

## SUBJECT: APPOINTMENT OF CONTRACTOR FOR STRUCTURAL REPAIRS/RENOVATION WORK INCLUDING EXTERNAL PAINTING WORK OF BANK'S RESIDENTIAL BUILDING (G+13 FLOOR) SITUATED AT POWAI MUMBAI.

## **TENDER FOR CIVIL REPAIRING WORKS**

PART-1

## PRE-QUALIFICATION CUM TECHNICAL BID

Date of issue of Tender	: 09.01.2023 to 31.01.2023 During office hours.
Last date for submission of tender	: 31.01.2023 up to 3.00 pm.
Opening of Bid	: 31.01.2023 at 3.30 pm.
Pre-bid Meeting	: 17.01.2022 at 11.00 am. (at 7th floor Conference hall, SSD, Union bank Bhavan, Nariman Point.)

<u>Owner</u> :	<u>Consultant</u> :
Union Bank of India, Central Office, 239, Vidhan Bhavan Marg, Nariman Point, Mumbai- 400021. Tel: 022-22892586,91.	Supreme Engicons (India) Pvt Ltd 808, Shree Krishna Tower, Opp. Laxmi Industrial Estate, Link Road Andheri (west) Mumbai-400053. telefax no- 91-22- 26774100/200 email: info@supremeengicons.com

### NOTICE INVITING TENDER FOR

#### STRUCTURAL REPAIRS/RENOVATION WORK INCLUDING EXTERNAL PAINTING WORK OF BANK'S RESIDENTIAL BUILDING (G+13 FLOOR) SITUATED AT POWAI MUMBAI.

Union Bank of India invites Tenders in two-bid system i.e. Technical Bid and Nationalized/Price Bid from eligible established contractors having registered Branch office in Mumbai and executed at least one project i.e,work of similar nature in Mumbai for Structural Repairs/Renovation Work Including External Painting Work Of Bank's Residential Building (G+13 Floor) Situated At Powai Mumbai. The estimated cost of work is Rs. 153.89 Lakhs+18% GST and the Completion period is 6 months (work) +1 month (for billing).Tender forms (prequalification bid & Price Bid) can be collected against payment of Tender fees Rs.1000/- (non-refundable) by way of pay order drawn from Nationalized Bank only in favour of "Union Bank of India" payable at Mumbai during working hours from 09.01.2023 to 31.01.2023 up to 3.00 pm. The tenders are also available on Bank's website www.unionbankofindia.co.in. & Government portal www.eprocure.gov.in.Tenderer downloading documents from website, must submit pay order for document cost (Rs.1000/-) while submitting the tender in a separate envelope super scribing "Tender Fees" else tender will not be considered for opening. The last date of submission of tender is 31.01.2023 up to 3.00 PM.

Applicants registered as *MSME (UAN Number is Mandatory) / NSIC / Udyog Aadhar/SSI* Scheme under specified nature of work (Building repair & maintenance/ structural repair works to buildings) are exempted from depositing cost of BID document / EMD provided they attach self-attested copy of the relevant certificate. Contractors submitting MSME certificate under any other categories of work for seeking exemption from EMD will not be entertained and may lead to disqualification from further process.

The Bank reserves the right to reject any or all applications without assigning any reasons whatsoever. Please refer banks website and Govt. portal regarding any corrigendum for the subject tender till finalization.

ASST. GENERAL MANAGER

CENTRAL OFFICE, MUMBAI.

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#### DISCLAIMER

The information is provided to prospective tenderer having Registered Branch Office in Mumbai, who intend to participate in bidding process for Civil works against structural Repairs/Renovation work including External painting work of Bank's Residential Building (G+13 FLOOR) Situated at Powai Mumbai. , for Union Bank of India for which this tender has been issued, as per the terms and conditions set out in this tender and any other terms and conditions related to such information.

This tender is neither an agreement nor an offer and the purpose of this Tender/ Request for Proposal (RFP) is to provide the Bidder(s) with information to assist the formulation of their proposals. The RFP does not claim to contain all the information each Bidder may require. While Bank has taken due care in the preparation of the information contained herein, it does not claim that the information is exhaustive. Respondents to this tender are required to make their own inquiries/analysis and should check the accuracy, reliability and completeness of the information in this RFP and where necessary obtain independent advices/clarifications. They should not rely solely on the information contained in the blank tender documents / forms. Bank may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP. The Bank is not responsible if no due diligence is performed by the Respondents.

The Bank, its employees and advisors make no representation or warranty and shall have no liability to any person, including any applicant or Bidder under any law, statute, rule or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expenses which may arise from or be incurred or suffered on account of anything contained in this tender or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the tender and any assessment, assumption, statement or information contained therein or deemed to form part of this tender or arising in any way for participation in this Bid stage.

Union Bank of India reserves the right to alter, amend, update or supplement the information reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline bids without assigning any reason thereof.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery, fees, expenses associated with any demonstrations or presentations which may be required by Bank or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and Bank shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding process.

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То

Dear Sir,

# SUBJECT: APPOINTMENT OF CONTRACTOR FOR STRUCTURAL REPAIRS/RENOVATION WORK INCLUDING EXTERNAL PAINTING WORK OF BANK'S RESIDENTIAL BUILDING (G+13 FLOOR) SITUATED AT POWAI MUMBAI.

Sealed, Item Rate tenders are invited in the prescribed format from contractors having registered Branch office in Mumbai for execution of civil work towards structural repair/renovation work including external painting of bank's residential building "Raj Anmol" at Borivali, Mumbai as per following details:

Estimated Cost of the Work	Rs.153.89 lacs + 18% GST.
Earnest Money Deposit	Rs.3,07,780.00 by way of pay order
	drawn From Nationalized Bank only in
	favor of Union Bank of India payable at
	Mumbai.
Period of Completion	6 months(work) + 1 month (billing)
Validity of Tender	120 days
Date of Issue of Tender	From 09.01.2023 to 31.01.2023 During
	office hours
Pre-bid Meeting with Contractor	<u>At 11.00 a.m. on 17.01.2023.</u>
Last date of submission of Tender	Up to 3.00 p.m. on 31.01.2023
Date & Time of opening the Technical bid.	3.30 p.m. on 31.01.2023 At Support
	Service Department, 7 <sup>th</sup> floor of Central
	Office.

The tender document can be obtained from Union Bank of India, 7<sup>th</sup> floor, Support Services Department, Union Bank of India,239-CentralOffice, Nariman point, Mumbai on payment of Rs.1000/- (non-refundable) by way of pay order drawn from Nationalized Bank only in favour of "Union Bank of India" payable at Mumbai and should be submitted in original, duly stamped, and sealed in the same office.

- 1) The Item Rates under the contract include for full, final & entire completion of all works in all respects described in the tender document & as shown in drawings forming part of the contract. Contractor must quote Item Rates on estimated cost. Tenders will be opened in the presence of contracting agencies or their authorized representatives.
- 2) The tenders shall be submitted in two envelopes. The envelope No.1 shall be marked as Technical Bid and shall contain Technical Bid of the tender, EMD in the form of Demand Draft/ Pay Order drawn from Nationalized Bank, Prequalification application and any other matter. The envelope No. 2 shall be marked as Price Bid.

All the above 2 envelopes to be put in 3<sup>rd</sup> envelope super scribing the subject tender before submitting.

3) **Envelope No.1.**Will be opened on the due date of opening of the technical bid. **Envelope No. 2** of the contractors will be opened at later date (to be intimated subsequently) and of those whose prequalification application meets with eligibility criteria of the advertisement and the requirement of Tender fees, EMD and the terms/ conditions submitted, acceptance of technical bid, etc.

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- 4) Tenders are to be submitted in one sealed Envelope Cover Enclosing Therein the Envelope No.1 and Envelope No.2 Duly Super scribed"structural Repairs/Renovation work including External painting work of Bank's Residential Building (G+13 FLOOR) Situated at Powai Mumbai."
- 5) The tenderer must use only the tender forms issued for the purpose to fill in the rates. Intimation of tender quoted by letter, telegram/ telex will not be acceptable. The tender must be dropped in a tender box kept at reception area near ground floor, Support Services Department, Union Bank of India,239, Central Office, Nariman Point, Mumbai. Delivery of the tender through courier/ post shall be avoided and any disputes arising thereof shall not be entertained.
- 6) Tenderers are advised not to make any alteration/modification in the tender documents, Item of work or in any respect whatsoever. Violation of this requirement will make the Tender liable for rejection.
- 7) In case of postal delivery, the tenderer has to ensure that tender is reached before the due date and time and dropped in the tender box. The Bank will not be responsible for damage in the transit and delay of receipt of tender, if any or sent by a special messenger. Tender received late shall be rejected.
- 8) Every page of the tender documents should be signed by the person or persons submitting the tender in token of his/their having acquainted himself/themselves with the General and Special Conditions of Contract, Specifications etc. as laid down. Any tender with any of the documents not so signed will be subjected to rejection.
- 9) No consideration will be given to a tender received after the time stipulated above and no extension will be allowed for submission of the tender.
- 10) The Union Bank of India shall not be bound to accept the lowest tender and reserves the right to accept or reject any or all the tenders without assigning any reason whatsoever.
- 11) This notice inviting tenders, the conditions of tender and the duly completed form of tender etc. will form part of the Agreement to be executed by the successful tenderer with the Bank.
- 12) Tender submitted without EMD from Nationalized Bank will be treated as incomplete and the same will be rejected outrightly. The EMD shall be strictly in the form of Pay Order / Demand Draft. No Cheques will be accepted on account of EMD. Tenders submitted with the cheque as EMD will be treated as incomplete and will be rejected.

ASST. GENERAL MANAGER

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#### "INTEGRITY PACT (IP):

Vendors/bidders/sellers, only those who commit themselves to Integrity Pact (IP) with the Bank, would be considered competent to participate in the bidding process. In other words, entering into this pact would be the preliminary qualification. Bids not accompanied with signed IP by the bidders shall be summarily rejected.

IP shall cover all phases of contract i.e. from the stage of Notice Inviting Tenders (NIT)/ Request for Proposals (RFP) till the conclusion of the contract i.e. final payment or the duration of warrantee/guarantee. Format of IP is attached in Annexure"A" for strict compliance.

The following Independent External Monitors (IEMs) have been appointed by the Bank, who will review independently and objectively, whether and to what extent parties have complied with their obligation under the pact.

- 1. Dr. Meeran Chadha Borwankar, IPS (Retd.) Email:mcborwankar@gmail.com
- 2. Smt. Bhararathi Sivaswami Sihag, IAS (Retd.) Email: bsihag@hotmail.com

It may kindly be noted that all clarification/query/status with respect to tender may be forwarded to the following officer and not to IEMs except query related to Integrated Pact: Mr./Ms. \_\_\_\_\_

Assistant General Manager/ Asst. Gen. Manager/Dy. Gen. Manager, Ph. No.:022-22892587/13

Asst. General Manager

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#### **BIO - DATA OF CONTRACTING AGENCY**

:

:

:

:

:

:

:

1. Name of the firm

Address

Telephone No. Office

Office : Residence : Mobile : Fax : E-Mail :

- 2. a) Whether proprietary/partnership/: Pvt. Ltd. / Public Ltd. (certificate of registration / partnership deed to be enclosed as Annexure-I).
  - b) Name of the Proprietor, Partners, Directors
    - I)
    - II)
  - c) Year of establishment
- 3. <u>Registration with Tax Authorities</u>:
  - i) Income-tax (PAN) No.
  - ii) GST No.
  - iii) EPF Regn. No.iv) ESI Regn. No.
  - (Copies of certificates of registration with relevant authorities to be enclosed as Annexure-II-A, II-B, II-C, II-D & II-E)
- 4. Names of the Bankers with address & telephone numbers:
  - I)

II)

5. Enclose solvency certificate of the : Enclosed/ Not enclosed Amount of 30% of estimated cost

<u>Note</u>: The solvency certificate should be addressed to "Whom so ever it may concern" and not older than six months from the date of advertisement.

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- 6. Furnish copies of audited balance- : Enclosed/ Not enclosed Sheet and Profit & Loss A/C. for the last 3 years i.e. Assessment years-2019-2020,2020-2021,2021-2022 as Annexure-IV-A, IV-B & IV-C.
  - 7. Registration with Govt. / Public Sector / Banks (certificates of Registration to be enclosed as Annexure-V.

Name of the Organization	Year since empanelled			

8. Give details if at present involved in litigation in similar type of contracts:

Sr. No.	Name of Project	Name of Employer	Nature of work	Work order dated	Date of completion of work	Value Rs.

:

9. Details of civil suit, if any, that arose: during execution of contract in the past 10 years.

10. Specify maximum value of single value project executed during the last three years.

11. Name & relation, if any, with the staff : Member of Union Bank of India.

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12. Details of work executed during the last 3 years:

Type of work	Work executed for (name of the Institution / Body)	Nature of work (in brief)	Location	Value Rs.	Duration of with dt Commenc completic	e	If work left incomplete or terminated (give reasons)

<u>Note</u>: Copies of work orders along with Xerox copies of relevant TDS certificate, satisfactory completion certificate obtained from the client shall be enclosed as Annexure VI. Please note without the copies of certificates, your application is liable to be rejected.

13. Details of work in hand (photo copies of performance certificate, work orders issued by valued clients, preferably Banks, Govt., Semi-Govt. Renowned Private Bodies should be enclosed as Annexure VII). Any works mentioned may be surveyed by the Banks concerned Authority along with the Members of the Appointed Consultancy Firm to find the Authenticity of the Project. The members may elude the Vendors whose performance on the stated Site are found to be unsatisfactory,

work ex fc of In	Vork executed or (name of the nstitution Body)	Nature of work (in brief)	Location	Value Rs.	Duration of work, stipulate d time	Present stage of work
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14. Details of Pre-Qualifying work (Filling of columns is mandatory and to be supported by copies of work order and completion letters as per the criteria. On Non-filling of columns or not enclosing credentials, the application form submitted will be rejected without assigning any reason thereof.)

Name of the work	Name of the client	Work order reference/date	Completion letter reference/ date	Value of work completed

#### 15. LIST OF NAME/S OF PROPRIETOR/ PARTNERS & EMPLOYEES

Name	Qualifications	Experience	Particulars of work done	Employe d in your firm since	Value of work done

#### 16. Turnover in last 5 years:

Sr. No.	Year	Turnover (Rs.in lacs)	Income-tax paid	VAT paid	Service Tax paid
1	2017-18				

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2	2018-19		
3	2019-20		
4	2020-21		
5	2021-22		

Copies of income-tax returns / assessment orders for each year to be enclosed as Annexure VIII-A, B, C, D& E

#### 17. List of equipment / machinery owned:

Sr. No.	Name of equipment	Year of manufacture	Nos. available

#### **18.** PRE-QUALIFICATION CRITERIA:

It is mandatory that all the agencies shall have registration for PAN / GST.

#### (Estimated Cost: Rs.153.89 lakhs +18% GST)

Sr. No.	Criteria	Weightages	Self rating marks
1	Should have executed one similar work of 80% of estimated cost i.e. Rs.1,23,11,200.00 OR Should have executed two similar work of Rs.50% of estimated cost i.e. Rs.76,94,500.00 OR Should have executed three similar works of 40% of estimated costi.e. Rs.61, 55,600.00 during last 7 years.	50	
2	Average turnover for the last three years shall be 30% of estimated costi.e. Rs.46, 16,700.00 and above.	25	
3	Should have submitted solvency certificate of 30% of estimated costi.e. Rs. 46, 16,700.00 (not older than 6 months).	Mandatory	
4	Should have made net profit at least in two years during last three years.	25	

#### NOTE:

- Criteria mentioned above are just minimum requirement. The Bank at its discretion may upgrade the criteria. No complaint on this account will be entertained.
- Contractors scoring 80 marks & above will only be considered for pre-qualification and will be qualified for opening of "Nationalized bid" on obtaining satisfactory site visit report/ confidential report by their client. Contractors themselves have to fill in self-rating marks column in the above table.
- Any other clauses, terms of bank's procurement & construction policies and manual will be applicable for prequalification of contractor.

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• The similar work means Civil repair work including external painting, structural repair work, plumbing work, water proofing works etc.

ANNEXURE	PARTICULARS	TICK IF ENCLOSED
1	Certificate of registration of Company / partnership deed.	
IIA, IIB, IIC, IID, IIE	Certificates of registration with Income Tax, GST, EPF authorities.	
	Solvency Certificate.	
IVA, IVB, IVC	Audited Balance Sheet & Profit & Loss A/c. Statement for2018-2019, 2019-2020& 2020-2021.	
V	Certificates of Registration with Govt. / Public Sector / Banks.	
VI	Copies of work orders along with Xerox copies of relevant TDS certificate, satisfactory completion certificate mentioning value of work.	
VII	Copies of performance certificate, work orders issued by valued clients, preferably Banks, Govt. and Semi-Govt. Bodies. At least One qualifying work mentioned by the Contractor in Bid is to be from Govt./Public Sector/Banks.	
VIIIA, VIIIB, VIIIC, VIIID, VIIIE	Copies of income-tax returns/ assessment orders for each year from 2019 to 2022	

Note: In absence of any of the above enclosures, your application is likely to be rejected.

#### DETAILS OF PREQUALIFYING WORKS - I

(Filling all details is mandatory without which application will be summarily rejected)

1.	NAME OF FIRM & ADDRESS FOR WHOM THE WORK IS EXECUTED	
2.	DETAILS OF WORK DONE BY THE FIRM	1. CIVIL WORK = Rs
3.	PHOTOGRAPHS OF WORK COMPLETED (PLEASE ENCLOSE COPY)	
4.	VALUE OF CONTRACT EXECUTED	
5.	BRIEF DISCRIPTION OF THE WORK	
6.	PERIOD DURING WHICH THE CONTRACT IS EXECUTED	
7.	WORK ORDER REFERENCE	

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	(PLEASE ENCLOSE COPY OF THE WORK ORDER)	
8.	COMPLETION CERTIFICATE REFERENCE (PLEASE ENCLOSE COPY OF THE COMPLETION OF WORK)	
9.	DELAY IN EXECUTION OF WORK	
10.	WHETHER TIME SCHEDULE IS ADHERED TO	
11.	ANY OTHER INFORMATION WHICH YOU CONSIDER WILL HELP US IN TAKING OUR DECISION.	

PLACE: DATE: SIGNATURE WITH OFFICE SEAL

#### FORMAT OF CONFIDENTIAL REPORT

(To be submitted by the Client of applicant on their letter head in sealed envelope to the Bank - Mandatory requirement)

To:

Asst. General Manager/ Dy. General Manager, Support Services Dept.,7<sup>th</sup> floor, Union Bank of India, Union Bank Bhavan, 239, Vidhan Bhavan Marg, Nariman Point, Mumbai- 400 021.

Sir,

Confidential Report on M/s.\_\_\_\_\_

This	is	to	certify	that	M/s.	;	having	Office
at						have	complete	ed the
work	of _					. Confide	ential Rep	oort for
		-	a auto dita				•	

our project executed is as under:

1.	DETAILS OF PROJECT EXECUTED BY THE FIRM	
2.	AREA OF CONSTRUCTION	
3.	DATE OF COMMENCEMENT OF PROJECT	
4.	DATE OF COMPLETION OF PROJECT	
5.	TOTAL VALUE OF PROJECT EXECUTED	
6.	QUALITY OF SERVICE RENDERED	
7.	COMPETENCE TO HANDLE WORKS	
8.	INTEGRITY AND RELIABILITY OF THE FIRM	
9.	DEALING IN EXECUTION OF WORK	

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10.	WHETHER TIME SCHEDULE IS ADHERED TO	
11.	WHETHER ANY PENALTY IMPOSED FOR THE DELAY	
12.	GENERAL ATTITUDE OF THE FIRM	
13.	ANY OTHER INFORMATION WHICH YOU CONSIDER WILL HELP US IN TAKING OUR DECISION	

PLACE:	SIGNATURE:	
	NAME:	

DATE: DESIGNATION: \_\_\_\_\_OFFICE SEAL

#### DECLARATION

I / We have read the instructions appended to the Proforma and I / We understand that if any false information is detected at a later date, any future contract made between ourselves and Union Bank of India, on the basis of the information given by me / us can be treated as invalid by the Bank and I / We will be solely responsible for the consequences.

I / We acknowledge that:

It shall be deemed that by submitting the Proposal, I/we have:

- a) made a complete and careful examination of the RFP;
- b) received all relevant information requested from the Authority;
- c) accepted the risk of inadequacy, error or mistake in the information provided in the RFP or furnished by or on behalf of the Authority or relating to any of the matters referred above;
- d) satisfied itself about all matters, things and information, including matters referred above, necessary and required for submitting an informed Application and performance of all of its obligations there under;
- e) acknowledged that it does not have a Conflict of interest: and
- f) Agreed to be bound by the undertaking provided by it under and in terms hereof.
- I / We agree that the decision of Union Bank of India in selection of contractors will be final and binding to me / us.
- I / We agree that I / we have no objection if enquiries are made about the work listed by me / us in the accompanying sheets.
- I / We agree that I / We have not applied in the name of sister concern for the subject empanelment process.
- All the information furnished by me hereunder is correct to the best of my knowledge and belief.

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Place :

Date :

#### SIGNATURE NAME & DESIGNATION SEAL OF ORGANISATION

## INSTRUCTION WITH REGARD TO SUBMISSION OF TENDER

- 1) Rates should be quoted both in figures and words in columns specified. All erasures and alterations made while initials of the tenderer must attest filling the tender. Overwriting of figures is not permitted. Failure to comply with either of these conditions will render the tender invalid and it will be the option of Union Bank of India to accept or reject the tender. No request of any change in rate or conditions after opening of the tender will be entertained.
- 2) In the case of figures, the word Rs. should be written before the figures of rupees and the word 'P' written after the decimal figures e.g. Rs. 3.25 P. In the case of words, the word Rupee should similarly precede and the words "Paise only" should be written at the end, closely following each the Item rate. The word "only" should not be written in the next line unless the rate quoted is in whole Rupees closely followed by the word "only". The amount should invariably be upto two decimal places.
- 3) The different Schedules should be filled as follows:
  - (a) The "Rate" Column wherever applicable to be legibly filled in ink in both figures and words.
  - (b) The "Amount" Column also to be legibly filled in ink in both figures and words.
  - (c) All corrections to be initialed.
  - (d) No over writing is allowed.
  - (e) The figure of Item of rate shall be legibly filled in ink in both figure and words.
- 4) Errors in the bill of quantities shall be dealt with in the following manner.
  - a. In the event of any discrepancy between the rates quoted in words and the rates in figures the former shall prevail.
  - b. In the event of an error occurring in the amount column of the bills of quantities as a result of the wrong extension of the unit rate and the quantity, the unit rate shall be regarded, as firm and extension shall be amended on the basis of the rates.
  - c. All the errors in totaling in the amount column and in carrying forward the totals shall be corrected.
- 5) The tender shall be signed and dated at all places provided therein. Also, all pages, drawings and corrections/ alterations shall be initialed. The tender submitted on behalf of a firm shall be signed by all the partners of the firm or by a partner who has the necessary authority on behalf of the firm to enter into the proposed contract. Otherwise the tender may be rejected by Union Bank of India.
- 6) The time allowed for completion of works is **6 months** from the date of commencement of the work is reckoned from the tenth day from the date of Letter of Intent. Time shall be considered the essence of contract.
- 7) It shall be the responsibility of the contractor to arrange for water and electricity required for completing construction. If water is available with the Bank, the same will be supplied to the contractor by recovering 1% of the value of work done. However, contractor will have to make arrangement of pipeline for distributing water. Contractor to make own arrangement of electricity and pay tariff to the electricity board. In case the Bank is supplying electricity, the contractor will have to install separate energy meter and pay the charges as per its consumption.

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- 8) Every tender shall be accompanied by earnest money of Rs.3,07,780.00 (Rupees Three lakhs Seven thousand Seven hundred Eighty only) by way of Demand Draft/Pay Order drawn from Nationalized Bank only favoring UNION BANK OF INDIA, payable at Mumbai. Tender submitted without earnest money shall be summarily rejected. The contractor whose tender is accepted will have to deposit as security deposit a further sum to make up 3 % of the value of the accepted tender. The security deposit will have to be made within 14 days from the date of acceptance of tender, failing which the Bank at its discretion may revoke the letter of acceptance and forfeit the earnest money deposit furnished along with the tender.
- 9) The Earnest Money may be retained in the case of the successful tendered as part of the security for due fulfillment of the Contract. No interest shall be paid on this deposit. Failure to enter into the Contract agreement within the stipulated time of 10 days from the date of acceptance of work order or withdrawal from bidding during bid validity period shall entail the forfeiture of the Earnest money Deposit. The Earnest money of unsuccessful tenderer will be released after issue of work order, without any interest.
- 10) The tenderer shall submit their tender after carefully examining the whole of the tender document and the terms and conditions of contract, the drawings and specifications, the schedule of quantities etc., and also after examining the site and conditions prevailing in and around site.
- 11) The Bank does not bind itself to accept the lowest of any tender and reserve to them the right of accepting the whole or any part of the tender and tenderer is bound to perform the same at the rates quoted. The Bank will not be bound to accept the lowest tender and reserves the right to accept or reject any or all the tender without assigning any reasons whatsoever. The work may also be divided among the contracting agencies depending on the exigencies of the Bank.
- 12) Bank shall not be responsible for any expenses incurred by bidders in connection with the preparation and delivery of their bids, including expenses incurred during bidding.
- 13) Bids from consortium shall not be accepted. Telex / Telegraphic / Fax / Email bids shall not be accepted. Late/ Delay / post tenders shall be rejected and representative of such bidder shall not be allowed to attend the bid opening.
- 14) The Bank is not concerned with any rise or fall in the prices of materials and labour. The rates quoted shall include all costs, allowances, taxes including sales tax on works contract or any other charges including any enhanced labour rates etc. which may become effective for any reason including those due to acts of Government/ Statutory Bodies enacted from time to time by the State and or the Central Government. Under no circumstances, shall the Bank be held responsible for compensation or loss to the contractor due to any increase in the cost of labour or materials etc.
- 15) Contractor to coordinate and assist the Architect/Interior Designer in obtaining all statutory approvals and any other State and Central rules in force. Any expenses incurred in obtaining such approvals are deemed included in the rates quoted by the Contractors.
- 16) Tenders shall remain valid for a period of 120 days from the date of opening of the tender which period may be extended by mutual agreement and the tenderer shall not cancel or withdraw the tender during the initial validity period of 120 days.
- 17) The successful tenderer shall be bound to implement the Contract and mobilize and sign specified agreements within 10 days from the date of acceptance of work order.

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- 18) Tenderer must include in their rates all taxes excluding GST. Due to change in taxes structure by orders from Central Govt. / State Govt. after opening of tenders shall be reimbursed to the contractor as per actual and upon verifying the proof of having made the payment.
- 19) This contract shall be an Item Rate contract. The Contractor shall be paid for actual quantity of work done, as measured at site including any deviation plus or minus. The rate of any non-schedule items of work shall be decided as mentioned in the conditions of contract.
- 20) The tender drawings exhibited/enclosed are preliminary drawings intended for the guidance of the Contractor only. They may be subject to revision and alteration without vitiating any of the terms of the contract and the Contractor shall be bound to execute the works as shown on the final drawings without claiming any extra payment.
- 21) No correspondence will be entertained in respect of this tender other than any clarifications strictly pertaining to this tender.
- 22) The tender price quoted by a tenderer shall be kept strictly confidential and shall not be divulged to any other party even approximately before the time limit for delivery of tender. The only exception be for obtaining an insurance quotation, you may give your insurance company or agent any essential information they ask for, so long as it is done in strict confidence. No information about other's tender price should be obtained and no arrangement with anyone else should be made whether or not he submits the tender.
- 23) For electrical, sanitary, water supply and drainage work, tenderer must possess respective valid licenses from the competent authority of the area where the site is located.
- 24) Contractor should sign at the end of every page prior to submitting the tender.
- 25) Conditional tenders will be summarily rejected.
- 26) COMPLETION PERIOD OF THE PROJECT WILL BE 6 months.
- 27) The contractor shall be responsible for obtaining all the necessary statutory permissions for the same.
- 28) The Contractor to depute a full time Supervisor, who shall be a degree civil engineer with minimum 10 years' experience in managing similar projects. The contractor should submit the necessary credentials of such engineer to UBI for scrutiny & approval. Such engineer shall be deputed on the site full time for the full duration of the project & shall report daily to the concerned person in charge from UBI.
- 29) The minimum salary requirement to be considered for labourers must be following minimum wages act of Government of India.
- 30) If it is found that the work on site is being carried out in absence of such an engineer, the contractor shall be fined Rs 5,000/- per day for such non-compliance. If such non-compliance is observed more than 10 times, UBI reserves the authority to ask the contractor to cease work on the site & terminate the contract without any explanation whatsoever & the termination process as per the tender document shall follow.
- 31) NATIONALIZED EVALUATION: Only the technically qualified bidders (after satisfactory site visit reports as per bank's policy) who are successful will be asked to participate in Nationalized bid/price Bid opening. The indicative Nationalized bids of all the bidders found ineligible as per the requirements of this RFP will not be opened and returned to them unopened against acknowledgement.

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- 32) After opening of Nationalized Bid, the lowest amount quoted by the bidder will be termed as L1 Bidder. The evaluation of the Nationalized Bids will also be done by the Project Architect and tender evaluation committee at Central Office. If L1 vendor refuses due to any reason, the Bank may contact L-2 or L-3 vendor and @ L-1 agreed rate may be accepted (Due to time constraint).
- 33) If any cartel formation is found during any stages of the tender process, the bank has every right to cancel all the offers of shortlisted vendors and will be debarred / expelled from applying from the tenders for Union Bank for a period of 3 years. The Bank's decision is final and binding.

Asst. General Manager/ Dy. General Manager, Support Services Dept., 7<sup>th</sup> floor, Union Bank of India, Union Bank Bhavan, 239, Vidhan Bhavan Marg, Nariman Point, Mumbai- 400 021.

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## TENDER FORM

To,

TENDER FOR STRUCTURAL REPAIRS/RENOVATION WORK INCLUDING EXTERNAL PAINTING WORK OF BANK'S RESIDENTIAL BUILDING (G+13 FLOOR) SITUATED AT POWAI MUMBAI.

Sir,

- 1. We have read and examined the following documents as received by us:
  - a) Notice Inviting Tender
  - b) Instructions to Tenderer
  - c) Conditions of Contract.
  - d) Supplementary Conditions.
  - e) Specifications
  - f) Drawings
  - g) Schedule of Quantities.
  - h) Addition condition of contract
- 1. We are well aware and familiar with CPWD/ PWD, Schedule of Rates 2018 and their specifications, CPWD/ PWD Specification, BIS publication and National Building code which shall apply to this contract to supplement any missing details in this contract in order of preference.

Further to the above, we have visited and examined the site of the proposed works and have acquired the requisite information relating thereto as affecting the tender invited by Bank.

- 2. We agree that any other terms or conditions of contract or any general reservation which may be printed on any correspondence emanating from us in connection with this tender or with any contract resulting from this tender shall not be applicable to this tender or to the contract.
- 4. We have obeyed the rules about confidentiality of tenders and will continue to do so as long as they apply.
- 5. We are enclosing along with our tender an earnest money of Rs. \_\_\_\_\_\_(Rupees \_\_\_\_\_\_\_ only) drawn from Nationalized Bank favoring Union Bank of India, payable at Mumbai (Pay Order No.----- dated ------ drawn on ------). We hereby agree that this sum shall be forfeited by Union Bank of India in the event of our tender being accepted and if we fail to execute the contract when called upon to do so.
- 6. Subject to and in accordance with paragraphs 3 & 4 above and the terms and conditions contained or referred to in the documents listed in paragraph 1, we agree and offer to execute all the Works referred to in the said documents upon the terms and conditions

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contained or referred to therein and to carry out such deviations as may be ordered to be valued as per the conditions of contract.

- 7. We undertake to complete and deliver the whole of the works within a period i.e.**6 months** as specified in the contract and further confirm that the time allowed for completion is adequate. Time allowed for completion of entire job or part job assigned shall be reckoned from the tenth day of the date of acceptance of work order. We shall be under no obligation to pay the sum as stated in the contract for every day that the works shall remain incomplete, damages as compensation subject to the conditions of contract relating to extension of time.
- 8. We hereby agree that unless & until a formal agreement is prepared & executed in accordance with the Articles of agreement, this tender together with your acceptance thereof, shall constitute a binding contract between us.
- 9. EMD Submitted by us us shall be treated as Initial Security Deposit. EMD submitted shall be by way of DD/PO drawn from Nationalized Bank in favour of UNION BANK OF INDIA, payable at Mumbai.We further agree for a deduction of 5 % from the running bill as retention money till accumulating total security deposit.
- 10. Validity of the tender is 120 days from the date of opening of tender or it may be beyond 120 days if mutually accepted.
- 11. The Bank is at liberty to accept or reject any tender, without assigning any reasons whatsoever.
- 12. The work may be split up in the first instance as per exigencies of the Bank. It may be split up in more parts or parts combined if so desired by the Bank without assigning any reasons whatsoever. We will not have any claim either for loss of profit or revision in rates.
- 13. Adherence to the pert chart will be ensured by us as the project is to be executed in a very strict time frame.
- 14. We are aware that the quantities of work indicated in the bill of quantities are approximate, may vary to any extent, even it may be omitted. We will not have any claim of any kind against the Bank.

Signed in the capacity of duly authorized to sign tenders for and on behalf of

Address	••••••	Telephone No
	•••••	Telex No
		Fax No
Date:		
Scope of \	Work:	

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#### SUPPLEMENTARY CONDITION

#### **INDEMNITY BOND**

On the acceptance of his tender, the contractor will be required to execute an Indemnity Bond within 10 days of issue of work order in favor of the Bank against third party claims, civil or criminal complaints, site mishaps and other accidents or disputes and, against any damages, loss or expenses caused to bank and bank's any of articles, fixtures, fittings, infrastructure, due to or resulting from any negligence, misconduct or breach of duty on the part of the contractor, his subcontractors/assignees or his employees and agents, representatives etc., as per the appropriate Indemnity Bond attached.

It will also be covered by labour laws of the Govt. of India.

Any other conditions suggested by the Bank may be added subsequently.

#### The EMD/SD may be forfeited:

If the Bidder withdraws his Bid during the period of Bid validity specified in this RFP.

or

If the Bidder makes any statement or submit information which turns out to be false / incorrect at any time prior/post of issuing Purchase order.

or

If the Bidder fails to furnish security Deposits or is there any benefit of doubt of formation of cartel by bidders.

or

If the bidder backs out or do not accept the work order after being declared L-1 bidder.

n	r

In case of a successful Bidder, if the Bidder fails to sign/execute the contract in accordance with this RFP.

or

If a bidder refuses to accept the corrections of errors calculated in accordance with the provisions of the bidding documents, its bid shall be rejected and its EMD shall be forfeited.

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#### **INDEMNITY BOND**

(On Non-Judicial Stamp Paper of Rs. 100/-)

KNOW all men by these presents that I/We \_\_\_\_\_\_ do hereby execute Indemnity Bond in favour of the Union Bank of India on this \_\_\_\_\_\_ day of \_\_\_\_\_\_2022. WHEREAS Union Bank of India, (address of the office)\_\_\_\_\_\_, have appointed \_\_\_\_\_\_\_ as the Contractors for their Proposed Union Bank of India Project at \_\_\_\_\_\_. THIS DEED WITNESS AS FOLLOWS: I/We \_\_\_\_\_\_,duly authorised by Resolution dated......(in case of a Company) hereby do Indemnify and save harmless Union

1. Any third-party claims, civil or criminal complaints/liabilities, site mishaps and other accidents or disputes and/or damages occurring or arising out of any mishaps at the site due to faulty work, negligence, faulty construction and/or for violating any law, rules and regulations in force, for the time being while executing/executed works by me/us.

