borne and paid. This submission shall be deemed to be a submission to arbitration within the meaning of the Indian Arbitration and Conciliation Act, 1996 or any statutory modification thereof. The award of the arbitrator shall be final and binding on the parties. It is agreed that the Contractor shall not delay the carrying out of the works by reason of any such matter, question or dispute being referred to arbitration, but shall proceed with the works with all due diligence and shall until the decision of the arbitrator is given, abide by the decision of the Employer. No award of the arbitrator shall relieve the Contractor of his obligations to adhere strictly to the Employer's instructions with regard to the actual carrying out of the works. The Employer and the Contractor hereby also agree that arbitration under this clause shall be a condition precedent to any right of action under the contract. The place of Arbitration shall be as specified in Schedule 'F'.
Contractor to indemnify Employer against Patent Rights	CLAUSE 26 The contractor shall fully indemnify and keep indemnified the Employer 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 himself pay any royalties, license fees etc. which may be payable in respect of any article or part thereof included in the contract or damages cost and charges of all and every sort that may be legally incurred in respect thereof. In the event of any claims made under or action brought against Employer in respect of any such matters as aforesaid, the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, 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 Employer 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 Engineer-in-Charge in this behalf.
Lumpsum Provisions in Tender	CLAUSE 27 When the estimate on which a tender is made includes lump sum in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for such items, or if the part of the work in

	question is not, in the opinion of the Engineer-in-Charge payable of measurement, the Engineer-in-Charge may at his discretion pay the lump-sum amount entered in the estimate, and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of the clause.	
Nominated Sub-Contractors	CLAUSE 28	
	(i)	All Specialists, Merchants, Tradesman and other executing any work of supplying and fixing any goods for which prime cost prices or provisional sums are included in the Schedule of Quantities and/or Specifications who may be nominated or selected by the Engineer-in-charge are hereby declared to be Sub-Contractors employed by the Contractor and are herein referred to as nominated Sub-Contractors.
	(ii)	No nominated Sub-Contractor shall be employed on or in connection with the works against whom the Contractor shall make reasonable objection or (save where the Employer and Contractor shall otherwise agree) who will not enter into a Contract provided:
	a)	That the nominated Sub-Contractor shall indemnify the Contractor against the same obligation in respect of the Sub-Contract as the Contractor is under in respect of this contract.
	b)	That the nominated Sub-Contractor shall indemnify the Contractor against claims in respect of any negligence by the Sub-Contractor, his servants or agents or any misuse by him or them of any scaffolding or other plant, the property of the Contractor or under any Workmen's Compensation Act in force.
	c)	Payment shall be made to the nominated Sub-Contractor within fourteen days of his receipt of the Engineer-in-charge's Certificate provided that before any certificate is issued, the Contractor shall, upon request, furnish to the Engineer-in-charge proof that all nominated Sub-Contractor's accounts included in previous Certificates have been duly discharged, on the default whereof, the Employer may pay the same upon a Certificate of the Engineer-in-charge and deduct the amount thereof from any sum due to the Contractor. The exercise of this power shall not create brevity of contract as between Employer and Sub-Contractor.
Withholding and lien in respect of sum due from contractor	CLAUSE 29	
	i)	Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the contractor, the Employer shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Employer shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Employer shall be entitled to withhold and have a lien to

		retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract elsewhere with the RESERVE BANK OF INDIA pending finalization of adjudication of any such claim. It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by Employer will be kept withheld or retained as such by the Employer till the claim arising out of or under the contract is determined by the arbitrator (if the contract is governed by the arbitration clause) or by the competent court, as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the Employer shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.
	ii)	Employer shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for Employer to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by Employer to the contractor, without any interest thereon whatsoever.
Lien in respect of claims in other Contracts	CLAUSE 29A	
	Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Employer against any claim of the Employer in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Employer or RESERVE BANK OF INDIA elsewhere. It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Employer will be kept withheld or retained as such by the Employer or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the contractor	

	shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.	
Return of Surplus materials	CLAUSE 30	
	Notwithstanding anything contained to the contrary in this contract, where any materials for the execution of the contract are procured with the assistance of Employer by purchases made under orders or permits or licenses issued by Government, the contractor shall hold the said materials economically and solely for the purpose of the contract and not dispose them off without the written permission of the Employer and return it to Employer, if required by the Employer, all surplus materials that may be left with him after the completion of the contract or at its termination for any reason whatsoever on being paid or credited such price as the Engineer-in-Charge shall determine having due regard to the condition of the materials. The price allowed to the contractor however shall not exceed the purchase price thereof inclusive of sales tax, octroi and other such levies paid by Contractor in respect thereof. The decision of the Engineer-in-Charge shall be final and conclusive. In the event of breach of the aforesaid condition, the contractor shall in addition to throwing himself open to action for contravention of the terms of the license or permit and/or for criminal breach of trust, be liable to Employer for all moneys, advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach.	
Water and Electric power supply for work	CLAUSE 31	
	Bank will make available water and electricity power supply required at one point free of charge. Contractor shall make their own arrangement for further extension of connection if any with safety fixtures and nothing extra will be paid for the same.	
Employer's water supply, if available	CLAUSE 32	
	Water if available may be supplied to the contractor by the Employer at free of cost subject to the following conditions:-	
	i)	The Employer do not guarantee to maintain uninterrupted supply of water and it will be incumbent on the contractor(s) to make alternative arrangements for water at his/ their own cost in the event of any temporary break down in the water mains so that the progress of his/their work is not held up for want of water. No claim of damage or refund of Water charges will be entertained on account of such break down.
Insurance in respect of damages to Persons and Property	CLAUSE 33	
		The Contractor shall be responsible for all injury or damage to persons, animals or things, and for all damage to property which may arise from any factor omission on the part of the Contractor or any Sub-Contractor or any nominated Sub-Contractor or any of their employees. The liability under this clause shall cover also inter-alia any damage to structures, whether immediately adjacent to the works or otherwise, any damage to roads, streets, footpaths, bridges as well as damage caused to the building and other structures and works forming the subject

	matter of this contract. The contractor shall also be responsible for any damage caused to the buildings and other structures and works forming the subject matter of this contract due to rain, wind, frost or other inclemency of weather. The Contractor shall indemnify and keep indemnified the Employer and hold him harmless in respect of all and any loss and expenses arising from any such injury or damage to persons or property as aforesaid and also against any claim made in respect of injury or damage, whether under any statute or otherwise and also in respect of any award or compensation or damage consequent upon such claims. The Contractor shall, at his own expense, effect and maintain till issue of the virtual completion certificate under this contract, with an insurance company approved by the Employer, an All Risks Policy for Insurance for the full amount of the contract including earth quake risk in the joint names of the Employer and the Contractor (the name of the former being placed first in the policy) against all risks as per the standard all risk policy for Contractors and deposit such policy or policies with the Employer before commencing the works. The Contractor shall reinstate all damage of every sort mentioned in this clause so as to do delivery of the whole of the works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to property or third parties.
	The Contractor shall also indemnify and keep indemnified the Employer against all claims which may be made against the Employer by any person in respect of anything which may arise in respect of the works or in consequence thereof and shall at his own expense, effect and maintain until the virtual completion of the contract, with an Insurance Company approved by the Employer a policy of Insurance in the joint names of the Employer and the Contractor (name of the former being placed first in the policy) against such risks and deposit such policy or policies before commencement of the works. The minimum limit of the coverage under the policy shall be Rs.2 lakhs per person for any one accident or occurrence and Rs.5 lakhs in respect of damage to property for any one accident or occurrence. The Contractor shall also indemnify the Employer against all claims which may be made upon the Employer, whether under the Workmen's Compensation Act or any other statute in force, during the currency of this contract or at Common Law in respect of any employee of the Contractor or Sub-Contractor and shall at his own expense effect and maintain until the Virtual Completion of the Contract with an Insurance Company approved by the Employer a policy of Insurance against such risks and deposit such policy or policies with the Employer from time to time during the currency of this contract. In default of the Contractor insuring as provided above, the Employer may so insure and may deduct the premiums paid from any money due or which may become due to the Contractor.

		The Contractor shall be responsible for any liability which may not be covered by the insurance policies referred to above and also for all other damages to any person, animal or defective carrying out of this contract, whatever, may be the reasons due to which the damage shall have been caused.
	The Contractor shall also indemnify and keep indemnified the Employer against all and any costs, charges or expenses arising out of any claim or proceedings relating to the works and also in respect of any award of damage or compensation arising therefrom. Without prejudice to the other rights of the Employer 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, compensation costs, charges and other expenses paid by the Employer and which are payable by the Contractor under this clause.	
	The Contractor shall upon settlement by the insurer of any claim made against the insurer pursuant to a policy taken under this clause, proceed with due diligence to rebuild or repair the works destroyed or damaged. In this event all the money 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. The Contractor, in case of re-building or reinstatement after damage shall be entitled to such extension of time for completion as the Engineer-in-charge may deem fit, but shall, however, not be entitled to reimbursement by the Employer of any shortfall or deficiency in the amount finally paid by the insurer in settlement of any claim arising as set out herein. Without prejudice to his liability under this clause, the Contractor shall also cause all nominated sub-Contractors to effect, for their respective portions of the works similar policies of insurance in accordance with the provisions of this clause and shall produce or cause to produce to the Employer such policies. The Contractor shall not permit a nominated Sub-Contractor to commence work at the site unless said insurance policies are submitted. In the event of failure, of the Sub-Contractor to take out such policy or policies of insurance before commencing the works at the site, the Contractor shall be responsible for any claim or damage attributable to the said Sub-Contractor.	
Employment of Technical Staff and employees	CLAUSE 34	
	Contractor's Superintendence, Supervision, Technical Staff & Employees	
	i)	The contractor shall provide all necessary superintendence during execution of the work and all along thereafter as may be necessary for proper fulfillment of the obligations under the contract until the expiry of the "Defects Liability Period" stated in schedule 'F'. The contractor shall immediately after receiving letter of award of work and before commencement of the work, intimate in writing to the

	Engineer-in-Charge, the name(s), qualifications, experience, age, address(s) and other particulars along with certificates, of the Project Manager, to be in charge of the work, Principal technical representative and other technical representative(s) who will be supervising the work. Minimum requirement of such Project Manager and technical representative(s) and their qualifications and experience shall not be lower than specified in Schedule 'F'. The Engineer-in-Charge shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such a representative(s) to the contractor. Any such approval may at any time be withdrawn and in case of such withdrawal, the contractor shall appoint another such representative(s) according to the provisions of this clause. Decision of the Employer shall be final and binding on the contractor in this respect. Such a Project Manager, Principal technical representative and other technical representative(s) shall be appointed by the contractor soon after receipt of the approval from Engineer-in-charge and shall be available at site before start of work. All the provisions applicable to the principal technical representative under the Clause will also be applicable to other technical representative(s). The principal technical representative and other technical representative(s) shall be present at the site of work for supervision at all times when any renovation work is in progress and also present himself/themselves, as required, to the Engineer-in-Charge and/or his designated representative to take instructions. Instructions given to the principal technical representative or other technical representative(s) shall be deemed to have the same force as if these have been given to the contractor. The principal technical representative and other technical representative(s) shall be actually available at site fully during all stages of execution of work, during recording/checking/test checking of measurements of works and whenever so required by the Engineer-in-Charge and shall also note down instructions conveyed by the Engineer-in-Charge or his designated representative(s) in the site order book and shall affix his/their signature in token of noting down the instructions and in token of acceptance of measurements/ checked measurements/ test checked measurements. Necessary site Registers viz. site instruction register /Hindrance Register/Labour Register etc. shall be strictly maintained by him on daily basis and got duly authenticated from Engineer-in-charge or his designated representative. The representative(s) shall not look after any other work. Substitutes, duly approved by Engineer-in-Charge of the work in similar manner as aforesaid shall be provided in event of absence of any of the representative(s) by more than two consecutive days. If the Engineer-in-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative(s) is/are effectively appointed or is/are effectively attending or fulfilling the provision of this clause, a recovery (non-
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		refundable) shall be effected from the contractor as specified in Schedule 'F' and the decision of the Engineer-In-Charge as recorded in the site order book and measurement recorded checked/test checked in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint suitable Project Manager, Principal technical representative and/or other technical representative(s) and if such appointed persons are not effectively present or are absent by more than two continuous days without duly approved substitute or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative(s) is/are appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative(s) (in the form of copy of Form-16 or CPF deduction issued to the Technical staff and employees employed by him) along with every on-account bill and final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.
	ii)	The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work. The contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work.
	iii)	The Engineer-in-Charge shall be at liberty to object to and require the contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-in-Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer-in-Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.
Levy/Taxes payable by Contractor	CLAUSE 35	
	i)	Goods and service tax (GST), Building and other Construction Workers Welfare Cess or any other tax or Cess in respect of this contract shall be payable by the contractor and Employer shall not entertain any claim whatsoever in this respect.
	ii)	The contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, sand, stone, kankar, etc. from local authorities.
	If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the Employer and does not any time become payable by the contractor to the State Government/ Local authorities in respect of any material used by the contractor in the works, then in such a case, it shall be lawful to the Employer and it will have the right and be entitled to recover the amount	

	paid in the circumstances as aforesaid from dues of the contractor.	
Conditions for reimbursement of levy/taxes if levied after receipt of tenders	CLAUSE 36	
	i)	All tendered rates shall be inclusive of all taxes and levies payable under respective statutes. However, if any further tax or levy or cess is imposed by Statute, after the last stipulated date for the receipt of tender including extensions, if any, and the contractor thereupon necessarily and properly pays such taxes/levies/cess, the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the Employer (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.
	ii)	The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the Employer and/or the Engineer-in-Charge and shall also furnish such other information/document as the Engineer-in-Charge may require from time to time.
	iii)	The contractor shall, within a period of 30 days of the imposition of any such further tax or levy or cess, give a written notice thereof to the Engineer-in-charge that the same is given pursuant to this condition, together with all necessary information relating thereto.
Other Persons employed by Employer	CLAUSE 37	
	The Employer reserves the right to use premises and any portions of the site for the execution of any work not included in this Contract which it may desire to have carried out by other persons and the Contractor shall allow all reasonable facilities for the execution of such work but shall not be required to provide any plant or material for the execution of such work except by special arrangement with the Employer. Such work shall be carried out in such manner as not to impede the progress of the works included in the Contract and the Contractor shall not be responsible for any damage or delay which may happen to or occasioned by such work.	
If relative working with the Employer then the contractor not allowed to tender	CLAUSE 38	
	The contractor shall not be permitted to tender for works in the office of the Employer responsible for award and execution of contracts in which his near relative is posted as an officer (in any grade) or assistant (including Junior Engineer). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Officer of the Employer. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of the Employer. If, however, the contractor is registered in any other organization, he shall be debarred from tendering by the Employer for any breach of this condition. NOTE: By the term “near relatives” is meant wife, husband, parents and grandparents, children and grandchildren, brothers and sisters, uncles,	

	aunts and cousins and their corresponding in-laws.
No Employee of the Employer to work as Contractor within one year of retirement	CLAUSE 39
	No Technical or other officer or assistant (including Junior Engineer) employed with the Employer shall work as a contractor or employee of a contractor for a period of one year after his retirement from the service without the previous permission of Employer in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of the Employer as aforesaid, before submission of the tender or engagement in the contractor's service, as the case may be.
Compensation during warlike situations	CLAUSE 40
	The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the Engineer-in-Charge and a certificate from him to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation, the contractor shall when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the Engineer-in-Charge, such payments being in addition to compensation up to the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed by the Engineer-in-Charge. The contractor shall be paid for the damages/destruction suffered and for restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the contract. The certificate of the Engineer-in-Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this contract. Provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operations (a) unless the contractor had taken all such precautions against air raid as are deemed necessary by the Engineer-in-Charge (b) for any material etc. not on the site of the work or for any tools, plant, machinery, scaffolding, temporary building and other things not intended for the work. In the event of the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Engineer-in-Charge.
	CLAUSE 41
Direction and approval of Engineer-in-charge	All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

	CLAUSE 42	
	All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of Employer without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.	
Release of Security deposit after labour clearance	CLAUSE 43	
	Security Deposit of the work shall not be refunded till the contractor produces a clearance deposit after labour certificate from the Labour Officer. As soon as the work is virtually complete the contractor shall apply for the clearance certificate to the Labour Officer under intimation to the Engineer-in-Charge. The Engineer-in-Charge, on receipt of the said communication, shall write to the Labour Officer to intimate if any complaint is pending against the contractor in respect of the work. If no complaint is pending, on record till after 3 months after completion of the work and/or no communication is received from the Labour Officer to this effect till Four months after the date of completion, it will be deemed to have received the clearance certificate and the Security Deposit will be released, if otherwise due.	
Non-Disclosure Pact	CLAUSE 44	
	The contractor shall not disclose directly or indirectly any information, materials and of the Employer's infrastructure/ system/equipment etc. which may come to the possession or knowledge of the contractor during the course of discharging its contractual obligations in connection with the agreement, to any third party and shall at all times hold the same in strictest confidence. The contractor shall treat the details of the contract as private and confidential, except to the extent necessary to carry out the obligations under it or to comply with applicable laws. The contractor shall not publish, permit to be published, or disclose any particulars of the works in any trade or technical paper or elsewhere without the previous written consent of the Employer. The contractor shall indemnify the Employer for any loss suffered by the Employer as a result of disclosure of any confidential information. Failure to observe the above shall be treated as breach of contract on the part of the contractor and the Employer shall be entitled to claim damages and pursue legal remedies. The contractor shall take all appropriate actions with respect to its employees to ensure that the obligations of non-disclosure of confidential information under this agreement are fully satisfied. The contractor's obligations with respect to non-disclosure and confidentiality will survive the expiry or termination of this agreement for whatever reason.	
Sexual Harassment Of Women At Work Place	CLAUSE 45	
	(i)	The Contractor /Agency shall be solely responsible for full compliance with the provisions of the "Sexual Harassment of the women at work place (Prevention, Prohibition and Redressal) Act, 2013". In case of any sexual harassment against its employee within the premises of the Bank, the complaint will be filed before the internal complaints committee constituted by the contractor / Agency and the Contractor / Agency shall ensure appropriate action under the said Act in respect to the complaint.

	(ii)	Any complaint of sexual harassment from any aggrieved employee of the contractor against any employee of the Bank shall be taken cognizance of the Regional Complaints Committee constituted by the Bank
	(iii)	The contractor shall be responsible for any monetary compensation that may need to be paid in case the incident involves the employees of the contractor, for instance any monetary relief to Bank's employee, if sexual violence by the employee of the contractor is proved.
	(iv)	The contractor shall be responsible for educating its employees about prevention of sexual harassment at work place and related issues
	<u>Compensation to be recovered from the Contractors in case of default on account of termination of contract:</u> If the contract is terminated from either of the party before completion of work/contract. It is treated that, the contractors are failed to complete the captioned work in stipulated time period and the approved extension. The left over or balance work will be carried out directly by the bank at the risk and cost of the contractors. Such risk and cost amount i.e. amount arrived by evaluating the difference of cost between cost based on tender rates of the contractors and as per the rates of new contract engaged by the Bank for completion of work. This risk and cost amount will be recovered by the bank, which is a direct financial loss incurred by the bank on account of forced termination of contract and against the time lost in completion of the work from any amount payable to the contractors such as gross amount of final bill, Performance Bank Guarantee amount, up to date converted Security Deposit (RMD) of the contract further including amount payable against any other bill/bills pending at all the Estate Cells/Office i.e. Estate office, Fort, Mumbai, Byculla Cell, BKC Cell etc.	

Place:

Date:

**Signature & Seal
of the bidder.**

Address:

Contact Person:

Cell No.

Email:

Section V

SPECIAL CONDITIONS OF CONTRACT

General	CLAUSE SC 1	
	i)	Special conditions of Contract shall be read in conjunction with the General Conditions of Contract, specifications of work, drawings and any other documents forming part of this contract, wherever the context so requires.
	ii)	Notwithstanding the sub-divisions of the document into separate sections, schedules, annexures etc., every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the contract so far as it may be practicable to do so.
	iii)	Where any portion of the Special Conditions of Contract is repugnant to or at variance with any provisions of the General Conditions of Contract then unless a different intention appears, the provision(s) of the Special Conditions shall be deemed to override the provision(s) of the General conditions of Contract only of the extent that such repugnance or variations cannot and shall be to the extent that such repugnance or variance cannot be reconciled with the General Conditions of Contract.
	iv)	Wherever it is stated anywhere in this tender document that such and such supply is to be effected or such and such work is to be carried out, it shall be understood that the same shall be effected / carried out by the Contractor at his own cost, unless a different intention is specifically stated.
	v)	The items given in Schedule of Quantities shall be read in conjunction with materials and job specifications and relevant drawings.
Responsibilities of contractor	CLAUSE SC 2	
	i)	The CONTRACTOR shall be entirely responsible for executing the work covered under this Tender document in a safe, efficient and expeditious manner as per the time schedule, specifications, drawings and Renovation work aids equipment such as transportation equipment, tools and tackles as well as teasing appliances such as air compressors etc. and the necessary supervisory personnel, skilled, semi-skilled and unskilled labour shall be provided by the CONTRACTOR to achieve the monthly/weekly targets and the overall time schedule.
	ii)	The CONTRACTOR shall ensure that local labour, unskilled as well as skilled, to the extent possible and available from local resources are preferably employed on the work.
	iii)	All expenses towards mobilization at site and demobilization including bringing in equipment, work force, materials, dismantling the equipment, clearing the site, etc. shall be deemed to be included in the prices quoted and no separate payments on account of such expenses shall be entertained.
	iv)	It shall be entirely the CONTRACTOR's responsibility to provide, operate and maintain all necessary equipment, necessary scaffoldings and safety gadgets, lifting tackles, tools and appliances to perform the work in a safe and efficient manner and complete all the jobs as per time schedules.

	v)	Preparing approaches and working area for the movement materials shall also be the responsibility of the CONTRACTOR. The CONTRACTOR shall acquaint himself with access availability etc. to provide suitable allowances in his quotation.
	vi)	The procurement and supply in sequence and at the appropriate time of all materials and consumables shall be entirely the CONTRACTOR's responsibility and his/her rates for execution of work will be inclusive of supply of all these items.
	vii)	Responsibility for obtaining all statutory approvals (if required) related to the work lies with the CONTRACTOR.
	viii)	The CONTRACTOR shall provide drinking water and other amenities at site for the contract workmen as per the statutory requirements at his own cost.
	ix)	CONTRACTOR shall take all steps to see that normal functioning of Working Office/Public life/ Public traffic is not affected/obstructed while executing the work. Stacking of materials, equipment, tools and vehicles involved in movement of equipment or materials should not make any hindrance for the movement of other vehicles and people.
	x)	CONTRACTOR shall be responsible for implementing the requirements of Local controlling State Pollution Control Board/ statutory authorities (if any).
	xi)	The works to be undertaken by the Contractor shall inter-alia include the following:
	a)	Preparation of detailed SHOP drawings and AS BUILT drawings wherever applicable.
	b)	Pre-commissioning tests as per relevant standard specifications, code of practice, Acts and Rules wherever required.
	c)	Contractor shall provide all the shop drawings or layout drawings for all the coordinated services before starting any work or placing any order of any of the services etc. These shop drawings/layout drawings shall be got approved from Engineer-in-charge before implementation and this shall be binding on the Contractor. The Contractor shall submit material submittals along with material sample for approval of Engineer-in-Charge prior to delivery of material at site.
	xii)	Wherever the 'basic rate' for the material is specified, the contractor shall furnish all the paid bills for Employer's verification. The purchase rate shall be got approved from the Engineer-in-charge before purchasing.
	xv)	The contractor shall arrange visits of authorized official of the manufacturer whose materials (costing more than Rs 1 lakh) have been selected / approved by the Employer for the work to inspect the materials supplied/ available at site and whether the materials are being used as per the Manufacturer's Specifications and specified consumption standards and shall be required to submit a report on the manufacturer's letterhead addressed to Employer, under official seal, indicating the genuineness or otherwise of the material and its usage methodology. No additional payment on this account shall be considered.
Role of employer	CLAUSE SC 3	
	The Employer (Reserve Bank of India, Mumbai Regional office) shall administer and directly arrange for supervision of works, to test and examine any materials to be used or workmanship employed in connection with the	

	works, monitoring of progress, inspection, certification of bills,	
	making payments and implementation of various terms, conditions and stipulations of the contract.	
Architect	CLAUSE SC 4	
	Banks appointed Architect will provide the design and drawings. The scope of their work includes inter-alia Planning & Designing and periodic inspection and supervision.	
Green building requirements	CLAUSE SC 5	
	The Contractor shall adopt the construction practices and materials in line with the requirements specified in schedule 'G'. The Contractor shall strictly follow the instructions of Engineer-in-charge in this regard.	
	CLAUSE SC 6	
Inspection of Site	The intending Tenderer shall be deemed to have visited the site and examined the Site and its surroundings and familiarized themselves thoroughly with the site conditions as to the nature of the ground and sub-soil and the form and nature of the Site before submitting the tender. Non familiarity with the site conditions will not be considered as reason either for extra claims or for not carrying out the work in strict conformity with the drawings and specifications. For site visit, the intending tenderer may contact the Employer.	
Underground Services / Utility	CLAUSE SC7	
	The Contractor shall take due and proper care during execution of telecommunication and fire alarm system work to protect Existing water/electric services from damage. In case, during the execution of work, the Contractor notices some services which require re-routing, the same shall be brought to the notice of the Engineer-in-charge. As per the instructions of Engineer-in-charge, further action for rerouting shall be undertaken. If the Contractor is advised by the Engineer-in-charge to carry out the required re-routing, the work shall be treated as Extra item of work and shall be dealt as per the relevant clause of GCC.	
Handing over of site	CLAUSE SC8	
	i)	The Contractor shall be required to complete the following documentation with regard to the work within tenth days from the date of award of work:
	a)	Signing of the agreement on adequate value of Non Judicial stamp paper as per the approved format
	b)	Obtaining and submitting all the required Insurance Policies as specified in the relevant clause of General Conditions of Contract and of specified value mentioned in schedule 'F'
	c)	Submission of the specified Bank Guarantees mentioned in Schedule 'F' or submission of documentary evidence of having instructed his Banker to prepare the specified Bank Guarantee
	d)	Obtaining and submitting the original Labour License or submitting the documentary evidence of having applied to the statutory authority in the prescribed form for Obtaining the Labour License if applicable.

		e)	Submitting the details/ documents of the Contractor's site team as specified in relevant clause of General Conditions of Contract and schedule 'F' for obtaining approval of Engineer-in-charge.
		f)	Submitting the detailed work programme as specified in the relevant clause of General Conditions of Contract for approval of the Engineer-in-charge, if applicable
	ii)		After complying to the above documentation and other statutory requirements required to be complied by the Contractor before start of work, the Contractor shall be handed over the possession of the site. The scheduled date of commencement of work shall be reckoned from the 10th day of the date of award of work or the date of handing over the possession of site (if delay is due to any reasons beyond the contractor's control), whichever is later. However, any delay in handing over the possession of site to the Contractor on account of non-submission of the above documents/ details shall not be considered for extension of time.
Drawings	CLAUSE SC 9		
	The CONTRACTOR shall keep one copy of all drawings on the works and Employer or his representative shall at all reasonable time have access to the same. Before the issue of the final certificate to the CONTRACTOR he shall forthwith return to the EMPLOYER all drawings and specifications. Drawings accompanying the tender documents are indicative of the scope or work and issued for tendering purpose only. Detailed construction drawings on the basis of which actual execution of the work is to be proceeded will be furnished to the CONTRACTOR progressively based on the approved programme after the award of the work.		
Further drawings and Instructions	CLAUSE SC 10		
	The Engineer-in-Charge shall have full power and authority to supply drawings to the Contractor from time to time during the progress of the Works such further drawings for adequate execution and maintenance of the Works and the Contractor shall carry out and be bound by the same. Any further drawings or specifications that may be required by the Contractor for execution of the work shall be requested by him to Engineer-in-charge at least 15 days in advance.		
Contractor's Barricades	CLAUSE SC11		
	i)		Contractor shall erect and maintain at his own cost barricades required in connection with his operation to guard or protect the entire working area including storage, etc.
	ii)		Barricades and hazardous areas adjacent to but not located in normal routes of travel shall be marked with suitable red markers at night without any extra cost.
	iii)		The Contractor shall also comply with the provisions of Environment Protection Act with regard to air, water & noise pollution.
	iv)		The Contractor shall provide suitable construction safety nets to prevent damage to man / material at site without any extra cost
Site Facilities	CLAUSE SC12		
	CONTRACTOR shall arrange for storage space for keeping own tools/tackles and other materials for performance of work under this contract.		

	Whereas space will be provided by the R B I free of cost, the safety and security including safety of materials for erection purpose as well as subsequent removal of the same on completion of 'Work' under this contract are the responsibility of the CONTRACTOR.	
	Lighting- The CONTRACTOR shall ensure that the entire site is provided with adequate lighting at all times when the renovation work is in progress. He shall also make additional arrangements for lighting for carrying out work at night, whenever required. All costs in this connection shall be borne by him.	
	Compressed Air The Contractor shall make his own arrangement for Portable compressors, pumps, temporary piping for compressed air, if required, for the work including all necessary accessories, fittings etc. at his own cost for cleaning, testing, flushing etc.	
Construction/Renovation work Equipment	CLAUSE SC13	
	The CONTRACTOR shall without prejudice to his overall responsibility to execute and complete the work as per specifications and time schedule, progressively deploy adequate and appropriate equipment and tools and tackles and augment the same as decided by the Engineer-in-Charge depending on the requirements of the work so as to suit the work schedule. No equipment shall be supplied by the Employer. Contractor shall assess the actual requirement based on the quantum and nature of work and arrange to provide the same to achieve the progress as per the approved work programme.	
Plant etc. to be exclusively for use on the works	CLAUSE SC14	
	i)	All plants, tools and equipment and materials provided by the Contractor shall when brought on to the Site be deemed to be exclusively intended for the renovation work and completion of the Works and the Contractor shall not remove the same or any part thereof (save for the purpose of moving it from one part of the Site to another or moving it outside the site for repairs) without the previous consent in writing of the Engineer-in-Charge which shall not be unreasonably withheld.
	ii)	Clearance of Site on Completion : On completion of the Works the Contractor shall remove from the Site all the said Constructional Plant, tools and equipment remaining thereon and any unused materials
Care of works /plant/equipment	CLAUSE SC15	
	From the commencement to the completion of the Works/Plant/Equipment, the Contractor shall take full responsibility for the care thereof and in case any damage loss or injury shall happen to the Works/Plant/Equipment or to any part thereof from any cause whatsoever shall at his own cost repair and make good the same so that at completion the Works/Plant/Equipment shall be in good order and condition and in conformity in every respect with the requirements of the contract. Finished Flooring shall be protected by suitable means while carrying out any civil/electrical work either internally or externally and no extra cost. Mixing mortar / concrete shall not be permitted on bare slab / waterproofing IPS / tiles and the same shall be done on steel plates / mixing tubs / G.I. Trays. Any damage done to the flooring / IPS shall be rectified by the Contractor at his own cost and which shall be in the form of replacing the total flooring.	

	Temporary used materials (e.g. Cable, pipe, valve etc) shall not be used for permanent work. All the bought-out items supplied by the Contractor and billed to Employer shall be considered as Employer's Property and due care shall be taken for safety of these by the contractor till handing over of work.	
Works to be carried out by licensed technicians under supervision of licensed Supervisors	CLAUSE SC 16	
	a)	All electrical works shall be carried out through a licensed Electrician under the supervision of licensed supervisor. The electrical connections carried out by the CONTRACTOR shall meet the statutory requirements. Changes, if any, as incorporated in the statutory rules and regulations from time to time shall be applicable to the electrical works done by the CONTRACTOR.
Quality Assurance and Quality Control	CLAUSE SC17	
	i)	The reports of the test shall be submitted to the Engineer-in-charge as and when the tests/ quality assurance & control checks are carried out as per the contract. The Engineer-in-charge, after evaluation of the results of tests may decide to either reject or accept the respective materials/ works etc. In case of rejection, the Contractor shall have to replace the defective material/ work at the earliest without any additional cost.
	ii)	In case the CONTRACTOR fails to follow the instructions of Engineer-in-charge in this regard, the Engineer-in-charge may suspend the work till such time the quality of the work is ensured. No compensation for delays on account of such suspension of work shall be considered.
Materials at Basic Prices/ Basic rates	CLAUSE SC 18	
	i)	For carrying out certain items of work, the tender provides for procurement of certain materials at "Basic Prices/ Basic Rates" as specified in the tender document.
	ii)	While quoting the rates, the tenderer should base their item rates at "the Basic Prices" wherever specified. The said prices are ex-Godown and are inclusive of excise duty, sales tax, octroi and all other taxes and duties levied by Government or any other statutory body. (ex-Godown referred here will be dealer's Godown or Rail head within the Municipal or city limits or the city where the work is being done).
	iii)	The contractor shall obtain written approval from the Engineer-in-charge before procuring any material for which "Basic Price/ Basic Rate" is specified in the tender Document.
	iv)	Basic Price adjustment shall be done on the measured quantities for the finished items of work with specified "Basic Prices/Rates". In addition to the difference in the Basic Price/ Rate and the actual purchase Rate/ Price, contractor's overhead and profit @ 15% on the difference shall be considered for the Basic price/ Rate adjustment. While carrying out price adjustments, No other components such as wastage, transportation, handling, insurance, labour, etc. shall be taken in to account.
	v)	The contractor shall submit copies of all tax paid vouchers (original tax paid vouchers shall be shown to the Engineer-in-charge for verification as and when required by him) for full quantity for all items to the Engineer-in-charge in support of their claim for adjustment in Basic Rates/Prices. In absence of these documents, his claim for adjustment in Basic rates/Prices shall not be considered.
	CLAUSE SC 19	

Documents to be maintained at site	a)	The Registers/ Documents specified at Schedule 'D' shall be maintained at site by the Contractor at his own cost and updated regularly.		
	b)	These documents shall be available for inspection by Employer's representative or Engineer-in-charge or his representative during his site visit at all reasonable times.		
	c)	After completion of work, the Contractor shall submit the duly completed registers/ documents along with all the drawings issued to him for construction purpose to the Engineer-in-charge before submission of the Final bill.		
Progress Monitoring by the Engineer-in-charge	CLAUSE SC 20			
	i)	The contractor shall submit his programme for approval of Engineer-in-charge within 14 days from the date of award of work as specified in the relevant clause of the General Conditions of Contract.		
	ii)	On the basis of the approved programme, the Engineer-in-charge shall monitor/ review the progress through site meetings on monthly interval or earlier, as and when required. The meeting should be attended by the contractor himself (in case of proprietorship firm) or authorized partner/ senior official in case of partnership firm/ limited company along with contractor's site in-charge.		
	iii)	For this purpose, the contractor shall prepare and submit a progress report indicating following:		
		A	Progress for the previous month (duration under review) and the planning for the next month and materials received during the month (duration under review) and expected to be received during next month.	
		B	The reasons for major deviations in planned schedule and the actual progress achieved along with any hindrances/ decisions required from the Employer/ Engineer-in-charge.	
		C	Statement of deployment of resources (men and machine) and variations, if any, from the planned schedule	
		D	List of Variations / extra items if any carried out during the previous month(period under review)	
Measurement, Billing and Terms of payment	CLAUSE SC 21			
	i)	The work shall be measured from time to time as provided in the General Conditions of Contract. The units of measurements shall be as defined in the specific item description in the Schedule of quantities. If for any item or part thereof, physical measurement is not practicable, measurements given in the execution drawings shall be adopted.(ii) As and when the Contractor feels that the grossvalue of work done after adjustment of the value of work already received in any previous bill and adjustment of advances, if any, has crossed the threshold value specified in the Schedule 'F' for Running Account Bill, he may raise a bill and submit to the Engineer-in-charge for payment. The bill shall invariably be accompanied with following documents:		
		a)	The signed measurements, as specified in the General Conditions of Contract.	
		b)	The progress reports of the concerned period.	
	c)	Test certificates/ reports of any material considered for the first time in the Contractor's bill		

	d)	Checklist indicating validity of the labour license, all the Insurance Policies, PBGs
	e)	Documents evidencing the price of materials (eg Tax paid vouchers etc.) considered in the bill where Basic Rates are mentioned, as applicable.
	f)	Delivery challans of the materials.
	ii)	The Engineer-in-charge reserves the right to refuse to accept the Running Account bill, if any of the document as above is not submitted along with the bill.
	iii)	Once the bill is received along with all the required documents, the Engineer-in-charge shall arrange to process the bill and the payments due to the Contractor shall be released through NEFT within the specified period for honouring the certificates.
	iv)	After completion of work and completing all the contractual responsibility, the measurement sheets shall be signed jointly by the Contractor or his authorized representative and Engineer-in-charge or his authorized representatives. The Contractor shall then submit the Final bill to the Engineer-in-charge. The Final Bill shall necessarily be submitted along with the following documents:
	a)	The signed measurements, as specified in the General Conditions of Contract.
	b)	The copy of last progress report, evidencing the completion of work.
	c)	Test certificates/ reports of any material considered for the first time in the Contractor's bill
	f)	Checklist indicating validity of the labour license, all the Insurance Policies, PBGs
	g)	Documents evidencing the price of materials (eg Tax paid vouchers etc.) considered in the bill where Basic Rates are mentioned, as applicable.
	h)	Delivery challans for the materials
	j)	All the required documents of Guarantees/ warranties (eg Water proofing and electrical equipments, etc. as mentioned in the specifications of respective items)
	k)	"No claim" certificate by the Contractor except as included in the Final bill.
	l)	Completion plans/ drawings/ details as specified in the General Conditions of Contract
	v)	The Engineer-in-charge reserves the right to refuse or to accept the Final bill, if any of the document, as above, is not submitted along with the bill.
	vi)	Once the Final bill is received along with all the required documents, the Engineer-in-charge shall arrange to process the bill and the payments due to the Contractor shall be released through NEFT within the specified period for honoring the certificates. No revised Final Bill shall be considered by the Employer.
	vii)	All statutory deductions shall be made from the payments due to the Contractor.
	CLAUSE SC 22	

Least disturbance to the office and other surroundings.		The tenderer may please note that the area involved for this work is, inside the residential premises of Reserve Bank of India Staff Quarters, Byculla, Mumbai – 400 008. As these buildings are in occupation the entire work shall be carried out without any inconveniences and least disturbance to the office and other surroundings. All the necessary arrangements shall be made to prevent dust, noise, debris etc. to the adjacent areas which is required to be cleared on day-to-day basis without any extra cost
	CLAUSE SC 23 (NOT APPLICABLE)	
Incentive for early completion		In case, the contractor completes the work ahead of updated stipulated date of completion considering the effect of extra work (to be calculated as per clause 12.1), a bonus @ 1% (one per cent) of the contract amount per month computed on per day basis, shall be payable to the contractor, subject to a maximum limit of 5% (five per cent) of the contract amount. The amount of bonus, if payable, shall be paid along with final bill after completion of work. Provided always that provision of the Clause 2A shall be applicable only when so provided in Schedule 'F'.
		CLAUSE SC 24
		<u>Compensation to be recovered from the Contractors in case of default on account of termination of contract:</u> If the contract is terminated from either of the party before completion of work/contract. It is treated that, the contractors are failed to complete the captioned work in stipulated time period and the approved extension. The left over or balance work will be carried out directly by the bank at the risk and cost of the contractors. Such risk and cost amount i.e. amount arrived by evaluating the difference of cost between cost based on tender rates of the contractors and as per the rates of new contract engaged by the Bank for completion of work. This risk and cost amount will be recovered by the bank, which is a direct financial loss incurred by the bank on account of forced termination of contract and against the time lost in completion of the work from any amount payable to the contractors such as gross amount of final bill, Performance Bank Guarantee amount, up to date converted Security Deposit (EMD and RMD) of the contract further including amount payable against any other bill/bills pending at all the Estate Cells/Office i.e. Estate office, Fort, Mumbai, Byculla Cell, BKC Cell etc. 58.

		I/We hereby declare that I/we have read and understood the above instructions to the contractors. Place: Signature of the firm Date: Address of the firm:
		CLAUSE SC 25
		<u>Protocols, safety measures and security norms of present pandemic situation of Covid-19 to be followed:</u> The contractors shall follow all security, safety norms and the standard protocol laid down by the Bank during the present pandemic situation of Covid -19 like wearing mask, using hand sanitizer, regularly washing hands with soap dispensers, wearing hand gloves, movement of the workers only pertaining to the work place, regular security checks etc. The violation of the same may be entitled for penalty on each occasion imposed by the Bank's P & SO, which may be recovered from the payment due to the contractors

I/We hereby declare that I/we have read and understood the above instructions to the contractors.

Place:

Signature of the firm

Date:

Address of the firm

Other CONDITIONS

1. Bank has got registered itself as Principal Employer under Section 7 of Contract Labour (regulation and abolition) Act 1970. Therefore, the successful tenderer has to furnish to the Bank, the details of work men like number of workmen employed each day, rates of wages, hours of work, wage periods, date of commencement and completion of work etc. so as to comply with the law, as the Principal Employer.
2. The workmen will not be allowed to stay within the premises beyond working hours.
3. No storage space will be provided by the Bank. Contractors have to make necessary arrangements for the same. However they may be permitted to make temporary sheds at approved locations within the premises during the period of work. The same shall be removed and taken away by the contractor at their risk and cost after completion of the work.
4. The water required for the work or workmen can be availed from the available source at site free of cost. However if there is shortage of water, contractors have to make their own arrangements for the same at their risk and cost. The Contractor has to make his own arrangements to take the supply to the requisite position.
5. The electric power required for the work can also be similarly drawn from the supply available at site free of cost. The Contractor has to make his own arrangements to take the supply to the requisite position in consultation with Bank's Engineers.
6. Permission, if any, required from the local bodies shall be obtained by the Contractor at his cost.
7. The authorized officials of the Bank shall be entitled to inspect the material/works at any time, if they so desire and the vendor shall provide all reasonable facilities to do so.
8. The contractor shall employ a qualified site Engineer on a regular basis to supervise day-to-day works at site. Such a person shall be capable of following the instructions of the Bank's Engineers and execute the works as per the specifications laid down in the Tender. Such person shall maintain daily work progress report, daily material consumption/ stock registers as directed by Bank's engineer.

9. The intending tenderer can obtain any clarifications regarding the tender provisions/specifications etc. if any from the office of the **Regional Director, Reserve Bank of India, Estate Office, MRO, and Mumbai – 1** on any Bank's working day.
10. The tenderer may please note that the work is to be executed in a Bank's **Colony** buildings and as such the entire work involved shall be carried out with least disturbance to Bank's staff/ visitors.
11. The entire materials for the work shall be brought to the working area through the staircase only without any disturbance to the residents.
12. The debris/dust or any wastage generated out of the above work shall be cleaned as frequently as required and as instructed by the Bank's Engineer and make the entire premises clear/clean on a day to day basis including staircase, passages affected/used by the labourers in the above work to the satisfaction of the Bank's Engineers at no extra cost. The entire debris/waste material shall be taken out of the Bank's premises and should not be dumped anywhere in and around the Bank's premises. The contractors are solely responsible if any debris is noticed by the local Corporation and penalty levied.
13. The tenderer is advised to inspect the proposed site of work to acquaint them of the scope of work.
14. The work has to be done in proper coordination with the Caretaker of the **Colony** buildings and other contractors engaged by the Bank.
15. The contractor shall maintain the account of painting materials brought to site including delivery Challan/ invoice etc. Material whenever delivered at site shall be got inspected from Bank's engineer and challans of the delivered materials shall be get verified. During progress of the work, Bank's Engineer will scrutinise the required quantity of paint as per the theoretical converge specified by the paint manufacturer was used in the work. In addition to this the Bank's Engineer will also verify the quantum of work done, quality and certify the bills of the contractor.
16. The entire painting operation including day-to-day supervision will be the responsibility of the contractor. The representative of the paint company shall inspect the works periodically and submit a report to the Bank for the quality/ progress of work being carried out. The contractor's representative shall visit the site; inspect the type of the existing surfaces, and site/ climatic conditions.
17. The tenderer shall submit along with his tender, a list mentioning the names of manufacturers of paints which he proposed to use in the work if his tender is accepted.

18. Price adjustment Clause: - Basic price of items indicated shall be ex-go down at Mumbai excluding GST. Contractors shall consider factors like transport, handling charges etc. while quoting their rates. Necessary approvals shall be obtained from the Bank before placing order for purchase of items with basic prices. Successful contractors shall submit purchase bills/vouchers for purchase of such items to the Bank. The adjustment in cost of materials for which basic prices have been mentioned in the tender shall be considered only for actual measured quantity by working out difference in basic price mentioned in the tender and actual purchase cost or MRP whichever is less and 15% towards C.P. & OHC only.

Place:

Signature of Tenderer with name, & seal

Date:

Address:

E -mail:

Phone:

SAFETY CODE

1. There shall be maintained in a readily place First aid appliances including adequate supply of sterilized dressings and cotton wool.
2. An injured person shall be taken to a nearby public hospital without loss of time, in cases where the injury necessitates hospitalization.
3. Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from 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 rungs shall not be more than 30 cm. When a ladder is used an extra labour shall be engaged for holding the ladder.
5. The excavated material shall not be placed within 1.5 meters of the edge of the edge of the trench or 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 is provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one metre.
7. No floor, roof or other part of the structure shall be so overloaded with debris or materials as to render it unsafe.
8. Workers employed on mixing and handling material such as asphalt, cement mortar or concrete and lime mortar shall be provided with protective footwear and rubber hand gloves.
9. Those engaged in welding works shall be provided with welder's protective eye-shields and gloves.
- 10.(i) No paint containing lead products shall be used except in the form of paste or readymade paint.
(ii) Suitable facemasks should be supplied for use by the workers when the paint is 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 the periods of cessation of work.
12. Hoisting machines and tackles used in the works, including their attachments, anchorage and supports shall be in perfect working condition.
13. The ropes used in hoisting or lowering material or as means of supervision shall be of durable quality and adequate strength and free from defects.

Additional safety net is to be providing to cover the external work and to avoid any injury to the occupants of the colony.

FIRE SAFETY CODE

- i. Cutting / drilling machine and other electrically operated equipment used at site shall be plugged into correctly rated electrical outlets.
- ii. Only ISI marked 3-pin plug and other appliances and equipment shall be used.
- iii. Electrical power cables/wires used shall not have any joints and shall be properly rated.
- iv. All electrical appliances i.e. welding, drilling, cutting machine etc. shall be safely and securely earthed to prevent leakage current while in operation.
- v. Before commencing the welding work for the first time on any day, the Engineers shall be informed and only after the site inspection by them, work shall be started.
- vi. Two buckets of water and sand shall be kept in an easily accessible area on the site.
- vii. Fire extinguishers recommended shall be kept on the site.
- viii. Used paint drums shall be stored in specified store only after closing them properly.
- ix. Personal protective equipment such as safety shoes, hand gloves, mask, ear plug etc. depending upon the requirement of the work shall be provided by the contractor to the workmen to prevent occupational health hazards.
- x. The safety belt shall be provided by the contractor and used by the workmen while working from height for more than 10 feet from Ground level.
- xi. None of the passages near staircases shall be used for stacking / dumping any kind of materials/waste.
- xii. None of the fire extinguishers shall be removed/shifted from its designated location.
- xiii. Power supply shall be switched off from the mains when equipment is not in use.
- xiv. Any debris/ junks generated from the work shall be collected on daily basis, removed from site and stored at the designated place in proper manner.

Place:
Date:

Signature of the Tenderer:
Address:
Phone/Mobile No. :

Section VI

TECHNICAL SPECIFICATIONS

A. Repairs / Renovation / External Repairs/ re-painting works

DISMANTLING AND DEMOLITION WORKS

LIST applicable INDIAN STANDARDS CODES

GENERAL:

1-All materials obtained from dismantling or demolition shall be the property of the EMPLOYER unless otherwise specified and shall be kept in safe custody until they are handed over to the Engineer-in-charge.

2-The demolition shall always be well planned before hand and shall generally be done in reverse order of the one in which the structure was constructed. The operations shall be got approved from the Engineer-in-charge before starting the work.

3-Due care shall be taken to maintain the safety measures prescribed in IS 4130.

4-Necessary propping, shoring and or under pinning shall be provided to ensure the safety of the adjoining work or property before dismantling and demolishing is taken up and the work shall be carried out in such a way that no damage is caused to the adjoining work or property. Wherever specified, temporary enclosures or partitions and necessary scaffolding with suitable double scaffolding and proper cloth covering shall also be provided, as directed by the Engineer-in-charge.

5-Necessary precautions shall be taken to keep noise and dust nuisance to the minimum. All work needs to be done under the direction of Engineer-in-charge. Helmets, goggle, safety belts etc. should be used whenever required and as directed by the Engineer-in-charge.

6-The demolition work shall be proceeded with in such a way that it causes the least damage and nuisance to the adjoining building and the public.

7-Dismantling shall be done in a systematic manner.

8-Any serviceable material, obtained during dismantling or demolition, shall be separated out and stacked properly as directed by the Engineer-in-charge within a lead of site boundary. All unserviceable materials, rubbish etc. shall be disposed of out of premises as directed by the Engineer-in-charge at place permitted by municipal authority.

9-The contractor shall maintain/disconnect existing services, whether temporary or permanent, where required by the Engineer-in-charge.

10-No demolition work should be carried out at night.

11-Screens shall be placed where necessary to prevent injuries due to falling pieces.

12-Water may be used to reduce dust while demolishing.

13-Safety belts shall be used by labourers while working at higher level to prevent falling from the structure.

14-First-aid equipment shall be got available at all demolition works of any magnitude.

RECOMMENDATIONS FOR DEMOLITION OF CERTAIN SPECIAL TYPES AND ELEMENTS OF STRUCTURES

In-situ Reinforced Concrete

- i) Before commencing demolition, the nature and condition of the concrete, the condition and position of reinforcement, and the possibility of lack of continuity of reinforcement should be ascertained.
- ii) Attention should be paid to the principles of the structural design to determine which parts of the structure depend on each other to maintain overall stability.
- iii) Demolition should be commenced by removing partitions and external non-load bearing cladding. It should be noted that in some buildings the frame may rely on the panel walls for stability.
- iv) Where hard demolition methods are to be used, the following procedures should be used.
 - a. Reinforced Concrete Beams: For beams, a supporting rope should be attached to the beam. Then the concrete should be removed from both ends by pneumatic drill and the reinforcement exposed. The reinforcement should then be cut in such a way as to allow the beam to be lowered under control to the floor.
 - b. Reinforced Concrete Columns: For columns, the reinforcement should be exposed at the base after restraining wire guy ropes have been placed round the member at the top. The reinforcement should then be cut in such a way as to allow the column to be pulled down to the floor under control.
 - c. Reinforced Concrete Walls: Reinforced concrete walls should be cut into strips and demolished as for columns.
 - d. In case of foundations/footings /plinth column/plinth beams the required area to be excavated and RCC to be demolished by mechanical means as approved by Engineer in charge.

MEASUREMENTS

- (i) All work shall be measured net in the decimal system, as fixed in its place, subject to the following limits, unless otherwise stated hereinafter.
- a) Dimensions shall be measured correct to a cm.
 - b) Areas shall be worked out in sqm correct to two places of decimal.
 - c) Cubical contents shall be worked out to the nearest 0.01 cum.
- (ii) Elements of work required to be dismantled/demolished shall only be measured and no allowance for increase in bulk. Excavation for exposing foundations/RCC elements will not be measured and paid under this item as already included in the excavation items.

RATES

"The rate shall include the cost of all labour involved and tools, equipment used in demolishing and dismantling including shoring/strutting/ scaffolding, dewatering etc. The rate shall also include the charges for separating out and stacking the serviceable material properly and shall be disposed off out of premises as directed by the Engineer-in-charge at place permitted by municipal authority.

"The rate shall also include for temporary shoring for the safety of portions not required to be pulled down, or of adjoining property, and providing temporary enclosures or partitions, where considered necessary."

2. CONCRETE AND ALLIED WORKS

It shall be very clearly understood that the specifications given herein are brief and do not cover minute details. However, all works shall have to be carried out in accordance with the relevant standards and codes of practices or in their absence in accordance with the best accepted current Engineering practices or as directed by ENGINEER-IN-CHARGE from time to time. The decision of ENGINEER-IN-CHARGE as regards the specification to be adopted and their interpretation and the mode of execution of work shall be final and binding on CONTRACTOR and no claim whatsoever will be entertained on this account.

a. APPLICABLE CODES AND SPECIFICATIONS

The following specifications, standards and codes, including all official amendments/revisions and other specifications & codes referred to therein, should be considered a part of this specification. In all cases the latest issue/edition/revision shall apply.

Materials

- a) IS:269 Specification for 33 grade ordinary Portland cement.
- b) IS:455 Specification for Portland slag cement.
- c) IS:1489 Specification for Portland pozzolana cement (Parts 1 & 2)
- d) IS:8112 Specification for 43 grade ordinary Portland cement.
- e) IS:12330 Specification for sulphate resisting Portland Cement.

- f) IS:383 Specification for coarse and fine aggregates from natural sources for concrete.
- g) IS:432 Specification for mild steel and medium tensile (Parts steel bars and hard drawn steel wires for 1 & 2) concrete reinforcement.

- h) IS:1786 Specification for high strength deformed steel bars and wires for concrete reinforcement.
- i) IS:1566 Specification for hard drawn steel wire fabric for (Parts II) concrete reinforcement.
- j) IS:9103 Specification for admixtures for concrete.
- k) IS:2645 Specification for integral cement waterproofing compounds.

- l) IS:4900 Specification for plywood for concrete shuttering work.
- m) IS:4926 Ready mixed concrete
- n) IS:12269 Specification for 53 grade ordinary Portland cement.

- o) IS:8041 Specification for rapid hardening cement.
- p) IS:12600 Specification for low heat cement.
- q) IS:6909 Specification for super sulphated cement.
- r) IS:12089 Specification for granulated ground blast furnace slag.
- s) BS:6699 Specification for granulated ground blast furnace slag.
- t) BS:6073 Specifications for precast concrete masonry units (Part 1) Methods for specifying precast concrete masonry (Part 2)
- u) IS
13620-
1993 Specification for Fusion bonded epoxy coated reinforcing bars

Material Testing

- a) IS:4031 Methods of physical tests for hydraulic cement. (Parts 1 to 15)

- b) IS:4032 Method of chemical analysis of hydraulic cement.
- c) IS:650 Specification for standard sand for testing of cement.
- d) IS:2430 Methods for sampling of aggregates for concrete.
- e) IS:2386 Methods of test for aggregates for concrete (Parts 1 to 8)
- f) IS:3025 Methods of sampling and test (physical and chemical) water used in industry.(Part 1 to 51)
- g) IS:6925 Methods of test for determination of water soluble chlorides in concrete admixtures.

Material Storage

- a) "IS:4082" Recommendations on stacking and storing of construction materials at site

Concrete Mix Design

- a) IS:10262 Recommended guidelines for Concrete Mix Design.
- b) "SP:23 " Handbook on Concrete Mixes.

Concrete Testing

- a) IS:1199 Method of sampling and analysis of concrete.
- b) IS:516 Method of test for strength of concrete.
- c) IS:9013 Method of making, curing and determining compressive strength of accelerated cured concrete test specimens.
- d) IS:8142 Method of test for determining setting time of concrete by penetration resistance.
- e) IS:9284 Method of test for abrasion resistance of concrete.
- f) IS:2770 Methods of testing bond in reinforced concrete.

Equipment

- a) IS:1791 Specification for batch type concrete mixers.
- b) IS:2438 Specification for roller pan mixer.
- c) IS:4925 Specification for concrete batching and mixing plant.
- d) "IS:5892" Specification for concrete transit mixer and agitator.
- e) IS:7242 Specification for concrete spreaders.
- f) IS:2505 General Requirements for concrete vibrators: Immersion type.
- g) IS:2506 General Requirements for screed board concrete vibrators.
- h) IS:2514 Specification for concrete vibrating tables.
- i) IS:3366 Specification for pan vibrators.
- j) IS:4656 Specification for form vibrators for concrete.
- k) IS:11993 Code of practice for use of screed board concrete vibrators.
- l) IS:7251 Specification for concrete finishers.
- m) IS:2722 Specifications for portable swing weigh batcher for concrete (single and double bucket type).
- n) IS:2750 Specifications for steel scaffoldings

Codes of Practice

- a) IS:456 Code of practice for plain and reinforced concrete.
 - b) IS:457 Code of practice for general construction of plain and reinforced concrete for dams and other massive structures.
 - c) IS:3370 Code of practice for concrete structures for storage of liquids (Parts 1 to 4)
 - d) IS:3935 Code of practice for composite construction.
 - e) IS:2204 Code of practice for construction of reinforced concrete shell roof.
 - f) IS:2210 Criteria for the design of reinforced concrete shell structures and folded plates.
 - g) IS:2502 Code of practice for bending and fixing of bars for concrete reinforcement.
 - h) IS:5525 Recommendation for detailing of reinforcement in reinforced concrete works.
 - i) IS:2751 Code of practice for welding of mild steel plain and deformed bars used for reinforced concrete construction.
 - j) IS:9417 Specification for welding cold worked bars for reinforced concrete construction.
 - k) IS:3558 Code of practice for use of immersion vibrators for consolidating concrete.
 - l) IS:3414 Code of practice for design and installation of joints in buildings.
 - m) IS:4326 Code of practice for earthquake resistant design and construction of buildings.
 - n) IS:4014 Code of practice for steel tubular scaffolding. (Parts 1 & 2)
 - o) IS:2571 Code of practice for laying in situ cement concrete flooring
 - p) "IS:7861" Part 1 - Recommended practice for hot weather concreting
Part 2 – Recommended practice for cold weather concreting
 - q) "IS:3370" Code of practice for concrete structures for the storage of liquid (Part I to IV)

Construction Safety

- a) IS:3696 Safety code for scaffolds and ladders.(Parts 1 & 2)
- b) IS:7969 Safety code for handling and storage of building materials.
- c) IS:8989 Safety code for erection of concrete framed structures.

b. GENERAL

ENGINEER-IN-CHARGE shall have the right at all times to inspect all operations including the sources of materials, procurement, layout and storage of materials, the concrete batching and mixing equipment, and the quality control system. Such an inspection shall be arranged, and ENGINEER-IN-CHARGE's approval obtained, prior

to starting of concrete work. This shall, however, not relieve CONTRACTOR of any of his responsibilities. All materials, which do not conform to this specification, shall be rejected.

Materials should be selected so that they can satisfy the design requirements of strength, serviceability, safety, durability and finish with due regards to the functional requirements and the environmental conditions to which the structure will be subjected. Materials complying with codes/standards shall only be used.

c. MATERIALS

Cement

- (a) Unless otherwise specified or called for by ENGINEER-IN-CHARGE, cement shall be ordinary Portland cement conforming to IS: 269, IS: 8112 or IS: 12269.
- (b) If used, The Portland pozzolana cement shall conform to IS: 1489 and it shall be used as directed by ENGINEER-IN-CHARGE. Where Portland pozzolana cements are used, it shall be ensured that consistency of quality is maintained and there will be no adverse interactions between the materials and the finish specified is not marred.
- (c) Only one type of cement shall be used in any one mix unless specifically approved by ENGINEER-IN-CHARGE.
- (d) Cement, which is not used within 90 days from its date of manufacture, shall be tested at a laboratory approved by ENGINEER-IN-CHARGE and until the results of such tests are found satisfactory, it shall not be used in any work.

Aggregates

- (a) Aggregates shall consist of naturally occurring stones and gravel (crushed or uncrushed) and manufactured sand (M sand) from approved source. They shall be chemically inert, strong, hard, clean, durable against weathering, of limited porosity, free from dust/silt/organic impurities/deleterious materials and conform to IS: 383. Aggregates such as slag, crushed over burnt bricks, bloated clay ash, sintered fly ash and tiles shall not be used.
- (b) Aggregates containing reactive materials shall be used only after tests conclusively prove that there will be no adverse effect on strength, durability and finish, including long term effects, on the concrete.
- (c) The fineness modulus of manufactured sand (M sand) shall be neither less than 2.2 nor more than 3.2. The CONTRACTOR shall be allowed to use river sand with the prior approval of ENGINEER-IN-CHARGE, if the manufactured sand is not available / shortage.
- (d) The maximum size of coarse aggregate shall not be greater than 1/4 of the minimum thickness of the member, if the concrete can be placed without difficulty to surround all reinforcement thoroughly and fill the corners of the form. For most of work 20mm downgraded aggregate is suitable.
- (e) In concrete elements with thin sections, closely spaced reinforcements or small cover, consideration should be given to the use of 10mm nominal maximum size.
- (f) Plums 150 mm and above of a reasonable size may be used where directed.

Plums shall not constitute more than 40% by volume of concrete unless specified by ENGINEER-IN- CHARGE.

Water

- a) Water used for both mixing and curing shall conform to IS: 456. Potable water is generally satisfactory. Water containing any excess of acid, alkali, sugar or salt shall not be used.
- b) The pH value of water shall not be less than 6.
- c) Seawater shall not be used for concrete mixing and curing.
- d) The proposed admixtures shall comply with requirements of Specification for admixture.

Reinforcement

- a) Reinforcement bars shall conform to IS: 1786 and welded wire fabric to IS: 1566 as shown on the drawing.
- b) All reinforcement shall be clean, free from pitting, oil, grease, paint, loose mill scales, rust, dirt, dust or any other substance that will destroy or reduce bond.
- c) The reinforcing bars to be provided with Fusion Bonded Epoxy coating shall conform to the and relevant I.S. specifications specified in the subsequent para with the prior approval of ENGINEER-IN-CHARGE.

Samples and Tests

- a) All major materials used for the works shall be tested before use as per relevant IS standards. Decision of ENGINEER-IN-CHARGE on testing of such materials is final and binding.
- b) Sampling and testing of aggregates shall be as per IS: 2386 under the supervision of ENGINEER-IN-CHARGE. The cost of all tests, sampling, etc. shall be borne by CONTRACTOR. For coarse aggregate crushing value shall be tested.
- c) Water to be used shall be tested to comply with Clause 5.4 of IS: 456.
- d) CONTRACTOR shall furnish manufacturer's test certificates and technical literature for the admixture proposed to be used. If directed, the admixture shall be got tested at an approved laboratory at no extra cost.

Storing Of Materials

- a) All material shall be stored in a manner to prevent its deterioration and contamination, which would preclude its use in the works. Requirements of IS: 4082 shall be complied with
- b) CONTRACTOR will have to make his own arrangements for the storage of adequate quantity of cement. If such cement is not stored properly and has deteriorated, the material shall be rejected. Cement bags shall be stored in dry weatherproof shed with a raised floor, well away from the outer walls and insulated from the floor to avoid moisture from ground. Not more than 15 bags shall be stacked in any tier. ENGINEER-IN-CHARGE shall approve storage arrangement. Storage under tarpaulins shall not be permitted. Each consignment of cement shall be stored separately and consumed in its order of receipt. CONTRACTOR shall maintain record of receipt, consumption and current stock of cement.

- c) Each size of coarse and fine aggregates shall be stacked separately and shall be protected from dropping leaves and contamination with foreign material. The stacks shall be on hard, clean, free draining bases, draining away from the concrete mixing area.
- d) CONTRACTOR shall make his own arrangements for storing water at site in tanks of approved capacity. The tanks shall be cleaned at least once a week to prevent contamination.
- e) The reinforcement shall be stacked on top of timber sleepers to avoid contact with ground/ water. Each type and size shall be stacked separately.

d.CONCRETE

General

Concrete grade shall be as designated on drawings. Concrete in the works shall be "DESIGN MIX CONCRETE". All concrete works of up to grade M20 can be NOMINAL MIX CONCRETE whereas all other grades, M20 above, shall be DESIGN MIX CONCRETE

Design Mix Concrete

- a) Design Mix Concrete are classified in three categories, viz. "Normal Concrete (M)", "Heavy Concrete (H)", "Super Heavy Concrete (SH)". A prefix and two numbers shall identify each class of concrete. Prefix "M" would denote Normal Concrete, prefix "H" would denote heavy concrete and prefix "SH" would denote super heavy concrete. The Number would denote the crushing strength of cube at 28 days in N/sq.mm
- b) Normal concrete shall have a net dry unit weight of not less than 25 KN/cum, for the finished structure after curing. Heavy concrete shall have a net dry unit weight of not less than 36.30 KN/cum, for the finished structure after curing. Special heavy concrete shall have a net dry unit weight of not less than 41 KN/cum for the finished structure after curing.
- c) Mix Design & Testing: For Design Mix Concrete, the mix shall be designed as per any of four methods given in SP: 23 to provide the grade of concrete having the required workability and characteristic strength not less than appropriate values given in IS: 456. The design mix shall in addition be such that it is cohesive and does not segregate during placement and should result in a dense and durable concrete capable of giving the specified finish. For liquid retaining structures, the mix shall also result in watertight concrete. The CONTRACTOR shall exercise great care while designing the concrete mix and executing the works to achieve the desired result.
- d) The minimum grade of concrete shall be as per Table 5 of IS: 456 for various exposure conditions of concrete. For various environmental conditions, refer Table 3 of IS: 456.
- e) The minimum cement content for Design Mix Concrete shall be as per Table 5 of IS: 456 or as given below, whichever is higher.

GRADE CONCRETE, M	OF Minimum Cement content in
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	kg/cum. of concrete
20	300
25	320
30	340
35	360
40	360
45	400

f) *The minimum cement content stipulated above* shall be adopted irrespective of whether the CONTRACTOR achieves the desired strength with less quantity of cement. The CONTRACTOR's quoted rates for concrete shall provide for the above eventuality and nothing extra shall become payable to the CONTRACTOR on this account. Even in the case where the quantity of cement required is higher than that specified above to achieve desired strength based on an approved mix design, nothing extra shall become payable to the CONTRACTOR.

g) It shall be CONTRACTOR's sole responsibility to carry out the mix designs at his own cost. He shall furnish to ENGINEER-IN-CHARGE for approval at least 30 days before concreting operations, a statement of proportions proposed to be used for the various concrete mixes and the strength results obtained. The strength requirements of the concrete mixes ascertained on 150 mm cubes as per IS: 516 shall comply with the requirements of IS: 456.

Grade of Concrete M	Minimum Compressive strength	Specified characteristic compressive strength
	N/sq.mm at 7 days	N/sq.mm at 28 days
15	10.00	15.00
20	13.50	20.00
25	17.00	25.00
30	20.00	30.00
35	23.50	35.00
40	27.00	40.00
45	30.00	45.00

h) A range of slumps recommended for various types of construction, unless otherwise instructed by the ENGINEER-IN-CHARGE, shall be as given below:

Structure / Member	Slump in Millimeters	
	Maximum	Minimum

Reinforced foundation walls and footings	75	25
Plain footings, caissons and substructure walls	75	25
T.G. and missive compressor foundations	50	25
Slabs, Beams and reinforced walls	50	25
Pumps & miscellaneous equipment Foundations	75	25
Building Columns	50	25
Pavements	50	25
Heavy Mass Construction	50	25
Liquid retaining / conveying structures	50	25

(NOTE: These values are not meant for pumped concrete)

i) Where single size graded coarse aggregate are not available, aggregates of different sizes shall be properly combined. The CONTRACTOR 's mix design shall show that combined grading of coarse aggregate meets the requirements of Table 2 of IS: 383 for graded aggregates.

j) Design mix adopted shall be got checked by the approved proof checking consultant, appointed by the Employer.

Batching & Mixing of Concrete

a) Proportions of aggregates and cement, as per approved concrete mix design, shall be by weight. These proportions shall be maintained during subsequent concrete batching by means of weigh batchers capable of controlling the weights within $\pm 2\%$ for cement and $\pm 3\%$ for aggregate. The batching equipment shall be calibrated at the frequency decided by ENGINEER-IN-CHARGE.

b) Amount of water added shall be such as to produce dense concrete of required consistency, specified strength and satisfactory workability and shall be so adjusted to account for moisture content in the aggregates. Water- cement ratio specified for use by ENGINEER- IN-CHARGE shall be maintained. Each time the work stops, the mixer shall be cleaned out, and while recommencing, the first batch shall have 10% additional sand and cement to allow for sticking in the drum.

c) Arrangement should be made by the CONTRACTOR to have the cubes tested at his own expense in an approved laboratory or in field with prior consent of ENGINEER-IN-CHARGE. Sampling and testing of strength and workability of concrete shall be as per IS: 1199, IS: 516 and IS: 456. It is preferable to cast additional cubes (minimum 3 specimen) for testing at 7 days and 28 days. Concrete cube compressive strength which shall be reported & carried out as per relevant IS code e.g. IS 456:2000 etc. in addition to following parameters:

(i) Ultrasonic Pulse Velocity Measurements on Cubes (2 measurements from opposite faces where load is not to be applied) before evaluating the 28-day Compressive Strength of Cubes

– 5 Samples

(ii) 28-day Compressive Strength of Cylinders: As per IS: 516 – 1959 (Reaffirmed 2004)

– 5 Samples

(iii) Modulus of Elasticity: As per IS: 516 – 1959 (Reaffirmed 2004) – 5 Samples.

(iv) Tensile Strength: As per IS: 5816 – 1999 (Reaffirmed 2004) – 5 Samples

(v) Hydraulic Permeability: As per IS: 3085 – 1965 (Reaffirmed 2002) – 5 Samples

NOMINAL MIX CONCRETE

Mix Design & Testing

Mix Design and preliminary tests are not necessary for Nominal Mix Concrete. However, works tests shall be carried out as per IS: 456. Proportions for Nominal Mix Concrete and w/c ratio may be adopted as per Table 9 of IS: 456. However, it will be CONTRACTOR's sole responsibility to adopt appropriate nominal mix proportions to achieve the specified characteristic strength.

Batching & Mixing of Concrete

Based on the adopted nominal mixes, aggregates shall be measured by volume. However cement shall be by weight only. Appropriate correction shall be made for bulking of sand after testing.

QUALITY CONTROL

ENGINEER-IN-CHARGE may furnish quality control formats for concrete works after award of work. CONTRACTOR shall note that it is required to adopt all such formats

Alternatively, if CONTRACTOR has his own QC formats he may adopt them subjected to such modifications considered necessary and approval by ENGINEER-IN-CHARGE.

In either case CONTRACTOR shall submit his detailed Quality Assurance Plan after the award of contract. This would be reviewed, appropriately modified and approved by ENGINEER-IN-CHARGE.

INSPECTION

All materials, workmanship and finished construction shall be subject to continuous inspection and approval of ENGINEER-IN-CHARGE. Materials rejected by ENGINEER-IN-CHARGE shall be expressly removed from site within 3 (three) working days and shall be replaced by CONTRACTOR immediately at no extra cost to OWNER.

CLEAN-UP

Upon the completion of concrete work, all forms, equipment, construction tools, protective coverings and any debris, scraps of wood, etc. resulting from the work shall be removed and the premises left clean.

5. MASONRY, PLASTERING AND PAINTING WORKS:

This specification covers the general requirements for building works comprising Autoclaved Aerated Concrete blocks, brick and stone masonry, pointing plastering, Gypsum plastering

/POP cladding, painting and such other related works forming a part of this job, which may be required to be carried out. The work under this specification shall consist of furnishing of all tools, plants, labour, materials, and everything necessary for carrying out the work

APPLICABLE IS CODES AND SPECIFICATIONS

The following codes, standards and specifications are a part of this specification. All standards, specifications, codes of practice referred to herein shall be as per the latest editions including all applicable official amendments and revisions.

In case of discrepancy between the specification and those referred to herein, these IS specification shall govern.

IS:110/1983	Ready mixed paint, brushing, and grey filler, for enamels for use over primers.
IS:269/1989	Specification for 33 grade ordinary Portland cement.
IS:280/1978	Specification for mild steel wire for general engineering purposes.
IS:337/1975	Varnish, finishing interior.
IS:348/1968	French polish.
IS:383/1970	Specification for coarse and fine aggregates from natural sources for concrete.
IS:412/1975	Expanded metal steel sheets for general purposes.
IS:419/1967	Specification for putty for use on window frames.
IS:428/1969	Distemper, oil emulsion, colour as required.
IS:702/1988	Specification for industrial bitumen.
IS:712/1984	Specification for building limes.
IS:733/1983	Wrought aluminium and aluminum alloys, bars, rods and sections for general engineering purposes.
IS:1077/1992	Specification for common burnt clay building bricks.
IS:1124/1974	Method of test for determination of water absorption, apparent specific gravity and porosity of natural building stones.
IS:1322/1993	Bitumen felts for water- proofing and damp proofing.
IS:1397/1990	Specification for Kraft paper.