Bank of India, \_\_\_\_\_\_ against

2. Any damages to any of articles, fixtures, fittings, infrastructure of bank, loss or expenses to Bank due to or resulting from any negligence or breach of duty on the part of me/us or my sub contractor's if any, servants or agents.

3. The Contractor shall at all times indemnify and keep indemnified the Bank against all losses, claims, damages or compensation including under the provisions of the payment of the Wages Act 1936, Minimum Wages Act 1948, Bank's Liability Act 1938, Workman's Compensation Act 1923, the Maternity Benefit Act 1961, the Bombay Shops and Establishments Act1947, Industrial Disputes Act 1947, and Contract Labour (Regulation and Abolition) Act 1970 and Employees State Insurance Act 1948, Motor Vehicles Act 1988 or any modifications thereof or under any other law relating thereto and rules made there under from time to time or as a consequence of any accident or injury to any workman or other person in or about the work whether in the employment of the Bank or Contractor or not, and also against all costs, charges and expenses of any suit, action or proceedings whatsoever out of such accident or injury or combination of any such claims arising out of and in the course of the execution of the contract.

4.Any claim by an employee of mine/ours or of sub-contractors if any, under the Employee's Compensation Act and Owners Liability Act, 1939 or any other law, rules and regulations in force for the time being and any Acts replacing and/or amending the same or any of the same as may be in force at the time and under any law in respect of injuries to persons or property arising out of and in the course of the execution of the contract work and/or arising out of and in the course of any workman/employee.

Any act or omission of mine/ours of sub-contractor's if any, our/their servants or agents which may involve any loss, damage, liability, civil or criminal action.

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IN WITNESS WHEREOF THE	has set his/their	
hand on this day of	2022.	
SIGNED AND DELIVERED BY THE	NAME AND ADDRESS	
AFORESAID	(Contractor)	
IN THE PRESENCE OF WITNESSES:		
1.		

2.

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#### ARTICLES OF AGREEMENT

(Draft will be modified by Bank's Law Officer as per requirement)

ARTICLES OF AGREEMENT made at \_\_\_\_\_ this \_\_\_\_\_day of \_\_\_\_\_ Two Thousand and twenty-two.

#### BETWEEN

#### AND

MESSRS \_\_\_\_\_\_, having its registered office at \_\_\_\_\_\_, hereinafter called the "Contractor" (which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns) of the OTHER PART.

#### **WHEREAS**

i.	The	Bank	is	desirous	of		(Works)	on	its
						at	•		

ii. The Bank has already appointed and retained M/s \_\_\_\_\_\_, having its Office at \_\_\_\_\_and Registered Office at as Architect / Consultant for the Works or the

Project.

- The Bank has caused the drawings and bills of quantities showing and describing the Works to be done to be prepared by or under the direction of the Consultants / Architect;
- iv. The Bank had invited tenders for \_\_\_\_\_\_work in accordance with the general conditions of contract, special conditions of contract, technical specifications, bills of quantities and working drawings, as prepared by the Interior Consultants/ Architect and furnished to the Contractor.

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- vi. The tender submitted by the Contractor was, after negotiations, modified/altered upon the Contractor agreeing to revise the rates of certain items and further offering a rebate for execution and completion of the Project thereby reducing the tender amount to Rs. \_\_\_\_\_\_as confirmed by its letters dated \_\_\_\_\_.
- vii. Towards the implementation of the Project, the Contractor has supplied the Bank with a fully priced copy of the said bills of quantities (which copy is hereinafter referred to as "the Contract Bills") and the drawings numbered as mentioned in the Annexure 11 of the Tender document inclusive (hereinafter referred to as "the Contract Drawings") and the Contract Bills and the contract Drawings have been signed by or on behalf of the parties hereto.
- viii. The Contractor has already agreed with the Bank to implement and execute the Project in full on the basis of the contract documents as hereinafter defined on the terms and conditions therein contained.
  - ix. The parties are now executing this Agreement setting out the basic terms of the agreement between them for smooth implementation and execution of the Project without any unnecessary difference or dispute.

#### **NOW IT IS HEREBY AGREED** as follows:

- 1. The Contract Document is comprising of
  - i. Tender document including technical bid (Vol.-I) and pre-bid (Vol.-II).
- ii. Notice Inviting Tender issued vide letter \_
- iii. Subsequent letters issued by the Bank vide\_
- iv. Clarifications submitted by the contractor vide letter dt. \_\_\_\_\_.
- v. Minutes of Meeting held on \_\_\_\_
- vi. Rebate/ Discount offered by the contractor vide letter \_\_\_\_\_
- vii. Work Order issued by the Bank vide letter \_
- viii. Acceptance letter \_\_\_\_\_ from the contractor
- ix. Drawings numbering as mentioned in the Annexure 11 of the Tender document enclosed along with the tender document.

1.a Unless the context otherwise requires the contract documents above mentioned shall be harmoniously construed and in the chronological order.

1.b Unless otherwise expressly provided under these presents, contract documents (iii) to (ix) above shall be construed as modifying only those general and special terms and conditions in tender document in so far and to the extent referable to the clauses in the said tender document.

1.c Unless otherwise stated expressly hereunder, all the general and special terms and conditions shall apply and binding on the contractor.

2. The Contract Document is complimentary. What is called for in any one shall be as binding as called for by all. The aforesaid shall form integral part of contract and in the event of any inconsistency between any provisions herein the provisions of the Contract Documents shall prevail. When any of the General and Special Conditions are at variance, the condition stipulated in the Special Conditions of Contract shall supersede relevant provisions in General Conditions. For all matters not specifically provided for

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herein the provisions of General and Special Conditions in the Tender Documents shall apply and the rights and liabilities of the parties shall be decided accordingly. The decision of the Bank in this regard shall be final and binding.

- 3. All time limits stated in the Contract Document are of the essence of the contract where the work has to be completed within 6 months failing which liquidated damages will be recovered @ 1.0% of contract amount for per week of delay subject to maximum recovery of 10 % of the contract amount.
- 4. For the consideration hereinafter mentioned, the Contractor shall carry out and complete the Works in conformity with the contract documents and in accordance with the instructions issued by the consultant from time to time including all modifications extra and additional works and obligations to be carried out either on the Site or at any factory or work shop or any other place for subsequent incorporation as required for the due performance of the contract.
- 5. The general character and the scope of the Works is illustrated and defined by the specifications and the bills of quantities herewith attached and by the signed drawings. The scope includes furnishing all materials, labour, tools, equipment and management necessary for and incidental to the construction and completion of the Works. If the Contractor shall find any discrepancy in or divergence between the contract drawings and/or the contract bills he shall immediately give to the Consultant a written notice specifying the discrepancy or divergence and the Consultant shall issue instructions in regard thereto which shall be complied with by the Contractor.

#### 6. <u>INTENT</u>

The intention of arrangement is to secure the performance of the Contractor's obligations to the satisfaction of the Bank/ Architect/ Consultant. All labour, material, equipment, constructional plant and transportation necessary for the proper execution of the Project is to be provided by the Contractor and should only be of the approved manufacturer/agencies respective kinds as described in the Contract Documents which is to be subjected from time to time to such tests as the Engineer/ Consultant's representative may direct. In case the required material/services of approved manufacturers/agencies are not available or are not up to the mark the Contractor shall procure material/ services from such other manufacturer/agencies as may be approved by the Consultant / Bank and the Contractor shall submit rate analysis for such material.

#### 7. <u>EXTENT</u>

The Contractor shall carry out and complete the Works in every respect in accordance with this contract and with the directions of and to the reasonable satisfaction of the Consultant. The Consultant may in their absolute discretion and from time-to-time issue further drawings, details and/or written instructions and written explanations whole of which are collectively referred to as Consultants' instructions. All such drawings and instructions shall be consistent with the Contract Document true developments thereof as reasonably inferable there from.

#### 8. <u>TYPE OF CONTRACT</u>

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The Contract is Item Rate contract. The Contractor shall be paid for the actual quantity of Work done, as measured at Site, at the Item quoted by him in the Contract Bills. The contractors have

- i. Been informed that the schedule of approximate quantities is liable to alteration by omission, deduction, substitution or additions at the discretion of the Consultant/Bank without affecting the terms of the contract and no compensation to Contractor.
- ii. Fully and correctly understood the meaning of all the tender documents, the General Conditions of Contract, Special Condition of Contract, Technical Specifications, Bill of Quantities and working drawings or part thereof.

#### 9. <u>CONTRACTORS COVENANTS</u>

- i. The Tender form conditions, priced schedule of quantities, contract drawings and General and Special Conditions of Contract, specifications, Drawings, priced Bill of Quantities, Schedule of Rates and Prices, if any, Tender, pre-contract correspondence, Letter of Intent/Acceptance, Work order, shall be read and construed as forming part of this agreement and the Contractor shall abide by and submit themselves to all the conditions and stipulations contained therein; which are not specifically incorporated herein;
- ii. The Contractor shall obtain necessary permissions/ certificates/ order from the Competent Authority in respect of workmen employed by them for the Project and shall keep the Bank safe, harmless and reimburse all amounts/expenses incurred or suffered by the Bank in connection with any such claim;
- iii. The Contractors shall not make any claim as regards want of information of any particular point or any change in the rate or conditions save and except as provided herein;
- iv. The Contractors shall have a duly authorized agent at the place of Work to accept services of notice and to agree to extras, omissions, additions and substituted items of Works and rates from the commencement of the Work until it is virtually completed.
- v. In the event of any discrepancy between the details and/or description given in the Bill of Quantities, the Drawings and the Technical Specifications, such item shall be deemed to have been priced in accordance with the details and/or description confirming to the most superior provisions contained in any of the following :
  - a) Bill of Quantities
  - b) Drawings
  - c) Technical Specifications
- vi. It shall be understood that the details and/or description not specifically mentioned in the Bill of Quantities and/or the drawing shall be the same as those mentioned in the Technical Specification. Any further interpretation of above Clause shall be at the discretion of the Consultants, whose decision shall be final and binding on the parties to the contract.
- vii. The Contractors shall not make any claim for increase in the contract consideration on the basis of incorrectness and insufficiency of the information available at the time of submitting the Tender and/ or incorrectness and insufficiency of the rates and prices stated in the price bill of quantity and schedule of rates and prices or otherwise alleging

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insufficiency of the tender amount to cover their obligation under the contract or matters concerning the execution of the Project.

- viii. The Contractor shall be fully responsible for the adequacy, stability and safety of all site operations and methods of construction, provided that the Contractor shall not be responsible, except as may be expressly provided in the Contract, for the design or specification of the Permanent Works, or for the design or specification of any Temporary Works prepared by the Consultant.
  - ix. The Contractor shall promptly inform the Consultant of any error, omission, fault and other defects in design, drawing or specifications for the Works, which are discovered while reviewing the Contract Documents or in the process of execution of the Works.
  - x. The Contractor shall arrange for the permits and licenses for release of materials, which are under Government control subject to the Bank giving all the necessary assistance and upon being advised by the Consultant signing any forms or applications that may be necessary.
  - xi. The Contractor shall comply with the provisions of legislation prevailing during the currency of contract.
- **10.** The Contractor shall keep the Bank saved harmless and indemnified against claims if any of the workmen and all costs and expenses as may be incurred by the Bank in connection with any claim that may be made by any workmen.

#### 11. <u>GENERAL CONDITIONS</u>

- i. The schedule of Quantities given in the <u>Contract Bill</u> is provisional and is meant to indicate the intent of the Work and to provide a uniform basis for tendering. The Bank reserves the right to increase or decrease any of the quantities or to totally omit any item of Work and the Contractor shall not claim any extras or damages on these grounds.
- ii. Any error in description or in quantity or omission of items from the Contract Bill shall not vitiate this Contract but shall be treated as a variation.
- iii. The rates quoted by the Contractor in the priced bill of quantities (Contract Bills) shall be treated as firm and the contract sum shall be deemed to have been calculated with reference to the cost of execution of Works as set out in Contract Documents and shall not be adjusted or altered for any reason.
- 12. Notwithstanding anything contained elsewhere in any of the clauses of the tender, the prices/rates quoted for each item/Work in the Bills of Quantities shall be deemed to be inclusive of all direct and indirect costs, and taxes, etc. on any of inputs, royalty on quarried items etc. that may be involved in completing the item/Work as required in the fulfillment of all obligations under the contract and to the satisfaction of the Engineer. Additional Taxes/ Levies by Central/ State Government legislations after opening of tender shall be reimbursed to the contractors as per actual.
- **13.** All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for Work actually done and completed, and shall not preclude the repairing of bad, unsound, and imperfect or unskilled Work to be removed and taken away and reconstructed, or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim, nor shall, it conclude, determine or affect in anyway the

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power of the Bank under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the Contractor within one month of the date fixed for completion of the Work or of the date of certificate of completion furnished by the Consultant and payment shall be made within eight (8) weeks from the date of receipt of final Certificate from the Consultant.

#### 14. INSURANCE

- i. Without limiting the obligations and responsibilities under Contract Clause for Care of Work the Contractor shall effect third party insurance with an insurer and in terms approved by the Bank in the joint names of the Bank and the Contractor-
- ii. against all loss or damage from whatever cause arising, other than the excepted risks stated in contract clause of the General Conditions for which the Contractor is to be held responsible under the terms of the Contract so as to cover the Bank and the Contractor during the period beginning with commencement of the Works until the date stated in the Certificate of Completion for the whole of the Works.
- iii. against any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purposes of completing the outstanding Work during the Defects Liability period pursuant to the Undertaking given at the time of applying for the issue of Certificate of Completion.
- iv. against any loss or damage occasioned by the Contractor in the course of any operations carried out by him for rectifying any defect in perfection or fault appearing during the progress of the Work or during the Defects Liability Period.
- v. against any loss or damage occasioned by the Contractor in the course of any operations carried out by him for searching the cause of any defect, imperfection or fault appearing during the progress of the Works or during the Defects Liability Period.
- vi. against any liability for or in respect of any damages or compensation payable at law in respect of or in consequence of any accident or injury to any workmen or other person in the employment of the sub-Contractor provided the sub-contractors shall not have insured against such contingency. (Insurance against accident etc.to workman)
- vii. Unless otherwise instructed the Contractor shall insure the Works and keep them insured until the virtual completion of the contract against loss or damage by fire and/or earthquake, flood.
- viii. The Contractor shall maintain Contractors' all risks insurance policy covering loss, damage, theft, burglary etc. of all materials and equipment, temporary Works and the Work shall be insured for a total sum equal to the value of all such items plus 10% of such value.

Provided always that all the insurance under the contract documents shall be arranged by the Contractor from a first class insurance company having a branch near the site who can deal with all matters pertaining to the subject, the insurance must be placed with a company approved by the Bank, in the joint names of the Bank and the Contractor for such amount and for any further sum if called to do so by the Bank, the premium of such further sum being allowed to the Contractor as an authorized extra.

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- **15.** The Contractor shall deposit the policy and receipt for premiums paid with the Bank within 21 (twenty-one) days from the date of issue of Work order unless otherwise instructed. In default of the Contractor insuring as provided above, the Bank on his behalf may so insure and may deduct the premiums paid from any money due, or which may become due to the Contractor. The Contractor shall as soon as the claim under the policy is settled or the Work reinstated by the Insurance Company should they elect to do so, proceed with due diligence with the completion of the Works in the same manner as though the insured risk/contingency has not occurred and in all respects under the conditions of the contract. The Contractor in case of rebinding or reinstatement after the occurrence of the insured risk/contingency shall be entitled to such extension of time for completion as the Bank may deem fit.
- 15.1 Such insurance shall continue during the whole of the time of continuance of Work and/or during such time that any persons are employed by him on the Works and shall when required produce before the Bank or the consultant, such policy of insurance and the receipt for payment of the earlier premium and the current premium.
- 15.2 The insurance shall be effective in such manner that the Bank is indemnified under the policy. In the event of the sub-contractor having affected an insurance against accident etc. to the workmen the Contractor shall require such sub-contractor to produce to the Bank/ consultant when required, such policy of insurance and the receipt for the payment of the current premium, then in that event insurance under clause (vii) hereof by the Contractor shall not be necessary.
- 16. The Contractor shall provide for adequate cover to the Bank as per the provisions of Workmen Compensation Act.
- 17. The Contractor shall make available the insurance cover notes before the commencement of the Work and shall notify any change in the nature or extent of the Work and also make available additional insurance of Works if required in special circumstances.

#### 18. DEFECTS LIABILITY

- 18.1 Any defects, shrinkages or other faults which shall appear within the Defects Liability Period of 12 months from the date of handing over the works and which are due to materials or workmanship not in accordance with this contract or on account of failure on the part of the Contractor to comply with any of his obligations expressed or implied shall be specified by the consultant in a schedule of defects which he shall deliver to the Contractor not later than 14 days after the expiration of the Defects Liability Period, and within a reasonable time after receipt of such schedule the defects, shrinkages and other faults therein specified shall be made good by the Contractor and (unless the consultant shall otherwise instruct, in which case the contract sum shall be adjusted accordingly) entirely at his own cost.
- 18.2 The Contractor shall make good at his own costs and to the satisfaction of the consultant, all defects, shrinkages or small faults arising in the opinion of the consultant/ engineer from Work or materials not being in accordance with the drawings or specifications or schedule of quantities or the instructions of the Engineer/ consultant which may appear within the "Defects Liability Period of 12 months from the date of handing over completed site" referred to in the Appendix to General

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Conditions. All defects, shrinkages or small faults arising from any other cause not attributable to the Contractor shall be rectified by the Contractor as an additional work.

- 18.3 In the event of failure of the Contractor to carry out any such work to the satisfaction of the Engineer/ consultant, the Bank shall be entitled to carry out the same at the Contractor's costs and all expenses consequential and incidental thereto shall be deducted by the Bank from any monies due or to become due to the Contractor.
- 18.4 When in the opinion of the Engineer/consultant any defects, shrinkages or other faults which he may have required to be made good under sub-clause (1) and (2) of this condition shall have been made good he shall issue a certificate to that effect, and completion of making good defects shall be deemed for all the purposes of this contract to have taken place on the day named in such certificate.

#### 19. SPECIAL RISK

The Contractor shall not be liable for or in respect of any consequences arising out of any special risks as enumerated in relevant clause of the General Conditions. The responsibilities, rights and liabilities of the parties in such case shall be determined with respect to Clause 65 of the General Conditions.

#### 20. STATUTORY OBLIGATIONS, NOTICES, FEES AND CHARGES

The Contractor shall comply with and give all notices required by any Act of Parliament, any instrument rule or order made under any Act of Parliament, or any regulation or byelaw of any local authority or of any statutory undertaker which has any jurisdiction with regard to the Works or with whose systems the same or will be connected. The Contractor before making any variation from the contract drawings or the contract bills necessitated by such compliance shall give to the Engineer / consultant a written notice specifying and giving the reason for such variation and the Engineer / consultant may issue instructions in regard thereto. If within 7 days of having given the said written notice the Contractor does not receive any instructions in regard to the matters therein specified, he shall proceed with the Work confirming to the Act of Parliament, instrument, rule, order, regulation or byelaw in guestion and any variation thereby necessitated shall be deemed to be a variation required by the Engineer / consultant. There shall be no Employer -Employee relationship whatsoever between the bank and the successful bidder/his sub-contractors /agents /labourers /employees /staff/ representatives. The bidder shall be liable for compliance of all labour laws applicable in connection with the contract and shall be responsible for payment of wages/arrears of wages under the applicable laws.

#### 21. MATERIALS, WORKMANSHIP, SAMPLES, TESTING OF MATERIALS

- 21.1 All the works specified and provided for in the specifications or which may he required to be done in order to perform and complete any part thereof shall be executed in the best and most workmanlike manner with materials of the best and approved quality of the respective kinds in accordance with the particulars contained in and implied by the specifications and as represented by the drawings or according to such other additional particulars, and instructions as may from time to time be given by the consultant /Engineer during the execution of the Work, and to his entire satisfaction.
- 21.2 If required by the consultant /Engineer the Contractor shall have to carry out tests on materials and workmanship in approved materials testing laboratories or as prescribed

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by the consultant /Engineer at his own cost to prove that the materials etc., under test conform to the relevant I.S. Standards or as specified in the specifications. The necessary charges for preparation of mould (in case of concrete cube) transporting, testing etc., shall have to be borne by the Contractor. No extra payment on this account should in any case be entertained.

- 21.3 In case contractor is delaying or refusing or avoiding testing of material, the consultant/engineer shall arrange for carrying out testing of material and the necessary expenditure in carrying out the testing, transportation and incidental expenses shall be recovered from the contractor.
- 22. All the materials (except where otherwise described) stores and equipment required for the full performance of the Work under the contract must be provided through normal channels and must include charge for import duties, sales tax, octroi and other charges and must be the best of their kind available and the Contractor/s must be entirely responsible for the proper and efficient carrying out of the Work. The Work must be done in the best workmanlike manner. Samples of all materials to be used must be submitted to the Consultant/Engineer when so directed by the Consultant / Engineer and written approval from Consultant / Engineer must be obtained prior to placement of order.
- 23. During the inclement weather the Contractor shall suspend concreting and plastering for such time as the Consultant /Engineer may direct and shall protect from injury all Work when in course of execution. Any damage (during constructions) to any part of the Work for any reason due to rain, storm or neglect of Contractor shall be rectified by the Contractor in an approved manner at no extra cost.
- 24. If the Work be suspended by reason of rain, strike, lock-outs or any other cause, the Contractor shall take all precautions necessary for the protection of Work and at his own expenses shall make good any damage arising from any of these causes.
- 25. The Contractor shall cover up and protect from damage from any cause, all new Work and supply all temporary doors, protection to windows, and any other requisite protection for the execution of the Work whether by himself or special tradesmen or sub-contractor and any damage caused must be made good by the Contractor at his own expenses.

#### 27.SUBSTITUTION

Should the Contractor desire to substitute any materials and workmanship, he/they must obtain the approval of the Bank / Consultant in writing for any such substitution well in advance. Materials designated in this specification indefinitely by such term as "Equal" or "Other approved" etc. specific approval of the Bank/Consultant has to be obtained in writing. The term equivalent means, if material specified is not available, then after satisfying to the fact, the consultant / engineer may give other material to be used which will be subject to adjustment in purchase prices.

#### 28. INSPECTION OF WORKS

28.1 All materials and workmanship shall be subject to inspection, examination and test at any and all times during manufacture and/or construction. The Consultant may issue instructions requiring the Contractor to open up for inspection any Work covered up or to arrange for or carry out any test at any and all times.

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- The Consultant / Engineer shall have the right to reject the defective material and workmanship or require its correction.
- 1. The test of any materials or goods (whether or not already incorporated in the Works) or of any executed Work, and the cost of such opening up or testing (together with the cost of making good in consequence thereof) shall be added to the contract sum unless provided for in the contract bills or unless the inspection or test shows that the Work, materials or goods are not in accordance with this contract.
- 2. The Consultant / Engineer may issue instructions in regard to the removal from the site of any Work, materials or goods, which are not in accordance with this contract.
- 3. The Engineer may (but not reasonably or vexatious) issue instructions requiring the dismissal from the Works of any person employed thereon.
- 4. On the failure of the Contractor to comply with any of the Engineer's instructions the Engineer may proceed to replace or correct such material/workmanship entirely at the cost of the Contractor.

#### 29. <u>REMOVAL OF IMPROPER WORK</u>

The Bank shall during the progress of the Work have power to order in writing from time to time the removal from the Work within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Consultant/ Engineer are not in accordance with specification or instructions, the substitution or proper re-execution of any Work executed with materials or workmanships not in accordance with the drawings and specifications or instructions. In case the Contractor refuses to comply with the order the Bank shall have the power to employ and pay other agencies to carry out the Workhand all expenses consequent thereon or incidental thereto as certified by the Consultant/ Engineer shall be borne by the Contractor. No certificate which may be given by the Engineer shall relieve the Contractor from his liability in respect of unsound Work or bad materials.

#### 30. **PROTECTIVE MEASURES**

- 30.1 The Contractor from the time of being placed in possession of the site must make suitable arrangements for watching, lighting and protecting the work, the site and surrounding property by day, by night, on Sundays and other holidays.
- 30.2 Contractor shall indemnify the Bank against any possible damage to the building, roads, or members of the public in course of execution of the work.
- 30.3 The contractor shall provide necessary temporary enclosures etc. for the protection of the work and materials and for altering and adopting the same as may be required and removing on completion of the works and making good all works disturbed.

#### 31.NOTICE AND PATENTS OF APPROPRIATE AUTHORITY AND OWNERS.

31.1 The Contractor shall conform to the provisions of any Acts of the Legislature relating to the Work, and to the Regulations and Bye-laws of authorities, and/or any water, lighting and other companies, and/or authorities with whose systems the structures were proposed to have connection and shall before making any variations from the drawings or specification that maybe associated to so conform, give the Consultant/ Engineer

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written notices, specifying the variations proposed to be made and the reasons for have making them and apply for instruction thereon. The Consultant / Engineer on receipt of such intimation shall give a decision within a reasonable time.

**31.2** The Contractor/s shall arrange to give all notices required for by the said Acts, Regulations or Bye-laws to be given to any authority, and to pay to such authority or to any public officer all fees that may be properly chargeable in respect of the Work and lodge the receipts due with the Bank.

#### 32. ASSIGNMENT AND SUB-LETTING

- a. The whole of the Works included in the contract shall be executed by the Contractor and the Contractor shall not directly or indirectly transfer, assign or underlet the contract or any part, share or interest therein nor, shall take a new partner, without written consent of the Bank and no subletting shall relieve the Contractor from the full and entire responsibility of the contract or from active superintendence of the Work during their progress.
- b. The Contractor shall not assign the Contract or any benefit or interest therein or thereunder, otherwise than by a charge in favour of the Contractor's Bankers of any monies due or to become due under this Contract, without the prior written consent of the Bank.
- c. The Contractor shall not sub-let the whole of the Works except where otherwise provided by the contract, the Contractor shall not sublet any part of the Works without the prior written consent of the Engineer, which shall not be unreasonably withheld, and such consent, if given shall not relive the Contractor from any liability or obligation under the contract and he shall be responsible for the acts, defaults and neglects of any subcontractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. Provided always that the provision of labour on a piecework basis shall not be deemed to be a subletting under this clause. The Contractor shall co-ordinate and shall be responsible for all aspects of his sub-contractor(s) without being relieved of any of his obligation under the contract.
- d. If, the contracting agencies are violating the tender terms and sub-let the work without Bank's consent and the same is brought to the notice of the Bank, the Bank will be entitled to recover 10% of such work as penalty besides initiating measures as provided in contract.
- **33.** If, at any time during the execution of the Works, the Consultant/ Engineer shall require the Contractor to make boreholes or to carry out exploratory excavation, such requirement shall be ordered in writing and shall be deemed to be an addition ordered under the provisions of the General Conditions unless a provisional sum in respect of such anticipated Work shall have been included in the Bill of Quantities.
- **34.** The Contractor shall in connection with the Works provide and maintain at his own costs all lights, guards, fencing and watching when and where necessary or required by the Consultant / Engineer or the Bank, or by any duly constituted authority, for the execution and for the protection of the Works, and/or for the safety and convenience of the public / others.
- **35.** The Contractor shall, in accordance with the requirements of the Consultant/ Engineer, afford all responsible opportunities for carrying out their Work to any other Contractors

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employed by the Bank and their workmen and to the workmen of the Bank and of any other duly constituted authorities who may be employed in the execution on or near the Site of any Work not included in the contract or of any contract with the Bank may enter into in connection with or ancillary to the Works. The Contactor will not be paid any compensation on this account.

**36.** Shall keep the Site reasonably free from unnecessary store of constructional plant and machinery, wreckage and rubbish during progress of Works and on completion leave the whole site clean and in a workmanlike condition to the satisfaction of the Consultant / Engineer.

#### 37. Default of Contractor

- 37.1 If the Contractor
  - i. being a company presents a petition for winding up and/or goes into liquidation (other than voluntary liquidation for the purposes of amalgamation or reconstruction) or
  - ii. shall make an assignment or a composition for the benefit of the greater part, in number of amounts of his creditors or shall enter into a Deed or arrangement with his creditors, or
  - iii. if a Receiver of the Contractor's firm appointed by the court shall be unable, within fourteen days after notice to him requiring him to do so, to show to the reasonable satisfaction of the Bank that he is able to carry out and fulfill the contract, and if so required by the Bank to give reasonable security therefore, or
  - iv. if the Contractor shall suffer execution to be issued, or
  - v. shall suffer any payment under this contract to be attached by or on behalf of and of the creditors of the Contractor, or
  - vi. shall assign, charge or encumber this contract or any payments due or which may become due to the Contractor without the consent in writing of the Bank first obtained, there under, or
- vii. shall agree to carry out the contract under a committee of inspections of his creditors, or
- viii. shall have an execution levied on his goods, or
- ix. shall use improper materials or workmanship in carrying on the Works, or
- x. shall in the opinion of the Bank not exercise such due diligence and make such due progress as would enable the Work to be completed within due time agreed upon, and
- xi. the Consultant/ Engineer certifies in writing that the Contractor has failed to commence the Works or failed to proceed with the Works after the suspension order when so called upon by the Consultant/ Engineer, or
- xii. shall abandon the contract,
- xiii. without reasonable excuse has failed to commence the Works or have suspended the progress of Works for 28 days after receiving from the Consultant/ Engineer written notice to proceed on

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- xiv. has failed to remove materials from the site or to pull down or replace for 28 days after receiving from the Consultant/ Engineer written notice that the said materials or Work has been condemned and rejected by the Consultant/ Engineer under these conditions or
- xv. despite previous writings by the Consultant/ Engineer in writing has failed to execute Works in accordance with the contract, or is persistently or flagrantly neglecting to carry out his obligations under the contract or as to the detriment of good workmanship or in defiance of the Consultant / Engineer's instructions to the contrary, sublet any part of the contract then and in any of the said cases the Bank may notwithstanding previous waiver
- a) determine the contract by after giving 14 days' notice in writing to the effect as hereinafter mentioned, but without thereby affecting the powers of the Bank 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 Works subsequently executed had been executed by or on behalf of the Contractor (without thereby creating any trust in favour of the Contractor)
- b) further the Bank or his agent, or servants, may enter upon the Site and take possession of the Work and all Constructional Plant, amenities, unused materials, tools, scaffolding, sheds, machinery, steam and other power, utensils and materials lying upon premises or the adjoining lands or roads reserved for the execution of the Works and
- sell 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 Contractors or other persons or person to complete the Works, and the Contractor shall not in any way interrupt or do any act, matter of thing to prevent or hinder such other Contractors or other persons or person employed from completing and finishing or using the materials and plants for the Works when the Works shall be completed, or as soon thereafter as conveniently may be, the Bank shall give notice in writing to the Contractor to remove his surplus materials and plants and should the Contractor fail to do so within a period of 14 days after receipt by him the Bank may sell the same by Public Auction and shall give credit to the Contractor for the amount so realized.
- 37.2 Any expenses or losses incurred by the Bank in getting the Works carried out by other Contractors shall be adjusted against the amount payable to the Contractor by way of selling his tools and plants or due on account of Work carried out by the Contractor prior to engaging other Contractors or against the Security Deposit.
- 37.3 Upon such entry and expulsion by the Bank the Consultant/ Engineer may adopt an appropriate mode at his discretion and certify the amounts, if any, that had at the time of such entry and expulsion reasonably been earned in respect of the work actually done by him and the value of any unused or partially used materials, any Constructional Plant and any amenities brought into existence exclusively for execution of the Works.
- 37.4 If the Bank shall enter and expel [the Contractor] under this Clause, he shall not be liable to pay to the Contractor any money on account of the Contract, until the expiration of the Defects Liability Period and thereafter until the costs of execution, damages for delay in completion, if any, and all other expenses incurred by the Bank

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have been ascertained and the amount thereof certified by the Consultant / Engineer. The Contractor shall then be entitled to receive only such sum or sums, if any, as the Consultant / Engineer may certify would have been payable to him upon due completion by him after deducting the said amount. If such amount shall exceed the sum which would have been payable to the Contractor on due completion by him, then the Contractor shall, upon demand, pay to the Bank the amount of such excess and it shall be deemed a "debt due" by the contractor to the Bank and shall be recoverable accordingly.

# 38 NOTICES

- 39.1 All certificates, notices or written orders to be given by the Bank or by the Consultant / Engineer to the Contractor under the terms of the Contract shall be served by sending by registered post or by Courier or delivering the same to the Contractor's principal place of business, or such other address as the Contractor shall nominate for this purpose.
- 39.2 All notices to be given to the Bank or to the Consultant/ Engineer under the terms of the Contract shall be served by sending by registered post or by Courier or delivering the same to the respective addresses nominated for that purpose in Part II of these conditions.
- 39.3 Either party may change a nominated address to another address in the country where the Works are being executed by prior written notice to the other party and the Consultant / Engineer may do so by prior written notice to both parties.
- 40 The work should be executed in time bound and Bank has the right to exit/cancel /terminate the contract with immediate effect and engage another contractor, in case the bidder defaults or commit breach of any Tender terms. In such an event, bank shall recover from the bidder the cost, expenses for loss, damage caused due to the bidder, by various means not limited to forfeiture of security deposit and unpaid bills.

## ARBITRATION

- 40.1 Wherever, in any of the documents forming part of the Contract, the Bank's Asst. General Manager/ Dy. General Manager, SSD Central Office has been vested with the final powers, his decision, opinion, certificate or any other discretion shall be final conclusive and binding on the parties and shall be without appeal. All other matters shall be subject to the right of arbitration.
- 40.2 All disputes or differences of any kind whatsoever save and except matters referred to in clause 1) arising out of or in connection with the Contract, whether during the progress of Work or after Completion and shall after written notice by either party to the contract to the other of them and to the Bank hereinafter mentioned be referred for adjudication to one mutual arbitrator in case of disagreement of the two parties or two Arbitrator, one each to be nominated by the Contractor and the Bank who shall thereafter appoint an Umpire. The provisions of Indian Arbitration and Conciliation Act 1996 shall apply for the purposes.
- 40.3 The Work under the Contract shall, however, continue during the arbitration proceedings and no payment due or payable to the Contractor shall be withheld on account of such proceedings.

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- 40.4 The Arbitrator shall be deemed to have entered on the reference on the date he issued notice to both the parties fixing the date of the first hearing.
- 40.5 The Arbitrator may from time to time, with the consent of the parties, enlarge the time for making and publishing the award.
- 40.6 The Arbitrator shall give a separate award in respect of each dispute or difference referred to him. The Arbitrator shall decide each dispute in accordance with the terms of the contract and give a reasoned award. The venue of arbitration shall be at Mumbai center only.
- 40.7 The fees, if any, of the Arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award including the fees, if any, of the Arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid and may fix or settle and amount of costs to be so paid.
- 40.8 The award of the Arbitrator shall be final and binding on both the parties.
- 40.9 Subject to aforesaid the provisions of the Arbitration & Conciliation Act 1996 or any statutory modification or re-enactment thereof and the rules made there under, and for the time being in force, shall apply to the arbitration proceeding under this clause.
- 40.10 The Bank and the Contractor hereby also agree that arbitration under clause shall be a condition precedent to any right to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.