	IS:1477/1971	Code of practice for painting of ferrous metals in buildings (Part 1).
	IS:1477/1971	- do- (Part 2)
	IS:1542/1992	Specification for sand for plaster.
	IS:1580/1991	Specification for bituminous compounds for water- proofing and caulking purposes.
	IS:1597/1992	Code of practice for construction of stone masonry: Part 1 Rubble stone masonry.
	IS:1661/1972	Code of practice for application of cement and cement- lime plaster finishes.
	IS:1834/1984	Specification for hot applied sealing compound for joint in concrete.
	IS:1838/1983	Specification for preformed fillers for expansion joint in concrete pavements and structures (non extruding and resilient type): Part 1 Bitumen impregnated fibre.
	IS:2074/1992	Ready mixed paint, air drying, red oxide-zinc chrome, and priming.
xxv	IS:2116/1980	Specification for sand for masonry mortars.
	IS:2185/1967	Specification for concrete masonry units (Parts 1, 2 & 3).
	IS:2212/1991	Code of practice for brickwork.
	IS:2250/1981	Code of practice for preparation and use of masonry mortars.
	IS:2339/1963	Aluminum paint for general purposes, in dual container.
	IS:2395/1994	Code of practice for painting Concrete, masonry and plaster surfaces (Part 1).
	IS:2395/1994	-DO- Part 2
	IS:2402/1963	Code of practice for external rendered finishes.
	IS:2572/1963	Code of practice for construction of hollow concrete block masonry.
	IS:2750/1964	Specification for steel scaffoldings.
	IS:2932/1993	Specification for enamel, synthetic, exterior type (a) undercoating, (b) finishing.

IS:3495/1992	Method of test for burnt clay building bricks: Part 1 to 4.
IS:3536/1966	Specification for ready mixed paint, brushing, wood primer, pink.
IS:3696/1987	Safety code of scaffolds and ladders (Part 1).
IS:3696/1991	-DO- (Part 2).
IS:4443/1980	Code of practice for use of resin type chemical resistant mortars.
IS:4832/1969	Specification for chemical resistant mortars (Part 2).
IS:4860/1968	Specification for acid resistant bricks.
IS:4948/1974	Specification for welded steel wire fabric for general use.
IS:5410/1992	Cement paint, colour as required.
IS:15489/2004	Specification for plastic emulsion paint .
IS:6041/1985	Code of practice for construction of autoclaved cellular concrete block masonry.
IS:6042/1969	Code of practice for construction of light weight concrete block masonry
IS 6441(part 1,2,4,5,6,8)	Methods of tests for autoclaved cellular concrete products
IS:8042/1989	Specification for white Portland cement.
IS:8543	Methods of testing plastics (all Parts/ all Section)
IS:12200/1987	Code of practice for provision of water-stops at transverse contraction joints in masonry and concrete dams.

GENERAL

(a) The work to be built plumb, curved, or batters as may be required by the design and to be carried out in a thoroughly workman like manner and to the entire satisfaction of the Engineer-in-charge The Contractor to provide at his own expense all moulds, templates, centering, scaffolding etc. as may be required for the proper execution of the work which shall be included in the prices of the work, as no separate change to be made for them.

(b) All stones to be thoroughly cleaned and wetted with fresh water before being put into the work and the mortar to be used stiff.

(c) The work to be kept wet (curing) while in progress to the entire satisfaction of the Engineer-in-charge till the mortar is properly set. On Sundays and other holidays also when the work is stopped, the top of all unfinished masonry to be kept flooded and labourers to be employed for this purpose. Watering& Curing to be done carefully so as not to wash the mortar out of the joints. The Engineer-in-charge shall be at liberty to employ labourers for watering curing of the works, if the contractors fail to do the

same to his (the Engineer's) satisfaction.

(d) Should the mortar perish that is becomes dry, white or powdery through neglect of watering, the work shall be pulled down and rebuilt at the contractor's expense.

(e) As a rule the whole of the masonry work in any structure to be carried up at one uniform level throughout but where breaks are unavoidable the joint to be made in good long steps, so as to prevent cracks arising between the new and old work. All junctions of walls to be formed at the time the walls are being built, and cross walls to be carefully bonded into the main walls.

(f) When new work is to be added to existing structure, the old work must be prepared to receive the new and both must be carefully bonded together.

(g) During the rains, the work to be carefully covered without extra charge, so as to avoid the fresh mortar being washed away.

(h) Where the word cement is used it is to be understood Portland cement of the best description, specified under the head of the Cement.

AUTOCLAVED AERATED CONCRETE BLOCK MASONRY

Materials

(a) Masonry units of Autoclaved Cellular Concrete blocks shall conform to the requirements of IS: 2185 (Part 3).

(b) The height of the concrete masonry units shall not exceed either its length or Four times its width.

(c) The nominal dimensions of concrete block shall be as under.

(i) Length - 600 mm.

(ii) Height- 100 or 200 mm.

(iii) Width- 100 to 300 mm in 50 mm increments

(iv) Half blocks shall be in lengths of 200, 250 or 300 mm to correspond to the full-length blocks. Actual dimensions shall be 10 mm short of the nominal dimensions.

(d) The maximum variation in the length of the units shall not be more than ± 5 mm and maximum variation in height or width of the units shall not be more than ± 3 mm.

(e) Concrete blocks shall be solid blocks. Concrete blocks shall be sound, free of cracks, chipping or other defects which impair the strength or performance of the construction. Surface texture shall be as specified. The faces of the units shall be flat and rectangular, opposite faces shall be parallel and all arises shall be square. The bedding surfaces shall be at right angles to the faces of the block.

(f) Concrete blocks shall be stored at site suitably to avoid any contact with moisture from the ground and covered to protect against wetting.

(g) Concrete blocks shall be of approved manufacture, which satisfy the limitations in the values of water absorption, drying shrinkage and moisture movement, as specified for the type of block as per relevant IS code. CONTRACTOR shall furnish the test certificates and also supply the samples, for the approval of Engineer-in-Charge.

Workmanship

(a) The type of the concrete block, thickness and grade based on the compressive strength for use in load bearing and/or non-load bearing walls shall be as specified in the respective items of work. The minimum nominal thickness of non-load bearing internal walls shall be 100 mm. The minimum nominal thickness of external panel walls in framed construction shall be 200 mm.

(b) The workmanship shall generally conform to the requirements of IS: 2572 for concrete block masonry and IS: 6041 for autoclaved cellular concrete block masonry works.

(c) From considerations of durability, generally concrete block masonry shall be used in superstructure works above the damp-proof course level.

(d) Concrete blocks shall be embedded with a mortar which is relatively weaker than the mix of the blocks in order to avoid the formation of cracks. Cement mortar of proportion 1:6 shall be used for the works unless otherwise specified in the respective items of work. Preparation of mortar shall be as specified.

(e) The thickness of both horizontal and vertical joints shall be 10 mm. The first course shall be laid with greater care, ensuring that it is properly aligned, levelled and plumb since this will facilitate in laying succeeding courses to obtain a straight and truly vertical wall. For the horizontal (bedding) joint, mortar shall be spread over the entire top surface of the block including front and rear shells as well as the webs to a uniform layer of 10 mm. For vertical joints, the mortar shall be applied on the vertical edges of the front and rear shells of the blocks. The mortar may be applied either to the unit already placed on the wall or on the edges of the succeeding unit when it is standing vertically and then placing it horizontally, well pressed against the previously laid unit to produce a compacted vertical joint. In case of two cell blocks with slight depression on the vertical sides these shall also be filled up with mortar to secure greater lateral rigidity. To assure satisfactory bond, mortar shall not be spread too far ahead of actual laying of the block as the mortar will stiffen and lose its plasticity. Mortar while hardening shrinks slightly and thus pulls away from the edges of the block. The mortar shall be pressed against the units with a jointing tool after it has stiffened to effect intimate contact between the mortar and the unit to obtain a weather tight joint. The mortar shall be raked to a depth of 10 mm as each course is laid to ensure good bond for the plaster.

(f) Dimensional stability of hollow concrete blocks greatly affected by variations of moisture content in the units. Only well dried blocks should be used for the construction. Blocks with moisture content/water absorption more than permissible limits specified in the relevant IS shall not be used. The blocks should not be wetted before or during laying in the walls. Blocks should be laid dry except slightly moistening their surface on which mortar is to be applied to obviate absorption of water from the mortar.

(g) As per the design requirements and to effectively control cracks in the masonry, RCC bond beam, joint reinforcement shall be provided at locations as per details indicated in the construction drawings. Joint reinforcement shall be fabricated either from welded wire fabric/MS steel /high strength deformed bars as per the drawings.

(h) Concrete Block for partition walls shall be stacked adjacent to the structural member to pre-deflect the structural member before the wall is taken up for execution. Further, the top most course of walls abutting against either a de-shuttered slab or beam shall be built only after any proposed masonry wall above the structural member

is executed to cater for the deflection of the structural element. All Block work shall be built tightly against columns, floor slabs or other structural members

(i) For jambs of doors, windows and openings where solid concrete blocks provided the holdfasts of doors/windows should be arranged so that they occur at block course level.

(j) At intersection of walls, the courses shall be laid up at the same time with a true masonry bond between at least 50% of the concrete blocks. The treatment at the top of load bearing walls to overcome the possibility of development of cracks in the block masonry following measures shall be adopted.

(l) For resting RCC slabs, the bearing surface of masonry wall shall be finished on top with 12 mm thick cement mortar 1:3 and provided with 2 layers of Kraft paper Grade 1 as per IS:1397 or 2 layers of 50 micron thick polyethylene sheets.

(ll) RCC/steel beams resting on masonry wall shall be provided with plain or reinforced concrete bed blocks of dimensions as indicated in the drawings duly finished on top with 2 layers of Kraft paper Grade 1 as per IS:1397 or 2 layers of 50 micron thick polyethylene sheets.

(k) Reinforced cement concrete transoms and mullions of dimensions as indicated in the construction drawings are generally required to be provided in 100mm concrete block partition walls. Reinforced concrete for transoms and mullions will not be measured separately.

(l) Curing of the mortar joints shall be carried out for at least 7 days. The walls should only be lightly moistened and shall not be allowed to become excessively wet.

(m) Double scaffolding shall be adopted for execution of block masonry work. Double scaffolding having two sets of vertical supports shall be provided to facilitate execution of the masonry works. The scaffolding shall be designed adequately considering all the dead, live and possible impact loads to ensure safety of the workmen, in accordance with the requirements stipulated in IS:2750 and IS:3696 (Part 1). Scaffolding shall be properly maintained during the entire period of construction.

(n) Cutting of the units shall be restricted to a minimum. All horizontal and vertical dimensions shall be in multiples of half length and full height of units respectively, adapting modular co-ordination for walls, opening locations for doors, windows etc.

(o) During inclement weather conditions, newly built block masonry works shall be protected by tarpaulin or other suitable covering to prevent mortar being washed away by rain.

(p) CONTRACTOR shall note that the unit rates quoted for the Concrete block masonry work shall be deemed to include for the installation of miscellaneous inserts such as pipe sleeves, bolts, steel sections with anchors etc and providing pockets, leaving openings, cutting chases etc. in accordance with the construction drawings. Miscellaneous inserts shall be furnished by the CONTRACTOR. Any of the miscellaneous inserts which are required to be fabricated and supplied by the CONTRACTOR and cement concrete to be provided in the pockets for the hold fasts of door/window frames etc.

Measurement

Measurement shall be in cum correct up to two places of decimal for walls of thickness 200 mm and above. Measurement shall be in sqm correct up to two places of decimal

for walls of 100mm/150mm in thickness. Measurement shall be for the quantities for actually executed duly deducting for openings as per IS1200. The rate quoted shall be for the type of masonry blocks specified in the respective items of work which shall include for the specific sequential operations as stipulated in the construction drawings.

CEMENT PLASTERING WORK

Materials

The proportions of the cement mortar for plastering shall be 1:4 (one part of Cement to four parts of Coarse Sand) for external work and 1:4(one part of Cement to four parts of fine Sand) for internal work, unless otherwise specified under the respective item of work. Cement and Sand (Manufactured sand) shall be mixed thoroughly in dry condition and then water added to obtain a workable consistency. The quality of water and cement shall be as per relevant IS. Cement shall be of Ordinary Portland Cement, 43 Grade of approved make. The quality and grading of Manufactured Sand for plastering shall conform to IS: 1542 & IS 383. Manufactured Sand shall be approved by Engineer-in-Charge and if so directed it shall be washed/screened to meet specification requirements. The mixing shall be done thoroughly in a mechanical mixer unless hand mixing is specifically permitted by the Engineer-in-Charge. The mortar thus mixed shall be used as soon as possible preferably within 30 minutes from the time water is added to cement. In case the mortar has stiffened due to evaporation of water this may be re-tempered by adding water as required to restore consistency, but this will be permitted only upto 30 minutes from the time of initial mixing of water to cement. Any mortar which is partially set shall be rejected and removed forthwith from the site. Droppings of plaster shall not be re- used under any circumstances.

Workmanship

(a) Preparation of surfaces and application of plaster finishes shall generally confirm to the requirements specified in IS: 1661 and IS: 2402.

(b) Plastering operations shall not be commenced until installation of all fittings and fixtures such as door/window panels, pipes, conduits etc. are completed as per drawing.

(c) All joints in masonry shall be raked as the work proceeds to a depth of 10mm/20mm for block/stone masonry respectively with a tool made for the purpose when the mortar is still green. The masonry surface to be rendered shall be washed with clean-water to remove all dirt, loose materials, etc., Concrete surfaces to be rendered shall be roughened suitably by hacking or bush hammering for proper adhesion of plaster and the surface shall be evenly wetted to provide the correct suction. The masonry surfaces should not be too wet but only

damp at the time of plastering. The dampness shall be uniform to get uniform bond between the plaster and the masonry surface. Render with a mortar of specified parts of Portland cement and fine sand of specified thickness and rough but do not beat. Float or set with a thin coat 3 mm of Portland cement and polished well immediately with a trowel or flat board. The cement mortar to be used within 30 minutes after it leaves the mixing board or mill. Before work is started patches of plaster 150 x 150 mm. should be put on about 3 meters apart as gauges. By this means an even thickness is ensured. The finishing surface should be as specified and directed

(d) Exterior Sand Faced Plaster - This plaster shall be applied in 2 coats of total thickness of 20mm. The first coat shall be 12mm thick and the second coat shall be

8mm thick. The first coat or the rendering coat shall be approximately 12mm thick. The rendering coat shall be applied except finishing it to a true and even surface and then lightly roughened by cross scratch lines to provide bond for the finishing coat. The rendering coat shall be cured for at least two days and then allowed to dry. The second coat or finishing coat shall be 8 mm thick. Before application of the second coat, the rendering coat shall be evenly damped. The second coat shall be applied from top to bottom in one operation without joints and shall be finished leaving an even and uniform surface. The mortar proportions for the coats shall be as specified in the respective item of work. The finished plastering work shall be cured for at least 7 days. M-Sand for the finishing work shall be coarse and of even size and shall be dashed against the surface and sponged. The mortar proportions for the first and second coats shall be as specified in the respective items of work.

(e) Smooth Cement Plaster (to internal surface) - This plaster shall be laid in a single coat of 12mm thickness. The mortar shall be dashed against the prepared surface with a trowel. The dashing of the coat shall be done using a strong whipping motion at right angles to the face of the wall or it may be applied with a plaster machine. The coat shall be troweled hard and tight forcing it to surface depressions to obtain a permanent bond and finished to smooth surface. Interior plaster shall be carried out on jambs, lintel and sill faces, etc. as shown in the drawing and as directed by the Engineer-in-Charge. Rate quoted for plaster work shall be deemed to include for plastering of all these surfaces.

(f) Wherever more than 20mm thick plaster is required, which is intended for purposes of providing beading, bands, drip moulds, etc. as per drawings this work shall be carried out in two or three coats as directed by the Engineer-in-Charge duly satisfying the requirements of curing each coat (rendering/floating) for a minimum period of 2 days and curing the finished work for at least 7 days. Rate quoted for this deemed to have been included in the external plastering item no extra payment will be made on this account.

(g) In the case of pebble faced finish plaster, pebbles of approved size and quality shall be dashed against the final coat while it is still green to obtain as far as possible a uniform pattern all as directed by the Engineer-in-Charge.

(h) Where specified in the drawings, rectangular grooves of the dimensions indicated shall be provided in external plaster by means of timber battens when the plaster is still in green condition. Battens shall be carefully removed after the initial set of plaster and the broken edges and corners made good. All grooves shall be uniform in width and depth and shall be true to the lines and levels as per the drawings.

(i) Curing of plaster shall be started as soon as the applied plaster has hardened sufficiently so as not to be damaged when watered. Curing shall be done by continuously applying water in a fine spray and shall be carried out for at least 7 days.

(j) When the specification items of work calls for waterproofing plaster the CONTRACTOR shall provide the waterproofing compound as specified while preparing the cement mortar. Cost of water-proofing compound shall be included in the rate for plastering work.

(k) For external plaster, the plastering operations shall be commenced from the top floor and carried downwards. For internal plaster, the plastering operations for the walls shall commence at the top and carried downwards. Plastering shall be carried out to the full length of the wall or to natural breaking points like doors/windows etc.

Ceiling plaster shall be completed first before commencing wall plastering.

(l) Double scaffolding to be used shall be as specified in clause 5.2.2.(m).

(m) The finished plaster surface shall not show any deviation more than 4mm when checked with a straight edge of 2m length placed against the surface.

(n) To overcome the possibility of development of cracks in the plastering work following measures shall be adapted.

(o) Plastering work shall be deferred as much as possible so that fairly complete drying shrinkage in concrete and masonry works takes place.

(p) GI/Steel wire fabric shall be provided at the junction of block masonry and concrete to overcome reasonably the differential drying shrinkage/thermal movement. This GI/steel wire mesh cost shall be included in the rate of plastering work.

(q) Ceiling plaster shall be done, with a trowel cut at its junction with wall plaster. Similarly trowel cut shall be adopted between adjacent surfaces where discontinuity of the background exists.

Measurement

Measurement for plastering work shall be in sqm correct to two places of decimal for finished exposed surface. Unless a separate item is provided for grooves, mouldings, etc., these works are deemed to be included in the unit rates quoted for plastering work. The quantity of work to be paid for under these items shall be calculated by taking the projected surface of the areas plastered after making necessary deductions for openings for doors, windows, fan openings etc. The plaster work carried out on jambs/sills of windows, openings, etc. shall be measured as per IS: 1200 for payment.

READY MIX PLASTER

Material

Ready-Mix Plaster is ready to use by just mixing water at site. This process eliminates job-site mixing practices. Hence it gives consistent quality with required sand mesh sizes in exact proportion which is most important for compactness of plaster. The ready mix plaster is available in market in different brand names and the characteristics of ready mix plaster in mentioned as below.

PRODUCT CHARACTERISTICS

Parameters	Values
Appearance	Greyish Granular Powder
Coverage	16 to 17 square feet / 40 Kg bag @ 10 - 12 mm thickness
Thickness of Single Layer	6-12 mm
Pot Life	30 minutes (can vary on climatic conditions)
Water Demand	18% of Mix (can vary on climatic conditions)

Ingredients : Graded River Sand, OPC 53 Cement, Fly Ash, Hydrated Lime and Performance additives.

Packaging : 40 Kg Bags.

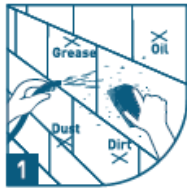
Storage : Keep in dry place free from moisture and water. Do not leave the bag/bags open.

Shelf Life : Six months from the date of manufacture in the originally sealed packaging and with recommended storage conditions.

TECHNICAL SPECIFICATIONS

Parameters	Values*
Max. Aggregate Size	3 mm
Bulk Density	1.7-1.8 Kg / liter unit
Compressive Strength (MPa)	More than 4 in 28 days
Silt Content in Sand	<1%
Soundness	<0.05%
Consistency (Using Standard flow table)	120 mm

HOW TO APPLY



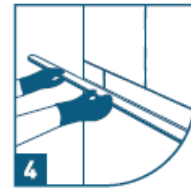
The substrate needs to be cleaned and made free from grease and loose particles. Then dampen the surface with clean water.



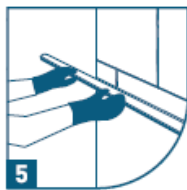
Add Ready Mix Plaster to potable water & mix well for 5-10 mins. (Recommended mix 15-17% water)



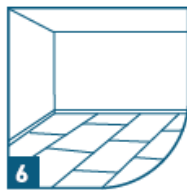
Allow Mixture to stand for 5 mins. & then remix again for 2 mins.



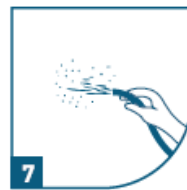
Apply plaster to the substrate, using some pressure while finishing with a steel trowel or wooden float to ensure optimum bonding.



Apply aluminum level patty from bottom to top direction followed by left to right & right to left direction to level the plaster.



Plain plaster wall, ready for wall putty application.



Post 24 hours curing is recommended for 7 days.

Measurement

Measurement for plastering work shall be in sqm correct to two places of decimal for finished exposed surface. Unless a separate item is provided for grooves, mouldings, etc., these works are deemed to be included in the unit rates quoted for plastering work. The quantity of work to be paid for under these items shall be calculated by taking the projected surface of the areas plastered after making necessary deductions for openings for doors, windows, fan openings etc. The plaster work carried out on jambs/sills of windows, openings, etc. shall be measured as per IS: 1200 for payment

CEMENT POINTING

Materials

The cement mortar for pointing shall be in the proportion of 1:3 (one part of cement to three parts of fine sand (M-Sand) unless otherwise specified in the respective items of work. Sand shall be of sound, hard, clean and durable particles. M- Sand shall be approved by Engineer- in-Charge and if so directed it shall be washed/screened to meet specification requirements.

.2 Workmanship

(a) Where pointing of joints in masonry work is specified on drawings/respective items of work, the joints shall be raked at least 15mm/20mm deep in stone/stone masonry respectively as the work proceeds when the mortar is still green.

Any dust/dirt in the raked joints shall be brushed out clean and the joints shall be washed with water. The joints shall be damp at the time of pointing. Mortar shall be filled into joints and well pressed with special steel trowels. The joints shall not be disturbed after it has once begun to set. The joints of the pointed work shall be neat. The lines shall be regular and uniform in breadth and the joints shall be raised, flat, sunk or 'V' as may be specified in the respective items of work. No false joints shall be allowed.

(b) The work shall be kept moist for at least 7 days after the pointing is completed. Whenever coloured pointing is to be done, the colouring pigment of the colour required shall be added to cement in such proportions as recommended by the manufacturer and as approved by the Engineer-in-Charge.

5.6.3 Measurement

The quantity of work to be paid for under this Item shall be measured in sqm correct to two places of decimal by taking the projected surface of the area pointed after making necessary deductions for openings, etc. as per IS 1200.

WATER-PROOFING ADMIXTURE

Water-proofing admixture shall conforming to the requirements of IS: 2645 and shall be of approved manufacture/ make and to be used in both coats of plastering work. The admixture shall not contain calcium chloride. The quantity of the admixture to be used for the works and method of mixing etc. shall be as per manufacturer's instructions and as directed by the Engineer-in-Charge. Cost of approved water proofing compound admixture shall be included in the rate for the plastering work.

PAINTING WORKS

General

(a) The painting work is to be executed according to the valid standards, codes and regulations on their latest revision. The following standards, codes and regulations shall be taken into consideration:

(b) The contractor has to deliver all the materials and work tools which are needed for performing the job. For instance, painting, cleaning solvents, dilution solvents, brushes, special equipment, scaffolding, ladders, collective protection material etc. Painting jobs are considered as high risk jobs and a safety and environment prevention plan has to be set up by the contractor before start of the work.

(c) Storage of the paints/ coatings and solvents: The coatings and solvents shall be stored in a ventilated container or storage room and in an ambient temperature

(d) Method of appliance of the layers: On the surfaces shall the layer been applied one after each other and between the appliance of each layer shall a drying time been respected according to the technical specification of the paint/coating manufacturer. The minimum thickness as stated in the technical specifications of the manufacturer and in this specification shall be respected.

(e) General precautions: Bolts, nuts, stud bolts, screws shall not been painted and temporarily protected for accidental paint, unless otherwise asked by the Client. Tag plates, name plates shall not been painted and temporarily protected for accidental paint. The contractor collects all removed dust, rust, spilled solvents and paints and any leftovers of paint and solvents and removes them from the site of the contractor. All

these materials are destroyed or deposit conform the local regulations. The contractor shall avoid any spill of paint and / or solvent on parts or surfaces belonging to the site of the client. To avoid spills on these parts, the contractor shall cover during the execution of the painting work (when needed) the parts.

(f) Cleaning and removal of rust or other foreign matters: Cleaning of steel and removal of rust: All the surfaces which shall be protected by a coating shall thoroughly been cleaned and prepared with as objective to remove dust, mill scale, protective coating applied during the rolling process, rust, greases, oil, humidity and other foreign matters to assure that the coating adhere on the surface and that should last as long as the normal lifetime is expected.

(g) When painting on wood, the work shall first be cleared of all such projections as glue or whiting spots being carefully removed with the stopping knife and duster, after which all knots shall be filled with one or more layers of oil and white zinc and size of glue laid on warm and rubbed down when dry with sand paper or pumice stone.

(h) The Concrete/plastered surface shall be thoroughly dried before the priming coat is applied.

(i) The steel work shall when be primed shall be either as per manufacturer's specifications or by providing with a coat of four parts by weight of white zinc mixed with one part twice boiled linseed oil.

(j) In wood works all holes, cracks and nail heads shall then be stopped with putty, and irregularities reduced with sand paper and pumice stone.

(k) Iron work shall be first thoroughly cleaned from rust and dirt, after which red lead alone shall be used as a primer.

(l) For other materials when the work is to be finished in a dark colour the priming may be zinc colour, if to be finished orange, red and similar tints the priming may be pink.

(m) All colour to be laid on evenly and properly with English made or best approved brushes. Each coat of colour to be allowed to dry thoroughly before the next is laid on and all, except the last coat to be slightly rubbed down with pumice stone.

(n) No hair marks from the brush shall be left on the work or puddle in the corners of panels, angle of mouldings etc.

(o) White paint to be made of the best mineral white zinc paint and double boiled linseed oil properly ground and mixed together with a small quantity of turpentine. A small quantity of Victoria blue to be added if directed.

(p) Linseed oil used shall be of best-approved quality limpid, pale and brilliant, yellow and sweet to the taste with every little small, and shall boiled twice.

(q) Putty shall be made of best whiting and oil, the whiting to be specially dry and passed through a sieve of 43 mashes to the inch, and then mixed with as much raw linseed oil as will form it into a stiff paste, this after being well needed, shall be left for twelve hours and worked up in small pieces till quite smooth. If the putty become dry it should be restored by heating and working it up again while hot.

(r) When tinted colour are required, a small quantity of the proper tint should be first prepared to serve as a guide by which to mix the whole quantity. The ground white zinc shall first be well mixed with a portion of the oil, and then the tinting colour shall be

added to match the pattern thoroughly after which the remaining portion of the oil or turpentine is to be added, and the whole passed through fine canvas or a fine sieve. The consistency shall be that of cream so as to work easily.

(s) Varnish to be done with copal varnish or such other as may be specified by the Engineer.

(t) Wood oiling, when employed as a substitute for painting timber work to be of linseed oil with a small quantity of dammer oiled up with it or red ochre.

(u) In case of doubt regarding the quality, the paints supplied by the contractor shall be tested in an approved laboratory as described in IS 101-1964 if considered necessary by the Engineer-in-charge.

(v) Paints, oils, varnishes etc. of approved brand and manufacture shall be used. Only ready mixed Paint as received from the manufacturer without any admixture shall be used. If for any reason, thinning is necessary in case of ready mixed Paint, the brand of thinner recommended by the manufacturer or as instructed by the Engineer-in-Charge shall be used.

(w) Approved Paints, oil or varnishes shall be brought to the site of work by the contractor in their original containers in sealed condition. The material shall be brought in at a time in adequate quantities to suffice for the whole work or at least a fortnight's work. The empties shall not be removed from the site of work, till the relevant item of work has been completed and permission obtained from the Engineer-in-Charge.

(x) Commencing Work: Painting shall not be started until the Engineer-in-Charge has inspected the items of work to be painted, satisfied himself about their proper quality and given his approval to commence the painting work. Painting of external surface should not be done in adverse weather condition like hail storm and dust storm. Painting, except the priming coat, shall generally be taken in hand after practically finishing all other building work. The rooms should be thoroughly swept out and the entire building cleaned up, at least one day in advance of the Paint work being started.

(y) Preparation of Surface: The surface shall be thoroughly cleaned and dusted off. All rust, dirt, scales, smoke splashes, mortar droppings and grease shall be thoroughly removed before painting is started. The prepared surface shall have received the approval of the Engineer-in-Charge after inspection, before painting is commenced

(z) Before pouring into smaller containers for use, the Paint shall be stirred thoroughly in its containers, when applying also, the Paint shall be continuously stirred in the smaller containers so that its consistency is kept uniform.

(aa) Where so stipulated, the painting shall be done by spraying. Spray machine used may be (a) high pressure (small air aperture) type, or (b) a low pressure (large air gap) type, depending on the nature and location of work to be carried out. Skilled and experienced workmen shall be employed for this class of work. Paints used shall be brought to the requisite consistency by adding a suitable thinner.

(bb) Spraying should be done only when dry condition prevails. Each coat shall be allowed to dry out thoroughly and rubbed smooth before the next coat is applied. This should be

facilitated by thorough ventilation. Each coat except the last coat, shall be lightly rubbed down with sand paper or fine pumice stone and cleaned off dust before the next coat is laid."

(cc) The painting shall be laid on evenly and smoothly by means of crossing and laying off, the latter in the direction of the grains of wood. The crossing and laying off consists of covering the area over with Paint, brushing the surface hard for the first time over and then brushing alternately in opposite direction, two or three times and then finally brushing lightly in a direction at right angles to the same. In this process, no brush marks shall be left after the laying off is finished. The full process of crossing and laying off will constitute one coat.

(dd) No left over Paint shall be put back into the stock tins. When not in use, the containers shall be kept properly closed. No hair marks from the brush or clogging of Paint puddles in the corners of panels, angles of mouldings etc. shall be left on the work.

(ee) In painting doors and windows, the putty round the glass panes must also be painted but care must be taken to see that no Paint stains etc. are left on the glass. Tops of shutters and surfaces in similar hidden locations shall not be left out in painting. However, bottom edge of the shutters where the painting is not practically possible, need not be done nor any deduction on this account will be done but two coats of primer of approved make shall be done on the bottom edge before fixing the shutters.

(ff) On painting steel work, special care shall be taken while painting over bolts, nuts, rivets overlaps etc. The additional specifications for primer and other coats of Paints shall be as according to the detailed specifications under the respective headings.

(gg) Brushes and Containers: After work, the brushes shall be completely cleaned of Paint and linseed oil by rinsing with turpentine. A brush in which Paint has dried up is ruined and shall on no account be used for painting work. The containers when not in use, shall be kept closed and free from air so that Paint does not thicken and also shall be kept safe from dust. When the Paint has been used, the containers shall be washed with turpentine and wiped dry with soft clean cloth, so that they are clean, and can be used again.

(hh) Measurements (as per IS 1200)

The length and breadth shall be measured correct to a cm. The area shall be calculated in sqm (correct to two places of decimal), except otherwise stated. Small articles not exceeding 10 sq. decimetre (0.1 sqm) of painted surfaces where not in conjunction with similar painted work shall be enumerated. Painting upto 10 cm in width or in girth and not in conjunction with similar painted work shall be given in running metres and shall include cutting to line where so required. Note : Components of trusses, compound girders, stanchions, lattices and similar work shall, however, be given in sq. metres irrespective of the size or girth of members. Priming coat of painting shall be included in the work of painting works.

(ii) In measuring painting, varnishing, oiling etc. of joinery and steel work etc. The coefficients as indicated in following tables shall be used to obtain the area payable. The coefficients shall be applied to the areas measured flat and not girthed.

Make Plain Areas of Uneven Surface

	Description of work	How measured	Multiplying coefficients
	2	3	4
	Wood work doors, windows Etc. Panelled or framed and braced Ledged and battened or ledged, battened and braced doors, windows etc	Measured flat (not girthed including) Chowkhat or frame, Edges, chocks, cleats, etc. shall be deemed to be included in the item.	1.30 (for each side)
	Flush doors etc.	-do-	1.20 (for each side)
	Partl panelled and part glazed or gauzed doors, window etc.	-do-	1.00 (for each side)
	Fully glazed or gauzed doors, windows etc. (Excluding painting of wire gauze portion)	-do-	0.80 (for each side)
	Fully venetioned or louvered doors, windows etc.	-do-	1.80 (for each side)
	Trellis (or Jaffri) work one way or two way	Measured flat overall, no deduction shall be made for open spaces, supporting members shall not be measured separately	2 (for painting all over)
	Carved or enriched work	Measured flat	2 (for each side)
	Weather boarding	Measured flat (not girthed supporting frame work shall not be measured separately	1.20 (for each side)
	Wood shingle roofing	Measured flat (not girthed)	1.10 (for each side)
	Boarding with cover fillets and match boarding	Measured flat (not girthed)	1.05 (for each side)
	Tile and slate battening	Measured flat overall no deductions shall be made for open spaces	0.80 (for painting all over)
	Steel work doors, windows Etc. Plain sheeted steel doors or windows	Measured flat (not girthed) including frame edges etc.	1.10 (for each side)

	Fully glazed or gauzed steel doors and windows (excluding painting of wire gauze portion)	-do-	0.50 (for each side)
	Partly panelled and partly glazed or gauzed doors and windows (excluding painting of wire gauze portion)	-do-	0.80 (for each side)
	Corrugated sheeted steel doors or windows	-do-	1.25 (for each side)
	Collapsible gates	Measured flat	1.50 (for painting all over)
	Rolling shutters of interlocked laths	Measured flat (size of opening) all over; jamb guides, bottom rails and locking arrangement etc. shall be included in the item (top cover shall be measured separately)	1.10 (for each side)
	General Expanded metal, hard drawn steel wire fabric of approved quality, grill works and gratings in guard bars, balustrades, railing partitions and MS Bars in windows frames.	Measured flat overall; no deduction shall be made for open spaces; supporting members shall not be measured separately	1 (for Paint all over)
	Open palisade fencing and gates including standards, braces, rails stays etc. in timber or steel	-do- (see note No. 12)	1 (for Paint all over)
	Corrugated iron sheeting in roofs, side cladding etc.	-do- Measured flat (not girthed)	1.14 (for each side)
	AC corrugated sheeting in roofs, side cladding etc.	-do-	1.20 (for each side)
	AC semi corrugated sheeting in roofs, side cladding etc. or Nainital pattern using plain sheets	-do-	1.10 (for each side)
	Wire gauze shutters including painting of wire gauze	-do-	1.00 (for each side)

Explanatory Notes

1. Measurements for doors windows etc., shall be taken flat (and not girthed) overall including chowkhuts or frames, where provided. Where Chowkhuts or frames are not provided, the shutter measurements shall be taken.
 2. Where doors, windows etc., are of composite types other than those included in Table 1 the different portion shall be measured separately with their appropriate coefficients, the centre line of the common rail being taken as the dividing line between the two portions.
 3. The coefficients for door and windows shall apply irrespective of the size of frames and shutter members.
 4. In case steel frames are used the area of doors, windows shutters shall be measured flat excluding frames.
 5. When the two faces of a door, window etc. are to be treated with different specified finishes, measurable under separate items, the edges of frames and shutters shall be treated with the one or the other type of finish as ordered by the Engineer-in-Charge and measurement of this will be deemed to be included in the measurement of the face treated with that finish.
 6. In the case where shutters are fixed on both faces of the frames, the measurement for the door frame and shutter on one face shall be taken in the manner already described, while the additional shutter on the other face will be measured for the shutter only excluding the frame.
 7. Where shutters are provided with clearance at top or/and bottom each exceeding 15 cm height, such openings shall be deducted from the overall measurements and relevant coefficient shall be applied to obtain the area payable.
 8. Collapsible gates shall be measured for width from outside to outside of gate in its expanded position and for height from bottom to top of channel verticals. No separate measurements shall be taken for the top and bottom guide rails rollers, fittings etc.
 9. Coefficients for sliding doors shall be the same as for normal types of doors in the table. Measurements shall be taken outside to outside of shutters, and no separate measurements shall be taken for the painting guide rails, rollers, fittings etc.
 10. Measurements of painting as above shall be deemed to include painting all iron fittings in the same or different shade for which no extra will be paid.
 11. The measurements of guard bars, expanded metal, hard drawn steel wire fabric of approved quality, grill work and gratings, when fixed in frame work, painting of which is once measured elsewhere shall be taken exclusive of the frames. In other cases the measurements shall be taken inclusive of the frames.
- (jj) Width of moulded work of all other kinds, as in hand rails, cornices, architraves shall be measured by girth.
- (kk) For trusses, compound girders, stanchions, lattice girders, and similar work,

actual areas will be measured in sq. metre and no extra shall be paid for painting on bolt heads, nuts, washers etc. even when they are picked out in a different tint to the adjacent work.

(ll) Painting of rain water, soil, waste, vent and water pipes etc. shall be measured in running metres of the particular diameter of the pipe concerned. Painting of specials such as bends, heads, branches, junctions, shoes, etc. shall be included in the length and no separate measurements shall be taken for these or for painting brackets, clamps etc.

(mm) Measurements of wall surfaces and wood and other work not referred to already shall be recorded as per actual.

(nn) All furnitures, fixtures, glazing, floors etc. shall be protected by covering and stains, smears, splashings, if any shall be removed and any damages done shall be made good by the contractor at his cost.

(oo) Rate: Rates shall include cost of all labour and materials involved in all the operations described above and in the particular specifications given under the several items.

(pp) PAINTING PRIMING COAT ON WOOD, IRON OR PLASTERED SURFACES

- (1) Primer: The primer for wood work, iron work or plastered surface shall be as specified in the description of item.
- (2) Primer for plaster/wood work/Iron & Steel/Aluminum, etc surfaces shall be as specified below:

	Surfaces	Primer to be used
	Wood work (hard and soft wood)	Pink conforming to IS 3536
	Resin wood and plywood	Aluminum primer conforming to IS 3585
	(A) Aluminum and light alloys (B) Iron, Steel and Galvanized steel	Zinc chromate primer conforming to IS 104 Red Oxide/ Zinc chromate Primer conforming relevant IS code
	Cement / Concrete / RCC / concrete blocks/brick work, Plastered surfaces, non-asbestos surfaces to receive Oil bound distemper or Paint finish.	Cement primer conforming to IS 109

The primer shall be ready mixed primer of approved brand and manufacture.

Where primer for wood work is specified to be mixed at site, it shall be prepared from a mixture of red lead, white lead and double boiled linseed oil in the ratio of 0.7 kg : 0.7 kg : 1 litre.

Where primer for steel work is specified to be mixed at site, it shall be prepared from

a mixture of red lead, raw linseed oil and turpentine in the ratio of 2.8 kg : 1 litre : 1 litre.

(qq) The specifications for the base vehicle and thinner for mixed on site primer shall be as follows:

- 1) White Lead : The White lead shall be pure and free from adulterants like barium sulphate and whiting. It shall conform to IS 103.
- 2) Red Lead: This shall be in powder form and shall be pure and free from adulterants like brick dust etc. It shall conform to IS 102.
- 3) "Raw Linseed Oil: Raw linseed oil shall be lightly viscous but clear and of yellowish colour with light brown tinge. Its specific gravity at a temperature of 30 degree C shall be between 0.923 and 0.928."

Note: The oil shall be mellow and sweet to the taste with very little smell. The oil shall be of sufficiently matured quality. Oil turbid or thick, with acid and bitter taste and rancid odour and which remains sticky for a considerable time shall be rejected. The oil shall conform in all respects to IS 75. The oil shall be of approved brand and manufacture.

4) Double Boiled Linseed Oil: This shall be more viscous than the raw oil, have a deeper colour and specific gravity between 0.931 and 0.945 at a temperature of 30 degree C. It shall dry with a glossy surface. It shall conform in all respects to IS 77. The oil shall be of approved brand and manufacture.

5) Turpentine: Mineral turpentine i.e. petroleum distillate which has the same rate of evaporation as vegetable turpentine (distillate product of oleoresin of conifers) shall be used. It shall have no grease or other residue when allowed to evaporate. It shall conform to IS 533.

All the above materials shall be of approved manufacture and brought to site in their original packing in sealed condition.

(rr) The number of coats shall be as stipulated in the item. The Paint will be applied in the usual manner with brush, spray or roller. The Paint dries by evaporation of the water content and as soon as the water has evaporated the film gets hard and the next coat can be applied. The time of drying varies from one hour on absorbent surfaces to 2 to 3 hours on non- absorbent surfaces. The thinning of emulsion is to be done with water and not with turpentine. Thinning with water will be particularly required for the under coat which is applied on the absorbent surface. The quantity of water to be added shall be as per manufacturer's instructions. The surface on finishing shall present a flat velvety smooth finish. If necessary, more coats will be applied till the surface presents a uniform appearance.

(ss) QUALITY ASSURANCE

For Quality Assurance the Contractor shall ensure that color and texture of finish coats, shall match the approved sample. Also,

- i) Color of priming coat shall be lighter than body coat.
- ii) Color of body coat shall be lighter than finish coat.
- iii) Color prime and body coats as required so as not to show through the finish coat and to mask surface imperfections.

Before starting application of each type of paint, the Contractor shall apply the paint to a specimen area, not to exceed 10 square meter and get finish and texture approved and shall use it as a sample for the remainder of the work.

PAINTING OF CONCRETE MASONRY & PLASTERED SURFACES

Materials

- (a) Acrylic emulsion paint shall be of an approved manufacture.
- (b) Plastic emulsion paint shall conform to IS: 15489-2004.
- (c) All the materials shall be of the best quality from an approved manufacturer. CONTRACTOR shall obtain prior approval of the Engineer-in-Charge for the brand of manufacture and the colour/shade. All materials shall be brought to the site of works in sealed containers.

Workmanship

- (a) CONTRACTOR shall obtain the approval of the Engineer-in-Charge regarding the readiness of the surfaces to receive the specified finish, before commencing the work on painting.
- (b) Painting of new surfaces shall be deferred as much as possible to allow for thorough drying of the sub-strata.
- (c) The surfaces to be treated shall be prepared by thoroughly brushing them free from dirt, mortar droppings and any loose foreign materials. Surfaces shall be free from oil, grease and efflorescence. Efflorescence shall be removed only by dry brushing of the growth. Cracks shall be filled with Gypsum. Workmanship of painting shall generally conform to IS: 2395.

The surface shall ordinarily not be painted until it has dried completely. Trial patches of primer shall be laid at intervals and where drying is satisfactory, painting shall then be taken in hand. Before primer is applied, holes and undulations, shall be filled up with plaster of paris and rubbed smooth.

- (d) Surfaces of doors, windows etc. shall be protected suitably to prevent paint finishes from splashing on them.
- (e) Oil Bound Distemper: The prepared surfaces shall be dry and provided with one coat of alkali resistant primer by brushing. The surface shall be finished uniformly without leaving any brush marks and allowed to dry for atleast 48 hours. A minimum of two coats of oil bound distemper having VOC (Volatile Organic Compound) content less than 50 grams/ litre shall be applied as specified in the item of work. The first coat shall be of a lighter tint. Atleast 24 hours shall be left after the first coat to become completely dry before the application of the second coat. Broad, stiff, double bristled distemper brushes shall be used for the work. The operations for brushing each coat shall be as detailed in 5.9.2(e)
- (f) Plastic Emulsion Paint: Plastic Emulsion Paint as per IS 15489 of approved brand and manufacture and of the required shade shall be used. The plastic emulsion Paint is not suitable for application on external, wood and iron surface and surfaces which are liable to heavy condensation. These Paints are to be used on internal surfaces except wooden and steel.

Plastic emulsion paint of interior grade, having VOC (Volatile Organic Compound)

content less than 50 grams/ litre of approved brand and manufacture in approved shade color including applying additional coats wherever required to achieve even shade and color. The prepared surface shall be dry and provided with one coat of primer which shall be a thinned coat of emulsion paint. The quantity of thinner shall be as per manufacturer's instructions. The paint shall be laid an evenly and smoothly by means of crossing and laying off. The crossing and laying off consists of covering the area with paint, brushing the surface hard for the first time over and then brushing alternately in opposite directions two or three times and then finally brushing lightly in a direction at right angles. In this process, no brush marks shall be left after the laying off is finished. The full process of crossing and laying off constitutes one coat. The next coat shall be applied only after the first coat has dried and sufficiently become hard which normally takes about 2 to 3 hours. A minimum of 2 finishing coats of the same colour shall be applied unless otherwise specified in the item of work. Paint may also be applied using rollers.

The surface on finishing shall present a flat velvety smooth finish and uniform in shade without any patches.

(g) Acrylic Emulsion Paint: Acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture in approved shade/color including applying additional coats wherever required to achieve even shade and color. This shall be applied in the same way as for plastic emulsion paint. A minimum of 2 finishing coats over one coat of primer shall be provided unless otherwise specified in the item of work.

(h) Premium Acrylic Textured Emulsion exterior paint: The surface shall be prepared in the similar fashion as specified under lime and colour wash. In addition any existing fungus or mould growth shall be completely removed by thoroughly scrapping and rubbing down with bristle brush and sand paper and then washing down with clean water and allowed to dry. The surface shall be brushed with a soft bristle to remove any dust particles 24 hours after the wash.

(A) With 100% Acrylic

Emulsion paint Preparation

The ready mixed exterior quality 100% Acrylic Emulsion paint shall be prepared strictly according to the manufacturer's specification.

Application of painting

The painting shall be carried out as follows.

- Apply one coat of specified primer of approved quality.
- Apply first coat of paint as per manufacturer's specification. After allowing the first coat to dry, the excessive air holes, indentations, cracks etc. should be made up with approved fillers to yield uniform plain surface.
- After overnight drying and light sand papering of surface, apply second coat of Emulsion paint of final approved shade.
- If directed by the Engineer additional coat of paint should be given to bring the surface to uniform shade and tone at no extra cost.

Measurement

Measurement shall be in sq.m correct to two places of decimal. Measurement shall be for the areas as executed duly deducting for any openings etc. as detailed in the IS: code. Rate quoted shall take into account the provision of necessary enabling works such as double legged scaffolding, painter's cradle etc. Measurement shall be as per IS 1200

PAINTING OF IRON AND STEEL SURFACES

Materials

- (a) Red oxide/Zinc chrome primer shall conform to IS: 2074.
- (b) Synthetic enamel paint shall conform to IS: 2932.
- (c) Aluminium paint shall conform to IS: 2339.
- (d) Chlorinated Rubber Paint
- (e) Epoxy micaceous Iron oxide paint
- (f) All the materials shall be of the best quality from an approved manufacturer. CONTRACTOR shall obtain prior approval of the Engineer-in-Charge for the brand of manufacture and the color/shade. All the materials shall be brought to the site in sealed containers.

Workmanship

- (a) Painting work shall be carried out only on thoroughly dry surfaces.

Painting shall be applied either by brushing or by spraying. CONTRACTOR shall procure the appropriate quality of paint for this purpose as recommended by the manufacturer. The workmanship shall generally conform to the requirement of IS: 1477 (Part 2).

- (b) The type of paint, number of coats etc. shall be as specified in the respective items of work.
- (c) Primer and finish paint shall be compatible with each other to avoid cracking and wrinkling. Primer and finish paint shall be from the same manufacturer.
- (d) All the surfaces shall be thoroughly cleaned of oil, grease, dirt, rust and scale. The methods to be adopted using solvents, wire brushing, power tool cleaning etc., shall be as per IS: 1477 (Part-1) and as indicated in the item of work.
- (e) It is essential to ensure that immediately after preparation of the surfaces, the first coat of red oxide-zinc chrome primer shall be applied by brushing and working it well to ensure a continuous film without "holidays". After the first coat becomes hard dry, a second coat of primer shall be applied by brushing to obtain a film free from holidays.
- (f) After the second coat of primer is hard dry, the entire surface shall be wet rubbed cutting down to a smooth uniform surface. When the surface becomes dry, the undercoat of synthetic enamel paint of optimum thickness shall be applied by brushing with minimum of brush marks. The coat shall be allowed to hard dry. The under coat shall then be wet rubbed cutting down to a smooth finish, taking adequate care to ensure that at no place the undercoat is completely removed. The surface shall then be allowed to dry.

(g) The first finishing coat of paint shall be applied by brushing and allowed to hard dry. The gloss from the entire surface shall then be gently removed and the surface dusted off. The second finishing coat shall then be applied by brushing.

(h) At least 24 hours shall elapse between the applications of successive coats. Each coat shall vary slightly in shade and this shall be got approved by the Engineer-in-Charge.

(i) All rust and scales shall be removed by scrapping or by brushing with steel wire brushes. Hard skin of oxide formed on the surface of wrought iron during rolling which becomes loose by rusting, shall be removed. All dust and dirt shall be thoroughly wiped away from the surface. If the surface is wet, it shall be dried before priming coat is undertaken.

(j) Treatment on Steel for Aggressive Environment: A second coat of ready mixed red oxide zinc chromate primer may be applied where considered necessary in aggressive environment such as near Industrial Establishment and Coastal regions where the steel members are prone to corrosion. The second coat (which shall be paid for separately) is to be applied after placing the member in position and just before applying Paint. The second coat of primer is not necessary in case of painting with synthetic enamel Paint as it is applied over an under coat of ordinary Paint.

Measurement

Measurement shall be in sqm correct to two place of decimal for the finished work including primer. Rate shall be inclusive of enabling works such as double scaffolding, etc. Measurement shall be as per IS 1200.

WOODEN SURFACES:

The wood work to be painted shall be dry and free from moisture. The surface shall be thoroughly cleaned. All unevenness shall be rubbed down smooth with sand paper and shall be well dusted. Knots, if any shall be covered with preparation of red lead made by grinding red lead in water and mixing with strong glue sized and used hot. Appropriate filler material conforming to IS 345 with same shade as Paint shall be used where specified. The surface treated for knotting shall be dry before Paint is applied. After obtaining approval of Engineer- in-Charge for wood work, the priming coat shall be applied before the wood work is fixed in position. After the priming coat is applied, the holes and indentation on the surface shall be stopped with glazier's putty or wood putty. Stopping shall not be done before the priming coat is applied as the wood will absorb the oil in stopping and the latter is therefore liable to crack.

PAINTING WITH SYNTHETIC ENAMEL PAINT : Synthetic Enamel Paint(conforming to IS 2933) of approved brand and manufacture and of the required colour & finish(matt/glossy)shall be used for the top coat and an undercoat of ordinary Paint of shade to match the top coat as recommended by the same manufacturer as far the top coat shall be used

POLISHING & VARNISHING

(a) Melamine Polish:

For the item of melamine polish, the item includes all the sand papering required to be carried out and wiped properly for cleaning all the loose dust particles. Necessary masking tapes are to be provided where different finishing work is to be carried out,

so that the melamine polish does not spread to the other surfaces. Care should be taken while removing the masking tape, so that the surface is not damaged. Cost of melamine polish includes the cost of providing and removing the masking tapes wherever required. The surface shall be sand papered using emery paper no. 180, 320 and 400 as required. Any staining required shall be carried out by applying approved stain & wood filler, to achieve the required colour and shade as directed by the Engineer-in-Charge. The item of melamine polish is deemed to include cost of such staining. Nothing extra shall be payable on this account. Melamine polish shall be applied with spray machine.

(b) French Polishing

French spirit polish shall be of an approved make conforming to IS 348. if it has to be prepared on site, polish shall be made by dissolving 0.7 Kg of best shellac in 4.5 liters of methylated 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 methylated spirit. When it dries, surface shall again be rubbed down perfectly smooth with sand paper and wiped clean.

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 gloss and is quite dry showing no sign of stickiness when touched. Gloss of the polish depends on amount of rubbing, therefore rubbing must be continuous and with uniform pressure and frequent change in direction.

Varnishing

Surface shall be prepared as described above. After preparation of surface, two coats of clean boiled linseed oil shall be applied at sufficient interval of time. After the linseed oil has dried, two coats of varnish obtained from approved manufacturer shall be applied at sufficient interval of time. If the surface fails to produce the required gloss an additional coat shall be applied without any extra cost.

Piece of clean fine 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 finishing coat, the pad shall be covered with a fresh piece of clean fine cotton cloth, slightly dampened with methylated spirit and rubbed lightly and quickly with a circular motion, till the finished surface attains uniform texture and high gloss.

Wax Polishing

Wax polish shall either be prepared on site or obtained readymade from market. Polish made on the site shall be prepared from a mixture of pure bees wax, linseed oil, turpentine oil and varnish in the ratio of 2:1.5:1:1/2 by weight. The bees 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.

6. WATER PROOFING TREATMENT

INTEGRAL CEMENT BASED TREATMENT FOR WATER PROOFING ON HORIZONTAL SURFACE OF UNDER-GROUND STRUCTURE AT ALL DEPTH

Water Proofing of Horizontal Internal Surfaces of Under-ground Structure

i) Preparation of Surface

The Water Proofing Treatment over the lean concrete/leveling course surface should adhere to the surface firmly, the surface of leveling course should be roughened properly when the concrete is still green. In case the surface is not made rough before the concrete is set, the work of water proofing should not be executed till proper key is provided for the base layer of Cement Mortar 1:3.

ii) Blending Cement/Water with Water Proofing Compound

The required quantity of cement bags to be used for a particular portion of work should be emptied on a dry platform. Water proofing compound bearing ISI mark and conforming to IS 2645 should then be mixed properly with the cement. The quantity of water proofing compound to be mixed should be as prescribed by the manufacturer but not exceeding 3% by weight of cement. The quantity of cement and water proofing compound thus mixed should be thoroughly blended and the blended cement should again be packed in bags.

For the water proofing compound in liquid form, the blending is to be done with water. This can be done by taking the just required quantity of water to be mixed in the particular batch of dry cement mortar.

The required quantity of water thus collected per batch of dry cement mortar to be prepared should be mixed with liquid water proofing compound from sealed tins with ISI mark. The water thus mixed with water proofing compound shall be thoroughly stirred so that the water is blended with water proofing compound properly.

iii) Rough Shahabad Stone 22 to 25 mm Thick

The stone slabs to be used for this item shall be in thickness of 22 mm to 25 mm. Larger size of stone slabs i.e. 575 mm x 575 mm or 575 mm x 875 mm shall be used to minimize the number of joints.

(iv) Preparation of Cement Slurry

Cement slurry shall be prepared by using 2.2 kg of blended cement per sqm. area. Each time only that much quantity shall be prepared which can be covered on the surface and the surface in turn would be covered with 25 mm thick cement mortar base within half an hour. Slurry prepared and remained unused for more than half an

hour shall be totally rejected.

(v) Preparation of Cement Mortar

Cement mortar 1:3 (1 blended cement: 3 coarse sand) shall be prepared with cement/water duly blended as explained in clause 6.1.1(ii) Only that much quantity of cement mortar which can be consumed within half an hour, shall be prepared. Any cement mortar that is prepared and remains unused for more than half an hour shall not be used in the work and shall be rejected.

(vi) Laying Water Proofing Course

Before laying the base course of cement mortar 1:3, the lean concrete surface shall be cleaned neatly with water. Cement slurry prepared as per clause 6.1.1 (ii), shall be applied only on the area of the concrete surface, that can be covered with the cement mortar (1:3) base course within half an hour. The cement slurry should cover every spot of the surface and no place shall remain uncovered. Just after the application of cement slurry on the surface, the cement mortar prepared as per clause 6.1.1 (v) should be used for laying the base course. Base Course should be laid to a perfect level with wooden/aluminum straight edge of at least 2 mtrs. long. The top surface of cement mortar should be finished neatly and later scratched when green with a suitable instrument before the base course dries and gets hard that is just before the base course takes up initial set.

When the 25 mm thick base course is just getting set the cement slurry prepared as per clause 6.1.1(iv) should be spread over the base course up to the area that shall be covered with just two to three stone slabs. The cement slurry shall be spread in such a way that the area of base course to be covered immediately shall be covered with slurry without any gap or dry spots. Immediately on applying cement slurry on the base course the Rough Shahabad Stone slab shall be laid over the base course and pressed gently so that the air gap can be removed. The slurry applied on the surface which gets spread when the stone slab is pressed shall get accumulated in the joints of adjacent stone slabs and if any gap still remains between the stone slabs the same should also be filled with additional quantity of cement slurry. For laying the stone slabs in perfect level, two stone slabs at adjacent concerns/ends shall be fixed firmly to the required level and a string stretched over the two slabs, the intermediate slabs shall then be set to the level of the string.

After filling all the joints of the Rough Shahabad stone Slabs with cement slurry the area of stone slab shall be laid with cement mortar 1:3. The surface of stone slabs shall be cleaned and lightly watered. Cement mortar 1: 3 prepared as per clause 6.1.1(iv) shall be used for laying this course. For laying this course 25 mm high wooden strips shall be used and the top surface shall be finished smooth without using additional cement or slurry.

After laying 3rd course and before the mortar layer takes the initial set, Stone aggregate of 10 mm to 12 mm nominal size shall be uniformly spread and lightly pressed into the finished surface @ 8 cu dm./sqm. The aggregates shall not be embedded totally inside the mortar and shall be visible on the top surface.

In cases where slope is to be provided for the water proofing layer, grading with additional cement concrete/cement mortar shall be provided and then the water proofing layer shall be laid on the graded surface. Extra payment shall however be made for the grading course.

(vii) Curing

Immediately after completing the fourth layer, arrangements shall be made for the top RCC slab as quickly as possible and in the meantime till the top slab is casted the water proofing treatment shall be kept wet continuously. In case the concreting of slab gets delayed for more than 2 weeks the curing can be stopped after 14 days.

(viii) Measurement

Length and breadth shall be measured along the finished surface correct to a cm and the area shall be worked out to nearest 0.01 sqm.

(ix) Rate

The rate shall include the cost of all labour & materials involved in all the operations described above. The cost of grading with cement concrete / cement mortar shall be paid for separately.

INTEGRAL CEMENT BASED WATER PROOFING TREATMENT ON THE VERTICAL SURFACE OF UNDER GROUND STRUCTURES.

(i) Preparing the Surface

The surface of the structure to be treated shall be roughed either by raking of joints in case of brick/ stone masonry or by hacking the cement concrete surface with a specifically made hacking tool just after removing shuttering. Alternately, the surface should be roughened by providing spatter dash key as explained under clause 6.1.1 (i). While doing water proofing to vertical faces from inside, it shall be ensured that water proofing treatment of floor slab is not damaged. Preferably, water proofing of vertical surface shall be done before that of horizontal surface.

(ii) Blending Cement/Water with Water Proofing

Compound Same as under clause 6.1.1(ii).

(iii) Rough Shahabad Stone Slab

Same as explained under clause 6.1.1(iii).

(iv) Preparation of Cement

Slurry Same as explained under clause 6.1.1(iv).

(v) Preparation of Cement

Mortar Same as explained under clause 6.1.1(v).

(vi) Laying Water Proofing Course

Same as explained under clause 6.1.1(vi). Further Rough Shahabad stone are not sufficiently rough to remain in vertical position held by cement slurry. Therefore, the grip for the stone slab has to be increased and this can be done by planting 12 mm to 15 mm nominal size stone aggregate fixed with araldite on surface of each sand stone slab.

(vii) Curing

Same as explained under clause 6.1.1(vii). Further till the water proofing work on vertical face is in progress, the water proofing work done on floor slab shall be kept wet for a minimum period of 14 days. Immediately after completion of water proofing on vertical faces of side walls, the water tank shall be gradually filled with water for testing.

(viii) Measurement

Same as explained under clause 6.1.1(viii).

(ix) Rate

Same as explained under clause 6.1.1(ix).

CONCRETE WATER PROOFING BY CEMENTITIOUS CRYSTALLIZATION WATER PROOFING:

These products comprise mineral based hydraulically setting products, which when applied to concrete as a cementitious slurry which reacts with concrete to form a crystalline structure deep within the capillary and pore structures, thereby blocking voids and producing a water proofing effect. Cement and sand used in the product are used as a carrying agent for the chemicals. The active components in slurry react with the by-products of cement hydrations and give rise to insoluble crystals. The system becomes permanent, integral part of the concrete itself. There is no other preparation of concrete required beyond the cleaning of surface. Such treatments can be used as solution to dampness due to capillary action of poorly executed plinth damp course. For better results however, downwardly inclined holes are to be bored in the masonry where the liquid compound can be grouted. This will diffuse into the masonry and give plinth protection from dampness.

Method of Application

In this process cementitious Crystallization water proofing powder compound sprinkled onto the surface of concrete (1 kg powder per sqm.) with the use of a mechanical spreader, sieve or similar device after concrete is placed, consolidated, and leveled. As new concrete has high moisture content, the crystalline penetration is immediate with accelerates crystal growth due to chemical reaction. The powder is then worked into the surface of the slab during the normal finishing process with a trowel. If application is being done in direct sunlight, it is extremely important to cover the slab after final troweling with a rigid sheet of polythene. Take care to see that the sheet is not in contact with the surface of the slab. This can be done by placing the sheet on bricks to ensure a gap between the slab and the sheet, which will allow air circulation. Remove the sheet after 48 hours and water pond the treated area to cure regularly.

WATER PROOFING TREATMENT TO VERTICAL AND HORIZONTAL SURFACE OF DEPRESSED PORTION OF WC, KITCHEN AND THE LIKE

Before the Water Proofing Treatment

Before the water proofing treatment, the internal plaster of ceiling and walls of WC block leaving the portion for dado/skirting should be completed. Grooving / chasing for doing the concealed work of GI/CI pipes/Electrical conduits should be completed. Cleaning the depressed/sunken portion of WC of all debris, extra mortar sticking to the vertical and horizontal surface etc. Necessary holes for 'P' trap /Nahani trap/Water

escape pipe etc should be completed.

Preparing Surface and Fixing Pipes and Fittings

Before the water proofing treatment work, proper key in the concrete surface should be provided. The depressed/sunken portion should be hacked by a hacking tool, after the concrete slab is cast and when this concrete is still green.

The vertical surfaces of the depressed /sunken portion should be hacked with a hacking tool just after the shuttering is removed.

Fixing the 'P' trap in position and all other pipes work including the water escape pipe shall be fixed properly and the holes should be plugged carefully before taking up the water proofing work.

1st Course

Cement duly blended with water proofing compound as explained in clause 6.1 shall be used for preparing the cement slurry.

The consistency of the slurry should be such that 4.4 kg. of blended cement with water proofing compound is used per sqm area of surface to be treated. The slurry should be started from the vertical faces towards the bottom of the floor. Particular care should be taken to see that the slurry is applied to corners without leaving any gap.

2nd Course

Immediately on applying the blended cement slurry on the surface to be treated cement plaster 20 mm thick in CM 1:3 (1 blended cement: 3 coarse sand) shall be applied both on vertical and horizontal surfaces taking particular care to complete the entire depressed/ sunken portion of WC within a day so that the plaster can be done without any joint. Junctions shall be properly rounded. The surfaces of the plaster shall be left rough but finished in one plain and cured for a week.

On completion of the curing period both horizontal and vertical surfaces shall be cleaned properly and gently and allowed to dry.

3rd Course

Only after the surface is completely dried the blown or residual bitumen shall be applied @ 1.7 kg. of bitumen per sqm area.

4th Course

PVC sheet 400 micron thick shall be spread evenly without any kink immediately, so that the PVC sheet sticks to the surface firmly. PVC sheet shall be continued to be laid over the main slab up to 100 mm.

Overlapping of PVC sheet should be done with a minimum overlap of 100 mm, duly pasting the overlapped sheet with an application of bitumen @ 1.7 kg./sqm.

The projections of pipes and 'P' trap outlet etc. inside the depressed/sunken portion of WC shall also be clad with water proofing treatment layer upto a height of 150 mm, using a coat of bitumen with PVC sheet complete.

The surfaces of depressed/sunken portion of WC shall not be left without covering with specified filling material and base concrete, otherwise the PVC sheet layer may be tampered by the labour working in the vicinity.

Fixing up of WC pan, filling specified material and the top base concrete should be done as early as possible (filling paid under separate item) and the top horizontal layer of water proofing may be taken up later i.e. just before laying the floor tiles.

Measurement

Length and breadth shall be measured along the finished surface correct to a cm. and area shall be worked out to nearest 0.01 sqm. No payment however shall be made for the 100 mm overlap of PVC Sheet over the roof slab.

Rate

The rate shall include the cost of labour and materials involved in all the operations described above.

GRADING ROOF WITH CEMENT CONCRETE SCREED

Materials

Over the geo-textile layer concrete screed of M20 (RMC) mixed with polypropylene fibers laid. This screed will provide the required protection to insulation and waterproofing system. The thickness of screed shall be 75mm (average). Screed shall be laid in panels and finished to a smooth surface. Curing of the screed shall be done for a minimum of 10 days by ponding.

Preparation of the Surface

The surface shall be cleaned properly with brooms brush, cloth to remove all dirt, dust, mortar droppings.

Laying

Before laying cement concrete for grading, the level markings to the required slope/gradient shall be made only with cement concrete on the surface of the slab at suitable spacing with the help of string and steel tape (Measuring tape) so that the mason can lay the concrete to the required thickness, slope / gradient easily in between the two level markings.

On getting the level marking approved by the Engineer-in-charge the surface should be sprinkled with thick cement slurry and the concrete should be laid carefully, without throwing from height, in predetermined strips.

The concrete should be consolidated by specially made wooden tamping. After the tamping is done the surface should be finished to required slope/gradient with wooden trowels without leaving any spots of loose aggregates etc.

The mixed cement concrete must be laid in position, within half an hour of its mixing. In case any quantity of concrete remains unused for more than half an hour the same should be rejected and removed from the site. Except that screed shall be tamped with wooden and steel trowels and surface finished with steel trowel.

Finishing

(i) The slope of finished surface shall not be more than 1 in 100 unless a steeper slope is specified in the item of work.

(ii) The finished surface of the grading shall present a smooth surface with correct slopes and uniform rounding wherever they are provided. The screed surface

shall be free of cracks. Excess trowelling shall be avoided.

Thickness

The minimum thickness of Screed/cement mortar grading at the junction with khurra or parapet wall shall be 50 mm. The screed cement mortar shall be rounded at the junction of roof slab and parapet. It is desirable to provide a haunch/gola/filler at the junction of parapet wall and the roof slab.

Curing

Curing shall be done either by spreading straw/Hessian cloth over the screed graded surface, keeping the same wet for full 10 days or flooding the graded area with water by making kiaries with weak cement mortar, for 10 days. Occasional curing by simply spraying water now and then shall not be permitted under any circumstances.

6.5.6 PROVIDING WATER STOPS in Water tanks

- (i) Water stops conforming to IS 12200 for construction/expansion joints should be fabrication from a plastic compound, the basic resin of which shall be polyvinyl chloride. The compound shall contain additional resin/ plasticizer inhibitors or other materials such that when the materials is compounded it shall meet the requirement given in IS 15058.
- (ii) Type of Joints for which Water Bars are provided: The water bars are provided only for the movement of joints in a water retaining structure.
- (iii) Rate quoted under relevant item for underground/overhead water tank work shall include providing water stops.

.6.7 WATER-PROOFING ADMIXTURE

Water-proofing admixture shall conform to the requirements of IS: 2645 and shall be of approved manufacture. The admixture shall not contain calcium chloride. The quantity of the admixture to be used for the works and method of mixing etc. shall be as per manufacturer's instructions and as directed by the ENGINEER-IN-CHARGE. Rate for admixture shall be included in the relevant item of work.

6.7.1 Water Proofing Treatment

Note: The Make of materials and authorized applicator for the Waterproofing treatment shall be approved by Engineer-in charge before the commencement. The contractor shall give the Performance Guarantee of the entire Waterproofing works for 10 Years as per the prescribed Proforma on Non-judicial stamp paper of required value.

7. FLOORING AND DADO WORKS

THE FOLLOWING CODES, STANDARDS AND SPECIFICATIONS ARE A PART OF THIS SPECIFICATION. ALL STANDARDS, SPECIFICATIONS, CODES OF PRACTICE REFERRED TO HEREIN SHALL BE THE LATEST EDITIONS INCLUDING ALL APPLICABLE OFFICIAL AMENDMENTS AND REVISIONS.

- | | | |
|-----|---------------------------------------|---|
| 1. | IS 13712:2006 | - Ceramic Tiles- definitions, classifications, characteristics and marking |
| 2. | IS15622-2006 | - Pressed ceramic tiles - specification |
| 3. | I.S. 1130-1969 | - Specification for marble (blocks, slabs and tiles) |
| 4. | IS: 777/1988 | - Specification for glazed earthenware tiles. |
| 5. | IS: 4457/1982 | - Specification for ceramic unglazed vitreous acid resisting tile. |
| 6. | IS: 1443/1972 | - Code of practice for laying and finishing of cement concrete flooring tiles. |
| 7. | IS: 2571/1970 | - Code of practice for laying in-situ cements concrete flooring. |
| 8. | IS: 2690/1993 | - Specification for burnt clay flat terracing tiles: Part 1 Machine made. |
| 9. | IS: 4631/1986 | - Code of practice for laying epoxy resin floor toppings |
| 10. | IS: 5318/1969 | - Code of practice for laying of flexible PVC sheet and tile flooring |
| 11. | IS: 5491/1969 | - Code of practice for laying of in-situ granolithic concrete floor |
| 12. | IS 1124/ 1974
(Reaffirmed
2003) | - Method of test for determination of water absorption, apparent specific gravity and porosity of natural building stones |

GRANITE STONE SLAB/TILES WORK

(a) The slabs shall be of approved selected quality, hard, sound, dense and homogenous in texture, free from cracks, decay, weathering and flaws. The percentage of water absorption shall not exceed 5 percent as per test conducted in accordance with IS: 1124.

(b) The type, size, thickness and colour/shade etc. of the slabs for flooring/dado/ skirting shall be as specified in the respective items of the work in the schedule of quantity.

(c) Granite stone slabs shall be handled carefully to prevent any damage. The stone slab procured shall be free of any surface defect or any edge damage. The damaged stones shall not be allowed to be used in the work. So the Contractor shall procure additional such quantities, to cover such contingencies. However nothing extra shall be payable on this account. The stone slabs shall not be waxed or touched up with dyes / colours.

(d) Slabs shall be supplied to the specified size with machine cut edges or fine chisel dressed to the full depth. All angles and edges of the slabs shall be true and square, free from any chipping giving a plane surface. Slabs shall have the top surface machine polished (first grinding/ mirror polished) before being brought to site. The slabs shall be washed clean before laying. Machine polishing and cutting to required size shall be done with water (as lubricant) only. Sawing shall also be done

preferably with water as lubricant but as a special case, the Engineer-in-charge may permit, at his discretion, oil or kerosene as lubricant subject to all kerosene or oil in the body and surface of tiles / slabs being thoroughly dried in ovens. Tiles / slabs with stains or patches due to the use of oil or otherwise, either before or after installation, shall be rejected and shall be replaced by the Contractor at his own cost. Nothing extra shall be payable on this account

(e) Before starting the work, the Contractor shall procure and submit the samples of granite stone slab for the approval of the Engineer-in-charge. The granite stone slabs to be procured for the work shall match the samples shown to the Contractors. The samples shall be submitted along with the following details:

- i) Two/three representative samples for each type of granite stone specified.
- ii) Details of physical characteristics such as dimensional tolerances (within the specified limits), water absorption, compressive strength, Mohs Hardness, Specific gravity with reference to IS standards.
- iii) Source of supply and confirmation of availability in full quantity and uniformity of colour, tone and textures.
- iv) The decision of the Engineer-in-charge as regards the approval of the samples for the various types of the granite stones shall be final and binding on the Contractor. No claim of any kind whatsoever shall be entertained from the Contractor on this account. The Contractor shall then procure and get the mock up prepared at site of work for approval of quality of workmanship and the granite stone as specified. The mock up shall be prepared on one of the floors at the location as decided by the Engineer-in-charge. The size of the stones shall be as per the Engineer-in-charge architectural drawings. If the quality of the workmanship and the material is as per the required standards, the mock up shall be allowed as part of the work and measured for payment and shall not be dismantled. Otherwise, it shall be dismantled by the contractor as directed by the Engineer-in-charge and taken away from the site of the work at his own cost. Nothing extra shall be payable on this account.

(f) The entire supply for each type of granite stone slab shall be procured from one location and supplied preferably, in one lot to keep variations to the minimum. The Contractor shall also segregate and sort the slabs according to colour, shade, texture and size of grains etc. to keep variation(s) in stones used at any one floor to the minimum. Any slab with variation in the colour, shade, texture and size of grains etc., not acceptable to the Engineer-in-charge, shall not be used in the work and shall be removed and replaced by the Contractor. Nothing extra shall be payable on these accounts. Also no claim of any kind shall be entertained from the Contractor on this account.