IN WITNESS WHEREOF the Bank and the Contractor have set their Respective hands to these presents through their authorized representatives

the day, month and year first herein above written.

Signed by the said In the presence of

Bank

Witness Name: Address

Signed by the said In the presence of

Contractor

Witness Name: Address

DOCUMENTS ATTACHED TO THE AGREEMENT FORMING PART & PARCEL OF THE AGREEMENT
 Tender document & tender drawings.

- NIT vide
- Addendum issued vide
- Contractor's letter dated

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## GENERAL INSTRUCTIONS TO CONTRACTORS AND SPECIAL CONDITIONS

- 1) Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
- 2) The Tender Form must be filled in English and all entries must be made by the hand and written in ink. If any of the documents is missing, or unsigned, the Tender may be considered invalid by the Bank in its discretion.
- EMD of Successful bidder will be returned after submission of Performance security. 3) Performance Security should be for an amount of three percent (3 %) of the contract value. Performance Security may be furnished in the form of an Account payee Demand Draft or bank Guarantee from a Nationalized Bank in an acceptable form safeguarding the interest of the bank in all respects. Performance Security should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. i.e 60 days beyond defect liability period. If the successful bidder desires to adjust the amount of EMD as Performance Security, then balance amount of performance Security should be taken separately and in such case, EMD should not be returned/refunded to the successful bidder until completion of all such obligations under the contract. Performance Security shall be forfeited and credited to the Bank's account in the event of breach of contract by the supplier/contractor, in terms of the relevant provision of the contract. Performance Security will be refunded to the supplier/contractor without any interest, after the supplier/contractor duly performs and completes the contract in all respects.
- 4) This amount of Security deposit is kept with the bank. 50% of the Total Security Deposit may be refunded to the contractor by the bank at its sole discretions without any interest on issue of virtual completion certificate by the Architect/Premises department, Contractor's removal of his material, equipment, labour force, temporary sheds/ stores, etc. from the site (excepting for small presence required, if any, for defect liability period and approval by the Bank) and payment of Final Bill. The remaining 50% of the Performance Security Deposit may be refunded 15 days after the end of completion of defect liability period i.e after one year, provided the contractor has satisfactorily carried out all the works and rectified all the defects in accordance with the conditions of contract. The Bid Security or Bank Guarantee/security deposit may be forfeited by the Bank for any default/failure to implement any of the terms by the successful bidder.
- 5) The contractor shall not assign the contract. He shall not sub-let any portion of the contract except with the written consent of the Bank. In case of breach of these conditions, the Bank may serve a notice in writing on the contractor rescinding the contractor whereupon the Security Deposit shall stand forfeited to the Bank, without prejudice to his other remedies against the contractor. Central Govt./ State Govt. organization will not be allowed to sublet the work on back to back basis.
- 6) The contractor shall carry out of all the work strictly in accordance with Drawings, details and instructions of the Architect, Consultant and the Bank. If in the opinion of the Architect, consultant or the Employer, changes have to be made in the design and with the prior approval in writing of the Employer, they desire the contractor to carry out the same, the contractors shall carry out the same without any extra charge. The Bank's decision in such cases shall be final and shall not be open to arbitration.

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- 7) A Schedule of probable quantities in respect of each work and specifications accompany these special conditions. The Schedule of probable quantities is liable to alteration by omission, deductions or additions at the discretion of the Architect/ Bank. No claim will be entertained from the contractor on account of loss of profit over revising the tender rates.
- 8) The Tenderer must obtain for himself on his own responsibility and at his own expenses all the information which may be necessary for the purpose of filling of 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 no compensation will be paid on account of not getting proper information.
- 9) The rates quoted in the Tender shall be inclusive of all charges for clearing of site before commencement as well as after completion, water, electrical consumption, meters, double-scaffolding, centering, boxing, staging, planking, timbering and pumping out water, including bailing, fencing, planking, timbering and pumping out water, including bailing, fencing, plant and equipment, storage sheds, watching and lighting by night as well as day, including Sundays and Holidays, temporary plumbing and electric supply, protection of the public and safety of adjacent roads, streets, cellars, vaults, open pavements, walls, houses, buildings and all other erections, matters or things and the contractor shall take down and remove any or all such centering, scaffolding, staging, planking, timbering, strutting, shoring, etc. as occasion shall require or when ordered so to do, and fully reinstate and make good all matters and things disturbed during the execution of the work and to the satisfaction of the Bank / Consultant.
- 10) Time allowed for carrying out the work as mentioned in the Memorandum shall be strictly observed by the contractor and its shall be reckoned from the 10 days after acceptance of order to commence the work or the date of handing over the site to the contractor whichever is later. 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 i.e. 6 months, he shall be liable to pay compensation as defined in the conditions of contract.
- 11) The contractor shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing the work, whatever the case of delays may be, including delays arising out of modifications to the work entrusted to him or in any sub-contract connected therewith or delays in awarding contracts for other trades if the project or in commencement or completion of such works or in procuring government controlled or other building materials or in obtaining water and power connections for construction purposes or for the other reasons whatsoever and the Employer shall not be liable for any claim in respect thereof. The Employer does not accept liability for any sum besides the Tender amount, subject to such variations as are provided for herein.
- 12) The successful Tenderer is bound to carry out any items of work necessary for the completion of the job even though such items are not included in the quantities and rates. Schedule of instructions in respect of such additional items and their quantities will be issued in writing by the Architect/ consultant with the prior consent in writing of the Bank.

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- 13) The successful Tenderer must co-operate with the other contractors appointed by the Employer so that the work shall proceed smoothly with the least possible delay and to the satisfaction of the Architects/ Consultant.
- 14) The contractor must bear in mind that all the work shall be carried out strictly in accordance with the specifications made by the Architect/ Consultant and also in compliance of the requirements of the Authorities concerned and no deviation on any account will be permitted.
- (i) The rates quoted in the Schedule rates also include the expenditure for providing all the water required for the work and the contractor shall make his own arrangements for the supply of good quality water including obtaining Municipal connection for his labour as well as for construction purpose and all charges shall be borne by him. If Municipal water connection is not available and should it become necessary for the contractor to drill a bore well for obtaining water for construction purposes or to bring water from outside by Tankers, The Bank shall not be liable to pay any charges in connection therewith.

(ii) The rates quoted in the Tender shall also include Electric consumption charges for Power. If no power is available at site, the contractor shall have to make his own arrangement to obtain electric power connection and maintain at his own cost an efficient service of electric light and power and shall pay for the electricity consumed.

(iii) For water and power, the contractor to whom the work is allotted shall maintain the same in good working conditions.

(iv)Contractor for other trades appointed by the Bank shall also be allowed to use water and power available by fixing reasonable charges mutually agreed.

(v) Any dispute regarding payment for water and power charges by the other contractor and or by subsidiary agencies appointed by the Bank to the contractor, who has obtained the temporary connections and allowed sub-connections, will be settled by the Bank / Consultant and the decision taken by the Bank / Consultant shall be final and shall be that of the contractor.

(vi)The Bank as well as the Consultant shall give all possible assistance to the Contractor to obtain the requisite permission from the various authorities, but the responsibility for obtaining the same shall be that of the contractor.

(vii) If no such facility is available at the site of work and if available found inadequate, it shall be the responsibility of the contractor to make his own arrangement for obtaining water and power at his cost.

- 16) The contractor will have to obtain completion / clearance certificate in respect of services such as water supply, sewerage, etc. The contractor will also obtain permanent water connection for the entire project. The Bank will pay necessary fee to be made to Govt. authorities.
- 17) The Contractor shall strictly comply with provision of safety code annexed hereto.
- 18) The contractor shall indemnify Union Bank of India, against any claim or legal action arising out of the said Act due to the failure of non-compliance of the provisions of the

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said Act and the penalty or any other amount levied by the authorities, shall be recoverable from the payments due to the contractors.

- 19) The Contractor shall comply with the provision of the Apprentices Act, 1961, and the Rules and Orders issued there under from time to time. Failure to do so will be in a breach of the contract and the Architect / consultant and the Bank may in their discretion cancel the contract. The contractor shall also be liable for any pecuniary or other liabilities arising on account of any violation by him of the provisions of the Act.
- 20) The Security Deposit of the successful Tender will be forfeited if he fails to comply with any of the conditions of the contract.
- 21) The contractor shall be responsible for the observance of all Central Rules and Regulation framed by the Central Government under the Contract Labour (Regulation and Abolition) Act,1970. The Bank shall be entitled to deduct all damages, which it might suffer on account of non-observance of these rules by the Contractor, from the amount payable to the Contractor.
- 22) Contractors are not allowed to remove materials brought at Site against which advances have been paid.
- 23) The Contractor is to provide at all times during the progress of the works and the maintenance period / defect liability period proper means of access, with ladders, gangways, etc., and the necessary attendance to move and adopt as directed for the inspection or measurement of the works by the Consultant or their representatives.
- 24) Materials shall be of approved quality and the best of their kind available and shall generally conform to I.S. Specifications. The Contractor shall order all the materials required for the execution of work as early as necessary and ensure that such materials are on site well ahead or requirement for use in the work. The work involved calls for approved standard of workmanship combined with speed and to the entire satisfaction of the Architect/ consultant. All the material shall be approved by the Consultant / Bank before use. Contractor to arrange samples well in time.
- 25) The Contractors shall after completion of the work clear the Site of all debris and leftover materials at his own expenses to the entire satisfaction of the Bank / Consultant and Municipal or other public authorities.
- 26) The contractor herewith agrees that in respect of inspection of works by the Chief Technical Examiner of the works, a wing of Central Vigilance Commission and the bills of the contractor including all supporting vouchers, abstract etc. to be made after payment of the bills and if as a result of such audit and technical examination any sum is found to have been over paid in respect of any work done by the contractor under the contract of any work claimed by him to have been done by him under the contract and found not to have been executed or any work is found not to have been executed in accordance with the contract, the contractor shall be liable to refund the amount of over payment made already and it shall be lawful for the Bank to recover the same from him in any manner the Bank deems fit either from any payments due and / or becoming due to the contractor or from the security deposit or retention money or through any further bills and / or final bill or in any other manner whatsoever not excluding through recourse to legal action. The certification of bills / measurements by consultant / Architect and Engineer will be scrutinized by the Bank's Central Office / Audit / Vigilance and any deficiency will be corrected accordingly. Contractor cannot

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insist for payment just because it is signed by consultant / architect / engineer. The contractor herewith agrees to co-operate with the Bank / Consultant while such examinations of works and redo the things without any extra cost to the Bank. It is essential and agreed condition of the contract that any such action taken by the Bank shall deemed to be the fully legal and valid and binding on the contractor.

- 27) Contractors are requested to note that no extra item or deviated item of work to be executed without taking prior permission, the Bank shall not be held responsible for the payment of such works executed. Contractors will have to submit all the particulars including purchase bills/price list for the materials along with the rate analysis for verification of Item Rates.
- 28) If it is observed the existing compound wall, gates railings are damaged then the contractors will have to make good the same at their own cost.
- 29) If contractors fail to pay the taxes/royalties to the Authorities concerned, the Bank reserve their rights to recover the said amount from the amount payable to the contractor and pay the same to the Authorities concerned.
- 30) Work is to be executed & measurements are to be paid as per the detail specification & description of item given in the Standard Specification Book except for the items which are specifically mentioned in the tender for which the details of item and mode of measurements to be followed as indicated separately in the conditions of contractors.
- 31) If there are any contracting clauses mentioned in the tender, the interpretation of the same will be done by the Architect / consultant. However, the decision of the Bank will be final and binding.
- 32) After awarding the work, contractor shall get registered with the office of the Labour commissioner and inform Bank accordingly. Contractors shall follow all rules and regulations stipulated by the Labour Commissioner strictly.
- 33) Contractors shall quote consistent rates for the items of similar nature or analogous in specifications for the sections in schedule of quantities. If it is observed that the rates quoted for similar nature of items or analogous in specification under different sections, are inconsistent, then the Bank reserves his right to consider the lowest of rates for all such items and work out the final amount for payment, unless the competent authority finds that there is justifications for such inconsistent rates.
- 34) The contractor shall give a list of his relatives working with the Bank along with their designations and addresses.
- 35) No employee of the Bank is allowed to work as a contractor for a period of two years of his retirement from Bank service, without the previous permission of the Bank. The contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of the Bank as aforesaid before submission of the tender or engagement in the contractor's service.

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# THE CONDITIONS HEREINBEFORE REFERRED TO

## 1. Definition of terms/ interpretation:

In construction these conditions, the specification schedule of quantities and contract agreement, the following words shall have the meanings herein assigned to them expect where the subject or context otherwise requires.

- (a) "Employer/ owner / Bank" shall mean Union Bank of India, Government of India undertaking" having Central Office at 239, Vidhan Bhawan Marg, Nariman Point, Mumbai - 400 0021 and any of its employees representatives authorized on their behalf.
- (b) "Architect / consultant" shall mean "M/s. \_\_\_\_\_having their Registered office at \_\_\_\_\_\_or in the event of his or their easing to be Architect/ Consultant for the purpose of this contract such other person as the Bank shall nominate for the Purpose.
- (c) "Contractors" (in case of partnership) shall mean.....and .....and .....trading as partners in the name and style of .....and shall include partners for the time being of the said firm and the legal representatives of a deceased partner.

"Contractors" (in case of individuals) shall mean.....and .....and .....trading in the name and style of .....and shall include his / their heirs, legal representative assigns or successors.

- (d) "Site" shall mean "Work Place located at \_\_\_\_\_\_ includes any building and erections thereon and any other land (inclusively), as aforesaid, allotted by the Bank for the contractor's use.
- (e) Site Engineer / Engineer: The Engineer appointed by the Bank/ Architect/ Consultant for the management of the project.
- (g) "The works" shall mean the work or works to be executed or done under this contract.
- (h) "This Contract" shall mean Articles of Agreement, the special conditions, the general conditions of contract, the appendix, the schedule of quantities and specifications, attached hereto and duly signed.
- (i) "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.
- (j) "Act of Insolvency" shall mean any Act of Insolvency as defined by the Presidency Towns Insolvency Act, or the Provincial Insolvency Act or any amending such original.

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- (k) "The Schedule of Quantities" shall mean the schedule of quantities as specified and forming part of this contract.
- (l) "Priced Scheduled of Quantities" shall mean the schedule of quantities duly priced with the accepted quoted rates of the contractor.
- (m) "Net Prices" 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 altem or otherwise, then the net price of any item in the Tender shall be the sum arrived at by adding to or deducting from the actual figure appearing in the Tender as the price of that item a similar Item or proportion of the sum so added or deducted of the sum so added or deducted by the contractor the 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.

## 2. SCOPE OF WORK: (To be defined as per requirement of works to be executed)

The work consists of Repair & Renovation of bank's residential building Ground + 14 Floors at Raj Anmol, Borivali. Work includes structural repairing of beams, columns, chajja, architectural bands and slab with application of micro-concreting or Polymer modifies concrete or Polymer modified mortar along with application of rust preventer solution wherever required. External painting work including crack repairing and complete/ partly repairs terrace water proofing. Tapping and identifying the damaged plaster and dismantling the same. Application of cement plaster of required thickness to old/ new surface at any height. Replacement and repairs of whole/ part of drainage, water supply pipelines of various sizes. It includes furnishing all materials, labour, tools and equipment and management necessary for and incidental to the construction and completion of the work. It includes liasoning with Statutory bodies for execution of work & disposal of garbage/ Mosquito/ noise control, as per the local statutory rules & also all documentation & registration with all statutory bodies, central/ state such as Insurances, Labour commissioner, etc. All work, during its progress and upon completion shall conform to the lines, elevations and grades as shown on the drawings furnished by the employer/ architects. Should any detail essential for efficient completion of the work be omitted from the drawings and specifications it shall be the responsibility of the contractor to inform the Bank/ Consultant and to furnish and install such detail with Bank/ Consultant's concurrence, so that upon completion of the proposed work the same will be acceptable and ready for use.

The term the 'Architects/Consultants' in the said conditions shall mean the said M/s SUPREME ENGICONS (INDIA) PVT.LTD. 808, Shree Krishna Tower, Opp. Laxmi Industrial Estate, Link Road, Andheri (W), Mumbai-400053.or in the event of the said Architect /Consultants ceasing to be the Architect /Consultants for the purpose of this contract for whatever reason, such other person or persons as shall be nominated for that purpose by the Owner/Employer, provided always that no person subsequently appointed to be the Architect /Consultants under this contract shall be entitled to disregard or over rule any decision or direction or approval given or expressed in writing by the Outgoing Architect /Consultants for the time being if the same had been done under instruction from the Bank/ Employer.

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# 3. CONTRACTOR'S RESPONSIBILITY

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 Consultant/Bank. The Consultant may in his absolute discretion and in consultation with the Bank (with prior approval from the Bank) and from time to time issue drawings and/or written instruction, details directions and explanations which are hereafter collectively referred to as "Consultant/Bank's Instruction".

In regard to: -

- a. The variations or modifications of the design, quality or quantity of works or the additions or omission or substitution of any work.
- b. Any discrepancy in the drawings or between the schedule of quantities and/or drawings and or drawings and or specification.
- c. The removal from the site of any defective materials brought thereon by the contractor and the substitution of any other materials thereof.
- d. The removal and/or re-execution of any works executed by the contractor.
- e. The dismissal from the works of any person employed thereupon.
- f. The opening up for inspections of any work covered up.
- g. The amending and making good of any defects under clauses 19 hereof and those arising during the maintenance/ defect liability period.

The contractor shall forthwith comply with and duly execute any work comprised in such Consultant/Bank instructions, provided always that the verbal instructions, directions, and explanations given to the contractor or his representative upon the works by the Consultant/Bank shall, if involving a variation, be confirmed in writing by the contractor within seven days, and if not dissented from in writing within a further seven days by the Consultant, such shall be deemed to be Consultant /Bank instructions within the scope of the Contract.

## 4. VISIT TO SITE

The contractor shall visit the site and make himself thoroughly acquainted with the local site condition, nature and requirements of the works, facilities of transport condition, effective labour and materials, access and storage for materials and removal of rubbish. The tenderer shall provide in their tender for cost of carriage, freight and other charges as also for any special difficulties and including police restriction for transport, etc. for proper execution of work as indicated in the drawings. The successful tenderer will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of any site condition which existed before the commencement of the work or which in the opinion of the Bank or Consultant might be deemed to have reasonably been inferred to be so existing before commencement of work.

## 5. AGREEMENT

The successful contractor is required to sign agreement as may be drawn up to suit local conditions and shall pay for all stamps and legal expenses, incidental thereto.

## 6. PERMITS AND LICENSES

Permits and licenses for release of materials which are under Government control will be arranged by the contractor. The Bank will render necessary assistance, sign any forms or applications that may be necessary.

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The contractor shall at his own cost arrange for storage shed adequate for taking delivery and storing of the quantity of controlled materials released by the authorities or supplied by the Bank. The costs of storing, transporting, etc. of all materials including those under Government control are to be included by the tenderer in his quoted rates.

The Bank / Consultant shall be indemnified against all Government or legal actions for theft or misuse of any controlled materials in the custody of the contractor.

# 7. GOVERNMENT AND LOCAL RULES

The contractor shall conform to the provisions of all local Bye-laws and Acts relating to the work and to the Regulations etc. of the Government and Local Authorities and of any company with whose system the structure is proposed to be connected. The contractor shall give all notices required by said Act, Rules, Regulations and Bye-laws, etc. and pay all fees payable to such authority / authorities for execution of the work involved. The cost, if any, shall be deemed to have been included in his quoted rates, considering all liabilities for license, fees for footpath encroachment and restorations etc. and shall indemnity the Bank against such liabilities and shall defend all actions arising from such claims or liabilities.

## 8. QUANTITY OF WORK TO BE EXECUTED

The quantities shown in the schedule of quantities are intended to cover the entire new structure indicated in the drawings but the Bank reserves the right to execute only a part or the whole or any excess thereof without assigning any reason therefore. The quantity may vary to any extent and even the same will be omitted. No separate payment/ compensation/ revision in the rates will be entertained.

## 9. VARIATIONS TO BE APPROVED BY THE BANK/ CONSULTANT

Notwithstanding anything herein contained, the Consultant or his representative shall not, without prior concurrence in writing of the Bank, issue any instructions, verbal or in writing, the Consultant can get the work done up to an amount of Rs.10,000.00 (Rupees Ten thousand only) and all instruction issued to the contractor should forthwith be brought to the notice of the Bank. The contractor shall submit through the Consultant, a statement of variations giving rise quantity and rates duly supported by analysis of rates, vouchers, etc. The rates on scrutiny and final acceptance by the Bank shall form a supplementary tender. The Bank shall not be liable for payment of such variations until these statements are sanctioned by the Bank.

## 10. DRAWINGS AND SCHEDULE OF QUANTITIES AND AGREEMENT

The contractor on the signing hereof shall be furnished by the Consultant free of cost one copy of each of the said drawings and of the specifications and one copy of all further Drawings issued during the progress of the works. Any further copies of such drawings required by the contractor shall be paid by him. The contractor shall keep one copy of all drawings on the works and the Consultant/ Bank or their representatives shall at all reasonable times have access to the same.

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## 11. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY

The contractor shall provide 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 be reasonably be inferred there from, and if the contractor finds any discrepancies therein, he shall immediately and in writings, refer the same to the Bank/ Consultant whose decision shall be final and binding. The contractor shall provide himself for ground and fresh water for carrying out of the works at his own cost. The Bank shall on account be responsible for the expenses incurred by the contractor for hired ground or fresh water obtained from elsewhere.

- (i) The rates quoted against individual items will be inclusive of everything necessary to complete the said items work within the contemplation of the contract, and beyond the unit price no extra payment will be allowed for incidental or contingent work, labour and /or materials inclusive of all taxes and duties whatsoever except for specific items, if any, stipulated in the tender documents.
- (ii) The contractor shall supply, fix and maintain at his own cost, for the execution of any work, all tools, tackles, machineries and equipment and all the necessary centering, scaffolding, staging, planking, timbering, strutting, shoring, pumping, fencing, boarding, watching and lighting by night as well as by day required not only for the proper execution and protection of the said work but also for the protection of the public and safety of any adjacent roads, streets, walls, houses, buildings, all other erections, matters and things and the contractor shall take down and remove any or all such centering, scaffolding, plumbing, timbering, strutting, shoring etc., as occasion shall be required or when ordered so to do, and shall fully reinstate and make good all matters and things disturbed during the execution or when ordered so to do, and shall fully reinstate and make good all matters and things disturbed during the Bank / Consultant.
- (iii) The Contractor shall also provide such temporary road on the site as may be necessary for the proper performance of the contract and for his own convenience but not otherwise. Upon completion, such roads shall be broken up and leveled where so required by the drawings unless the Bank shall otherwise direct.
- (iv) The contractor shall at all times give access to workers employed by the Bank or any men employed on the buildings and to provide such parties with proper sufficient and if required, special scaffolding, hoists and ladders and provide them with water and lighting and leave or make any holes, grooves etc., in any work, where directed by the Bank as any be required to enable such workman to lay or fix pipes, electrical wiring, special fittings etc. The quoted rates of the tenderers shall accordingly include all these above-mentioned contingent works.

# 12. AUTHORITIES NOTICES AND PATENTS

The contractor shall confirm to the provisions of any Act of the legislature relating to the works, and to regulations and bye-laws of any authority, and or any water electric supply and other companies and/or authorities with and whose the systems the structures is proposed to be connected, and shall, before making any variations from the drawing or specifications that may be associated to so confirming, give to the Architect written notice, specifying the variations proposed to be made and the reason

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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 confirming to the provisions, regulations, or byelaws in questions, and variations so necessitated shall be dealt with under clause 13 hereof.

The contractor shall bring to the attention of the Consultant/ Bank all notices required by the said Acts, regulations or bye-law 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 said work, and lodge the receipt with the Consultant/ Bank.

The contractor shall indemnify the Bank against all claims in respect of patent rights, royalties, and damages to buildings, roads or members of public in course of execution of work and shall defend all actions arising from such claims and shall keep the Bank saved harmless and indemnified in all respects from such actions, costs and expenses.

# 13. CLEARING SITE AND SETTING OUT WORKS

The site shall be cleared of all obstructions, loose stone, and material rubbish of all kind. All holes or hollows either originally existing or produced by removal of loose stone or material shall be carefully filled up with earth, well rammed and leveled of as directed at his own cost. The contractor shall set out the works and shall be responsible for the true and perfect setting out of the work and for the correctness of the positions, dimensions, levels and the alignment of all the parts thereof. If at any time any error in this respect shall appear during the progress of any part of work or within the period of one year from the completion of the works, the contractor shall at his own expenses rectify such error to the satisfaction of the Consultant / Bank.

## 14. DATUM

The average ground level will be considered as the crown of the nearest road, which should be taken as "Datum" which is however, subject to final confirmation by the Bank/ Consultant. All levels shown in the drawings are to be strictly adhered to.

## 16. BENCHES

The contractor is to construct and maintain proper benches of all the main walls, in order that the lines and levels may be accurately checked at all times.

These benches will consist of salwood post of adequate length and minimum diameter 75mm to be driven in the ground at suitable distance as directed encased with brickwork. The wire nails will be driven on the top of salwood post on the center lines of columns, walls, inside and outside faces of foundation trenches, in order that lines may be stretched between the benches and accurate intersection of excavation. Centre line of walls, columns, etc. may be clearly indicated and checked at any time if it is so required.

## 17. CONTRACTOR IMMEDIATELY TO REMOVE ALL OFFENSIVE MATTERS

All soil, filth or other matters of any offensive nature taken out of any trench, sewer, drain, cesspool or other place shall not be deposited on the surface but shall be at once carted away by the contractor to place provided by him.

The contractor shall keep the foundations and works free from water and shall provide and maintain at his own expenses electrically or other power-driven pumps and other plant to the satisfaction of the Bank for the purpose, until the building is handed over to the Bank. The contractor shall arrange for the disposal of the water so accumulated

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to the satisfaction of the Bank and local authority and no claims will be entertained afterwards if he does not include in his rates for the purpose.

# 18. MATERIALS, WORKMANSHIP, SAMPLES, TESTING OF MATERIALS:

All the works specified and provided for in the specifications or which may be required to be done in order to perform and complete any part thereof shall be executed in the best and most workman like manner with materials of the best and approved quality of the respective kinds in accordance with the particulars contained in and implied by the specifications and represented by the drawings or according to such other additional particulars and instructions as may from time to time be given by the Bank/Consultant during the execution of the work, and to his entire satisfaction.

The contractor shall have to carry out test on materials and workmanship in approved materials testing laboratories or as prescribed by the Bank/ Consultant at own cost to prove the materials quality and test sample, confirm to the relevant I.S. Standard or as specified in the specifications. The necessary charges for preparation of mould (in case of concrete cube) transporting testing etc. shall have to borne by the contractors. **No extra payment on this account should in any case be entertained.** 

All the materials (except where otherwise described) store and equipment required for the full performance of the work under the contract must be provided through normal channels and must include charges for import duties, sales tax, octroi and other charges and must be the best of their kind available and the contractors/must be entirely responsible for the proper and efficient carrying out the work. The work must be done in the best workman like manner. Samples of all materials to be used must be submitted to the Bank/ Consultant when so directed by the Engineer/ Consultant and written approval from Bank/ Consultant must be obtained prior to placement of order.

The Contractor shall set up a field laboratory with necessary equipment for day to day testing of material like sand, brick, aggregate etc.

## **19. INCLEMENT WEATHER**

During the inclement weather the contractor shall suspend concreting and plastering for such time as the Bank / consultant may direct and shall protect from injury all work when in course of execution. Any damage (during construction) to any part of the work for reasons due to rain, storm, or neglect of contractor shall be rectified by the contractor in an approved manner at no extra cost.

Should the work be suspended by reason of rain, strike, lockouts or any other cause, the contractor shall take all precautions necessary for the protection of work and at his own expenses shall make good any damage arising from any of these causes. The contractor shall cover up and protect from damage, from any cause, all new work and supply all temporary doors, protection to window, and any other requisite protection for the execution of the work whether by himself or special tradesmen or sub-contractor and any damage caused must be made good by the contractor at his own expenses.

## 20. MATERIALS AND WORKMANSHIP TO CONFORM TO DESCRIPTIONS:

All materials and workmanship shall so far as procurable be of the respective kinds described in the schedule of quantities and/ or specifications and in accordance with the Consultant's instructions, and the contractor shall upon the request of the Consultant furnish him with all invoices, accounts, receipts and other vouchers to prove

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that the materials comply therewith. The contractor shall at his own cost arrange for and/ or carry out any test of any materials which the architects may require from Government approved laboratories.

## 21. CONTRACTOR'S SUPERINTENDENCE & REPRESENTATIVE ON THE WORKS.

The contractor shall give all the necessary personal superintendence during the execution of the works, and as long thereafter as the Bank/ Consultant may consider necessary until the expiration of the defects liability period stated in the Appendix hereto. The contractor shall also during the whole time the works are in progress employ;

a) An experienced qualified Civil Engineers (1 Nos., graduate engineer having experience of 10 years or more in field + 1 diploma holder having experience of 7 years) as required who shall be in constantly attendance at work while the men are at work. Any directions, explanations, instructions, or notices given by the Bank/ Consultant to such representative shall be held to be given to the contractor.

For non-compliance an amount of Rs.20,000/- pm/ per Engineer shall be deducted from the contractor for the period required engineers are not provided. However, deduction of payment shall not exonerate contractor for his responsibility for executing quality work.

# 22. DEPLOYMENT OF LABOURS

No labourer below the age of eighteen years shall be employed on the work. Any labourer supplied by the contractor to be engaged on the work on day-work basis either wholly or partly under the direct order or control of the Bank or his representative shall be deemed to be a person employed by the contractor.

## 23. FACILITIES TO BE PROVIDED TO WORKERS

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

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

## 24. DISMISSAL OF WORKMEN

The contractor shall at the request of the Bank/ Consultant immediately dismiss from the works, any person employed thereon by him who may in the opinion of the Bank/ Consultant is incompetent or misconduct himself and such person shall not be engaged again. Such discharges shall not be the basis of any claim for compensation or damages against the Bank or any of their officer or employee.

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## 25. ACCESS TO WORK

The Bank/ Consultant and their responsible representative shall at all reasonable times have free access to the works and/ or to the workshops, factories or other places where materials are being prepared or constructed for the work and also to any place where the materials are lying or from where they are being obtained the contractor shall give every facility to the Bank, the Consultant and their representative necessary for inspection and examination and test of the materials and the workmanship. No. persons not authorized by the Bank or the Consultant except the representatives of Public Authorities shall be allowed on the works at any time.

## 26. ASSIGNMENT/ SUB-LETTING

The whole of the works included in the contract shall be executed by the contractor and the contractor shall not directly or indirectly transfer, assign, or under-let the contract or any part share there of or any interest therein without the prior written consent of the Bank and no undertaking shall relive the contractor of the full and entire responsibility of the contract or from active superintendence of works during their progress. Central Govt. / State Govt. companies shall not be allowed to sublet the work on back to back basis / labour basis without approval from the Bank. In case, in case contractor sub-let the work, the Bank will be entitled to deduct 10% of cost of work executed besides initiating other measures provided in the contract.

## 27. VARIATIONS

No alterations, omissions or variations shall vitiate this contract, but in case the Architect thinks proper at any time during, the progress of the works to make any alterations in, or additions to or omissions from, the work or any alteration in the kind or quality of materials to be use therein and shall give notice thereof in writing under his hand to the contractor, the contractor shall alter, add to, or omit from, as the case may be, in accordance with such notice, but the contractor shall not do any work extra to or make any alterations or additions to or omissions from the works or any deviations from any of the provisions of the contract, stipulation specifications or contract drawings without the previous consent in writing of the consultant /Architect / Bank and the values of such extras, alternations, additions or omissions shall in all cases be determine by the Consultant with the prior approval in writing of the Bank in accordance with the provision of the Clause hereof, and the same shall be added to, or deducted from the contract amount, as the case may be accordingly.

## 28. SCHEDULE OF QUANTITIES

The Schedule of quantities, unless otherwise stated shall be deemed to have been prepared in accordance with the standard method of quantity measurement.

Any error in description or in quantity or in omission of items from the Schedule of quantities shall not vitiate this contract but shall rectified and the value thereof shall be added to or deducted, from the contract amount (as the case may be), provided that no rectification of errors, if any, shall be allowed in the contractor's Schedule of rates.

The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of this tender for the works and the prices stated in the Schedule or quantities and or the schedule of rates and prices which rates and prices shall cover all his obligations under the contract and all matters and things necessary for the proper completion of works.

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The quantities of work may vary to any extent or may be omitted; the contractor cannot claim loss of profit/ overhead on this account.

# 29. MEASUREMENT OF WORKS

- (i) The Consultant may from time to time intimate to the contractor and the Bank that he requires works to be measured, and the contractor shall forth with attend or send a qualified agent to assist the Consultant in taking such measurements and calculations and to furnish all the particulars or to give all assistance required by any of them.
- (ii) The Engineer will take measurement of the work jointly with the contractor and enter the same in measurement books. Based on these measurements the contractor will raise the bill as per the prescribed format. Consultant to verify the bill/measurement and issue certificate stating that the work completed is as per the specifications and the measurement claimed for the works are actually executed at site. This certificate shall be issued within 14 days after bill submission by the Contractor. The Bank will release bill amount within 21days. If for some reason checking of the bill/measurement is not completed, 75% of the bill amount at least shall be released within 21 days and the balance within 30 days.
- (iii) Should the contractor not attend or neglect or omit to send such agent then the measurement taken by the Architect or a person approved by him shall be final and binding on the contractors.
- (iv) The contractor or his also supply without charge the requisite number of persons with means and materials necessary for the purpose of measurements or examinations at any time and from time to time of the work or counting weighting of the materials, etc.
- (v) All authorized extra works, omissions and all variations made without the Consultant's knowledge, if subsequently sanctioned by him in writing (with the prior approval in writing of the Bank) shall be included in such measurement.
- (vi) Measurements shall be recorded as per IS 1200 mode measurement and in metric system. Measurement shall be recorded in 100 pages bounded measurement book to be supplied by Union Bank of India. Such measurement shall be recorded by the Engineer or Bank's officer and not by contractor. M.B. shall be kept in the custody of the consultant / Bank.

# **30. PROCEDURE FOR MEASUREMENT AND BILLING OF WORK IN PROGRESS:**

## a. Advance against materials brought at Site:

Contractor may be allowed Secured advance on security for materials brought to site for execution on contracted item of work to the extent of 75% of the value of the materials provided that the materials of the imperishable nature is safeguarded against losses due to the contractor postponing execution of the work or to the storage or misuse the materials and against the expenses entitled for their proper watch and safe custody. Recoveries of advances so made would be from running bills. The secured advance may be given against the following materials brought to the site and stored properly.

- i) Cement
- ii) Steel
- (iii) Wood

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- (iv) Flooring / Wall tiles
- (v) Aluminum steel / wooden window and door frame
- (vi) Plumbing / Sanitary / Pipes and fittings.
- (vii) Electrical items (one time only)
- (viii) Any other item of non-perishable nature and as decided by the Bank

The Contractors will have to submit the bills for the materials purchased, in triplicate, to verify the cost of the materials purchased and brought at Site.

No advances against perishable materials purchased and brought at Site will be made.