(g) The stone work may be required to be carried out in patterns, design and / or in combination with granite stones of different colour and shade with or without borders and in combination of different stone slabs / ceramic tiles for which nothing extra shall be payable. The stones shall be provided in sizes and shapes as per the approved architectural drawings and wastages and incidental costs, if any, shall be deemed to be covered in the cost of the relevant items. Nothing extra shall be payable on this account. For the purpose of payment, only the actual area of each type of granite stone provided and fixed shall be measured separately under the relevant items as specified in Schedule of quantity.

- (h) The following tolerances shall be allowed in the dimension of granite stone slab:

Slabs:	Tolerance
a). Length $\pm 1\text{mm}$	
b). Width $\pm 1\text{mm}$	
c). Thickness - 1mm	
d). Angularity at corners	$\pm 0.25\%$

The stones (slab and tiles) not meeting the above tolerance limits shall be rejected and not permitted to be used in the work. Nothing extra shall be payable on this account.

(j) Stones slabs shall have uniform thicknesses with-in the tolerance limits and linear items like treads, sills and jambs, coping, risers, urinal partitions, kitchen / wash basin platforms, vanity counters, facias and other similar locations etc. shall have edge polished calibrated thickness i.e. exposed edges shall have edge polished uniform thickness throughout the length of the work. Nothing extra shall be payable on this account.

(j) The flooring work shall be carried out as per the architectural drawings in design and pattern (geometric, abstract etc.) and in linear and / or curvilinear portions and in combination with stones of different colour and shade and ceramic tiles etc. For the flooring portions curved in plan, the stone slabs (at the edge) shall be cut to the required profile and shape as per the architectural drawings. Nothing extra shall be payable on this account and any consequent wastages and incidental charges on such accounts shall be deemed to be included in the cost of such items. For the purpose of payment, the actual area of each type granite stone as laid shall be measured separately under the relevant items.

(k) For the granite flooring in the curvilinear profile of the steps in the building the same shall be negotiated in segmental manner (using trapezoidal shaped granite stone pieces with straight edges for treads and rectangular stone pieces for the risers) and not in curved profiles as specified earlier. However, the granite stone slabs shall be cut to required sizes and shapes, as per the Engineer-in-charge architectural drawings, to negotiate the curved steps in segmented manner. The risers shall also be cut to required sizes and shapes and the edges chamfered at the joints, all as per the approved architectural drawings. However, the Contractor shall prepare the detailed shop drawings for the same and commence work only after the approval by the Engineer-in-charge. The rate shall also include any consequent wastage, incidental charges involved in this work. Nothing extra shall be payable on this account. For the purpose of payment, the actual area of each type of granite stone as laid shall be measured.

(l) For the steps (risers and treads) in the linear profile, the granite stone shall be provided in single pieces up to 2.0m as per the architectural drawings, unless otherwise specifically permitted by the Engineer-in-charge. Wherever grooves are required to be provided the same is to be done as per architectural drawings and as directed by the Engineer-in-charge. Wherever required, the joints shall be provided as per the architectural drawings and as directed by the Engineer-in-charge. Nothing extra shall be payable on these accounts.

(m) The granite slabs used for providing and fixing in the sills, soffits and jambs of doors, windows, ventilators and similar locations shall be in single piece unless otherwise directed by the Engineer-in-charge. Wherever stone slab other than in single piece is allowed to be fixed, the joints shall be provided as per the architectural drawings and as per the directions of the Engineer-in-charge. In the cabin areas, the joints in sills shall preferably be provided in line with the partition wall. Depending on the number of joints, as far as possible, the stone slabs shall be procured and fixed in slabs of equal lengths as per the architectural drawings and as directed by Engineer-in-charge.

(n) While fixing the granite slabs in sills, soffits and jambs of doors, windows, ventilators etc., rebates shall be made by overlapping the stones at the required places for fixing shutters for doors, windows and ventilators etc. as shown in the Architectural drawings and as per the directions of the Engineer-in-charge. Epoxy based adhesives shall be used for fixing the granite stones to each other, as per the manufacturer's recommendations. The authorized overlap as per the Engineer-in-charge architectural drawings or as directed by the Engineer-in-charge shall be measured for payment under the same item. However, any extra mortar thickness required due to the overlap arrangement shall be deemed to have been included in the rate of this item. Nothing extra shall be payable on this account. The cut exposed edges of the granite stones shall be polished, moulded edges / nosing as per the Architectural drawing of the granite work and such cost shall not be payable.

(o) The granite stone slab shall be fixed over low level storage cabinets using necessary adhesive as per the manufacturer's specification. The stone shall have uniform thickness and shall be provided in sizes as per the Architectural drawings. The stone slab shall have uniformly levelled surface after fixing. All the joints shall be finished smoothly in a workmanlike manner.

(p) Granite stone in flooring, skirting and in stair area as covered under the scope of work shall be laid and fixed in portion using suitable adhesive / cement mortar as specified in the schedule of the item in profile, design and pattern as per the approved drawings and direction of the Engineer-in-charge, for which nothing extra shall be paid.

(q) The granite work shall be adequately protected by a layer of Plaster of Paris, which shall be maintained throughout and removed just before handing over of the works, cleaning, disposal of debris and for which nothing extra shall be payable.

(r) Wherever the granite stone slab dry cladding is provided exposed to environment, both the surfaces of the granite stone slabs shall be treated to make the surfaces hydrophobic by applying water repellent/hydrophobic clear coating of water soluble silicate based impregnating agent of approved make. The formulation shall be prepared and applied as per the manufacturer's recommendations. Before applying the formulation, the surface preparation shall be done as per the manufacturer's recommendations. The surface shall be cleaned using water and the formulation shall be applied on the damp surface. The payment for this treatment to the granite stone slabs shall be included under relevant item.

(s) It shall be applied by spray application before installation of stone on vertical surface has been completed and after necessary surface preparation. The Contractor shall impart training to his supervisors and labour to take adequate precautions and safeguards as per the manufacturer's specifications while handling the chemical.

He shall also provide required gears and protective accessories like face masks, gloves, goggles, respiratory masks etc. for the labour for executing the work. Nothing extra shall be payable on this account.

(t) Before the slab/tiling work is taken up, the base concrete or structural slab/masonry shall be cleaned of all loose materials, mortar droppings, dirt, laitance etc. using steel wire brush and well wetted without allowing any water pools on the surface. A layer of average thickness of cement mortar (specified in item) consisting of one part of cement to 6 parts of sand shall be provided as bedding for the tiles over the base concrete. The thickness of bedding mortar shall not be less than 10 mm at any place. The quantity of water to be added for the mortar shall be just adequate to obtain the workability for laying. Sand for the mortar shall conform to IS: 2116 and shall have minimum fineness modulus of 1.5. The surface shall be left rough to provide a good bond for the tiles. The joints shall be in straight lines and shall normally be 1.5mm wide. On completion of laying of the tiles in a room, all the Joints shall be cleaned and washed fairly deep with a stiff broom/wire brush to a minimum depth of 5mm. The day after the tiles have been laid, the joints shall be filled with cement grout of the same shade on the colour of the matrix of the tile. For this purpose, white cement or grey cement with or without approved pigments shall be used. The flooring should be kept moist and left undisturbed for 7 days for the bedding/joints to set properly. Heavy traffic shall not be allowed on the floor for atleast 14 days after fixing of the tiles.

(u) slab/tile dado work shall be executed only after laying tiles on the floor. For dado and skirting work, the vertical wall surface shall be thoroughly cleaned and wetted. Thereafter it shall be evenly and uniformly covered with specified thick backing of 1:4 cement sand mortar. The back of each slab/tile to be fixed shall be covered with a thin layer of neat cement paste and the tile shall then be gently tapped against the wall with a wooden mallet. Fixing shall be done from the bottom of the wall upwards. The joints shall be in straight lines and shall normally be 1.5mm wide. Any difference in the thickness of the slab/tiles shall be evened out in the backing mortar or cement paste so that the tile faces are in conformity & truly plumb. Slab/Tiles for use at the corners shall be suitably cut with beveled edges to obtain a neat and true joint. After the work has set, hand polishing with carborundum stones shall be done so that the surface matches with the floor finish. The thickness of the slabs for dado/skirting work shall not be more than 25mm. Slabs shall be so placed that the back surface is at a distance of 12mm. If necessary, slabs shall be held in position temporarily by suitable method. After checking for verticality, the gap shall be filled and packed with cement Sand mortar of proportion 1:3. After the mortar has acquired sufficient strength, the temporary arrangement holding the slab shall be removed. Marble/Granite dado work if any shall be carried out with requisite brass clamps and keys in required sizes and pattern as directed.

(v) Measurement

Measurement for floor slab and dado shall be in sq.m correct to two places of decimal. Actual quantity of slab/tiles work as laid shall be measured for payment as per the respective items of work after making deductions for openings etc.

VITRIFIED/SEMI VITRIFIED/ GLAZED/ANTI-SKID CERAMIC TILES/VITRIOUS

(a) VITRIFIED TILES shall be approved manufacture and shall conform to table

12 of IS 15622 (Tiles with water absorption $E \leq 0.08$ per cent Group B I a) and the joint thickness in flooring shall not be more than 1mm. Ceramic tiles shall be of approved manufacture and shall generally conform to IS 15622 . The tiles shall be square or rectangular of nominal size.

Glazed earthenware tiles shall be approved manufacture and conform to the requirements of IS: 777.

The Tiles shall be flat, and true to shape and free from blisters crazing, pinholes, chips, welts, crawling or other imperfections detracting from their appearance and shall have ribs or indentations for a better anchorage with the bedding mortar. Dimensional tolerances shall be as specified in relevant IS.

(b) The size, thickness, colour, with or without designs etc of the tiles for flooring/dado/skirting shall be as specified in the respective items of work. The Ceramic / Vitrified tiles, shall be of approved manufacturer and shall include laying them in desired pattern and colour/combination and to proper slope. The samples of tiles for flooring and dadoing etc. shall be got approved and tested before laying.

(c) The total thickness of glazed tile finish including the bedding mortar shall be as specified in item in flooring/dado/skirting. The minimum thickness and proportion of bedding mortar for flooring and for dado/skirting work as specified in item of schedule of quantity Sand mixed with just sufficient water to obtain proper consistency for laying. Sand for the mortar shall conform to IS: 2116 and shall have minimum fineness modules of 1.5

(d) Where full size tiles cannot be fixed, tiles shall be cut to the required size using special cutting device and the edges rubbed smooth to ensure straight and true joints.

(e) Coloured tiles with or without designs shall be uniform and shall be preferably procured from the same batch of manufacture to avoid any differences in the shade.

(f) Tiles for the flooring shall be laid over hardened concrete base. The surface of the concrete base shall be cleaned of all loose materials, mortar droppings etc well wetted without allowing any water pools on the surface. The bedding mortar shall then be laid evenly over the surface, tamped to the desired level and allowed to harden sufficiently to offer a fairly rigid cushion for the tiles to be set and to enable the mason to place wooden plank across and squat on it. The top surface shall be left rough to provide a good bond for the tiles. For skirting and dado work, the backing mortar shall be roughened using a wire brush.

(g) Neat cement slurry using 3.3 kg cement per one sq.m of floor area shall be spread over the hardened mortar bed over such an area as would accommodate about 20 tiles. Tiles shall be fixed in this slurry one after the other, each tile being gently tapped with a wooden mallet till it is properly bedded and in level with the adjoining tiles. For skirting and dado work, the back of the tiles shall be smeared with cement slurry for setting on the backing mortar. Fixing of tiles shall be done from the bottom of the wall upwards. The joints shall be in perfect straight lines and as thin as possible, For vitrified tiles it shall not be more than 1mm wide. The surface

shall be checked frequently to ensure correct level/required slope. Floor tiles near the walls shall enter skirting/dado to a minimum depth of 10mm. Tiles shall not sound hollow when tapped.

(h) In bath, toilet W.C. kitchen and balcony/verandah flooring, suitable tile drop or as shown in drawing shall be given in addition to required slope to avoid spread of water. Further tile drop will also be provided near floor trap.

(i) All the joints shall be cleaned of grey cement with wire brush to a depth of at least 3mm and all dust, loose mortar etc. shall be removed. White cement with or without pigment shall then be used for flush pointing the joints. Curing shall then be carried out for a minimum period of 7 days for the bedding and joints to set properly. The surface shall then be cleaned using a suitable detergent, fully washed and wiped dry.

(j) Specials consisting of caves, internal and external angles, cornices, beads and their corner pieces shall be of thickness not less than the tiles with which they are used.

(k) All tile work in skirting, facia and dado shall include scaffolding, working platforms, etc. and the cost of bedding/backing materials. Tiles shall be set in cement paste and joints filled with cement slurry for matching shade (e.g. white tile joints to be filled with white cement).

(l) The rate shall include provision for extra bedding thickness to have the same finished levels when flooring is done with two different materials e.g. Kotah stone/ Granite, Vitrified tiles for adjoining areas, and laying to the required slope, gradient etc. Rate shall include all cuttings and wastage of tiles, curing, cleaning finished surfaces and adequate protection of vitrified/ceramic flooring work by a layer of Plaster of Paris which shall be maintained throughout and removed just before handing over of the works, cleaning, disposal of debris and for which nothing extra shall be payable.

(m) Measurement

Measurement for repairs, painting, floor tiling and dado shall be in sq.m correct to two places of decimal. Actual quantity of tiling work as laid shall be measured for payment as per the respective items of work after making deductions for openings etc.

Place:

Date:

Signature and seal of the Tenderer

Name & address

Phone/Mobile No. :

E-mail id:

A. LIST OF APPROVED MATERIALS

1. All materials shall be of the 1st quality ISI marked/ ISI Standard.
2. If the approved brands mentioned are not available, equivalent make as may be approved by the Bank / Bank's Engineer only to be used on the work.
3. Wherever contractor proposes to use equivalent makes (i.e. other than specified), the same shall be done after prior approval of the Bank / Bank's Engineer. Any additional expenditure and time due to this shall be solely on contractor's account and no claims whatsoever shall be entertained in this regard.

Description	Name of approved make/ manufacturers
Paints / Primers / French spirit / Melamine Polish / PU coating/Enamel paint	Asian Paints, ICI Delux, Nerolac, Berger or any other approved make
Ready Mixed plaster / Ready mix waterproof plaster	Ultra-Tech (Readyplast), Wallplast (Easy Plast), MYK Laticrete (Powerplast) ACC or approved equivalent make .
Structural repairs chemicals	M/s. Fosroc India Limited, M/s. Pidilite, M/s. MC Baushumie, M/s. STP, M/s. BASF, M/s. SIKA, M/s. Bal Endura or approved equivalent make.
White Cement / white cement based putty	Birla White, Berger wall putty, J K Wall putty, Magicrete or any other approved make
Cement	A.C.C, Ultra Tech, Ambuja, Birla, Dalmiya, Ramco, Coramandal or approved equivalent make.
Water proofing compound	Dr.FIXIT, BASF / PIDILITE / FOSROC / SIKA or approved equivalent make

NOTE: All the materials should get approved from the “Bank’s Engineer” before using in the work.

Place:

Date:

Signature and seal of the Tenderer

Name & address

Phone/Mobile No. :

E-mail id:

B. List of items with BASIC PRICES / RATES (Not applicable)

Basic rate of items as mentioned in respective items in un-prices schedule of quantities / Part-II of tender or as per approved list of items

SI No	Description	Basic Rate (Excluding Applicable GST) per Unit in ₹	Unit
	-Nil -	-Nil -	-Nil -

NOTE: All the materials should get approved from the “Bank’s Engineer” before using in the work.

Place:

Date:

Signature and seal of the Tenderer

Name & address

Phone/Mobile No. :

E-mail id:

Indicative List for CIVIL Items

ANNEX -1

S. No.	Item Description	Class IV Flats		Class III Flats		Officers Flats(A, B, C)			Office Building		Remarks
		Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	
	Bath and WC										
	Combined WC-Bath Sanitary Fixings										
1	Indian type squatting vitreous china Water Closet (WC) pan	Hardware	20042, 20070	Hardware	same as proposed in class-IV flats	Hardware	same as proposed in class-IV flats	Hardware	same as proposed in class-IV flats	Hardware	Model of Same series are available in this item for all category/type of flats
		Parry ware	C0116	Parry ware	C0116	Parry ware	C0116	Parry ware	C0116	Parry ware	
		Roca	Equivalent to Above(EA)	Roca	Equivalent to Above(EA)	Roca	Equivalent to Above(EA)	Roca	Equivalent to Above(EA)	Roca	
		Cera	EA	Cera	EA	Cera	EA	Cera	EA	Cera	
		Jaquar	EA	Jaquar	EA	Jaquar	EA	Jaquar	EA	Jaquar	
		RAK	EA	RAK	EA	RAK	EA	RAK	EA	RAK	
		Kohler	EA	Kohler	EA	Kohler	EA	Kohler	EA	Kohler	
2	Orissa type vitreous china WC pan	Hardware	20042, 20070, Comfort GRAC E, ECO	Hardware	20042, 20070, Popular GRACE E, ECO	Hardware	20042, 20070, Popular GRACE, ECO	Hardware	20042, 20070, Popular GRACE, ECO	Hardware	Same series available for all category/type of flats
		Parryware	C0117, SMPOL Q	Parryware	C0117, C0111	Parryware	C0117	Parryware	C0117	Parryware	
		Jaquar	EA	Jaquar	EA	Jaquar	EA	Jaquar	EA	Jaquar	
		Roca	EA	Roca	EA	Roca	EA	Roca	EA	Roca	
		Cera	EA	Cera	EA	Cera	EA	Cera	EA	Cera	
		RAK	EA	RAK	EA	RAK	EA	RAK	EA	RAK	
		Kohler	EA	Kohler	EA	Kohler	EA	Kohler	EA	Kohler	

S. No.	Item Description	Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	Model / Series	Office Building	Model / Series	Remarks
		Class IV Flats		Class III Flats		Officers (P/IIA, B, C)		Sr. Officers Flats						
3	Floor mounted type ceramic European WC pot													
		Hardware	Slck 20011, Popular	Hardware	same as proposed in class-IV flats	Hardware	CEORA ELVA	Hardware	ELVA/RENEVER LIN	Hardware	Slck 20011, Popular, Italian Collection - Mario, Engma			
		Partware	C0297, C0471	Partware	same as proposed in class-IV flats	Partware	C-8906, C0901, C0902, C0919, C0939, C-8900, C0989, C0989, C09851	Partware	Same as proposed in officer's flats	Partware	Same as proposed in officer's flats			
		Jaquar	SLSWHT6751S 220PPZ	Jaquar	CNSWHT551P S/P, CNSWHT 1511SSPP	Jaquar	FSS-WHT-29853300U/FSM VGS-WHT-81953300U/OP-S-WHT-15853300U/FSM NS-WHT-10853300U/FSM	Jaquar	Same as proposed in officer's flats	Jaquar	JCH-WHT-2400FS, FSS-WHT-29853300U/FSM VGS-WHT-81953300U/FSM VGS-WHT-15853300U/FSM VHT-10853300U/FSM	Model considered are water efficient/Siphonic Flushing action type		
		Roca	EA	Roca	EA	Cera	DAMPBELL DUROPLAST 110	Cera	EA	Cera	EA			
		Cera	EA	Cera	EA	Roca	EA	Roca	EA	Roca	European standard (INSPIRA Series)			
		RAK	EA	RAK	EA	RAK	EA	RAK	EA	RAK	EA			
		Kohler	EA	Kohler	EA	Kohler	EA	Kohler	EA	Kohler	EA			
		Toto	EA	Toto	EA	Toto	EA	Toto	EA	Toto	EA			
4	Wall hung type vitreous china EMC pot													
		Jaquar	Continental CNS WHT959JSP	Jaquar	Continental CNS WHT959JSP	Jaquar	Continental CNS WHT959JSP	Jaquar	Continental CNS WHT959JSP	Jaquar	Vignetta Continental CNS WHT 956 N, C02651C			
		Partware	C0465, C0467, Carcade NMT, Indus, C02651C	Partware	Fair, Indus, Zest, C0467, C0265	Partware	Fair, Indus, Zest, C0467	Partware	Fair, Indus, Zest, C0467	Partware	Fair, Indus, Zest, C0467			
		Hardware	Studio, MARIO	Hardware	Studio, Engma slim, Essence-20011, 20061	Hardware	Studio, Engma slim, Essence-20011, 20061	Hardware	Italian Collection - Studio, Rubble, Engma slim, Essence-52051, 20061	Hardware	Italian Collection - Studio, Rubble, Engma slim, Essence-52051, 20061	Water efficient model has been proposed for flushing system		
		Roca	EA	Roca	NEVO	Roca		Roca	European standard (INSPIRA Series)	Roca	European standard (INSPIRA Series)			
		RAK	EA	RAK	EA	RAK	EA	RAK	Kohler/NEXT	RAK	Kohler/NEXT			
		Kohler	EA	Kohler	EA	Kohler	EA	Kohler	EA	Kohler	EA			
		CERA	EA	CERA	EA	CERA	EA	CERA	EA	CERA	EA			
		Toto	EA	Toto	EA	Toto	EA	Toto	EA	Toto	EA			

S. No.	Item Description	Class IV Flats		Class III Flats		Officers Flats(A, B, C)		Sr. Officers Flats		Office Building		Remarks
		Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	Model / Series	
5	Low level PVC/ vitreous china flushing cistern											
		Jaquar	WHC-WHT-184NLNTwith dual flush tank	Jaquar	WHC-WHT-184NLNTwith concealed dual flush tank	Jaquar	WHC-WHT-184NLNTwith sleek plus dual	Jaquar	same as proposed in officer's flats	Jaquar	same as proposed in officer's flats	
		Hindware	sleek plus dual	Hindware	sleek plus dual	Hindware	sleek plus dual	Hindware	sleek plus dual	Hindware	Steak Fresh Dual Flush / Steak Fresh ISI / Steak Smart / Steak Essence Dual Flush	
		Paryware	Delux slimline Dual EB1771C	Paryware	Delux slimline Dual EB1771C	Paryware	Delux slimline Dual EB1771C	Paryware	Delux slimline Dual EB1771C	Paryware	Delux slimline Dual EB1771C	Water efficient model has been proposed for flushing system
		CERA	EA	CERA	EA	CERA	EA	CERA	B1020106, CLAIR	CERA	B1020106, CLAIR	
		Roca	EA	Roca	EA	Roca	EA	Roca	EA	Roca	EA	
		RAK	EA	RAK	EA	RAK	EA	RAK	EA	RAK	EA	
		Kohler	EA	Kohler	EA	Kohler	EA	Kohler	EA	Kohler	EA	
		Toto	EA	Toto	EA	Toto	EA	Toto	EA	Toto	EA	
6	Wash Basin vitreous china clay											
		Jaquar		Jaquar		Jaquar		Jaquar	same as proposed in officer's flats	Jaquar	FSSWHT29601,KUSWH135201,CNSWHT101GS WHT Series	
		Paryware	Tapdi, Oxford, CD418/2 2X18), CD417(2 2X18), CD406(2 2X18)	Paryware	Tapdi, Oxford, CD405(2 2X18)	Paryware	Venus, C848G, MAGNA, VAALDASY(21X 17), CD464 CO466, CD406(22X18)	Paryware	Cascade Venus, C848G, MAGNA, VAALDASY(21X 17), CD464 CO466, CD406(22X18)	Paryware	Cascade Venus, C848G, MAGNA, VAALDASY(21X 17), CD464 CO466, CD406(22X18)	
		Hindware	Delta, 1000B	Hindware	Delta, 1000B	Hindware	NILE 59R Standard Viking, Mario, Neo, Compact, Italian Collection - Edge, Ebello, Dove, Evia, ZEN, GARNET	Hindware	NILE 59R Standard Viking, Mario, Neo, Compact, Italian Collection - Edge, Ebello, Dove, Evia, ZEN, GARNET, 10031	Hindware	NILE 59R Standard Viking, Mario, Neo, Compact, Italian Collection - Edge, Ebello, Dove, Evia, ZEN, GARNET, 10031	
		Roca	EA	Roca	EA	Roca	EA	Roca	EA	Roca	European standard (INSFRA Series)	
		CERA	COUNSEL	CERA	COUNSEL	CERA	CLIFF	CERA	CALIBER	CERA	CALIBER, S4020105, CANOPY	
		Kohler	EA	Kohler	EA	Kohler	Kankara, Escala,	Kohler	EA	Kohler	EA	
		RAK	EA	RAK	EA	RAK	EA	RAK	EA	RAK	EA	
		Toto	EA	Toto	EA	Toto	EA	Toto	EA	Toto	EA	

S. No.	Item Description	Class IV Flats		Class III Flats		Officers Flats(A, B, C)		Sr. Officers Flats		Office Building		Remarks
		Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	Model / Series	
7	Wash Basin Vitreous china pedestal											
		Jaguar	QNSWHT7801	Jaguar	QNSWHT7801							
		CERA	Cerish	CERA	Canopy							
		Hardware	Constellation, Cedar, No. 10092 (440 X 440) Dove Wash Basin Stainless Italian Collection (Counter Top) 10006	Hardware	Constellation, Cedar, Maro, Cat. No. 10092 (440 X 440) Dove Wash Basin Stainless Italian Collection (Counter Top) 10006							
	Not Applicable	Porcelain	Magna Wall hung type Oxford CD405 (550x400) White	Porcelain	Magna Wall hung type Oxford CD405 (550x400) White							
		Roca	EA	Roca	EA							
		RAK	EA	RAK	EA							
		Kohler	EA	Kohler	EA							
		Toto	EA	Toto	EA							
8	Urinal vitreous china basin / stall / half stall flat back / corner											
		Jaguar	URS-WHT-13205, 132530									
		Porcelain	Integrated N, 1-Hawk E Top -AC 17184A1									
		Hardware	Waterless/Aquafree, Ergoma, Italian Collection) Sersironi(Serial Art, Italian Collection)Alumal popodi(Flat Back Large, Eureka, Italian collection I, 50002, 50020, 50010									
	Not Applicable	CERA	S4020105									
		Kohler	EA									
		Roca	EA									
		RAK	EA									
		Toto	EA									

S. No.	Item Description	Class IV Flats		Class III Flats		Officers Flats(A, B, C)		Sr. Officers Flats		Office Building		Remarks
		Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	Model / Series	
9	Vitreous china clay squatting plate urinal											
										Roca	EURET , Sense standard (INSPIRA Series)	
										Hardware	Flat Back Large 60003	
										Panynware	Magnum_C0503	
										RAK	EA	
										Toto	EA	
										CERA	EA	
										Kohler	EA	
										Jaquar	EA	
10	Urinal Partition (Ceramic)											
										Hardware	ART, 61001,61005	
										Panynware	C0507_C0571	
										RAK	EA	
										Toto	EA	
										CERA	EA	
										Kohler	EA	
										Jaquar	EA	
										Roca	EA	
	Combined WC-Bath Plumbing Fittings											
11	Auto flush system with infrared sensors for urinals											
										Euronics	EU04BE	
										Panynware	CB051 Integrated	
										Hardware	Sense Art Flow	
										Jaquar	SNR- STL- 51083, Sensoronic SNR- CHR-51097, PRS077	
										Toto	EA	
										Arca	EA	
										Kohler	EA	
										Roca	EA	

S. No.	Item Description	Class IV Flats		Class III Flats		Officers Flats(A, B, C)		Sr. Officers Flats		Office Building		Remarks
		Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	Model / Series	
12	C.P. Brass Health Faucet	Jaquar	ALD-QHR-577,ALD-QHR-565	Jaquar	ALD-QHR-577,ALD-QHR-565,ALD-QHR-563N	Jaquar	ALD-QHR-577,ALD-QHR-565,ALD-QHR-563N	Same as proposed in officers flats	Jaquar	FLR-505N,ALD-QHR-573, ALD-QHR-577,563, FLR- CHR-5011N.		
		Paryware	T9941A1 Cardf	Paryware	T9941A1 Cardf	Paryware	T9941A1 Cardf	Paryware	Paryware	T9941A1 Cardf		
		CERA	CG105, 106,206	CERA	CG105, 106,206	CERA	CG105, 106,206	CERA	CERA	CG105, 106,206		
		Roca	EA	Roca	EA	Roca	EA	Roca	Roca	Standard(INSPIRA Series)		
		Kohler	EA	Kohler	EA	Kohler	EA	Kohler	Kohler	EA		
		Toto	EA	Toto	EA	Toto	EA	Toto	Toto	EA		
		Plumber	EA	Plumber	EA	Plumber	EA	Plumber	Plumber	EA		
		Gem	EA	Gem	EA	Gem	EA	Gem	Gem	EA		
		Marc	EA	Marc	EA	Marc	EA	Marc	Marc	EA		
13	CP Brass Bit cock, Stop cock, Pillar cock, Mixer cock, Angular stop cock,	Jaquar	Florentine Series	Jaquar	Florentine Series	Jaquar	Opal series, Fusion series	Jaquar	Kubik series, Fusion series, OPAL PRIME series.	Jaquar	Florentine Series, Kubik series, Fusion series, OPAL PRIME series, SAKRISO19PM, SAKRISO19MPK.	1)Model should have hot and cold indication, wherever required. 2) Taps should have granite flow. 3) Sensor based pillar cock may be used in Bank Building
		Jaquar	Contessa Plus	Jaquar	Contessa Plus	Contessa Plus,OPRA,AVIO R	Contessa Plus,OPRA,AVIO R	Contessa Plus,OPRA,AVIO R	Contessa Plus			
		Hindware		Hindware								
		Kohler	EA	Kohler	EA	Kohler	EA	Kohler	Kohler	EA		
		Toto	EA	Toto	EA	Toto	EA	Toto	Toto	EA		
		Plumber	EA	Plumber	EA	Plumber	EA	Plumber	Plumber	EA		
		Gem	EA	Gem	EA	Gem	EA	Gem	Gem	EA		
		Marc	EA	Marc	EA	Marc	EA	Marc	Marc	EA		

		Class IV Flats		Class III Flats		Officers Flats(A, B, C)		Sr. Officers Flats		Office Building		Remarks
S. No.	Item Description	Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	Model / Series	Make	Model / Series	
Plumbing Fittings												
26	CP Brass Swivel type long neck Sink tap	Jaquar	Continental	Jaquar	Continental	Jaquar	Continental Opal Florentine series, CON CHR 347 KMM	Jaquar	Continental Opal Lyric, Florentine series, CON CHR 347 KMM	Jaquar	Continental Florentine/ARC, ALD Series	
		Metro	Hermody	Metro	Xperia	Hydroware	Contessa Plus	Hydroware	Contessa Plus	Plumber	EA	
		Plumber	EA	Plumber	EA	Plumber	EA	Plumber	EA	Plumber	EA	
		Gem	EA	Gem	EA	Gem	EA	Gem	EA	Gem	EA	
		Marc	EA	Marc	EA	Marc	EA	Marc	EA	Marc	EA	
		Hydroware	EA	Hydroware	EA	Flora	EA	Hydroware	EA	Hydroware	EA	
		Korber	EA	Korber	EA	Korber	EA	Korber	EA	Korber	EA	
27	CP Brass Swivel type long neck Sink tap with mixer	Jaquar	Continental	Jaquar	Continental	Jaquar / Chrome Plated	Continental, Opal/OT 7309 (Quartz/Quartz Turb) / Florentine series	Jaquar	Continental Opal Lyric, Florentine series	Jaquar	Continental, Florentine	
		Hydroware	EA	Hydroware	EA	Hydroware	Contessa Plus	Hydroware	Contessa Plus	Plumber	EA	
		Plumber	EA	Plumber	EA	Plumber	EA	Plumber	EA	Plumber	EA	
		Gem	EA	Gem	EA	Gem	EA	Gem	EA	Gem	EA	
		Marc	EA	Marc	EA	Marc	EA	Marc	EA	Marc	EA	
		Korber	EA	Korber	EA	Korber	EA	Korber	EA	Korber	EA	
28	Kitchen Accessories Modular Kitchen fittings SS baskets & accessories	Not Applicable										
		Exco	Promotion drawer system	Exco	Promotion drawer system	Exco	EA	Exco	EA	Exco	EA	
		Sheek	EA	Sheek	EA	Sheek	EA	Sheek	EA	Sheek	EA	
		Heilich	EA	Heilich	EA	Heilich	EA	Heilich	EA	Heilich	EA	
		Dormis	EA	Dormis	EA	Dormis	EA	Dormis	EA	Dormis	EA	
		Harfale	EA	Harfale	EA	Harfale	EA	Harfale	EA	Harfale	EA	
		Godrej	EA	Godrej	EA	Godrej	EA	Godrej	EA	Godrej	EA	
29	Locks and Latches	Godrej	8812, 7 Lever Height lock	Godrej	8812, 7 Lever Height lock	Godrej	Height Lock, Ultra (Satin Nickel Finish) with Cylinder, product code - 4690, Ultra Meridian universal hardware, product code - 4757, Lock one side key and one side knob, product code - 4808, Merico Lock, Ultra XL+Rim deadbolt	Godrej	Height Lock, Ultra (Satin Nickel Finish) with Cylinder, product code - 4690, Ultra Meridian universal hardware, product code - 4757, Lock one side key and one side knob, product code - 4808, Merico Lock, Ultra XL+Rim deadbolt	Godrej	8812, Merico Lock, Ultra XL+Rim deadbolt, Item Lock, Furniture Lock, Naxos	
		Exco	EA	Exco	EA	Exco	EA	Exco	EA	Exco	EA	
		Ozone	EA	Ozone	EA	Ozone	EA	Ozone	EA	Ozone	EA	
		Heilich	EA	Heilich	EA	Heilich	EA	Heilich	EA	Heilich	EA	
		Dormis	EA	Dormis	EA	Dormis	EA	Dormis	EA	Dormis	EA	
		Harfale	EA	Harfale	EA	Harfale	EA	Harfale	EA	Harfale	EA	
		Godrej	EA	Godrej	EA	Godrej	EA	Godrej	EA	Godrej	EA	
		Europe	EA	Europe	EA	Europe	EA	Europe	EA	Europe	EA	

Indicative List for Electrical Items

S. No.	Item Description	Make	Model / Series	Remarks
1	Modular type Switch / Socket / Switch Plate / Regulator / Sockets for TV / Telephone / Cat-6	Anchor	Penta, Rider, Roma, THEA, VISION	1. 5A/6A, 5 pins sockets shall be provided. The two middle pins of the socket shall be operable with ease to use mobile/Tablet charging point. If required, two pin socket may be provided additionally. 2. Step type Fan regulator with uniform speed control shall be provided.
		Crabtree	Athena, Thames, Murano	
		Legrand	ARTEOR, Mylinc, Myrius	
		MK	Blenze Plus, WrapAround	
		Schneider	ZENCELO	
		Siemens	Delta	
		SSK	SSK Grand, Signature	
2	Ceiling Fan	Almonard	Regular	Fans with copper winding with double ball bearing shall be procured. The size of ceiling fan (sweep) may be decided based on the room size.
		Atomberg	EFFICIO, Renesa	
		Bajaj	Ultima (1200mm), Esteem (1200mm)	
		Crompton	Aura, BRIZ, HS PLUS (1200mm), BREEZE	
		Havells	ES 50	
		Khaitan	Euro, Kraze	
		Orient	Gratia, Summer Breeze, Summer King, Twister	
3	Wall Mounted Fan	Usha	Striker	Metal body fans shall be preferred in Office buildings
		Almonard	Tempest Mark II, Supreme	
		Atomberg	Efficio	
		Bajaj	Midea	
		Crompton	Highflo, SStorm2, wave plus	
		Havells	Platina, swing, V3	
		Khaitan	Merlin, Paloma	
4	Exhaust Fan	Orient	Tornado, Trendz, WALL-44, Wall 47, Wind-pro, Wall 80	1. Heavy duty Exhaust Fan with Double ball bearing & Copper winding shall be provided in Office buildings. 2. Exhaust fans with suitable flaps shall be provided.
		Usha	Colossus (Aluminium Blade), Maxx Air, mist air	
		Almonard	Airvent	
		Bajaj	Bahar(metal), Maxima	
		Crompton	Brisk Air, Tidal air, Trans Air (metal)	
		Havells	Ventilair, Turboforce (Metal)	
		Khaitan	Vento, Fresh Air(Metal)	
5	Pedestal Fan	Orient	Ventilator, Hill Air (Metal)	Metal body fans shall be preferred in Office building
		Usha	Crisp Air, Aeroclean(Metal)	
		Almonard	Mark II	
		Atomberg	Efficio +	
		Bajaj	Elite, MIDEA	
		Crompton	Highflo, Storm, Silentpro penta flow, SDX Gold	
		Havells	Swing	
6	LED Tube light	Khaitan	Flora, Magma	Preferably, LED tube light having the LM-79 report / certificate from NABL accredited lab shall be procured.
		Orient	Stand, Stand Wind pro, Tornado-II,	
		Usha	Mist Air, Maxx Air	
		Bajaj	Flextron, Connect	
		Crompton	Radiance Ray Plus, Laser Ray, Light Linea	
		Havells	EdgeLit Slim	
		Jaquar	Glaze	
7	2x2 Light Fitting	Orient	Eternal Grace	Preferably, LED fittings having the LM-79 report / certificate from NABL accredited lab shall be procured.
		Philips	Smart Bright, Endura Next, Astra Line, ESSENTIAL TUBE, Slim line, Twin glow	
		Syska	Syska LED	
		Wipro	Garnet, Garnet Plus	
		Bajaj	Skylux, Skylite, Auralite, Waffle	
		Crompton	Aura, TROFFER	
		Jaquar	Ultima, Sauver	
8	LED Bulb / lamp	Philips	SmartGlow, GreenSquare, Coreview	BEE 3 star or higher rated LED bulb as per the site requirement shall be procured. Wherever BEE star rating is not available, the energy efficient LED lamp/s shall be procured based on latest equivalent Lumens per watt declared by BEE (www.bee-starlabel.com).
		Wipro	Garnet Slim, Garnet Wave	
		Bajaj		
		Crompton		
		Havells		
		Jaquar		
		Orient		

S. No.	Item Description	Make	Model / Series	Remarks
9	Geyser / Water Heater	AO Smith	HSE-VAS	BEE 3 star or higher rated water heaters as per the required capacity shall be procured.
		Bajaj	Majesty PC Deluxe, Majesty Horizontal, New Shakti	
		Crompton	Arno Neo, Solarium Neo, Solarium Qube	
		Haier	ES 15V-T1, ES 25V-T1, ES 15H-T1, ES 25H-T1	
		Havells	Monza	
		Jaquar	Elena, ULT	
		Racold	Classico, CDR, CDR DLX, Eterno, Andris	
		Usha	Aqua Genie, Misty	
		Venus	Celo, Magma, Magma Plus, Splash	
		V-guard	Sprinkhot Plus, Ema, Iris	
10	Water Purifier (UV Based)	Alfaa UV	Sparkle, F-Water	
		Blue Star	PRISTINA, ETERNIA	
		Eureka Forbes	Dr Aquaguard, Aquaguard, AquaSure	
11	Water Purifier (RO Based)	Kent	Ultra Star, Sterling UV, Maxx Star	RO system shall be used only if TDS levels are high.
		Alfaa UV	Dewdrop	
		Blue Star	GENIA, ARISTO, EXCECELLA, ELANOR	
		Eureka Forbes	Dr Aquaguard, Aquaguard, AquaSure	
		Kent	Supreme, Grand+, Grand star, Pearl, Prime, Super star	
		LG	Multi stage RO system	
12	Split AC / Window AC / Cassette AC / Tower AC	Livpure	Giltz, Bolt, Pep+, Envy +	BEE 3 star or higher rated air conditioner/s as per the required capacity shall be procured. The air conditioner/s shall be of copper tube only. Wherever BEE star rating is not available, the energy efficient air-conditioner/s shall be procured based on latest equivalent Coefficient of Performance (COP), Energy Efficiency Ratio (EER) or Indian Seasonal Energy Efficiency Ratio (ISEER) declared by BEE.
		Blue Star		
		Carrier		
		Daikin		
		Haier		
		Hitachi		
		LG		
		Lloyd		
		Midea		
		Mitsubishi		
		O-Genaral		
		Panasonic		
13	Chimney	Samsung		Ducted Chimney shall be preferably used in the Kitchen. Due to site constraints, Ductless chimney is installed, a suitable exhaust fan in the kitchen shall also be provided.
		Toshiba		
		Trane		
		Voltas		
		Elica	TCG slim BF, Nero, Wdat HAC	
		Faber	ARCO 3D, Kutchina, Ruby Plus PB60BK, Stilo, Stilux, Tender, Topaz	
		Hindware	Zita, Blaze, Jupiter, Pacific, Myra, Clara, Clarissa	
		Glen	Glen SS	
		IFB	OLIM BF60 Plus, EPT-BF-BL 90, GL-15EP	
		Kaff	Opec, Lumax, Lux	

NOTE: All required materials should get approved from the Bank's Engineer before using in the work.