The Contractors will have to keep the materials at Site under their safe custody and at their risk and cost.

The Bank is not responsible for damages and losses of such materials brought at site.

The contractor to submit undertaking marking lien on the material brought at site against which Bank has granted advance payment.

## b. Running Account Payments to be regarded as Advances:

All running account payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed and accepted and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the contract, or any part thereof, in this respect, or the accruing of any claim, nor shall it conclude, determine or effect in any way the powers of the Bank/ consultant under these conditions or any of them as to the powers of the Bank/ consultant under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary/affect the contract. The final bill shall be submitted by the contractor within two months of the date fixed for completion of the work; otherwise the Consultant/ Engineer-in-charge's certificate of the measurement and of the total amount payable for the work accordingly shall be final and binding on all parties. Interim Bill value to be minimum of **Rs.26 Lacs.** 

## 31. COMPLETION CERTIFICATE

## (i) APPLICATION FOR COMPLETION CERTIFICATE

The Consultant /Engineer-In-Charge shall normally issue to the contractor the completion certificate within one month after receiving, an application thereof from the contractor and after verifying from the completion documents and satisfying himself that the work has been completed in accordance with and as set out in the construction and erection drawing and contract documents.

The contractor, after obtaining the completion certificate, is eligible to present the final bill for the work executed by him under the terms of contract.

## (ii) Completion Certificate

Within one month of the completion of the work in all respects, the Contractor shall be furnished with a certificate by the Consultant/ Engineer-In-Charge of such completion but no certificate shall be given nor shall the work be deemed to have been completed until all scaffolding, surplus materials and rubbish is cleared of the site

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completely. The work will not be considered as complete and taken over by the Bank, until all the temporary works, labour and staff colonies etc., constructed, are removed and the works site cleared to the satisfaction of the Consultant/ Engineer.

If the Contractor shall fail to comply with the requirements of this clause on or before the date fixed for the completion of the work, the Consultant/ Engineer-In-Charge may at the expenses of the contractor remove such scaffolding, surplus materials and rubbish and dispose off the same as he thinks fit and clean up the site and the contractor shall forthwith pay the employer for all expenses so incurred and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except of any sum actually realized by the sale thereof.

## (iii) CERTIFICATE (to be issued by the consultant/ engineer)

(Rs. .....)

Quality and rates verified. The material supplied and work done confirm

with the tender specifications.

DATE :

## SITE ENGINEER / CONSULTANT

The above certification shall be endorsed in the relevant Measurement Books also by the Consultant.

## iv. FORMAT FOR RUNNING BILL

#### ON LETTER HEAD OF CONTRACTOR

Running Bill No		
Tender Amount		Rs
Value of work done		Rs
Less rebate	(-)	Rs
Net Value of work done		Rs
Extra variation items after settlement @100%		Rs
Extra variation items without settlement @75	%	Rs

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Add :	Total Cost of material on site @	75%	Rs
		Total payable	Rs
1.	<b>Deductions</b> Retention money		Rs
2.	Recovery of advance if any	y	Rs
3.	Income-tax		Rs
4.	Any other		Rs
5.	Total bill paid till last bill		Rs
	Total deductions	Rs	Rs
		Net payable	Rs
	Amount certified for paym	ient	Rs

Note : This page shall be signed and stamped by the Site Engineer, Contractor and Project Architect.

# v. FORMAT FOR SECURED ADVANCE

# ACCOUNT OF SECURED ADVANCE IF ADMISSIBLE ON MATERIALS HELD AT SITE BY THE CONTRACTOR

Sno.	Name of the supplier	Quantity	Unit	Amount	Remarks
1	2	3	4	5	6
Face	value of Materials at si	te			
Secur	red Advance	% o	f above value.		

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Date	Signature of Site Engineer Preparing the bill.
Date	Signature of Bank's Consultants
Date	Signature of the Contractor

# vi. FORMAT FOR RUNNING BILL (To be submitted by the contractor)

I	Name of the Contractor / Agency	:	
II	Name of the Work	:	
	Sr.No. of the Bill	:	
IV	Sr.No. of the Previous Bill	:	
V	Reference to Agreement No.	:	
VI	Date of written order to	:	
	commence		
VII	Date of Completion as per	:	
	Agreement		
	¥		
VIII	Date of Measurements	:	
XI	Present status of work	:	

Sr no.	Items Description	Unit	Rate	Qty. as per	Tender Amount
				measurement	Rs.
1	2	3	4	5	6

Up to prev	ious RA Bill	Up to da	ate gross	Prese	nt bill	remark
Qty	Amt.	Qty.	Amt.	Qty.	Amt.	
7	8	9	10	11	12	13

#### Note:

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- 1. If part rate is allowed for any item, it should be indicated with reasons for the allowing such a rate.
- 2. If adhoc payment is made, it should be mentioned specially.
- 3. Consumption of Cement/Steel statement to be submitted along with each R.A. Bills.

# vii. CEMENT CONSUMPTION STATEMENT

Code No.	Description of item of work	Unit	Quantity of cement to
			be used per unit
			quantity of work
			(Bags)
1	2	3	4
Cement Co	ncrete (Cast-in-Situ)		
1.	1:1.5:3 (1 Cement : 1.5 sand : 3	Cu.M.	8.00
	graded aggregate)		
2.	1:2:4 (1 Cement : 2 sand : 4	Cu.M.	6.40
	graded aggregate)		
3.	1:3:6 (1 Cement : 3 sand : 6	Cu.M.	4.40
	graded aggregate)		
4.	1:4:8 (1 Cement : 4 sand : 8	Cu.M.	3.40
	graded aggregate)		
Burnt Brick	k Masonry		
5.	In CM 1:3 (1 Cement : 3 mortar)	Cu.M.	2.56
6.	In CM 1:4 (1 Cement : 4 mortar)	Cu.M.	1.90
7.	In CM 1:6 (1 Cement : 6 mortar)	Cu.M.	1.06
Half Brick	Masonry		
8.	In CM 1:3 (1 Cement : 3 mortar)	100Sq.M.	28.56
9.	In CM 1:4 (1 Cement : 4 mortar)	100Sq.M.	21.28
Random Ru	Jbble Masonry		
10.	In CM 1:6 (1 Cement : 6 mortar)	Cu.M.	1.70
Course Rul	bble Masonry		
11.	In CM 1:6 (1 Cement : 6 mortar)	Cu.M.	1.50
Flooring	1		
12.	40 mm thick in PCC (1:2:4)	Sq.M.	0.34
13.	18 mm thick in Skirting	Sq.M.	0.32
L	1		

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Cement Plaster					
14.	12 mm thick in CM (1:3)	100Sq.M.	14.68		
15.	12 mm thick in CM (1:4)	100Sq.M.	10.94		
16.	15 mm thick in CM (1:4)	100Sq.M.	13.08		
17.	15 mm thick in CM (1:6)	100Sq.M.	8.60		
18.	20 mm thick in CM (1:4)	100Sq.M.	17.02		
19.	20 mm thick in CM (1:6)	100Sq.M.	11.20		
20.	6 mm thick in CM (1:3)	100Sq.M.	7.34		
21.	6 mm thick in CM (1:4)	100Sq.M.	5.48		

# 32. ENGINEER

The Site Engineer or any representative of the Architect/ Consultant, or the Bank shall have power to give notice to the contractor or to his representative, of non-approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of the Architect is obtained. The work will be from time to time be examined by the Architect/ the Bank's Engineer or the Architect's representative, but such examination shall not in any way exonerate the contractor from the obligations to remedy any defects which may be found to exist at any stage of the works or after the same is complete. Subject to the limitations of this clause, the contractor shall take instructions only from the Architect/ Bank.

## 33. DUTIES OF ENGINEER

- i. To make a thorough study of contract documents, Architectural/Structural drawings and other details so as to bring out ambiguities/discrepancies between them and to obtain clarification from the Competent Authority well in time to avoid delays.
- ii. To render a certificate to the Competent Authority to the effect that he has studied the contract documents, drawings and specifications.
- iii. To approve the centerline layout of building pegged out on site by the contractor and the benches for ground floor and other levels.
- iv. To take charge of objects of value and antiquity found on site or in excavations, immediately, after their discovery, to hold them in safe custody and to hand them over to the Competent Authority of the Bank for further action.
- v. To approve the foundation strata when the appropriate depth of excavation is reached in consultation with the architects.
- vi. To ensure that the quality of materials and workmanship as laid down in the contract is maintained and the accuracy of dimension shown on drawings is attained in the construction.
- vii. To watch the validity of the building permission issued by the Local Authority and to ensure that the revalidation, if necessary, is obtained well in time.
- viii. To arrange periodical reconciliation of cement and steel account and ensure that proper recoveries are effected from contractor's running account bills.
  - ix. To maintain the undernoted records at the site of work, in addition to normal routine requirements of an office:
    - a. Daily Progress Record
    - b. Work Site Order Book.
    - c. Instruction by Bank's Officers.

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- d. Cement Statement (Receipt/Consumption/Balance).
- e. Steel Register/any other costly Material Register.
- f. Contract Pour Reports including Slump Test Record.
- g. Concrete Cube Test Register.
- h. Test Registers of other materials/fittings, fixtures, equipment as stipulated in the tender.
- i. Register of Drawings and Working Details.
- j. Log Book of Defects.
- k. The Site Engineer should maintain in a Hindrance Register giving details of commencement and removal of each hindrance.
- l. Dismantled Materials Account Register.
- m. Supply and consumption register of scarce/costly materials like bitumen, lead, laminates, special paints etc.
- n. Record of cement used/received: Day to day record of cement used/received shall be entered in the register and signed by the Site Engineer of the Bank as well as contractor's representative at site.
- o. Record of reinforcement bars received at site: Necessary entry for reinforcement bars of each category shall be made in the register for steel and signed by the site engineer of Bank and the contractor daily.
- x. To study the quality of approved coarse and fine aggregate and get the design of the concrete mix in accordance with modern practice. The Site Engineer shall ensure that the mix design for RCC work shall be carried out by the Architect/Structural Consultant, if applicable.
- xi. To record measurements of completed work jointly with the Contractor and to process them in running account bills.
- xii. To receive running account bills from the contractor and to forward them after checking, to the Competent Authority with his comments and recommendations and accompanied by all supporting documents.
- xiii. To submit to the Competent Authority the Progress Report fortnightly.
- xiv. To watch that the concerned contract does not lapse for want of extension of time. Therefore, to keep it alive and in operation from point of consideration that "Time is the essence of contract".
- xv. To ensure that progress on every contract is in accordance with the appropriate stage of its Time and Progress Chart.
- xvi. To prevent contractor from proceeding with any work on which the contractor has got intentions of raising claims of extra/deviated items, until the Competent Authority approves the work to continue.
- xvii. To receive the Final Bill from the contractor, to check it, and forward it with his comments and recommendations to the Competent Authority with all the supporting documents duly attached.
- xviii. To submit the final summary of costs for the project to the Competent Authority.
- xix. To submit the Competent Authority authentic information on and the under noted records pertaining to the completed work in order to enable the Competent Authority to finalize them in the due course:
  - a) Record i.e. as completed drawings.
  - b) Record of Standard Measurements for periodical services.
  - c) Inventory of fittings and fixtures.

To hand over to the Competent Authority a "first draft" of "A Note of Comprehensive Information to the User" containing detailed instructions on how to use and maintain the completed building to the best advantage of the Bank.

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## 34. PRICES FOR EXTRAS ETC. ASCERTAINMENT OF NON-TENDER ITEMS

The contractor may, when authorized, and shall, when directed in written by the Architect / Consultant with the approval of the Bank, add to, omit from, or vary the works shown upon the drawings, or described in the specification or included in the schedule of quantities, but contractor shall make no addition, omission or variation without such authorization or direction. A verbal authority or direction by the Architect / Consultant shall, if confirmed by them in written seven days, be deemed to have been given in writing.

Any such extra is herein referred to as authorized extra and shall be made in accordance with the following provisions.

(a) (i) The net rates or prices in the original tender shall determine the valuations of the extra 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.

(ii) Rates for all items, wherever possible, should be derived out of the rates given in the priced schedule of quantities.

- (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 C hereof.
- (c) Where the extra works are not of similar character and /or executed under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items of works are carried out or if the amount of the whole of the contract works or to any part thereof shall be such that in the opinion of the Architect 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 unreasonable or inapplicable, the Architect shall fix such other rate or price as in the circumstances he shall feel reasonable and proper, with the prior approval in writing of the employer.
- (d) Where extra work cannot be properly measured or valued the contractor shall be allowed days work prices as 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 Architect, the workman's name) and materials employed to be delivered for verification to the Architect, or his representative at to the Architect or his representative at or before the end of the week following that in which the work has been executed.

Add for Labour charges	Rs.
Add for Taxes, Transportation, If any.	Rs.
Add for Wastage of Materials (Upper Limit 5% wherever applicable	e) Rs.
Add for water and electricity Charges if any	
required, upper limit 2% of basic cost of materials.	Rs.
Add for 15% towards contractor's overheads and profit.	Rs.
Final rate arrived.	Rs.

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# 35. UNFIXED MATERIALS WHEN TAKEN INTO ACCOUNT TO BE THE PROPERTY OF THE BANK

Where in any certificate (of which the contractor has received payment), the Architect has included the value of any unfixed materials intended for and/or placed on adjacent to the works, such materials shall become the property of the Bank and they shall not be removed except for use upon the works, without the written authority of the Architect/Bank. The contractor shall be liable for any loss of or damages to such materials.

## 36. REMOVAL OF IMPROPER WORKS

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

No certificate, which may have been issued by the Architect, shall relive the contractor from his liability in respect of unsound work of bad materials.

## 37. DEFECTS AFTER COMPLETION

The contractor shall make good at his own cost and to the satisfactions of the Bank all defects, shrinkage, settlements or other faults, which may appear within 12 months after completion of the work. In default the Bank may employ and pay other persons to amend and make good such damages, losses and expenses consequent thereon or incidental there to shall be made good and borne by the contractor and such damages, loss and expenses shall be recoverable from him by the Bank or may be deducted by the Bank, in lieu of such amending and making good by the contractor, deduct from any amount due to the contractor, a sum equivalent to the cost of amending such work and in the event of the amount retained being insufficient, recover that from the contractor from the amount retained as retention money together with any expenses the Bank may have incurred in connection therewith.

## 38. CONCEALED WORK:

The contractor shall give due notice to the Bank/ architects whenever any work is to be buried in the earth, concrete or in the bodies of walls or otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions taken before such burial, in default whereof the same shall, at the opinion of the Bank/ architect be either opened up for measurement at the contractor's expense or no payment may be made for such materials. Should any dispute or differences arise after the execution of any work as to measurements etc., or other matters which cannot be conveniently tested or checked, the notes of the employer/ architects shall be accepted as correct and binding on the contractor.

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## **39. CERTIFICATE OF VIRTUAL COMPLETION & DEFECTS LIABILITY PERIOD**

The work shall not be considered as completed until the Architect has certified in writing that they have been virtually completed. The defects Liability Period shall commence from the date indicated in the virtual completion certificate issued by the Architect.

## 40. NOMINATED SUB-CONTRACTORS

All specialist, Merchants, Tradesmen and others 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 Architect/ Bank are hereby declared to be Sub-Contractors employed by the Contractors and are herein referred to as nominated Sub-Contractors.

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 Architect and Contractor shall otherwise agree) who will not enter into a Contract providing: -

- a. That the nominated Sub-Contractor shall indemnify the Contractor against the same obligations in respect of the Sub-Contract as the Contractor is under in respect of this contract.
- b. 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 Architect's Certificates provided that before any certificate is issued, the contractor shall upon request furnish to the architect proof that all nominated Sub-Contractor's accounts included in the previous Certificate have been duly discharged; in default whereof the Employer may pay the same upon a Certificate or the Architect and deduct the amount thereof from any sums due to the Contractor. The exercise of this power shall not create privacy of Contract as between Employer and Sub-Contractor.

## 41. OTHER PERSONS ENGAGED BY THE BANK

The Bank reserves the right to execute any part of the work included in this contract by other agency or persons and contractor shall allow all reasonable facilities and use of his scaffolding for the execution of such work. The main contractor shall extend all co-operations in this regard.

## 42. INSURANCE

## a. IN RESPECT OF DAMAGE TO PERSONS AND PROPERTY

(i) The contractor shall be responsible for all injury to the work or to persons, animals or things, and for all damages to the structural and / or decorative part of the property which may arise from the operation or neglect of himself or of any nominated sub-

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contractor or any of his / sub-contractor's employee, whether such damage/ injury arises from carelessness, accident or any other cause whatsoever in any way connected in the carrying out of this contract. This clause shall be held to include inter alias, any damage to buildings, whether immediately adjacent or otherwise, and any damage to the roads, streets, foot-paths, bridge or ways as well as damage caused to the building and work forming the subject of this contract by rain, wind or other inclement of the weather. The contractor shall indemnify the Bank and hold it harmless in respect of all and any expense arising from such injury or damage to persons or property as aforesaid and also in respect of any claim made in respect of injury and damage under any Act of any Legislature or otherwise and also in respect of any award of compensation or damage consequent upon such claims.

- (ii) The contractor shall reinstate all damage of every sort mentioned in this clause, so as to deliver up the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property or third parties.
- (iii) The contractor shall indemnify the Bank against all claims which may be made against the Bank by any member of the Public or third party in respect of anything which may arise in respect of the works or in consequence thereof and shall at his own expense arrange to effect and maintain, until the virtual completion of the contract, with an approved office, a Policy of Insurance in the name of the Bank and the contractor against such risks and deposit such policies with the Bank from time to time during the currency of this contract. The contractor will also similarly indemnify the Bank of all claims which may be made upon the Bank 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 any sub-contractor and shall at his own expense effect and maintain, until the virtual completion of the contract, with an approved office, a Policy of Insurance in the joint name of the Bank and the Contractor against such risks and deposit such policy or policies with the Bank from time to time during the currency of the contract.
- (iv) The contractor shall be responsible for any liability which may be excluded from the Insurance Policies above referred to and also for all other damages to any person animal or property arising out of incidental or defective carry in out of this contract. He shall also indemnify the Bank in respect of any cost, charges or expenses arising out of claims or proceeding and also in respect of any award of composition and damages arising therefrom.
- (v) The Bank shall be entitled to deduct the amount of any damage, compensation, cost, charges and expenses arising from or accruing from, or in respect of, any such claims or damage from any or all sums due or to become due to the contractor without prejudice to the Bank's other rights in respect thereof.

## b. FIRE INSURANCE

(i) The Contractor shall, within fourteen days from the date of commencement of works, insure the works at his cost and keep them insured until the virtual completion of the contract, against loss or damage by fire and/ or earthquake, flood with an office to be approved by the Architect in the joint name of the Bank and the Contractor (the name of the former being placed first in the policy), for the contract amount only. The Contractor shall deposit the policy and receipts for the premium with the owner

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within 21days from the date of issue of work order, unless otherwise instructed by commencement of the works, unless otherwise instructed by the Architect. In default of the Contractor insuring as provided above, the Bank or the Architect on his behalf, may so insure the works and may deduct the premium paid from any money due or which may become due to the Contractor without prejudice to the other rights of the Bank in respect of such default. In case it becomes necessary to suspend the works, the Contractor shall as soon as the claim under the policy is settled, or work reinstated by the Insurance office should they elect to do so, proceed with all due diligence with the completion of the works in the same manner as though the incident had not occurred and in all respects under the same conditions of the Contract. The contractor in case of rebuilding or reinstatement after fire, shall be entitled to such extension of time for completion as the Bank/ Architect deemed fit.

- (ii) The amount so due as aforesaid shall be the total value of the works duly executed and of the contract materials and goods delivered upon the site for use in works up to and including a date not more than seven days prior to the date of the said Certificate less the amount to be retained by the Employer (as hereinafter provided) and less any installments previously paid under this clause. Provided that such Certificate shall only include the value of the said materials and goods as and from time to time as they are reasonably, properly and not prematurely brought upon the site and then only if properly stored and/or protected against weather.
- c) The Contractors will have to take out following Insurance Policies:
- Contractors All Risks Insurance Policy to cover-Earthquake- Fire & Shock Landslide/Rockslide/Subsidence. Flood/Inundations. Storm/Tempest/Hurricanes/Typhoon /Cyclone Collapse. Theft/Burglary. Damage to material brought at Site and to be subsequently used in the work.
- 2) Third party Insurance Policy
- a. For accidental loss or damage caused to the property of other persons.
- b. For fatal or non-fatal injury to any person other than insured own employees or work men of employees of the owner of the works any other construction work thereon, or member of the Insured's family or of any of the aforesaid; directly consequent upon of solely due to the construction of any property described in the Schedule.
- 3) Workmen's Compensation Insurance.

## 43. ACCOUNTS RECEIPTS & VOUCHERS:

The contractor shall, upon the request of the employer furnish them with all the invoices, accounts, receipts and other vouchers that they may require in connection with the works under this contract. If the contractor shall use materials less than what he is required under the contract, the value of the difference in the quantity of the material he was required to use and that he actually used shall be deducted from his dues. The decision of the Bank shall be final and binding on the contractor as to the amount of materials the contractor is required to use for any work under this contract.

## 45. LIQUIDATED DAMAGES/ DAMAGES FOR NON-COMPLETION

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If the Contractor fails to complete the works by the date stated in the Appendix or within any extended time and the Architect certifies in writing that in his opinion, the same ought reasonably to have not been completed, the Contractor shall pay the Bank liquidated damages @ 1.0 % of the contract amount per week of delay subject to maximum deduction of 10% of the contract amount.

# 46. TOOLS, STORAGE OF MATERIALS, PROTECTIVE WORKS AND SITE OFFICE REQUIREMENTS

- i) The contractor shall provide, fix up and maintain in an approved position proper office accommodation for the contractor's representative and staff which offices shall be open at all reasonable hours to receive instruction notices or communications and clear away on completion of the works and make good all work disturbed.
- ii) All drawings maintained on the site are to be carefully mounted on Boards of appropriate size and covered with a coat of approved varnish. They are to be protected from ravages of termites, ants and other insects.
- Iii) The contractor shall provide at his own cost all artificial light required for the work and to enable other contractors and sub-contractors to complete the work within the specified time.
- iv) The contractor shall provide a suitable temporary hut for the watchmen and clear away the same when no longer required and to provide all necessary attendance, lights, etc. required.
- v) The contractor shall arrange for temporary washrooms for the use of workers and field staff and keep the same in a clean and sanitary condition to the satisfaction of the Public Health Authorities and shall cause such latrines and soil to be cleared away whenever necessary and shall make good all the works disturbed by these conveniences.
- vi) Every precaution shall be taken by the contractor to prevent the breeding of mosquitoes on the works during the construction and all receptacles, cisterns, water tanks, etc., used for the storage of water must be suitably protected against breeding of mosquitoes. The contractor shall indemnify the Employer against any breach of rules in respect of anti-malarial measures.
- vii) The contractor shall not fix or place any placards or advertisement of any description or permit the same to be fixed or placed in or upon any boarding, gantry, building structure other than those approved by the Bank.

## 47. **PROTECTIVE MEASURES**

The contractor from the time of being placed in possession of the site must make suitable arrangements for watching, lighting and protecting the work, the site and surrounding property by day, by night, on Sundays and other holidays.

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Contractor shall indemnify the Bank against any possible damage to the building, roads or members of the public in course of execution of the work.

The contractor shall provide necessary temporary enclosures, gates, entrances, etc. for the protection of the work and materials and for altering and adoption the same as may be required and removing on completion of the works and making good all works disturbed.

**Storage of materials:** The contractor shall provide and maintain proper sheds for the proper storage and adequate protection of the materials etc. and other work that may be executed on the site including the tools and materials of sub-contractors and remove same on completion.

Cement godown shall be constructed for storing about six weeks' requirement of cement and stored as per norms with a stack of 10 bags each and 2 feet opening all around with 2 feet passage of each stack. Structure shall be water-proof from all the sides and top. Cement should be stored one feet above the ground level and have pucca raised floor.

So also reinforcement bars are to be stored above the ground level to prevent the same from getting rusted.

**Tools:** Theodolite levels, prismatic compass, chain, steel and metallic taps and all other surveying instruments found necessary on the works shall be provided by the contractor for the due performance of this contract as instructed by the site engineer. All measuring tapes shall be of steel and suitable scaffolding and ladders that may be required for safely taking measurement shall be supplied by the contractor.

The mestaries and the supervisors on the works shall carry with them always a one meter or two meter steel tape, a measuring tape of 30 meters, a spirit level, a plum bob and a square and shall check the work to see that the work is being done according to the drawing and specifications. The Site Engineer will use any or all measuring instruments or tools belonging to the contractors as he chooses for checking the works executed or being executed on the contract.

The contractor should cover in his rates for making provisions for all reasonable facilities for the use of his scaffolding, tools and plant etc. by sub-contractors for their work.

## 48. DATE OF COMMENCEMENT & COMPLETION

The Contractor shall be allowed admittance to the Site on the "Date of Commencement" stated in the Appendix hereto, or such later date as may be specified by the Architect / Consultant and he shall there upon and forthwith begin the works and shall regularly proceed with and complete the same (except the painting or other decorative works the Architect / Consultant may desire to delay) on or before the "Date of Completion" stated in the Appendix subject nevertheless to the provision for extension of time hereinafter contained. As the work is to be carried out in a running office, the contractor should take care so as not to disturb the day to day functioning of the office & should properly cordon off the section where the work is being carried out from the working section.

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# 49. TIME OF COMPLETION, EXTENSION OF TIME & PROGRESS CHART

- (i) Time of completion: The entire work is to be completed in all respects within the stipulated period i.e. **6 months.** The work shall deem to be commenced within 10 days from the date of acceptance of work order or date of handing over of site, whichever is later. Time is the essence of the contract and shall be strictly observed by the contractor. The work shall not be considered as complete until the Bank / Architects have certified in writing that this has been completed and the Defects Liability Period shall commence from the date of such certificate.
- (ii) Extension of time: If in the opinion of the Architect / Consultant the work has been delayed
  - (a) By force majeure; or
  - (b) By reason of any exceptionally inclement weather or
- (c) By reason of proceedings taken or threatened by or dispute with adjoining or Neighboring Owners or public authorities arising otherwise then through the Contractors own default or

Contractors own default or

- (d) By the works or delay or the other Contractors or tradesmen engaged or nominated by the Bank or the Architect and not referred to in the Schedule of Quantities and/or specification or
- (e) By reasons of the Architect's instructions as per clause 2 hereof or
- (f) By reason of any combination of workmen or strike or lock-out affecting any of the building trades or
- (g) in consequence of the Contractor not having received in due time necessary instructions from the Architect for which he shall specifically applied in writing or
- (h) From other cause which the Bank may consider as beyond the control of the Contractor or
- (i) In the event, the value of work exceed the value of the Priced Schedule of Quantities owing to variation, the architect may with the previous approval in writing of the Bank make a fair and reasonable extension of time for the completion of the Contract works. In case of such strike or lockout, the Contractor shall as soon as give written notice thereof to the Architect / Consultant, but the Contractor nevertheless constantly use his endeavor to prevent delay and shall do all that may be reasonably required to the satisfaction of the Architect/Bank to proceed with the work and on his doing so that it will be ground of consideration by the Bank for an extension of time as above provided. The decision of the Bank as to the period to be allowed for an extension of time for completion hereunder (which decision shall be final and binding on the contractor) shall be promulgated at the conclusion of such strike or lock-out and the Bank shall then, in the event of an extension being granted, determine and declare the final completion date. The provision in clause with respect to payment of liquidated damages shall, in such case, be read and construed as if the extended date fixed by the Bank were substituted for and the damage shall be deducted accordingly.
- (iii) **PROGRESS OF WORK:** During the period of construction the contractor shall maintain proportionate progress on the basis of a Programme Chart submitted by the contractor immediately before commencement of work and agreed to by the Bank / Architects. Contractor should also include planning for procurement of scare material well in advance and reflect the same in the Programme Chart so that there is no delay in completion of the project.

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# 50. FAILURE BY CONTRACTOR TO COMPLY WITH ARCHITECT/CONSUSLTANT'S INSTRUCTION.

If the Contractor after receipt of written notice form the Architect / Consultant requiring compliance within ten days fails to comply with such further drawings and/or Architect's instructions, the Bank may employ and pay other persons to execute any such work whatsoever the may be necessary to give effect thereto, and all costs incurred in connection therewith shall be recoverable from the Contractor by the Bank on the Certificate of the Architect / Consultant as a debt or may be deducted by him from any moneys due to the Contractor.

#### 51. Idle labour:

Whatever the reasons may be no claim for idle labour, additional establishment cost of hire and labour charges of tools and plants would be entertained under any circumstances.

## 52. Suspension:

If the contractor except on account of any legal restraint upon the Bank preventing the continuance of the work or in the opinion of the employer shall neglect or fail to proceed with due diligence in the performance of his part of the contract or if he shall more than once make default, the Bank shall have the power to give notice in writing to the contractor requiring the work to be proceeded within a reasonable manner and with reasonable dispatch, such notice purport to be a notice under this clause.

After such notice shall have been given the contractor shall not be at liberty to remove from the site of the works or from any ground contiguous thereto any plant or materials to subsist from the date of such notice being given until the notice shall have been complied with. If the contractor fails to start the work within seven days after such notice has been given to proceed with the works as therein prescribed, the employer may proceed as provided in clause Termination of Contract by employer.

## 53. TERMINATION OF CONTRACT BY THE BANK

If the Contractor being a individual or a Firm, commits any "act of insolvency" or shall be adjudged an Insolvent or being an Incorporate company, shall have an order for supervision of the court and the official Assignee or the Liquidator in such acts of insolvency and winding up, as the case may be, shall be unable within seven days after notice to him requiring him to do so, to show the reasonable satisfaction of the Architect that he is able to carry out and fulfill the Contract and to give security therefore, if so required by the Architect / Consultant.

OR if the Contractor (whether an individual, Firm or Incorporated Company) shall suffer execution or other process of court attaching property to be issued to the Contractor.

OR shall suffer any payment under this Contract to be attached by or on behalf of any of the creditors of the Contractors.

OR shall assign or sublet this Contract without the consent in writing of the Bank first obtained.

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OR shall charge or encumber this Contract or any payment due or which may become due to the Contractor hereunder.

OR if the architect / consultant shall certify in writing to the Bank that the contractor:

- i. Has abandoned the Contract, or
- ii. Has failed to commence the works, or has without any lawful excuse under these conditions suspended the progress of the works for fourteen days after receiving from the Architect notice to proceed, or
- iii. Has failed to proceed with the works with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or
- iv. Has failed to remove materials from the Site or to pull down and replace work within seven days after receiving from the architect written notice that the said materials or work were condemned and rejected by the Architect under these conditions or,
- v. Has neglected or failed persistently to observe and perform all or any of the acts, matters or things by this Contract to be observed and performed by the contractor to observe or perform the same.

Then and in any of the said cases the Bank may, notwithstanding any previous waiver, after giving seven days notice in writing to the Contractor, determine the Contract but without thereby affecting the powers of the Architect/Bank or obligations and liabilities of the Contractor, the whole of which shall continue in force as fully as if the contract has not been so determined, and as if the work subsequently executed had been executed by or on behalf of the Contractor, And further, the Bank by his agent or servants may enter upon and take possession of the work and all plant, tools, scaffoldings, shed, machinery, steam and other power utensils and materials lying upon the premises or on the adjoining land 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 the employing any other contractor or 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 or finishing or using the materials and plant for the work. When the work shall be completed or as soon as thereafter as convenient the Architect shall give a notice to the Contractor to remove his surplus materials and plant, and should the Contractor fail to do so within the period of fourteen days after receipt thereof by him, the Bank may sell the same by public auction, and give credit to the Contractor for the net amount realized. The architect shall thereafter ascertain and certify in writing under his hand what (if anything) shall be due or payable to, or by the employer, for the value of the said plant and materials so taken possession of by the Bank and the expense or loss which the Bank 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 thereupon be paid by the Bank to the Contractor or by the Contractor to the Bank, as the case may be and the certificate of the architect shall be final and conclusive between the parties.

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## 54. Certificates & payments:

The Contractor shall be paid by the Bank from time to time by installments under Interim certificates to be issued the Architect / Consultant to the Contractor on account of the works executed when in the opinion of the Architect, work to the approximate value named in the appendix as value of work for Interim Certificates (or less at the reasonable discretion of the Architect / Consultant has been executed in Accordance with this contract, subject, however, to a retention of the Item of such value named in the appendix hereto as "retention Item from Interim Certificate", until the total amount retained shall reach the named in the Appendix as "Total Retention Money", after which time the installments shall be upto the full value of the work subsequently so executed and fixed in the building. The Architect / Consultant may in his discretion include the Interim Certificate, such amount, as he may consider proper on accounts of material delivered upon the site by the contractor for use in the works. And when the works have been virtually completed and the Architect/ Consultant shall have certified in writing that they have been completed, the contractor shall be paid by the Bank in accordance with the certificate to be issued by the Architect / Consultant the sum of money named in the Appendix "Installment after virtual completion" being a part of the said Total Retention Money. And 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 Architect at the expiration of the period referred to as "The Defects Liability Period" in the appendix hereto from the date of virtual completion, or as soon after the expiration of such period as the works shall be finally completed and all defects made good according to the true intent and meaning and hereof whichever shall last happen, provided always that the issue of the Architect / Consultant of any certificate during the progress of the works or at or after the completion shall not relieve the contractor from his liability under clause 2 and 20 nor relieve the Contractor from 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 the defects and insufficiencies in the works or materials which is a reasonable examination would not have disclosed. No certificate of the Architect shall of itself be conclusive evidence that any works or materials to which it relates are in accordance with the contract, neither will the contractors have a claim for any amounts which the Architect / Consultant might have certified in any interim bill and paid by the Bank and which might subsequently be discovered as not payable and in this respect the Bank's decision shall be final and binding.

The Architect/ Consultant shall have power to withhold any Certificate if the works or any parts thereof are not being carried out to his satisfaction.

The Architect/ Consultant may by any certificate make any correction in any previous certificate, which shall have been issued by him.

No certificate of payment shall be issued by architect if the contractor fails to insure the works and keep them insured till the issue of Virtual completion certificate.

All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim nor shall it conclude determine or affect in any way the

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power of the Bank under these conditions or any of terms as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract.

#### 55. EXCEPTED MATTERS / MATTERS TO BE FINALLY DECIDED BY THE BANK:

The decisions, opinion, direction, certificate with respect to all or any of the matters under this tender shall be final and conclusive and binding on the contractor and shall be without appeal. Any other decision, opinion, direction, certificate or valuation of the architect or any refusal of the architect to give any of the same, shall be subject to the right of arbitration and review. The Architect/ Consultant to give recommendations/ opinion in respect of interpreting the various clauses. However, the decision from the competent authority of the Bank shall be final and binding.

#### 56. SETTLEMENT OF DISPUTES BY ARBITRATION

Wherever, in any of the documents forming part of the Contract, the Bank has been vested with the final powers, his decision, opinion, certificate or any other discretion shall be final conclusive and binding on the contractor and shall be without appeal. All other matters shall be subject to the right of arbitration.

All disputes or differences of any kind whatsoever save and except matters referred to in clause 1) arising out of or in connection with the Contract, whether during the progress of Work or after Completion and shall after written notice by either party to the contract to the other of them and to the Bank hereinafter mentioned be referred for adjudication to one mutual arbitrator or two Arbitrator, one each to be nominated by the Contractor and the Bank in case of disagreement between two parties, who shall thereafter appoint an Umpire. The provisions of Indian Arbitration and Conciliation Act 1996 shall apply for the purposes.

The Work under the Contract shall, however, continue during the arbitration proceedings and no payment due or payable to the Contractor shall be withheld on account of such proceedings.

The Arbitrator shall be deemed to have entered on the reference on the date he issued notice to both the parties fixing the date of the first hearing.

The Arbitrator may from time to time, with the consent of the parties, enlarge the time for making and publishing the award.

The Arbitrator shall give a separate award in respect of each dispute or difference referred to him. The Arbitrator shall decide each dispute in accordance with the terms of the contract and give a reasoned award. The venue of arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion.

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

The award of the Arbitrator shall be final and binding on both the parties.

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Subject to aforesaid the provisions of the Arbitration & Conciliation Act 1996 or any statutory modification or re-enactment thereof and the rules made there under, and for the time being in force, shall apply to the arbitration proceeding under this clause. The Bank and the Contractor hereby also agree that arbitration under clause shall be a condition precedent to any right to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.

The Bank and the contractor hereby also agree that arbitration under clause shall be a condition precedent to any right to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.

**Jurisdiction:** All matters arising out of or in any way connected with this contract shall be deemed to have arisen in Mumbai and only the courts in Mumbai shall have jurisdiction to determine the same.

# 57. RIGHT OF TECHNICAL SCRUTINY OF FINAL BILL

The Bank shall have right to cause a technical examination of the works and the final bill of the works and the final bill of the contractor including all supporting vouchers, abstracts, etc., to be made at the time of payment of the final bill. If as a result of this examination or otherwise any sum is found to have been overpaid or over certified, it shall be lawful for the Bank to recover the sum. The Bank reserves the right to alter / reduce amount certified by Consultant / Engineer, if noticed that certification is not proper.

The subject wok will be scrutinized by the Chief Technical Examiner's Office, a technical wing of Central Vigilance Commission and other Vigilance and Audit Authorities of the Bank. Decision of this Authority shall be binding on the contractor. Any discrepancy noted defected shall be rectified by the contractor free of cost or appropriate amount will be recovered from the contractor's payment.

# 58. BANK ENTITLED TO RECOVER COMPENSATION PAID TO WORKMEN:

The Bank is obliged, by the virtue of the provisions of the workmen's compensation Act, 1923, or any statutory modification or re-enactment thereof to pay compensation to a workman employed by the contractor in execution of the works, the Bank shall be entitled to recover from the contractor the amount of compensation so paid, and without prejudice to the rights of the Bank under said Act. The Bank shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due to the contractor under this contract or otherwise. The Bank shall not be bound to contest any claim made against it under the said Act, except on written request of the contractor and upon his giving to the Bank full security to the satisfaction of the Bank for all costs for which the Bank might become liable in consequence of contesting such claim.

# 59. ABANDONMENT OF WORKS:

If at any time after the acceptance of the Tender, the Employer shall for any reasons whatsoever not require the whole or any part of the works to be carried out, the Architect/ Bank shall give notice in writing to the contractor who shall have no claim to any payment of compensation or otherwise whatsoever on account of any profit or advantage which be might have derived from the execution of the whole works but which did not derived in consequence of the foreclosure of the whole or part of the work.

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#### 60. RETURN OF SURPLUS MATERIALS:

Notwithstanding anything to the contrary contained in any or all the clauses of this contract, where any material for the execution of the contract is procured with the assistance of the Bank by purchase made under orders or permits or licenses issued by the Government, the contractor shall hold the said materials economically and solely for the purpose of the contract and not dispose of them without the prior written permission of the Bank, if required by the Bank, at the price to be determined by the Architect having due regard to the condition of the materials, the price to be determined not to exceed the purchase price thereof inclusive of Sales Tax, Octroi Duty and other such levies paid by the contractor shall, in addition to being liable to action for contravention of the terms of license or permit and /or criminal breach of trust, be liable to Bank for all such moneys, advantage or profits resulting or which in the usual course would have resulted to him by reason of such breach.

# 61. RIGHTOF BANK TO TERMINATE CONTRACT IN THE EVENT OF DEATH OF CONTRACTOR IF INDIVIDUAL.

Without prejudice to any of the rights or remedies under this contract, if the contractor, being an individual dies, the Bank shall have the option of terminating the contract without incurring any liability for such termination.

#### 62. Materials Having Basic Price.

For materials for which a basic price has been stipulated in the tender, the variation in the actual cost of purchase from the basic price will be considered for adjustment (payment / recovery) in the tender cost due to incorporation of required quantity of such material in the works over different periods of time as per construction schedule. Rates should be however fair and competitive and verified by market enquiry by the Bank/ Consultant and the quantity purchased in every period should be reasonable and advantageous, if any due to bulk purchase may be also taken into account.

Reinforcement Steel (TOR)	As mentioned in the Bill of Quantity
Reinforcement Steel (MS)	As mentioned in the Bill of Quantity
Cement	As mentioned in the Bill of Quantity
Granite slab	As mentioned in the Bill of Quantity
Granite Tile	As mentioned in the Bill of Quantity
Marble	As mentioned in the Bill of Quantity
Ceramic tiles	As mentioned in the Bill of Quantity
Interlocking / paver blocks	As mentioned in the Bill of Quantity
Vitrified tiles	As mentioned in the Bill of Quantity

The amount of difference in actual price and basic cost will be paid by the Bank if the increase is on higher side or the amount will be recovered if there is decrease in the prices. The clause will be operated irrespective of any ceiling in terms of time frame as stipulated for price variation adjustment wherein the contractor is supposed to complete specific value of work during first six months within which they are not entitled for PVA relief.

#### 63. Office accommodation for Site Engineer.

The contractor shall provide, erect, and maintain at his cost a separate simple watertight office accommodation for the Site engineer/ PMC. This accommodation shall

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be well lighted and ventilated and provided with windows, door with lock. The site engineer's / PMC office shall be minimum of 150 Sq.Ft. and the contractor shall provide a desk, chairs, drawers, for keeping drawing, a cupboard having proper lock and a tack board for displaying drawings. The accommodation shall be demolished when directed. The contractor has to provide one peon for the said office who shall keep the office neat and tidy. The contractor shall also make arrangement for toilet facilities and drinking water. The office shall be provided with fan / air-cooler / air-condition as required.

# 64. Security arrangement at Site

Upon taking possession of the site, the contractor shall make arrangement of security by posting required number of security guards and flood light arrangement.

Estimated cost	Rs.153.89 lakhs + 18% GST		
EMD	EMD shall be <b>Rs.3,07,780.00</b> payable in form of Demand Draft/Pay Order drawn from Nationalized Bankfavoring Union Bank of India payable at Mumbai.		
Initial security deposit	The amount of ISD shall be 3% of the accepted value of the tender.		
Date of commencement	10 <sup>th</sup> day from the date of acceptance of work order OR date of site possession, whichever is later.		
Time for completion of work	As per time schedule given in tender document i.e. 4months.		
Retention money to be deducted from the bills.	5 % of the certified gross value of each running bill, till accumulating total security deposit including ISD.		
Security Deposit	3% of Contract amount		
Defect Liability Period	Twelve months from the virtual completion. However, if all the works or more than one works awarded to one contractor the defects liability period will be reckoned from the date of virtual completion of last work.		
Period of Final Measurement	1 months.		
Liquidated damages	Shall be 1 % of contact amount per week of delay subject to ceiling of 10% of the accepted contract amount.		
Value of works for Interim Certificates	Value not less than Rs.46 lacs (Rs. Fourty six Lacs only) or as decided by the Bank.		

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Payment after virtual completion	50% of security deposit will be returned after (i) issue of virtual completion certificate by the project architect. (ii) Contractor's removal of his material, equipment's, cleaning of site and against Bank Guarantee. Balance 50% of retention money shall be released 15 days after satisfactory completion of defect liability period.
Period for honoring interim certificate.	75% of the bill amount shall be honored within 7 days after getting certificate from project architect and submitting to the Bank. Balance 25% bill amount payable within 30 days after checking by the Bank.
Recovery towards taxes.	As per rules applicable from time to time.

# SAFETY CODE

#### 1. Scaffolds

- i. Suitable scaffolds shall be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except in the case of short duration work which can be done safely from ladders. When a ladder is used, it shall be of rigid construction made either of good quality wood or steel. The steps shall have a minimum width of 450 mm and a maximum rise of 300 mm. Suitable hand holds of good quality wood or steel shall be provided and the ladder shall be given an inclination not steeper than 1/4 to 1 (1/4 horizontal and 1 vertical).
- ii. Scaffolding or staging more than 4 m.above the ground floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail property bolted, braced or otherwise secured, at least 1 m. above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- iii. Working platforms, gangways and stairways shall be so constructed that they do not sag unduly or unequally and if the height of the platform, gangway or stairway is more than 4 m. above ground level or floor level, they shall be closely boarded and shall have adequate width and be suitably fenced as described in (ii) above.
- iv. 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 1 m.

Wherever there are open excavations in ground, they shall be fenced off by suitable railing and danger signals installed at night so as to prevent persons slipping into the excavations.

v. Safe means of access shall be provided to all working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 m. in length while the width between side rails in rung ladder shall in no case, be less than 290 mm. for ladder up

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to and including 3 m. in length. for longer ladders this width shall be increased at least 20 mm. for each additional meter of length.

vi. A sketch of the ladders and scaffolds proposed to be used shall be prepared and approval of the Engineer obtained prior to construction.

# 2. Other Safety Measure

- vii. All personnel of the contractor working within the plant site shall be provided with safety helmets. All welders shall wear welding goggles while doing welding work and all metal workers shall be provided with safety gloves. Persons employed on metal cutting and grinding shall wear safety glasses.
- ix. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public

# 3. Excavation & Trenching

- ix. All trenches, 1.25 m. or more in depth shall at all times be supplied with at least one ladder for each 30 m. in length or fraction there of. The ladder shall be extended from bottoms of the trench to at least 1 m. above the surface of the ground. Sides of trenches which are 1.5 m. or more in depth shall be stepped back to give suitable slops or securely held by timer bracing so as to avoid the danger of sides of collapsing. The excavated materials shall not be placed within 1.5 m. of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.
- x. The contractor shall take all measure on the site of the work to protect the public from accidents and shall be bound to bear the expenses of deference of every suit, action or other proceedings at law that may be brought by any persons for injury sustained owing to neglect of the above precautions and to pay any such persons or which may with the consent of the contractor, be paid to compromise any claim by any such person.

# 4. Demolition

- a. Before any demolition work is commenced and also during the process of the work:
- b. All roads and open areas adjacent to the work site shall either be closed or suitably protected.
- c. No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
- d. All practical steps shall be taken to prevent danger to persons employed from the risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.

# 5. Personal Safety Equipment

All necessary personal safety equipment as considered adequate by the Engineer should be kept available for the use of the person employed on the site and maintained in a

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condition suitable for immediate use, the contractor should take adequate steps to ensure proper use of equipment by those concerned.

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

#### 6. Hoisting Machines

- xiv. Use of hoisting machines and tackle including their attachments anchorage and supports shall confirm to the following standards or conditions:
- i.a. These shall be of good mechanical constructions sound material and adequate strength and free from patent defect and shall be kept in good repair and in good working order.
- i.b. Every rope used in hoisting or lowering materials or as means of suspension shall be of durable quality and adequate strength and free from patent defects.

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- ii. Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years shall be in charge of any hoisting including any scaffolding winch or give signals to operator.
- iii. In case of every hoisting machine and of every chain ring hook, shackle shovel and pulley block used in hoisting or as means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
- iv. In case of departmental machines, the safe working load shall be notified by the Engineer. As regards contractor's machines, the contactor shall notify the safe working load of the machine to the Engineer whenever he brings any machinery to site of work and get verified by the Engineer concerned.
- xv. Motors, gearing, transmission, electrical wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum of the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary, should be provided. The workers should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
- xvi. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use.

Adequate washing facilities should be provided at or near places of work.

- xvii. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
- xviii. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer, Engineer of the Department or their representatives.
- xix. Notwithstanding the above clause from (i) to (xviii), there is nothing in these to exempt the contractor from the operation of any other Act or Rule in force in India.

# ADDITIONAL CONDITIONS

1. **Tenderer to inspect Site:** The tenderer shall visit and examine the construction site and satisfy himself as to the nature of the existing roads or other means of communications, the character of the soil and the excavation, the extent of magnitude of the work and facilities for obtaining material and shall obtain generally his own information on all matters affecting the execution of the work. No extra changes made in consequence of any misunderstanding or incorrect information on any of these points

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or on grounds of insufficient description will be allowed. All expenses incurred by the contractor in connection with obtaining information for submitting this tender including his visits to the site or efforts in compiling the tender shall be borne by the Tenderer and no claim for reimbursement thereof shall be entertained.

- 2. Access to Site: The tenderer is to include in his rates for forming access to the Site with all temporary roads gangways required for the works.
- 3. Setting out: The tenderer shall set out the building in accordance with the plans. All grid/centre lines shall be pegged out to satisfaction of the Architects. The tenderer shall be responsible for the correctness of the lining out and any inaccuracies are to be rectified at his own expenses. He will be responsible for taking ground levels of the Site before setting out and recording them without any extra charge.

The tenderer shall construct and maintain proper benches at the intersection of all main walls, columns, etc., in order that the lines and levels may be accurately checked at all times.

- 4. **Treasure Trove:** Should any treasure, fossils, minerals, or works of art of antiquarian interest be found during excavation or while carrying out the works, the tenderer shall give immediate notice to the Architects of any such discovery and shall make over such finds to the Employer.
- 5. Attendance upon all Trades: The general tenderer shall be required to attend on all the Tradesman or Sub-contractor/ contractors appointed by the Bank for Water-Supply & Sanitary, Electrical installation, Air-conditioning, Security Equipment, Hardware, Telephone and other special contactors. The rates quoted shall be inclusive of attendance and also allow the contractors and retain until such times the relevant Sub-contract works are completed.
- 6. **Gate-Keeper and Watchmen:** The tenderer from the times of being placed in possession of the Site must make arrangements for watching, lighting and protecting the work, all materials, workmen and the public by day and night on all days including Sundays and holidays at his own cost.
- 7. Sheds for materials: The contractor shall provide all necessary sheds of adequate dimensions for shortage and protection of materials like cement, lime, timber, and such other materials including tools and equipments which are likely to deteriorate by the action of sun, wind, rain or other natural causes due to exposure in the open. Cement godown shall be constructed for storing about six weeks' requirement of cement and stored as per norms with a stack of 10 bags each and 2 feet opening all around with 2 feet passage of each stack. Structure shall be waterproof from all the sides and top. Cement should be stored one feet above the ground level and have pucca raised floor.

Reinforcement bars are to be stored above the ground level to prevent the same from getting rusted.

All such sheds shall be cleared away and the whole area left in good order on completion of the contract to the satisfaction of the Architects.

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All materials which are stored on the site such as bricks, aggregate, etc. shall be stacked in such a manner as to facilitate rapid and easy checking of quantum of such materials.

- 8. **Cost of transporting:** The tenderer shall allow in his cost for all transporting, unloading stacking and storing or supplies of goods and materials for this work on the site and in the places approved from time to time by the Architects. The tenderer shall allow in his price for transport of all materials controlled or otherwise to the site.
- 9. W.C and Sanitary accommodation and office Assessors and accommodation: The tenderer shall provide at his own cost and expense adequate closet and sanitary accommodation complying in every respect to the rules and regulations in force of the local authorities and other public bodies, for his workmen of nominated sub-contractors and other contractors working in the building, the assistant engineer and other employer's agent connected with this building project and maintain the same in good working order.

The tenderer shall also provide at his own expense adequate office and shall maintain the same in a satisfactory condition and shall provide light, fan and attendant, etc... for the same and shall remove them after completion of works. He shall arrange to supply at his own expense, office furniture with drawing assessors for the official use of the assistance engineer and at all times maintain in good working order a dumpy level and a Theodolite at Site, to enable the Site Engineer to check the lines and levels of work.

- 10. **Materials, Workmanship & Samples:** Materials shall be of approved quality and the best of their kind available and shall generally conform to I.S. Specifications, The Contractor shall order all the materials required for the execution of work as early as necessary and ensure that such materials are on site well ahead of requirement for use in the work. The work-involved calls for high standard of workmanship combined with speed and to the entire satisfaction of the Architects.
- 11. **Rates for Non-Tender Items:** Rates of items not included in Schedule of Quantities shall be settled by the Architects as mentioned in the variation clause of the Contract Conditions.
- 12. **Rate to include:** The rates quoted shall be for all heights and depths and for finished work. Submission of every required Test report by the Consultant to determine the performance of the works, Structure, usage of materials etc. at site. All the expenses of the Test are to be born by the Vendor. The correction, if required after the Test report result will also be required to be rectified by the vendor at free of cost basis.

The contractor shall ascertain from other contractors as directed by the Architects all particulars relating to their work with regard to the order of its execution and the position in which cases, holes and similar items will be required, before the work is taken in hand as no claims for extras will be allowed for cutting away work already executed in consequence of any neglect by the contractors to ascertain these particulars beforehand.

Before ordering materials, the contractors shall get the samples approved from the Architects well in time.

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13. Testing of work and material: The contractors will have to carry out testing of the material at regular interval to proof quality, soundness and efficiency of the material. Expenditure required for testing and transportations shall be borne by the tenderer.

All the test should be as under:

LIST OF	F MANDATORY TESTS
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MATERIALS	TEST	TEST ROCEDURE	MINMUM QUANTITY	FREQUENCY
1	2	3	4	5
Lime	Chemical and Physical Properties of lime	IS-6932	15 Mt.	10 mt or part thereof
Sand	a) Silt Content	Field	40 Cu.M.	40 Cu.M. or part thereof
	b) Bulking	Field	40 Cu.M.	50 Cu.M. or part thereof
	c) Particle size distribution	Field	80 Cu.M.	Every Cu.M. required in R.C.C. Work
Stone Aggregate	Particle size distribution		135 Cu.M.	Every 135 Cu.M. or part thereof for R.C.C. work. For rest of work as desired.
Cement	- Setting time - Strength - Soundness	IS-269 and other applicable I.S.		Every batch of Consignment and as directed wherever there is a change of source.

Cement	1. Slump		Once a day or as desired.
Concrete or	2. Cube	20 Cu.M. in	Every 20 Cu.M. of a day's
R.C.C.	strength	slab beams	concrete.
		£	
		connected	
		columns	
		5 Cu.m.in	Every 5 Cum. In column
		column.	concrete.
Bricks	1. Water	Designation-	One test for each source
	absorption &	35	of manufacture.
	Efflorescence		
	2.	Designation-	1,00,000 or part
	Compressive	35	thereof. Two test for 1 <sup>st</sup>
	strength		lot of 1,00,000 & One
			test later for every
			2,00,000 & part thereof.
Timber	Moisture	1 Cu.M.	Every three Cu.M. & part
			thereof.

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Aluminum	Thickness of	IS-5523	Rs.5000.00	Rs. 10000 or part	
doors or	anodic			thereof.	
Windows fitting	coating				
Mortice Locks	Testing of		50 os.	100 or part thereof.	
	springs				
Steel	a)Tensile	IS-1529	20 ton	Every 20 Tonne or part	
	Strength			thereof.	
	b) Bend		do	do	
	strength				
Marble/Mosaic/	1) Transverse	IS-1237	10000 tiles	10000 tiles or part	
Terrazzo Tiles	strength			thereof	
	2) Water	do	do	do	
	absorption				
	3) Abrasion	do	do	do	
	test				
White glazed	1) Water	IS_777	10000 tiles	10000 tiles or part	
tiles	absorption			thereof	
	2) Craxing		do		
	3) Impact			do	
Flush door	1) End		IS-2202	Destructive tests no.	
	Immersion				
	2) Knife			No. of shutters	
	3) Adhesion		22-65	1	
			66-100	2	
			101-180	2	
			181-300	3	
			301-500	4	
			501-above	5	

- Cost of testing and transport will be borne by contractors.
- Any other materials will be tested by contractors at his own cost as per the instruction of Architect and Bank from time to time.
- Frequency stated above is minimum and the Contractor may have to test materials with any frequency or as instructed by Bank/Architects without any cost.

If after any such test the work or portion of works is found in the opinion of the Architect to be defective or unsound, the contractor shall pull down and re-do the same at his own cost. Defective materials shall immediately be removed from the site.

14. **Foremen and Tradesmen:** All tradesmen shall be experienced men properly equipped with suitable tools for carrying out the work of carpentry and joinery and other specialist trades in a first-class manner and where the Architects deemed necessary, the contractor shall provide any such tools, special or ordinary which are considered necessary for carrying out the work in a proper manner.

All such tradesmen shall work under an experienced and properly trained foremen, who shall be capable of reading and understanding all drawings, pertaining to this work and the contractor shall also comply with other conditions set out in Clause 9 of the conditions of the contract.

# 15. Work Programmed/ weekly progress report:

The contractor shall prepare and submit to architects for approval, a bar chart showing the programme of construction of various items, fitted within the period stipulated for

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completion, within 15 days of the communication of the acceptance of the tender. The contractor shall also furnish necessary particulars to the site engineer for compiling weekly progress reports in the form furnished by the architects.

- **16. Photographs:** The contractor shall at his own expense supply to the architects with triplicate copies of large photographs not less than 25cm x 20cm (10"x8") of the works taken from two approved portions of each building, at intervals of not more than three months during the progress of the work, or at every important stage of construction.
- 17. Clearing of Site: The contractor shall after completion of the work clear the site of all the debris and left-over materials at his own expense to the entire satisfaction of the Architects and Municipal or other public authorities.

The whole of the work shall be thoroughly inspected by the contractor and all deficiencies and defects put right. On completion of such inspection, the contractor shall inform the Architects in writing that he has finished the work and it is ready for the Architects inspection.

**18. Vouchers:** The contractor shall furnish the Architects with vouchers on request, to prove that the materials are as specified and to indicate the rates at which the materials are purchased in orders to work out the rate analysis of the non-tender items which he may be called upon to carry thereafter.

# 19. <u>Consultant's decisions are final & binding on both the parties</u>:

For all matters not specifically provided for herein the provisions of General and Special Tender Documents shall apply and the rights and liabilities of the parties shall be decided accordingly. The decision of the Consultant in this regard shall be final and binding, provided that decision is based on contract clauses executed.

# 20. <u>settlement of dispute:</u>

Wherever, in any of the document forming part of the contract, the Consultant has been vested with final powers, his decisions, opinion, certificate or any other discretion shall be final, conclusive and binding on the parties and shall be without appeal. All other matters shall be subject to the right of arbitration.

# 21. <u>TYPE OF CONTRACT:</u>

The Contractor shall be paid for the actual quantity of Work done, as measured at Site, at the Item quoted by him in the Contract Bills.

# 22. <u>Schedule of Quantities:</u>

The schedule of Quantities given in the <u>Contract Bill</u> is provisional and is meant to indicate the intent of the Work and to provide a uniform basis for tendering. The Bank reserves the right to increase or decrease any of the quantities or to totally omit any item of Work and the Contractor shall not claim any extras or damages on these grounds.

# 23. <u>Contract Sum (Consideration):</u>

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The rates and Items quoted by the Contractor in the priced bill of quantities (Contract Bills) shall be treated as firm and the contract sum shall be deemed to have been calculated with reference to the cost of execution of Works as set out in price bid of Contract Documents and shall not be adjusted or altered for any reason.

#### 24. Idle Labour/ Machinery:

Whatever the reason may be, **no claim** for idle labour, additional establishment cost of hire and labour charges of tools & plants would be entertain under any circumstances, even if the work is delayed / abandoned for any reason.

#### 25. <u>Provisional Completion of works:</u>

The Works shall deemed to have been provisionally accepted after fulfillment of all the following by the Contractor:

- (a) Obtaining approvals from local Authorities as required for occupation and use of the Works and handing over such certificates to the Engineer as follows :-
  - (i) Sewer drainage approval up to drainage completion including required submission drawings, certificates and required follow up with Authorities/Authority Concern Department of statutory authority.
  - (ii) Storm water drainage approval upto storm water drain completion including required submission drawings, certificate and required follow up with Authorities/Authority Concern Department of statutory authority.
  - (iii) All required approval/permission for temporary structures, temporary water connection and temporary electrical connection for construction purpose from the authorities/authority Concerned Government Authority.
- (b) Submitting As-Built drawings (Contractor shall mark all the services on drawings issued by the Engineer), Catalogues, Brochures, Data Sheets, manuals as directed by the Engineer.
- (c) Obtaining certificate of Completion from the Consultant.
- (d) Handing over of the Works to the Bank as directed by the Consultant.

# 26. <u>Non-compliance of instructions:</u>

If within seven days after receipt of a written notice from the Consultant, requiring compliance with an instruction the Contractor does not comply therewith, then the Bank may employ and pay other persons to execute any Work whatsoever which may be necessary to give effect to such instructions and all cost incurred with such employment shall be recoverable from the Contractor by the Bank as a debt or may be deducted by him from any monies due or to become due to the Contractor under this Contract.

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Upon receipt of what purports to be instruction issued to him by the Consultant the Contractor may request the Consultant to specify in writing the provision of these conditions which empowers the issue of the said instructions. The Consultant shall forthwith comply with any such request, and if the Contractor shall thereafter comply with the said instruction, then the issue of the same shall be deemed for all purposes of this Contract to have been empowered by the provision of these Conditions specified by the Consultant in answer to the Contractor's request.

# 27. <u>Certification of Bills in absence of 'Claimant's Engineer:</u>

If the Contractor fails to attend or neglects or omits to send his agent at the time of taking measurement or for examining the records or drawings then the measurements so taken by the Consultant, the records and drawings as prepared by the Engineer shall be taken to be correct, final and conclusive.

# 28. Interim payment as adhoc against final bill:

All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for Work actually done and completed, and shall not preclude the requiring of bad, unsound, and imperfect or unskilled Work to be removed and taken away and reconstructed, or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim, nor shall, it conclude, determine or affect in anyway the power of the Bank under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the Contractor within one month of the date fixed for completion of the Work or of the date of certificate of completion furnished by the Engineer and payment shall be made within six (6) weeks from the date of receipt of final Certificate from the Consultant.

# 29. <u>Cessation of Bank's liability:</u>

The Bank shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or the execution of the Works, unless the Contractor shall have made a claim in writing before the giving of Certificate of Final Completion.

# 30. In respect of building cleaning:

On completion the Contractor shall clean all windows and doors including the cleaning and oiling if necessary, of all hardware, inside and outside, all floors, staircases, and every part of the building. He will leave the entire building neat and clean and ready for immediate occupation and to the satisfaction of the Bank.

# 31. In respect of extension and claims of contractor:

The Contractor, in his application for grant of time shall clearly bring out the **financial effect** of extension of time requested by him. In case no financial effect is stated in the request for grant of extension of time, the same shall be taken as zero and it shall be presumed that the Contractor has mitigated whole of the losses due to the delays of all kinds.

# 32. In respect of contractor cannot claim extra cost:

Provided that the Contractor shall **not beentitled to recover** any such extra cost unless he gives written notice to the Consultant of his intention to claim within twenty-eight days of the Consultant's order. The Consultant shall in consultation with the Bank settle and determine such extra payment and/or extension of time to be made to the

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Contractor in respect of such claim as shall, in the opinion of the Consultant, be fair and reasonable, and provided the Contractor has taken all steps to mitigate the losses.

#### 33. In respect of no compensation to contractor for increasing work progress:

If for any reason, we don't entitle the contractor to an extension of time, the rate of progress of the works or any section is at any time, in the opinion of the Consultant, too slow to ensure completion by the prescribed time or extended time for completion. The Consultant shall so notify the contractor in writing and the contractor shall thereupon take such steps as are necessary and the Consultant may approve to expedite progress so as to complete the works or such sections by the prescribed time or extended time. The contractor shall **not be entitled to** any additional payment for taking such steps.

#### 34. In respect of no additional cost for scheduling and programming:

The contractor shall mobilize or remobilize or adjust his resources according to the priorities set by the Employer **at no extra cost** to the Employer.

1.	Name of Contractor	:	
2.	Name of the work as given in the		
	Agreement		
3.	Agreement No.	:	
4.	Estimated tender amount	:	
5.	Date of Commencement of work as per	:	
	Agreement		
6.	Period allowed for completion of work	:	
	as per Agreement.		
7.	Date of Completion stipulated in	:	
-	Agreement.		
8.	Period for which extension of time has	:	
	been give previously		
a)	Ist extension vide Architect's /Bank's	:	
	letter		
	No Deted Month Deve		
	No. Dated Month Days		
<b>b</b> )	2 <sup>nd</sup> extension vide Architect's /Bank's		
b)	letter	:	
	letter		
	No. Dated Month Days		
	No. Dated Month Days		
c)	3 <sup>rd</sup> extension vide Architect's /Bank's	•	
с,	letter	•	
	No. Dated Month Days		
d)	4 <sup>th</sup> extension vide Architect's /Bank's	:	
-,	letter		
	No. Dated Month Days		
	· · · · · · · · · · · · · · · · · · ·		
	Total extension previously given	:	

#### PROFORMA FOR APPLICATION FOR EXTENSION OF TIME PERIOD

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9.	Reason's for which extensions have been previously given (Copies of the previous applications should be attached)	•	
10.	Period for which extension is applied for	:	
11.	Hindrances on account of which extension is applied for with dates on which hindrances occurred and the period for which these are likely to last.	•	
a)	Serial No.		
b)	Nature of Hindrance		
c)	Date of occurrence		
d)	Period for which it is likely to last.		
e)	Period for which extension required for this particular hindrance		
f)	Over lapping period if any, with reference to item (e) above		
g)	Net extension applied for		
h)	Remarks, if any		
12.	Extension of time required for extra work	:	
13.	Details of extra work and the amount involved	:	
a)	Total value of extra work		
b)	Proportionate period of extension of time on estimated amount put to tender.		
14.	Total extension of time required for 11 & 12	:	

Submitted to the Architect/Bank .....

Date:

Signature of Contractor

#### PARTICULAR SPECIFICATIONS PART-I

#### SECTION I: DEMOLITION, DISMANTLING AND MODIFICATIONS DURING CONSTRUCTION OF BUILDING INTERIORS

GENERAL

SCOPE OF WORK

Work included:

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This section covers the requirements of works involving demolition and/or dismantling parts of building interiors not involving the structure or any part of the building that contributes to the integrity and stability of the building

This section includes preliminary works in preparation for demolition such as obtaining permits; disconnection and/or controlled operation of building services; precautionary measures for the safety of the building, its occupants and workers.

This section includes demolition of non-load-bearing masonry and concrete walls; ally types of partitions and wall cladding; doors and windows; suspended ceiling; wall and floor finishes.

This section includes the dismantling of built-in cabinets, counters, Kitchen Platform, furniture and fixtures.

This section includes disconnection, dismantling and controlled operation of electrical systems, water supply, drainage and sanitary systems, HVAC systems and all other building services by skilled operatives competent in their respective fields.

This section includes the salvaging, retrieval and safe storage of all material as required by the contract and the transport and disposal of all unwanted material and debris.

Work excluded:

This section does not include structural demolition or modifications.

#### **RELATED WORK SPECIFIED ELSEWHERE**

Temporary works Electrical Water supply & drainage HVAC

#### SUBMITTALS

The contractor shall submit the following to the architect for review and approval well before the commencement of work.

- Required approvals from all concerned authorities
- Proposed demolition and dismantling plan and day-to-day progress schedule showing clearly the sequence of operations for disconnection of building services, controlled operation of services to retain and safety precautions. This shall be accompanied by description of procedures proposed to be followed.
- Equipment proposed to be used for demolition and dismantling.
- Proposals for temporary works to partition and protect adjacent or nearby areas in use, including dust control and clean up procedures.
- Proposal for temporary storage of salvaged material and for debris to be transformed off site. CONTROL OF PROCEDURES AND SAFETY

The contractor shall devise and be responsible for all procedures to ensure the safety of the building, the workers and the other occupants during the demolition and dismantling work. The work shall at all times be under the direct supervision of experienced foremen under the overall supervision of the contractor's site engineer.

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#### HANDLING, STORAGE, TRANSPORTATION AND DISPOSAL

Handle and store materials retrieved from the demolition and dismantling in accordance with IS: 7969. Whenever there is a conflict in the requirements of IS: 7969 and the provisions herein, the more stringent of the specifications shall apply.

Store debris and salvaged material separately in designated places approved by the submittals procedure described above. All salvaged material shall be classified and stored separately by categories agreed upon prior to commencement of demolition.

Do not pile up material in a manner that will cause the structure to be over loaded. Stack material so that the stacks are stable and do not cause obstruction to movement.

Do not allow debris to accumulate beyond the capacity of the approved area for temporary storage. Do not dump debris in public rights-of-way, in private property without owners consent, in municipal garbage receptacles etc. The contractor shall dispose of debris only at dumping grounds approved by the local authority in manner not objectionable to the authority.

Transport debris to the approved dumping grounds at times permissible by law and acceptable by local practice. Take precautions to avoid spillage of debris from the transport vehicle en-route.

#### MATERIALS AND PRODUCTS

#### SCAFFOLDS AND LADDERS

Scaffolds and ladders used in the demolition and dismantling shall be in accordance with IS:3696 Part 1 and Part 2.

The scaffolding shall be designed and erected by the contractor in accordance with the requirements of the work, by experienced workers. All scaffolding material shall be in good serviceable condition and assembled to be stable in the conditions of the work being performed.

#### **MECHANICAL EQUIPMENT**

Do not use mechanical equipment without the prior approval of the architect.

Do not use gas cutting and electric welding or cutting without the prior approval of the architect. Take special precautions to prevent fire if permission is granted for gas and electrical cutting and welding.

#### EXECUTION

#### GENERAL

Survey and mark out clearly the portions that are to be demolished or dismantled. Proceed with demolition and dismantling strictly in conformance with the plans, sequence, schedules and procedures proposed by the contractor and approved by the architect. Proceed with work only in the presence and under control of skilled supervisors.

Do not proceed with work if latent conditions contrary to expectations or assumptions are encountered as work proceeds. Do not proceed with work if any part of the building assumed to be non-structural and non-load-bearing is discovered or suspected to be structural and contributing to the stability of the building. Report to the architect and obtain approval to proceed further.

Maintain in a journal with serially numbered pages, inventories of all salvaged items as the work proceeds.

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#### WATER SUPPLY AND SANITATION PIPES, FIXTURES AND FITTINGS

Dismantling of water supply, drainage and sanitary installation shall be carried out under the supervision of a licensed plumber, employing competent skilled workers.

Coordinate dismantling work with related permanent work to be installed, if any.

Shut off water supply and drainage pipes by closing valves or by providing plugs to isolate the systems to be dismantled from those to be retained. Ensure that areas in use are not disturbed during the progress of work by providing temporary service connections. If possible complete and protect proposed permanent modifications before commencing dismantling and demolition work.

Fixtures and fittings shall be removed only by skilled technicians to salvage them with minimum damage. Dismantle in the following sequence:

- Fittings such as faucets, showers, taps, valves, meters, gauges etc.
- Fixtures such as wash basins, WC's, urinals, pumps etc.
- Pipes, tanks, and heavy equipment
- Brackets, supports, hangers and foundations

Complete dismantling of water supply, drainage and sanitary installation before commencing demolition of walls and partitions, flooring, ceiling etc. Closely coordinate the works if this is not practically possible.

# **ELECTRICAL**

Dismantling of electrical installation shall be carried out under the supervision of a licensed electrical contractor, employing competent certified electricians.