Place:

Signature and seal of the tenderer

Date:

Name and Address:

C. APPENDIX HEREINBEFORE REFERRED TO

1. Defects liability Period	12 months from the date of issue of virtual completion certificate.
2. Period of final measurement	Three months from the date of final completion of the work including settlement of final bill.
3. Date of commencement	Within 10 th day from the date of award of work.
4. Date of completion	Four (4) MONTHS for entire work which shall be reckoned from 10th day of work order. Validity of rates will be for a period of 3 months.
5. Liquidated Damages	₹1,435 per day subject to maximum amount of 10% of the contract amount for the entire work.
6. Value of work for Interim Certificate	₹ 10 Lakh
7. Retention Percentage	5% from each bill
8. Total Security Deposit	5% RMD + EMD
9. Refund of EMD	On receipt of PBG.
10.Period of honoring RA bill certificate	one month
11. Period of honoring final bill certificate	Three months including measurement of work
12. Interest for delayed payment	Three percent per annum
13. Performance Bank Guarantee (PBG)	Bank Guarantee from any Scheduled Bank for an amount equal to 5% of the Contract Amount and valid till completion of the work
14. Release of Performance Bank Guarantee (PBG)	Release after one month from the virtual date of completion of work.
15. Waterproofing Performance Bank Guarantee (WPBG)	Waterproofing Performance Bank Guarantee to be submitted from any Scheduled Bank for an amount equal to 5% of the contract amount of waterproofing works valid till 3 years beyond date of virtual completion of the work.
16. Release of Waterproofing Performance Bank Guarantee (WPBG)	Release of WPBG after one month of completion of guarantee period of 3 years onwards to virtual completion
17. Released of RMD	After DLP, 12 months from the date of issue of virtual completion.

Date:-

Signature of the contractor with name & seal

Place:-

Address:

Phone/Mobile no.e-mail

SECTION VII

SCHEDULES (A to H)

Schedule A

Notes for Schedule of Quantities

1	The Schedule of Quantities shall be read in conjunction with the specifications, Tender drawings and bid documents. CONTRACTOR shall not rely merely on the description given in the Schedule of Quantities.		
2	Quantities of work indicated in the Schedule of Quantities are only approximate and are given to provide a common basis for bidding. The actual quantities of work shall be ordered by Employer as shown on the final drawings released for Renovation. No claim shall be entertained from CONTRACTOR if the actual quantities or items of work differ from those indicated herein, except where stated otherwise. The Engineer-in-charge reserves the right to modify any aspect of the scope of Tender at any time during the course of work.		
3	The contractor shall fill his rates and amounts for all the items for the specified quantities indicated in Schedule of Quantity issued by the Employer.		
4	Quoted Prices shall be in Indian Rupees only.		
5	Rates and amounts shall be entered in both figures and words. Non-compliance of these conditions may render the Bid invalid at the discretion of the Employer.		
6	Unit Rates shall be submitted for all Items and they shall be firm for the entire duration of the contract and any approved extended period.		
7	The quantities of work actually carried out against each item shall be measured and paid at the rates quoted in the Schedule of Quantities where applicable or otherwise at such rates and prices as may be fixed within the terms of the Contract.		
8	BIDDER shall be deemed to have allowed in his rates the provision, maintenance and final removal of all temporary works of whatsoever nature required for the proper execution of the works, except for those temporary works for which specific items have been provided in Schedule of Quantities.		
9	Abbreviations used are as under :		
	i)	No.	Number
	ii)	Cu m	Cubic metre
	iii)	Sq m	Square metre
	iv)	M	Metre
	v)	LS	Lump sum
	vi)	MT	Metric Tonne
	vii)	Kg	Kilogram

Schedule B

Material Testing and Quality Assurance Plan:

Contractor shall submit the detailed material testing and quality control plan if required or directed by the Bank's engineer as per the relevant IS codes and standards covering the entire scope of work as per schedule of quantity and specifications and on approval from Engineer-in-charge same shall be followed while executing the work within the cost quoted.

Schedule C

SAFETY CODE

1. First aid appliances including adequate supply of sterilized dressing and cotton wool shall be kept in a readily accessible place.
2. An injured person shall be taken to a public hospital without loss of time, in cases where 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/floor.
4. No portable single ladder shall be over 8m in length. The width between the side rails shall not be less than 30cm (clear) and the distance between two adjacent rungs shall not be more than 30cm. When a ladder is used, an extra mazdoor shall be engaged for holding ladder.
5. The excavated material shall not be placed within 1.5m of the edge of the trench or 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 shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one metre.
7. No floor, roof or other part of the structure shall be so overloaded with debris or materials as to render it unsafe.
8. Workers employed on mixing and handling materials such as asphalt, cement mortar or concrete and lime mortar shall be provided with protective footwear and rubber hand-gloves.
9. Those engaged in welding works shall be provided with welder's protective eye shields and gloves.
10. No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
11. Suitable facemasks should be supplied for use by the workers when the paint is applied in the form of spray or surface having lead paint dry rubbed or scrapped.
12. Overalls shall be supplied by the Contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during the periods of cessation of work.
13. Hoisting machines and tackle used in the works, including their attachments, anchorage and supports shall be in perfect condition.
14. The ropes used in hoisting or lowering material or as a means of suspension shall be of durable quality and adequate strength and free from defects.

FIRE SAFETY CODE

1. Cutting / drilling machine and other electrically operated equipment used at site shall be plugged into correctly rated electrical outlets.
2. Only ISI marked 3 pin plug and other appliances and equipment shall be used.
3. Electrical power cables/wires used shall not have any joints and shall be properly rated.
4. All electrical appliances i.e. welding, drilling, cutting machine etc. shall be safely and securely earthed to prevent leakage current while in operation.
5. Before commencing the welding work for the first time on any day, fire section shall be informed and only after the site inspection by the Fire officers/Personnel, work shall be started.
6. Two buckets of water and sand shall be kept in an easily accessible area on the site.
7. Fire extinguishers recommended and issued by fire officers shall be kept on the site.
8. Used paint drums shall be stored in specified store only after closing them properly.
9. Personal protective equipment such as safety shoes, hand gloves, welder's mask, ear plug, etc., depending upon the requirement of the work shall be provided by the Contractor to the workmen to prevent occupational health hazards.
10. The safety belt shall be provided by the Contractor and used by the workmen while working from height for more than 10' from Ground level.
11. None of the passages near lift lobby and staircases shall be used for stacking / dumping any kind of materials/waste.
12. Both the staircase doors shall be normally kept closed.
13. None of the fire extinguishers shall be removed/shifted from its designated location.
14. Power supply shall be switched off from the mains when equipment is not in use.
15. Wood-shavings and saw-dust generated from the work shall be collected on daily basis, removed from site and stored at the designated place in proper manner.
16. Any debris generated from the work shall be collected on daily basis, removed from site and stored at the designated place in proper manner.
17. Battery operated emergency light/torches shall be provided by the Contractor to the workmen while working beyond office hours.

Schedule D

LIST OF DOCUMENTS TO BE MAINTAINED AT SITE

Sr. No.	Description of the Document	Remarks
1	Contract Agreement.	Certified true copies of the contracts
2	Drawings	One set of all Architectural Interior layout plan , Electrical, AC and other drawings issued for the work shall well preserved by covering transparent polythene paper
3	Work Programme Chart	Showing latest item wise progress plan
4	Work instruction / Site order Book	For issue of instructions by Engineer-in-charge or his representative at site in the course of day to day supervision. This book shall be in the form of Triplicate book with machine numbered pages. After recording the instructions, one copy shall be taken by Engineer-in-Charge or his representative, another by the contractor and the third copy shall remain in the book on which the compliance shall be recorded by Contractor after taking required action.
5	Material at site Register	To record the material receipted and issued by on daily basis by the contractor.
6	Labor Report and Daily Progress Report (DPR)	To record the labour and DPR by the contractor
7	Test Reports/ certificates for Materials/ equipment	To maintain record of test reports/ certificates received from manufacturers
8	Measurement Book	To record measurements of works
9	Progress Review reports along with progress photographs	To maintain record of progress
10	File and Register for Extra/Variation Order	To maintain record of extra/ variation items
11	Hindrance register	For recording the details of hindrances, reasons & its clearance with time period jointly signed by the Site Engineer/ Engineer-in-charge representative and the contractor's representative
12	Log Book of defects	To record defects noticed during inspection

Schedule E
General Rules and Instructions to Bidders - Information

Bids in Two Bids System	2	Tender Inviting Authority – Regional Director Reserve Bank of India Estate Cell, Byculla, Mumbai Tel No. 02223028125 E Mail id estatebyculla@rbi.org.in
		Name of the Work- General repairs and application of waterproof coating on terraces of buildings at RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025. Estimated cost of work: ₹ 40.17 lakh
	2, 14	Due Date and Time for submission of e-Tender/Bid (Bid close date)- 18/02/2025 up to 2:00 PM Tender submission mode: e-Tender
Earnest Money Deposit (EMD)	4(iii) and 11	EMD of ₹ 80,340/- in the form of NEFT or Bank Guarantee as per proforma annexed hereto shall be deposited in original at the office of tender inviting authority on or before the due date and up to 11:00 AM. EMD can also be remitted to Reserve Bank of India Account of on or before 2:00 PM of 17.02.2025. The account details for NEFT transactions are as under: Beneficiary Name- Reserve Bank of India A/c No.- 04869229925 IFSC CODE- RBIS0MBPA04 Proof of remittance indicating transaction number and other details shall be uploaded on Bank's approved e-tender portal along with other tender documents.
Clarifications and pre-Bid Meeting	5	Date and Time of Pre-Bid Meeting - Offline on 05.02.2025 at 11.00 AM
Opening of Bids	16	Date of opening of tenders/bids (Part-I) 18.02.2025 at 3.00 PM on e-Tender mode.
Bid validity	17	Bid validity – 6 Months
Time for Completion of work	23	Time allowed to complete the work: Four (4) MONTHS for entire work which shall be reckoned from 10th day of work order. Validity of rates will be for a period of 04 months.

Schedule F

General Conditions of the Contract - Information

Definition		i)	Name of the Work: General repairs and application of waterproof coating on terraces of buildings at RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025.
		ii)	The Site – Reserve Bank of India, Byculia Staff Quarters, Mumbai – 400 008
		iii)	The Employer – Regional Director Reserve Bank of India Estate Cell, Byculia, Mumbai
		xiii)	The Engineer-in-charge: Assistant Manager/ Manager/ Asst General Manager (Tech)/, Reserve Bank of India, Estate Cell, Byculia, Mumbai Central
		xxii)	The percentage mentioned to cover all overheads and profits – 15%
Discrepancies and Adjustment of Errors (order of preference)	8.2	The Competent Authority – Regional Director Reserve Bank of India Estate Cell, Byculia Mumbai	

CLAUSES OF CONTRACT

Performance Guarantee	CLAUSE 1	
	(i)	Time allowed for submission of Performance Guarantee from the date of award of work – 14 days
	(ii)	Maximum allowable extension of time for submission of Performance Guarantee beyond the period specified in (i) above without penalty – 7 days
	(iii)	Maximum allowable extension of time for submission of Performance Guarantee beyond the period specified in (ii) above with late fee @ 0.1% of the amount of Performance Guarantee per day – 7 days
Recovery of Security Deposit	CLAUSE 1 A	
	Retention percentage – 5% from every bill subject to 5% of the contract price	
Compensation for Delay	CLAUSE 2	
	Authority for fixing compensation under clause 2: Regional Director, Reserve Bank of India Estate Cell, Byculla Mumbai	
	CLAUSE 5 (Not applicable)	
Time and Extension for Delay	Date of commencement: 14th day from the date of award of work Time allowed for completion of work: 04 months from the date of commencement. Milestones are specified in the table below:	
	Date of commencement: 14th day from the date of award Time allowed for completion of work: 6 (Six) Calendar months from the date of commencement. Milestones are specified in the table below:	
	Milestone No.	Milestone Target Amount in ₹ Lakh Time allowed for achieving the progress (from date of commencement)
	1st	15.0 2ND Month
	2nd	45.0 3RD Month
	3rd	85.0 5TH Month
	4th	Full amount 6TH Month
Amount to be withheld in case of non-achievement the Milestone will be done		

	as under:																															
<table><thead><tr><th>Specimen Milestones Chart Milestone</th><th>Due date</th><th>Milestone Target amount</th></tr></thead><tbody><tr><td>Project Start</td><td>D0</td><td>0</td></tr><tr><td>1st</td><td>D1</td><td>T1</td></tr><tr><td>2nd</td><td>D2</td><td>T2</td></tr><tr><td>(N-X)th</td><td>D(N-X)</td><td>T(N-X)</td></tr><tr><td>(N-X+1)th</td><td>D(N-X+1)</td><td>T(N-X+1)</td></tr><tr><td>(N-X+2)th</td><td>D(N-X+2)</td><td>T(N-X+2)</td></tr><tr><td>(N-1)th</td><td>D(N-1)</td><td>T(N-1)</td></tr><tr><td>Nth</td><td>D(N)</td><td>T(N)</td></tr></tbody></table> Say a RA bill received on $D_{(R)}$ is certified for gross amount of R where i. $T_{(N-X)} \leq R < T_{(N-X+1)}$ i.e. Progress reached up to (N-X)th milestone ii. RA Bill date $D_{(R)}$ is after $D_{(N)}$ i.e. Nth milestone has become due as on RA bill date iii. Say, the liquidated damages is 0.25% per week of delay. iv. Withhold amount for not achieving Nth milestone $A_{(N)} = (0.0025/7) * (D_R - D_N) * (T_N - T_{(N-1)})$ where $T_{(N-1)}$ will be zero if Nth milestone is the first in the series of delayed milestones. <table><thead><tr><th colspan="2">Milestones approving authority – Engineer-in-charge</th></tr></thead><tbody><tr><td>(i)</td><td>Authority for granting Extension of Time - Regional Director, Reserve Bank of India Estate Cell, Byculla Mumbai</td></tr></tbody></table>		Specimen Milestones Chart Milestone	Due date	Milestone Target amount	Project Start	D0	0	1st	D1	T1	2nd	D2	T2	(N-X)th	D(N-X)	T(N-X)	(N-X+1)th	D(N-X+1)	T(N-X+1)	(N-X+2)th	D(N-X+2)	T(N-X+2)	(N-1)th	D(N-1)	T(N-1)	Nth	D(N)	T(N)	Milestones approving authority – Engineer-in-charge		(i)	Authority for granting Extension of Time - Regional Director, Reserve Bank of India Estate Cell, Byculla Mumbai
Specimen Milestones Chart Milestone	Due date	Milestone Target amount																														
Project Start	D0	0																														
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(N-1)th	D(N-1)	T(N-1)																														
Nth	D(N)	T(N)																														
Milestones approving authority – Engineer-in-charge																																
(i)	Authority for granting Extension of Time - Regional Director, Reserve Bank of India Estate Cell, Byculla Mumbai																															
	(ii)	Rescheduling of Milestones -Engineer-in-charge																														
	(iii)	Shifting of date of commencement in case of delay in handing over of site - Engineer-in-charge																														
Measurements of Work Done	CLAUSE 6 or CLAUSE 6A																															
	Clause applicable – 6A																															
Payment on Interim Certificate	CLAUSE 7																															

to be Regarded as Advances		Gross value of work done together with net payment/ adjustment of advances for material collected, if any, since the last such payment eligible for raising Running Account bill (Interim payment) - Rs.10.00 Lakh.
		Retention percentage for Interim Certificates – 5% from every bill

		Total Retention Money - 5% of the Contract Price plus 5% Performance Bank Guarantee.
		Retention period for the Retention Money - up to successful completion of Defects Liability Period (DLP)
		Installment due after Completion - Performance Bank Guarantee submitted by contractor towards Performance
		Period of honouring interim certificates-1 month from the date of receipt of complete bill along with all the documents as specified in Special Conditions of Contract.
Action in case Work not done as per Specifications	CLAUSE 11 A	
	Authority for accepting reduced rate – Regional Director Reserve Bank of India Estate Cell, Byculla Mumbai	
Deviations/ Variations Extent and Pricing	CLAUSE 12	
Deviation - Deviated Quantities and Pricing	Deviation limit beyond which clause 12.2 C shall apply - 25% beyond the tender item quantity specified in the Schedule of Quantity	
Contractor Liable for Damages, defects during defect liability period and Liquidated Damages	CLAUSE 17	
	Defects Liability Period – 12 months from the date of completion and handing over the Completion Certificate to the Employer Liquidated damages at the rate on ₹ 1,435/- per day subject to a maximum of 10% of the contract amount for the entire work. Competent Authority for deciding reduced rates – Regional Director Reserve Bank of India Estate Cell, Byculla Mumbai	
Settlement of Disputes & Arbitration	CLAUSE 25	
	In case of any dispute, the case will be referred to Dispute Resolution Committee (DRC) of Reserve Bank of India before Arbitration. Place – Mumbai Regional Office For Arbitration, Competent Authority for referring the dispute will be Chief General Manager- in-Charge, Reserve Bank of India, Premises Department, Mumbai Place of Arbitration – Mumbai, India	
Water and	CLAUSE 31	

Electric power supply for work	Bank will made available water and electricity power supply required at one point free of charge. Contractor shall arrange to make arrangement for connection with safety fixtures.				
Alternate water supply arrangements					
	CLAUSE 33				
Insurance in respect of damages to Persons and Property	Contractor shall take following Insurance Policies: 1) Contractor's All Risk Policy for the full Contract Value for entire Contract Period 2) Workmen Compensation Policy for all workmen deployed at site 3) Third Party Liability Policy as per following details: a) For injury to persons – ₹ 2 Lakh per person per accident b) For damage to property – ₹ 5 Lakh per accident Subject to overall ceiling as per extant Insurance guidelines				
Employment of Technical Staff and employees	CLAUSE 34 Minimum required Personnel at site shall be as below, failing which recovery at the specified rates as below shall be effected from the contractor:				
Sr. No.	Designation	Minimum No. of personnel	Minimum Professional/ Technical Qualification	Minimum years of Relevant Experience	Rate of recovery per head per day for non-compliance
1	Site supervisor (Civil) (Full time)	1	B.E./ B.Tech./ Diploma	3 years In case of B.E. /B-Tech & 5 years for diploma holder	₹1000/-
2	Site supervisor * (Electrical/AC etc.)	-	-	-	-
Note - * Project Manager/Site Supervisor shall be posted to site during the progress of work as and when required.					

Schedule G

GREEN BUILDING REQUIREMENTS

Reserve Bank of India (RBI) intend to follow Indian Green Building Council (IGBC) norms for Green Interiors space External repairs, minor structural repairs, and waterproof painting of Buildings J, K, and L Blocks at the Bank's Staff Quarters in Byculla, Mumbai - 400 008.. IGBC Green Interior involves complying with the green building specification like using of certain green materials, following of sustainable procedures and certain measures during Renovation/up gradation stage, as spelt out in this document. Accordingly, various parameters related to Green building have been incorporated in the design by the RBI/Employer. The contractor shall ensure to comply the material specifications/ works as per Schedule of Quantities for the respective items and all the work procedures/ processes as specified in this schedule.

To comply with Green Building requirement, wherever called for, the Contractor shall provide necessary documents / shop drawings issued by the manufacturers and this document shall generally cover test certificates, Letter of authorization in terms of standards, thermal values, and relevant data, MSDS, write-ups / detailed description of the particular material / equipment, as stipulated by the Engineer-in-charge prior to ordering the materials and after the supply of materials or at appropriate stages.

The contractor shall verify with the Engineer-in charge regarding the correctness of the green specification before ordering and procurement of materials and equipment supplied to the work.

If the material specifications, the shop drawings and the relevant documents do not meet the specified norms; it shall be the sole responsibility of the contractor to satisfy the specified Green norms by replacing the materials / equipment with the prior approval of the Engineer-in-charge.

The contractor shall ensure that the following facilities for workers are provided

- (i)First-aid and emergency facilities
- (ii)Adequate drinking water facilities
- (iii)Personal protective equipment
- (iv)Dust suppression measures
- (v)Adequate illumination levels in construction work areas

All Renovation activities over the duration of the project should be sequenced carefully to minimize the impact on the indoor air quality.

Note: The below photographs are given just for reference purpose, they do not refer to any specific brands/makes.



Ducts Wrapped With Plastic To Avoid Dust Plastic



Ducts Stored with Properly Wrapped with Plastic

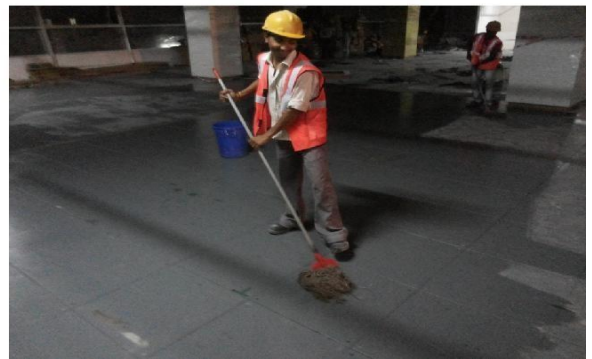


Equipment covered during Construction Phase



Equipment covered during Construction





Cleaning

Segregated Waste Stored on Site – Cement Bags and Scrap area on Site marked with signage



Schedule H

IMPORTANT INSTRUCTIONS FOR e - TENDER

Bidders are requested to read the terms & conditions of this tender before submitting their online tender.

Process of e-Tender:

A) Registration:

The process involves vendor's registration with MSTC e-procurement portal which is free of cost. Only after registration, the vendor(s) can submit his/their bids electronically. Electronic Bidding for submission of Technical Bid (part I) as well as Price Bid (part II) will be done over the internet. The Vendor should possess Class III signing type digital certificate. Vendors are to make their own arrangement for bidding from a PC connected with Internet. MSTC is not responsible for making such arrangement. (Bids will not be recorded without Digital Signature).

SPECIAL NOTE: THE TECHNICAL BID (part I) AND PRICE BID (part II) HAVE TO BE SUBMITTED ON-LINE AT www.mstcecommerce.com/eprochome/rbi

1). Vendors are required to register themselves online with www.mstcecommerce.com → e-Procurement → PSU/Govtdepts → Select RBI Logo > Register as Vendor -- Filling up details and creating own user id and password → Submit.

2). Vendors will receive a system generated mail confirming their registration in their email which has been provided during filling the registration form. In case of any clarification, vendors may contact RBI/MSTC, (before the scheduled time of the e- tender).

Contact person (RBI):

1. Shri Rajesh Khobarkhede (A.M Tech-Civil) – Mobile No.8585017154, Email: rbkhobarkhede@rbi.org.in for Technical Query
2. Shri Arti Yadav (Asst.Manager – (022) 2302 8190) – artiyadav@rbi.org.in for e-tender query.

Contact person (MSTC Ltd):

1. Mr Tanmoy Sarkar, Deputy Manager; Email id: tsarkar@mstcindia.co.in Phone No: 8349894664
 2. Ms. Rupali Pandey, Asst. Manager- rpandey@mstcindia.co.in – Mobile – 9458704037
 3. Mr. Abhishek Kr. Kanaujia, Executive – Mobile – 9953089772
 4. Helpdesk at MSTC Mumbai for vendors - 022-22886268/22822789
 5. Helpdesk – Landline -- 022 22870471/022 22886266/033 22901004
- Google hangout ID- (for text chat)- mstceproc@gmail.com

B) System Requirements:

- i. Windows 7 or above Operating System
- ii. IE-and above Internet browser.
- iii. Signing type digital signature
- iv. Latest updated JRE 8 (x86 Offline) software to be downloaded and installed in the system.

To disable “Protected Mode” for DSC to appear in the signer box following settings may be applied.

- Tools => Internet Options => Security => Disable protected Mode If enabled- i.e, Remove the tick from the tick box mentioning “Enable Protected Mode”.
- Other Settings:

Tools => Internet Options => General => Click On Settings under “browsing history/ Delete Browsing History” => Temporary Internet Files => Activate “Every time I Visit the Webpage”.

To enable ALL active X controls and disable ‘use pop up blocker’ under Tools→Internet Options→ custom level (Please run IE settings from the page www.mstcecommerce.com once)

The Technical Bid (part I) and the Price Bid (part II) shall have to be submitted online at www.mstcecommerce.com/eprochome/rbi .Tenders will be opened electronically on specified date and time as given in the Tender.

All entries in the tender should be entered in online Technical & Price Bid Formats without any ambiguity.

Special Note towards Transaction fee:

The vendors shall pay the transaction fee using “**Transaction Fee Payment**” Link under “My Menu” in the vendor login. The vendors have to select the particular tender from the event dropdown box. The vendor shall have the facility of making the payment either through NEFT or Online Payment. On selecting NEFT, the vendor shall generate a challan by filling up a form. The vendor shall remit the transaction fee amount as per the details printed on the challan without making change in the same. On selecting Online Payment, the vendor shall have the provision of making payment using its Credit/ Debit Card/ Net Banking. Once the payment gets credited to MSTC’s designated bank account, the transaction fee shall be auto authorized and the vendor shall be receiving a system generated mail. **Transaction fee is non-refundable.** A vendor will not have the access to online e-tender without making the payment towards transaction fee.

NOTE

Bidders are advised to remit the transaction fee well in advance before the closing time of the event so as to give themselves sufficient time to submit the bid.

Information about tenders /corrigendum uploaded shall be sent by email only during the process till finalization of tender. Hence the vendors are required to ensure that their Email ID provided is valid and updated at the time of registration of vendor with MSTC. Vendors are also requested to ensure validity of their DSC (Digital Signature Certificate).

E-tender cannot be accessed after the due date and time mentioned in NIT.

Bidding in e-Tender:

a) Vendors need to submit necessary EMD (Earnest Money Deposit), Transaction fees (If any)

to be eligible to bid online in the e- tender. Transaction fees are non-refundable. No interest will be paid on EMD. EMD of the unsuccessful vendor(s) will be refunded by the tender inviting authority in due course.

- b) The process involves Electronic Bidding for submission of Technical and Price Bid.
- c) The vendor(s) who have submitted transaction fee can only submit their Technical Bid and Price Bid through internet in MSTC website www.mstcecommerce.com → e-procurement → PSU/Govtdepts → Login under RBI → My menu → Auction Floor Manager → live event → Selection of the live event.
- d) The vendor should have running JAVA application. This exercise has to be done immediately after opening of Bid floor. Then they have to fill up Common terms/Commercial specification and save the same. After that, they should click on the Technical bid. If this JAVA application does not run, then the vendor will not be able to save/submit his Technical bid.
- e) After filling the Technical Bid, vendors have to click 'save' for recording the same. Once the Price Bid link becomes active and the details are filled up, vendors have to click on "save" to record the Price bid. After both the Technical bid & Price bid have been saved, vendor has to click on the "Final submission" button to register the bids
- f) Vendors are instructed to use *Attach Doc button* to upload documents. Multiple documents can be uploaded. In all cases, vendors are advised to use their own ID and Password along with Digital Signature at the time of submission of their bids.
- g) During the entire e-tender process, the vendors will remain completely anonymous to one another and also to everybody else.
- h) The e-tender floor shall remain open from the pre-announced date & time and for as much duration as mentioned above.
- i) All electronic bids submitted during the e-tender process shall be legally binding on the vendor. Any bid will be considered as the valid bid offered by that vendor and acceptance of the same by the Buyer will form a binding contract between employer and successful bidder for execution of the work.
- j) It is mandatory that all the bids are submitted with digital signature certificate otherwise the same will not be accepted by the system.
- k) The vendor should upload all the credentials / documents as per format of Bank along with technical bid. Otherwise the tender will be treated as cancelled.
- l) Employer reserves the right to cancel or reject or accept or withdraw or extend the tender in full or part as the case may be without assigning any reason thereof.
- m) No deviation of the terms and conditions of the tender document is acceptable. Submission of bid in the e-tender floor by any vendor confirms his acceptance of terms & conditions for the tender. Any order resulting from this tender shall be governed by the terms and conditions mentioned therein.
- n) The tender inviting authority has the right to cancel this e-tender or extend the due date of receipt of bid(s) without assigning any reasons thereof.

- o) Vendors are requested to read the vendor guide and see the video in the page www.mstcecommerce.com/eprochome to familiarize them with the system before bidding.
- p) Vendors are requested to quote GST as per Government rules. No change in quoted rates will be accepted.

I/We hereby declare that I/we have read and understood the information provided in Schedule A to Schedule H above.

Place

Signature of bidder with seal

Date

SECTION VIII

ANNEXURES

TO

**VARIOUS SECTIONS
AND SCHEDULES**

Annex 1**Pre-qualification / Eligibility Criteria forms**
(Not Applicable)**Format 1****Basic Information**

1(a)	Name of the Contractor/firm	
2.	Details of registration of the firm : whether Sole Proprietorship/ Partnership firm /Private Limited/ Limited or Co- operative Body etc.	
2(a)	Name of the proprietor or Partners./ directors :	
3(a)	Registered Address:	
3(b))	Address for correspondence	
4(a))	Contact Person	
4(b))	Designation	
4(c)	Telephone :	
4(d))	Mobile no.	
4(e))	FAX/Tele-fax:	
4(f)	e-mail id	
5	GST Registration details and no.	
5(a))	Details of registration of labour, ESI, EPF if any	
6	Number of years of experience of contractor / Firm of contractor in the field.	
7	In case the company is subsidiary, the involvement, if any, of the Parent Company in the Bank's proposed work :	

8	Was the applicant ever required to suspend the eligible works for a period of more than Four months continuously after commencement? If yes, then furnish the reasons thereof.	
9	Has the agency or any constituent partner in case of partnership firm, ever abandoned the awarded works before their completion? If so, give name of the project and reasons for abandonment.	
10	Has the agency or any constituent partner in case of partnership firm, ever been debarred /black-listed for competing in any organization at any time? If so, give details	
11	Has the agency or any constituent partner in case of partnership firm, ever been convicted?	
12.	Whether the agency is involved in frequent civil suit /litigations in the contracts/being executed now. If yes please furnish the details in proforma given below.	Yes / No

Sl no	Name of the project and Employer	Nature of work	Work order No and Date	Present stage of work	Value of contract	Brief details of litigation
1.	2.	3.	4.	5.	6.	7.