Carefully survey the entire existing system and coordinate dismantling work with related temporary permanent works, if any. Modify the existing system, if required before commencing dismantling work to ensure that the functioning of systems outside the demolition areas is not affected.

Shut off and isolate electric supply to the demolition and dismantling area. Take precautions to ensure that the disconnected circuits may not be accidentally re-energized.

- Disconnect supply cables and isolate all distribution boards within the work areas. Disconnect and remove the distribution boards. Provide temporary service connections to the work areas from a temporary DB fed by an exclusive cable tapped from a board outside the work area with an isolation switch close to the temporary DB. Do not provide temporary services through any existing circuits in the areas to be demolished.
- If DB and circuits located within the demolition areas cannot be disconnected or diverted, they shall be clearly marked out and identified with cautionary signs to distinguish them from others that are to dismantled.
- Have a skilled electrician on standby.
- Fixtures and fittings shall be removed only by skilled technicians to salvage them with minimum damage.
- Complete dismantling of electrical installation before commencing demolition of walls and partitions, flooring, ceiling etc.

# OTHER SERVICES

Carefully survey each of the existing systems in its entirety and coordinate dismantling work with related temporary and permanent works, if any. Modify the existing system, if required, **Page 92 of 143** Technical Bid of Civil & structural repairs of Bank's Residential Building Situated at Powai Mumbai.

before commencing dismantling work to ensure that the functioning of systems outside the demolition areas is not affected.

Systematically shut off and isolate each system from the demolition and dismantling area. Take precautions to ensure that the portions to be retained are clearly marked out and identified with cautionary signs to distinguish them from others that are to dismantle.

Follow a sequence of dismantling by which valuable equipment, fittings and other material are recovered with minimum damage.

Complete dismantling of all services before commencing demolition of walls and partitions, flooring, ceiling etc.

#### SECTION II: CAST IN PLACE PORTLAND CEMENT CONCRETE

#### GENERAL

#### SCOPE OF WORK

Work included

This section covers the requirements for supply of materials, mixing, forming, placing, compacting, finishing, jointing, curing and all other works as required for cast-in-place concrete.

The scope of work includes testing of concrete as required by this specification.

Work not included

Concrete reinforcement

#### RELATED WORK SPECIFIED WORK ELSEWHERE

Concrete reinforcement

Metal decks

#### QUALITY CONTROL

The contractor shall be fully responsible for quality control inspection and testing. All concreting operations shall be at all times under the supervision of a qualified and experienced engineer.

The quality control supervisor shall be responsible for the following regular tests and inspection:

- Consistency measurements such as slump, air-content, temperature, cement content etc.
- Taking and testing of specimens from concrete pours and having them tested in accordance with the codes and standards.
- Inspection and approval of framework and reinforcement.
- Inspection and approval of batching and mixing facilities.
- Inspection and approval of concrete placement, consolidation, finishing and curing operations.

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- Inspection and approval of form removal.
- Maintaining complete, up to date records, throughout the contract of all concreting operations, inspection, tests etc.
- The standard age of concrete for tests is 28 days, but seven day test may be used to predict probable 28-day strength, provided that the relation between 7-day and 28-day test strength is established and the 28-day tests are subsequently performed for confirmation. The acceptance criteria for concrete shall be as set out in NBC, Part VI, section 5, table 5.
- Any concrete, which is deemed by the architect not to comply with this specification shall be broken and replaced, including all reinforcement.

#### TRANSPORTATION, HANDLING AND STORAGE

Cement and dry admixtures shall be stored in dry, water proof, well ventilated housing or silos. Liquid admixtures shall be stored in clean, isolated containers.

#### Packaged cement

Packaged cement shall be delivered to the mixing site in original moisture proof, sealed packages, which shall be labeled with the weight, name of manufacturer, brand and type specified. Cement received in broken or damaged packages shall not be used.

Packages of cement, which vary in weight by +/-3% shall not be accepted.

#### Bulk cement

Bulk cement shall be stored separately from packaged cement. Bulk cement shall be stored in dry, weather tight, well ventilated bins with provisions for prevention of moisture absorption or the intrusion of foreign matter.

Facilities for sampling of cement shall be proved at the weighing hopper, or at the feed line immediately before entering the hopper.

Different brands of cement, or the same brand of cement from different sources, shall not be used without prior notification by the contractor.

#### Aggregates

Aggregates shall be transported and stockpiled separately according to their sources and gradations. Aggregates shall be handled in a manner, which will prevent segregation and contamination with earth or foreign materials.

If the aggregates show segregation, or if the different grades become mixed, the aggregates shall be re-screened before placing in the proportioning bins. Contaminated aggregates shall not be used.

Aggregates shall not be transferred directly from trunks, railroad cars or barges to the proportioning bins when moisture content or/and water absorption is such that it will affect the accuracy of the proportioning of the concrete mixture. In such cases, the aggregates shall be stockpiled until the excess moisture drains off.

Muddy or oil-leaking equipment shall not be allowed to operate on the stockpiles.

#### Formwork

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All formwork materials that may be affected by moisture or whether shall be stored in dry, weatherproof, well ventilated housing.

All formwork material shall be handled and stored to prevent damage.

# FORMWORK

Forms are designed by the contractor to have sufficient strength to carry the hydrostatic head of the concrete as a liquid without deflecting beyond acceptable limits. Besides the weight of concrete and reinforcement, the formwork shall be designed for loads and lateral pressures due to construction operations.

Maximum deflection of facing materials which reflect in concrete surfaces exposed to view shall be not greater than 1/240 of the span between structural supports.

Where necessary to maintain the tolerances indicated, the framework shall be cambered to compensate for anticipated deflections due to the weight and pressure of the fresh concrete and also due to any other construction loads.

The surface of forms is to be designed to provide the correct finish, as specified in the subsection herein.

# CURING:-

Exposed Surfaces of concrete shall be kept continuously in a damp or wet condition for at least seven days from the date of placing of concrete.

Approve curing compounds may be used in lieu of moist curing with the permission of the Architect/Engineer-in-charge. Such compounds shall be applied to all exposed surfaces of the concrete as soon as possible after the concrete has set.

# COVER:-

To maintain the specified amount of concrete cover to the reinforcement small precast concrete blocks of grade similar to that of concrete to be placed shall be used as indicated hereunder unless otherwise specified in the drawings.

- a) At each end of reinforcing bar, not less than 25mm, nor less than twice the diameter of bar.
- b) For a longitudinal reinforcing bar in a beam, not less than 25mm, nor less than the diameter of the bar.
- c) For a longitudinal reinforcing bar in a column, not less than 40mm nor less than the diameter of the bar.
- d) For tensile, compressive, shear or other reinforcement in a slab, not less than 15mm, nor less than the diameter of the bar.
- e) For Vertical or horizontal reinforcement in concrete walls not less than 15mm nor less than the diameter of the bar.
- f) For reinforcement in footings, pile caps and raft foundations not less than 50mm.

#### ADMIXTURES:-

Plasticizers may be used in the concrete work to achieve better workability admixtures or cement containing additives (Such as accelerators, retarders, water proofing agents etc) shall

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not be used unless specified or otherwise directed or approved by the Architect/Engineer-incharge.

#### COARSE AGGREGATE:-

The Coarse aggregate for the reinforced concrete work shall consist of crushed gravel, black trap, granite or other stone to the approval of the Architect/ Engineer-in-charge and shall be free from dust. If considered necessary by the Architect / Engineer-in-charge the aggregate shall be washed specially until an approved cleanliness is obtained. The use of laminated stone, flat or flaky material will not be permitted. The combined coarse aggregate shall in all respects be so graded as to allow 95% to 100% by weight to pass a 20mm BIS Sieve; 25% to 55% by weight to pass a 10mm BIS Sieve and 0% to 10% by weight to pass a 5mm BIS Sieve. The aggregates of different sizes shall be stored in separate stacks in clean state and free from all dirt.

The coarse aggregate where absorption of water after 24 hours immersion is more than 5% by weight shall not be used.

When required by the Architect/Engineer-in-charge tests indicated in BIS 383 shall be carried out by contractor at this cost to show the acceptability of the materials.

Stored piles of aggregate shall have good drainage, preclude inclusion of foreign matter and preserve the gradation.

#### FINE AGGREGATE:-

Sand shall conform to BIS: 383 and relevant portion of BIS: 515. It shall pass through a BIS: Sieve 4.75mm (3/16-B.S.) test sieve, leaving a residue not more than 5%. It shall be from natural source or crushed stone screenings, chemically inert, clean, sharp, hard, durable, well graded & free from dust, clay, shale, large pebbles, salt, organic matter, loam, mica or other deleterious matter. The sum of percentage of all deleterious materials in sand shall not exceed 5% by weight. It shall be washed, to reduce the percentage of deleterious substances to acceptable limits. Sand shall not contain any trace of salt and it shall be rejected.

The fine aggregate for concrete shall be graded within limits as specified in BIS: 383 and the Fineness modulus may range between 2.60 to 3.20.

The fine aggregate shall be stacked carefully on a clean hard dry surface so that it will not get mixed up with deleterious foreign materials. If such a Surface is not available, a platform of planks or iron sheets or brick floor or a thin layer of lean concrete shall be prepared. The sand for plaster shall be screened & washed.

In no case crushed aggregate or grit powder may be used for concrete, mortar & plaster work.

#### WATER PROOFING:-

The cement based waterproofing work shall be carried out through approved contractor with **10 years guarantee** as per their specifications under the supervision of the contractor.

Terrace, Canopy, Refuge area, roofs, Tops of balconies, lift machine rooms, water tank, pump room and watchman's cabin roof: These shall be finished with water proofing treatment as per the approved agencies specifications and as approved by architect with a guarantee of 10 years. Water proofing treatment will include necessary waterproof brickbat coba of required minimum thickness 75mm laid to required slope. Top of brickbat will be finished with waterproofing treatment and china mosaic flooring of approved colour by Architects finished

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smooth made watertight including 300mm round vata at junction of slab and parapet wall complete.

Toilets: This shall be as per approved agency's specifications with 10 years guarantee. Water proofing treatment to sunk portion including waterproof brickbat coba filling. Before filling brickbat coba, the walls upto 600mm above general finished floor level will be finished with waterproof treatment as per waterproofing agency's specifications.

#### TESTING:-

All G. I. pipes and fittings may be tested to a pressure of 10.5 Kg/cm2 to ensure that pipes have proper threads and that proper materials (such as white zinc and spurnyarn) have been used in jointing. All leaky joints must be made leak- proof by tightening or redoing at contractors expense.

#### MATERIALS ANDPRODUCTS CEMENT

Cement shall be ordinary Portland conforming to IS: 269 and shall meet the following additional requirements:

Compressive strength At 3 days ------ 160 Kg/Cm2 minimum At 7 days ------ 220 Kg/Cm2 minimum

Time of setting (vicat): Initial set ------ 30 minutes minimum Final set ------ 10 hours maximum

#### COARSE AGGREGATES

Coarse aggregates shall comprise clean crushed or uncrushed gravel, crushed stone or a combination of the tree free from adherent coatings deleterious materials, organic impurities and salts in accordance with IS:383.

The coarse aggregates shall be selected, screened to various particle sizes and rinsed as necessary to meet the acceptance criteria.

The normal size of coarse aggregates used for different purposes shall be as given below:

Reinforce concrete - 20mm maximum; 4.75 mm minimum Floor screed upto 75mm th over existing concrete slab - 8mm maximum, 1mm minimum Un-reinforced mass concrete - 40mm maximum; 4.75mm minimum

The coarse aggregates shall comply with the requirements set forth below: Slake durability index using distilled water as slake fluid - 99.0% minimum Clay lumps and friable particles - 1.0% maximum Water absorption - 2.5% maximum Sodium chloride - 0.03% maximum

#### FINE AGGREGATES

Fine aggregates shall comprise clean natural sand with rounded or sub rounded particles free of adherent coatings, deleterious materials, organic impurities and salts in accordance with IS :383.

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Fine aggregates shall be selected, screened and rinsed as necessary to meet acceptance criteria.

The aggregates shall comply with the requirements set forth below Clay lumps and friable particles - 1.0% maximum Material finer than 75 micros - 2.0% maximum Water absorption - 1.0% maximum Sodium chloride - 0.05% maximum

#### <u>WATER</u>

Water for rising aggregates, for inCompany in the concrete and for curing shall be clean potable water free from injurious amounts of oils, acids, salts, alkalis, organic matters and other potentially deleterious substances when examined in accordance with IS:3025 and when compared with the limits specified in this specification.

The maximum permissible concentrations of chemicals and organic and inorganic solids shall be in accordance with NBC, Part VI, Section 5, paragraph 4.1.3.2. The pH value of water shall generally be between 6 and 8.

#### FORM MATERIALS

The selection of materials suitable for formwork shall be made by the contractor unless specified otherwise based on maximum quality consistent with the specified finishes and safety.

The use of proprietary forming systems is recommended and should be used where possible. <u>MISCELLANEOUS MATERIALS</u>

Water stops to the used in water tight concrete construction joints shall be polyvinchloride (pvc) of the size and type shown on the drawing.

Other inserts and embedment shall be as shown on drawing.

Form release agents to prevent concrete adhering to formwork shall be non-staining, non-reactive, rust preventive and guaranteed to be compatible with subsequent surface applications to concrete.

#### CONCRETE GRADES AND MIXES

#### General

Controlled concrete or designed concrete mix is concrete of which the constituted proportions have been determined by preliminary tests to meet the acceptance criteria of the grade of concrete required.

Ordinary concrete or normal concrete mix is concrete of which the constituent proportions ar based on nominal mixes without preliminary tests.

Only controlled concrete shall be permitted for use in reinforced concrete and concrete used in building structures. Ordinary concrete shall generally not be used except by written approval of the architect preceded by a written request for use of ordinary concrete by the contractor giving reasons why he wishes to do so.Concrete in this specification shall always mean controlled concrete.

Grades of concrete are denoted by a designation consisting of the letter 'M' followed by a numeral indicating the 28-day cube compressive strength in Kg/cm2.

Each grade of concrete may consist of one or more 'mixes' determined by cement content, quantity and gradation of aggregates, water cement ratio, slump, type of admixtures etc.

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Each mix within a grade shall be considered a specific type given an appropriate distinctive nomenclature and will require approval by the architect. The contractor shall use the approved the approved mix for approved uses.

Strength requirements of concrete.

The strength requirements of concrete for the various grades of concrete shall be as given below, determined on the basis of the compressive strength of 150mm cubes at 28 days after mixing in accordance with IS: 516

Grade of concrete	Preliminary test Comp. Strength in Kg/sqcm (min)	Works test Comp. Strength in (Kg/sqcm (min
M100	135	100
M150	200	150
M200	260	200
M250	320	250
M300	380	300
M350	440	350
M400	500	400

For explanation refer NBC, Part VI, section 5, table 1.

Concrete mix proportions for ordinary concrete:

The concrete mix proportions for ordinary concrete shall be as given below:

Grade of		Total quantity of dry	Proportion of	Qty of water		
Concrete aggregate by volume per 50 Kg of cement being the sum of individual volumes of fine and coarse aggregates (max in ltrs)		Fine aggregates to coarse aggregates in ltrs)		per 50Kg of cement (maximum		
M100 M150 M200	300 220 160		Generally 1:2 but subject to an upper limit of 1:1 ½ and	32 30	34	
M250	100		lower limit of 1:3		27	

For explanation refer NBC, Part VI, section 5, table 3and 4.

#### SECTION III: BURNT CLAY BRICK MASONRY

#### SCOPE OF WORK

Work included

This section covers the requirements for the supply of materials and workmanship for the construction of load bearing and non-load bearing burnt clay brick masonry including all types of mortar, grouting and masonry accessories.

This section includes architecturally exposed burnt clay brick masonry in association with stone masonry.

#### RELATED WORK SPECIFIED ELSEWHERE

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#### QUALITY CONTROL

The contractor shall be responsible for the quality of the burnt clay brick masonry. The masonry work shall at all times be under the direct supervision of an experienced foreman under the overall supervision of the contractors site engineers. The bricks shall comply with I.S.1077.

#### EXECUTION

#### GENERAL

The setting and layout of masonry shall be the contractor's responsibility and shall be in strict conference with the drawings.

The contractor shall accurately locate openings, returns, offsets etc. in accordance with the drawings.

The contactor shall layout walls in advance for accurate spacing of surface bond patterns with uniform joint widths and to properly locate openings. Use of less than half size bricks at corners, jambs and other locations shall be avoided.

Cut bricks carefully to prevent disintegration and to obtain clean, sharp, un chipped edges. Cut-bricks may be used not more than twice in a straight-run course.

#### COORDINATION WITH OTHER WORK

The contractor shall coordinate and schedule the masonry work with other related work and trades to avoid cutting and breaking of masonry after erection and for proper sequencing.

#### ACCURACY AND TOLERANCES

Erect walls and columns true to line and plumb, with courses level with joints of uniform thickness and spacing. Corners, returns, jambs etc. shall be square or true to angles shown on drawings.

Acceptable tolerances are as given below:

Variation from means plan: Walls shall be constructed as true planes. When tested with a 3 meter straight edge, placed anywhere on the wall in any direction, the maximum deviation from a true plane shall be within 5mm.

Variation from plumb: Variation from plumb shall be within 5mm in 3meters height.

Variation from level: Variation from the level for any masonry course shall not exceed 6mm in any 6mtere bay.

Variation from positions: Variation from positions shall not exceed 6mm from the designated position shown on the drawing.

#### CONCRETE WORK

All concrete work associated with masonry shall proceed keeping pace with masonry. Concrete lintels, sills, and stringer course etc. shall be flush with the masonry surfaces, unless otherwise indicated.

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#### INSTALLATION OF GRANOLITHIC FLOORING

The installation of granolithic flooring shall generally be in according with the specification section titled 'CAST-IN-PLACE PORTLAND CEMENT'

The finish shall be unformed finish type U3.

The surface hardener and sealer shall be applied in accordance with the manufacturers specifications.

#### PROTECTION AND CLEANING

All work covered by this specification shall be protected after installation and handed over in good condition after thorough cleaning.

#### SECTION - VIII- WALL FINISHES

#### 1. <u>General</u>

- a) <u>Scope:</u> This section shall cover internal and external plastering/rendering works as shown in the drawings.
- b) <u>Mortar:</u> The mortar of specified mix shall be used.
- c) <u>Scaffolding:</u> Stage scaffolding shall be provided for plastering work as per standard practice and as directed by Architect/Site Engineer. This shall be independent of the walls.
- d) **Preparation of Surfaces:** Joints of brickwork wall s hall be raked-out properly. Dust and loose mortar shall be brushed out. Efflorescence if any shall be removed by brushing and scraping, shuttering imperfections of all concrete shall be roughened by hacking with chisel and all resulting dust and loose particles cleansed and the surface shall be thoroughly hacked or bush hammered to the satisfaction of Architect/Project Engineer. The surface shall be thoroughly washed with water, cleaned and kept wet before plastering is commenced.
- e) <u>Approval of Architect/Project Engineer to be taken</u>: No plastering work shall be started before all conduits, pipes fittings and fixtures clamps, hooks etc. are embedded, grouted and cured and all defects removed to the satisfaction of Architect/Project Engineer. Special approval shall be taken from Architect/Project Engineer before starting each plastering work. No cutting of finished plaster shall be allowed. No portion shall be left out initially to be patched up later on.
- f) <u>Mixing:</u> The ingredients shall be mixed in specified proportions by volume. The mixing shall be done in a mechanical mixer on water-tight platform. The cement and sand shall first be mixed thoroughly dry in the mixer. Water shall then be added gradually and wet mixing continued for at least a minute until mortar attains the consistency of a stiff paste and uniform colour. Mortar shall be used within 30 minutes of addition of water. Mortar which has partially set shall not be used and removed from the site immediately.

#### 2. Internal Surfaces

i) Plastering shall be started after the completion of ceiling plaster from top and gradually worked down towards floor. It shall not, at any place be thinner than as specified. To ensure even thickness and a true surface plaster of about 15cm x 15 cm shall be first

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applied horizontally and vertically at not more than 2m interval over the entire surface to serve as gauges. The mortar shall then be applied to the wall/surface between the gauges and finished even. All corner junctions and rounding shall be truly vertical or horizontal and finished carefully. Inspecting the work at the end of the day plaster shall be cut clean to line, where recommencing the plastering, edge of old work shall be crapped, cleaned and wetted with cement putty before restarting plastering

- ii) Cement plastering internally on all internal surfaces including soffits of RCC slabs, chajjas, lintels, alround shelves, inner side of parapets and alround of parabolas etc. shall be as shown on drawing. Wherever not shown it shall be as under:-
- (a) 12mm thick plaster in cement mortar 1:6 (1 cement: 6 parts 75%: fine sand & 25% coarse sand) mixed with 10% of lime water over brick and concrete surfaces. Dubbing out wherever required (i.e. bringing up the undulation on the rough face of brick work in level with proudest points) shall also be executed in the same mix along with rendering coat.
- (b) 6 thick plaster in cement mortar 1:3 (1 cement: 3 fine sand) on soffits of RCC slabs, chajjas, lintels and kitchen platforms and alround of shelves and para golas.
- (c) 10mm x 6mm grooves shall be provided in ceiling plaster at junction of wall and ceiling.
- (d) 12mm thick plaster in cement mortar 1:4 (1cement: 4 parts 75% fine sand & 25% coarse sand) mixed with water proofing compound CICO-1 (liquid) as per manufacturer's instruction to be done on the inside face of the book shelves and cupboards.
- (e) 15mm thick plaster in cement mortar 1:4 (1 Cement: 4coarse sand) mixed with water proofing compound CICO-1(liquid) as per manufacturer's instruction to be done on the internal surfaces of parapet walls including dubbing wherever required.
- (f) Before plastering it should be ensured that brick masonary joints are raked out (at least on even surfaces) to a depth of 12mm and all concrete surfaces are rough enough for proper adhesion of plaster. If not they shall be made rough by hacking or bush hammering at intervals of 2". Efflorescence if any and dust/dirt shall be removed. The surfaces shall be wetted adequately before plastering.
- (g) G.I. Chicken wire mesh of 24 gauge and 20mm mesh shall be fixed all along RCC Surface adjoining brick work given 150mm lapping on either side of the junction in double fold or as called for using nails etc and cement slurry before plastering. Ensuring equal thickness of plaster on both sides of the mesh.
- (h) Sand used in plaster shall be within the grading zones as stipulated in the IS silt contents shall not exceed 4% by weight. Brick surface shall be raked out at the end of day brick work to afford key to plaster. Plaster surface shall be hard and even without patchy appearance. If they flake or show scratch marks if rubbed by appointed nail the plaster shall be rejected, dislodged and redone.

#### SECTION - IX - WHITE WASH, DISTEMPER AND PAINTING

#### <u>GENERAL</u>

#### SCOPE OF WORK

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Work Included: This section covers the surface preparation, field priming and field painting or finish coating of all wood, plaster, concrete and metal surface, (both interior and exterior) as called for in the finish schedule. In addition, all surface, schedule or not, such as piping, tanks, equipment and machinery shall be painted when called for in the finish schedule or in their respective section of these specifications. Contractor shall finish all labour materials, tools and equipment required to complete the work.

Surface not to be painted: The following surface shall not be painted stainless steel, aluminum, brose, copper, lead, brass, factory pre-finished surfaces and installed surfaces. In addition surface of steel member which ate to have concrete cast against them or are to be fully embedded in concrete shall be pointed.

Shop primed Equipment: Final field painting or touch-up of manufacturer's shop primed or shop painted equipment shall not be done until operational testing has been complete and certified.

#### RELATED WORK SPECIFIED ELSEWHERE

Quality Control Structural Steel Lath and Plaster Architectural woodwork Cast-in-place Portland Cement concrete. MOCK-UPS

In addition to the requirement for submitting colour samples, the contractor shall, prior to proceeding with paint application, provide mock-up or field samples, for each substrate to be painted. The mock-ups or field samples shall be painted to demonstrate method of application, finish texture, colour and quality of workmanship. The size and location of the mock-up or field samples shall be determined by the architect.

#### PRODUCTS

# ACCEPTABLE MANUFACTURES

All coating material (paints) shall be furnished be a manufacture, regularly engaged in the manufacture of coatings shall be the manufacturer's best-grade for the intended substrate.

#### MATERIALS

Coating materials are listed herein by generic type (vehicle) for various substrates. A1 materials proposed will be subject to review and acceptance by the architect.

Coating accessory materials such as linseed oil, shellac, turpentine and other materials not specifically indicated herein but required to achieve the finished specified shall be of high quality and as far as possible from the manufacturer of the coating material.

Coating shall be ready-mixed, expect for field-catalyzed coatings. Pigments shall be fully ground maintaining a soft past consistency, capable of being readily and uniformly dispersed to a complete homogeneous mixture for brush, roller or airless spray application, as recommended by the manufacturer.

Coating shall have good flowing properties and be capable or drying or cutting free of streaks, runs or sags.

Colours, texture and degree of gloss shall be as shown on the finish schedule. Tint, prime and intermediate coats shall be approximately to the shade of the final coat but with sufficient variation to distinguish them from the preceding coat. Use products of the same manufacturer

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for succeeding coats. Where red lead primer is used, subsequent coats may be the produce of another manufacturer.

If ferrous metals are shop primed, the contractor shall make every effort to determine the type of primer used. If this is not possible or the primer is not compatible with the proposed finish coat as recommended by the coating manufacturer may be required prior to application of finish coat

#### PAINTS SELECTION GUIDE

Exterior Surface	
Ferrous Metals (unprimed	)
First Coat	Organic Zinc rich primer
Top Coat	Chlorinated Rubber
Ferrous Metals (Unprime	d)
First coat	Chlorinated rubber Modified Alkyd.
Second Coat	Acrylic Epoxy Enamel
Top Coats	Acrylic Epoxy Enamel

#### Concrete

First Coat	Acrylic primer/ Sealer.
Second Coat	Acrylic or Vinyl Emulsion
Third Coat	Acrylic or Vinyl Emulsion
Top Coats	Acrylic or Vinyl Emulsion

#### **Cement Plaster**

First Coat	Acrylic Latex.
Second Coat	Acrylic Latex.
Top Coats	Acrylic Latex.

#### Wood Designated Painting.

First Coat	Alkyd Primer
Second	Alkyd Enamel.
Top Coats	Alkyd Enamel.

#### Galvanized Steel:

First Coat

(Where not passivating coat as recommended by coating shop Bonderized ) manufacture followed by a Zinc chromate Primer (Where Galvanized Iron primer Bonderised) First Coat Alkyd Enamel. Second Coat Alkyd Enamel. Top Coats

#### Interior Surfaces.

Ferrous metals (Unprimed) First Coat **Red Oxide Primer** Second Coat Alkyd Enamel Top Coats Alkyd Enamel.

#### Concrete:

First Coat	Acrylic primer/Sealer
Second Coat	Acrylic or Vinyl Emulsion.
Top Coats	Acrylic or Vinyl Emulsion

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# Gypsum Plaster :

First Coat	Latex Sealer.
Second Coat	Acrylic Latex.
Top Coats	Acrylic Latex.

#### **Cement or Cement lime Plaster**

First CoatAlkali resistant primer.Second CoatAcrylic Latex.Top CoatsAcrylic Latex.

#### Gypsum Board :

First CoatAcrylic primer / Sealer (Note required on<br/>Moisture resistant board)Second CoatAcrylic or Vinyl Emulsion.<br/>Acrylic or Vinyl Emulsion.

#### Wood Designated for painting :

First Coat	Alkyd primer
Second Coat	Alkyd Enamel.
Top Coats	Alkyd Enamel.

#### Wood designated for staining and polishing:

First Coat	Alkyd standing Sealer
Second Coat	Modified Polyurethane.
Top Coats	Modified Polyurethane.

#### Galvanized Steel :

First coat	(Where passivating Coat as recommended by
	Manufacture followed by a Zinc)
First Coat	(Where Galvanized iron primer Bonderized)
Top Coats	Alkyd Enamel.

#### <u>SECTION - X - INTERNAL PLUMBING WORK</u> (INTERNAL WATER SUPPLY PLUMBING, INTERNAL DRAINAGE) GENERAL

- 1.1. The form of Contract shall be according to the "Conditions of Contract". The following clauses shall be considered as an extension and not in limitation of the obligation of the Contractor
- 1.2. Work under this contract shall consist of furnishing all labour, materials, equipment and appliances necessary and required. The Contractor is required to completely furnish all the plumbing and other specialized services as described hereinafter and as specified in the schedule of quantities and /or shown on the plumbing drawings.
- 2. Scope of internal water supply, plumbing, internal sewerage and drainage shall consist of providing and fixing of the following for each units of each unit blocks/other buildings as shown on drawings.
- 3. The entire work shall be carried out by licensed plumbers
- (a) CPVC/UPVC/GI pipe with fittings and valves for cold and hot water supply.

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- (b) Sanitary fixtures, CP fittings and accessories.
- (c) Soil, waste, vent, rain water pipes and fittings
- (d) Overhead water tank at Terrace with supports.
- (e) Internal Drainage including gully traps.

# 4. Water supply.

- (a) All GI/CPVC/UPVC pipes and fittings from over head tank to all taps, wall mixers, wash basins, cisterns, sinks, geyser points, washing machine and showers as shown on drawings.
- (b) Provision of hot and cold water supply lines in all toilets and kitchen.

# 5. MATERIALS

- 6. All GI pipes shall be galvanized steel tubes medium grade conforming to IS-1239 and ISI marked of makes Jindal Hissar/Prakash. All CPVC/UPVC pipes shall conform to the relevant IS standards.
- 7. All GI fittings shall be conforming to IS-1879 and ISI marked.
- 8. Valve shall be heavy Gun metal full way confirming to IS-778-1971 class I and ISI marked.

# LAYING, FIXING AND FITTINGS OF GI PIPES

- 9. All GI pipes below ground shall be laid in trenches and shall have minimum cover of 600mm.
- 10. The runs of the pipes shall be straight and pipes shall not run diagonally. Proper bends, elbows, tees at turnings/corners shall be used.
- 11. All pipes with necessary fittings wherever they are laid on internal faces of the walls shall be concealed in chase. On external faces they will be laid on walls fixed with clamps or on M.S. angle iron brackets as shown in drawings.
- 12. In the concealed portion of plumbing no joints shall be provided in the pipe lines except in the fittings i.e., bends, elbows, tees and nipples where required.
- 13. All pipes for water supply (Hot or cold) within toilets and kitchen shall be laid on walls only. No pipe shall be laid in sunken portion of toilets/kitchen.
- 14. For each unit the size of down comers, branch pipes from the ring (at terrace) from over head tank and branch pipes from down comers shall be of sizes as shown on drawing.
- 15. Pipes and fittings shall be jointed with screwed fittings, care shall be taken to remove burrs from the end of the pipe after cutting by a round file. Genuine white/red lead and a few strands of cotton thread shall be applied. All pipes shall be fixed in accordance with layout shown on the drawings. Care shall be taken to avoid air pockets. Pipes inside toilets shall be fixed in wall chases at least 30cm above the floor.
- 16. Pipes in shafts and other locations shall be supported by clamps of design as indicated in the typical detail. Pipes in wall chases shall be anchored by iron hooks.

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- 17. <u>Unions:</u> Contractorshall provide adequate number of unions on all pipes to enable dismantling later. Unions shall be provided near each gun metal valve, stop cock, or check valve and on straight runs as necessary at appropriate locations.
- 18. <u>Puddle Flanges</u>: Puddle flanges shall be provided to all connection i.e. inlet overflow, and scour of the over head tank wherever required.
- 19. <u>Pipe Protection:</u> All pipes in chase or under floors or below ground shall be protected against corrosion by applying two coats of bitumen paint, covered with polythene tape and finished with a final coat of bitumen paint.
- 20. <u>Painting:</u> All exposed pipes shall be painted with two coats of oil paint over one coat of primer. Pipes shall be painted to standard colour code as approved by Project Engineer/Architect.

#### 21. Over Head Tanks

- a. The tanks shall be of molded HDPE and shall be one of the following make.
- i) Unitank, ii)Polycon iii) Sintex
- b. These tanks shall be located on the roof terrace as shown on drawing. Placed on supports as per details shown on drawings.
- c. Each over head water tank shall be complete with the following.
- (i) Lid and cover with locking arrangement.
- (ii) Inlet, outlet, over flow (25mm), scour pipe(20mm) and Air vent pipe with all fittings.
- (iii) Mosquito proof coupling shall be provided to overflow and air vent pipes.
- (iv) The inlet pipe to the over head tank shall be provided with ISI marked 25mm brass body ball valve with polythene ball.
- (v) The inlet pipe to the over head tank shall be provided with 25mm ISI marked full way gunmetal brass valve and each outlet pipe shall be provided with ISI marked full way gunmetal valve of size of outlet pipe.
- (vi) The over flow pipes shall be brought down up to the finished terrace level and laid up to nearest khurra on terrace.
- d. The water tank will rest over 100 mm thick RCC 1:2:4 (1 cement:2 coarse sand:4 graded stone aggregate 20mm nominal size) platform with nominal reinforcement of 8mm dia6"c/c both ways, supported over ISMBs resting on brick wall supports over terrace and finished with cement plaster 1:6 all around as shown in drawings.
- 22. <u>Vent pipes</u>: Each down take pipe shall be provided with a vent pipe. The height of the vent pipe shall be 150mm above the top of the water tank.

# 23. Testing of pipes :

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- a) All pipe lines shall be tested hydraulically to pressure of 7 kg/Sq.cm for a minimum period of 24 hours for check for leakage.
- b) The pipe line in chase or under floors/ground shall be covered up only after the testing is carried out satisfactorily and passed by Architect/Site Engineer.
- c) The instrument, equipment and water for testing shall be arranged by the contractor without extra charges. (i.e. Hydraulic testing machine with pressure gauge)
- d) A test register shall be maintained by the Site Engineer and all entries shall be signed and dated by contractor, Architect and Site Engineer.
- 24. <u>Insulation</u>: 24 Hot water lines in chases shall be provided with 20 mm thick insulation by wrapping 6 mm dia asbestos rope and finishing with a coat of 85% magnesia.
- 25. <u>Approval of layout of pipes and position of fixtures at site:</u> The contractor shall mark the location of all fixtures and fittings and layout of GI pipes on the terrace walls/ ground at site and take approval of Site Engineer/Architect before commencement of cutting chases for GI pipes within the building and digging trenches outside the building.
- 25. Sanitary Fixture and CP Fittings and Accessories

All sanitary ware shall be first quality white-vitreous china and shall be inclusive of all fixing devices nuts, bolts and hangers/Brackets.

These shall be from one of the following manufactures:-

- (a) Hindustan Sanitary Ware
- (b) Parry Ware
- (c) CERA (Madhu Sudan Ceramics)
- (d) NEYCER Ceramic
- 26. It will be ensured that all sanitary fixtures are from one manufacturer only for the entire work i.e. for all the units. However, if due to any reason contractor proposes to provide part quantity from other manufacturer as approved above, then he may be permitted, but he will have to obtain specific approval of Site Engineer/Architect for this change in brand. This will be subject to that all items and fixtures in any particular block/other buildings shall be always of one manufacturer only. In no circumstances items of two manufacturers shall be used in all of the toilets of particular block/other buildings.
- 27. <u>Kitchen sink and draining Board</u>: Kitchen sink and draining boards shall be of stainless steel (Salem stainless steel ISI-304) 1.0mm thick. The sink and draining board shall be in one piece of following sizes with rectangular compartment/bowl. Each sink shall be provided with one CP brass waste and PVC waste pipe.

Overall size (LxW)	=	1060x510mm
Bowl size (LxWxD)	=	500x400x200mm
28. The Stainless steel sink and	draining	board shall be of one of the following makes:-

(a) NIRALI.

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(Endorsement of Authorized Signatory of the Vendor with Stamp, Date & Designation).

- 29. Kitchen Sink shall be supported on RCC/ Kadappah platform having suitable cut for the bowl of the sink as per the details shown on the drawings.
- 30. All bib cocks, stop cocks, angle-valves, pillar taps, mixtures, showers rose & arm, bottle traps, CP waster and inlet connections and other minor fittings shall be brass chromium plated. These shall be ISI marked where manufactured. Contractor shall obtain the approval of the name of the manufacturer and brand of CP brass fittings from Site Engineer/Architect before placing the supply order. While asking for the approval, copy of the Bureau of Indian Standard letter under which the manufacturer has been issued the license and authorized to mark the five items of CP brass fittings as listed in hereinafter below with ISI marking should be attached and one sample of each fittings of the particular brand duly ISI marked shall be given by contractor. The fittings shall be of CONTINENTAL range from Jaguar Make.
- 31. Project Engineer before giving the approval of the name of the manufacturer and brand shall ensure that the validity date of license for marking the fittings as ISI marked has not expired.
- 32. Those CP brass fittings which are not manufactured as ISI marked shall also be of the same brand of which the ISI marked CP brass fittings are approved by Site Engineer as per para above.
- 33. It will be ensured that all CP fittings are from one manufacturer only for the entire work i.e. for all units in D'unit blocks/other buildings. However, if due to any reason contractor proposes to provide part of quantity from other manufacturer approved in para hereinafter then he may be permitted, but he will have to obtain specific approval of Site Engineer/Architect for this change in the brand. This will be subject to that all items and fittings in any particular block/other buildings shall be always of one manufacturer only. In no circumstances items of two manufacturers shall be used in any of the toilets of particular block/other buildings.
- 34. All chromium plated brass fittings and accessories shall be provided with CP cast brass wall flanges.
- 35. For fixing of CP brass fittings wherever required CP brass extension pieces shall be provided.
- 36. Fixing screws shall be half round head chromium plated brass screws with CP washers.
- 37. All exposed pipes, if any, within the toilets and near the fixtures shall be chromium plated brass except otherwise specified.

Schedule of Sanitary and CP Brass fittings in all buildings shall be as under:-

- (a) <u>Kitchen</u>
  - (i) Stainless steel Sink with drain board
  - (ii) CP Brass waste
  - (iii)Sink Mixer
- (iv)GI Waste pipe 40mm dia from CP Waste to floor drain grating

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(b) Toilets: - All vitreous china sanitary wares shall be "white". The fittings and fixtures in toilets of each unit shall be as under:-

# (A) <u>Wash Hand Basin</u>

- (i) Vitreous china first quality wash basin 550 x 400mm wall mounting type on MS Angle brackets.
- (ii) Same as above but Oval Shape under counter WB.
- (i) CP Brass waste 32mm dia with over flow
- (ii) CP Brass bottle trap with CP brass pipe to wall with CP cast brass wall flange
- (iii) Brass pillar taps 15mm
- (iv) CP Brass Basin Mixer
- (v) CP Brass angle valves with CP copper
- (vii) Connecting pipes with nuts and washers.

(viii) CPVC waste pipe 32 mm dia

<u>Note</u>: Outlet of CP brass bottle trap shall be connected to nearest floor trap by GI waste pipe (concealed) as per details shown on drawings

# (B) <u>Water Closets and Cisterns</u>

- (1.) European type white vitreous china ware and cistern with S-trap without vent horn
- (2.) White10.00 Litre capacity low level HIP flushing cistern water bird "COMMANDER MODEL"ISI marked complete with Delrin valve and float, fittings and specials of standard make & 40mm white flush bend, over flow with mosquito proof coupling, all washers and rubber bed etc. complete including fixing accessories
- (3.) CP brass angle valve with CP copper connecting pipe with nut and washer
- (4.) Bakelite solid type seat and cover ISI marked Type 1A (IS-2548-1983) with CP brass Hinges commander brand (black colour)

# (C) <u>Urinals</u>

- (i) Range of one and three urinals
- (ii) Chinaware cistern
- (iii) Bottle trap
- (iv) CP brass angle valve with CP copper connecting pipe with nut and washer.

# (D) Shower and Taps

- i. CP brass wall mixer with bend for over head shower with central control knob for three positions, for supply to spout, second to stop and third for supply to shower.
- ii. 125mm dia CP brass shower rose 15mm with ball joint and 230mm long CP brass extension pipe.
- (E) <u>Towel Rail</u>: CP brass towel rail 20mm dia 16 guage600mm long including brackets.

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- (F) Towel Ring: CP brass towel ring 200 mm dia with CP brass brackets fixed to wall with Flanges & CP brass screws.
- (G) Mirror of size as specified in the items and 5mm thickness over every wash hand basin. The mirrors shall be of makeModifloat or Atul Brand made from Tata Ashi float glass. The mirror shall have marine ply backing 6mm thick mounted on kail wood frame  $\frac{34}{7}$  x  $\frac{11}{2}$  with Aluminum angle 30 x 15 x2mm alround& hung on to wall with key hole hooks.

# (F) Peg Sets: AluminumAnodized with 3 hooks

# (J) Gratings:

- (i) All floor traps (FT) and floor drains (FD) shall be provided with 125mm and 100mm round stainless steel gratings respectively of approved design and shape. The weights of 125mm dia and 100mm dia gratings shall not be less than 130gms and 100 gms respectively.
- (ii) Gratings for floor drain (FD) below sink in kitchen shall have suitable hole for passing GI waste pipe from sink.
- 38. Geysers: Scope for arrangement of fixing of Geysers included in this contract is as under:
- (a) Arrangement for fixing electric geyser vertical type one each in toilets and kitchen.
- (b) In all the units from the provision of common hot water supply shall be made.
- (c) Hot water supply of all units shall be from the respective Geysers/Solar heater installed therein.
- (d) At the inlet pipe of all Geysers one number CP brass angle valve shall be provided.
- (c) The ends of inlet and outlet pipes shall be connected with one PVC connecting pipe with CP brass nuts & washers. This is to pass the water from inlet to outlet till Geyser is installed at a later date.
- (d) Provisioning and fixing of Geysers is beyond the scope of this contract.

# 39. Installation of Sanitary Fittings:

- (a) European Type water closets shall be fixed with brass screws of suitable length with PVC plugs or phill plugs embedded in the floor after drilling hole in floor. It should be coupled with low level flushing cistern complete with rubber cone adapters etc, all as per manufacturer instructions.
- (b) Wash hand basins shall be fixed firmly to wall with MS angle iron brackets. The brackets shall be given two coats of white enamel paint over a coat of primer. In addition the wash basin shall be securely fixed to walls with a pair of 25x3mm MS clips screwed with

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rawplugs to walls (placing of basin over the brackets without secure fixing on wall shall not be accepted).

- (c) Indian type Water Closets shall be embedded firmly in the floor and its surrounding packed with cement concrete 1:3:6 (1 cement : 3 coarse sand : graded aggregate 40mm graded aggregate) below the level of top of the Closet to receive the top layer of floor finish. WC shall be set in the CI trap in cement concrete 1:3:6 (1cement:3 coarse sand:6 graded stone aggregate 20mm nominal size), joint between WC and Flush pipe will be made in the pre-moulded rubber joint.
- (d) Urinals: Urinals shall be lipped type half stall (small) white glazed vitreous china of first quality and size 610x 400 x 380 mm size.
- Half stall urinal shall be provided 15 mm dia spreader, 32 mm dia CP domical waste and C.P. cast brass bottle trap with pipe and wall flange, and shall be fixed to wall by one CI bracket and two CI wall clips complete as recommended by manufacturer's directives/Site Engineer.
- (ii) Half stall urinals shall be fixed with C.P.brass screws.
- (iii) Flushing cistern for urinals shall be automatic type vitreous china as given in the schedule of quantities. Each flushing cistern shall have a copper siphon and inlet nozzle cock to control the flow. Flushing cistern shall be fixed to wall with R.S. or C.I. brackets painted with two coats of white enamel paint.
- (iv) Flush pipes shall be G.I. pipes concealed in wall chase but with chromium plated bends at inlets and outlets.
- (v) Urinals may be flushed with flush valves as described in the item.
- (vi) Waste pipes for urinals shall be any of the following.
- a. G.I. pipes. b. Rigid PVC

Waste pipes may be exposed on wall or concealed chase as directed by the engineer-incharge. Specifications for waste pipes shall be same as given in Section II.

- (e) <u>Urinal Partitions</u>: Urinal partitions shall be white glazed vitreous chinaware marble or stone of size specified in the schedule of quantities. Porcelain partitions shall be fixed at proper heights with C.P. brass screws with anchor fasteners and MS clips as recommended by the manufacturer and directed by engineer-in-charge.
- (e) All fixtures shall be fixed at proper heights, as shown in drawings and workmanship which shall be of acceptable standards.
- 40. Internal Drainage: Scope of internal sewage disposal and drainage system for all buildings/blocks included in Schedule A part I under this contract will include the following and shall be provided as per the layout/locations shown on drawings:
  - (a) GI floor drains in toilets and kitchen
  - (b) HCI waste pipes and their connections upto Gully traps.
  - (c) HCI soil pipes and their connections upto nearest manholes.

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- (d) Vent pipes with vertical stacks
- (e) All floor traps and gully traps.
- **Note:** SWG sewerage lines from Gully Trap and nearest manholes onwards shall be measured and paid separately under schedule A part III (External sewerage)
- 41. <u>Soil, Waste, Vent and Rain Water Pipes:</u> All pipes shall be sand cast iron and shall comply to IS-1729 of 1979 and shall be ISI marked. Where shown on drawings the floor drains (FD) shall be of GI pipe medium grade ISI marked.
- **42.** All cast iron pipes fittings like bends, branches, floor traps, tees 'Y' junctions, in waste, soil and vent pipes shall be sand cast iron comply with IS 1729 of 1979 and shall be ISI marked. These shall be spigot and socket "Access door shall be made up with 3mm thick insertion rubber washer and white lead. The bolts shall be lubricated with grease or white lead for easy removal later. The fixing shall be air and water tight".
- 43. **Cast Iron Traps:**Floor trap shall be cast iron, deep seal with an effective seal of 50mm. The trap and waste pipes shall be set in cement concrete blocks firmly supported on the structural floor. The blocks shall be in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) and extended to 40mm below finished floor level. The concrete portion at top of the floor trap inlet shall be finished smooth and water proofed by applying neat cement slurry mixed with water proofing compound. Size of the blocks shall be 30x30cms of the required depth. The trap shall be 100mm inlet and 100mm outlet for kitchen and for toilets. Traps shall have extension pieces to receive waste lines as indicated in typical details.

**Urinal Traps:**Urinal traps shall be cast iron P&S trap with or without vent and set in cement concrete block specified in para above without extra charge.

**Cleanout Plugs:**Contractor shall provide cast brass clean out plugs as required. Cleanout plugs shall be thread and provided with key holes for openings. Cleanout plugs shall be fixed to the pipe by a G.I. socket lead caulked.

<u>PVC pipes &fittings:</u> PVC pipes for drainage system shall be rigid upvc pipes conforming to I.S. 13592 Type B.

- i. Fittings for the pipes shall be injection moulded with approved type of sockets and 'O' rings joints.
- ii. Jointing shall be done as per themanufacturer's recommendation. The pipes and fittings must have matching dimensions for a perfect joint. Loose or excessively tight joints in the system shall not be accepted. Fittings must have sufficient gap (approx. 10 mm) for permissible thermal expansion of pipes.

# **Fittings**

- i. Fittings shall conform to the same Indian Standard as for pipes. Contractor shalluse pipes and fittings of matching specifications.
- ii. Fittings shall be of the required degree of curvature with or without access door of rear, LH or RH .

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# SECTION XI: GYPSUM BOARD PARTITIONS AND CEILING

### **GENERAL**

It is intended that these specifications cover principal requirement of new gypsum board partition and ceiling construction.

To prevent weakening due to calcimine, gypsum wallboard should not be exposed to temperature over 125F (52 C) for extended periods of time.

The Contractor shall furnish all materials, labour and scaffolding required to complete satisfactorily of all gypsum board partitions and ceiling work shown on the Drawings and / or specified.

### MATERIALS

All materials shall be of an approval manufactures (India gypsum or equivalent) and shall comprise of the following:

G.I Framing for suspended ceiling

G.I Framing for partition and wall cladding.

G.I. corner beads and edge trims.

Dry-wall screw.

Regular gypsum wall board shall be  $\frac{1}{2}$ " thick. Long edges shall be squire. Joint treatment materials shall be.

Joint Tape

Joint compound to be ready-Mixed

Fast hardening joint compound.

Topping compound to be ready-mixed.

Adhesive materials shall be joint compound for board application and wallboard /panel adhesive for board for framing application as recommended by manufacturer.

### **INSTALLATION**

Preparation of work:

Commerce gypsum board and ceiling only after all work are complete.

Examine and inspect materials to which gypsum board is to be applied. Remedy all defects prior to installation of drywall. Any defects in the finished installation due to misaligned framing or the work performed under that section of the specification and such defects shall be remedied under that section of the specification.

Installation of wallboard:

Gypsum wallboard shall be applied to wall. Board of maximum practical length shall be used so that an absolute minimum number of end joints occur. Board edges shall be brought into contract with each other but shall be forced into place.

Wallboard joints at opening shall be located so that no end joint will align with edges of opening unless control joints will be installed at these points. End joints shall be staggered, and joint on opposite sides of a partition shall not occur on the same stud.

Gypsum wallboard shall be held in firm contract with framing member while fasteners are being driven. Fastening shall proceed from center portion of the wallboard toward the edges and ends. Fasteners shall be set with the heads slightly below the surface of the wallboard in a dimple formed by the hammer or power screwdriver. Care shall be taken to avoid breading the face paper of the wallboard. Improperly driver nails or screws shall be removed.

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### SECTION XII: ARCHITECTURAL WOODWORK

### SCOPE OF WORK

### Work included

This section covers the furnishing of all materials, equipment, accessories and labour for architectural woodwork, including but not limited to:

Wall paneling Staircases Railings and balustrade Wood flooring and decks Built-in-cabinetry, including plastic emulsion Miscellaneous finished woodwork Rough carpentry and framing associated with the above Preservative treatment of wood Metal fasteners, accessories and adhesives

Work not included

The following work is not included in this section and is covered elsewhere:

Structural woodwork Wood doors Wood windows

### RELATED WORK SPECIFIED ELSEWHERE

Structural woodwork Wood doors and windows Painting and finish coatings

### QUALITY CONTROL

The contractor shall be responsible for the quality of all work and material used in the work and shall implement a programme for inspection and testing to monitor the quality of work.

Wood shall be of the best select grade free of defects in accordance with IS:1629

### COORDINATION WITH OTHER TRADES AND CONDITIONS

The contractor shall schedule and coordinate the structural woodwork with other trades and contractors whose work may be affected by the Architectural woodwork.

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### MATERIALS AND PRODUCTS

### WOOD

Generally wood for all architectural wood work shall be teak, except for parquet flooring for which the wood shall be Laurel.

The moisture content of wood shall be in conformance to IS:287 and shall generally be between 12% to 14%.

All wood shall be heartwood from mature trees, of the best grade, with minimum sapwood, free of defects, selected for goods finished appearance.

All grades of wood with the following defects shall be prohibited for use:

Timber with loose grain, splits, compression wood in coniferous timber, heartwood-rot and sap rot and wraps.

Worm holes and pitch knots

Wood, that has been badly stored and damaged.

### LAMINATES

Plastic laminates shall be from an approved manufacturer, shall conform to IS: 2046 and shall be of new stock & 1.0-1.5mm in thickness.

### PLYWOOD

Plywood shall be of new stock from an approval manufacturer, complying IS:303 BWR (and preservative treated respectively) Plywood having the following defects shall be prohibited for use: Damaged surfaces Loose joints between ply Badly stored

### FASTENER AND ACCESSORIES

Screws shall be of Mild steel, complying to IS:451 Mild steel wire nails shall be in compliance with IS:723 Copper wire nails shall be in compliance with IS:725

### **ADHESIVES**

Adhesive shall be synthetic resin adhesives complying with IS: 851, Fast setting glues such as Rubber solutions/ "Zat Pat" shall not be used. IRON MONGERY

Flanges, bolts, hasps, screws and other hardware shall be brass of the best quality approved by the architect.

Locks and architectural finish hardware such as handles and knobs will be selected by the owner against the allowance made in the contract documents.

The contractor shall order, take delivery and arrange for the transportation of the hardware from the supplier nominated by the owner. The costs for ordering, transportation etc. upto delivery at site will be adjusted the allowance.

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# EXECUTION

### <u>GENERAL</u>

The preservative treatment of wood shall be performed after conversion of lumber to the required sizes in construction so as to keep subsequent working on them to a minimum.

Brush supply two heavy coats of the same wood preservative chemical to any surfaces which were exposed by cutting, sawing, drilling etc.

Set out all architectural woodwork accurately in accordance with the contract drawings or approved shop drawings, true to line, angles, slopes and panes.

All members shall be in continuous lengths between supports without any immediate joints or splices unless otherwise shown on the drawings.

All sizes shown on the drawings are the finished dimensions and shall be within the tolerances given below:

- For measurement upto and including 100mm in width or thickness +/- 0.5mm.
- For measurement above 100mm in width and thickness +/- 0.1mm

All bearing surfaces shall be constructed to achieve full contract between surfaces over the entire bearing area.

All joints shall be worked to achieve accurate and tight fit with full contract between surfaces. As far as possible grain and of wood shall be matched for adjacent pieces.

### PANELING

Install the wall paneling in accordance with the design and details shown on the drawings. Check alignment, plumb, plane and dimensions of the backing which is to receive paneling.

Make necessary corrections prior to commencing paneling.

Layout paneling in accordance with actual dimensions obtained at site location. Adjust detailed dimensions to obtain the intent of the design.

Install sub-frames and grounds and secure them firmly to the backing, tree to line, plumb, alignment and plane to avoid adjustment while installing paneling.

The panel frames shall be true to dimensions, sections, profiles, mouldings etc. as shown on the drawings. Members shall be in one piece between joints.

Panels shall be of the thickness and profiles shown in the drawings. When a large panel is required to be built up from two or more pieces, the joints shall be tongue and grooved flush joints, glued and drawn tight by means of vices, clamps or other means to obtain permanently indiscernible joints. The colour and grain of the wood shall be matched to conceal the joints. The frames and panels shall be planed and sanded smooth to remove all tool marks before assembly.

The panel frames shall be joined by 'all wood' joints without metal fasteners by means of the most appropriate glued mortise-and-tenonned joints and wood pins. Mortises and tennons shall be tooled to obtain intimate contact between their surfaces and shall be fully glued with glue. Joints shall be tightened with vice, clamps, draw straps or other means to obtain tight, indiscernible joints. The grain of wood pins shall match the surface grain of the frames.

Mouldings shall be mitered at 45 degrees to obtain a perfect match of lines, edges and profiles between abutting pieces.

After assembly the joints shall be tooled and sanded to remove minor unevenness at joints. Planted mouldings and architects shall be fixed by means of headless-nails, neatly punched below the surface of wood.

Tolerances:

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- Plane surfaces when tested with a straight edge placed anywhere, in any direction shall not show a gap of more than 1mm between the surface and the edge in any 2 meter length, provided that there is no noticeable abrupt differences in smaller areas.
- Straight lines and edges when tested with a 2 meter long straight edge shall not show a variation of more than 2mm, provided that there are no noticeable abrupt differences.

# WOOD VENEERS AND PLYWOOD

Wood veneered plywood shall be 4mm. thick of an approved manufacture. Veneered plywood shall be selected from the best quality new stock for grain and colour appearance. Plywood shall comply with IS: 5509 and IS: 5539

# ADHESIVES AND FASTENERS

Adhesives shall be synthetic resin adhesive complying with IS: 851 Screw shall be of brass. Copper wire nails shall be in compliance with IS:725

### TREATMENT AGAINST DECAY AND INSECT ATTACK

Treatment against and insect attack shall be by means of an approved proprietary product, proven to have outstanding durability under any conditions of exposure, to provide long-lasting protection against decay producing fungi and insects.

The material used for treatment shall be clean, oil-free. Odorless and harmless to people, planes and animals, evens when exposed to fire.

The material shall be spray or brush applied for deep-penetration, fiber- fixed to prevent leaching. The treated wood shall be capable of being subsequently painted or stained without being discolored.

No coal -tar based products shall be used for preservative treatment.

The material used for preservative treatment shall be compatible with the material used for fire retardant treatment.

### HARDWARE

All hardware for wood doors and wood windows will be selected by the owner.

The Contractor shall order, take delivery and arrange for the transportation of the hardware from the supplier nominated by the owner. The costs for ordering, transportation etcup to delivery at site will be adjusted against the Allowance.

# GLASS

Glass All shall be float glass of glazing quality conforming to BS:952 part 1 or other acceptable standard.

Wired glass: All wired glass shall be polished both sides with square pattern stainless steel wire mesh complying to BS:925, part 1 or other acceptable standard

Insulating glass insulating glass units shall consist of one exterior pane of tinted glass and one pane of clear glass, separated by a 15mm. Thick spacer filled with moisture absorbing desiccant. Each unit shall be hermetically sealed with primary butyl rubber sealant completely covering the unit's edge.

Glass and sizes and thickness shall be as shown on the contract Drawings.

All glass shall bear the label of its manufacturer and the standard to which it is manufactured.

Glazing gaskets : All glazing gaskets shall be 'U' shaped of flexible vinyl or synthetic rubber (Neoprene) to fit the glass thickness.

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Setting blocks: All setting blocks shall be of synthetic rubber to provide the necessary edge clearance from frames for the glass.

Glazing components: These shall be clear silicone sealant.

# WEATHER STRIPS

The weather strip to seal the perimeter gaps between sashes and frames shall be flexible vinyl or synthetic rubber suitable for heavy-duty application.

Sealant caulk for sealing joints between frames and structural opening shall be a one -part polysulphide sealant suitable for application by a caulking gun

### List of Material of Approved Maker/Brands: Civil Works

The contractor shall quote for the best of the materials specified below with ISI mark wherever applicable. The contractor shall obtain prior approval from the Bank / Architect before placing order for the specific materials agencies. In case of non availability of any of the approved/specified materials/agency. During the execution of the work, the Bank /Architect may approve suitable equivalent brand/agency and his decision shall be final and binding on the contractor and the price variations. If any, shall be adjusted accordingly.

S. No	Materials	Manufacturers		
1.	Plywood	Signature / Anchor / Archid / Century / Kenwood / Samrat / Green Mayur(6mm, 9mm, 12mm, 19mm).		
2.	Laminates	Signature/Formica /Greenlam / Century / Signature / Heritage / Archid / Newmica / Amulya,Sunmica(1.0 / 1.5mm thick)		
3.	Block board	Anchor / Century / Archid / Kenwood / Samrat / Mayur		
4.	Soft Board (pin up board)	Jolly board, Western India plywood		
5.	Gyp. Board	India gypsum		
6.	Metal ceiling	Luxelon, Superseal, Trident, Armstrong		
7.	Vertical blinds	Vista, Universal		
8.	Screws	GKW / Mettle fold		
9.	Brass hinges	Reliance / Punit heavy duty		
10.	Hardware	Shalimar, Everite / Reliance (brass powder coated)		
11.	Drawer shutter lock	Vijayan / Godrej (3 set of keys)		
12.	Ball catch	Magnetic (M-2) / Brass		
13.	Door lock / handles	4-C ACME, Golden, Godrej, Ultra		
14.	Veneer	Anchor / URO / Durian / Century		
15.	Adhesives	Fevicol (SH), Mowicoll, Mahacol, Araldite		
16.	Wood preservatives	Woodguard, PCI, Black Japan		
17.	Door closure	Yale / Efficient gazets, Everite Hyper		

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18.	Glass	Modi / Triveni / Hindustan Palington / Asahi / Saint Gobain			
19.	Glass tinted	Same as above.			
20.	Melamine Polish	Asian paint, MRF, Nerolac, French / Zinc oxide			
21.	Paint	ICI, Burger, Nerolac, Asian.			
22.	AC grill	Air products, Omicron, Patrawala			
23.	Vitrified tiles	Marbonite, / Navin / Orient Bell Spartek,Kajaria			
24.	Ceramic tiles(Non-Skid)	Jhonson&Jhonson, Kajaria, Nitco, Regency			
25.	Alu. Door & window sections	Ajit India / Jindal / Indal / Bhansali of 25 microns.			
26.	Floor springs	Everite / Hemco / Hyper			
27.	Wood preservative	Asian paint / British paint			
28.	White Cement Putty	A.C.C, L&T, AMBUJA, Jaypee Birla White, J.K. Birla White Putty			
29.	Sun control film	Garware			
30.	Stainless steel sink	Nirali / Diamond			
31.	Carpet	Hitkari / Modi / Trans Asia			
32.		34 density mm foam			
33.	WC seat cover	Commander / Patel / Supreme			
34.	Toilet paper holder	Parryware / Hindustan / Nycer			
35.	Steel (Thermo MechanicallyTreated Steel) High strength deformed bars or mild steel reinforcement	TATA, SAIL, RINL			
36.	Clay Bricks	Good quality locally available material approved by Engineer / Architect			
37.	Pressed Steel frames for Doors	Fabricated P.S. frames approved by Engineer/Architect.			
38.	Pressed Steel frames for Aluminium- Windows, Ventilators.	Indal / Jindal of 25 microns approved by Engineer/Architect.			
39.	Flush Door Shutters	Century/ Anchor / Archid / Green / Samrat / Kenwood ,Signature			
40.	Aluminum Hardware/fittings	Argent / Classic / Shalimar			
41.	Brass Mortice Locks & Latches	Godrej			
42.	Latches with Internal locks	Godrej / Ultra			
43.	Floor Type Hydraulic door closer (Floor spring)	Everite / Hypper / Hemco			
44.	Aluminum door, window and ventilator sections.	Jindal / Indal / Hindalco			
45.	Water proofing material / compound.	CICO - I / Roff			
46.	Glazed Tiles	Johnson & Johnson / Naveen / Nitco / Regency / Spartek			

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47.	Cement Concrete (Chequred) Tiles	Nitco / Bharat			
48.	Glass Mosaic Tiles	Italia			
49.	Inhibition coat	Protégé Construction Solutions, Dr. Fixi Choksey Chemicals Pvt. Ltd, Mcon Rasayan ASCOLITE.			
50.	Bond coat	Protégé Construction Solutions, Dr. Fixit Choksey Chemicals Pvt. Ltd, Mcon Rasayan ASCOLITE .			
51.	Ready-mix Polymer	Protégé Construction Solutions, Dr. Fixit, Ultra tech, ACC, ACOLITE Mcon Rasayan.			
52.	Plasticizing &water proofing property	Protégé Construction Solutions, Dr. Fixit Choksey Chemicals Pvt. Ltd, Ultratech Pvt Ltd. MCON RASAYAN.			
53.	Plasticizer & protection & controls of corrosion admixture	Protégé Construction Solutions, Dr. Fixit Choksey Chemicals Pvt. Ltd, FOSROC			
54.	Gunniting aid	Protégé Construction Solutions, Dr. Fixit Choksey Chemicals Pvt. Ltd, FOSROC,.			
55.	Curing Compound	Dr. Fixit, Protégé Construction Solutions FOSROC, MCON RASAYAN.			
56.	Crack filling/P.U Sealent & waterproofing compound.	Protégé Construction Solutions. Dr. Fixit, Choksey Chemicals Pvt. Ltd, MCON RASAYAN			
57.	Polymer modified w/p Grout for Injection.	Protégé Construction Solutions, Dr. Fixit, Choksey Chemicals Pvt. Ltd, FOSROC,			
58.	Micro Concrete	Protégé Construction Solutions, Ultra-tech, ACC, ACOLITE Dr. Fixit, MCON,			
59.	Ready-mix Plaster	Ultra-tech, ACC, ACOLITE , Globus & Greencast, Kaineria Plast			
60.	Panelled Doors	National / Century / Swastik / Kitply			
61.	P.V.C. Doors	Sintex / Mihir / Fixopan			
62.	Rolling Shutter & Grills	Good quality locally available material.			
63.	Hardeners	"Ironite".			
64.	Red Oxide	"Asian"			
65.	Waterproof cement paint / acrylic paint	Snocem India, Nerolac, Nitcocem			
66.	Glazing	"Hindustan Pilkington" Tiveni, Modi			
67.	compound	As approved by Architect / Engineer			
68.	Medium density fibre-board in lieu of partitions paneled doors and flush doors.	Nuwood, mangalam			
69.	Ironmonjires and brass fittings	Jiranna / CIEF/ Shalimar / Everite.			
70.	Drawer sliding fitting	Earl bhihari			
71.	Veneer	Achor / Kitply / Uro / Durian / Century			
72.	Polish	French/Zinc Oxide / Melamine (Asian)			

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73.	Polyure than foam		'U' foam
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### PLUMBING WORK

S.No	Materials	Manufacturers
1.	Vetreous china sanitary ware (ISI	Hindustan sanitary ware/ parryware/ Cera
	mark)	
2.	Seats & Covers solid (W.C.)	Commander/ Admiral/ Supreme
3.	PVC Low level flushing cisterns	Commander / Parryware / Hindustan
4.	C P Fittings / Toilet Accessories ISI Marked	Jaquar / Aquel / ESS ESS / Marc
5.	UPVC Pipes (S/W/R Pipes)	Diplast / Supreme / Finolex / Prince
6.	Centrifugal cast CI Pipes & Fittings	RIF / Neco
7.	G.I. Pipes ( B-Class)	ITC / Tata / Zenith
8.	G.I. Fittings (ISI Brand)	Unik / AMCO
9.	Gunmetal valves (Full way, check and globe valves)	Leader / Zoloto (with ISI mark) / Sant
10.	S.W. Pipes / Fittings & Gully traps	Perfect / Tirmurti / Bharat
11.	Ball valves	Voltec / Zoloto
12.	Stainless steel sinks	Nirali / Neelkanth
13.	HDPE Tanks	Sintex / Polycon / Unitank
14.	Mirrors	Modiguard
15.	C.I. Manhole Cover	RIF / BIC / Neco
16.	Concrete Man holes SFRC	CICO
17.	Hydropneumatic Systems	GrundFos / Crompton
18.	Water lifting Pump	GrundFos / Crompton
19.	Submersible Pump	GrundFos / Crompton
20.	Chemical Doser	Asia Lmi / Prominent / Ion Exchange
21.	Pressure Gauge	H. Guru
22.	Level Indicator	RM Approved Make
23.	Air Relief Valves	RB / Zolto
24.	Water Meter	Dasmesh / Capstain / Kaycee

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25.	PVC Encapsulated footrest.	KGM approved make		
26.	C.I. Sluice valves	Kirloskar, Leader with ISI mark on the boAsst.		
27.	A.C. Pipes	Everest Ramco		
28.	R.C.C. Pipes	Indian Hume pipe		
29.	Brass & Gun metal globe, gare valves, feet valves	Leader NETA with ISI marking on the boAsst.		
30.	Sanitary Fixture	Hindware / Parryware / Cera		
31.	Storage Heaters	Recold, Spherehot		
32.	Fire Hydrant	Approved by local fire Bridges Authority		
33.	Sand cast soil pipes and fittings	NECO sand cast / B.I.C.		
34.	Bracket supports	Hi-tech/MS brackets as per drawings		
35.	Towel rail / ring	Jaquar / ESS ESS		
36.	Connection pipe-PVC	Kohinoor/Viking		
37.	Butterfly valve	Intervalve		
38.	PVC Fittings (Moulded)	Clarion / Finolex / Prince		
39.	Non-return valve	Intervalve		
40.	UV filter	Alfa-level		
41.	Stainless Steel	Salem Steel		
42.	Marble Mosaic Tiles	Nitco / Bharat / Himalayan		
43.	Fire Door	RDG / Shakti / Metdor		
44.	RCC pipe	Indian Hume Pipe Co. / Spun Pipe Co.		
45.	Stoneware Pipe and fittings	Trimurti / Perfect Potters / Bharat		

# **MODE OF MEASUREMENTS FOR INTERIOR FURNISHING WORKS :**

- 1. DOORS, WINDOWS AND GRILLS. Clear area over one face inclusive of frame shall be measured. Hold fasts and portion embedded in masonry or flooring shall not be measured.
- 2. PARTITIONS IN WOOD WORK The partition height shall be measured up to bottom of false ceiling and framing members / ply going above shall not be measured
- 3. DECORATIVE PANELLING OVERWALL OR OVER PARTITIONS

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The actual area of cladding shall be measured in square meter.

4. CARPETS

The actual area covered by the carpet shall be measured. No extra shall be allowed for wastage. No deduction shall mad e for columns up to 0.5 sq. meter.

5. PAVING AND TILE WORK

The work mentioned in this section shall be measured in square meter and shall be priced per unit of square meter. In all paving work, the slabs shall be touching the walls and go well under the plaster, but the measurements shall be the clear measurements of the rooms or areas finished. No allowance shall be made for portions going under the plaster.

6. ALUMINIUM SLIDING WINDOWS

The measurement of aluminum sliding windows shall be taken only after the frame going with shutter is fixed in its final finished position in line level and plumb. Width and height shall be measured net between the out to out portion of the aluminum window frames.

7. FALSE CEILING

For false ceiling work, the measurement shall be for the actual area covered. No deductions shall be made for the cutouts, for light fittings, speakers, AC grills and column up to 0.5 sq. meters.

8. WOODWORK

For conversion of centimeters to meter the resultant figure shall be taken upto two digits after decimal point. Third digit shall not be taken into account.

Selection of materials for repair is the most important tasks. They help to ensure durable and trustworthy repair of the concrete structure. The materials for repair of the concrete should be of the non-shrink type. They should also be compatible with parent material. Besides being of compatible properties, materials for repair of the concrete structure shall also be easy to apply. It needs no attention after the repair has been applied

Essential Parameters: Materials for Repair of Concrete Structure:

- Low shrinkage properties
- Requisite setting/hardening properties
- Workability
- Good bond strength with existing substrate
- Compatible <u>co-efficient of thermal expansion</u>
- Compatible mechanical properties and strength to that of the substrate
- Should allow relative movement (I.e. sealing of cracks and dealing with expansion joints)
- <u>Curing</u> requirement

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- Alkaline character
- Low air and water permeability
- Aesthetics to match with surrounding
- Cost
- Durability
- Non-hazardous and non-polluting

# A wide range of materials for repair of concrete is available differing in cost and their performance. Here are the materials for repair of concrete

- **01. Cement:** Cement is the most important materials for repair of the concrete structure. Cement which has revolutionized construction technology in last two centuries is a major construction material even for repairing of the concrete structures as cement remains the basic material for concrete. Quick seating or medium setting cement is required for the structure repairs.
- **02. Aggregates** are important materials for repair of the concrete structure in the construction industry. The dry aggregate required ranges from 3/4 " to 2" in this project.
- **03. Wire meshes** play a major role to reduce, restrict or arrest the cracks in the building and it serves as good materials for repair of the concrete structure. The places of use and size of mesh are interdependent, and its judicious use will help you to reduce the most of the separation cracks.