Signature of bidder

Name & Designation

Date and Place

Office Seal:

PREVIOUS WORK EXPERIENCE (Not Applicable)

**List of important similar works executed by the contractor/firm
(including works completed prior to on or before))**

Sl no	Name of similar work and location	Nature of work involved in the contract (e.g. Renovation of office building, residential quarters).	Name of the owner/ client and Architect. Also indicate whether Government or Semi-Government or Private Body with full postal address.	Cost of work		Period of completion			Reason for delay, if any	Whether work was left incomplete or contract was terminated from either side?	Litigation/ Arbitration , if any with details.	Any other relevant information.
				Contract Amount (₹ lakh)	Actual value of work done (in ₹ lakh)	Date of commencement of work	Scheduled date of completion	Actual date of completion				
1.	2.	3.	4.	5 a	5 b	6a	6b	6c	7	8	9	10

Attach supporting documents

Signature of the bidder with seal

List of important similar works 'On Hand' (Not Applicable)

Sl no	Name of the work and location	Nature of work involved in the contract	Name of the owner and Architect Whether Government or Semi- Government or Private Body with full postal address.	Contract Amount in ₹	Completion Period		Present stage of work with reasons if the work is getting delayed	Any other relevant information
					Stipulated	Expected		
1	2	3	4	5	6(a)	6(b)	7	8

Signature of the bidder with seal

PREVIOUS EXPERIENCE (Not Applicable)**Details of similar work/s (qualifying) completed during last five years ending March 31, 2020**
(The work/s costing above the minimum value specified in pre-qualification criteria)

Sl no	Name of similar work and location	Nature of work involved in the contract (e.g. Renovation of office buildings/ residential quarters).	Name of the owner/ client and Architect. Also indicate whether Government or Semi-Government or Private Body with full postal address.	Name, e-mail ID, telephone (land line and mobile) nos., Fax no. of the contact executive (the person of bidders client who can be contacted by the bank in case it is so needed).	Cost of work		Period of completion			Reason for delay, if any	Whether work was left incomplete or contract was terminated from either side?	Litigation n/Arbitration, if any with details.	Any other relevant information.
					Contract Amount (₹ lakh)	Actual value of work done (in ₹ lakh)	Date of common cement of work	Schedule d date of completion n	Actual date of completion				
1.	2.	3.	4.	5.	6 a	6b	7a	7b	7c	8	9	10	11

Signature of the bidder with seal

CLIENT's CERTIFICATE REG. PERFORMANCE OF CONTRACTOR (On Client's Letter Head)
(Not Applicable)

Name & address of the Client :

Details of Works executed by Shri /M/s :

1. Name of work with brief particulars :

2. Agreement No. and date :

3. Agreement amount :

4. Date of commencement of work :

5. Stipulated date of completion :

6. Actual date of completion :

7. Details of compensation levied for delay (indicate amount) if any :

8. Gross amount of the work completed and paid :

9. Name and address of the authority under whom works executed :

10. Whether the contractor employed qualified Engineer during execution of work ?

11. i) Quality of work (indicate grading) : Outstanding/Very Good/ Good/Satisfactory/poor

(ii) Amt. of work paid on reduced rates, if any

12. i) Did the contractor go for arbitration?

ii) If yes, total amount of claim

iii) Total amount awarded

13. Comments on the capabilities of the contractor.

a) Technical proficiency	:	Outstanding/Very Good/ Good/Satisfactory/poor
b) Financial soundness	:	Outstanding/Very Good/Good/Satisfactory/poor
c) Mobilization of adequate T&P	:	Outstanding/Very Good/Good/Satisfactory/poor
d) Mobilization of manpower	:	Outstanding/Very Good/Good/Satisfactory/poor
e) General behavior	:	Outstanding/Very Good/Good/Satisfactory/poor

Signature of the Reporting Officer* with Office seal

Note: (i) All columns should be filled in properly

(ii) * Clients Report/certificate (a) for each of qualifying similar completed works carried out for Government/ public sector companies, the certificate should be signed by the concerned Executive Engineer or an officer in an make or higher rank (b) for each of the qualifying similar completed works carried out for Private companies shall accompany Tax deduction at source, TDS certificate has to be submitted for proving the credentials/contract amount.

FINANCIAL STATUS (Not Applicable)

Sr.no.	Details	Assessment Year			
		₹ in lakh	₹ in lakh	₹ in lakh	₹ in lakh
1	Annual financial turn over certified by Chartered Accountant.				
2	Income Tax returns for the year	NIL			

Note:

- i. Statement shall be supported by copies of audited financial statements/ accounts of the business of the bidder duly certified by a Chartered Accountant. The Income Tax Clearance Certificates / Income Tax Assessment orders along with the latest final accounts of the business of the contractor duly certified by a Chartered Accountant, copied of the Income Tax clearance Certificate/ Income Tax assessment orders along with the latest final accounts of business of the contractor duly certified by a Chartered Accountant as a proof creditworthiness.

Signature of the bidder with seal

**FORM OF BANKERS' CERTIFICATE FROM A SCHEDULED BANK
(On Bankers' Letter Head) (Not Applicable)**

To,
Shri.....
Regional Director /CGM Officer -in-Charge
Reserve Bank of India
Estate Department,
.....Office,

This is to certify that to the best of our knowledge and information M/s. /Shri. a customer of our bank having marginally noted address,
Are/is respectable and can be treated as good for any engagement up to a limit of ₹ (Rupees
.....). This certificate is issued without any guarantee or responsibility on the bank or any of its officers.

For the Bank with Name, Designation & Seal

Note:- (i) Bankers' certificates should be on letter head of the Bank
(ii) In case of partnership firm, certificate to include names of all partners as recorded with the Bank.

Details of Bidder's Banker (Not Applicable)

1	Name and full Address of the Banker	
2	Name of contact executives, Email ID, contact numbers (land line and mobile), Fax number etc. (The person can be contacted at the office of their banker by the Bank in case it is needed.)	

Signature of the bidder with seal

Format 1A

List of Technical Personnel. Giving Details about their Technical Qualifications. Experience including that in RBI

Sr. No.	Name	Age	Qualifications	Construction experience	Nature of works handled	Name of the projects handled costing more than ₹ lakh	Date from which employed in your organization	Indicate special experience (if any) such as Advanced Construction management techniques like CPM/PERT and indicate projects in which such techniques were employed if any
1.	2.	3.	4.	5.	6.	7.	8.	9.

Signature of the bidder with seal

Draft Articles of Agreement

(On Non Judicial Stamp Paper of appropriate value)

यह करार की शर्तें मुंबई में को एक पक्ष भारतीय रिजर्व बैंक जिसका केंद्रीय कार्यालय मुंबई में है (इसके पश्चात जिसे नियुक्ता कहा गया है) और दूसरा पक्ष है (जिसे इसके बाद ठेकेदार कहा गया है) के बीच हुआ है।	ARTICLES OF AGREEMENT made theday ofbetween the Reserve Bank of India having its Central Office at Mumbai,(hereinafter called “the Employer”) of the one part and (hereinaftercalled “the Contractor”) of the other part.
जबकि नियोक्ता जलादा और वरदा, प्रभादेवी, मुंबई में आरबीआई के वरिष्ठ अधिकारियों के क्वार्टर में इमारतों की छतों पर वॉटरप्रूफ कोटिंग की सामान्य मरम्मत और अनुप्रयोग का काम करने का इच्छुक है और उसने किए जाने वाले कार्यों का वर्णन करने वाले चित्र और विनिर्देश तैयार किए हैं। और जबकि उक्त रेखाचित्रों, विशिष्टताओं और मात्राओं की अनुसूची पर इसके पक्षकारों द्वारा या उनकी ओर से हस्ताक्षर किए गए हैं। और जबकि ठेकेदार यहाँ तय की गई शर्तों, विशेष शर्तों में उल्लिखित शर्तों तथा संविदा की शर्तों एवं मात्राओं की अनुसूची में बताई गई शर्तों पर (उक्त सभी को आगे सामूहिक रूप से “ उक्त शर्तें” कहा जाएगा), उक्त ड्रॉविंग (रेखाचित्र) में दर्शाए और / या उक्त विशिष्टताओं में वर्णित और उक्त मात्राओं की अनुसूची में दर्शाए कार्य, वहाँ पर तय की गई दरों के अनुरूप, भुगतान के लिए देय राशि या ऐसी अन्य राशि जो उसके तहत देय हो (जिसको इसके बाद “ उक्त ठेका राशि” के रूप में संदर्भित किया जाएगा”) के अधीन कार्य करने के लिए सहमत है।	WHEREAS the Employer is desirous of carrying out the work of General repairs and application of waterproof coating on terraces of buildings at RBI Senior Officers’ Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025 and has caused drawings and specifications describing the works to be done. AND WHEREAS the said drawings, the Specifications and the Schedule of Quantities have been signed by or on behalf of the parties hereto. AND WHEREAS the Contractor has agreed to execute upon and subject to the Conditions set forth herein and to the Conditions set forth 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 Specification and included in the Schedule of Quantities at the Respective rate therein set forth amounting to the sum as therein arrived at or such other sum as shall become payable there under (hereinafter referred to as “the said Contract Amount”).
अब यहाँ से इस प्रकार सहमति बनी है	NOW IT IS HEREBY AGREED AS FOLLOWS:
उक्त विचारणीय राशि के संदर्भ में, जो कि इस करार में तय तरीके के अनुसार भुगतान की जाएगी, ठेकेदार	In considerations of the said Contract Amount to be paid at the times and in the manner set forth in the

द्वारा उक्त रेखाचित्रों में दर्शाए गए एवं उक्त विशिष्टताओं तथा मात्राओं की अनुसूची में वर्णित काम को पूर्ण करने एवं शर्तों को कार्यान्वित करने के अधीन होगी।	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 Schedule of Quantities.
नियोक्ता ठेकेदार को शर्तों में उल्लेखित तरीके के अनुसार संविदा राशि या ऐसी अन्य राशि जो देय हो का समय पर भुगतान करेगा।	The Employer shall pay 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.
उक्त शर्तों में "वास्तुकार" शब्द का अर्थ इस संविदा के तहत नवीनीकरण कार्यों की वास्तु योजना और डिजाइनिंग आदि के उद्देश्य से 'वास्तुकार' होगा।	The term "Architect" in the said conditions shall mean 'Architect' for the purpose of architectural planning & designing etc. of the Renovation works under this contract.
भारतीय रिज़र्व बैंक निर्माण कार्यों के पर्यवेक्षण, बिलों के प्रमाणीकरण, भुगतान और संविदा के विभिन्न नियमों, शर्तों और पूर्वापेक्षाओं के कार्यान्वयन के लिए सीधे व्यवस्था और प्रबंध करेगा।	The Reserve Bank of India shall administer and directly arrange for supervision of works, certification of bills, making payments and implementation of various terms, conditions and stipulations of the contract.
यहाँ उल्लेखित शर्तें और विभिन्न अनुसूचियों को इस करार के आधार के रूप में पढ़ा और समझा जाएगा और यहाँ मौजूद पार्टियां अपनी ओर से उक्त शर्तों द्वारा बंधे हैं, स्वयं को उक्त शर्तों को समर्पित करते हैं और उक्त शर्तों में उल्लेखित अनुसार अपनी ओर से करार का निष्पादन करेंगे।	The said conditions and various schedules shall be read and construed as forming part of this agreement, and the parties hereto shall respectively abide by, submit themselves to the said Conditions and perform the agreements on their part respectively in the said Conditions contained.
करार और यहाँ उल्लिखित दस्तावेज़ इस संविदा का आधार बनाएंगे	The agreement and documents mentioned herein shall form the basis of this Contract.
यह अनुबंध न तो एक निश्चित एकमुश्त अनुबंध है और न ही टुकड़ा कार्य अनुबंध है, बल्कि जलादा और वरदा, प्रभादेवी, मुंबई में आरबीआई के वरिष्ठ अधिकारियों के क्वार्टर में इमारतों की छतों पर वॉटरप्रूफ कोटिंग की सामान्य मरम्मत और अनुप्रयोग के संबंध में कार्य करने का अनुबंध है। दरों और संभावित मात्राओं की अनुसूची में निहित दर पर या उक्त शर्तों में प्रदान की गई दर पर वास्तविक मापी गई मात्रा के अनुसार भुगतान किया जाना है।	This Contract is neither a fixed Lump sum contract nor a Piece Work Contract but is a Contract to carry out the work in respect of General repairs and application of waterproof coating on terraces of buildings at RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025 To be paid for according to actual measured quantities at the rate contained in the Schedule of rates and Probable Quantities or as provided in the said Conditions.
उक्त शर्तों में निर्धारित तरीके के अनुसार ठेकेदार सिविल निर्माण कार्यों से संबंधित सभी कार्यों, सेनेटरी कार्य और फिटिंग, स्थायी जल आपूर्ति, विद्युत इन्स्टालेशन, फिटिंग, एयर कंडीशनिंग और अन्य संबंधित कार्यों से संबंधित सभी कार्यों को करने के लिए हर उचित सुविधा प्रदान करेगा और इस तरह के कार्यों के पूरा होने	The Contractor shall afford every reasonable facility for the carrying out of all works relating to civil works, installation of sanitary work and fittings, permanent water supply, electrical installations, fittings, air conditioning and other ancillary works in the manner laid down in the said conditions and shall make good any

के बाद दीवारों, फर्श आदि को हुए किसी भी नुकसान को पुनः ठीक करेगा।	damages done to walls, floors etc. after the completion of such works.
नियोक्ता के पास इस संविदा के पूर्वाग्रह के बिना कार्य के किसी भी वस्तु (आइटम) को जोड़कर या हटाकर या उसी के कुछ भाग को बनाए रखकर रेखाचित्र और कार्य की प्रकृति को बदलने का अधिकार सुरक्षित है।	The Employer 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 arrived out without prejudice to this contract.
समय को इस संविदा के तत्व के रूप में माना जाएगा और ठेकेदार एतद्वारा साइट को सौंपे जाने के तुरंत बाद या उक्त शर्तों में उल्लिखित कार्यारंभ की निर्धारित तिथि से, जो भी बाद में हो, काम शुरू करने और तथापि समय विस्तार प्रावधानों के अधीन सम्पूर्ण कार्य को पूरा 4 महीने के भीतर पूर्ण करने के लिए सहमत है।	Time shall be considered as the essence of this Contract and the Contractor hereby agrees to commence the work soon after the site is handed over to him or from the scheduled date of commencement as provided for in the said Conditions whichever is later and to complete the entire work within 4 months subject nevertheless to the provisions for extension of time.
इस संविदा के तहत नियोक्ता द्वारा सभी भुगतान केवल मुंबई में ही किए जाएंगे।	All payments by the Employer under this Contract will be made only at Mumbai
इस करार से जुड़े या किसी भी तरह से उत्पन्न होने वाले सभी विवादों को मुंबई में उत्पन्न माना जाएगा और उसका निर्धारण केवल मुंबई में स्थित न्यायालय के अधिकार क्षेत्र में होगा।	All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Mumbai and only Courts in Mumbai shall have jurisdiction to determine the same.
यह कि इस संविदा के कई अंशों को ठेकेदार द्वारा पूरी तरह से पढ़ा और समझा गया है। ठेकेदार निविदा में दी गई मात्रा से अधिक मात्रा के भुगतान के लिए तब तक हकदार नहीं होगा जब तक कि बैंक के प्रभारी अभियंता से विशिष्ट लिखित अनुदेशों के तहत आदेश नहीं दिया जाता है।	That the several parts of this Contract have been read by the Contractor and fully understood by the Contractor. The Contractor shall not be entitled for the payment for the quantities beyond the tendered quantities unless ordered for by specific written instructions from the Bank's Engineer-in-Charge.
ठेकेदार बैंक के बुनियादी ढांचे उपकरणों / प्रणालियों / आदि के बारे में प्रत्यक्ष या अप्रत्यक्ष रूप से किसी भी जानकारी, सामग्री और विवरण का किसी भी तीसरे पक्ष के साथ खुलासा नहीं करेगा, जो कि इस करार के संबंध में संविदात्मक दायित्वों के निर्वहन के दौरान ठेकेदार या उसके कर्मचारियों के ध्यान में या ज्ञान में आ सकता है, और हर समय उन्हें सख्त गोपनीय रखेगा। ठेकेदार करार के विवरण को निजी और गोपनीय मानेंगे, सिवा इस सीमा के कि जो इसके तहत दायित्वों को पूरा करने के लिए या लागू कानूनों का पालन करने के लिए	The Contractor shall not disclose directly or indirectly any information, materials and details of the Bank's infrastructure/systems/equipment etc., which may come to the possession or knowledge of the Contractor during the course of discharging its contractual obligations in connection with this agreement, to any third party and shall at all times hold the same in strictest confidence. The Contractor shall treat the details of the contract as private and confidential, except to the extent necessary to carry out the obligations under it or to comply with applicable

आवश्यक है। ठेकेदार बैंक की पूर्व लिखित सहमति के बिना किसी भी व्यापार या तकनीकी पेपर या अन्य जगहों पर कार्य की विशेषताओं को प्रकाशित नहीं करेगा, न ही प्रकाशित करने की अनुमति देगा या उजागर नहीं करेगा। ठेकेदार किसी भी गोपनीय जानकारी के प्रकटीकरण के परिणामस्वरूप नियोक्ता को हुई किसी भी प्रकार की हानि के लिए नियोक्ता को क्षतिपूर्ति करेगा। उक्त का पालन करने में विफलता को ठेकेदार की ओर से अनुबंध को भंग करने के रूप में माना जाएगा और नियोक्ता नुकसान का दावा करने और कानूनी कदम उठाने का हकदार होगा। ठेकेदार इस बात को सुनिश्चित करने के लिए अपने कर्मचारियों के संबंध में सभी उचित कार्यवाही करेगा कि इस करार के तहत गोपनीय जानकारी के गैर-प्रकटीकरण के दायित्वों को पूरी तरह से संतुष्ट किया जा रहा है। गैर प्रकटीकरण और गोपनीयता के संबंध में ठेकेदार-के दायित्व किसी भी कारण से होने वाले इस करार की समाप्ति या समापन को बचाये ंगे।	laws. The Contractor shall not publish, permit to be published, or disclose any particulars of the works in any trade or technical paper or elsewhere without the previous written consent of the Employer. The Contractor shall indemnify the Employer for any loss suffered by the Employer as a result of disclosure of any confidential information. Failure to observe the above shall be treated as breach of contract on the part of the Contractor and the Employer shall be entitled to claim damages and pursue legal remedies. The Contractor shall take all appropriate actions with respect to its employees to ensure that the obligations of non-disclosure of confidential information under this agreement are fully satisfied. The Contractor's obligations with respect to non-disclosure and confidentiality will Survive the expiry or termination of this agreement for whatever reason.
15. कार्य स्थल पर महिलाओं के यौन उत्पीड़न की रोकथाम का खंड ए) फर्म, बैंक के परिसर के भीतर अपने (फर्म के) कर्मचारी के खिलाफ यौन उत्पीड़न की किसी भी शिकायत के मामले में पूर्णतः जिम्मेदार होंगी, भारतीय रिज़र्व बैंक द्वारा क्षेत्रीय समिति के समक्ष शिकायत दर्ज की जाएगी और बैंक उस शिकायत के संबंध में उक्त अधिनियम के तहत उचित कार्यवाही की जाना सुनिश्चित करेगा। बी.) बैंक के किसी भी कर्मचारी के विरुद्ध फर्म के किसी भी कर्मचारी की तरफ से यौन उत्पीड़न होने की कोई भी शिकायत का बैंक द्वारा गठित क्षेत्रीय शिकायत समिति द्वारा संज्ञान लिया जाएगा। सी.) फर्म किसी भी मौद्रिक क्षतिपूर्ति के लिए जिम्मेदार	15. <u>Clause of Prevention of Sexual Harassment at Work place:-</u> a) The firm shall be solely responsible in case of any complaint of sexual harassment against its employee within the premises of the Bank, the complaint will be filed before the Regional Committee constituted by the Reserve Bank of India and Bank shall ensure appropriate action under the said Act in respect of the complaint. b) Any complaint of sexual harassment from any aggrieved employee of the firm against any employee of the Bank shall be taken cognizance of by the Regional Complaint Committee constituted by the Bank. c). The firm shall be responsible for any monetary compensation that may need to be paid in case the incident involves the employees of the firm, for instance any monetary relief to Bank's employees,

होगा, जिसे फर्म के कर्मचारियों को शामिल करने वाली घटना में भुगतान करने की आवश्यकता हो सकती है, उदाहरण के लिए बैंक के कर्मचारी को कोई भी मौद्रिक राहत, अगर समिति द्वारा फर्म के कर्मचारी द्वारा यौन उत्पीड़न किया जाना साबित होता है। डी) फर्म कार्यस्थल पर यौन उत्पीड़न की रोकथाम और संबंधित मुद्दों के बारे में अपने कर्मचारियों को शिक्षित करने के लिए जिम्मेदार होगा। ई) फर्म बैंक परिसर में नियोजित अपने कर्मचारियों की पूर्ण एवं अद्यतन सूची उपलब्ध कराएगा।	if sexual violence by the employee of the firm is proved. d) The firm shall be responsible for educating its employees about prevention of sexual harassment at work place and related issues. e) The firm shall provide a complete and updated list of its employees who are deployed within the Bank's premises.
16. गैर-प्रकटीकरण खंड - ठेकेदार बैंक के बुनियादी ढांचे उपकरणों आदि के बारे में प्रत्यक्ष या / प्रणालियों / अप्रत्यक्ष रूप से किसी भी जानकारी, सामग्री और विवरण का किसी भी तीसरे पक्ष के साथ खुलासा नहीं करेगा, जो कि इस करार के संबंध में संविदात्मक दायित्वों के निर्वहन के दौरान ठेकेदार या उसके कर्मचारियों के ध्यान में या ज्ञान में आ सकता है, और हर समय उन्हें सख्त गोपनीय रखेगा। ठेकेदार करार के विवरण को निजी और गोपनीय मानेंगे, सिवा इस सीमा के कि जो इसके तहत दायित्वों को पूरा करने के लिए या लागू कानूनों का पालन करने के लिए आवश्यक है। ठेकेदार बैंक की पूर्व लिखित सहमति के बिना किसी भी व्यापार या तकनीकी पेपर या अन्य जगहों पर कार्य की विशेषताओं को प्रकाशित नहीं करेगा, न ही प्रकाशित करने की अनुमति देगा या उजागर नहीं करेगा। ठेकेदार किसी भी गोपनीय जानकारी के प्रकटीकरण के परिणामस्वरूप नियोक्ता को हुई किसी भी प्रकार की हानि के लिए नियोक्ता को क्षतिपूर्ति करेगा। उक्त का पालन करने में विफलता को ठेकेदार की ओर से अनुबंध को भंग करने के रूप में माना जाएगा और नियोक्ता नुकसान का दावा करने और कानूनी कदम उठाने का हकदार होगा। ठेकेदार इस बात को सुनिश्चित करने के लिए अपने कर्मचारियों के संबंध में सभी उचित कार्यवाही करेगा कि	16. Non-Disclosure clause: The Contractor shall not disclose directly or indirectly any information, materials and details of the Bank's infrastructure/systems/equipment etc., which may come to the possession or knowledge of the Contractor during the course of discharging its contractual obligations in connection with this agreement, to any third party and shall at all times hold the same in strictest confidence. The Contractor shall treat the details of the contract as private and confidential, except to the extent necessary to carry out the obligations under it or to comply with applicable laws. The Contractor shall not publish, permit to be published, or disclose any particulars of the works in any trade or technical paper or elsewhere without the previous written consent of the Employer. The Contractor shall indemnify the Employer for any loss suffered by the Employer as a result of disclosure of any confidential information. Failure to observe the above shall be treated as breach of contract on the part of the Contractor and the Employer shall be entitled to claim damages and pursue legal remedies. The Contractor shall take all appropriate actions with respect to its employees to ensure that the obligations of non-disclosure of confidential information under this agreement are fully satisfied. The Contractor's obligations with respect to non-disclosure and confidentiality will survive the expiry or termination of this agreement for whatever reason.

इस करार के तहत गोपनीय जानकारी के गैर-प्रकटीकरण के दायित्वों को पूरी तरह से संतुष्ट किया जा रहा है। गैर प्रकटीकरण और गोपनीयता के संबंध में ठेकेदार-के दायित्व किसी भी कारण से होने वाले इस करार की समाप्ति या समापन को बचायेेंगे।	
17. न्यूनतम मजदूरी अधिनियम : ठेकेदार लागू न्यूनतम मजदूरी अधिनियम व श्रम अधिनियम का अनुपालन करेंगे। किसी भी सांविधिक नियम / अपेक्षाओं के अनुसार जारी नोटिस / दंड, यदि कोई हो तो, का भुगतान ठेकेदार द्वारा बैंक से किसी दावे के बगैर किया जाएगा।	17. <u>Minimum Wages Act:</u> - Contractor shall comply with minimum wage act and labour act in force. Notices /penalty, if any, issued /imposed by any statutory norms/requirements shall be paid by the contractor, without any claim to the Bank.
18. कोविड -19 की वर्तमान महामारी की स्थिति में पालन किए जाने वाले प्रोटोकॉल, हिफाजती उपाय और सुरक्षा मानदंड : ठेकेदारों को कोविड -19 की वर्तमान महामारी की स्थिति के दौरान बैंक द्वारा निर्धारित सभी सुरक्षा, हिफाजती मानदंडों और मानक प्रोटोकॉल का पालन करना होगा जैसे कि मास्क पहनना, हैंड सैनिटाइज़र का उपयोग करना, नियमित रूप से साबुन डिस्पेंसर से हाथ धोना, हाथ के दस्ताने पहनना, केवल कार्य स्थल से संबंधित श्रमिकों की आवाजाही, नियमित सुरक्षा जाँच आदि। इसका उल्लंघन करने पर बैंक के शिष्टाचार व सुरक्षा अधिकारी द्वारा प्रत्येक अवसर पर जुर्माना लगाया जा सकता है, जो ठेकेदारों को देय भुगतान से वसूल किया जा सकता है।	18. <u>Protocols, safety measures and security norms of present pandemic situation of Covid-19 to be followed:</u> The contractors shall follow all security, safety norms and the standard protocol laid down by the Bank during the present pandemic situation of Covid -19 like wearing mass, using hand sanitizer, regularly washing hands with soap dispensers, wearing hand glases, movement of the workers only pertaining to the work place, regular security checks etc. The violation of the same may be entitled for penalty on each occasion imposed by the Bank's P & SO, which may be recovered from the payment due to the contractors.
19. संविदा की समाप्ति के कारण चूक के मामले में ठेकेदारों से वसूल की जाने वाली क्षतिपूर्ति : यदि कार्य/संविदा के पूरा होने से पहले किसी भी पार्टी द्वारा संविदा को समाप्त कर दिया जाता है। यह माना जाता है कि, ठेकेदार निर्धारित समय अवधि और स्वीकृत विस्तार में उपर्युक्त कार्य को पूरा करने में विफल रहे हैं।	19. <u>Compensation to be recovered from the Contractors in case of default on account of termination of contract:</u> If the contract is terminated from either of the party before completion of work/contract. It is treated that, the contractors are failed to complete the captioned work in stipulated time period and the approved extension. The left over or balance work will be carried out directly by the bank at the risk and cost of the contractors. Such risk and cost

बचा हुआ या शेष कार्य सीधे बैंक द्वारा ठेकेदारों के जोखिम और लागत पर किया जाएगा। इस तरह की जोखिम और लागत राशि यानी ठेकेदारों की निविदा दरों के आधार पर लागत और कार्य पूरा करने के लिए बैंक द्वारा की गई नई संविदा की दरों के अनुसार प्राप्त राशि के बीच अंतर की गणना से प्राप्त राशि। यह जोखिम और लागत राशि बैंक द्वारा ठेकेदारों को देय किसी भी राशि जैसे अंतिम बिल की सकल राशि, निष्पादन बैंक गारंटी राशि, संविदा की अद्यतित परिवर्तित प्रतिभूति जमा (ईएमडी और आरएमडी) इसके अतिरिक्त सभी संपदा प्रकोष्ठों / कार्यालय यानी संपदा कार्यालय, फोर्ट, , भायखला कक्ष, बीकेसी कक्ष इत्यादि में लंबित किसी भी अन्य बिल / बिलों सहित के समक्ष देय राशि में से वसूल की जाएगी, जो कि संविदा की जबरन समाप्ति और कार्य को पूर्ण करने में व्यर्थ हुए समय के कारण बैंक द्वारा उठाया गया एक प्रत्यक्ष वित्तीय नुकसान है।	amount i.e. amount arrived by evaluating the difference of cost between cost based on tender rates of the contractors and as per the rates of new contract engaged by the Bank for completion of work. This risk and cost amount will be recovered by the bank, which is a direct financial loss incurred by the bank on account of forced termination of contract and against the time lost in completion of the work from any amount payable to the contractors such as gross amount of final bill, Performance Bank Guarantee amount, up to date converted Security Deposit (EMD and RMD) of the contract further including amount payable against any other bill/bills pending at all the Estate Cells/Office i.e. Estate office, Fort, Mumbai, Byculla Cell, BKC Cell etc.
इसके साक्ष में, नियोक्ता और ठेकेदार ने अपने विधिवत अधिकृत अधिकारी के माध्यम से इन विलेखों के लिए अपने भाग निर्धारित किए हैं एवं दो कथित डुप्लिकेट को निष्पादित किये जा सकते हैं, दिन और वर्ष पहले यहाँ ऊपर लिखें गये हैं। (यदि ठेकेदार एक साझेदारी या व्यक्तिगत स्वामित्व है) इसके साक्ष में, नियोक्ता ने अपने विधिवत अधिकृत अधिकारी के माध्यम से इन विलेखों के लिए अपने भाग निर्धारित किए हैं और ठेकेदार ने अपनी आम मुहर को यहां लगाया है और इसके बाद उसकी ओर से दो कथित डुप्लिकेट को निष्पादित किये जा सकते हैं, दिन और वर्ष पहले यहाँ ऊपर लिखें गये हैं।	IN WITNESS WHEREOF the Employer and the Contractor have set their respective hands to these presents and two duplicates hereof the day and year first hereinabove written. (If the Contractor is a partnership or an individual) IN WITNESS WHEREOF the Employer has set its hands to these presents through its duly authorized officials and the Contractor has caused its common seal to be affixed hereunto and the said two duplicates/has caused these presents and the said two duplicates hereof to be executed on its behalf, the day and year first hereinabove written. (If the Contractor is a Company)
भारतीय रिजर्व बैंक द्वारा हस्ताक्षरित और वितरित	SIGNED AND DELIVERED by the Reserve Bank of India by the hand of
श्री _____ के द्वारा	Shri _____

(नाम और पदनाम)		(Name and Designation)	
इनकी उपस्थिति में -		 In the presence of	
साक्षी -		Witnesses –	
1. _____		1. _____	
पता:		Address:	
2. _____		2. _____	
पता:		Address:	
यदि भाग साझेदारी फर्म या व्यक्तिगत स्वामी है, तो सभी के द्वारा या सभी भागीदारों की तरफ से हस्ताक्षरित होना चाहिए		If the part is a partnership firm or any individual should be signed by all or on behalf of all the partners.	
..... के द्वारा हस्ताक्षरित और वितरित किया गया था। साक्षी 1)..... पता 2) पता		SIGNED AND DELIVERED BY Witnesses – 1)..... Address 2) Address	
दिनांक को आयोजित बैठक में निदेशक मण्डल द्वारा पारित संकल्प के अनुसरण में आम मुहर यहाँ के लिए लगाई जाती है। की उपस्थिति में (1) (2)	यदि ठेकेदार ने आम मुहर के तहत हस्ताक्षर किये हैं, तो उस हस्ताक्षर का संस्था के अंतर्नियम में मुहर क्लॉज के साथ मिलान करना चाहिए। यदि ठेकेदार की तरफ से मुख्तारनामा प्राप्त व्यक्ति ने हस्ताक्षर किये हैं, चाहे वह कंपनी हो या कोई व्यक्ति	THE COMMON SEAL OF Was hereunto affixed pursuant to the resolutions passed By its Board of Directors at the meeting held on In the presence of 1.	If the Contractor signs under its common Seal the signature clause should tally with their sealing clause in the Articles of Associations. The Contractor is signing by the hand of power of attorney whether a company or individual.

..... 		 2. 	
निदेशक जिन्होंने वहाँ मौजूद की उपस्थिति में इन प्रस्तुतों पर हस्ताक्षर किये हैं - (1) (2)		Directors who have signed these presents in taken thereof in the presence of (1) (2)	
2. _____		2. _____	
यदि ठेकेदार की तरफ से मुख्तारनामा प्राप्त व्यक्ति ने हस्ताक्षर किये हैं, चाहे वह कंपनी हो या कोई व्यक्ति		If the Contractor is signed by the hand of Power of Attorney, whether of a company or an individual	
इनके द्वारा हस्ताक्षरित और वितरित-- इन के हाथ से ठेकेदार द्वारा श्री _____ और विधिवत गठित वकील		SIGNED AND DELIVERED BY - The Contractor by the hand of Shri _____ and duly constituted attorney.	

PROFORMA OF BANK GUARANTEE FOR EARNEST MONEY DEPOSIT/ BID SECURITY
(On Non-Judicial Stamp Paper of appropriate value)

Place: _____
Date: _____

Regional Director
Reserve Bank of India
Estate Cell Byculla
Mumbai

Dear Sir,

Name of Work: General repairs and application of waterproof coating on terraces of buildings at RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025.

Ref.: NIT/Advt.No. _____ date _____

WHEREAS

The Reserve Bank of India, having its Central Office at Shahid Bhagat Singh Road, Mumbai (hereinafter called the 'RBI') has invited tenders for the captioned work (hereinafter called "the said tender") on the terms and conditions mentioned in the said tender documents.

It is one of the terms of invitation of tenders that the tenderer shall furnish a Bank Guarantee for a sum of Rs. _____ (Rupees _____ only) as Earnest Money Deposit (EMD).

M/s. (Name of the Tenderer/Bidder) _____, (hereinafter called as "the Tenderer/ Bidder"), who are our Clients/Constituents intend to submit their tender/ Bid for the said work and have requested us to furnish Bank Guarantee to RBI in respect of the said sum of Rs. _____ (Rupees _____ only) in respect of EMD.

NOW THIS GUARANTEE WITNESSETH

1. We _____ (Name of the Bank) do hereby agree with and undertake to RBI, their Successors, Assigns that in the event of the RBI coming to the conclusion that the Tenderer have not performed their obligations under the said conditions of the tender or have committed a breach thereof, which conclusion shall be binding on us as well as the said Tenderer; we shall on demand by the RBI, pay without demur to the RBI, a sum of Rs. _____ (Rupees _____ only) or any lower amount that may be demanded by the RBI. Our guarantee shall be treated as make to the Earnest Money

Deposit for the due performance of the obligations of the Tenderer under the said Conditions, provided, however, that our liability against such sum shall not exceed the sum of Rs. _____ (Rupees _____ only).

2. We also agree to undertake to and confirm that the sum not exceeding Rs. _____ (Rupees _____ only) as aforesaid shall be paid by us without any demur or protest, merely on demand from the RBI on receipt of a notice in writing stating that the amount is due to them and we shall not ask for any further proof or evidence and the notice from the RBI shall be conclusive and binding on us and shall not be questioned by us in any respect or manner whatsoever. We undertake to pay the amount claimed by the RBI within a period of one week from the date of receipt of the notice as aforesaid.
3. We confirm that our obligation to the RBI under this guarantee shall be independent of the agreement or agreements or other understandings between the RBI and the Tenderer.

This guarantee shall not be revoked by us without prior consent in writing of the RBI.

We hereby further agree that –

- a) Any forbearance or commission on the part of the RBI in enforcing the conditions of the said agreement or in compliance with any of the terms and conditions stipulated in the said tender and/or hereunder or granting of any time or showing of any indulgence by the RBI to the Tenderer or any other matters in connection therewith shall not discharge us in any way and our obligation under this guarantee. This guarantee shall be discharged only by the performance by the Tenderers of their obligations and in the event of their failure to do so, by payment by us of the sum not exceeding Rs. _____ (Rupees _____ only).
- b) Our liability under these presents shall not exceed the sum of Rs. _____ (Rupees _____ only) .
- c) Our liability under this agreement shall not be affected by any infirmity or irregularity on the part of our said constituents/clients in tendering for the said work or their obligations there under or by dissolution or change in the constitution of our said constituents.
- d) This guarantee shall remain in force up to _____ (four months from the last date of submission of tender) provided that if so desired by the RBI, this guarantee shall be renewed for a further period as may be indicated by them on the same terms and conditions as contained herein.
- e) Our liability under these presents will terminate unless these presents are renewed as provided hereinabove on the _____ or on the day when our said constituents comply with their obligations, as to which a certificate in writing by the RBI alone is the conclusive proof whichever date is later. Unless a claim or suit or action is filed against us within

_____or any extended period, all the rights of the RBI against us under this guarantee shall be forfeited and we shall be released and discharged from all our obligations and liabilities hereunder.

Yours faithfully,

For and on behalf of _____Bank.

Authorized Official (with seal)

(NB: This guarantee will require stamp duty as applicable in the state, where it is executed and shall be signed by the official whose signature and authority shall be verified).

PROFORMA OF BANK GUARANTEE for PERFORMANCE (SECURITY DEPOSIT)

(On Non-Judicial Stamp Paper of appropriate value)

Place: _____

Date: _____

Regional Director
Reserve Bank of India
Estate Cell Byculla
Mumbai

Dear Sir,

Name of Work: General repairs and application of waterproof coating on terraces of buildings at RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025

Whereas Reserve Bank of India, having its Central Office at Shahid Bhagat Singh Road, Mumbai, (hereinafter called "the RBI") has awarded the Contract for the captioned project (hereinafter called the "Contract") to M/s _____ (Name of the Contractor) (hereinafter called "the said Contractor" which expression shall include its successors and assigns).

AND Whereas the Contractor is bound by the said Contract to submit to RBI a Performance Security deposit for a total amount of ₹ _____ (Rupees _____ only) (Amount in figures and words) for the due fulfilment by the said contractor of the terms and conditions contained in the contract. We, _____ (Name of the Bank), (hereinafter called "the Bank"), at the request of M/s _____

_____ , the contractor, do hereby undertake to pay to the RBI an amount not exceeding ₹ _____ as Performance Guarantee for due fulfilment of the terms and conditions of the contract.