**Use 3 inch to 14-inch-**wide chicken wire mesh for masonry wall and RCC beam joints, masonry wall and RCC column joints, and over and along all electrical conduits laid under masonry walls duly plastered.

**Use 4 inch to 7-inch-wide** wire mesh for brick or block reinforcement work as per IS:2212-1991.

7-inch-wide wire mesh should be used at all wall corners before corner plastering.

Remember wire mesh will not be useful in arresting structural cracks particularly expanding in nature. It is more or less a facial treatment which can be just a cosmetic touch.

- **04. Admixtures** are the important materials for repair of the concrete structure. The advancement in material chemistry and technology have revolutionized construction industry and more particularly repairing industry. These are of varied varsities and for various uses. These act as a catalyst in enhancing the ability of the Produce.
- **05. Bonding** agents are natural, compounded or synthetic materials used to join the individual member of the structure without employing mechanical fasteners. The main types of bonding agent used in construction are specified below:

# (a) Latex Emulsion Bonding Agent:

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They are further classified as Styrene Butadiene (SBR) latex, Polyvinyl Acetate (PVA) latex (Non Re-Emulsifiable and Re-Emulsifiable), Acrylic Latex, and Epoxy Latex (Produced from liquid epoxy resin mixed with the curing agent or wetting agent or emulsifying agent).

They are mainly used to bond fresh concrete to old concrete. They are also used in waterproofing sandwich layers of joint, are water resistant and also can be used as the anti-carbonation coating over concrete. It can be applied over moist surface also.

### (b) Epoxide Resin Bonding Agent:

They are used to bond fresh concrete to cured concrete and concrete to steel. This will give monolithic bond capable of transmitting high stresses. They contain resins which are 100 percent solid. Resin possesses excellent water and alkali resistance.

They are also used for cold joints of concrete and cement plaster/guniting, reinforcing existing concrete structure or elements and also in jacketing of columns.

06. **Corrosion Protection of Reinforcement**. Corrosion is major diseases in modern buildings. Most of the RCC buildings built in last 100 years in developing countries have corrosion problem. Due to the poor grade of concrete, inadequate cover to concrete, poor quality of steel, such buildings are undergoing repairs, particularly in coastal and corrosive areas. To treat the corrosion is therefore a major.

### (a) Alkaline Rust Converting Primer:

It is applied on rusted steel surfaces to form a complex compound. During the application of primer, the deoxygenating agent is formed which makes rusted steel surface more corrosion resistant. It protects the surface from further corrosion. They are sometime referred as "rust remover" or "rust killer".

Conventional rust converters are water based and free from mineral acids making it safer for application and for the environment. It gives no fumes and is ideal for use in enclosed spaces. They are alkaline in nature and hence safe to use with concrete and embedded steel in concrete.

### (b) Corrosion Inhibitors:

Corrosion inhibitors by virtue of its high vapour pressure and affinity for the embedded metal diffuse through de.

nsest concrete to reach the corroding steel. The main advantage is that the Corrosion inhibitors reach the unexposed side of reinforcement, too and ensures protection even in the presence of high amount of chlorides.

The corrosion inhibitors can be added to water during concrete mixing to impart corrosion protection to the embedded reinforcement. Corrosion inhibitors are used in structures exposed to the saline atmosphere, coastal structures, sewage structures, and swimming pool, etc

07. **Repair Mortars:** When it comes to materials for repair of cracks in concrete structure, repairing mortar plays an important role. They are used in external face repairing work,

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Concrete patching work, and reinforcement protection. They are generally blended with super plasticizers, micro silica, and polypropylene fibers

### **08.** Protective Coatings:

(a) IPN Protective Coating: It is a system, which is based on epoxy-phenolic interpenetrating polymer network (IPN). It is used for protection of concrete structures and anti-corrosive coating to steel bars.

These systems are chemical and weather resistant, have high elongation and hence have excellent crack bridging ability and compatible with concrete substrates.

(c) Acrylic Protective Coating: They are concrete specific coating that provides protection against chloride ion penetration, carbonation, UV radiations and weathering effect. They have excellent crack bridging ability and excellent biological resistance. It can be used in the painting of external surface of concrete buildings.

### 09. Super Plasticizer Modified Cement Paints:

- A. Ordinary cement paints can be mixed a suitable melamine based super plasticizer to enhance the quality, durability and life of the paint. It is also used in the painting of external surface of concrete buildings.
- 10. The selection of materials for repair of the concrete structure is an intricate process which may put home owner in the difficult situation. Hence above are general guidelines which help to select right materials for repair of the concrete structure. Hence it is best To take time to choose and have detail Planning and approvals from the appointed consultant.

### LIST OF INDIAN STANDARDS FOR CIVIL & Repairing works to be followed in this work.

ISO 16311-1:2014 presents the framework and general principles for maintenance and repair of all kinds of existing concrete structures .

The scheme of strengthening should satisfy the requirements stipulated for the seismic zone of IS 1893 : 1984, building categories of IS 4326 : 1993 and provisions made in IS 13827 : 1993 for earthen buildings and IS 13828 : 1993 for low strength masonary building.

456 : 1978 Code of practice for plain and reinforced concrete

IS 13935 : 2009 For Crack Repair.

IS 4081: Safety code for blasting and related drilling operation

**IS 6313:** Code of practice for anti-termite measures in building

Part 1: Constructional measures.

**Part 2** Code of practice for ant termite measures in buildings: Pre constructional chemical treatment measures

### CONCRETE

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**IS 456:** Code of practice for plain and reinforced concrete.

### MASONRY WORK -BRICK WORK

**IS 1077:** Specification for common burnt clay building bricks.

IS 2212: Code of practice for brick work

IS 2250: Code of practice for preparation and use of masonry mortars.

### PLASTERING AND POINTING

IS 412: Specification for expanded metal steel sheets for general purposes

IS 1635: Code of practice for application of cement and cement-lime plaster finishes

IS 2402: Code of practice for external rendered finishes.

IS 1542 Specification for sand for plaster (Class A grading)

### FLOORING

**IS 1443:** Code of practice for laying and finishing of cement concrete flooring tiles.

IS 4457: Specification for ceramic unglazed vitreous acid resisting tiles.

### DOORS AND WINDOWS

**IS 287:** Recommendation for maximum permissible moisture content for timber used for different purposes in different zones

IS 848: Specification for synthetic resin adhesive for plywood (Phonetic and amino plastic)

IS 1141: Code of Practice for seasoning of timber

IS 2202: Specification for wooden flush door shutters (solid core type)

Part I: Plywood face panels

Part II: Particle board panels and hard board faced panels

### GLAZING

**IS 1081;** Code of practice for fixing and glazing of metal, (steel and aluminium) doors, windows and ventilators.

IS 2553: Specification for safety glass

IS 2835: Specification for flat transparent sheet glass

IS 3548: Code of practice for glazing in building

### PAINTING AND POLISHING

IS 1477: Code of Practice for painting of ferrous metals in building

Part I: Pre-treatment

Part II: Painting

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IS 2338: Code of Practice for finishing of wood and wood-based materials

Part I: Operation and workmanship

Part II: Schedule

IS 2395: Code of Practice for painting, concrete, masonry and plaster surfaces

IS 3537: Specification for ready mixed paint, finishing interior, for general purposes to IS colors

**IS 5410:** Specification for cement paints colour, as required

IS 6278: Code of Practice for white washing and colour washing

Note - Contractor should note that all the measurement should be carried out strictly as per mode of measurement stated above. However, all the work should be carried out as per relevant I. S. codes specified.

### Note:

Note:	
•	The bidding Contractor should have their registered branch office in Mumbai Region
	and Should have executed at-least one similar work in Mumbai.
•	At least One qualifying work mentioned by the Contractor in Bid is to be from
	Govt./Public Sector/Banks.
•	Exemption of tender fees / EMD to MSME/NSIC/SSI registered firms will be allowed on
	submission of copy of Registration (Attested)
•	The full floor will be handed over for work to the contractor. Full Floor shall be
	emptied for construction. Also the contractor to be responsible for any other statutory
	approvals/ clearances apart from plan approval from MMRDA & CFO.
•	The Rates mentioned in tender are all Basic Rates.
•	Prequalification Criteria -Integrity Pact must be filled in and signed by the bidder in
	the prescribed format only and submitted along with the tender document.
•	Bank Solvency can be addressed to "Whom so ever it may concern" & not specifically
	addressed to UBI. It should not be older than 6 months.
•	All labour/workers should have valid Adhaar Card for their identity and daily entry in
	Central Office Building.
•	Material dismantled to be stacked near the site.
•	TDS Certificates to be attached of completed Projects.
•	The contractor to be responsible for any other statutory approvals/ clearances apart
	from plan approval from Municipal Authorities, MMRDA & CFO.
•	Contractors are allowed to work overnight with the necessary statutory clearances if
	any to be taken by the contractor.
•	The contractor shall be responsible for obtaining all the necessary statutory
	permissions for the same.
•	The Contractor to depute a full time Supervisor, who shall be a degree civil engineer
	with minimum 10 years' experience in managing similar Interior projects. The
	contractor should submit the necessary credentials of such engineer to UBI for
	scrutiny & approval. Such engineer shall be deputed on the site full time for the full
	duration of the project & shall report daily to the concerned person in charge from
	UBI.
•	The minimum salary requirement to be considered as per minimum wages act of Government of India.

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•	If it is found that the work on site is being carried out in absence of such an engineer,
	the contractor shall be fined Rs 5,000/- per day for such non-compliance. If such non-
	compliance is observed more than 10 times, UBI reserves the authority to ask the
	contractor to cease work on the site & terminate the contract without any explanation
	whatsoever & the termination process as per the tender document shall follow.
•	The contractor shall be allocated space for storing 1 truck load of debris on the
	ground. The arrangement for disposing off the same shall be of the contractor.
•	One Lift available for Raw Material movement within the weight limit capacity of that
	lift. If the Lift is damaged due to over loading by the contractor, the repair charges of
	the lift shall be recovered from the contractor's bill.
•	Work completion certificate for the actual work executed mentioned in the bid is
	required from the client's side.
•	Electricity, water supply will not be free, but will be charged as per the Banks
	amicable settlement. Generally, the Electric & water Bill services as per metre will
	be charged by the Bank. All the provisions else are to be made by the Vendor on His
	part.
•	No consideration shall be made by the Bank for any local issues.
•	Confidential letter from the client is not required for the Technical Bid. Only
	certificate & the current contact details of the relevant person from the client's side
	shall be enough.
•	Equivalent brand of material can be used than that mentioned in the Make of Materials
	with the necessary test reports & the prior approval of the consultant/ UBI. All
	materials to be used should be ISI approved.
•	Any Material from supplier should be accompanied by Certificate from Company and
	Supported by Purchase bills.
•	Brand mentioned in the individual specifications in the BOQ supersedes the one
	mentioned in the Makes of materials.
•	All pipes G.I./PVC etc. are to be concealed in wall/floor/false ceiling etc. properly by
	contractor.
•	All construction debris, salvageable material shall be disposed/ cleared as per local
	municipal laws and the cost to be included in rates. No extra payment shall be granted
	for this apart from the tender rate. The contractor shall be allocated space for storing
	1 truck load of debris on the ground. The arrangement for disposing off the same shall
	be of the contractor.
•	All entries, Rate quoted etc. in Financial Bid should be Hand written only. Printed
	copies will not be accepted.
•	As built drawing of repair work with floor wise layout plan work to be submitted by
	the Vendor after completion of Project.
•	No crushed sand will be permitted, only River sand is allowed.
•	All ceiling surfaces horizontal and Vertical to be paid in Sqft .
•	The groove above skirting in POP shall be included in skirting cost, no extra payment
	shall be made. Group matching veneers to be used whenever possible.

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# Annexure-A

Tender Ref. No.:....

### Integrity Pact

Whereas Union Bank of India having its registered office at Union Bank Bhavan, 239,Vidhan Bhavan Marg, Nariman Point, Mumbai, India- 400 021 acting through its ......Department, represented by General Manager / Dy. General Manager hereinafter referred to as the Buyer and the first party, proposes to procure (Name or category of the Equipment, services, etc.), hereinafter referred to as Stores and / or Services.

And

M/s....., represented by....., Chief Executive Officer (which term, unless expressly indicated by the contract, shall be deemed to include its successors and its assignee), hereinafter referred to as the Bidder/ Seller and the second party, is willing to offer/ has offered the Stores and / or Services.

2. Whereas the Bidder / Seller is a private company/public company /partnership/ registered export agency, constituted in accordance with the relevant law in the matter and the Buyer is a Public Sector Undertaking and registered under Companies Act 1956. Buyer and Bidder/Seller shall hereinafter be individually referred to as "Party" or collectively as the "parties", as the context may require.

### 3. <u>Preamble</u>

Buyer has called for tenders under laid down organizational procedures intending to enter into contract/s for supply / purchase / etc of......and the Bidder / Seller is one amongst several bidders/Proprietary Vendor/Customer Nominated Source/Licensor who has indicated a desire to bid/supply in such tendering process. The Buyer values and takes primary responsibility for values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder(s) and / or Seller(s).

In order to achieve these goals, the Buyer will appoint Independent External Monitor(s) (IEM) in consultation with Central Vigilance Commission, who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

# 4. Commitments of the Buyer.

4.1 The Buyer commits itself to take all measures necessary to prevent corruption and fraudulent practices and to observe the following principles:-

- i) No employee of the Buyer, personally or through family members, will in connection with the tender, or the execution of a contract demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- ii) The Buyer will during the tender process treat all Bidder(s) / Seller(s) with equity and reason. The Buyer will in particular, before and during the tender process, provide to all Bidder(s) / Seller(s) the same information and will not provide to any Bidder(s) / Seller(s) confidential / additional information through which the

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Bidder(s) / Seller(s) could obtain an advantage in relation to the process or the contract execution.

- iii) The Buyer will exclude from the process all known prejudiced persons.
- 4.2 If the Buyer obtains information on the conduct of any of its employees which is a criminal offence under the Indian legislation Prevention of Corruption Act 1988 as amended from time to time or if there be a substantive suspicion in this regard, the Buyer will inform to its Chief Vigilance Officer and in addition can initiate disciplinary action.
- 5. <u>Commitments of the Bidder(s) / Seller(s).</u>
- 5.1 The Bidder(s)/ Seller(s) commit himself to take necessary measures to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
  - i) The Bidder(s)/ Seller(s) will not, directly or through any other persons or firm, offer promise or give to any of the Buyer's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he / she is not legally entitled to, in order to obtain in exchange any advantage during the tendering or qualification process or during the execution of the contract.
  - ii) The Bidder(s)/ Seller(s) will not enter with other Bidders / Sellers into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
  - iii) The Bidder(s)/ Seller(s) will not commit any offence under the Indian legislation, Prevention of Corruption Act 1988 as amended from time to time. Further, the Bidder(s)/ Seller(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Buyer as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
  - iv) The Bidder(s)/Seller(s) shall ensure compliance of the provisions of this Integrity Pact by its sub-supplier(s)/ sub-contractor(s), if any. Further, the Bidder/Seller shall be held responsible for any violation/breach of the provisions by its subsupplier(s)/sub-contractor(s).
- 5.2 The Bidder(s)/Seller(s) shall ensure compliance of the provisions of this Integrity Pact by its sub-supplier(s)/ sub-contractor(s), if any. Further, the Bidder/Seller shall be held responsible for any violation/breach of the provisions by its sub-supplier(s)/sub-contractor(s).
- 5.3 The Bidder(s)/ Seller(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences

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### 5.4 Agents / Agency Commission:

The Seller/Bidder confirms and declares to the buyer that the Seller/Bidder is the original manufacturer or authorized distributor / stockist of original manufacturer or Govt. Sponsored / Designated Export Agencies (applicable in case of countries where domestic laws do not permit direct export by OEMS) of the stores and / or Services referred to in this tender/ offer / contract / Purchase order and has not engaged any individual or firm, whether Indian or Foreign whatsoever, to intercede, facilitate or in any way to recommend to Buyer or any of its functionaries, whether officially or unofficially, to the award of the tender / contract / purchase order to the Seller/Bidder; nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The Seller/Bidder agrees that if it is established at any time to the satisfaction of the Buyer that the present declaration is in anyway incorrect or if at a later stage it is discovered by the Buyer that the Seller/Bidder has engaged any such individual / firm, and paid or intended to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this contract / purchase order, the Seller/Bidder will be liable to refund that amount to the Buyer. The Seller will also be debarred from participating in any RFQ / Tender for new projects / program with Buyer for a minimum period of five years. The Buyer will also have a right to consider cancellation of the Contract / Purchase order either wholly or in part, without any entitlement or compensation to the Seller/Bidder who shall in such event be liable to refund agents / agency commission payments to the buyer made by the Seller/Bidder along with interest at the rate of 2% per annum above LIBOR (London Inter Bank Offer Rate) (for foreign vendors) and Base Rate of SBI (State Bank of India) plus 2% (for Indian vendors). The Buyer will also have the right to recover any such amount from any contracts / Purchase order concluded earlier or later with Buyer.

# 6. <u>Previous Transgression</u>

- 6.1 The Bidder /Seller declares that no previous transgressions have occurred in the last three years from the date of signing of this Integrity Pact with any other company in any country conforming to the anti corruption approach or with any other Public Sector Enterprise in India that could justify Bidder's/ Sellers' exclusion from the tender process.
- 6.2 If the Bidder / Seller makes incorrect statement on this subject, Bidder / Seller can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason without any liability whatsoever on the Buyer.

# 7. <u>Company Code of Conduct</u>

Bidders / Sellers are also advised to have a company code of conduct (clearly rejecting the use of bribes and other unethical behavior) and a compliance program for the implementation of the code of conduct throughout the company.

### 8. <u>Sanctions for Violation</u>

8.1 If the Bidder(s)/ Seller(s), before award or during execution has committed a transgression through a violation of Clause 5, above or in any other form such as to put his reliability or credibility in question, the Buyer is entitled to disqualify the Bidder(s)/

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Seller(s) from the tender process or take action as per the procedure mentioned herein below:

- i) To disqualify the Bidder / Seller with the tender process and exclusion from future contracts.
- ii) To debar the Bidder / Seller from entering into any bid from Buyer for a period of two years.
- iii) To immediately cancel the contract, if already signed / awarded without any liability on the Buyer to compensate the Bidder /Seller for damages, if any. Subject to Clause 5, any lawful payment due to the Bidder/Seller for supplies effected till date of termination would be made in normal course.
- iv) To encash EMD / Advance Bank Guarantees/ Performance Bonds
  / Warranty Bonds, etc. which may have been furnished by the Bidder / Seller to the extent of the undelivered Stores and / or Services.
- 8.2 If the Buyer obtains knowledge of conduct of a Bidder/ Seller or of an employee or a representative or an associate of a Bidder / Seller which constitutes corruption, or if the Buyer has substantive suspicion in this regard, the Buyer will inform to its Chief Vigilance Officer.
- 9. <u>Compensation for Damages</u>
- 9.1 If the Buyer has disqualified the Bidder(s) / Seller(s) from the tender process prior to the award according to Clause 8, the Buyer is entitled to demand and recover the damages equivalent to Earnest Money Deposit in case of open tendering.
- 9.2 If the Buyer has terminated the contract according to Clause 8, or if the Buyer is entitled to terminate the contract according to Clause 8, the Buyer shall be entitled to encash the advance bank guarantee and performance bond/ warranty bond, if furnished by the Bidder / Seller, in order to recover the payments, already made by the Buyer for undelivered Stores and / or Services.
- 10. Price Fall Clause

The Bidder undertakes that it has not supplied/ is not supplying same or similar product/systems or subsystems at a price lower than that offered in the present Bid in respect of any other Ministry/Department of the Government of India or PSU or Coal India Ltd and its subsidiaries during the currency of the contract and if it is found at any stage that same or similar product/ Systems or Subsystems was supplied by the Bidder to any other Ministry / Department of the Government of India or a PSU or any Public Sector Bank at a lower price during the currency of the contract, then that very price will be applicable to the present case and the difference in the cost would be refunded by the Bidder to the Buyer, if the contract has already been concluded."

# 11. Independent External Monitor(s)

11.1 The Buyer has appointed Independent External Monitors for this Integrity Pact in consultation with the Central Vigilance Commission (Names and Addresses of the Monitors to be given in RFQ).

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- 11.2 As soon as the Integrity Pact is signed, the Buyer shall provide a copy thereof, along with a brief background of the case to the Independent External Monitors.
- 11.3 The Bidder(s) / seller (s), if they deem it necessary, may furnish any information as relevant to their bid to the Independent External Monitors.
- 11.4 If any complaint with regard to violation of the IP is received by the buyer in a procurement case, the buyer shall refer the complaint to the Independent External Monitors for their comments / enquiry.
- 11.5 If the Independent External Monitors need to peruse the records of the buyer in connection with the complaint sent to them by the buyer, the buyer shall make arrangement for such perusal of records by the Independent External Monitors.
- 11.6 The report of enquiry, if any, made by the Independent External Monitors shall be submitted to MD & CEO, Union Bank of India, Union Bank Bhavan, Vidhan Bhavan Marg, Nariman Point, Mumbai -21 within 2 weeks, for a final and appropriate decision in the matter keeping in view the provision of this Integrity Pact.
- 12. Law and Place of Jurisdiction

This Integrity pact is subject to Indian Laws, and exclusive Jurisdiction of Courts at Mumbai, India.

13. Other Legal Actions

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

### 14 Integrity Pact Duration

- 14.1 This Integrity Pact beginswhen both parties have legally signed it. It expires for the successful Bidder / Seller 10 months after the last payment under the contract, and for all other Bidders / Sellers within 6 months from date of placement of order / finalization of contract.
- 14.2 If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this Integrity Pact as specified above, unless it is discharged / determined by MD & CEO, Union Bank of India.
- 14.3 Should one or several provisions of this Integrity Pact turn out to be invalid, the remainder of this Integrity Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 15. <u>Other Provisions</u>
- 15.1 Changes and supplements need to be made in writing. Side agreements have not been made.
- 15.2 The Bidder(s)/Seller(s) signing this IP shall not initiate any Legal action or approach any court of law during the examination of any allegations/complaint by IEM and until the IEM delivers its report.

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- 15.1 In view of the nature of this Integrity Pact, this Integrity Pact shall not be terminated by any party and will subsist throughout its stated period.
- 15.4 Nothing contained in this Integrity Pact shall be deemed to assure the Bidder/ Seller of any success or otherwise in the tendering process.
- 16. This Integrity Pact is signed with Union Bank of India exclusively and hence shall not be treated as precedence for signing of IP with MoD or any other Organization.

17.	The Parties hereby sign the (Seller/Bidder) and	nis Integrity Pact at on (Buyer)	0n
	BUYER	BIDDER* / SELLER*	
	Signature:	Signature:	
	General Manager/ Dy G M,	Authorized Signatory (*)	
	Union Bank of India,		
	Division		
	Date:	Date:	
	Stamp:	Stamp:	
	Witness	Witness	
	1	1	
	2	2	

(\*) - Authorized signatory of the company who has also signed and submitted the main bid

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# **SUBJECT** STRUCTURAL REPAIR/RENOVATION WORK INCLUDING EXTERNAL PAINTING OF BANK'S RESIDENTIAL BUILDING AT POWAI, MUMBAI.

# TENDER FOR CIVIL/STRUCTURAL REPAIR WORKS

# PART-II

# **TECHNICAL SPECIFICATION AND BILL OF QUANTITIES**

# **PRICE BID**

DATE OF ISSUE OF TENDER	:	09.01.2023	from 11.00 am onwards
LAST DATE FOR SUBMISSION OF TENDER	:	31.01.2023	upto 3.00 pm
<u>Owner</u>		Architect:	
Union Bank of India		M/s Supreme Engicons (I	NDIA) Pvt. Ltd.
Central Office,239, Vidhan Bhavan Marg,		808, Shree Krishna Towe	r, Opp. Laxmi Industrial
Nariman Point, Mumbai.		Estate, link road Andher	i (W) Mumbai-400053.
Tel: 022-22892587, 89		Tele No 91-22-26774100/	/200

SR.NO.	ITEM DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	DISMANTLING AND DEMOLISHING WOR	RK		· · ·	
1	Removing any existing water proofing layers of I. P. S. with bituminous joints and brick bat concrete over the existing terrace floor, chajja, top of headroom slab and canopy including cement vata and exposing R.C.C. slab top complete.		SQMT		
2	Removing cement plaster of any finish from the wall, complete with racking out the joints to a depth of 20 mm.	4500	SQMT		
3	Removing existing door or windows with frame and shutters and making good etc. to the existing surface.	2	NOS		
4	Removing & Refixing whether shade and M.S. Grill carefully and deposting the same with occupant etc and after the plastering work refixing the grill with steel nails )	700	SQMT		
5	Demolishing brick work in lime or cement mortar including plaster, paint, etc. manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.	84	CUMT		
	CONCRETING				
6	Providing and fixing in position steel bars reinforcement of various diameters for R.C.C. pile, pile caps, footings, raft, retaining wall, shear wall, lift wall, foundations, slabs, beams, columns, canopies, staircases, newels, chajjas, lintels, pardies, coping, fins, arches, etc. as per detailed designs, drawings and bar bending schedules, including straightening, cutting, bending, hooking the bars, binding with wires or tack welding, supporting as required etc. all complete at all levels.				
	Thermo-Mechanically Treated steel bars. (Fe 500 D)	0.5	MT		
7	Providing Ready mix Micro Concrete jacketing to walls or beams of thickness upto 75 mm using Polymer modified cement premixed quartz sand aggregate packed in bags of standard manufacture, for high early strength of 40 N /mm sq.cm of approved brand. The dry product is to be mixed with 12.5% water by weight, along with washed and poured into rigid form work moulds & tamped properly, & cured for 3 days. [Payment is to be made by weight premixed of micro concrete product	1000	KGS		

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	consumed as per site register records. No extra payment shall be made for shuttering or any other material.			
8	Chipping /removing loose concrete upto reinforcement bars, without damaging the reinforcement, removing all the loose materials and to make all the exposed surfaces free from oil, dust and all impurities etc complete.	2000	SQMT	
9	Removing corrosion of steel reinforcement by mechanical means like wire brushing, chipping to remove loose rust and then applying rust removal solution by using brush application, leaving the surface for at least 15 to 30 minutes, then removing loose materials by scrubbing or with brush and applying polymer bond to the old concrete surface before applyingPolymer mortar.	2000	SQMT	
10	Providing and applying Ready mix Polymer modified cement mortar of average thickness 15mm using Polymer in one or more layers in proportion 1:5:15 of Polymer Cement Quartz Sand as manufacturer's specifications in specific layers, curing the surface after 72 hours of application with wet gunny bags etc and by finishing the surface with 12mm thick (1:3) Cement sand plaster.	1000	SQMT	
11	Providing and applying Ready Mix Polymer modified cement mortar of average thickness 30mm using Polymer in two layers in proportion 1:5:15 of Polymer Cement Quartz Sand as manufacturer's specifications in specific layers, curing the surface after 72 hours of application with wet gunny bags etc and by finishing the surface with 12mm thick (1:3) Cement	500	SQMT	
12	Injection Grouting High Performance Polymer Cement Grout: Providing & injecting high performance non shrink, Anti- washout Polymer Cement Grout per pack of 225gm for 50kg bag of cement as per manufacturer's specifications into honeycombing area / porous concrete with suitable pump at pressure of 2.0 Kg/Cm2 and subsequently cutting/removal of nozzles and sealing of holes with grout etc., complete.Thisdoes not include the rate of cement bag.	50	Per 50 kg bag of cement	

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	MASONARY WORK			
13	Brick work with common burnt clay machine moulded perforated bricks of class designation 12.5 conforming to IS: 2222 in superstructure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) :			
	With F.P.S.(non modular) bricks	2	CUMT	
	PLASTERING WORK			
14	Providing and applying 20 mm thick internal plaster with neeru finish at all heights and locations in cement mortar specified below in two coats for masonry (except stone masonry) and concrete surfaces including racking out joints, hacking of concrete surface, watering, finishing, curing, scaffolding etc complete as directed By Engineer In Charge.			
	In cement mortar 1:4	1000	SQMT	
15	Providing and applying 20 mm thick external sand faced cement plaster with neat cement rendering upto 10m from ground level and at all locations in cement mortar proportion specified below in two coats for masonry (except stone masonry) and concrete surfaces including providing water proofing compound to the first coat of plaster as per manufacturers specification, racking out joints, hacking of concrete surface, finishing, curing, scaffolding etc complete as directed By Engineer In Charge. Min. time lag between two coats shall be 24 hours.(as per IS 2402 of 1963.)			
	In cement mortar 1:3	3500	SQMT	
16	SEALING SEPARATION GAPS:opening & sealing separation cracks between RCC and brick work by cutting grove on both sides crack along the length by electrically operated groove cutter Breaking / removing plaster & loose mortar (up to 75mm depth) in the area between two grooves by chiseling. Washing by potable water to make it dust free surface. Hammering 10 to 20mm size aggregates in the crack as directed by the consultant. Sealing the crack with polymer modified cementitious. Mortar Up to 50mm depth in two layers 1:5.15. mi	400	SQMT	
17	DASH COAT: Removing the loose plaster material and repairing the damaged wall surface with application of Dash coat of 1: 4 cement mortar and inserting brickbats or metal chips to level the surface complete or as directed by the Engineer.	400	SQMT	
	WATERPROOFING TREATMENT		1 1	I
18	Providing the waterproofing treatment as per item no CS-WP-30 but for existing terrace after removing the old brick bat coba, tiling work etc. completely so as to expose the R.C.C. slab surface and cleansing the same. The rate is inclusive of removing the debris from actual place of work to the ground and from there the same will have to be carted away immediately the debris will become contractors property and no extra payment will be made for removing and carting. [Injection treatment shall be given as per item no. CS-WP-45	350	SQMT	

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19	Providing waterproofing treatment as per Item No.CS-WP-32-a with Broken China mosaic flooring as per design.	350	SQMT	
20	Waterproofing the terrace slab and staircase roof slab with average100 mm thick concrete of broken brick bats and cement mortar (1:4) in the proportion of 2 parts of brick bats and 1 part of mortar, laid in proper slope (1:100) well rammed, watered and consolidated with vata 15 cm at junction of walls and Indian patent stone flooring 1:2:3 (12.5 mm chips) 40 mm thick and with admixture of approved water proofing compound as per manufacturers specifications laid after grouting the surface of brickbat coba with neat cement slurry in alternate suitable squares to required slope as directed including filling in joints with bitumen and cleaning the slab top of all dust and loose material; tamping, finishing and curing complete as directed and specified. (Horizontal measurements clear between walls will be paid for).	120	SQMT	
	PLUMBING & SANTATION WORK			
21	Providing and fixing in position uPVC/SWR (Soil/Waste/Rain) pipe of type-B 110 mm dia. in any position including all fittings and accessories, making joints / connections water tight with solvent cement, scaffolding if necessary and making good the damages if any (excluding excavation and refilling the trenches) etc. complete as specified and directed.(All fittings and accessories like clamps,etc. should be of same brand. No separate payment shall be made for fittings and accessories).	972	RMT	
22	Providing and fixing in position uPVC/SWR (Soil/Waste/Rain) pipe of type-B 75 mm dia. in any position including all fittings and accessories, making joints / connections water tight with solvent cement, scaffolding if necessary and making good the damages if any (excluding excavation and refilling the trenches) etc. complete as specified and directed.(All fittings and accessories like clamps,etc. should be of same brand. No separate payment shall be made for fittings and accessories).	320	RMT	
23	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.			
	25 mm nominal outer dia Pipes	300	RMT	
	20 mm nominal outer dia Pipes	250	RMT	
	15 mm nominal outer dia Pipes	200	RMT	
	50 mm nominal outer dia Pipes	650	RMT	

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	40 mm nominal outer dia Pipes	400	RMT	
	32 mm nominal outer dia Pipes	550	RMT	
24				
	Providing and fixing gun metal gate valve with C.I. wheel of approved			
	50 mm nominal bore	10	NOS	
	40 mm nominal bore	7	NOS	
25				
	Providing and fixing ball valve (brass) of approved quality, High or low			
	pressure, with plastic floats complete :			
	15 mm nominal bore	112	NOS	
26	Duct Door Openimg	90	SQMT	
27	Providing and fixing polycarbonate multiple wall sheet roofing 16mm thick gauge of approved make UV coated of approved make and of approved colour and with aluminium framing for fixing polycarbonate sheet using pressure plates with EPDM gasket (compatible to polycarbonate) breather tape, screws and covering the pressure plates complete and making the entire system water tight by using sealant as per architectural drawings and specification.(Rate does not include cost of structural steel framing which will be paid seperately)	30	SQMT	
28	Backlite Door with framing at Duct area	56	NOS	
29	Providing and applying first single coat of approved primer and two coats of anti-algal, anti-fungal, exterior paint as specified below of an approved make and colour as per manufacturers specifications to any surface, upto 10m height from ground level and at all locations as directed including preparing surfaces for painting by any approved means, scaffolding, cleaning and curing etc. complete as directed by Engineer-in-charge.			
	By using Acrylic Based Exterior Paint	8000	SQMT	
30	Providing and applying first single coat of approved primer and two coats of acrylic distemper (oil bound distemper) of an approved make and colour as per manufacturers specifications to any surface, at all height and locations as directed including scaffolding, cleaning and preparing surfaces for painting with broom by any approved means, etc. complete as directed by Engineer-in-charge.	2820	SQMT	

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Providing and applying first single coat of approved primer and two coats of synthetic enamel paint/flat oil paint of an approved make and colour as per manufacturers specifications to surfaces specifird below, at all height and locations as directed including scaffolding, cleaning and preparing surfaces for painting by any approved means etc. complete as directed by Engineer-in-charge				
For Steel work	750	SQMT		
Total Amount			(Rs.)	-
Discounts if any			(Rs.)	
Net Amount after deduction (a-b)			(Rs.)	
GST @ 18%			(Rs.)	
Grand Total (c+d)			(Rs.)	
	enamel paint/flat oil paint of an approved make and colour as per manufacturers      specifications to surfaces specifird below, at all height and locations as directed      including scaffolding, cleaning and preparing surfaces for painting by any approved      means etc. complete as directed by Engineer-in-charge      For Steel work      Total Amount      Discounts if any      Net Amount after deduction (a-b)      GST @ 18%	enamel paint/flat oil paint of an approved make and colour as per manufacturers specifications to surfaces specifird below, at all height and locations as directed including scaffolding, cleaning and preparing surfaces for painting by any approved means etc. complete as directed by Engineer-in-chargeFor Steel work750Total Amount750Discounts if anyNet Amount after deduction (a-b)GST @ 18%18%	enamel paint/flat oil paint of an approved make and colour as per manufacturers specifications to surfaces specifird below, at all height and locations as directed including scaffolding, cleaning and preparing surfaces for painting by any approved means etc. complete as directed by Engineer-in-charge      For Steel work    750    SQMT      Total Amount    750    SQMT      Net Amount after deduction (a-b)    GST @ 18%    Image: Steel ste	enamel paint/flat oil paint of an approved make and colour as per manufacturers specifications to surfaces specifird below, at all height and locations as directed including scaffolding, cleaning and preparing surfaces for painting by any approved means etc. complete as directed by Engineer-in-charge750SQMTFor Steel work750SQMT(Rs.)Discounts if any(Rs.)(Rs.)Net Amount after deduction (a-b)(Rs.)(Rs.)GST @ 18%(Rs.)(Rs.)

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