NOW THIS GUARANTEE WITNESSETH

1. We _____ (Name of the Bank) do hereby agree with and undertake to RBI, their Successors, Assigns that in the event of the RBI coming to the conclusion that the Contractor has not performed his obligations under the said conditions of the contract or have committed a breach thereof, which conclusion shall be binding on us as well as the said contractor; we shall on demand by the RBI, pay without demur to the RBI, a sum of ₹ _____ (Rupees only) or any lower amount that may be demanded by the RBI. Our guarantee shall be treated as make to the Performance Guarantee Amount for the due performance of the obligations of the Contractor under the said Contract, provided, however, that our liability against such sum shall not exceed the sum of ₹ _____ (Rupees _____ only).

We also agree to undertake to and confirm that the sum not exceeding ₹
(Rupees _____ only) as aforesaid shall be paid by us without any demur or protest, merely on demand from the RBI on receipt of a notice in writing stating that the amount is due to them and we shall not ask for any further proof or evidence and the notice from the RBI shall be conclusive and binding on us and shall not be questioned by us in any respect or manner whatsoever. The Bank shall pay to RBI any money so demanded notwithstanding any dispute/disputes raised by the Contractor in any suit or proceedings pending before any Court, Tribunal or Arbitrator/s relating thereto and the liability under

this guarantee shall be absolute and unequivocal. We undertake to pay the amount claimed by the RBI within a period of one week from the date of receipt of the notice as aforesaid.

3. We confirm that our obligation to the RBI under this guarantee shall be independent of the agreement or agreements or other understandings between the RBI and the Contractor.
4. This guarantee shall not be revoked by us without prior consent in writing of the RBI.

We hereby further agree that –

- f) Any forbearance or commission on the part of the RBI in enforcing the conditions of the said agreement or in compliance with any of the terms and conditions stipulated in the said Contract and/or hereunder or granting of any time or showing of any indulgence by the RBI to the Contractor or any other matters in connection therewith shall not discharge us in any way and our obligation under this guarantee. This guarantee shall be discharged only by the performance by the Contractor of their obligations and in the event of their failure to do so, by payment by us of the sum not exceeding ₹ _____ (Rupees _____ only).
- g) Our liability under these presents shall not exceed the sum of ₹ _____ (Rupees _____ only) .
- h) Our liability under this agreement shall not be affected by any infirmity or irregularity on the part of our said constituents/clients or their obligations thereunder or by dissolution or change in the constitution of our said constituents.
- i) This guarantee shall remain in force up to _____ (30 days beyond the work completion period) provided that if so desired by the RBI, this guarantee shall be renewed for a further period as may be indicated by them on the same terms and conditions as contained herein.
- j) Our liability under these presents will terminate unless these presents are renewed as provided hereinabove on the _____ or on the day when our said constituents comply with their obligations, as to which a certificate in writing by the RBI alone is the conclusive proof whichever date is later. Unless a claim or suit or action is filed against us within _____ or any extended period, all the rights of the RBI against us under this guarantee shall be forfeited and we shall be released and discharged from all our obligations and liabilities hereunder.

In witness whereof I/We of the Bank have signed and sealed this guarantee on the----- day of ----- (Month).....being herewith duly authorized.

For and on behalf of _____ (Name of the Bank)

Signature of authorized Bank official

Name:

Designation:

Stamp/ Seal of the Bank

Signed, sealed and delivered for and on behalf of the Bank by the above named in the presence of :

Witness 1

Signature

Name

Address

Witness 2

Signature

Name

Address

Annexure – 4A

PROFORMA OF BANK GUARANTEE FOR WATERPROOFING PERFORMANCE

Place: _____

Date: _____

Regional Director
Reserve Bank of India
Estate Cell Byculla
Mumbai

Dear Sir,

**General repairs and application of waterproof coating on terraces of buildings at RBI
Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025.**

Performa Bank Guarantee for WATERPROOFING PERFORMANCE

WHEREAS

Reserve Bank of India, having its Central Office at Shahid Bhagat Singh Road, Mumbai, (hereinafter called "the RBI") has awarded the Contract for the captioned project (hereinafter called the "Contract") to M/S _____ (Name of the Contractor) (hereinafter called "the said contractor" which expression shall include its successors and assigns).

AND whereas the contractor is bound by the said Contract to submit to RBI a Performance waterproofing guarantee for a total amount of Rs _____ (Rupees _____ only) (Amount in figures and words) for the due fulfilment by the said contractor of the terms and conditions contained in the contract.

We, _____ (Name of the Bank), (hereinafter called "the Bank"), at the request of M/s _____, the contractor, do hereby undertake to pay to the RBI an amount not exceeding Rs _____ as Performance Waterproofing Guarantee for due fulfilment of the terms and conditions of the contract.

NOW THIS GUARANTEE WITNESSETH

We _____ (Name of the Bank) do hereby agree with and undertake to RBI, their Successors, Assigns that in the event of the RBI coming to the conclusion that the Contractor has not performed his obligation under the said condition of the contract or have committed a breach thereof, which conclusion shall be binding on us all as well as the said contractor; we shall on demand by the RBI, pay without demur to the RBI, a sum of Rs. _____

(Rupees _____ only) or any lower amount that may be demanded by the RBI. Our guarantee shall be treated as make to the Performance Waterproofing Guarantee Amount for the due performance of the obligations of the Contractor under the said Contract, provided, however, that our liability against such sum shall not exceed the sum of Rs. _____ (Rupees _____ only).

1. We also agree to undertake to and confirm that the sum not exceeding Rs. _____ (Rupees _____ only) as aforesaid shall be paid by us without any demur or protest, merely on the demand from the RBI on receipt of a notice in writing stating that the amount is due to them and we shall not ask for any further proof or evidence and the notice from the RBI shall be conclusive and binding on us and shall not be questioned by us in any respect or manner whatsoever. The Bank shall pay to RBI any money so demanded notwithstanding any dispute/disputes raised by the Contractor in any suit or proceedings pending before any court, Tribunal or Arbitrator/s relating thereto and the liability to pay the amount claimed by the RBI within a period of one week from the date of receipt of the notice as aforesaid.
2. We confirm that our obligation to the RBI under this guarantee shall be independent of the agreement or agreements or other understanding between the RBI and the Contractor.
3. This guarantee shall not be revoked by us without prior consent in writing of the RBI.

We hereby further agree that-

- a) Any forbearance or commission on the part of the RBI in enforcing the conditions of the said agreement or in compliance with any of the terms and conditions stipulated in the said Contract and/or hereunder or granting of any time or showing of any indulgence by the RBI to the Contractor or any other matters in connection therewith shall not discharge us in any way and our obligation under this guarantee. This guarantee shall be discharged only by the performance by the Contractor of their obligations and in the event of their failure to do so, by payment by us of the sum not exceeding Rs. _____ (Rupees _____ only)
- b) Our liability under these presents shall not exceed the sum of Rs. _____ (Rupees. _____ only)
- c) Our liability under this agreement shall not be affected by any infirmity or irregularity on the part of our said constituents/clients or their obligations thereunder or by dissolution or change in the constitution of our said constituents.
- d) This guarantee shall remain in force up to _____ (60 days beyond 5 years from virtual completion of the work) provided that if so desired by the RBI, this guarantee shall be renewed for a further period as may be indicated by them on the same terms and conditions as contained herein.
- e) Our liability under these presents will terminate unless these presents are renewed as provided hereinabove on the _____ or on the day when our said constituents comply with their obligations, as to which a certificate in writing by the RBI alone is the conclusive proof whichever date is later. Unless a claim or suit or action is filed against us within _____ or any extended period, all the rights

of the RBI against us under this guarantee shall be forfeited and we shall be released and discharged from all our obligations and liabilities hereunder.

In witness whereof I/We of the Bank have signed and sealed this guarantee on the ____ day of _____ (Month)(Year) being herewith duly authorised.

For and on behalf of _____ (Name of the Bank)

Signature of authorised Bank official

Name:

Designation:

Stamp/Seal of the Bank

Signed, sealed and delivered for and on behalf of the Bank by above named in the presence of:

Witness 1

Signature.....

Name.....

Address.....

(NB: This guarantee will require stamp duty as applicable in the state, where it is executed and shall be signed by the official whose signature and authority shall be verified).

FORMAT FOR POWER OF ATTORNEY FOR AUTHORIZED SIGNATORY
(On Non-Judicial Stamp Paper of appropriate value)

To,
Regional Director
Reserve Bank of India
Estate Cell Byculia
Mumbai

Dear Sir/Madam,

General repairs and application of waterproof coating on terraces of buildings at RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025.

We.....(Name of the Bidder and address of their registered office) do hereby constitute, appoint and authorize Mr. / Ms.
.....(Name and residential address of Power of Attorney holder) who is presently employed with us and holding the position of as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our bid for the captioned Project, including signing and submission of all documents and providing information / responses to the Reserve Bank of India (RBI), representing us in all matters before RBI, and generally dealing with RBI in all matters in connection with our proposal for the said Project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

Signature/(s) of the Bidder

Name/(s)

Stamp/Seal of the Bidder

Note:

Power of Attorney should be properly stamped and notarized

Power of Attorney furnished by Contractor shall be irrevocable.

Annex 6: Proforma for providing input for NEFT Payment RTGS/NEFT/ECS – MANDATE
AUTHORISATION FORM

1. Supplier's / Vendor's Name:

[illegible]

2. Supplier's / Vendor's Name as per Bank Records:

[illegible]

3A. Supplier's Code

--	--	--	--	--

3B. Supplier's PAN Number: #

[illegible]

Quoting PAN No. in all the e-returns has become 100% mandatory w.e.f. 14-02-2008, hence ensure to fill- up this and also send a photocopy of PAN duly self-attested. If there is any difference between the name given in the supplier's name and name given in the PAN card, then a note to explain the reason for the difference and the correlation between both.

4. Supplier's / Vendor's Complete Postal Address:

Door No.							Street:											
Location:							District:											
City:							State					PIN						

5. Supplier's / Vendor's E-mail ID:

[illegible]

6. Supplier's / Vendor's Telephone Number & Mobile Phone Number:

[illegible]

7. Name of the Bank:

[illegible]

8. Bank (Branch) Postal Address:

[illegible]

9. RTGS*/NEFT** /MICR- Code of the Branch:

[illegible]

RTGS* - "Real Time Gross Settlement", NEFT** - "National Electronic Fund Transfer". MICR-Magnetic Ink Recognition Character These "IFSC" Codes are unique numbers of each Branch – "Indian Financial Services Code". For some Branches both the codes are the same and some Banks, may maintain one Code No. for RTGS and another Code No. for NEFT. Hence, please fill-up both the rows, even if it is the same.

10. Nature of the Account: (Tick whichever is applicable & put 'x' mark for the balance two accounts)

Saving Bank Account:	Cash Credit Account:	Current Account:	
----------------------	----------------------	------------------	--

11. Bank Account Number of the Supplier: ©

[illegible]

© Fill up from the 1st column. For the balance left out blank columns, please mention 'x' mark.

We hereby declare that the particulars given above are correct and complete. If the transaction is delayed for reasons of incomplete or incorrect information, we would not hold MDL responsible.

Date: _____ **Supplier's Seal:** _____ **Authorized Signature of the Supplier:** _____

Certified that the particulars as per Serial Numbers 2, 7 to 11 are correct as per our records.

Date: _____ Bank's Stamp _____ Authorized Signature of the Officer of the Bank. _____

Proforma for Indemnifying the Employer against Contract labour Rules/regulations
(On Non-Judicial Stamp Paper of appropriate value)

To,
Regional Director
Reserve Bank of India
Estate Cell Byculla
Mumbai

Dear Sir/Madam

**General repairs and application of waterproof coating on terraces of buildings at
RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025.**

We, M/s (Name of contractor), hereby undertake that we shall comply with all the statutory rules/ regulations with regard to the employment of contract labour and their payment.

We also hereby fully indemnify and keep indemnified the Employer, i.e. Reserve Bank of India, against payments to be made to the contract labour and for the observance of the laws in this regard without prejudice to our right to claim indemnity from our sub-contractors.

Yours faithfully,

For _____

Authorized signatory

Proforma for Indemnifying the Employer against Patent Rights
(On Non-Judicial Stamp Paper of appropriate value)

Regional Director
Reserve Bank of India
Estate Cell Byculla
Mumbai

Dear Sir/Madam

General repairs and application of waterproof coating on terraces of buildings at RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025.

M/s____(Name of Contractor) hereby undertake to fully indemnify and keep indemnified the Employer i.e. Reserve Bank of India 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 ourselves pay any royalties, licence fees etc. which may be payable in respect of any article or part thereof included in the contract or damages, cost and charges of all and every sort that may be legally incurred in respect thereof.

In the event of any claims made under or action brought against Employer in respect of any such matters as aforesaid, we shall, on being notified thereof, at our own expense, settle any dispute or conduct any litigation that may arise therefrom, provided that we shall not be liable to indemnify the Employer 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 Engineer-in-Charge in this behalf.

Yours faithfully,

For _____

Authorized signatory

NAME AND ADDRESS OF THE CONTRACTOR:

SIGN & SEAL OF THE CONTRACTOR:

Date:

Place:

FORMAT OF MEASUREMENT BOOK

M.B.No. _____

Page No. _____

Tender Item No./ Tender Page No.	Full Description of item of work	Measurements				Quantity
		No.	L	B	D/H	

Abstract of cost for

Running/Final Bill

Running Bill no:

.....

M.B. No. _____

Page No. _____

Serial No.	Tender Item No.	Description	Quantity	Rate ₹	Unit	Amount ₹
1	2	3	4	5	6	7

Part- II may be prepared taking into consideration buyback, if any, are there.

Proforma for Undertaking / Declaration / Certificate by the Bidder regarding country Sharing land border with India

(To be submitted by bidders on their letter head duly sealed and signed by the authorized signatory)

To,

.....

Reserve Bank of India

.....

Name of Work:

I/ We.....(Name and address, including Country of location of bidder) have read and understood the contents of the Office Memorandum (OM)F. No.6/18/2019-PPD dated July 23, 2020 and its subsequent orders / revision issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India regarding the restrictions on procurement from a bidder of a country which shares a land border with India.

2. I/We certify that..... (Name of the bidder)

- i. Is not from a country sharing landborder with India,or
- ii. Is from a country sharing landborder with India and has been registered with the Competent Authority, the certificate of which is enclosed,or
- iii. Is from a country sharing land border with India where Government of India has extended lines of credit,or
- iv. Is from a country sharing landborder with India where Government of India is engaged in development projects.

(Strike out whichever of the above is not applicable).

3. I/We further certify that (Name of bidder) fulfils all requirements in this regard and is eligible to be considered under the provision of the above referred OfficeMemorandum and its subsequent orders / revision. I/We also undertake that even in case of contracts where we are permitted by the Bank /RBI to sub-contract I/we(Name of bidder) will not sub-contract any work to a contractor from country(ies) sharing land border with India, unless such contractor

fulfils all the requirements contained in the above referred office memorandum/ order.

4. I/ We know and understand that, if this Undertaking / Declaration / Certificate submitted by us is found to be false, the Bank shall be free to reject / terminate our tender / Work Order and that the Bank shall also be free to initiate any legal action in accordance with law including forfeiting of Earnest Money Deposit / Performance Bank Guarantee / Security Deposit and / or debarring us from participating in *tenders* invited by the Bank *in* future.

Signature and name of the authorized signatory of the Bidder

With rubber stamp

Place:

Date:

Grounds for debarment of firms from bidding:

A bidder is liable for debarment/ disqualification from bidding on the following grounds:

1 . If it is determined that the bidder has committed the following acts or omissions in contravention of the code of integrity:

(i)

- a. making offer, solicitation or acceptance of bribe, reward or gift or any material benefit, either directly or indirectly, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process.
- b. any omission or misrepresentation that may mislead or attempt to mislead so that financial or other benefit may be obtained or an obligation avoided.
- c. any collusion, bid rigging or anticompetitive behavior that may impair the transparency, fairness and the progress of the procurement process.
- d. improper use of information provided by the procuring entity to the bidder with an intent to gain unfair advantage in the procurement process or for personal gain.
- e. any financial or business transactions between the bidder and any official of the procuring entity related to tender or execution process of contract: which can affect the decision of the procuring entity directly or indirectly.
- f. any coercion or any threat to impair or harm, directly or indirectly, any party or its property to influence the procurement process.
- g. obstruction of any investigation or auditing of a procurement process.
- h. making false declaration or providing false information for participation in a tender process or to secure a contract;
- i. failed to disclose conflict of interest.
- j. failed to disclose any previous transgressions made in respect of the provisions of subclause (i) with any public institution/ entity in India or any other country during the last three years or of being debarred by any public procuring institution/ entity.

2. For any actions or omissions by the bidder other than violation of code of integrity, which in the opinion of the Bank warrants debarment, for the reasons like supply of sub-standard material, non-supply of material, abandonment of works, sub-standard quality of works, failure to abide terms of the tender etc.

3. If the bidder has been convicted of an offence- (a) under the Prevention of Corruption Act, 1988; or (b) the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.

Undertaking for declaration of debarment by public institution(s):

{To be submitted by the tenderer on their letterhead}

Name of Work:

1. I/We (Name of the bidder) declares that:

a) I/we or any of our allied firm* is/ are not debarred/ suspended/ blacklisted by any public institution / entity in India or any other country as on ... (last date of submission of bid) .

b) I/ We or any of our allied firm* have not made any transgression in respect of the code of integrity (as mentioned in the tender) with any public institution / entity in India or any other country in last three years as on .. (last date of submission of bid).

c) we will inform the Bank in writing, in case, I/we or any of our allied firm• is/are debarred/ suspended/ blacklisted by any public institution/ entity in India or any other country on or before award of work for the captioned work.

2. I/We (Name of the bidder) declare that I/we or our allied firm* ...
..... (Name of the allied firm(s)) is/ are debarred / suspended / blacklisted by ..
..... (Name and address of public institution in India or any other country) and
the same effective upto (date). A copy of such letter is attached for your information
and record.

(seal and signature of the bidder)

Date

Place

(Note: strike out one of the above two declarations which is not applicable)

*Allied firm : A firm would be termed as "allied firm" if the management is common, or substantial or majority shares are owned by the banned/ suspended firm and by virtue of this it has a controlling voice. Further all successor firms will also be considered as allied firms

List of Clauses to be amended in tender in General Conditions Clause to contract from Page No. mentioned Below:

Clause No.	Description of Clause No.
	<u>Clause of Prevention of Sexual Harassment at Work place:</u>
	The firm shall be solely responsible in case of any complaint of sexual harassment against its employee within the premises of the Bank, the complaint will be filed before the Regional Committee constituted by the Reserve Bank of India and Bank shall ensure appropriate action under the said Act in respect of the complaint. b) Any complaint of sexual harassment from any aggrieved employee of the firm against any employee of the Bank / DICGC shall be taken cognizance of by the Regional Complaint Committee constituted by the Bank. c) The firm shall be responsible for any monetary compensation that may need to be paid in case the incident involves the employees of the firm, for instance any monetary relief to Bank's employees, if sexual violence by the employee of the firm is proved. d) The firm shall be responsible for educating its employees about prevention of sexual harassment at work place and related issues. e) The firm shall provide a complete and updated list of its employees who are deployed within the Bank's premises.
	<u>Protocols, safety measures and security norms of present pandemic situation of Covid-1 to be followed:</u>
	The contractors shall follow all security, safety norms and the standard protocol laid down by the Bank during the present pandemic situation of Covid -19 like wearing mask, using hand sanitizer, regularly washing hands with soap dispensers, wearing hand gloves, movement of the workers only pertaining to the work place, regular security checks etc. The violation of the same may be entitled for penalty on each occasion imposed by the Bank's P & SO, which may be recovered from the payment due to the contractors.
	<u>Clause of Liquidated damages for delayed completion:</u>
	Time allowed to complete the work: 06 months for entire work which shall be reckoned from 10th day of work order. Validity of rates will be for a period of 03 months. Rates shall be valid for one year from the date of opening of Part-I of the tender. The work shall throughout the stipulated period of the contract be proceeded with all due diligence and if the Contractor fails to complete the work within the specified period, he shall be liable to pay compensation at the rate of ₹ 3,482/- per day subject to maximum amount of 10% of the contract amount for the entire work.



Reserve Bank of India
Estate Cell, Byculla

**General repairs and application of waterproof coating on terraces of
buildings at RBI Senior Officers' Quarters at Jalada & Varada,
Prabhadevi, Mumbai 400 025**

List of Clauses from Tender part I which are '*Not Applicable*' for this tender

Clause No	Page No	Sections/particulars	Particulars	Remarks
1 (A to E) and Note (i) to (viii)	16	Section III General Rules and Instructions to the Bidders	Prequalification/Eligibility criteria forms	Not applicable since the tender is invited from eligible empaneled vendors
26	24	Section III General Rules and Instructions to the Bidders	Integrity Pact	Not Applicable in the tender work since the value of work is below 5 crore.
27	27	Section III General Rules and Instructions to the Bidders	Education Cess for Construction Workers	Not Applicable in the tender work since it is not a new construction work.
Clause 10A	50	Section IV General Conditions of the contract	Price Adjustment – Payment on Account of variation in Material Prices/Wages (Escalation)	Not Applicable in the tender work since the scheduled time completions is within one year of work.
B	147	List of items with BASIC PRICES / RATES	No such items	Not applicable
Clause No.5	169	Schedule F Clause of Contract	Time and extension for delay (Mile stone)	Not Applicable in the tender work since the scheduled time completions is within one year of work.
	182	Annexures To Various Sections and Schedule	Pre-qualification/Eligibility Criteria forms	Do - Do
	185	Format 2 Annexures Various Sections and Schedule	Previous Work Experience	Do - Do
	186	Format 2A Annexures To Various Sections	List of important similar works 'On Hand'	Do - Do

		and Schedule		
	187	Format 3 Annexures Various Sections and Schedule	Previous Experience	Do - Do
	188	Format 3A Annexures To Various Sections and Schedule	Client's Certificate Reg. Performance of Contractor (On Client's Letter Head)	Do - Do
	190	Format 4 Annexures To Various Sections and Schedule	Financial Status	Do - Do
	191	Format 5 Annexures To Various Sections and Schedule	Form of Bankers' Certificate from A Scheduled Bank (On Bankers' Letter Head)	Do - Do
	192	Format 5A Annexures To Various Sections and Schedule	Details of Bidder's Banker	Do - Do



**RESERVE BANK OF INDIA
ESTATE CELL, BYCULLA OFFICE, MUMBAI**

External repairs, minor structural repairs, and waterproof painting of Buildings J, K, and L Blocks at the Bank's Staff Quarters in Byculla, Mumbai - 400 008.

PREAMBLE TO SCHEDULE OF QUANTITY

1. The work is to be carried out in officer's occupied premises and hence shall be executed with least disturbance to the occupants. All necessary measures shall be taken for keeping the work area & surroundings in hygienic condition all the time.
1. Tenderers, before filling the tender, shall inspect the site and place of work to understand the nature & scope of the work, working space available and any other related constraints and get acquaintance of the site.
2. All safety measures while working at site shall be followed and all workmen shall be provided like safety belts, hand gloves, helmets, etc. including COVID 19 related safety measures as per norms of Central/State Government/ Local bodies from time to time.
3. Materials should be properly and carefully stacked and secured to avoid any accident/incident at site as directed by Banks' Engineer
4. No debris shall be kept on the adjoining municipal foot path or within the premises of the colony and same shall be removed frequently as per instructions of Banks' Engineer. Debris formed in the work shall be brought down, stacked suitably only at location specified by Banks' Engineer.
5. All the materials to be used in the work shall be got approved in advance from the Bank. The copies of delivery memos/ invoices of the materials delivered/ brought to site shall be regularly submitted to the Bank's Engineer.
6. Final selection of the brand of materials shall be done exclusively by the Bank.
7. During execution of the work, if any damages occurred to the Bank's property same shall be repaired satisfactorily without any extra charges to the Bank. Failing to comply with this condition, same will be got done by Bank at the risk and cost of the successful contractors.
8. After completion of the work, the entire area shall be cleaned/ cleared properly to the satisfaction of Bank by the successful contractor and no debris, etc. shall be left behind.

If, not done properly, then Bank will get it done through any of the agency at the risk and cost of the contractor.

9. The quoted rates shall be exclusive of GST. The applicable GST percentage, as per the Government extant rules/regulations, shall be added at the place indicated in SOQ and arrive at total tender amount.
10. It shall be the responsibility of the contractor to cover the parked cars with suitable covering to prevent falling of paint drops, also if necessary, towing the vehicle to safe place. If paint drops on the parked cars, then same shall be removed without any extra cost to the Bank. If contractor fails to remove the paint stains fallen on the cars, then same will be got done at the risk and cost of the contractor.
11. Care shall be taken while dismantling the windows/ plaster dismantling to avoid falling of debris.
12. Contractor shall plan the work as per the site condition so as to complete the work within schedule time of the contract.
- 13. The tenderer shall abide by all the rules and regulations of the State Government/ Central Government/ Local Authorities on Covid-19 and the quoted rates shall be included for such expenses and Bank will not entertain any claim whatsoever on this account.**
14. The tenderer shall quote rates in the price bid considering all the conditions in the tender.
15. RBI Estate Cell Byculia details for online payment of EMD are as below:
A/c No.- 04869229925, IFSC CODE- RBIS0MBPA04
16. Mechanical breaker should not be used for dismantling floor/dado plaster.

Place:

Signature and seal of the Tenderer

Date:

Name & address

E-mail id:

Phone/Mobile No. :



RESERVE BANK OF INDIA
ESTATE OFFICE, MUMBAI

General repairs and application of waterproof coating on terraces of buildings at RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025.

Scope of work:

The scope of work covers 'External repairs, minor structural repairs, and waterproof painting of Buildings J, K, and L Blocks at the Bank's Staff Quarters in Byculla, Mumbai - 400 008.' in accordance with specifications prepared to the satisfaction of the Bank's Engineer. The following specifications shall form part of the contract and these shall be deemed to be supplemental to the specifications and not in derogation thereof except to the extent specifically provided herein.



**Reserve Bank of India
Estate Cell, Byculla Office
Mumbai – 400 008**

**General repairs and application of waterproof coating on terraces of buildings at
RBI Senior Officers' Quarters at Jalada & Varada, Prabhadevi, Mumbai 400 025**

Schedule of Quantities -Unpriced Bid

Item no.	Description	Quantity	Unit
1	<u>Structural Repairs to R.C.C Members:-</u> Carefully chipping of unsound/weak concrete material from slabs, beams, columns etc. with manual Chisel and/ or by standard power driven percussion type or of approved make including tapering of all edges, making square shoulders of cavities including cleaning the exposed concrete surface and reinforcement with wire brushes etc. and disposal of debris for all lead and lifts all complete as per direction of Engineer-In-Charge. a) Removal of rust on steel reinforcement: Providing & applying approved rust remover to clean reinforcement bars & allowing it to react for specified time and cleaning the reinforcement of total rust by tapping or using mechanical wire brush around the reinforcement bars to give it a totally rust free finished steel surface using suitable tools and equipment. b) Passivator coat on steel reinforcement: Providing and applying the one component, Polymer modified, cementitious anti-corrosive primer (having the technical parameters mentioned in material specifications) formulated to provide dual protection of a polymeric barrier and an integral corrosion-inhibiting system, to the existing steel and additional steel provided before patching of damaged areas, using suitable tools and equipment inclusive of Material, Manpower and Equipment BASF Master Emaco P130 / Fosroc Nitoprime Zincrich / Sika Rustoff 100 or other equivalent (Mode of measurement: concrete surface area with exposed reinforcement). c) Bond coat on old concrete surfaces: Providing and applying bond coat on concrete surface by mixing high dispersion SBR	10	Sqm

	latex like Master Emaco SBR2 of BASF or Nitobond SBR (Latex) of Fosroc with white cement in the ratio of 2:3. The mixing should be done to a lump free consistency for bond coat and screed mortar to be applied once the bond coat is tacky. d) Polymer Modified Mortar (PMM) 25mm thick:- Providing and repairing the damaged concrete portion with single component, fibre reinforced, dual shrinkage-compensated, thixotropic, cementitious patch repair mortar (having the technical parameters mentioned in material specifications) capable of applying 25mm thick in single layer initially by hand and finishing with trowel carefully compacting the same around the rebars and finishing to bring it in line with existing concrete surface with an average thickness of 25mm inclusive of Manpower, Material and Equipment Master Emaco S348 of BASF / Renderoc HB-60 of Fosroc / Sikadur 41 of Sika (or) approved equivalent make Polymer Modified Mortar (PMM). Note: The Contractor should ensure that all stages (a to d) of PMM works to be passed by the Banks Engineer. The rate quoted should include for the cost all materials, labour, tools & plants, scaffolding, disposing off the debris from the colony premises including proper covering/protecting of all plumbing, carpentry & electrical fittings/fixtures, furniture if any and cleaning of the area/floor, glass panes, etc. complete as directed.		
2	P.C.C. Coping (1:1.5:3)	290	Sqm
	PCC COPING FOR PARAPET WALLS Providing and laying ready mix cement concrete of normal strength (dry mix bags) in coping of parapet walls of average 50 mm to 40 mm thickness (50mm thickness on outside & 40 mm on inside of parapet wall to allow proper slope) Including mixing water proofing compound of approved make by weight of cement, curing, shuttering/centering, consolidating, using needle/ platform vibrato, disposing and carting away the debris from the premises etc. all complete as directed by Banks Engineer. The rate shall be for working at any height and excluding the cost of scaffolding and including dismantling and disposing out side Bank's premises of the existing old PCC, plaster etc. as directed.		
3	External waterproof plaster using ready mixed polymer cement mortar :- Applying External waterproof plaster using ready mix polymer cement mortar plaster of approved make as specified below : i) Carefully dismantling and removing the existing loose / damaged plaster of any thickness on the external surfaces of walls at all levels, parapet walls, mummy rooms etc. upto RCC/Brick surface as directed.	1285	sqm

	ii) Applying bond coat of approved make over the exposed brick wall / RCC surfaces as per manufacturer's specifications. iii) Providing and applying new Sand faced cement plaster of average 20 mm thickness in two coats by using ready mix polymer modified cement plaster of approved make with addition of approved make WP compound as per manufacturer's specification. The first coat shall be of average 12 mm thickness including making gauges at directed spacing and making the plastered surface rough to receive the top finish coat, allowing the surface for curing. Second coat plaster shall be of average 8 mm thickness in perfect plumb, line & level with sponge finish so as to obtain fine sand grain in uniform pattern etc. Note:-The rate shall include removal of the existing damaged plaster, cleaning the surface, scaffolding for plaster repair with necessary coverings/ curtains on sunshades, AC/network/electric conduit pipes on terrace/wall, terrace slabs, curing as per site conditions and dispose off the debris generated out of the office premises all completely done in workmanlike manner as directed by the Bank's Engineer (Vendor shall inform Bank for removing of all utilities over the wall and refixing the same after completion of work). The actual measurement shall be taken at site. No extra/ additional payment will be made for extra thickness (i.e. Above 20 mm) of plaster. Rate shall including making drip mould wherever required as directed by the Bank's Engineer without any extra cost.		
4	Checking by tapping the entire terrace horizontal top surface with light hammer/wooden mallet and if found sounding hollow same surface shall be identified and carefully removed up to top of brick bat coba using light hammer chiselling manually, making good the dismantled portion by providing and laying ready mixed cement plaster of required thickness matching to the surrounding surface, with waterproofing compound over the approved bond coat on exposed brick bat coba and finishing the top with smooth cement float etc. Rate shall be including cost of surface preparation, curing, dispose of the debris generated out of the office premises to the designated place by local authority / BMC etc complete as directed by Bank's Engineer.	442	sqm
5	Terrace Waterproof coating work Providing and carrying out water proofing works for terrace horizontal surfaces with Elastomeric waterproof liquid chemical coating of approved make comprising the following specifications.	3400	sqm

	i) Carefully preparation of the existing surface of terrace including watta by grinding or mechanical means to make the surface fungal free, rough to form grip for coating, free of dirt particles, etc. upto the satisfaction of Bank's engineer and as per manufacturer's requirement, uprooting plants/ shrubs grown on the surfaces, filling the hole if formed any with ready mixed plaster, cleaning the terrace surface from dust or any other loose particles, treating the surface cracks by making a groove of required depth and width, cleaning the same and entire terrace tile joints filling with waterproof sealant grout of approved make after application of waterproof primer coat of approved make.		
	ii) Apply a coat of insulating elastomeric waterproof coating (diluted with water in the ratio as instructed by the manufacturer) as self-priming coat. If the substrate is porous apply a second coat of primer or tile primer as per manufacturer's specification.		
	ii) Providing and applying two or more coats of elastomeric chemical waterproof coating of approved make as per manufacturer's specification to be applied in uniform layer mechanically or manually applied over terrace surface and watta. WP coating shall overlap minimum 150mm above watta to existing plaster surface of parapet walls. WP coating shall be mixed, prepared and applied strictly as per manufacturer's specification. The mixing methodology, mixing proportions of the material, surface preparation and application of the coating shall be done, strictly, as per manufacturer's specification and as directed by Bank's engineer. After completion of WP coating the treated terrace surface shall be tested with water ponding for 72 Hrs over entire treated surface area.		
	The coating shall be provided with waterproofing guarantee for minimum period of 3 years from date of issue of virtual completion. (Plan area of terrace shall be measured and paid. No separate measurement for watta will be considered). The treated surface shall be got certified from the manufacturer for the satisfactory work done.		
	NOTE: The entire work shall be done in close and strict supervision and direction of the manufacturer's representative including taking activity wise clearance from the representative for proceeding with the related works. Entire coating work shall be done by deploying experienced workers. The elastomeric chemical water proofing coating coverage shall be strictly maintained in each coat as specified by the manufacturer and shall be applied in consultation with manufacturer's representative. The waterproof treatment shall be provided with waterproof performance guarantee for minimum period of 3 years from date of virtual completion of work in the form of Bank guarantee from Scheduled Bank to be submitted as per Bank's standard proforma & quoted rate shall be included for the same.		

6	External Painting to parapet wall	1470	sqm
	Applying 100% acrylic emulsion elastomeric (stretchable) external variety decorative paint over a coat of waterproofing priming/ base coat over which 2 or more coats waterproof decorative paint shall be applied. Providing and applying 2 or more coats of 100% acrylic emulsion elastomeric (stretchable) external variety decorative paint over a coat of a waterproofing priming/ base coat of approved make out of the given brands and variety of paint in combination of 1 primer coat and 2 or more coats waterproof decorative paint all as per the technical specifications of manufacturer and following general activities all as per the directions of Bank's engineer.		
	a) Surface preparation		
	i) Thoroughly cleaning the exposed surface with water. ii) Treating all the surface cracks by opening the same in "V" groove shape by mechanical means. Providing and filling the cracks up to 5 mm width with approved make acrylic base crack filler. iii) Sealing the cracks which are more than 5 mm and also all the separation gaps of plastered surface with approved make mortar.		
	b) Priming / base waterproofing coat		
	Providing and applying a priming or base coat of specific waterproof variety of approved brand over the prepared surface all as per the manufacturer's specifications.		
	c) Two or more coats of decorative external 100% elastomeric variety paint in top coat		
	Providing and applying two or more coats of decorative exterior variety 100% elastomeric paint in combination of two or more shades in lighter and darker shades as approved over the base coat all as per the manufacturer's specifications etc. Completely done in workmanlike manner and as per manufacturer's specifications and as per the instructions of Bank's engineer		
	Note: The rate shall include the necessary scaffolding, as required.		
7	Providing and fixing approved make aluminium sheet of approx. 600 mm wide in 'C' shape and 10 Gauge thick to cover expansion joints of vertical wall surfaces/ terrace beam. Aluminium sheet shall be fixed using steel dash fasteners of 8 mm dia and 75 mm long bolt including providing aluminium washers of 2 mm thick in staggered pitch of 200 mm centre to centre including drilling holes in wall surface with expandable plastic sleeves in holes, sealing all gaps of aluminium sheet between wall & sheet with approved make adhesive so joints /overlaps become water tight etc., complete as per direction of the Bank's Engineer. Note: -The rate shall include removal of the existing aluminium sheet from external surface of wall/beam and taking away scrap out of Bank's	25	Rm

	premises by considering salvage value of old sheet, rate also includes cost of MS steel scaffolding require for work.		
	CGST		
	SGST		

Date

Signature and the seal of the contractor

Place

Address :